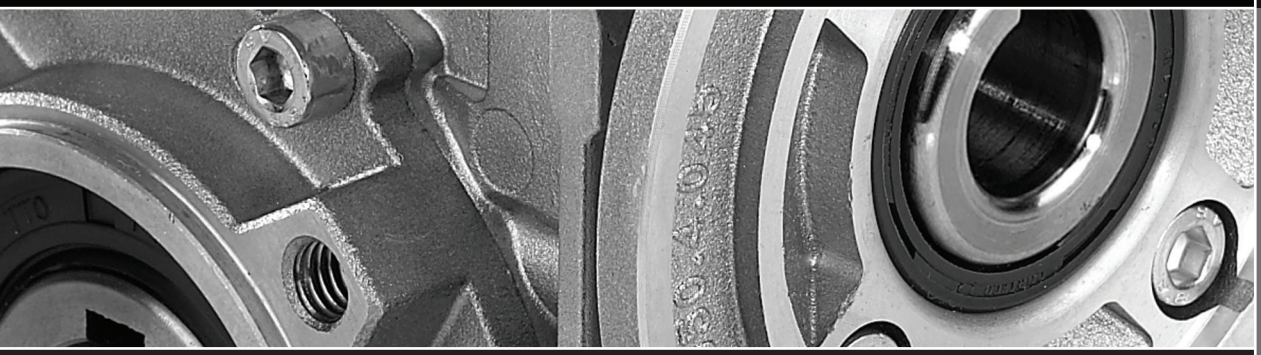


General Catalogue

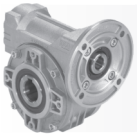
Gearboxes Made in Italy

HYDRO·MEC®

Catalogue code: CT-GEMA-HM020-ML

2020 *Edition*

IN THIS CATALOGUE



Rightangle-Gear

Worm gearboxes
Riduttori a vite senza fine

Paragraph **1**

Square-Gear

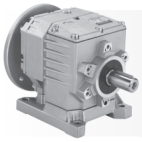
Square worm gearboxes
Riduttori a vite senza fine quadri

Paragraph **2**

One step-Gear

One step gearboxes
Riduttori a uno stadio

Paragraph **3**



Coaxial-Gear

Aluminum gearboxes
Riduttori coassiali in alluminio

Paragraph **4**

Coaxial-Gear

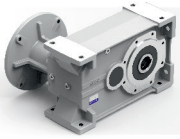
Cast iron gearboxes
Riduttori coassiali in ghisa

Paragraph **5**

Compact-Gear

Shaft mounted gearboxes
Riduttori ad assi paralleli

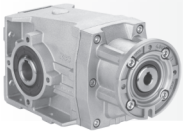
Paragraph **6**



Cube-Gear

Parallel shaft gearboxes
Riduttori ad assi paralleli

Paragraph **7**



Angletech-Gear

Helical bevel gearboxes
Riduttori a coppia conica

Paragraph **8**

Electric motors

Aluminum electric motors
Motori elettrici in alluminio

Paragraph ***M***

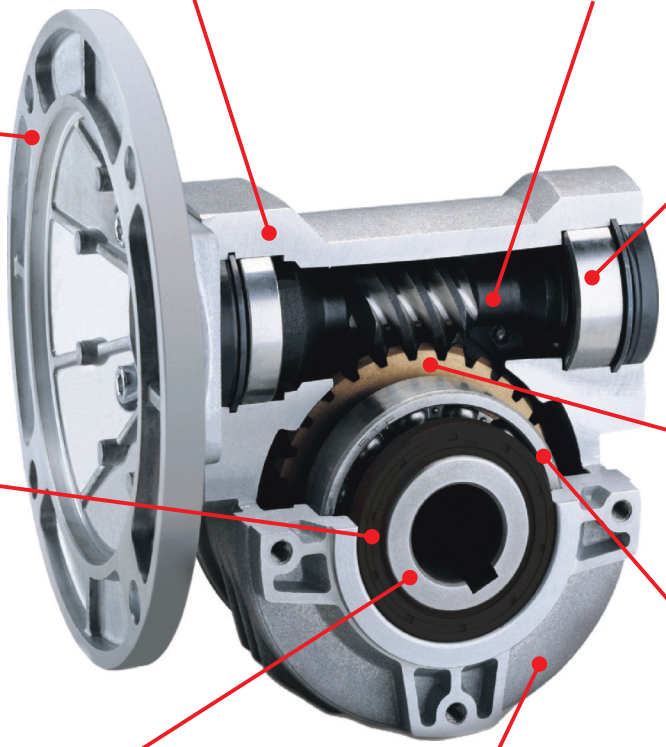
Worm gearboxes

A modular and compact product

Single-piece aluminum alloy housing
Is vacuum impregnated (MIL-STD 276) for protection and sealing.
No secondary finish required but readily accepts paint. Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing.

Single piece alloy steel input shaft and worm shaft.
High helix angle worm is case-hardened (Rc 58-60), ground, teeth are profiled and radiused, for noise reduction and enhanced efficiency.

Flange
Fully modular to IEC and compact integrated motor.
NEMA C flange.



Oversized bearings
Support positively-retained, high speed shaft for higher shock load capacity - ideal for frequent starting and reversing application.
Premium, Nitrile® high temperature seals each end.

Premium, high temperature
Nitrile® output seals

Bronze alloy worm gears.
CuSn12Ni (C91700) Nickel bronze worm gears are centrifugally cast onto an iron hub for maximum strength and superior life.
Removable hollow shaft with key for safe torque transmissions.

Oversize bearing
For radial load capability and maximum hollow output shaft diameter.

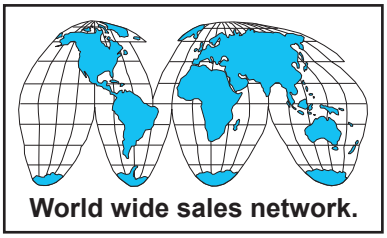
Standard hollow output shaft mounting
Reduces total drive envelope size, weight and cost.
Single and double solid output shaft is available.

Impregnated and machined bearing caps
With exterior machined surfaces enable a variety of mounting accessories.
Extra-deep thread engagement provided for greater support strength.
Zinc plated hardware.

Vent Free Design.
No breather or vents to leak! Factory lubricated for life with synthetic, semi-fluid gear lubricant with an operating range of -15ºC to 130ºC.

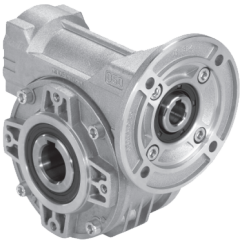
oil free

vent free



World wide sales network.

Specific type datasheet on page...



Types / Tipi / Tipen / Types / Tipos

On page / A pagina / Auf Seite / À la page / En la página

1-5	1-7	1-9	1-11	1-13	1-15	1-17
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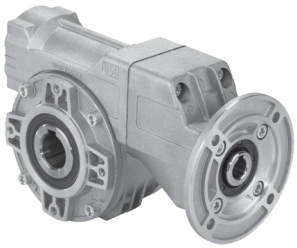

Types / Tipi / Tipen / Types / Tipos

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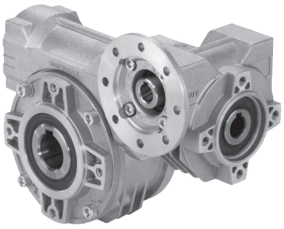

Types / Tipi / Tipen / Types / Tipos

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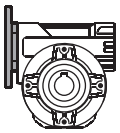
Type - Tipo - Typ Type - Tipo	**Size** - Grandezza Grösse - Taille Tamaño	**Mounting** - Montaggio - Montage Fixation Fixation - Tipo de montaje
P	**045**	**PA**

Worm gearboxes
Riduttori a vite senza fine
Schneckengetriebe
Reducteurs a vis sans fin
Reductores de corona sin fin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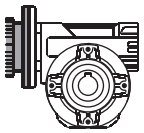
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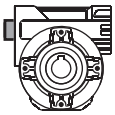
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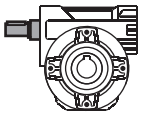
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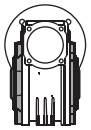
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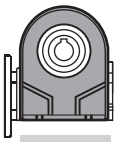
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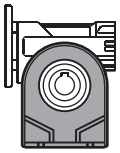
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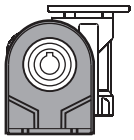
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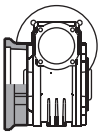
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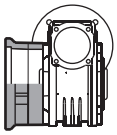
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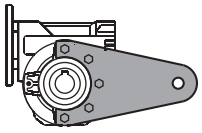
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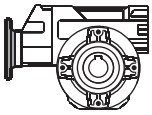
Worm gearboxes with primary reduction
Riduttori a vite senza fine con precoppia
Schneckengetriebe mit stirnradstufe am Eintrieb
Reducteurs a vis sans fin avec pré-réduction
Reductores corona sin fin con prereductora de engranajes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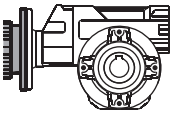
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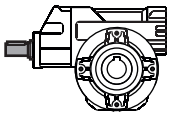
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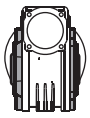
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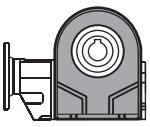
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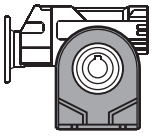
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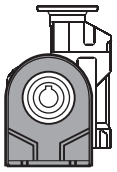
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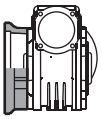
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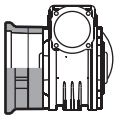
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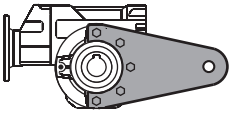
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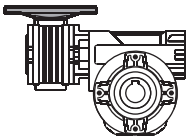
Combined worm gearboxes
Riduttori a vite senza fine combinati
Schneckengetriebekombinationen
Reducteurs a double train de vis sans fin
Reductores combinados corona sin fin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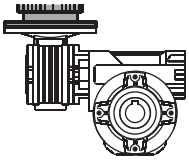
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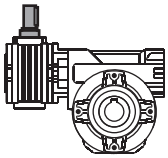
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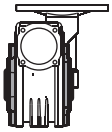
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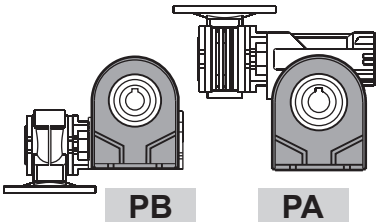
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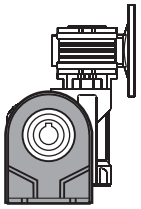
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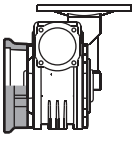
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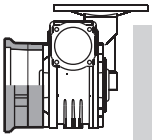
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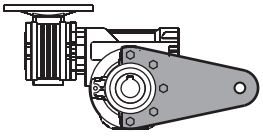
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Dossier according to 94/9/EG 8. b ii stored
0032

On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Ratio Rapporto Untersetzung Reduction Relaciòn	**Hub** Mozzo corona Hohlwelle Arbre creux Nucleo corona	**Output shaft** Albero lento Abtriebswelle Arbre de sortie Eje salida	**Motor size** Grandezza motore Motor Grösse Grandeur moteur Tamaño motor	**Mounting position** Posizione montaggio Einbaulage Position de montage Position de montaje	**Input bore** Foro entrata Eingangshohlwelle Trou d'entree Eje hueco de entrada	**Mountin position** Esecuzione montaggio Einbaulage Exécution de montage Posición de montaje	**Terminal box position** Posizione morsettiera Klemmkastenlage Position boîte a bornes Posición caja de bornes
10	**C**	**Ø**	**-Q**	**B3**	**-**	**---**	

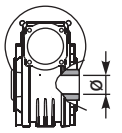
See technical data table

Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir tableau données techniques

Ver tabla datos técnicos



STANDARD

C

030 ⇨ ø14
045 ⇨ ø18
050 ⇨ ø25
063 ⇨ ø25
63A ⇨ ø28
085 ⇨ ø35
110 ⇨ ø42

I

Stainless steel hub
Mozzo in acciaio Inox
Edelstahlhohlwelle
Moyeu en acier Inox
Nucleo corona de acero Inox

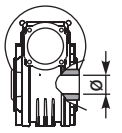
SPECIAL SERIES
SERIE SPECIALE

S

045 ⇨ ø19
050 ⇨ ø24

X

Stainless steel hub
Mozzo in acciaio Inox
Edelstahlhohlwelle
Moyeu en acier Inox
Nucleo corona de acero Inox



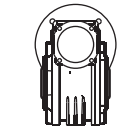
INCH

U

045⇨ø0.750"
050⇨ø1.000"
063⇨ø1.125"
085⇨ø1.500"

Z

Stainless steel hub
Mozzo in acciaio Inox
Edelstahlhohlwelle
Moyeu en acier Inox
Nucleo corona de acero Inox



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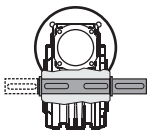

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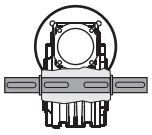

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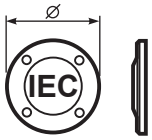


-M
without flange
Senza flangia

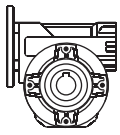
B5

-A=56 (ø120)
-B=63 (ø140)
-C=71 (ø160)
-D=80 (ø200)
-E=90 (ø200)
-F=100÷112 (ø250)
-G=132 (ø300)

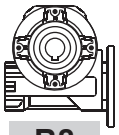
B14

-O=56 (ø80)
-P=63 (ø90)
-Q=71 (ø105)
-R=80 (ø120)
-T=90 (ø140)
-U=100÷112 (ø160)
-V=132 (ø200)

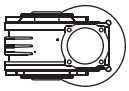
-0=Type R
-S=Type R
S series



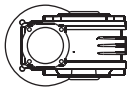
B3



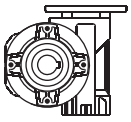
B8



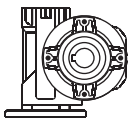
B6



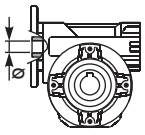
B7



V5



V6



-

Nothing indication:
Standard bore
Kit R standard

Nessuna indicazione:
Foro standard
Kit R standard

P

Input bore reduced one size

Foro entrata ridotto di una misura

Ex.
Input Flange
71 B14
Standard ø14
Reduced ø11

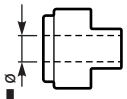
Q

Input bore reduced two sizes

Due grandezze ridutte foro entrata

Ex.
Input Flange
71 B14
Standard ø14
Reduced ø9

COUPLING



A = 9mm
B = 11mm
C = 14mm
D = 19mm
E = 24mm
F = 28mm

Ready for input coupling
Predisposto per giunto

0
Type B
Tipo B

0
Type R
Tipo R

Only for combined units
See technical data table

Solo per i riduttori combinati
Vedi tabelle dati tecnici.

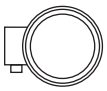
Ausführungen für Getriebekombinationen it

Uniquement pour combinés.
Voir tableau données techniques

Sólo para combinados
ver tabla datos técnicos

With Type M specify terminal box position

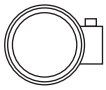
Con tipo M specificare posizione morsettiera



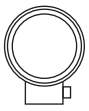
A

B

STANDARD



C



D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

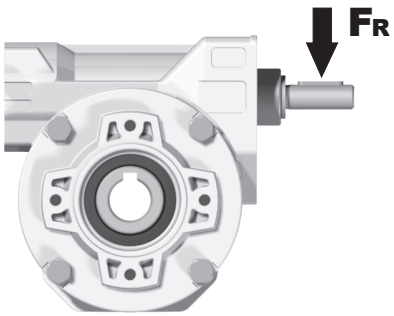
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$
Linear movement / traslazione / linearbewegung / translation / translacion	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

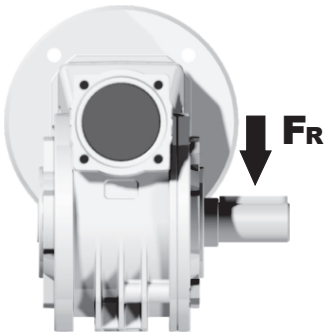
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

	$\mathbf{M}\ [Nm] = \frac{\mathbf{9550} \cdot \mathbf{P}[KW]}{\mathbf{n}\ [rpm]}$
	$\mathbf{M}\ [lb\ in] = \frac{\mathbf{63030} \cdot \mathbf{P}[HP]}{\mathbf{n}\ [rpm]}$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida





$\mathbf{F_R}\ [N] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{2000}}{\mathbf{d}\ [mm]} \cdot \mathbf{f_K}$	$\mathbf{F_R}\ [N] = \frac{\mathbf{M}\ [lb\ in] \cdot \mathbf{8.9}}{\mathbf{d}\ [in]} \cdot \mathbf{f_K}$

M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo
$\mathbf{f_K}$	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión **1.15** Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje **1.25** Catena / Chain sprochets / Antriebskette / Chaîne / Cadena **1.75** Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal **2.50** Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana

— If your application requires higher radial loads, contact our technical office. Higher load may be possible.
— Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
— Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
— Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
— En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

B Output speed / Velocità in uscita / Abtriebsdrehzahl / Vitesse de sortie / Velocidad de salida

Nominal power / Potenza nominale / Max. mögliche Leistung / Poissance nominale / Potencia nominal

Gear size / Grandezza riduttore / Getriebegröße / Taille réducteur / Tamaño reductor

Motor power / Potenza motore / Motorleistung / Puissance moteur / Potencia motor

A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

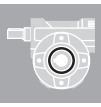
Flange code / Codice flangia / Flanschtype / Code bride / Código bridas

Dynamic efficiency / Rendimento dinamico / Dynamischer Rendement dynamique / Rendimento dinámico

Input speed / Velocità in entrata / Eintriebsdrehzahl / Vitesse en entrée / Velocidad de entrada

045 Rightangle - Gear 41Nm

Rating - Aluminum WORM GEARBOXES



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	0.37	14	2.2	**0.80**	**30**	**B**		B-C	**B**-C		80	2.2	01
140	**10**	0.37	20	1.5	**0.57**	**30**	**B**		B-C	**B**-C		79	2.2	02
100	**14**	0.37	27	1.1	**0.41**	**30**	**B**		B-C	**B**-C		77	2.4	03

C Ratio / Rapporto / Untersetzung / Rapport de réduction / Relación

Nominal module / Modulo nominale / Nenn modul / Module nominale / Módulo nominal

Notes / Note / Anmerkungen / Note / Notas

Transmitted torque / Momento torcente trasmesso / Mögliche Drehmomente / Couple de sortie / Par transmitido

Service factor / Fattore di servizio / Betriebsfaktor / Facteur de service / Factor de servicio

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. <2 h	2 - 8 h	8 - 16 h
Continuous or intermittent appl. with start / hour ≤ 10 / Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.9	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour > 10 / Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1.25	1.5	1.75
	Moderate / Moderato	1.5	1.75	2
	Heavy / Forte	1.75	2	2.25

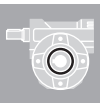
D Motor flange available / Flange disponibili / Erhältliche Motorflansche / Brides disponibles / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Reduzierhülsen / Montage avec douille de réduction / Montaje con casquillo de reducción

C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur / Posición agujeros brida / base motor

B) Available without reduction bushes / Disponibile anche senza boccola / Auch ohne Reduzierbuchse verfügbar / Disponible aussi sans douille de réduction / Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
280	**5**	0.18	5	3.3	**0.60**	**17**	B		B-C		82	1.26	09
200	**7**	0.18	7	2.4	**0.44**	**17**	B		B-C		80	1.44	01
140	**10**	0.18	10	1.8	**0.32**	**17**	B		B-C		78	1.44	02
93	**15**	0.18	13	1.4	**0.25**	**19**	B		B-C		73	1.44	03
70	**20**	0.18	17	1.1	**0.20**	**19**	B		B-C		70	1.09	04
47	**30**	0.12	15	1.4	**0.17**	**21**	B		B-C		62	1.44	05
35	**40**	0.12	19	1.1	**0.13**	**20**	B		B-C		57	1.09	06
23	**61**	0.09	19	1.1	**0.10**	**20**	B		B-C		50	0.72	07
17.5	**80**	0.06	16	1.0	**0.06**	**16**	B		B-C		48	0.56	08
14	**100**	0.06*	16	0.5	**0.03**	**8**	B		B-C		40	0.45	10

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **030** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **030** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **030** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **030** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **030** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

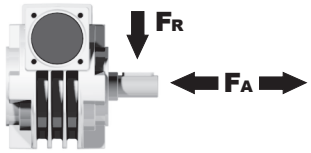
▪ LUBRICATION 030 Oil Quantity 0.03 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

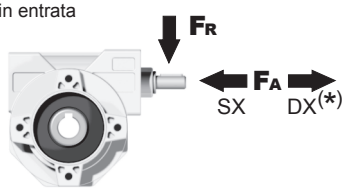
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	120	600
150	140	700
100	160	800
75	180	900
50	200	1000
25	250	1250
15	280	1400

Input shaft
albero in entrata



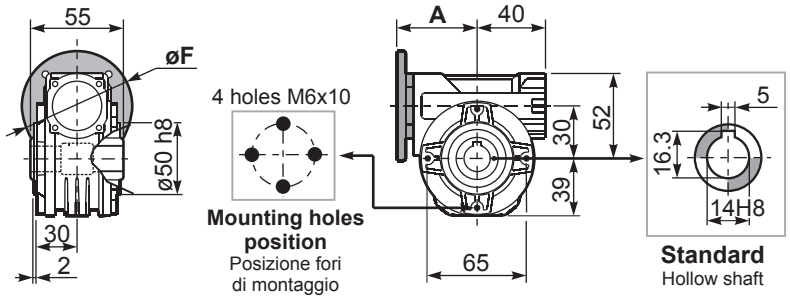
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

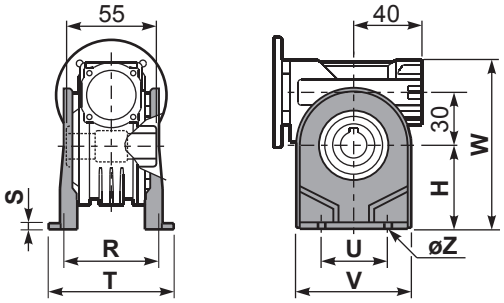
P030**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5

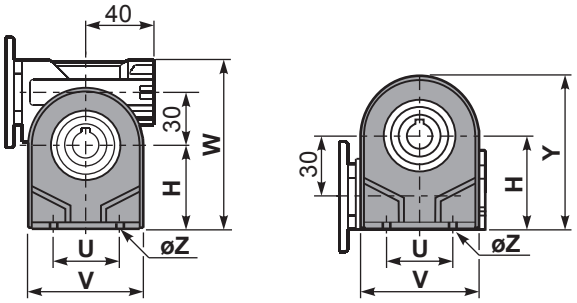


Gearbox weight / peso riduttore: **1.05 kg**

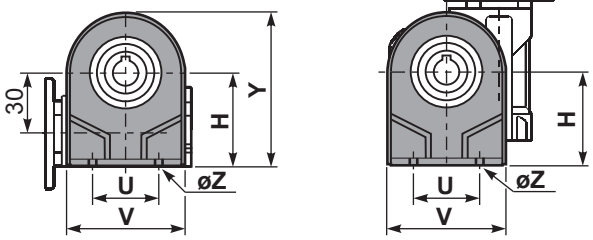
P030**PA**... Feet
Piedini



P030**PB**... Feet
Piedini

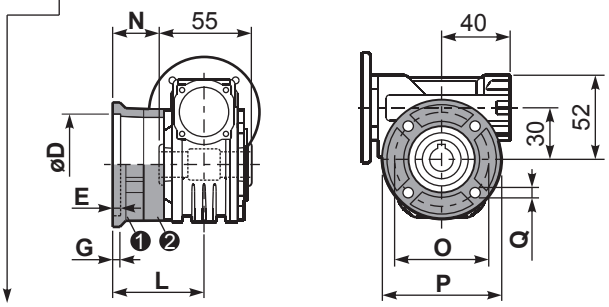


P030**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	55	66	3	87	50	78	94	107	ø6.5	K030.9.022
type **S**	52	66	3	87	52	90	91	104	ø6.5	KS030.9.023

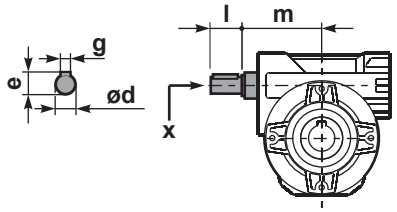
P030**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$50^{+0.15}_{+0.05}$	6	6	50.5	23	68	80	7	❶ K030.9.010 ❷ -
FL	$60^{+0.15}_{+0.05}$	6	6	55.5	28	87	110	8.5	❶ K045.9.010 ❷ -

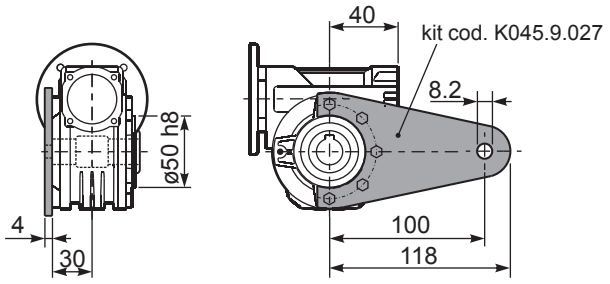
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$40^{+0.15}_{+0.10}$	3.5	5.5	49	21.5	56	80	6.5	❶ KS030.9.012 ❷ -

R030FB... Input shaft
Albero in entrata



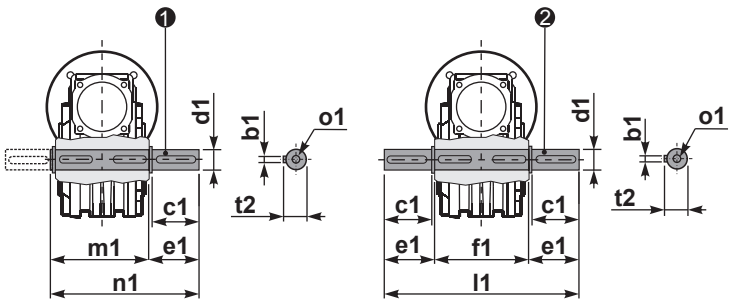
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type **S**	-	-	-	-	-	-	-

P030**BR**... Reaction arm
Braccio di reazione



P030.....**S**... Single Shaft
Albero lento semplice

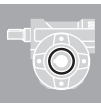
P030.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K030.5.028 type **B**

❷ kit cod. K030.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	5	25	$14^{-0.005}_{-0.020}$	35.5	55	126	59	94.5	16	M5x14
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	0.37	14	2.2	**0.80**	**30**	**B**		B-C	**B**-C		80	2.2	01
140	**10**	0.37	20	1.5	**0.57**	**30**	**B**		B-C	**B**-C		79	2.2	02
100	**14**	0.37	27	1.1	**0.41**	**30**	**B**		B-C	**B**-C		77	2.4	03
67	**21**	0.37	36	1.2	**0.43**	**41**	**B**		B-C	**B**-C		67	1.6	04
50	**28**	0.25	31	1.3	**0.33**	**41**	**B**		B-C	**B**-C		65	2.5	05
38	**37**	0.25	40	1.0	**0.26**	**41**	**B**		B-C	**B**-C		63	1.8	06
30	**46**	0.25	46	0.9	**0.22**	**41**	**B**		B-C	**B**-C		59	1.5	07
23	**60**	0.18	41	1.0	**0.18**	**41**	**B**		B-C	**B**-C		56	1.2	08
20	**70**	0.12	31	1.0	**0.12**	**30**	**B**		B-C	**B**-C		54	1.0	09
13.7	**102**	0.09	31	1.0	**0.09**	**29**	**B**		B-C	**B**-C		49	0.72	10

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **045** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **045** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **045** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **045** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **045** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

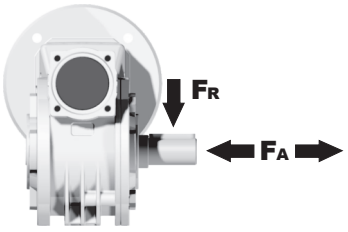
▪ LUBRICATION 045 Oil Quantity 0.09 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

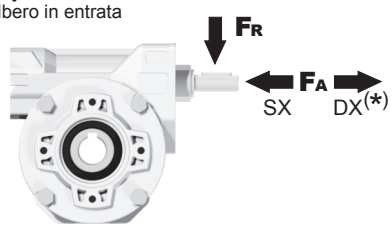
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	180	900
150	200	1000
100	220	1100
75	240	1200
50	260	1400
25	300	1800
15	400	2000

Input shaft
albero in entrata



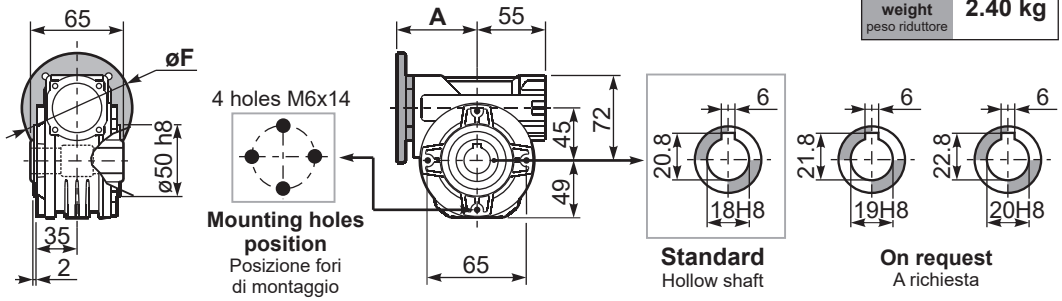
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

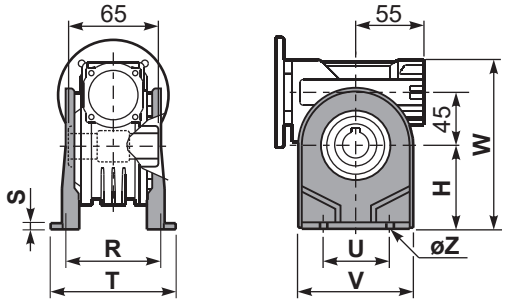
P045**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

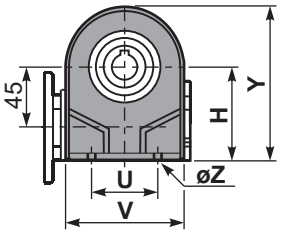


Gearbox weight peso riduttore **2.40 kg**

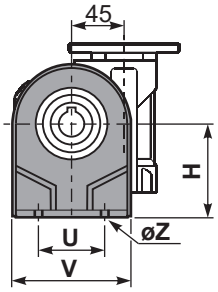
P045**PA**... Feet
Piedini



P045**PB**... Feet
Piedini

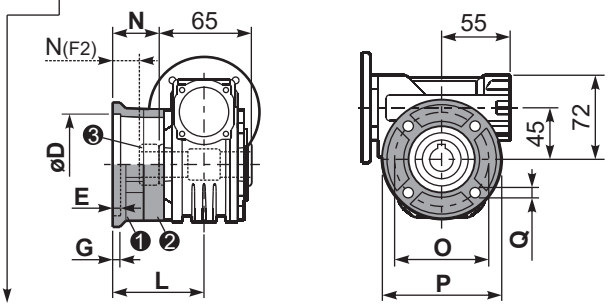


P045**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	72	81	3	100	52	98	121	144	ø10.5	K045.9.022
type **S**	71	84	8	100	70	90	120	143	ø8	KS045.9.023

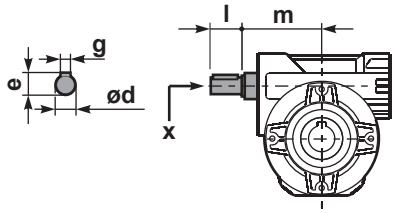
P045**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$60^{+0.15}_{+0.05}$	9	9	60.5	28	87	110	8.5	❶ K045.9.010 ❷ -
FL	$60^{+0.15}_{+0.05}$	9	9	90.5	58	87	110	8.5	❶ K045.9.010 ❷ K045.0.200

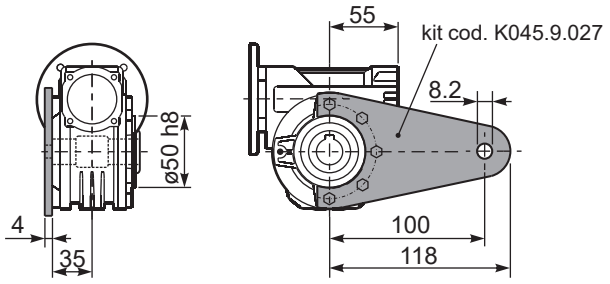
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$95^{+0.20}_{+0.15}$	4	11	73.5	41	115	140	9	❶ KS045.9.013 ❷ -
F2	$60^{+0.15}_{+0.05}$	9	9	60.5	19	87	110	8.5	❶ KS045.9.010 ❸ S045.0.204
F3	$80^{+0.15}_{+0.10}$	3	8	51.5	19	100	120	9	❶ KS045.9.014 ❷ -

R045FB... Input shaft
Albero in entrata



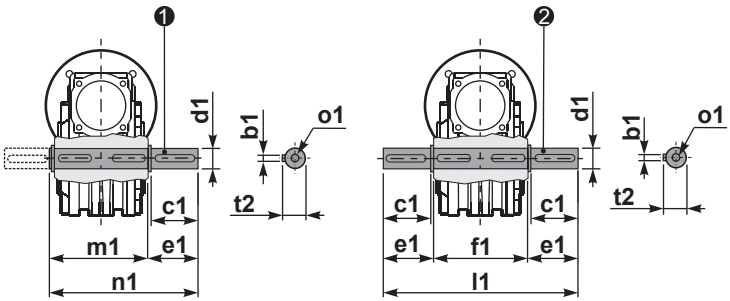
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P045**BR**... Reaction arm
Braccio di reazione



P045.....**S**... Single Shaft
Albero lento semplice

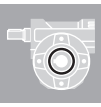
P045.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K045.5.028 type **B**
kit cod. KS045.5.030 type **S**

❷ kit cod. K045.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	6	32	$18^{-0.005}_{-0.020}$	43	65	151	70	113	20.5	M6x18
type **S**	6	40	$19^{-0.005}_{-0.020}$	58.8	-	-	70	128.5	21.5	M8x20



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	Available B14 motor flanges -O 56	-P 63	-Q 71	-R 80	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	0.75	29	1.9	1.5	57	B	**B**			B-C	**B**		82	2.5	01
140	**10**	0.75	41	1.5	1.1	62	B	**B**			B-C	**B**		80	2.4	02
100	**14**	0.75	57	1.2	0.90	68	B	**B**			B-C	**B**		79	2.6	03
78	**18**	0.55	51	1.2	0.67	62	B	**B**			B-C	**B**		75	2.0	04
54	**26**	0.55	67	1.0	0.54	66	B	**B**			B-C	**B**		69	2.7	05
47	**30**	0.55	79	0.9	0.50	72	B	**B**			B-C	**B**		70	2.5	12
39	**36**	0.37	63	1.2	0.43	72	B			B-C	B-C			69	2.1	06
33	**43**	0.37	72	1.0	0.35	68	B			B-C	B-C			66	1.8	07
28	**50**	0.25	53	1.2	0.31	66	B			B-C	B-C			62	1.5	13
23	**60**	0.25	59	1.0	0.26	62	B			B-C	B-C			58	1.3	08
21	**68**	0.25	66	0.9	0.22	58	B			B-C	B-C			57	1.2	09
17.5	**80**	0.18	53	1.1	0.19	57	B			B-C	B-C			54	1.0	10
14	**100**	0.12	41	1.3	0.15	51	B			B-C	B-C			50	0.8	11

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

EN Unit **050** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **050** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **050** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **050** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **050** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

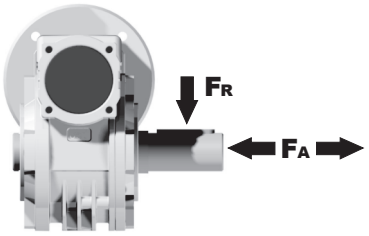
▪ LUBRICATION 050 Oil Quantity 0.14 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

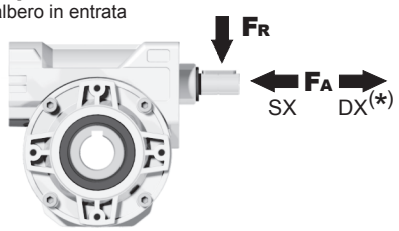
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	240	1200
150	280	1400
100	300	1500
75	340	1700
50	380	1900
25	480	2500
15	560	2800

Input shaft
albero in entrata



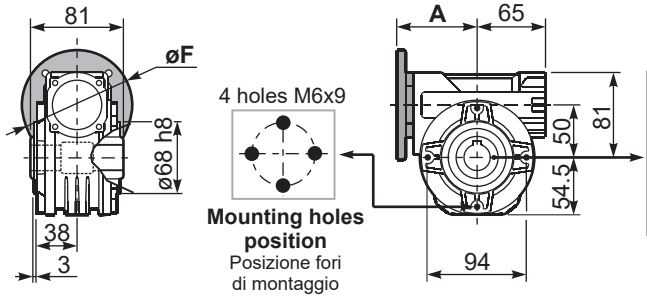
n_1 [min^{-1}]	FA [N]	FR [N]
1400	76	380

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P050**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	78.5
71B5	K050.4.042	160	76
80B5	K050.4.043	200	76.5
56B14	KC40.4.049	80	76
63B14	K050.4.047	90	78.5
71B14	K050.4.045	105	76
80B14	K050.4.046	120	76.5

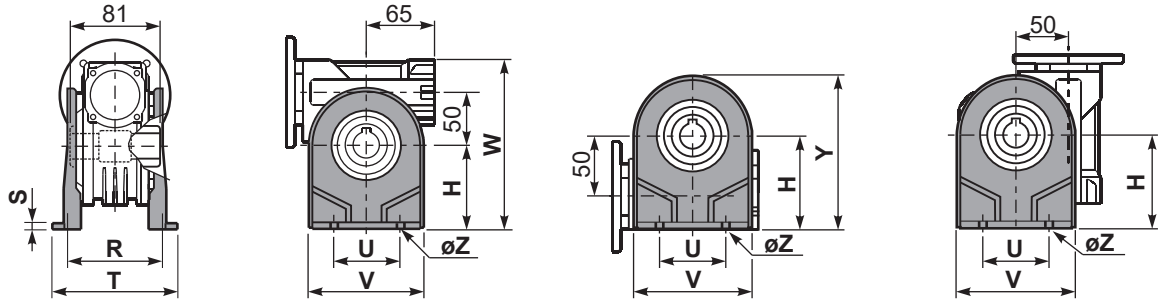


Gearbox weight peso riduttore: **3.00 kg**

P050**PA**... Feet
Piedini

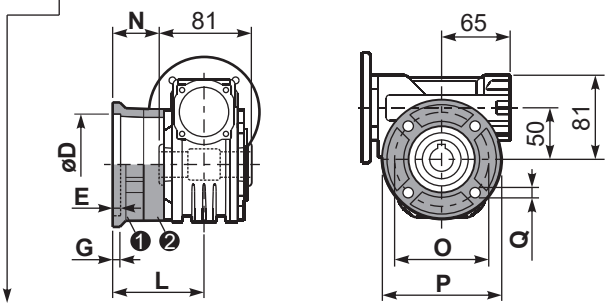
P050**PB**... Feet
Piedini

P050**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	82	98.5	3.5	123	63	113	138.5	163	ø10.5	K050.9.022
type **S**	85	96	10	114	85	110	139.5	166	ø10	KS050.9.023

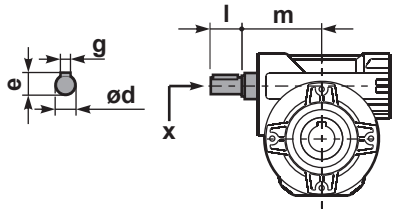
P050**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$70^{+0.20}_{+0.15}$	9	12	85	44.5	90	123	10.5	❶ K050.9.010 ❷ -
FL	$70^{+0.20}_{+0.15}$	9	12	114.5	74	90	123	10.5	❶ K050.9.010 ❷ K050.0.200

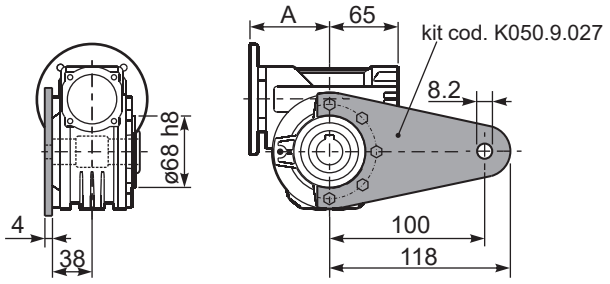
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$110^{+0.20}_{+0.15}$	4	11	83.5	43	130	160	10	❶ KS050.9.012 ❷ -
F2	$70^{+0.20}_{+0.15}$	9	12	76.5	36	90	123	10.5	❶ KS050.9.014 ❷ -
F3	$95^{+0.035}_{0}$	4	10	66.5	26	115	140	10	❶ KS050.9.013 ❷ -

R050FB... Input shaft
Albero in entrata



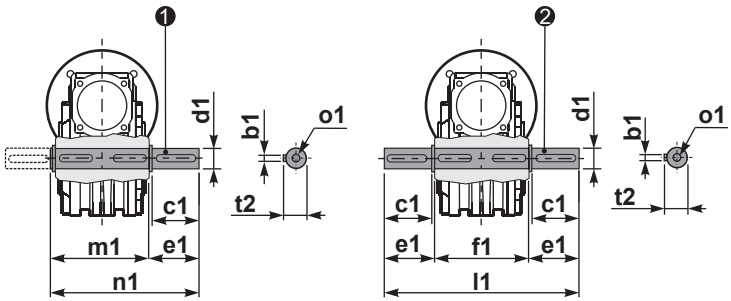
	ød	e	g	l	m	x	kit code
type **B**	16 h6	18	5	30	74.5	M6x16	❶ K050.5.006 PAM71 ❷ K050.5.007 PAM80
type **S**	14 h6	16	5	30	74.5	M5x10	❶ KS050.5.008 PAM71 ❷ KS050.5.009 PAM80

P050**BR**... Reaction arm
Braccio di reazione



P050.....**S**... Single Shaft
Albero lento semplice

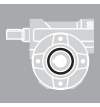
P050.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K050.5.028 type **B**
kit cod. KS050.5.030 type **S**

❷ kit cod. K050.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	52	$25^{-0.005}_{-0.020}$	59.5	81	200	86.5	146	28	M8x20
type **S**	8	50	$24^{-0.005}_{-0.020}$	68.8	-	-	86.5	155	27	M8x20



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	1.8	71	1.8	3.2	125		B	**B**		B-C	**B**-C		83	3.1	01
140	**10**	1.8	99	1.4	2.4	134		B	**B**		B-C	**B**-C		81	3.1	02
93	**15**	1.5	121	1.1	1.7	138		B	**B**		B-C	**B**-C		79	3.1	03
74	**19**	1.1	111	1.2	1.4	138		B	**B**		B-C	**B**-C		78	2.6	04
58	**24**	1.1	135	1.0	1.2	142		B	**B**		B-C	**B**-C		75	2.0	05
47	**30**	1.1	167	0.9	0.96	146		B	**B**		B-C	**B**-C		74	3.2	06
39	**36**	0.75	125	1.2	0.88	147		B	**B**		B-C	**B**-C		68	2.7	07
35	**40**	0.75	135	1.0	0.78	140		B	**B**		B-C	**B**-C		66	2.5	13
31	**45**	0.55	111	1.2	0.67	135	B	B			B-C	C		66	2.1	08
23	**60**	0.55	140	0.9	0.51	130	B	B			B-C	C		62	1.6	12
21	**67**	0.55	151	0.8	0.45	124	B	B			B-C	C		60	1.5	09
17.5	**80**	0.37	115	1.0	0.38	119	B	B			B-C	C		57	1.3	10
14.9	**94**	0.37	123	1.0	0.36	119	B	B			B-C	C		52	1.1	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **063** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **063** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **063** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **063** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **063** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

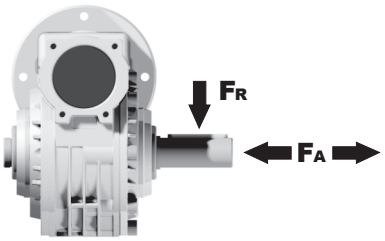
▪ LUBRICATION 063 Oil Quantity 0.40 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

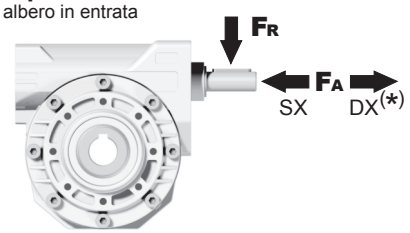
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	360	1800
150	400	2000
100	460	2300
75	500	2500
50	600	3000
25	700	3800
15	800	4000

Input shaft
albero in entrata



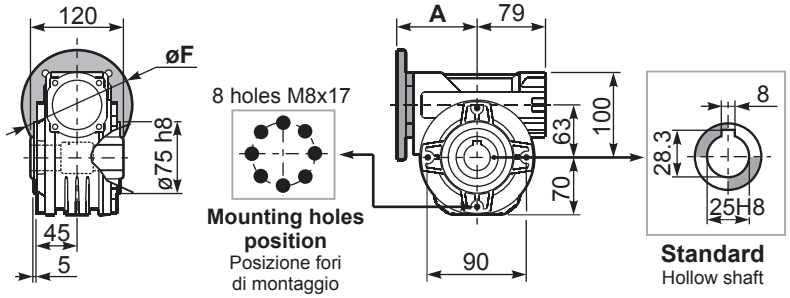
n_1 [min^{-1}]	FA [N]	FR [N]
1400	90	450

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

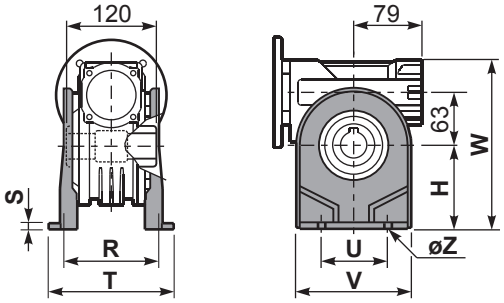
P063**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	99.5
71B5	K063.4.042	160	97.5
80/90B5	K063.4.043	200	99.5
71B14	K063.4.047	105	97.5
80B14	K063.4.046	120	99.5
90B14	K063.4.041	140	99.5

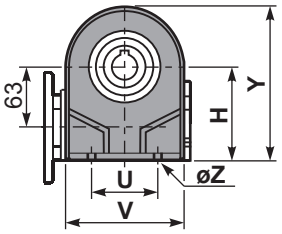


Gearbox weight peso riduttore **6.00 kg**

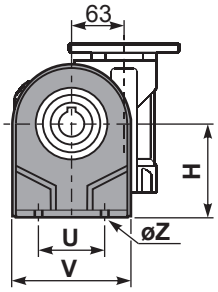
P063**PA**... Feet
Piedini



P063**PB**... Feet
Piedini

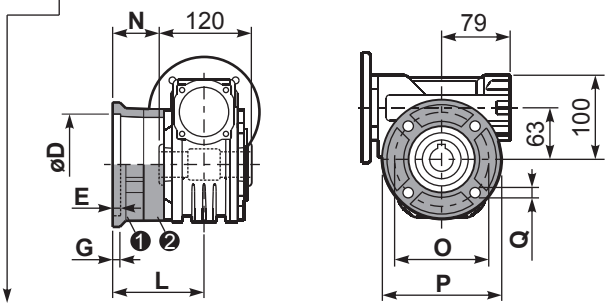


P063**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	100	111	4	144	95	133	170	200	ø10.5	K063.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

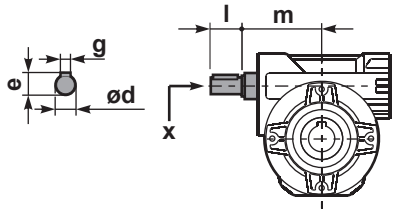
P063**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 $^{+0.20}_{+0.15}$	7	13	86	26	150	175	11	❶ K063.9.010 ❷ -
FL	115 $^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ K063.9.010 ❷ K063.0.200

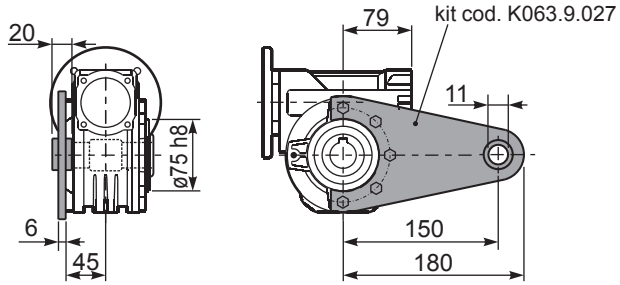
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 $^{+0.035}_{0}$	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R063FB... Input shaft
Albero in entrata



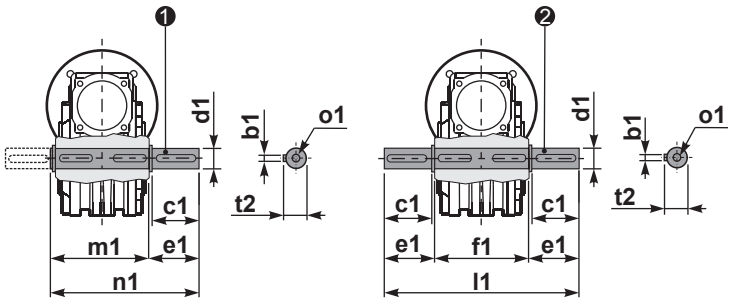
	ød	e	g	l	m	x	kit code
type **B**	18 h6	20.5	6	45	93	M6x16	❶ K063.5.006 PAM80 ❷ K063.5.007 PAM90
type **S**	19 h6	21.5	6	40	93	M8x20	❶ KS063.5.008 PAM80 ❷ KS063.5.009 PAM90

P063**BR**... Reaction arm
Braccio di reazione



P063.....**S**... Single Shaft
Albero lento semplice

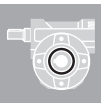
P063.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	25 $^{-0.005}_{-0.020}$	63.2	120	246.4	126.8	190	28	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	1.8	71	2.3	4.1	162		B	**B**		B-C	**B**-C		83	3.1	01
140	**10**	1.8	99	1.7	3.1	173		B	**B**		B-C	**B**-C		81	3.1	02
93	**15**	1.5	121	1.5	2.2	178		B	**B**		B-C	**B**-C		79	3.1	03
74	**19**	1.5	152	1.2	1.8	178		B	**B**		B-C	**B**-C		78	2.6	04
58	**24**	1.5	184	1.0	1.5	185		B	**B**		B-C	**B**-C		75	2.0	05
47	**30**	1.5	227	0.8	1.3	189		B	**B**		B-C	**B**-C		74	3.2	06
39	**36**	1.1	184	1.0	1.1	191		B	**B**		B-C	**B**-C		68	2.7	07
35	**40**	1.1	198	0.9	1.0	181		B	**B**		B-C	**B**-C		66	2.5	13
31	**45**	0.75	152	1.2	0.86	175	B	B			B-C	C		66	2.1	08
23	**60**	0.55	140	1.2	0.66	168	B	B			B-C	C		62	1.6	12
21	**67**	0.55	151	1.1	0.58	159	B	B			B-C	C		60	1.5	09
17.5	**80**	0.37	115	1.3	0.49	153	B	B			B-C	C		57	1.3	10
14.9	**94**	0.37	123	1.1	0.39	130	B	B			B-C	C		52	1.1	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **63A** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **63A** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **63A** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **63A** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **63A** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

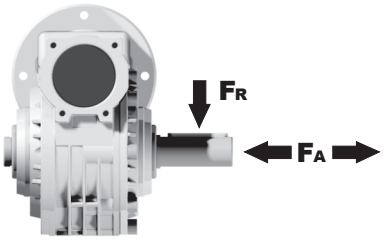
▪ LUBRICATION 63A Oil Quantity 0.40 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

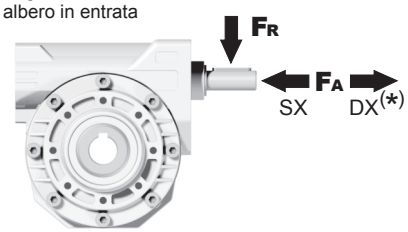
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	360	1800
150	400	2000
100	460	2300
75	500	2500
50	600	3000
25	700	3800
15	800	4000

Input shaft
albero in entrata



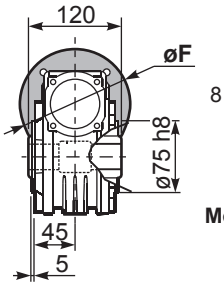
n_1 [min^{-1}]	FA [N]	FR [N]
1400	90	450

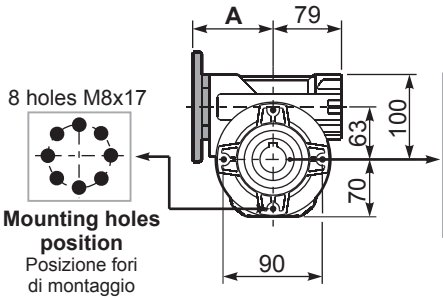
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P63A**FB**... Basic wormbox
Riduttore base

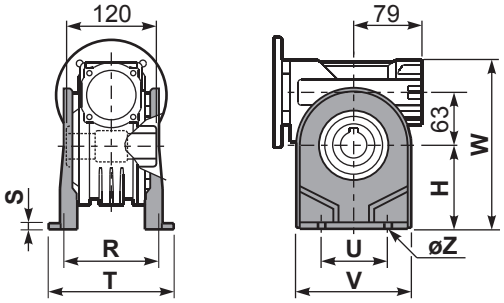
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	99.5
71B5	K063.4.042	160	97.5
80/90B5	K063.4.043	200	99.5
71B14	K063.4.047	105	97.5
80B14	K063.4.046	120	99.5
90B14	K063.4.041	140	99.5



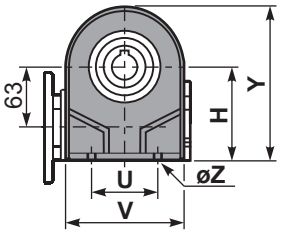


Gearbox weight peso riduttore **6.00 kg**

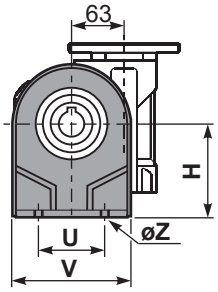
P63A**PA**... Feet
Piedini



P63A**PB**... Feet
Piedini

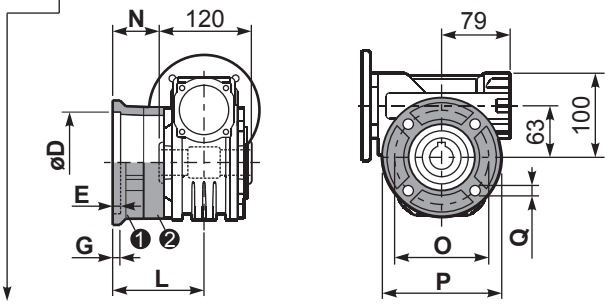


P63A**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	115	115	12	142	120	156	185	215	ø11	K070.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

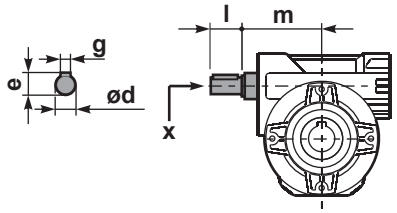
P63A**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$130^{+0.20}_{+0.15}$	7	13	85	25	165	200	13	❶ K070.9.010 ❷ -
FL	$130^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ K070.9.010 ❷ K070.0.200

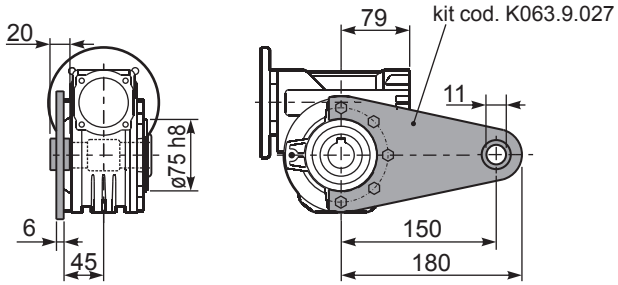
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$130^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	$115^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	$110^{+0.035}_{0}$	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

R63AFB... Input shaft
Albero in entrata



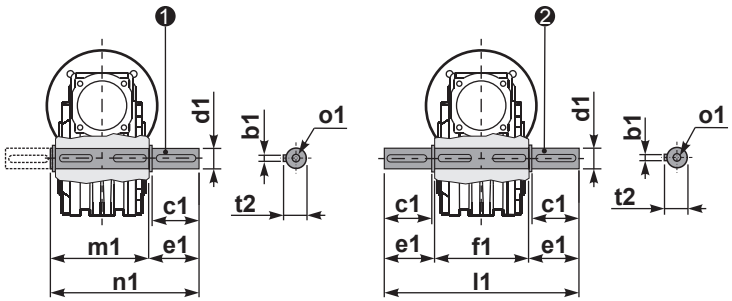
	ød	e	g	l	m	x	kit code
type **B**	18 h6	20.5	6	45	93	M6x16	❶ K063.5.006 PAM80 ❷ K063.5.007 PAM90
type **S**	19 h6	21.5	6	40	93	M8x20	❶ KS063.5.008 PAM80 ❷ KS063.5.009 PAM90

P63A**BR**... Reaction arm
Braccio di reazione



P63A.....**S**... Single Shaft
Albero lento semplice

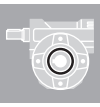
P63A.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K070.5.028 type **B**

❷ kit cod. K070.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	$28^{-0.005}_{-0.020}$	63.5	120	247	127.5	191	31	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -R 80	-T 90	-U 100 112	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	4.0	168	1.5	**6.1**	**257**		B	B		B	B		88	4.23	01
140	**10**	4.0	218	1.3	**5.2**	**284**		B	B		B	B		80	4.2	02
100	**14**	3.0	223	1.4	**4.1**	**305**		B	B		B	B		78	4.5	03
70	**20**	2.2	237	1.2	**2.7**	**294**		B	B		B	B		79	3.4	04
64	**22**	2.2	258	1.1	**2.5**	**294**		B	B		B	B		78	3.1	05
50	**28**	2.2	315	1.1	**2.4**	**347**		B	B		B	B		75	4.7	06
37	**38**	1.5	276	1.2	**1.8**	**336**	B	B			B			71	3.5	07
30	**46**	1.5	320	1.0	**1.5**	**326**	B	B			B			68	3.1	08
27	**52**	1.1	258	1.1	**1.2**	**289**	B	B			B			66	2.7	09
21	**67**	1.1	327	0.9	**0.97**	**289**	B	B			B			65	2.1	10
18.9	**74**	0.75	220	1.2	**0.91**	**268**	B	B			B			58	1.9	11
14.6	**96**	0.55	191	1.3	**0.70**	**242**	B	B			B			53	1.5	12

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **085** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **085** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **085** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **085** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **085** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

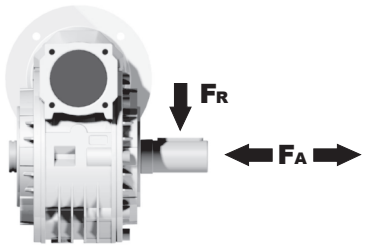
▪ LUBRICATION 085 Oil Quantity 1.20 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

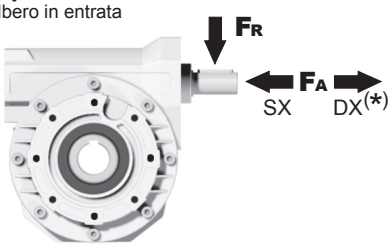
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	500	2500
150	580	2900
100	600	3000
75	700	3500
50	800	4000
25	1000	5000
15	1160	5800

Input shaft
albero in entrata



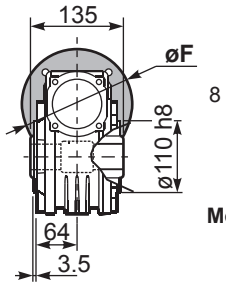
n_1 [min^{-1}]	FA [N]	FR [N]
1400	130	650

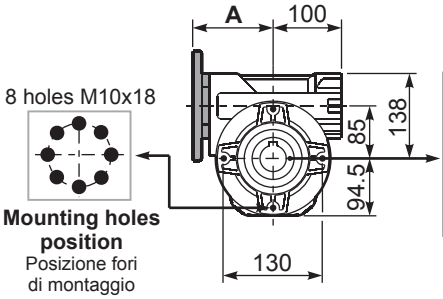
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P085**FB**... Basic wormbox
Riduttore base

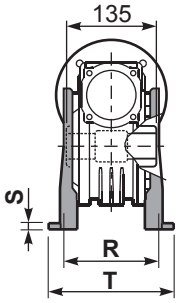
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	116.5
80/90B5	K023.4.042	200	118.5
100/112B5	K023.4.043	250	127.5
80B14	K085.4.046	120	118.5
90B14	K085.4.045	140	118.5
100/112B14	K085.4.047	160	127.5



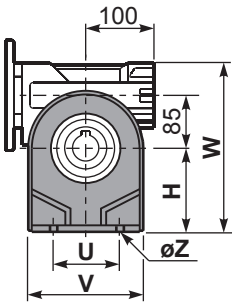


Gearbox weight peso riduttore **11.00 kg**

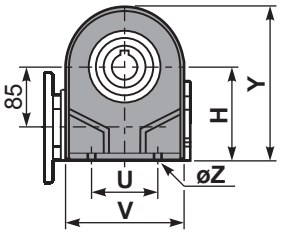
P085**PA**... Feet
Piedini

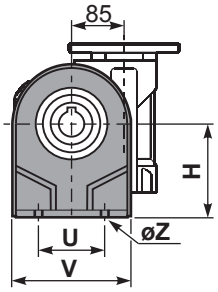


P085**PB**... Feet
Piedini



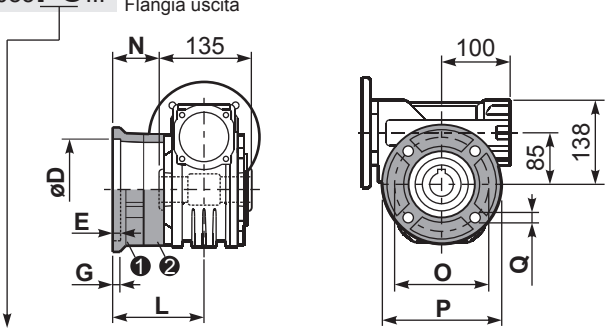
P085**PV**... Feet
Piedini





	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	142	145	5	182	140	180	236.5	280	ø10.5	K085.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

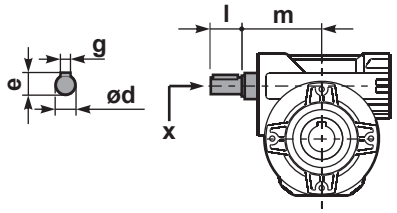
P085**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	152 $^{+0.06}_{+0.00}$	5	16	108	40.5	176	205	13	❶ K085.9.010 ❷ -
FL	152 $^{+0.06}_{+0.00}$	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

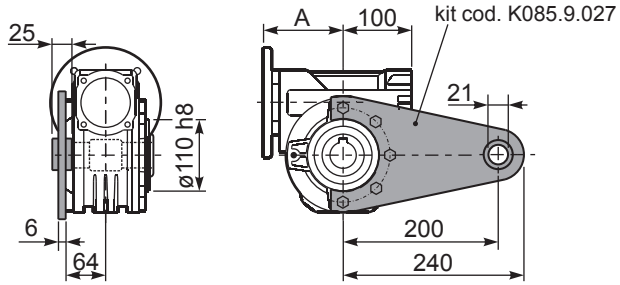
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 H7	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 $^{+0.06}_{+0.00}$	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 H7	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

R085FB... Input shaft
Albero in entrata



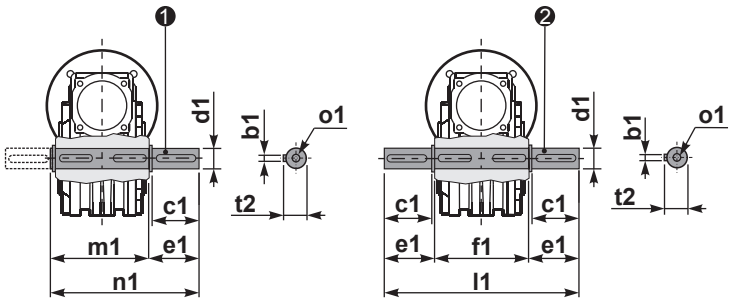
	ød	e	g	l	m	x	kit code
type **B**	25 h6	28	8	50	112	M8x20	❶ K085.5.007 PAM90 ❷ K085.5.008 PAM100
type **S**	24 h6	27	8	50	112	M8x20	❶ KS085.5.009 PAM90 ❷ KS085.5.011 PAM100

P085**BR**... Reaction arm
Braccio di reazione



P085.....**S**... Single Shaft
Albero lento semplice

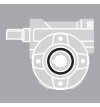
P085.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K085.5.028 type **B**

❷ kit cod. K085.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	10	60	35 $^{-0.005}_{-0.020}$	73.5	135	282	141	214.5	38	M10x23
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	7.5	315	1.5	**11.5**	**483**		B	B			B	B			88	5.5	01
140	**10**	7.5	440	1.2	**9.0**	**525**		B	B			B	B			86	5.4	02
88	**16**	5.5	492	1.1	**6.0**	**536**		B	B			B	B			82	5.3	03
70	**20**	4.0	447	1.2	**4.9**	**546**		B	B			B	B			82	4.5	04
61	**23**	3.0	377	1.4	**4.1**	**515**		B	B			B	B			80	3.9	05
47	**30**	3.0	467	1.4	**4.2**	**651**		B	B			B	B			76	5.6	06
37	**38**	3.0	583	1.1	**3.3**	**641**		B	B			B	B			75	4.7	07
31	**45**	2.2	493	1.2	**2.7**	**599**		B	B			B	B			73	4.0	08
26	**53**	2.2	557	1.1	**2.5**	**620**		B	B			B	B			70	3.5	09
22	**64**	1.5	452	1.2	**1.8**	**536**	B	B				B				69	2.9	10
16.7	**84**	1.1	410	1.2	**1.3**	**494**	B	B				B				65	2.2	11
14.1	**99**	1.1	446	1.1	**1.2**	**483**	B	B				B				60	1.9	12

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

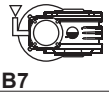
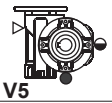
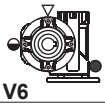
EN Unit **110** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **110** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **110** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **110** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile.
L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

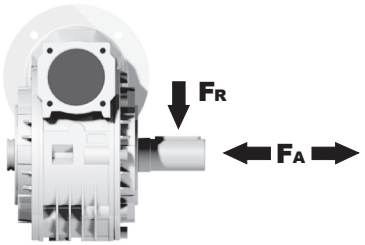
E El reductor tamaño **110** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes.
Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	 B7	B8	 V5	 V6
1.90 LT	1.35 LT	1.35 LT	2.00LT	2.00 LT	2.00LT
AGIP Blasia 460					

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

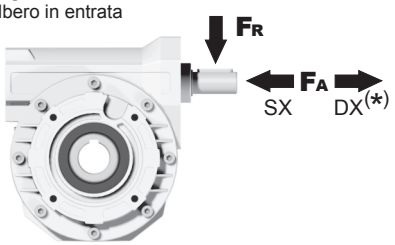
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	600	2900
150	700	3300
100	750	3600
75	800	4000
50	920	4600
25	1200	6000
15	1400	7000

Input shaft
albero in entrata



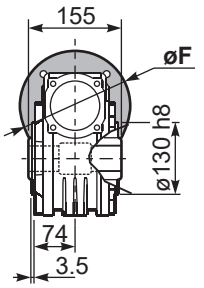
n_1 [min^{-1}]	FA [N]	FR [N]
1400	228	1140

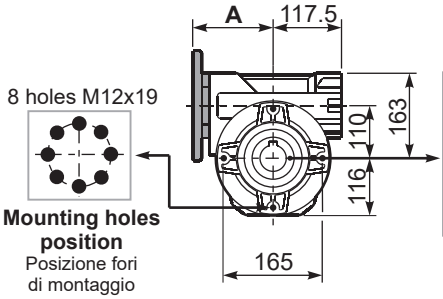
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

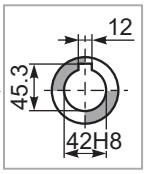
tab. 2

P110**FB**... Basic wormbox
Riduttore base

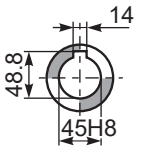
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	136
80/90B5	K023.4.042	200	138
100/112B5	K023.4.043	250	147
132B5	-	300	187
80B14	K085.4.046	120	138
90B14	K085.4.045	140	138
100/112B14	K023.4.041	160	136
132B14	-	200	187







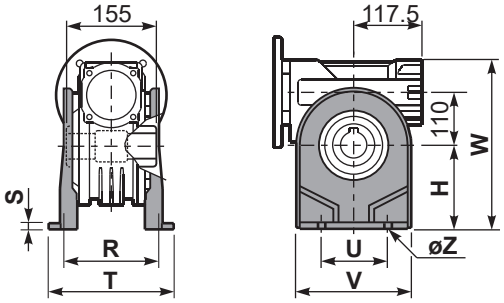
Standard
Hollow shaft



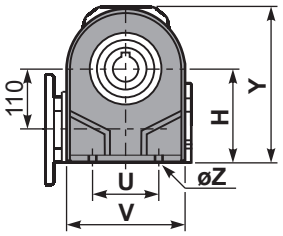
On request
A richiesta

Gearbox weight peso riduttore **35.00 kg**

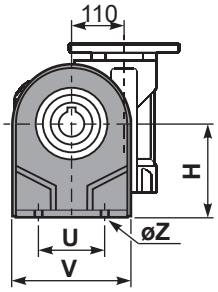
P110**PA**... Feet
Piedini



P110**PB**... Feet
Piedini

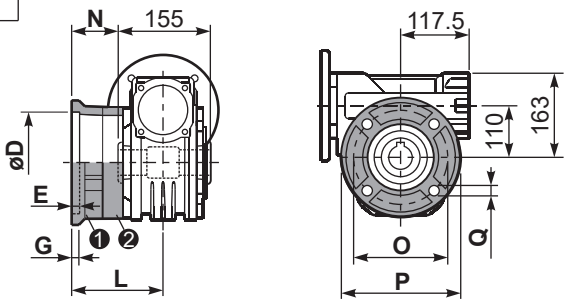


P110**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	170	180	22	224	200	240	286	333	ø13	K110.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

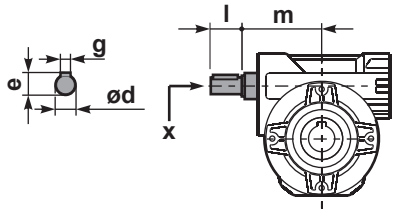
P110**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	170 +0.083 +0.043	11	16.5	131.5	54	230	270	13	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

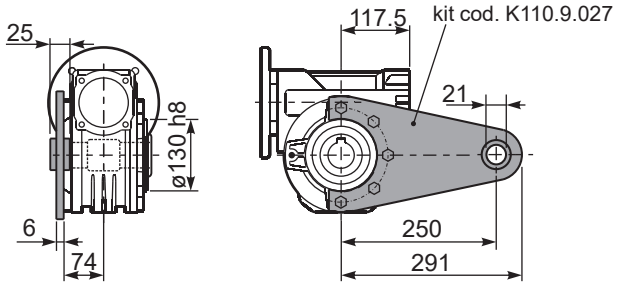
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

R110FB... Input shaft
Albero in entrata



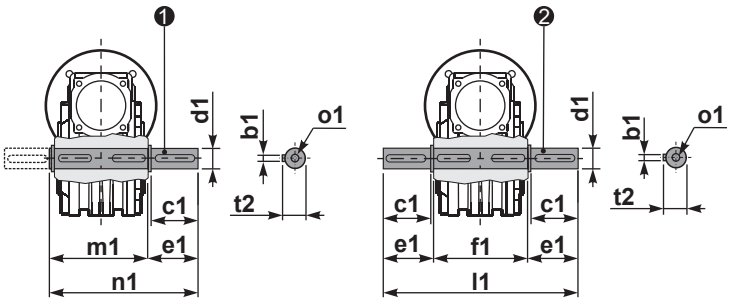
	ød	e	g	l	m	x	kit code
type **B**	25 h6	28	8	50	131.5	M8x20	❶ K085.5.007 PAM90 ❷ K085.5.008 PAM100
type **S**	24 h6	27	8	50	131.5	M8x20	❶ KS085.5.009 PAM90 ❷ KS085.5.011 PAM100

P110**BR**... Reaction arm
Braccio di reazione



P110.....**S**... Single Shaft
Albero lento semplice

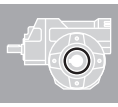
P110.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K110.5.028 type **B**

❷ kit cod. K110.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	12	75	42 -0.005 -0.020	96.5	155	348	163.5	260	45	M12x32
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	-B 63	-C 71	Available B14 motor flanges -P 63	-Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
47	**30.1**	0.25	38	1.4	**0.36**	**55**				C		74	2.2	01
33	**43.0**	0.25	53	1.0	**0.26**	**55**				C		72	2.2	02
23	**60.2**	0.25	62	0.9	**0.22**	**55**				C		60	2.4	03
15.5	**90.3**	0.12	42	1.3	**0.16**	**55**				C		57	1.6	04
11.6	**120**	0.12	52	1.1	**0.13**	**55**				C		53	2.5	05
8.8	**159**	0.12	64	0.9	**0.10**	**55**				C		49	1.8	06
7.1	**198**	0.12*	55	<0.8	**0.09**	**55**				C		47	1.5	07
5.4	**258**	0.12*	55	<0.8	**0.07**	**55**				C		45	1.2	08
4.7	**301**	0.12*	39	<0.8	**0.05**	**39**				C		40	1.0	09
3.2	**439**	0.12*	39	<0.8	**0.04**	**39**				C		36	0.72	10

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **P45** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P45** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **P45** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P45** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P45** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION P45 Oil

Common lubrication 0.17 l (A + B).

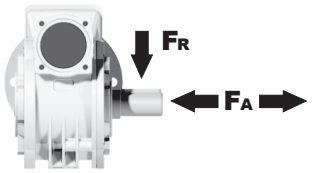
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

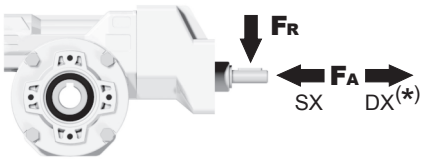
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	240	1200
50	260	1400
25	300	1800
15-6	400	2000

Input shaft
albero in entrata



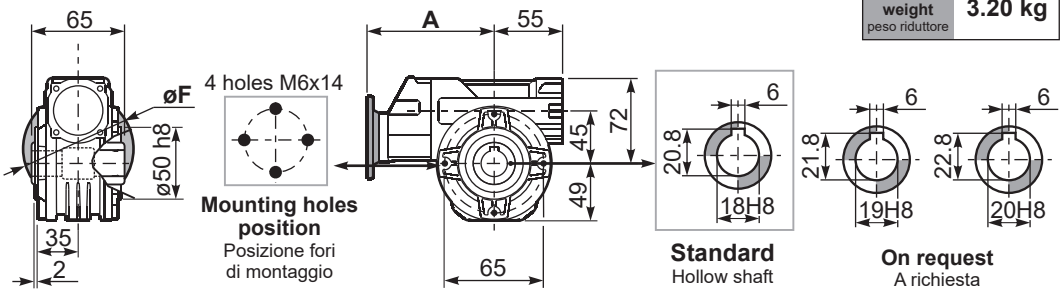
n_1 [min^{-1}]	FA [N]	FR [N]
1400	44	220

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PP45**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K050.4.046	120	137.5
63B5	K050.4.041	138	139.5
71B5	K050.4.042	160	137
63B14	K050.4.047	90	139.5
71B14	K050.4.045	105	137

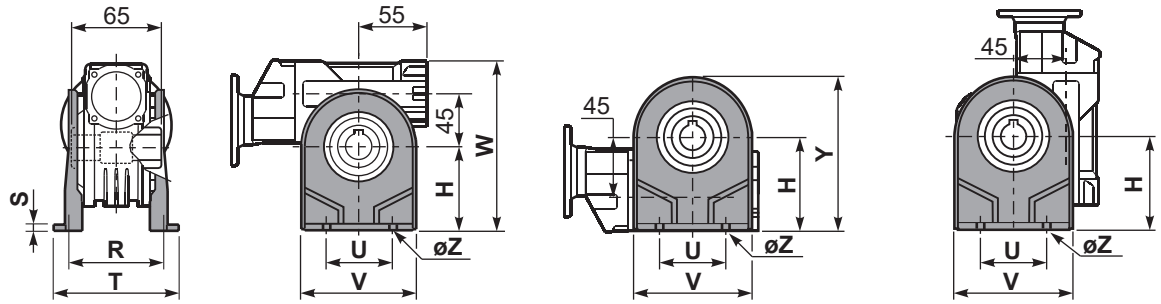


Gearbox weight peso riduttore **3.20 kg**

PP45**PA**... Feet
Piedini

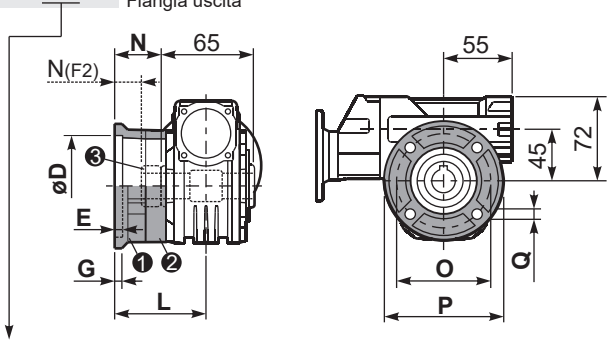
PP45**PB**... Feet
Piedini

PP45**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	72	81	3	100	52	98	121	144	ø10.5	K045.9.022
type **S**	71	84	8	100	70	90	120	143	ø8	KS045.9.023

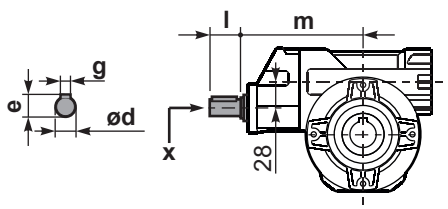
PP45**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$60^{+0.15}_{+0.05}$	9	9	60.5	28	87	110	8.5	❶ K045.9.010 ❷ -
FL	$60^{+0.15}_{+0.05}$	9	9	90.5	58	87	110	8.5	❶ K045.9.010 ❷ K045.0.200

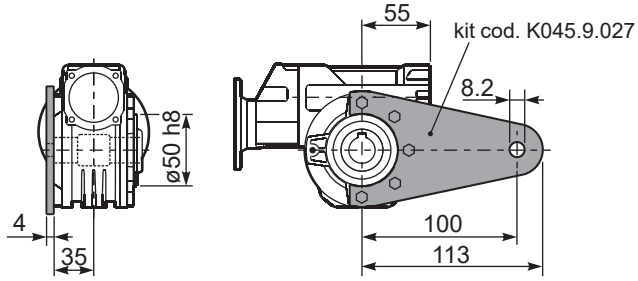
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$95^{+0.20}_{+0.15}$	4	11	73.5	41	115	140	9	❶ KS045.9.013 ❷ -
F2	$60^{+0.15}_{+0.05}$	9	9	60.5	19	87	110	8.5	❶ KS045.9.010 ❸ S045.0.204
F3	$80^{+0.03}_{+0.00}$	3	8	51.5	19	100	120	9	❶ KS045.9.014 ❷ -

RP45FB... Input shaft
Albero in entrata



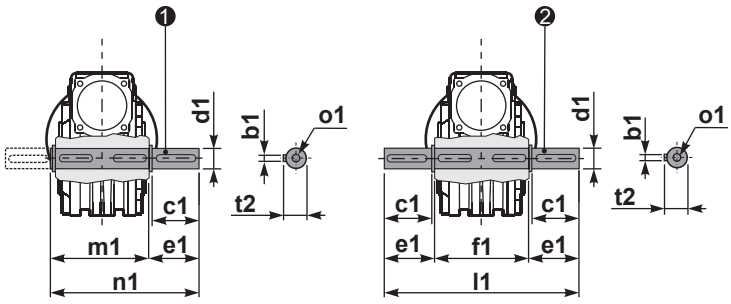
	ød	e	g	l	m	x	
type **B**	14 h6	16	5	25	131	M5x13	C35.5.061
type **S**	-	-	-	-	-	-	

PP45**BR**... Reaction arm
Braccio di reazione



PP45.....**S**... Single Shaft
Albero lento semplice

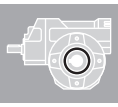
PP45.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K045.5.028 type **B**
kit cod. KS045.5.030 type **S**

❷ kit cod. K045.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	6	32	$18^{-0.005}_{-0.020}$	43	65	151	70	113	20.5	M6x18
type **S**	6	40	$19^{-0.005}_{-0.020}$	58.8	-	-	70	128.5	21.5	M8x20



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	-B 63	-C 71	Available B14 motor flanges -P 63	-Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
47	**30.1**	0.37	58	1.3	**0.49**	**77**				C		76	2.5	01
33	**43.0**	0.25	55	1.4	**0.35**	**77**				C		75	2.4	02
23	**60.2**	0.25	71	1.1	**0.27**	**77**				C		69	2.6	03
18.1	**77.4**	0.25	81	1.1	**0.27**	**88**				C		61	2.0	04
12.5	**112**	0.18	84	1.1	**0.19**	**88**				C		61	2.7	05
9.0	**155**	0.12	71	1.2	**0.15**	**88**				C		56	2.1	06
7.6	**185**	0.12	74	1.0	**0.12**	**77**				C		49	1.8	07
5.4	**258**	0.12*	77	<0.8	**0.09**	**77**				C		47	1.3	08
4.8	**292**	0.12*	66	<0.8	**0.08**	**66**				C		44	1.2	09
4.1	**344**	0.12*	44	<0.8	**0.05**	**44**				C		40	1.0	10
3.3	**430**	0.12*	44	<0.8	**0.04**	**44**				C		36	0.8	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **P50** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P50** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **P50** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P50** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P50** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION P50 Oil

Common lubrication 0.26 l (A + B).

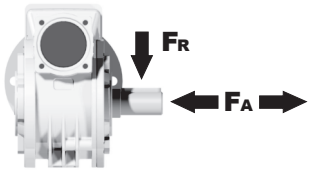
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

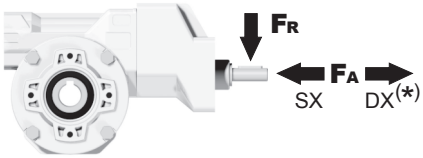
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	340	1700
50	380	1900
25	480	2500
15-6	560	2800

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	44	220

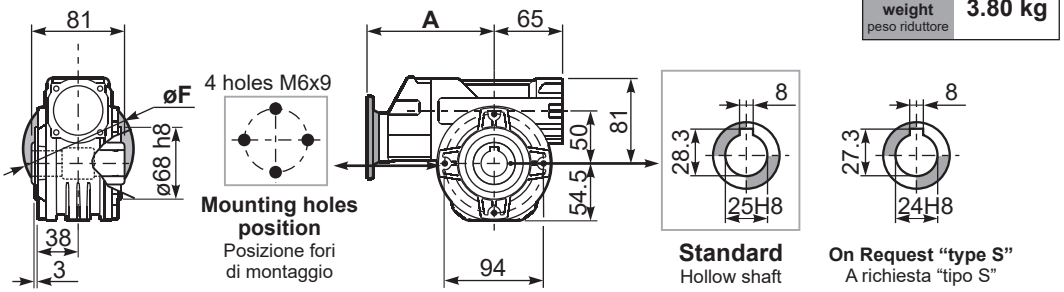
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PP50**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore: **3.80 kg**

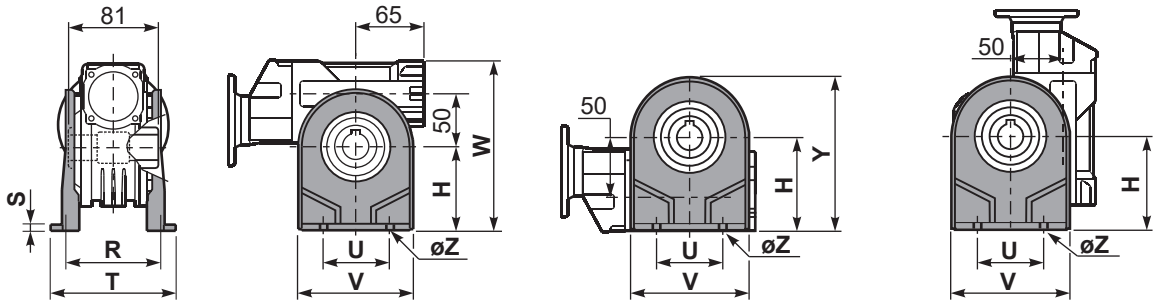
M. flanges	Kit code	øF	A
56B5	K050.4.046	120	142
63B5	K050.4.041	138	144
71B5	K050.4.042	160	141.5
63B14	K050.4.047	90	144
71B14	K050.4.045	105	141.5



PP50**PA**... Feet
Piedini

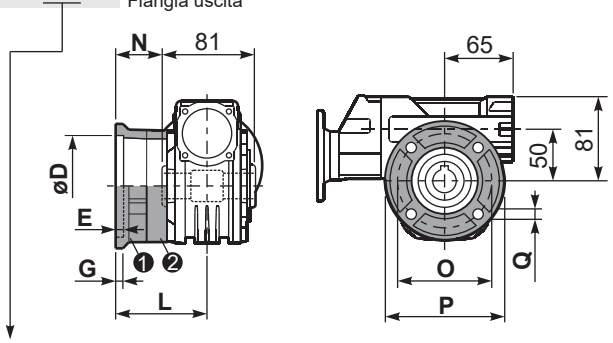
PP50**PB**... Feet
Piedini

PP50**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	82	98.5	3.5	123	63	113	138.5	163	ø10.5	K050.9.022
type **S**	85	96	10	114	85	110	139.5	166	ø10	KS050.9.023

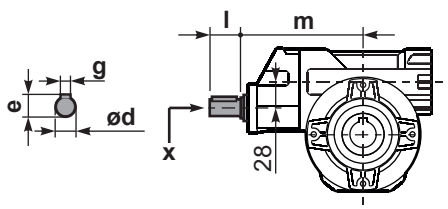
PP50**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$70^{+0.20}_{+0.15}$	9	12	85	44.5	90	123	10.5	❶ K050.9.010 ❷ -
FL	$70^{+0.20}_{+0.15}$	9	12	114.5	74	90	123	10.5	❶ K050.9.010 ❷ K050.0.200

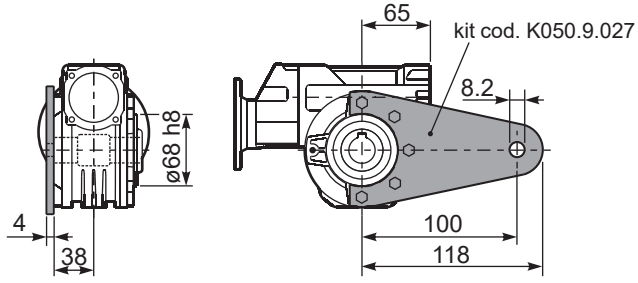
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$110^{+0.20}_{+0.15}$	4	11	83.5	43	130	160	10	❶ KS050.9.012 ❷ -
F2	$70^{+0.20}_{+0.15}$	9	12	76.5	36	90	123	10.5	❶ KS050.9.014 ❷ -
F3	$95^{+0.035}_{0}$	4	10	66.5	26	115	140	10	❶ KS050.9.013 ❷ -

RP50FB... Input shaft
Albero in entrata



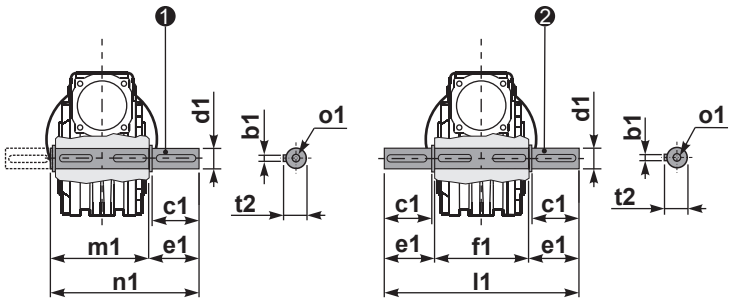
	ød	e	g	l	m	x	
type **B**	14 h6	16	5	25	135.5	M5x13	C35.5.061
type **S**	-	-	-	-	-	-	

PP50**BR**... Reaction arm
Braccio di reazione



PP50.....**S**... Single Shaft
Albero lento semplice

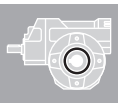
PP50.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K050.5.028 type **B**
kit cod. KS050.5.030 type **S**

❷ kit cod. K050.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	52	$25^{-0.005}_{-0.020}$	59.5	81	200	86.5	146	28	M8x20
type **S**	8	50	$24^{-0.005}_{-0.020}$	68.8	-	-	86.5	155	27	M8x20



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

	Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -P 63	-Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
IEC 90 - 80 - 71	47	**29.9**	0.75	113	1.5	**1.1**	**165**		■	■	■		C	C		74	2.6	01
	37	**37.7**	0.75	141	1.2	**0.88**	**165**		■	■	■		C	C		73	2.0	02
	30	**47.1**	0.75	169	1.1	**0.83**	**187**		■	■	■		C	C		70	3.2	03
	25	**56.6**	0.55	136	1.4	**0.76**	**187**		■	■	■		C	C		64	2.7	04
	19.8	**70.7**	0.55	164	1.1	**0.63**	**187**		■	■	■		C	C		62	2.1	05
	15.9	**87.8**	0.37	162	1.2	**0.43**	**187**		■	■			C	C		73	2.6	06
	12.6	**111.0**	0.37	199	0.9	**0.35**	**187**		■	■			C	C		71	2.0	07
IEC 71 - 63	10.1	**139**	0.37	234	0.8	**0.30**	**187**	■	■			C	■			67	3.2	08
	8.4	**166**	0.25	173	1.1	**0.27**	**187**	■	■			C	■			61	2.7	09
	6.7	**208**	0.18	151	1.1	**0.20**	**165**	■	■			C	■			59	2.1	10
	4.5	**310**	0.12	129	1.3	**0.15**	**165**	■	■			C	■			51	1.5	11
	3.8	**370**	0.12	145	1.1	**0.14**	**165**	■	■			C	■			48	1.3	12
	3.2	**434**	0.12	149	0.9	**0.11**	**138**	■	■			C	■			42	1.1	13

■ **Motor Flanges Available** Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **P63** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P63** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

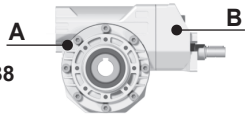
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P63** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P63** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P63** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION P63 Oil

For B3-V5-V6 separate lubrication for A (0.40 l) B (0.08 l) , for B6-B7-B8 common lubrication 0.38 l (A + B).

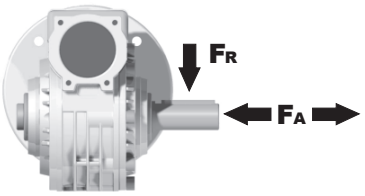


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

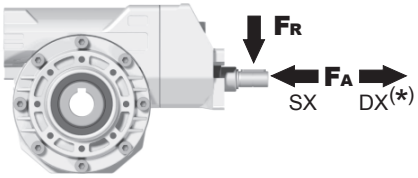
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	500	2500
50	600	3000
25	700	3800
15-6	800	4000

Input shaft
albero in entrata



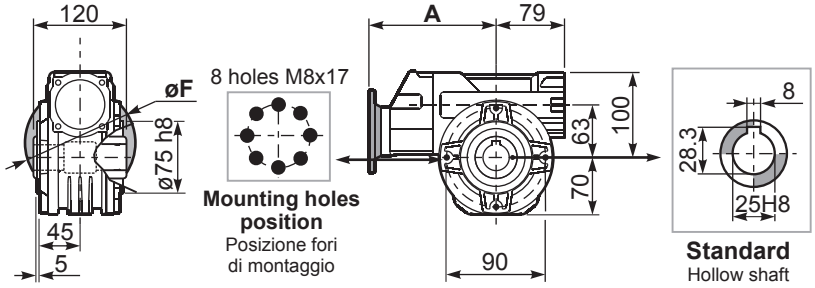
n_1 [min^{-1}]	FA [N]	FR [N]
1400	61	305

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

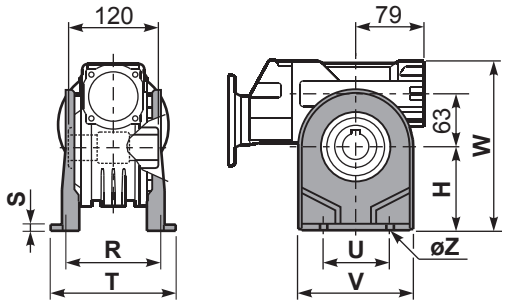
PP63**FB**... Basic wormbox
Riduttore base

	M.flange	Kit code	øF	A
29.9÷111	71B5	K063.4.042	160	176.5
	80/90B5	K063.4.043	200	178.5
	71B14	K063.4.047	105	176.5
	80B14	K063.4.046	120	178.5
	90B14	K063.4.041	140	178.5
139÷434	63B5	K050.4.041	138	162.5
	71B5	K050.4.042	160	160
	63B14	K050.4.047	90	162.5
	71B14	K050.4.045	105	160

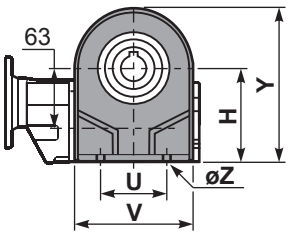


Gearbox weight peso riduttore	29.9÷111	139÷434
	7.30 Kg	7.80 Kg

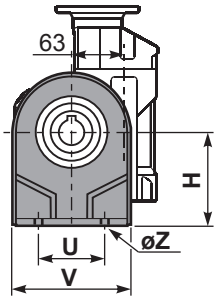
PP63**PA**... Feet
Piedini



PP63**PB**... Feet
Piedini

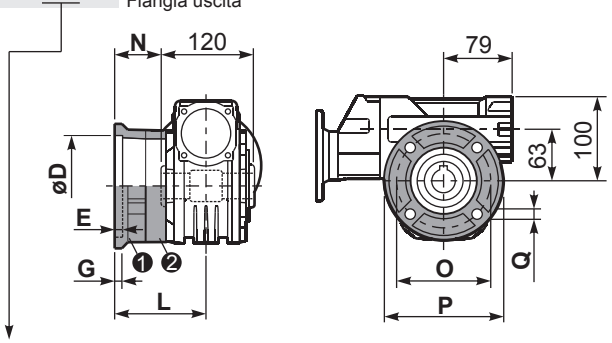


PP63**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	100	111	4	144	95	133	170	200	ø10.5	K063.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

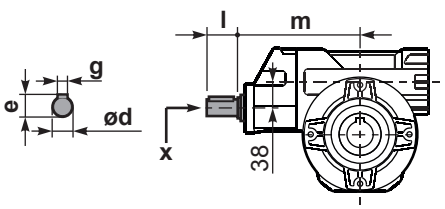
PP63**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 +0.20 +0.15	7	13	86	26	150	175	11	❶ K063.9.010 ❷ -
FL	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ K063.9.010 ❷ K063.0.200

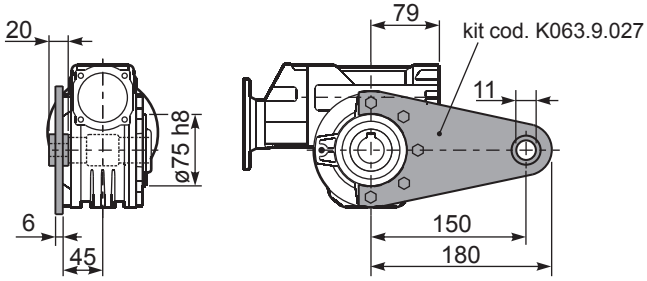
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R P63FB... Input shaft
Albero in entrata



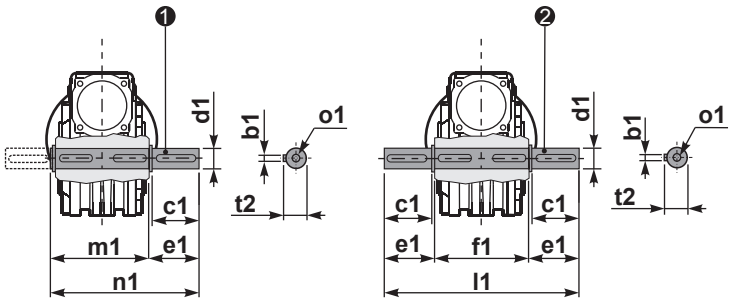
	ød	e	g	l	m	x	
29.9÷111	19 h6	21.5	6	35	169.4	M6x16	C40.5.062
139÷434	14 h6	16	5	25	154.2	M5x13	C35.5.061

PP63**BR**... Reaction arm
Braccio di reazione



PP63.....**S**... Single Shaft
Albero lento semplice

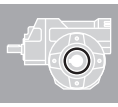
PP63.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	25 -0.005 -0.020	63.2	120	246.4	126.8	190	28	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

	Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -P 63	-Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
IEC 90 - 80 - 71	47	**29.9**	0.75	113	1.6	**1.20**	**182**		■	■	■		C	C		74	2.6	01
	37	**37.7**	0.75	141	1.3	**0.97**	**182**		■	■	■		C	C		73	2.0	02
	30	**47.1**	0.75	169	1.2	**0.91**	**206**		■	■	■		C	C		70	3.2	03
	25	**56.6**	0.75	185	1.1	**0.83**	**206**		■	■	■		C	C		64	2.7	04
	19.8	**70.7**	0.55	162	1.3	**0.70**	**206**		■	■	■		C	C		61	2.1	05
	15.9	**87.8**	0.37	160	1.4	**0.51**	**218**		■	■			C	C		72	2.6	06
	12.6	**111.0**	0.37	196	1.1	**0.41**	**218**		■	■			C	C		70	2.0	07
IEC 71 - 63	10.1	**139**	0.37	231	0.9	**0.35**	**218**	■	■			C	■			66	3.2	08
	8.4	**166**	0.25	170	1.3	**0.32**	**218**	■	■			C	■			60	2.7	09
	6.7	**208**	0.25	195	1.0	**0.25**	**194**	■	■			C	■			55	2.1	10
	4.5	**310**	0.18	194	1.0	**0.18**	**194**	■	■			C	■			51	1.5	11
	3.8	**370**	0.18	213	0.9	**0.16**	**194**	■	■			C	■			47	1.3	12
	3.2	**434**	0.18*	143	<0.8	**0.11**	**143**	■	■			C	■			42	1.1	13

■ **Motor Flanges Available** Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **P6A** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P6A** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

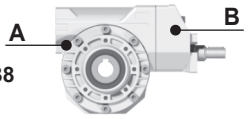
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P6A** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P6A** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P6A** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION P6A Oil

For B3-V5-V6 separate lubrication for A (0.40 l) B (0.08 l) , for B6-B7-B8 common lubrication 0.38 l (A + B).

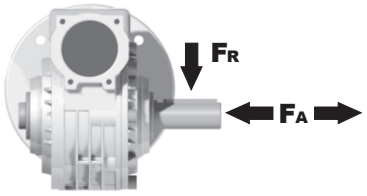


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

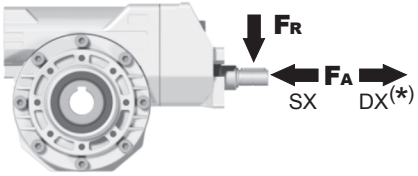
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	500	2500
50	600	3000
25	700	3800
15-6	800	4000

Input shaft
albero in entrata



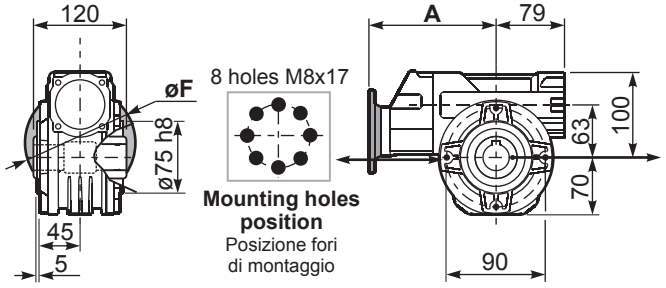
n_1 [min^{-1}]	FA [N]	FR [N]
1400	61	305

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

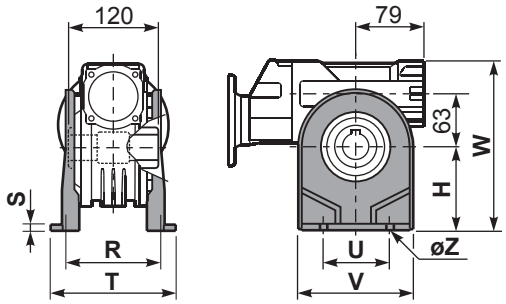
PP6A**FB**... Basic wormbox
Riduttore base

	M.flange	Kit code	øF	A
29.9÷111	**71B5**	K063.4.042	160	176.5
	80/90B5	K063.4.043	200	178.5
	71B14	K063.4.047	105	176.5
	80B14	K063.4.046	120	178.5
	90B14	K063.4.041	140	178.5
139÷434	**63B5**	K050.4.041	138	162.5
	71B5	K050.4.042	160	160
	63B14	K050.4.047	90	162.5
	71B14	K050.4.045	105	160

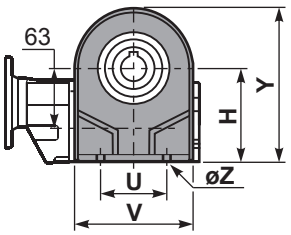


Gearbox weight peso riduttore	29.9÷111	139÷434
	7.30 Kg	7.80 Kg

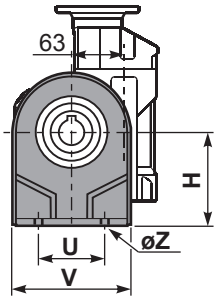
PP6A**PA**... Feet
Piedini



PP6A**PB**... Feet
Piedini

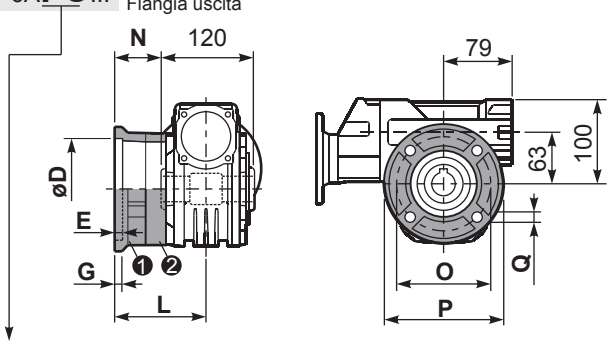


PP6A**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	115	115	12	142	120	156	185	215	ø11	K070.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

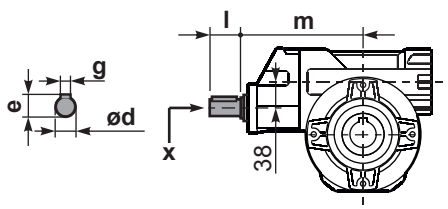
PP6A**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	130 +0.20 +0.15	7	13	85	25	165	200	13	❶ K070.9.010 ❷ -
FL	130 +0.20 +0.15	7	13	111	51	165	200	13	❶ K070.9.010 ❷ K070.0.200

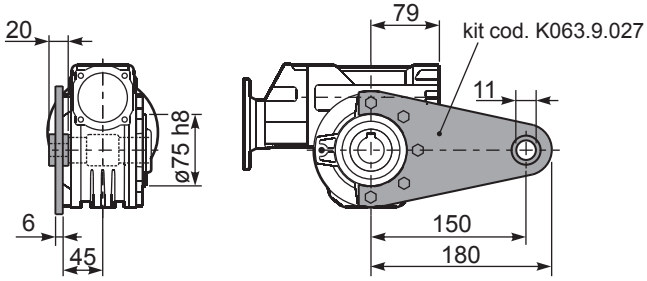
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

R P6AFB... Input shaft
Albero in entrata



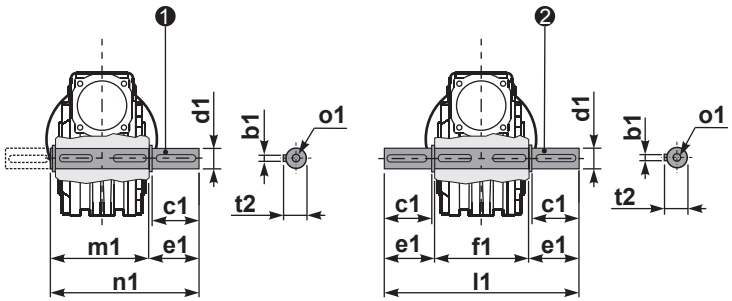
	ød	e	g	l	m	x	
29.9÷111	19 h6	21.5	6	35	169.4	M6x16	C40.5.062
139÷434	14 h6	16	5	25	154.2	M5x13	C35.5.061

PP6A**BR**... Reaction arm
Braccio di reazione



PP6A.....**S**... Single Shaft
Albero lento semplice

PP6A.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K070.5.028 type **B**

❷ kit cod. K070.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	28 -0.005 -0.020	63.5	120	247	127.5	191	31	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-

1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
23.5	**59.7**	1.1	300	1.4	**1.5**	**418**					C	C		67	3.5	01
19.4	**72.3**	1.1	347	1.2	**1.3**	**407**					C	C		64	3.1	02
17.1	**81.7**	1.1	374	1.1	**1.2**	**418**					C	C		61	2.7	03
13.3	**105**	0.75	323	1.2	**0.89**	**385**					C	C		60	2.1	04
8.0	**176**	0.55	415	1.1	**0.58**	**440**	B				C	C		63	3.5	05
6.6	**213**	0.37	322	1.3	**0.47**	**407**	B				C	C		60	3.1	06
5.8	**240**	0.37	321	1.3	**0.48**	**418**	B				C	C		53	2.7	07
4.3	**328**	0.37	438	1.0	**0.35**	**418**	B				C	C		53	2.7	08
3.3	**422**	0.25	374	1.0	**0.26**	**385**	B				C	C		52	2.1	09
3.0	**466**	0.25	358	0.9	**0.23**	**330**	B				C	C		45	1.9	10
2.3	**605**	0.18	297	1.1	**0.20**	**330**	B				C	C		40	1.5	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **P85** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P85** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

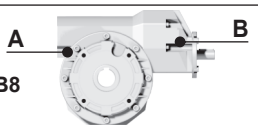
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P85** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P85** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P85** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION P85 Oil

For B3-V5-V6 separate lubrication for A (1.20 l) B (0.14 l) , for B6-B7-B8 common lubrication 0.90 l (A + B).

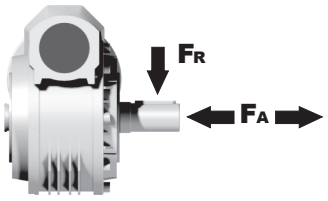


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

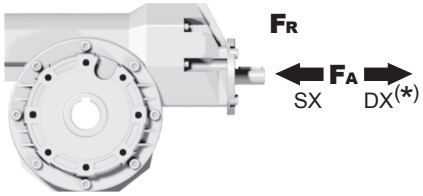
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	700	3500
50	800	4000
25	1000	5000
15-6	1160	5800

Input shaft
albero in entrata



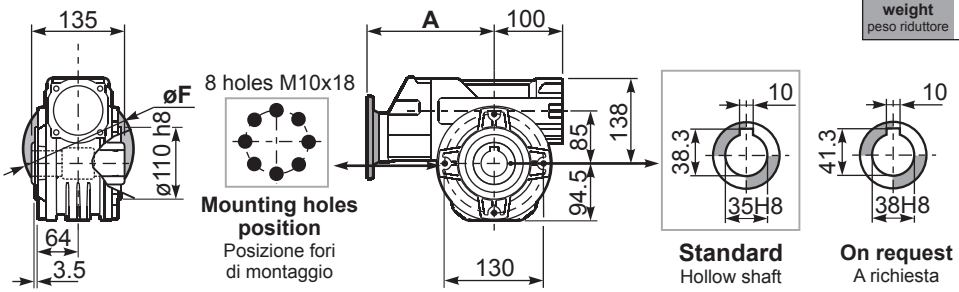
n_1 [min^{-1}]	FA [N]	FR [N]
1400	108	540

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PP85**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	195.2
71B5	K063.4.042	160	193.2
80/90B5	K063.4.043	200	195.2
71B14	K063.4.047	105	193.2
80B14	K063.4.046	120	195.2
90B14	K063.4.041	140	195.2

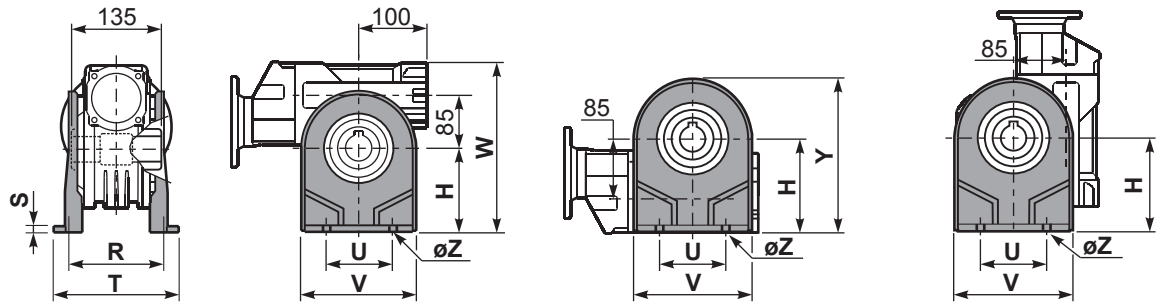


Gearbox weight peso riduttore **19.30 kg**

PP85**PA**... Feet
Piedini

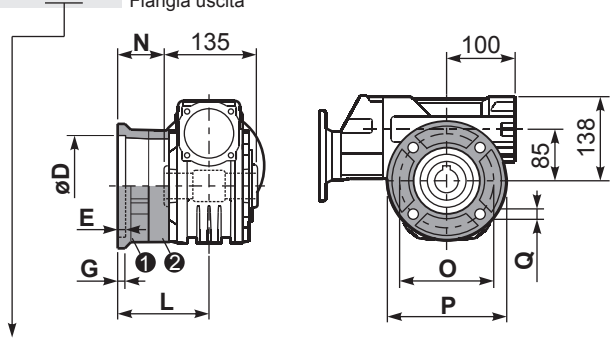
PP85**PB**... Feet
Piedini

PP85**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	142	145	5	182	140	180	236.5	280	ø10.5	K085.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

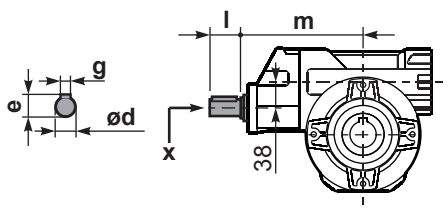
PP85**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	152 +0.06 +0.00	5	16	108	40.5	176	205	13	❶ K085.9.010 ❷ -
FL	152 +0.06 +0.00	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

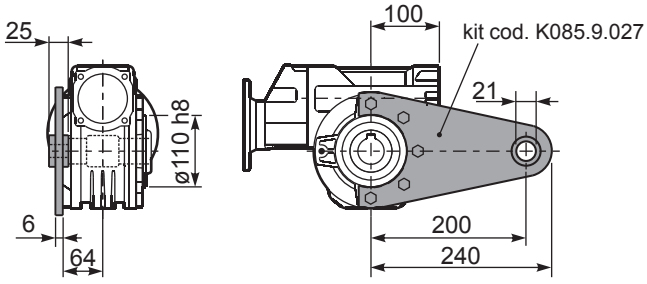
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.04 +0.00	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 +0.06 +0.00	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 +0.04 +0.00	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

RP85FB... Input shaft
Albero in entrata



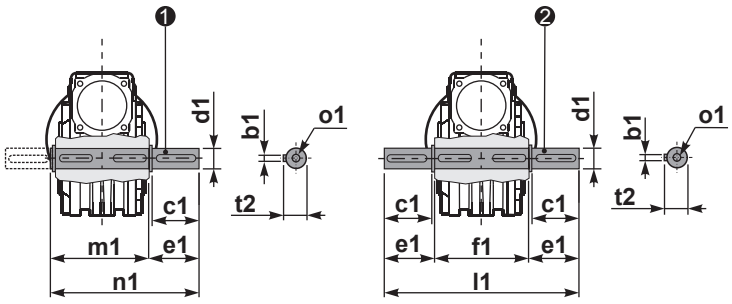
	ød	e	g	l	m	x	
type **B**	19 h6	21.5	6	35	187.5	M6x16	C40.5.062
type **S**	-	-	-	-	-	-	

PP85**BR**... Reaction arm
Braccio di reazione



PP85.....**S**... Single Shaft
Albero lento semplice

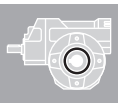
PP85.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K085.5.028 type **B**

❷ kit cod. K085.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	10	60	35 -0.005 -0.020	73.5	135	282	141	214.5	38	M10x23
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
16.8	**83.2**	1.5	587	1.1	**1.7**	**660**					C	C		69	3.5	01
13.9	**100.5**	1.5	699	0.8	**1.3**	**594**					C	C		68	2.9	02
10.6	**132**	1.1	634	0.9	**0.95**	**550**					C	C		64	2.2	03
8.0	**176**	0.75	666	1.2	**0.90**	**803**	B				C	C		74	4.7	04
6.7	**208**	0.75	766	0.9	**0.65**	**660**	B				C	C		72	4.0	05
5.7	**245**	0.55	634	1.0	**0.57**	**660**	B				C	C		69	3.5	06
4.7	**296**	0.55	755	0.8	**0.43**	**594**	B				C	C		68	2.9	07
4.2	**334**	0.55	865	0.8	**0.42**	**660**	B				C	C		69	3.5	08
3.5	**403**	0.37	692	0.9	**0.32**	**594**	B				C	C		68	2.9	09
2.6	**529**	0.25	577	1.0	**0.24**	**550**	B				C	C		64	2.2	10
2.2	**624**	0.25	628	0.8	**0.21**	**528**	B				C	C		59	1.9	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **P10** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
Primary reduction unit is supplied with closed plugs and lubricated for life with synthetic oil.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P10** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. La precoppia è fornita con tappi chiusi e lubrificata a vita con olio sintetico.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **P10** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
Die Stirnradvorstufe ist Lebensdauergeschmiert und wird mit synthetischem Öl Geliefert. Die Stirnradvorstufe ist komplett geschlossen ohne Füllschauben.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P10** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Le précouple est fourni lubrifié à vie avec de l'huile synthétique et avec des bouchons fermés.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **P10** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

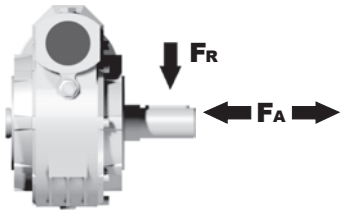
B3	B6	B7	B8	V5	V6
1.9/0.14LT	1.35/0.14 LT	1.35/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT

AGIP Blasia 460

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

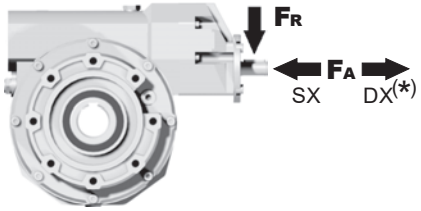
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	800	4000
50	920	4600
25	1200	6000
15-6	1400	7000

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	150	760

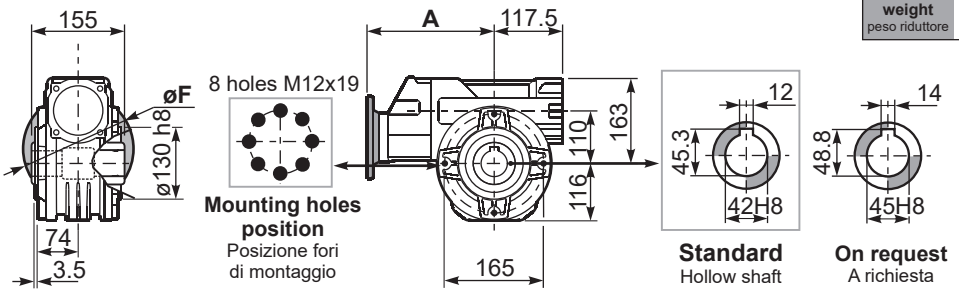
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

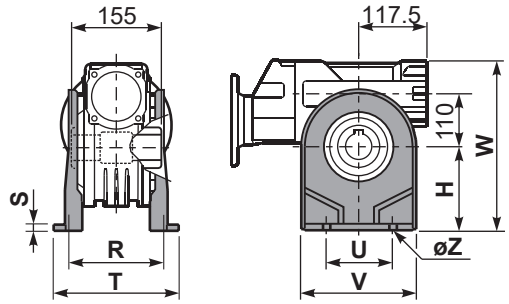
PP10**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore: **41.00 kg**

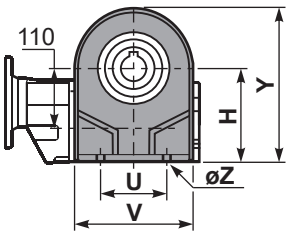
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	214.7
71B5	K063.4.042	160	212.7
80/90B5	K063.4.043	200	214.7
71B14	K063.4.047	105	212.7
80B14	K063.4.046	120	214.7
90B14	K063.4.041	140	214.7



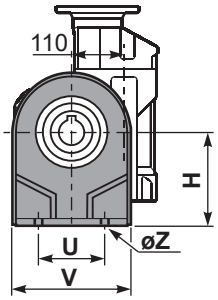
PP10**PA**... Feet
Piedini



PP10**PB**... Feet
Piedini

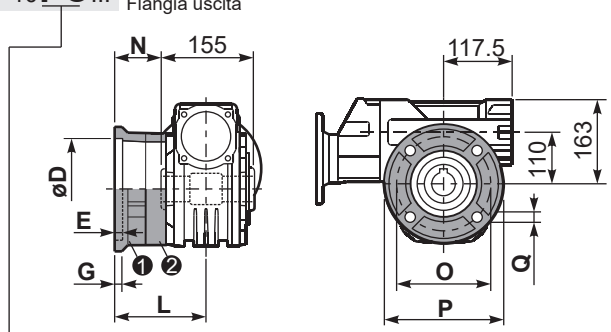


PP10**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	170	180	22	224	200	240	286	333	ø13	K110.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

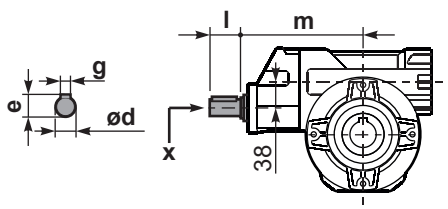
PP10**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	170 +0.083 +0.043	11	16.5	131.5	54	230	270	13	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

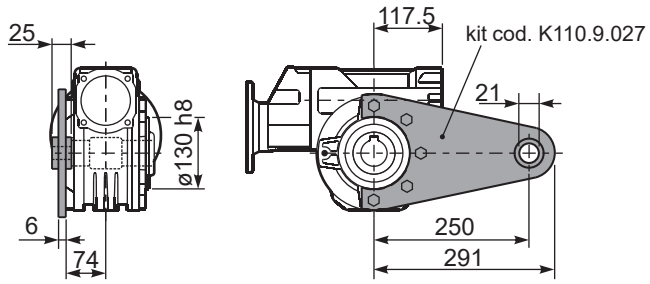
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

R P10FB... Input shaft
Albero in entrata



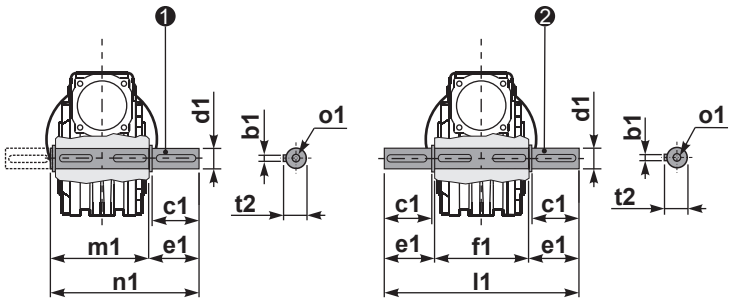
	ød	e	g	l	m	x	
type **B**	19 h6	21.5	6	35	205	M6x16	C40.5.062
type **S**	-	-	-	-	-	-	

PP10**BR**... Reaction arm
Braccio di reazione



PP10.....**S**... Single Shaft
Albero lento semplice

PP10.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K110.5.028 type **B**

❷ kit cod. K110.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	12	75	42 -0.005 -0.020	96.5	155	348	163.5	260	45	M12x32
type **S**	-	-	-	-	-	-	-	-	-	-

303 Rightangle - Gear 030+030 35Nm

Rating - Aluminum WORM GEARBOXES

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
9.3	**150**	0.06	29	1.2	**0.07**	**35**	B		B-C		48	1.44	01
6.7	**210**	0.06	39	0.9	**0.05**	**35**	B		B-C		45	1.44	02
4.7	**300**	0.06*	35	<0.8	**0.05**	**35**	B		B-C		36	1.44	03
3.1	**450**	0.06*	35	<0.8	**0.03**	**35**	B		B-C		33	1.44	04
2.3	**600**	0.06*	35	<0.8	**0.03**	**35**	B		B-C		30	1.44	05
1.6	**900**	0.06*	35	<0.8	**0.02**	**35**	B		B-C		27	1.44	06
1.2	**1200**	0.06*	35	<0.8	**0.02**	**35**	B		B-C		26	1.44	07
0.8	**1830**	0.06*	35	<0.8	**0.01**	**35**	B		B-C		24	1.44	08
0.6	**2400**	0.06*	35	<0.8	**0.01**	**35**	B		B-C		22	1.44	09

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **303** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

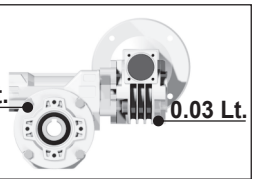
I Il riduttore tipo **303** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **303** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **303** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **303** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 303 Oil Quantity 0.03/0.03 Lt.

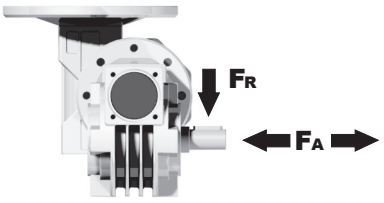


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

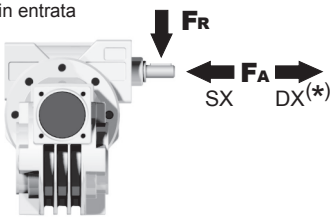
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	300	1800
15	400	2000

Input shaft
albero in entrata



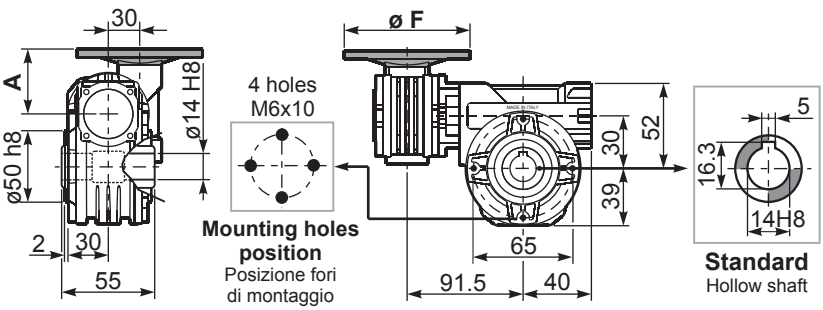
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

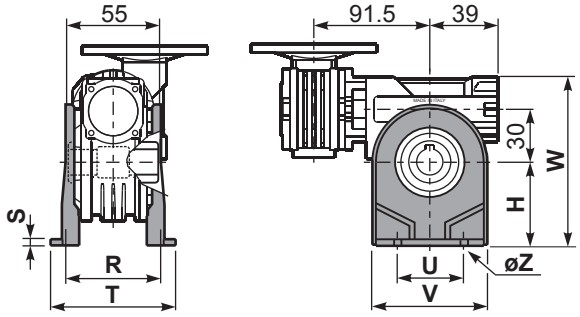
P303**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5

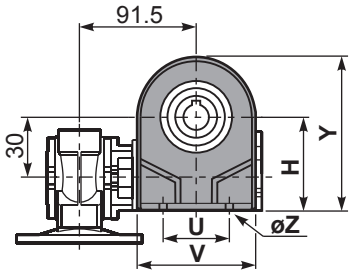


Gearbox weight peso riduttore **2.15 kg**

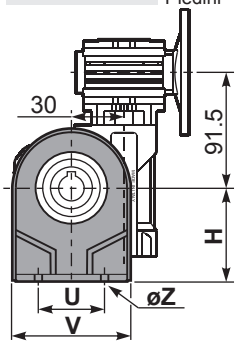
P303**PA**... Feet
Piedini



P303**PB**... Feet
Piedini

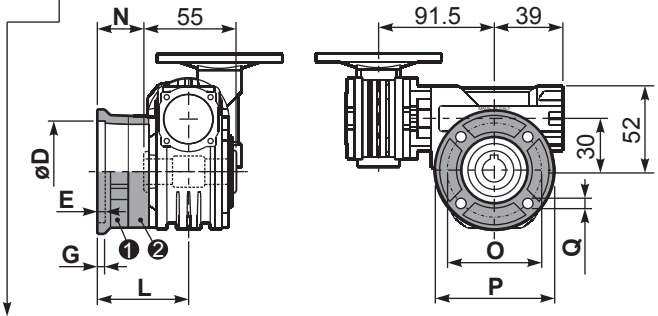


P303**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	55	66	3	87	50	78	94	107	ø6.5	K030.9.022
type **S**	52	66	3	87	52	90	91	104	ø6.5	KS030.9.023

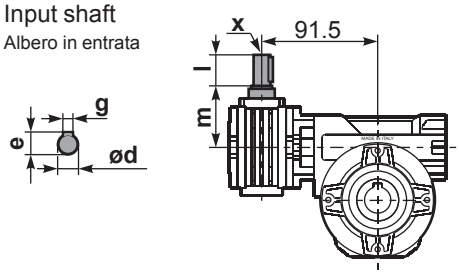
P303**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$50^{+0.15}_{+0.05}$	6	6	50.5	23	68	80	7	❶ K030.9.010 ❷ -
FL	$60^{+0.15}_{+0.05}$	6	6	55.5	28	87	110	8.5	❶ K045.9.010 ❷ -

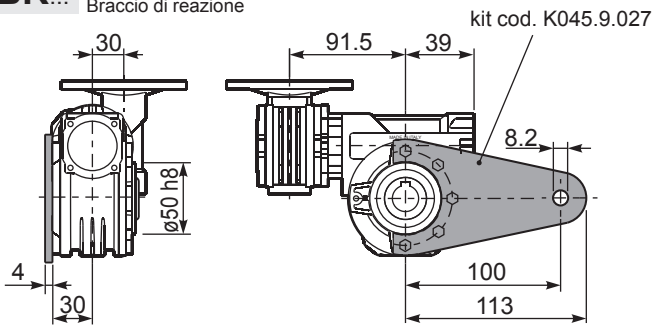
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$40^{+0.15}_{+0.10}$	3.5	5.5	49	21.5	56	80	6.5	❶ KS030.9.012 ❷ -

R303FB... Input shaft
Albero in entrata



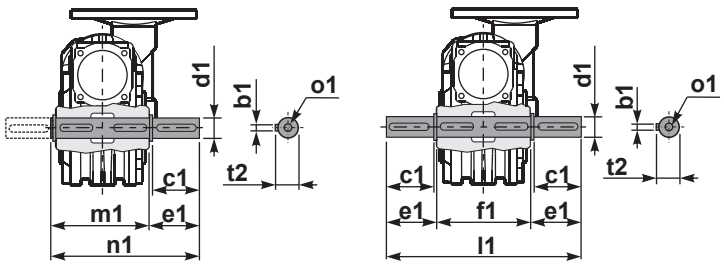
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type **S**	-	-	-	-	-	-	-

P303**BR**... Reaction arm
Braccio di reazione



P303.....**S**... Single Shaft
Albero lento semplice

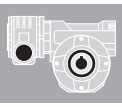
P303.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K030.5.028 type **B**

❷ kit cod. K030.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	5	25	$14^{-0.005}_{-0.020}$	35.5	55	126	59	94.5	15.8	M5x14
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
10.0	**140**	0.12	57	1.2	**0.14**	**69**	B		B-C		50	2.2	01
7.0	**200**	0.12	79	0.9	**0.11**	**69**	B		B-C		48	2.2	02
5.0	**280**	0.12*	69	<0.8	**0.08**	**69**	B		B-C		45	2.4	03
3.3	**420**	0.12*	69	<0.8	**0.07**	**69**	B		B-C		36	1.6	04
2.5	**560**	0.12*	69	<0.8	**0.05**	**69**	B		B-C		33	2.5	05
1.9	**740**	0.12*	69	<0.8	**0.05**	**69**	B		B-C		30	1.8	06
1.5	**920**	0.12*	69	<0.8	**0.04**	**69**	B		B-C		27	1.5	07
1.3	**1120**	0.12*	69	<0.8	**0.03**	**69**	B		B-C		26	2.5	08
0.9	**1480**	0.12*	69	<0.8	**0.03**	**69**	B		B-C		24	1.8	09
0.8	**1840**	0.12*	69	<0.8	**0.02**	**69**	B		B-C		22	1.5	10
0.6	**2400**	0.12*	69	<0.8	**0.02**	**69**	B		B-C		21	1.2	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **453** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

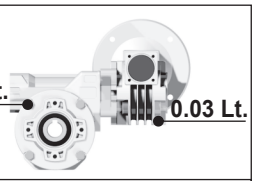
I Il riduttore tipo **453** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **453** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **453** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **453** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 453 Oil Quantity 0.09/0.03 Lt.

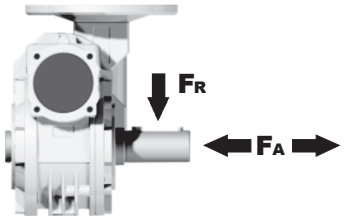


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

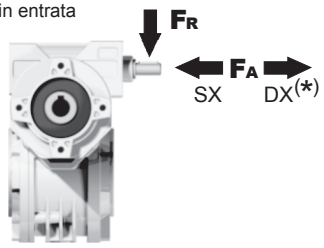
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	300	1800
15	400	2000

Input shaft
albero in entrata



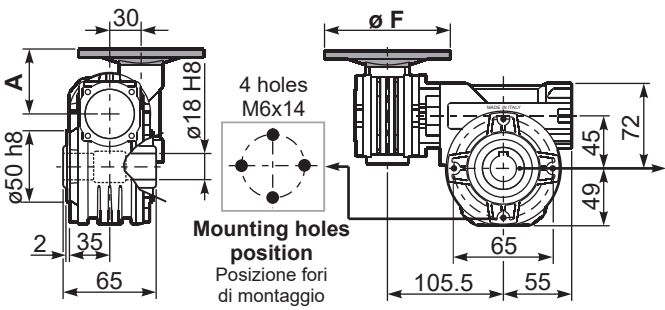
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

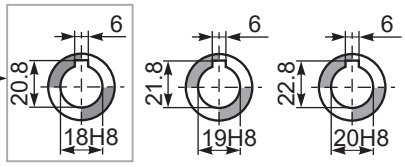
tab. 2

P453**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



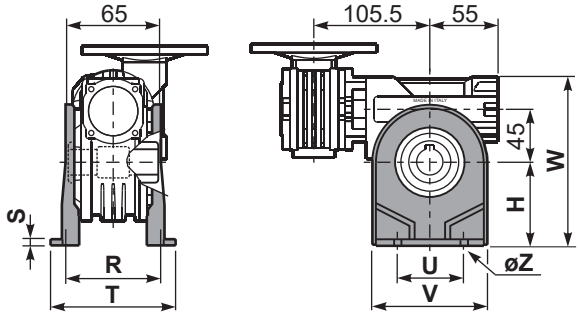
Gearbox weight peso riduttore	3.60 kg



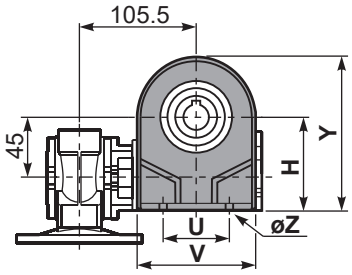
Standard Hollow shaft

On request A richiesta

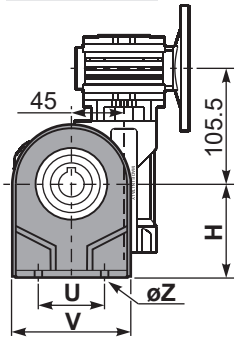
P453**PA**... Feet
Piedini



P453**PB**... Feet
Piedini

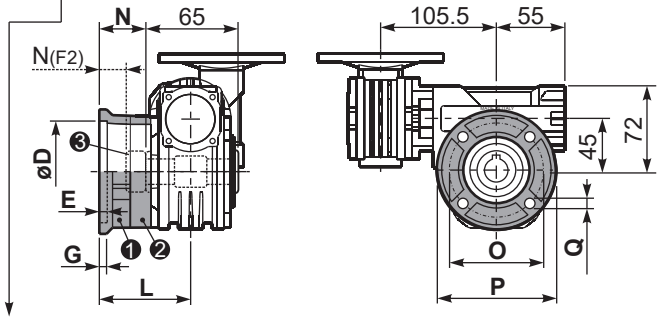


P453**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	72	81	3	100	52	98	121	144	ø10.5	K045.9.022
type **S**	71	84	8	100	70	90	120	143	ø8	KS045.9.023

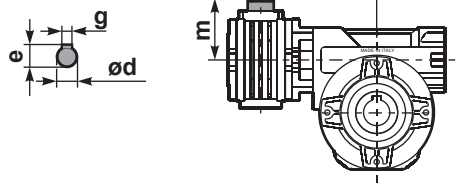
P453**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$60^{+0.15}_{+0.05}$	9	9	60.5	28	87	110	8.5	❶ K045.9.010 ❷ -
FL	$60^{+0.15}_{+0.05}$	9	9	90.5	58	87	110	8.5	❶ K045.9.010 ❷ K045.0.200

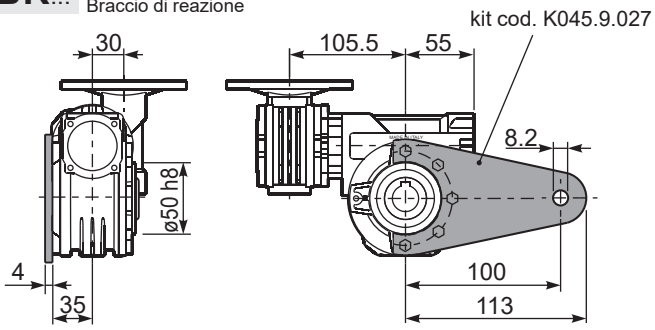
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$95^{+0.20}_{+0.15}$	4	11	73.5	41	115	140	9	❶ KS045.9.013 ❷ -
F2	$60^{+0.15}_{+0.05}$	9	9	60.5	19	87	110	8.5	❶ KS045.9.010 ❸ S045.0.204
F3	$80^{+0.030}_{0}$	3	8	51.5	19	100	120	9	❶ KS045.9.014 ❷ -

R453FB... Input shaft
Albero in entrata



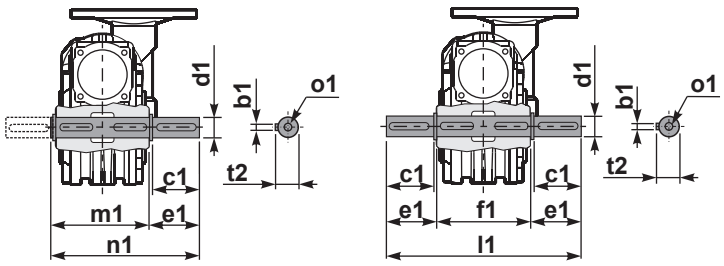
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P453**BR**... Reaction arm
Braccio di reazione



P453.....**S**... Single Shaft
Albero lento semplice

P453.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K045.5.028 type **B**
kit cod. KS045.5.030 type **S**

❷ kit cod. K045.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	6	32	$18^{-0.005}_{-0.020}$	43	65	151	70	113	20.5	M6x18
type **S**	6	40	$19^{-0.005}_{-0.020}$	58.5	-	-	70	128.5	21.5	M8x20

503 Rightangle - Gear 050+030 109Nm

Rating - Aluminum WORM GEARBOXES

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
5.6	**252**	0.12	97	1.1	**0.14**	**109**	B		B-C		47	2.1	01
3.9	**360**	0.12	124	0.9	**0.11**	**109**	B		B-C		42	2.1	02
2.6	**540**	0.12*	109	<0.8	**0.08**	**109**	B		B-C		39	2.1	03
1.9	**720**	0.12*	109	<0.8	**0.06**	**109**	B		B-C		36	2.1	04
1.6	**860**	0.12*	109	<0.8	**0.06**	**109**	B		B-C		32	1.8	05
1.2	**1200**	0.12*	109	<0.8	**0.05**	**109**	B		B-C		27	1.3	06
1.0	**1440**	0.12*	109	<0.8	**0.04**	**109**	B		B-C		26	2.1	07
0.8	**1720**	0.12*	109	<0.8	**0.04**	**109**	B		B-C		25	1.8	08
0.6	**2400**	0.12*	104	<0.8	**0.03**	**104**	B		B-C		21	1.3	09

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **503** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

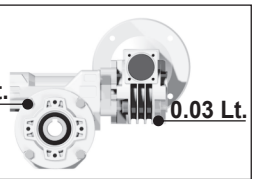
I Il riduttore tipo **503** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **503** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **503** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **503** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 503 Oil Quantity 0.14/0.03 Lt.

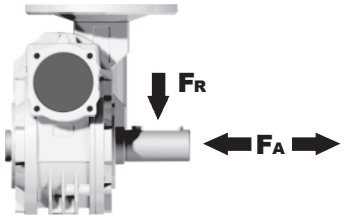


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

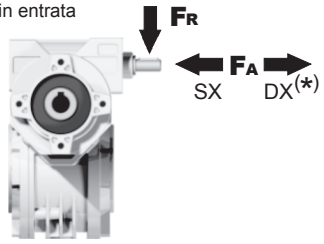
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	480	2500
15	560	2800

Input shaft
albero in entrata



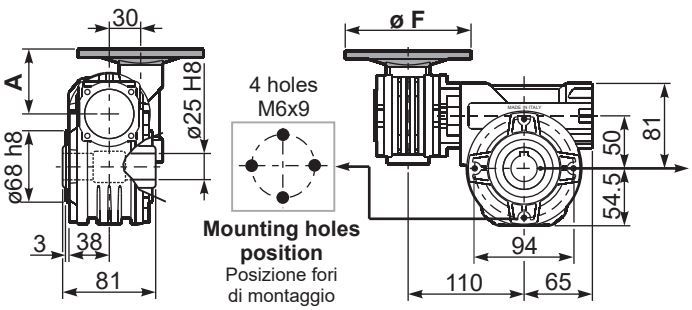
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

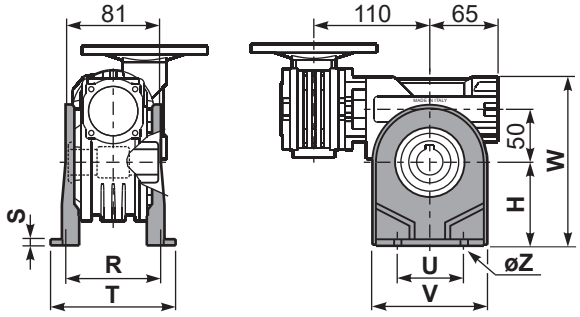
P503**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5

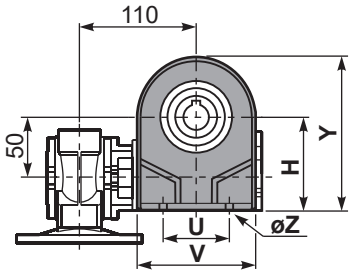


Gearbox weight / peso riduttore: **4.20 kg**

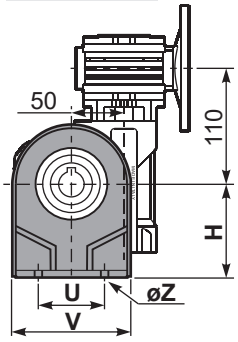
P503**PA**... Feet
Piedini



P503**PB**... Feet
Piedini

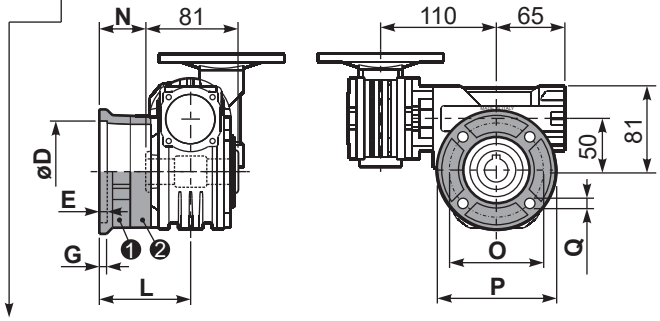


P503**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	82	98.5	3.5	123	63	113	138.5	163	ø10.5	K050.9.022
type **S**	85	96	10	114	85	110	139.5	166	ø10	KS050.9.023

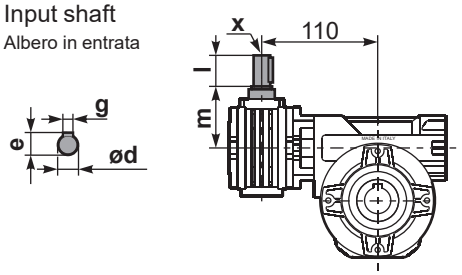
P503**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	70 $^{+0.20}_{+0.15}$	9	12	85	44.5	90	123	10.5	❶ K050.9.010 ❷ -
FL	70 $^{+0.20}_{+0.15}$	9	12	114.5	74	90	123	10.5	❶ K050.9.010 ❷ K050.0.200

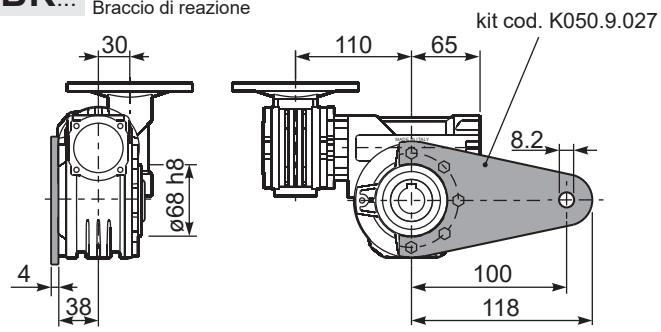
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	110 $^{+0.20}_{+0.15}$	4	11	83.5	43	130	160	10	❶ KS050.9.012 ❷ -
F2	70 $^{+0.20}_{+0.15}$	9	12	76.5	36	90	123	10.5	❶ KS050.9.014 ❷ -
F3	95 $^{+0.035}_{0}$	4	10	66.5	26	115	140	10	❶ KS050.9.013 ❷ -

R503FB... Input shaft
Albero in entrata



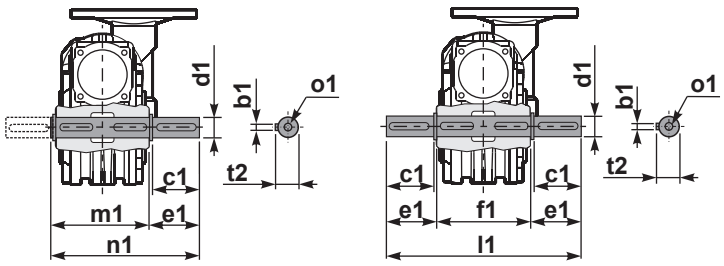
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P503**BR**... Reaction arm
Braccio di reazione



P503.....**S**... Single Shaft
Albero lento semplice

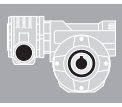
P503.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K050.5.028 type **B**
kit cod. KS050.5.030 type **S**

❷ kit cod. K050.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	52	25 $^{-0.005}_{-0.020}$	59.5	81	200	86.5	146	28	M8x20
type **S**	8	50	24 $^{-0.005}_{-0.020}$	68.5	-	-	86.5	155	27	M8x20



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
5.6	**252**	0.18	142	1.6	**0.29**	**230**	B		B-C		46	2.7	01
3.9	**360**	0.18	181	1.3	**0.23**	**230**	B		B-C		41	2.7	02
2.6	**540**	0.12	164	1.4	**0.17**	**230**	B		B-C		37	2.7	03
1.9	**720**	0.12	200	1.1	**0.14**	**230**	B		B-C		34	2.7	04
1.3	**1080**	0.12	265	0.9	**0.10**	**230**	B		B-C		30	2.7	05
1.0	**1440**	0.12*	230	<0.8	**0.09**	**230**	B		B-C		27	2.7	06
0.5	**2745**	0.12*	230	<0.8	**0.05**	**230**	B		B-C		23	2.1	07

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **633** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

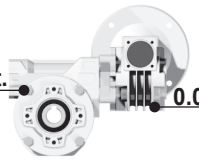
I Il riduttore tipo **633** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **633** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **633** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **633** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 633 Oil Quantity 0.40/0.03 Lt.

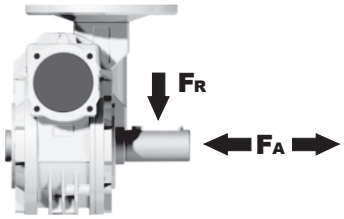


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

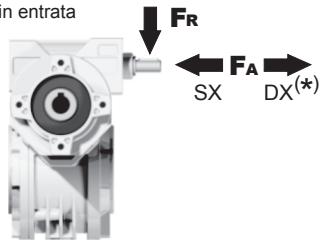
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



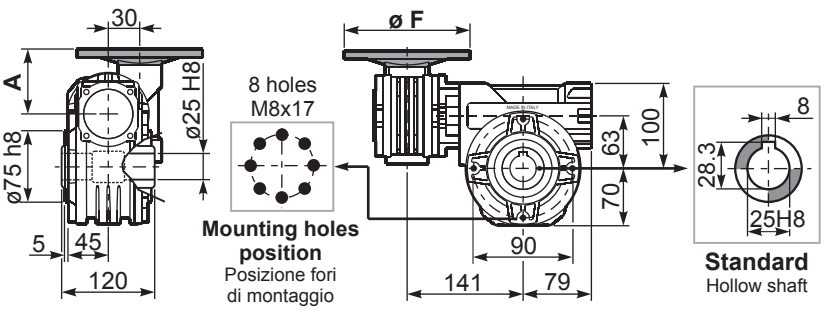
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

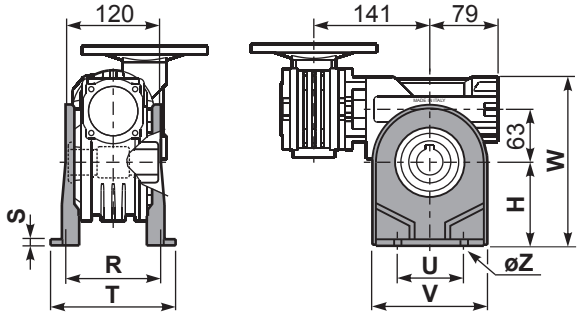
P633**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5

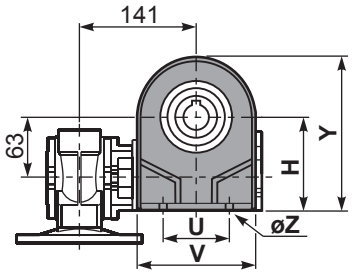


Gearbox weight peso riduttore **7.50 kg**

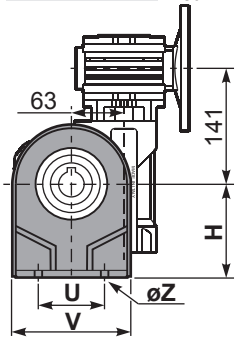
P633**PA**... Feet
Piedini



P633**PB**... Feet
Piedini

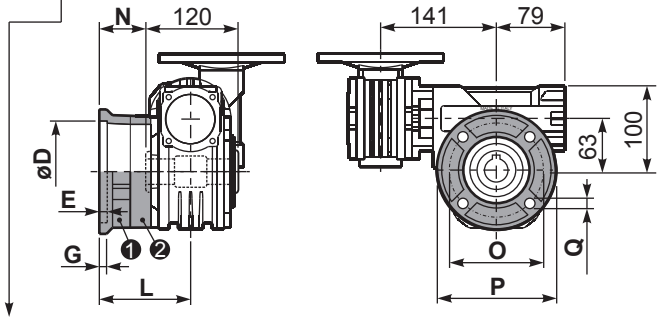


P633**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	100	111	4	144	95	133	170	200	ø10.5	K063.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

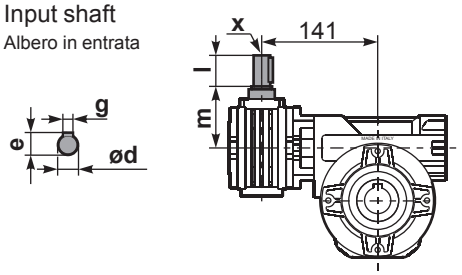
P633**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 +0.20 +0.15	7	13	86	26	150	175	11	❶ K063.9.010 ❷ -
FL	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ K063.9.010 ❷ K063.0.200

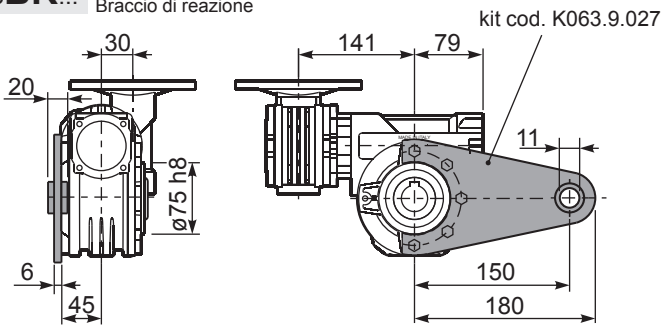
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R633FB... Input shaft
Albero in entrata



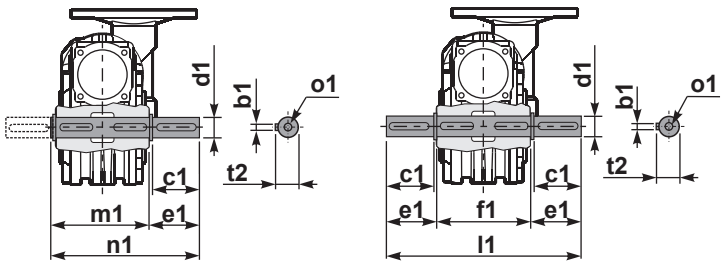
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P633**BR**... Reaction arm
Braccio di reazione



P633.....**S**... Single Shaft
Albero lento semplice

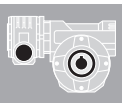
P633.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	25 -0.005 -0.020	63.2	120	246.4	126.8	190	28	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
5.6	**252**	0.25	198	1.3	**0.33**	**265**	**B**		B-C	**B**-C		46	2.7	01
3.9	**360**	0.18	186	1.4	**0.26**	**265**	**B**		B-C	**B**-C		42	2.7	02
2.8	**504**	0.18	241	1.1	**0.20**	**265**	**B**		B-C	**B**-C		39	2.7	03
1.9	**756**	0.12	204	1.3	**0.16**	**265**	**B**		B-C	**B**-C		33	2.7	04
1.4	**1008**	0.12	256	1.0	**0.12**	**265**	**B**		B-C	**B**-C		31	2.7	05
1.1	**1332**	0.12*	265	<0.8	**0.10**	**265**	**B**		B-C	**B**-C		30	2.7	06
0.8	**1656**	0.12*	265	<0.8	**0.08**	**265**	**B**		B-C	**B**-C		28	2.7	07
0.6	**2160**	0.12*	265	<0.8	**0.07**	**265**	**B**		B-C	**B**-C		26	2.7	08
0.6	**2520**	0.12*	265	<0.8	**0.06**	**265**	**B**		B-C	**B**-C		25	2.7	09

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **634** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

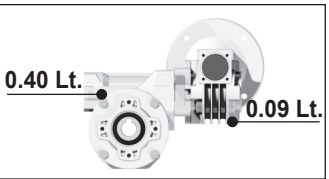
I Il riduttore tipo **634** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **634** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **634** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **634** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 634 Oil Quantity 0.40/0.09 Lt.



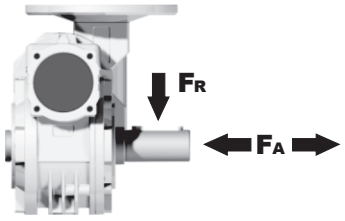
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

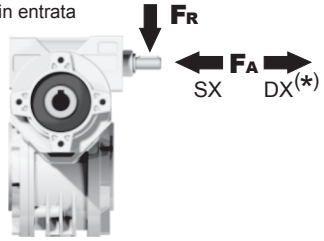
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



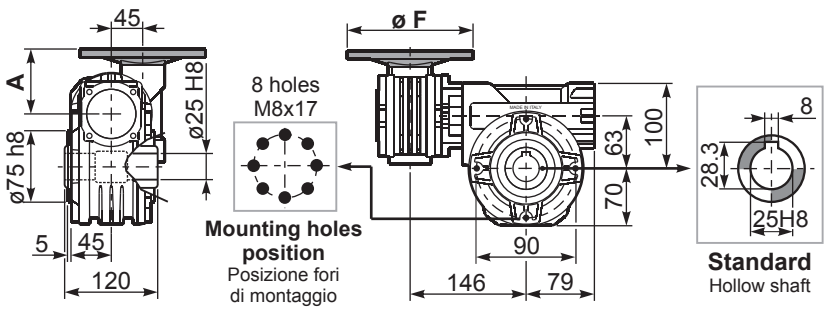
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

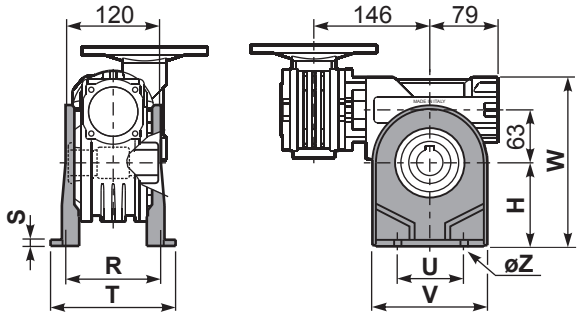
P634**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

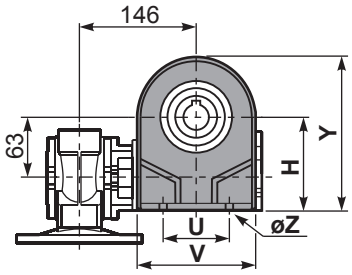


Gearbox weight peso riduttore **8.90 kg**

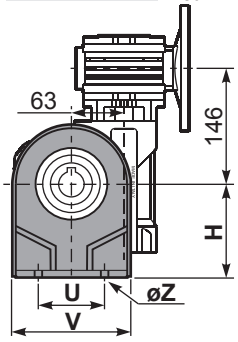
P634**PA**... Feet
Piedini



P634**PB**... Feet
Piedini

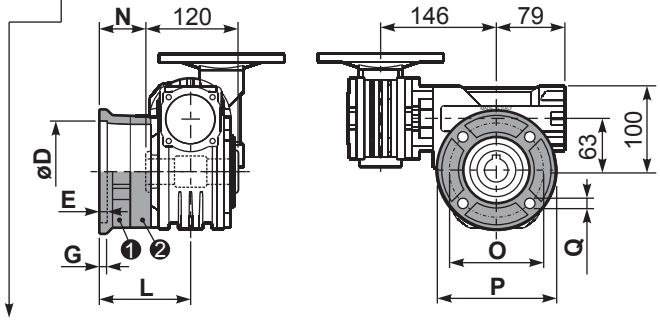


P634**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	100	111	4	144	95	133	170	200	ø10.5	K063.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

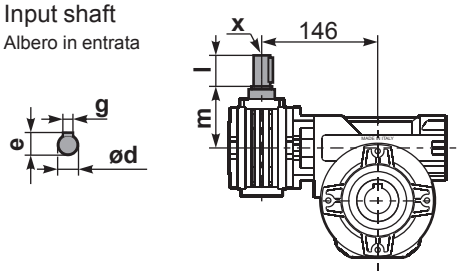
P634**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 +0.20 +0.15	7	13	86	26	150	175	11	❶ K063.9.010 ❷ -
FL	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ K063.9.010 ❷ K063.0.200

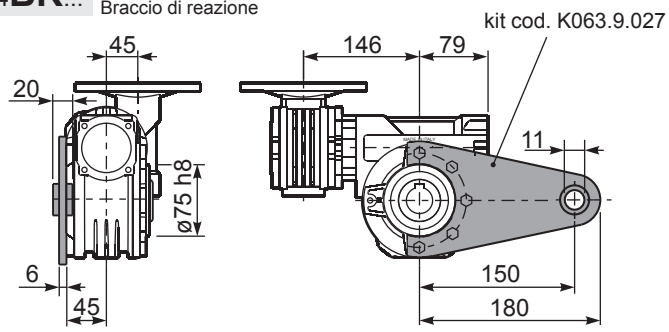
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R634FB... Input shaft
Albero in entrata



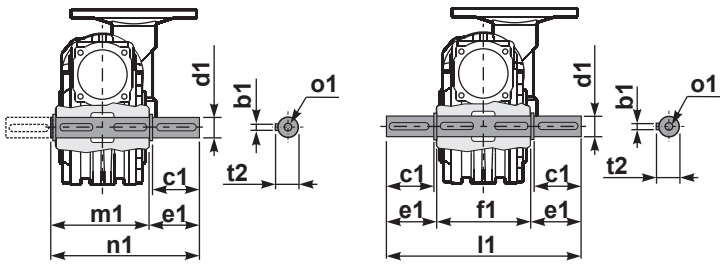
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P634**BR**... Reaction arm
Braccio di reazione



P634.....**S**... Single Shaft
Albero lento semplice

P634.....**D**... Double Shaft
Albero lento bisp.



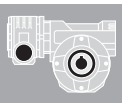
❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	25 -0.005 -0.020	63.2	120	246.4	126.8	190	28	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-

6A3 Rightangle - Gear 63A+030 290Nm

Rating - Aluminum WORM GEARBOXES



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
5.6	**252**	0.18	142	2.0	**0.37**	**290**	B		B-C		46	2.7	01
3.9	**360**	0.18	181	1.6	**0.29**	**290**	B		B-C		41	2.7	02
2.6	**540**	0.18	245	1.2	**0.21**	**290**	B		B-C		37	2.7	03
1.9	**720**	0.12	200	1.4	**0.17**	**290**	B		B-C		34	2.7	04
1.3	**1080**	0.12	265	1.1	**0.13**	**290**	B		B-C		30	2.7	05
1.0	**1440**	0.12	318	0.9	**0.11**	**290**	B		B-C		27	2.7	06
0.5	**2745**	0.12*	242	<0.8	**0.06**	**242**	B		B-C		23	2.1	07

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **6A3** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

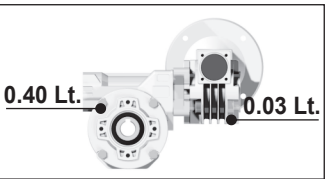
I Il riduttore tipo **6A3** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **6A3** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **6A3** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **6A3** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 6A3 Oil Quantity 0.40/0.03 Lt.



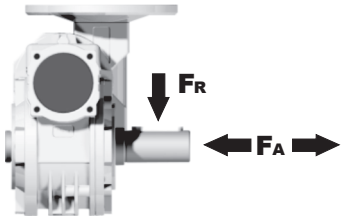
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

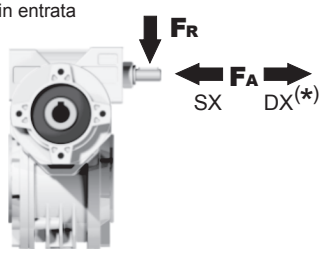
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



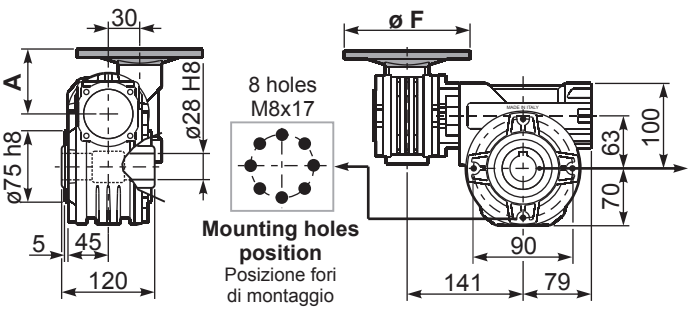
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

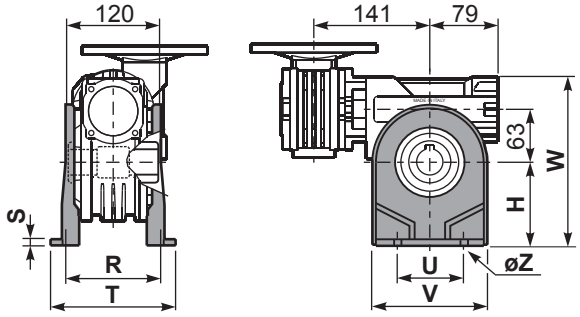
P6A3**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5

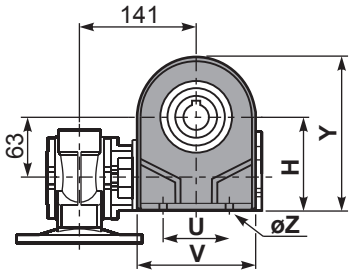


Gearbox weight peso riduttore **8.90 kg**

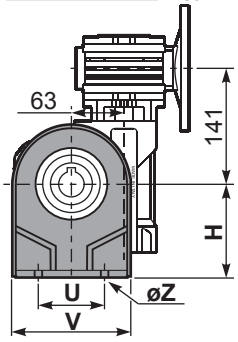
P6A3**PA**... Feet
Piedini



P6A3**PB**... Feet
Piedini

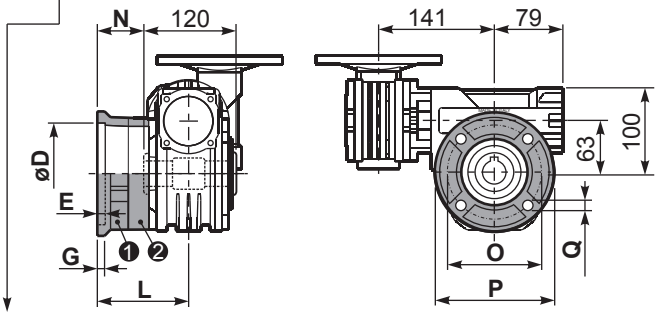


P6A3**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	115	115	12	142	120	156	185	215	ø11	K070.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

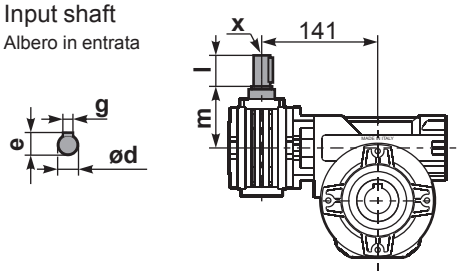
P6A3**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	130 $^{+0.20}_{+0.15}$	7	13	85	25	165	200	13	❶ K070.9.010 ❷ -
FL	130 $^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ K070.9.010 ❷ K070.0.200

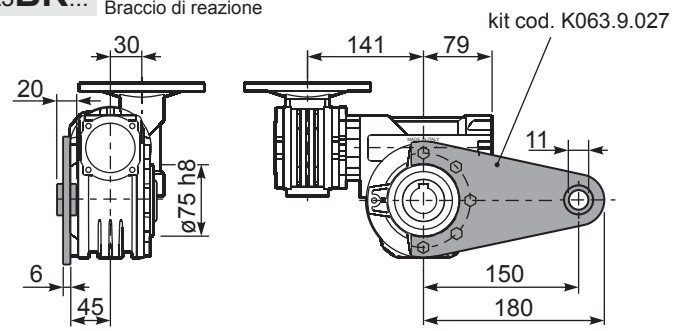
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ KS063.9.013 ❸ -
F3	110 $^{+0.035}_{0}$	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

R6A3FB... Input shaft
Albero in entrata



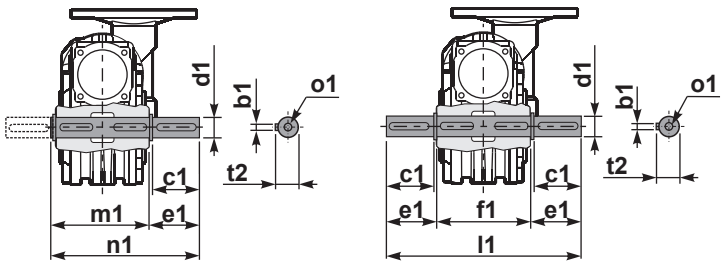
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P6A3**BR**... Reaction arm
Braccio di reazione



P6A3.....**S**... Single Shaft
Albero lento semplice

P6A3.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K070.5.028 type **B**

❷ kit cod. K070.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	28 $^{-0.005}_{-0.020}$	63.5	120	247	127.5	191	31	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-

6A4 Rightangle - Gear 63A+045 304Nm

Rating - Aluminum WORM GEARBOXES

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
5.6	**252**	0.25	198	1.5	**0.38**	**304**	**B**		B-C	**B**-C		46	2.7	01
3.9	**360**	0.25	258	1.2	**0.29**	**304**	**B**		B-C	**B**-C		42	2.7	02
2.8	**504**	0.18	241	1.3	**0.23**	**304**	**B**		B-C	**B**-C		39	2.7	03
1.9	**756**	0.12	204	1.5	**0.18**	**304**	**B**		B-C	**B**-C		33	2.7	04
1.4	**1008**	0.12	256	1.2	**0.14**	**304**	**B**		B-C	**B**-C		31	2.7	05
1.1	**1332**	0.12	327	0.9	**0.11**	**304**	**B**		B-C	**B**-C		30	2.7	06
0.8	**1656**	0.12*	304	<0.8	**0.10**	**304**	**B**		B-C	**B**-C		28	2.7	07
0.6	**2160**	0.12*	304	<0.8	**0.08**	**304**	**B**		B-C	**B**-C		26	2.7	08
0.6	**2520**	0.12*	304	<0.8	**0.07**	**304**	**B**		B-C	**B**-C		25	2.7	09

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **6A4** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

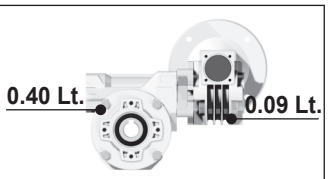
I Il riduttore tipo **6A4** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **6A4** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **6A4** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **6A4** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 6A4 Oil Quantity 0.40/0.09 Lt.

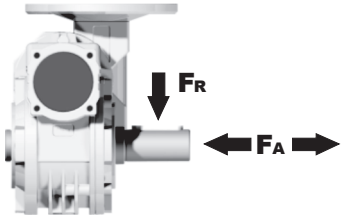


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

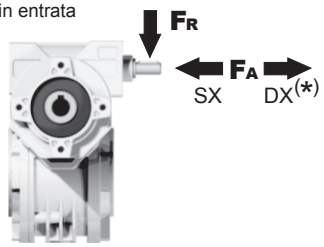
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



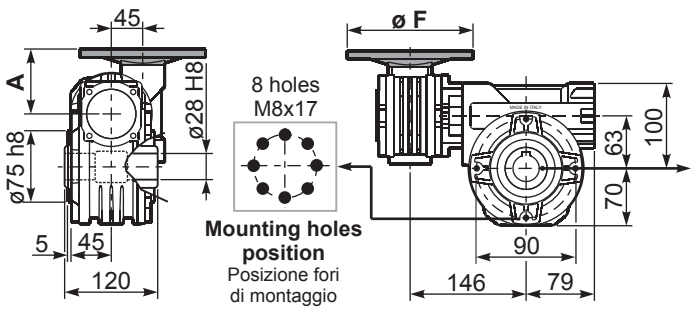
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

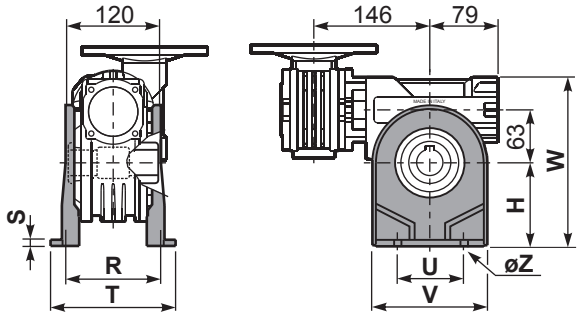
P6A4FB... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

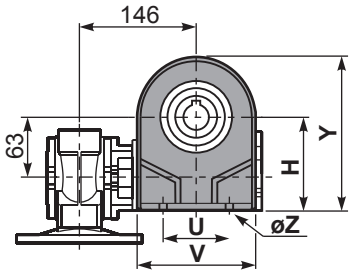


Gearbox weight peso riduttore **8.90 kg**

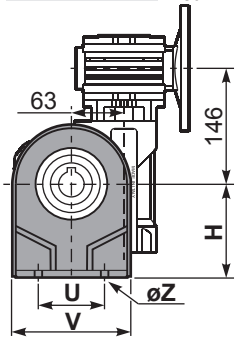
P6A4PA... Feet
Piedini



P6A4PB... Feet
Piedini

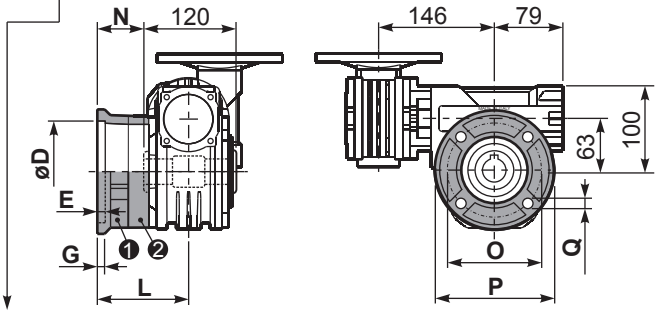


P6A4PV... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	115	115	12	142	120	156	185	215	ø11	K070.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

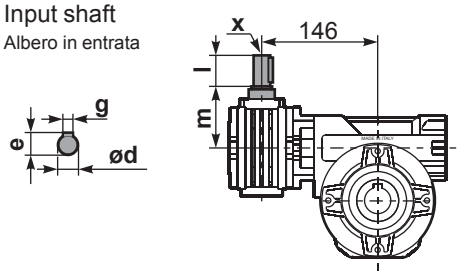
P6A4FC... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$130^{+0.20}_{+0.15}$	7	13	85	25	165	200	13	❶ K070.9.010 ❷ -
FL	$130^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ K070.9.010 ❷ K070.0.200

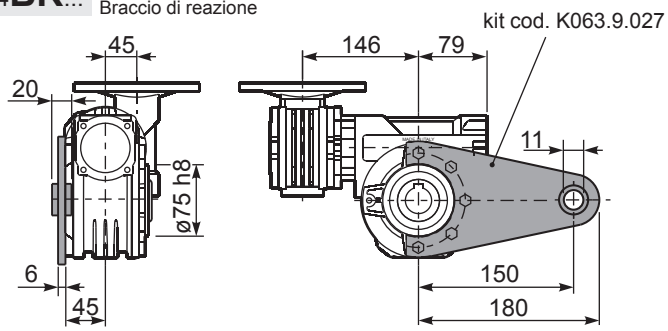
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$130^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	$115^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	$110^{+0.035}_{0}$	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

R6A4FB... Input shaft
Albero in entrata



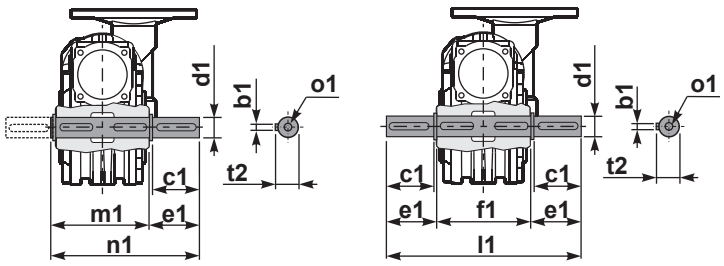
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P6A4BR... Reaction arm
Braccio di reazione



P6A4.....S... Single Shaft
Albero lento semplice

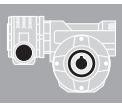
P6A4.....D... Double Shaft
Albero lento bisp.



❶ kit cod. K070.5.028 type **B**

❷ kit cod. K070.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	$28^{-0.005}_{-0.020}$	63.5	120	247	127.5	191	31	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
10	**140**	0.37	205	1.8	**0.66**	**368**	**B**		B-C	**B**-C		58	4.5	01
7.1	**196**	0.37	257	1.4	**0.53**	**368**	**B**		B-C	**B**-C		52	4.7	02
5.0	**280**	0.37	332	1.6	**0.58**	**518**	**B**		B-C	**B**-C		47	4.7	03
3.6	**392**	0.37	435	1.2	**0.44**	**518**	**B**		B-C	**B**-C		44	4.7	04
2.4	**588**	0.25	371	1.4	**0.35**	**518**	**B**		B-C	**B**-C		37	4.7	05
1.8	**784**	0.25	455	1.1	**0.28**	**518**	**B**		B-C	**B**-C		34	4.7	06
1.4	**1036**	0.18	420	1.2	**0.22**	**518**	**B**		B-C	**B**-C		33	4.7	07
1.1	**1288**	0.18	474	1.1	**0.20**	**518**	**B**		B-C	**B**-C		30	4.7	08
0.7	**1960**	0.12	449	1.2	**0.14**	**518**	**B**		B-C	**B**-C		28	4.7	09
0.5	**2856**	0.12	584	0.9	**0.11**	**518**	**B**		B-C	**B**-C		25	4.7	10

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

EN Unit **854** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

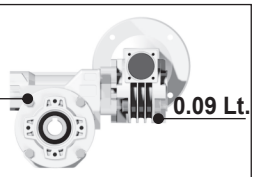
I Il riduttore tipo **854** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **854** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **854** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **854** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 854 Oil Quantity 1.2/0.09 Lt.

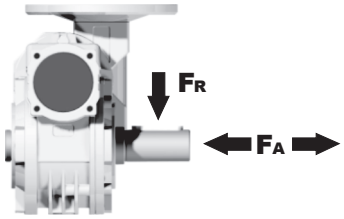


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

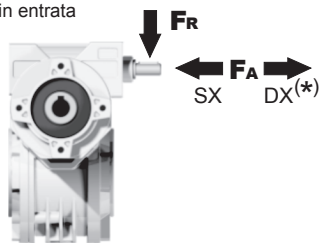
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	1000	5000
15	1160	5800

Input shaft
albero in entrata



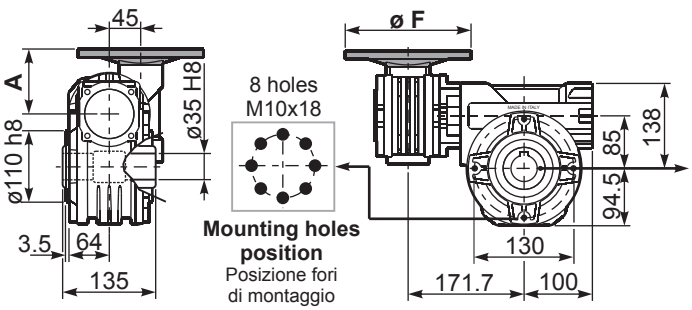
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P854**FB**... Basic wormbox
Riduttore base

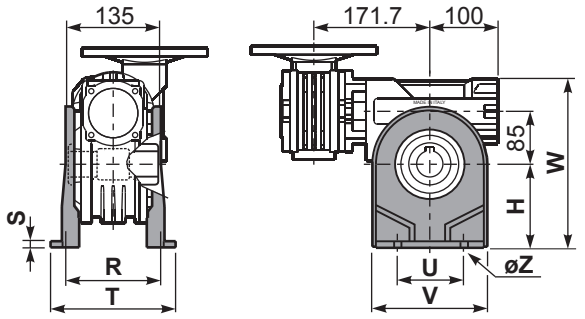
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5



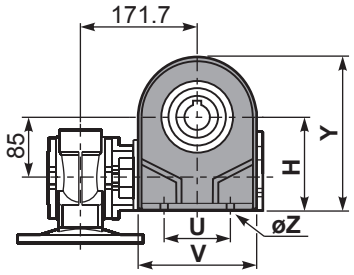
Gearbox weight peso riduttore **19.50 kg**

1

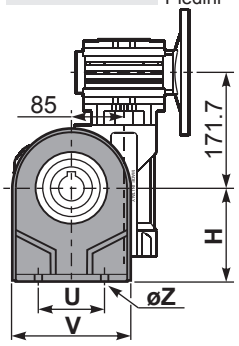
P854**PA**... Feet
Piedini



P854**PB**... Feet
Piedini

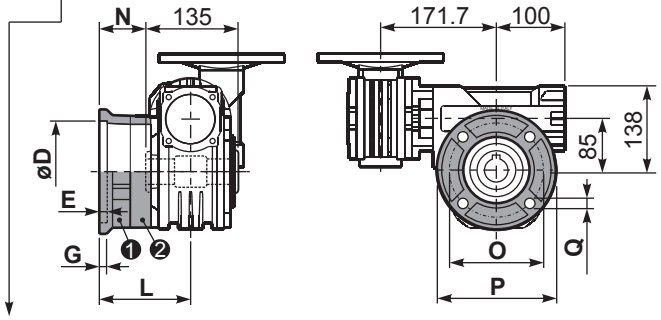


P854**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	142	145	5	182	140	180	236.5	280	ø10.5	K085.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

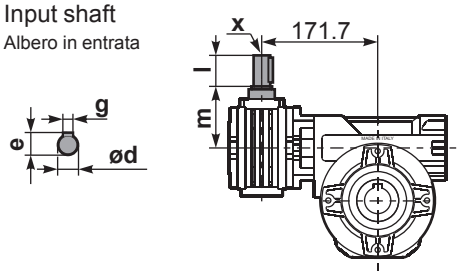
P854**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$152^{+0.06}_{+0.00}$	5	16	108	40.5	176	205	13	❶ K085.9.010 ❷ -
FL	$152^{+0.06}_{+0.00}$	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

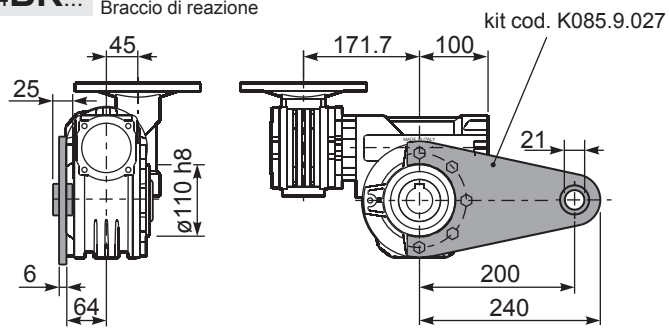
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$130^{+0.040}_{0}$	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	$152^{+0.06}_{0}$	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	$130^{+0.040}_{0}$	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

R854FB... Input shaft
Albero in entrata



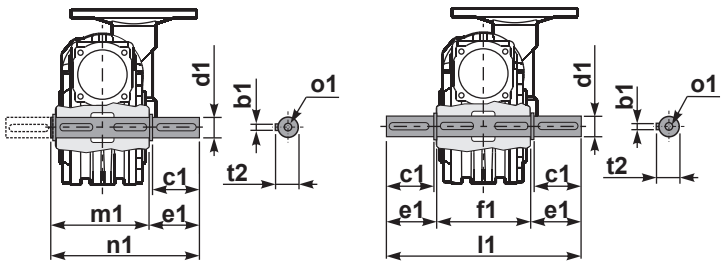
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P854**BR**... Reaction arm
Braccio di reazione



P854.....**S**... Single Shaft
Albero lento semplice

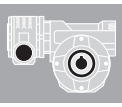
P854.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K085.5.028 type **B**

❷ kit cod. K085.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	10	60	$35^{-0.005}_{-0.020}$	73.5	135	282	141	214.5	38	M10x23
type **S**	-	-	-	-	-	-	-	-	-	-



1

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	Available B14 motor flanges -O 56	-P 63	-Q 71	-R 80	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
6.7	**210**	0.75	591	1.5	**1.1**	**863**	B	**B**			B-C	**B**		55	5.6	01
4.7	**300**	0.75	752	1.3	**0.97**	**978**	B	**B**			B-C	**B**		49	5.6	02
3.3	**420**	0.55	741	1.3	**0.73**	**978**	B	**B**			B-C	**B**		47	5.6	03
2.6	**540**	0.55	851	1.1	**0.63**	**978**	B	**B**			B-C	**B**		42	5.6	04
1.8	**780**	0.37	748	1.3	**0.48**	**978**	B	**B**			B-C	**B**		38	5.6	05
1.3	**1080**	0.37	1009	1.0	**0.36**	**978**	B			B-C	B-C			37	5.6	06
1.1	**1290**	0.25	770	1.3	**0.32**	**978**	B			B-C	B-C			35	5.6	07
0.8	**1800**	0.25	921	1.1	**0.27**	**978**	B			B-C	B-C			30	5.6	08
0.7	**2040**	0.18	751	1.3	**0.23**	**978**	B			B-C	B-C			30	5.6	09
0.6	**2400**	0.18	825	1.2	**0.21**	**978**	B			B-C	B-C			28	5.6	10
0.5	**3000**	0.18	958	1.0	**0.18**	**978**	B			B-C	B-C			26	5.6	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **115** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a type that are closed.
Gearbox **050** is supplied lubricated for life.
See tab.1 for oils and recommended quantity.
In tab.2 there are radial loads and axial loads applicable to the gearbox.

I Il riduttore tipo **115** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Il riduttore **050** è fornito lubrificato a vita con olio sintetico.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **115** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
Das Getriebe der Baugröße **050** ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **115** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Le réducteur de type **050** est fourni lubrifié à vie avec de l'huile synthétique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

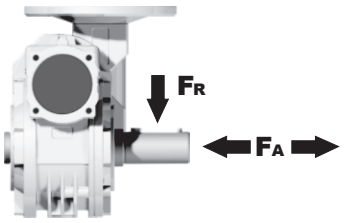
E El reductor tamaño **115** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos.
El reductor **050** se suministra lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6
1.9/0.14 LT	1.35/0.14 LT	1.35/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT
AGIP Blasia 460					

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

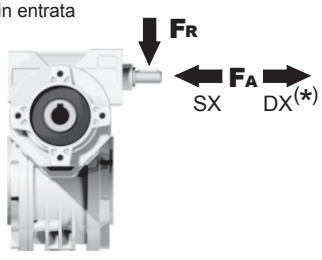
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	1200	6000
15	1400	7000

Input shaft
albero in entrata



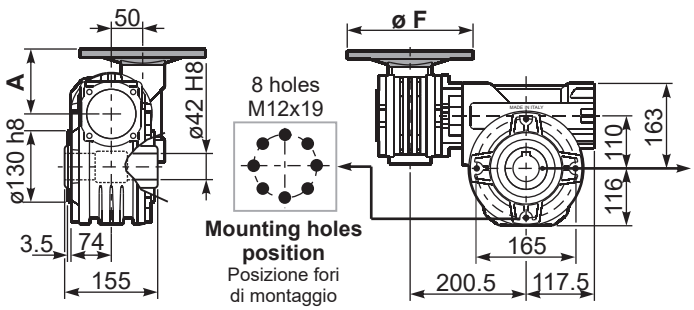
n_1 [min^{-1}]	FA [N]	FR [N]
1400	76	380

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

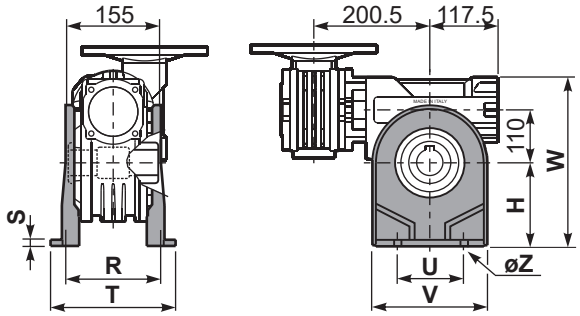
P115**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	78.5
71B5	K050.4.042	160	76
80B5	K050.4.043	200	76.5
56B14	KC40.4.049	80	76
63B14	K050.4.047	90	78.5
71B14	K050.4.045	105	76
80B14	K050.4.046	120	76.5

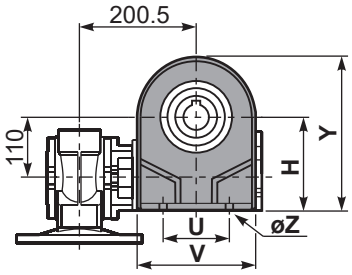


Gearbox weight peso riduttore	38.00 kg

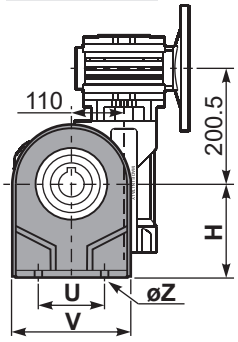
P115**PA**... Feet
Piedini



P115**PB**... Feet
Piedini

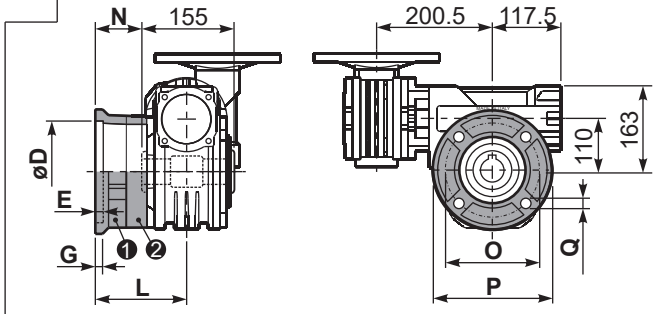


P115**PV**... Feet
Piedini



	H	R	S	T	U	V	Y	W	øZ	kit code
type **B**	170	180	22	224	200	240	286	333	ø13	K110.9.022
type **S**	-	-	-	-	-	-	-	-	-	-

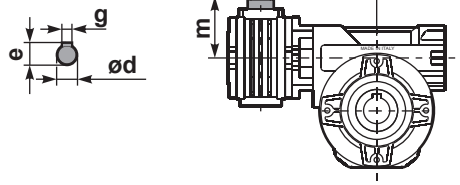
P115**FC**... Output flange
Flangia uscita



type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	170 +0.083 +0.043	11	16.5	131.5	54	230	270	13	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

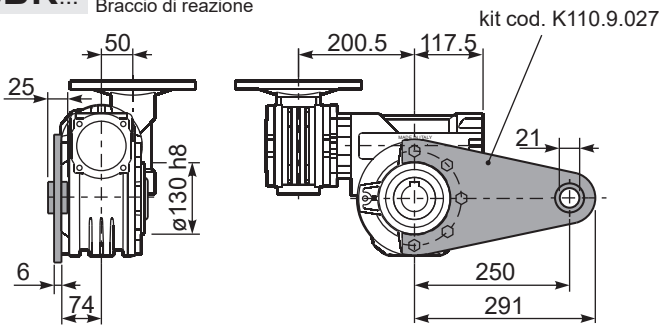
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

R115FB... Input shaft
Albero in entrata



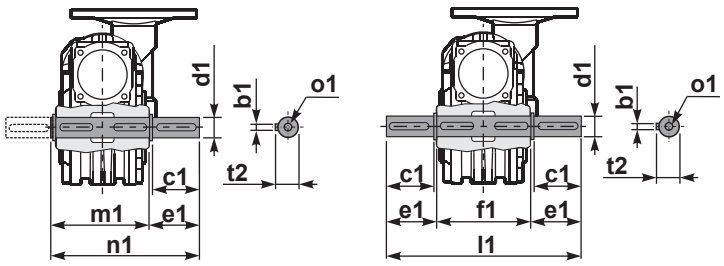
	ød	e	g	l	m	x	kit code
type **B**	16 h6	18	5	30	74.5	M6x16	❶ K050.5.006 PAM71 ❷ K050.5.007 PAM80
type **S**	14 h6	16	5	30	74.5	M5x10	❶ KS050.5.008 PAM71 ❷ KS050.5.009 PAM80

P115**BR**... Reaction arm
Braccio di reazione



P115.....**S**... Single Shaft
Albero lento semplice

P115.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K110.5.028 type **B**

❷ kit cod. K110.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	12	75	42 -0.005 -0.020	96.5	155	348	163.5	260	45	M12x32
type **S**	-	-	-	-	-	-	-	-	-	-

Square worm gearboxes

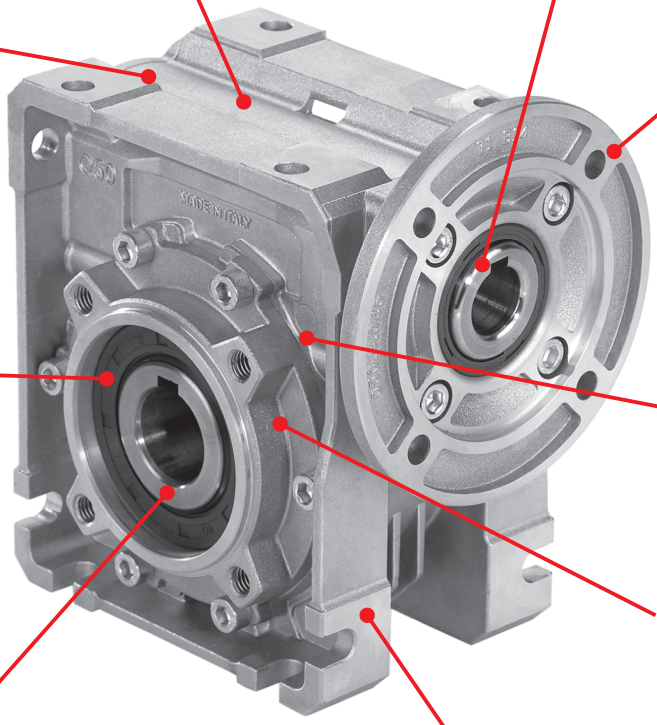
A modular and compact product

Single-piece aluminum alloy housing
Is vacuum impregnated (MIL-STD 276) for protection and sealing.
No secondary finish required but readily accepts paint. Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing.

Single piece alloy steel input shaft and worm shaft.
High helix angle worm is case-hardened (Rc 58-60), ground, teeth are profiled and radiused, for noise reduction and enhanced efficiency.

Oversized bearings
Support positively-retained, high speed shaft for higher shock load capacity - ideal for frequent starting and reversing application.
Premium, Nitrile® high temperature seals each end.

Flange
Fully modular to IEC and compact integrated motor.
NEMA C flange.



Premium, high temperature
Nitrile® output seals

Bronze alloy worm gears.
CuSn12Ni (C91700) Nickel bronze worm gears are centrifugally cast onto an iron hub for maximum strength and superior life.
Removable hollow shaft with key for safe torque transmissions.

Oversize bearing
For radial load capability and maximum hollow output shaft diameter.

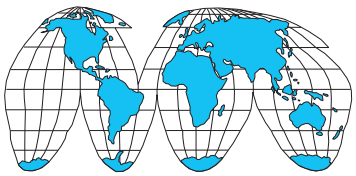
Standard hollow output shaft mounting
Reduces total drive envelope size, weight and cost.
Single and double solid output shaft is available.

Impregnated and machined bearing caps
With exterior machined surfaces enable a variety of mounting accessories.
Extra-deep thread engagement provided for greater support strength.
Zinc plated hardware.

Vent Free Design.
No breather or vents to leak! Factory lubricated for life with synthetic, semi-fluid gear lubricant with an operating range of -15ºC to 130ºC.

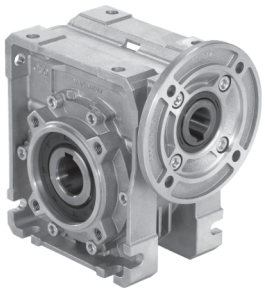
oil free

vent free



World wide sales network.

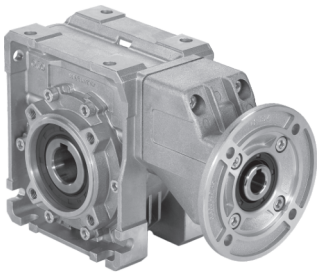
Specific type datasheet on page...



Types / Tipi / Tipen / Types / Tipos

On page / A pagina / Auf Seite / À la page / En la página

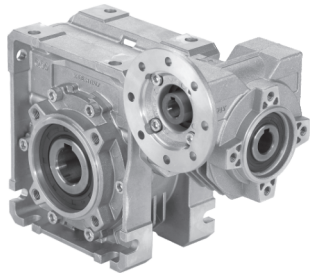
2-5	2-7	2-9	2-11	2-13	2-15	2-17	2-19	2-21
Q30 21Nm	**Q45** 41Nm	**Q50** 72Nm	**Q63** 147Nm	**Q75** 270Nm	**Q85** 347Nm	**Q11** 651Nm	**Q13** 1050Nm	**Q15** 1550Nm



Types / Tipi / Tipen / Types / Tipos

On page / A pagina / Auf Seite / À la page / En la página

2-23	2-25	2-27	2-29	2-31	2-33
P4Q 55Nm	**P5Q** 88Nm	**P6Q** 187Nm	**P7Q** 310Nm	**P8Q** 440Nm	**P1Q** 803Nm



Types / Tipi / Tipen / Types / Tipos

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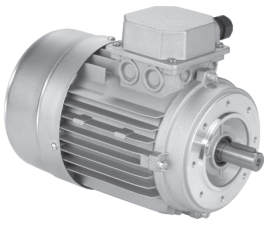
2-35	2-37	2-39	2-41	2-43	2-45	2-47
43Q 69Nm	**53Q** 109Nm	**63Q** 230Nm	**64Q** 265Nm	**74Q** 359Nm	**84Q** 518Nm	**15Q** 978Nm



Types / Tipi Tipen / Types Tipos

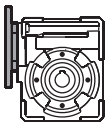
On page / A pagina / Auf Seite / À la page / En la página

M-1									
56A 56B	**63A 63B**	**71A 71B**	**80A 80B**	**90S 90L**	**100LA 100LB**	**112M**	**132S 132M**	**160M 160L**	**180M 180L**

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Type - Tipo - Typ Type - Tipo	**Size** - Grandezza Grösse - Taille Tamaño	**Mounting** - Montaggio - Montage Fixation Fixation - Tipo de montaje
P	**Q45**	**FC**

Worm gearboxes
Riduttori a vite senza fine
Schneckengetriebe
Reducteurs a vis sans fin
Reductores de corona sin fin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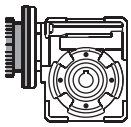
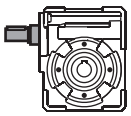
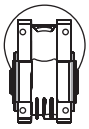
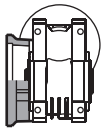

M

B


R

Q30
Q45
Q50
Q63
Q75
Q85
Q11
Q13
Q15


FB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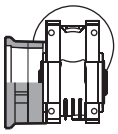
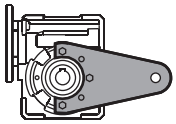
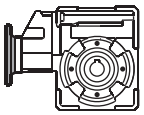

FL

F1
F2
F3
F4


BR

Worm gearboxes with primary reduction
Riduttori a vite senza fine con precoppia
Schneckengetriebe mit stirnradstufe am Eintrieb
Reducteurs a vis sans fin avec pré-réduction
Reductores corona sin fin con prereductora de engranajes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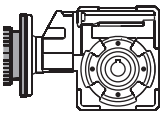
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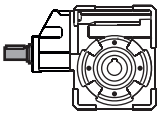
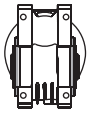

R

P4Q
P5Q
P6Q
P7Q
P8Q
P1Q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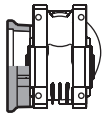
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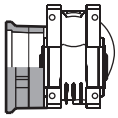
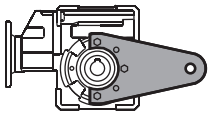
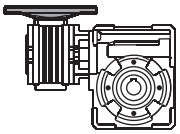

FL

F1
F2
F3
F4


BR

Combined worm gearboxes
Riduttori a vite senza fine combinati
Schneckengetriebekombinationen
Reducteurs a double train de vis sans fin
Reductores combinados corona sin fin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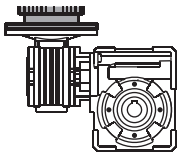
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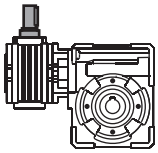
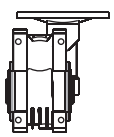

R

43Q
53Q
63Q
64Q
74Q
84Q
15Q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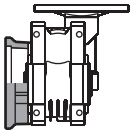
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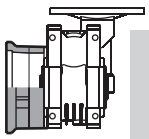
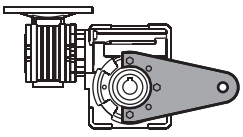

FL

F1
F2
F3
F4


BR

Dossier according to 94/9/EG 8. b ii stored
0032

On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Ratio Rapporto Untersetzung Reduction Relaciòn	**Hub** Mozzo corona Hohlwelle Arbre creux Nucleo corona	**Output shaft** Albero lento Abtriebswelle Arbre de sortie Eje salida	**Motor size** Grandezza motore Motor Grösse Grandeur moteur Tamaño motor	**Mounting position** Posizione montaggio Einbaulage Position de montage Position de montaje	**Input bore** Foro entrata Eingangshohlwelle Trou d'entree Eje hueco de entrada	**Mountin position** Esecuzione montaggio Einbaulage Exécution de montage Posición de montaje	**Terminal box position** Posizione morsettiera Klemmkastenlage Position boîte a bornes Posición caja de bornes
10	**C**	**ø**	**-Q**	**B3**	**-**	**---**	

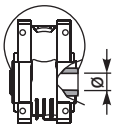
See technical data table

Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir tableau données techniques

Ver tabla datos técnicos



STANDARD

C

Q30 ⇨ ø14
Q45 ⇨ ø18
Q50 ⇨ ø25
Q63 ⇨ ø25
Q75 ⇨ ø30
Q85 ⇨ ø35
Q11 ⇨ ø42
Q13 ⇨ ø45
Q15 ⇨ ø50

I

Stainless steel hub
Mozzo in acciaio Inox
Edelstahlhohlwelle
Moyeu en acier Inox
Nucleo corona de acero Inox

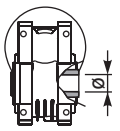
SPECIAL SERIES
SERIE SPECIALE

S

Q45 ⇨ ø19
Q50 ⇨ ø24

X

Stainless steel hub
Mozzo in acciaio Inox
Edelstahlhohlwelle
Moyeu en acier Inox
Nucleo corona de acero Inox



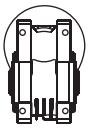
INCH

U

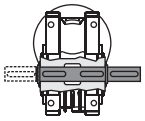
Q45⇨ø0.750”
Q50⇨ø1.000”
Q63⇨ø1.125”
Q85⇨ø1.500”

Z

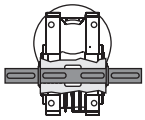
Stainless steel hub
Mozzo in acciaio Inox
Edelstahlhohlwelle
Moyeu en acier Inox
Nucleo corona de acero Inox



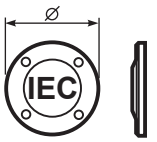
Ø



S



D

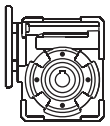


-M
without flange
Senza flangia

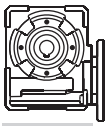
B5
-A=56 (ø120)
-B=63 (ø140)
-C=71 (ø160)
-D=80 (ø200)
-E=90 (ø200)
-F=100÷112 (ø250)
-G=132 (ø300)
-H=160 (ø350)

B14
-O=56 (ø80)
-P=63 (ø90)
-Q=71 (ø105)
-R=80 (ø120)
-T=90 (ø140)
-U=100÷112 (ø160)
-V=132 (ø200)

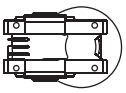
-0=Type R
-S=Type R
S series



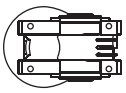
B3



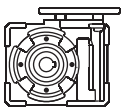
B8



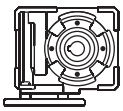
B6



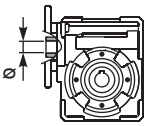
B7



V5



V6



-

Nothing indication:
Standard bore
Kit R standard

Nessuna indicazione:
Foro standard
Kit R standard

P

Input bore reduced one size

Foro entrata ridotto di una misura

Ex.
Input Flange
71 B14
Standard ø14
Reduced ø11

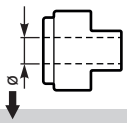
Q

Input bore reduced two sizes

Due grandezze ridotte foro entrata

Ex.
Input Flange
71 B14
Standard ø14
Reduced ø9

COUPLING



A = 9mm
B = 11mm
C = 14mm
D = 19mm
E = 24mm
F = 28mm

Ready for input coupling
Predisposto per giunto

0
Type B
Tipo B

0
Type R
Tipo R

Only for combined units See technical data table

Solo per i riduttori combinati Vedi tabelle dati tecnici.

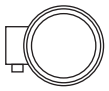
Ausführungen für Getriebekombinationen it

Uniquement pour combinés. Voir tableau données techniques

Sólo para combinados ver tabla datos técnicos

With Type M specify terminal box position

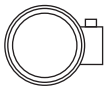
Con tipo M specificare posizione morsettiera



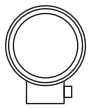
A

B

STANDARD



C



D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

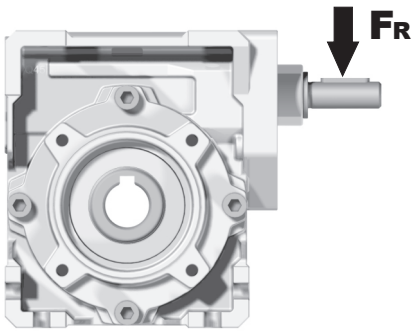
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$
Linear movement / traslazione / linearbewegung / translation / translacion	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

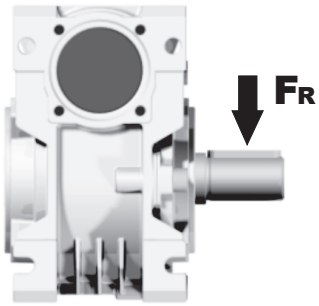
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

	$\mathbf{M}\ [Nm] = \frac{\mathbf{9550} \cdot \mathbf{P}[KW]}{\mathbf{n}\ [rpm]}$
	$\mathbf{M}\ [lb\ in] = \frac{\mathbf{63030} \cdot \mathbf{P}[HP]}{\mathbf{n}\ [rpm]}$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida





$F_R\ [N] = \frac{M\ [Nm] \cdot 2000}{d\ [mm]} \cdot f_K$	$F_R\ [N] = \frac{M\ [lb\ in] \cdot 8.9}{d\ [in]} \cdot f_K$

M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo
f_K	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión **1.15** Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje **1.25** Catena / Chain sprochets / Antriebskette / Chaîne / Cadena **1.75** Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal **2.50** Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana

— If your application requires higher radial loads, contact our technical office. Higher load may be possible.
— Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
— Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
— Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
— En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

B Output speed / Velocità in uscita / Abtriebsdrehzahl / Vitesse de sortie / Velocidad de salida

Nominal power / Potenza nominale / Max. mögliche Leistung / Poissance nominale / Potencia nominal

Gear size / Grandezza riduttore / Getriebegröße / Taille réducteur / Tamaño reductor

Motor power / Potenza motore / Motorleistung / Puissance moteur / Potencia motor

A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

Flange code / Codice flangia / Flanschtype / Code bride / Código bridas

Dynamic efficiency / Rendimento dinamico / Dynamischer Rendement dynamique / Rendimento dinámico

Input speed / Velocità in entrata / Eintriebsdrehzahl / Vitesse en entrée / Velocidad de entrada

Q45 Square - Gear 41Nm

Rating - Aluminum WORM GEARBOXES

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	0.37	14	2.2	**0.80**	**30**	**B**		B-C	**B**-C		80	2.2	01
140	**10**	0.37	20	1.5	**0.57**	**30**	**B**		B-C	**B**-C		79	2.2	02
100	**14**	0.37	27	1.1	**0.41**	**30**	**B**		B-C	**B**-C		77	2.4	03

C Ratio / Rapporto / Untersetzung / Rapport de réduction / Relación

Nominal module / Modulo nominale / Nenn modul / Module nominale / Módulo nominal

Notes / Note / Anmerkungen / Note / Notas

Transmitted torque / Momento torcente trasmesso / Mögliche Drehmomente / Couple de sortie / Par transmitido

Service factor / Fattore di servizio / Betriebsfaktor / Facteur de service / Factor de servicio

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. <2 h	2 - 8 h	8 - 16 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora **≤ 10**	Uniform / Uniforme	0.9	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora **> 10**	Uniform / Uniforme	1.25	1.5	1.75
	Moderate / Moderato	1.5	1.75	2
	Heavy / Forte	1.75	2	2.25

D Motor flange available / Flange disponibili / Erhältliche Motorflansche / Brides disponibles / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Reduzierhülsen / Montage avec douille de réduction / Montaje con casquillo de reducción

C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur / Posición agujeros brida / base motor

B) Available without reduction bushes / Disponibile anche senza boccola / Auch ohne Reduzierbuchse verfügbar / Disponible aussi sans douille de réduction / Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
280	**5**	0.18	5	3.3	**0.60**	**17**	B		B-C		82	1.26	01
200	**7**	0.18	7	2.4	**0.44**	**17**	B		B-C		80	1.44	02
140	**10**	0.18	10	1.8	**0.32**	**17**	B		B-C		78	1.44	03
93	**15**	0.18	13	1.4	**0.25**	**19**	B		B-C		73	1.44	04
70	**20**	0.18	17	1.1	**0.20**	**19**	B		B-C		70	1.09	05
47	**30**	0.12	15	1.4	**0.17**	**21**	B		B-C		62	1.44	06
35	**40**	0.12	19	1.1	**0.13**	**20**	B		B-C		57	1.09	07
23	**61**	0.09	19	1.1	**0.10**	**20**	B		B-C		50	0.72	08
17.5	**80**	0.06	16	1.0	**0.06**	**16**	B		B-C		48	0.56	09
14	**100**	0.06*	16	0.5	**0.03**	**8**	B		B-C		40	0.45	10

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **Q30** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q30** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **Q30** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **Q30** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **Q30** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

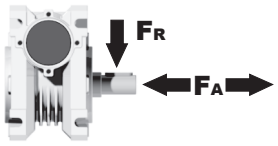
▪ LUBRICATION Q30 Oil Quantity 0.03Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

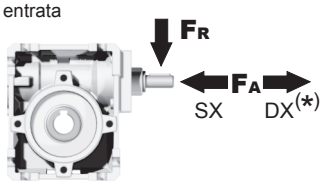
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	120	600
150	140	700
100	160	800
75	180	900
50	200	1000
25	250	1250
15	280	1400

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

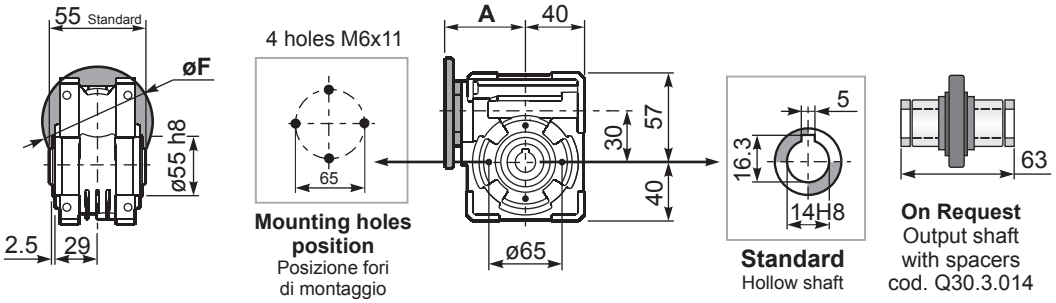
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

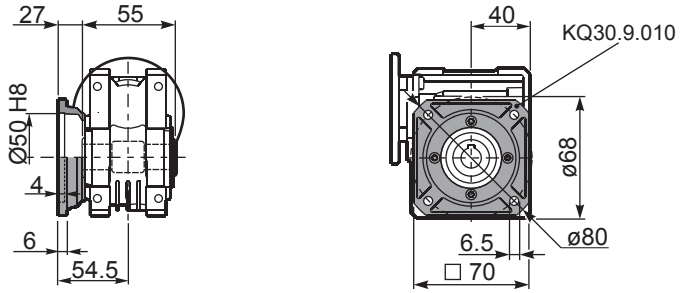
PQ30**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore: **1.15 kg**

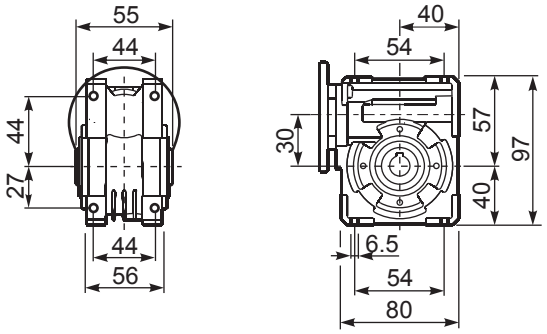
M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



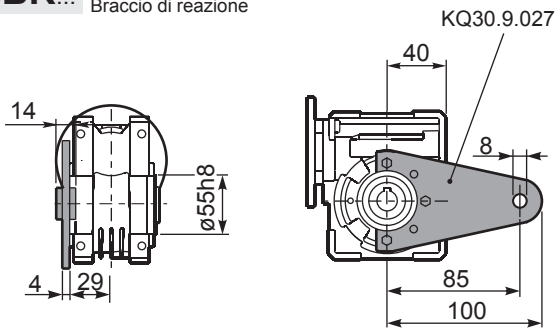
PQ30**FC**... Square flange
Flangia quadrata



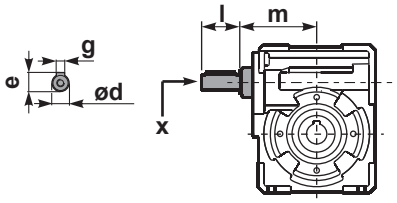
PQ30**FB**... Feet
Piedini



PQ30**BR**... Reaction arm
Braccio di reazione



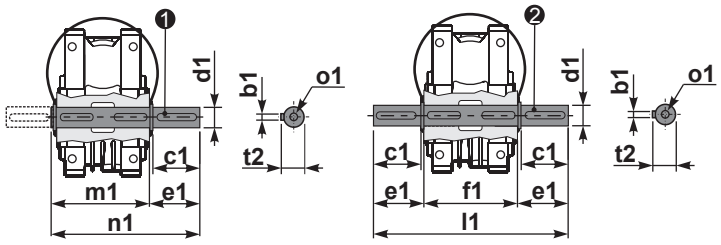
RQ30FB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type **S**	-	-	-	-	-	-	-

PQ30.....**S**... Single Shaft
Albero lento semplice

PQ30.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K030.5.028 type **B**

❷ kit cod. K030.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	5	25	$14^{-0.005}_{-0.020}$	35.5	55	126	59	94.5	16	M5x14
type **S**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	0.37	14	2.2	**0.80**	**30**	**B**		B-C	**B**-C		80	2.2	01
140	**10**	0.37	20	1.5	**0.57**	**30**	**B**		B-C	**B**-C		79	2.2	02
100	**14**	0.37	27	1.1	**0.41**	**30**	**B**		B-C	**B**-C		77	2.4	03
67	**21**	0.37	36	1.2	**0.43**	**41**	**B**		B-C	**B**-C		67	1.6	04
50	**28**	0.25	31	1.3	**0.33**	**41**	**B**		B-C	**B**-C		65	2.5	05
38	**37**	0.25	40	1.0	**0.26**	**41**	**B**		B-C	**B**-C		63	1.8	06
30	**46**	0.25	46	0.9	**0.22**	**41**	**B**		B-C	**B**-C		59	1.5	07
23	**60**	0.18	41	1.0	**0.18**	**41**	**B**		B-C	**B**-C		56	1.2	08
20	**70**	0.12	31	1.0	**0.12**	**30**	**B**		B-C	**B**-C		54	1.0	09
13.7	**102**	0.09	31	1.0	**0.09**	**29**	**B**		B-C	**B**-C		49	0.72	10

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **Q45** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q45** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **Q45** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **Q45** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **Q45** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION Q45 Oil Quantity 0.09 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
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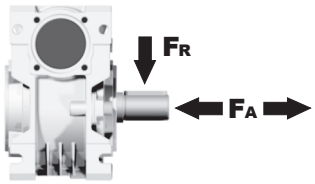
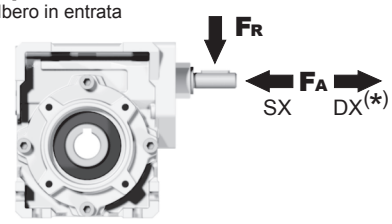
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	180	900
150	200	1000
100	220	1100
75	240	1200
50	260	1400
25	300	1800
15	400	2000

Input shaft
albero in entrata



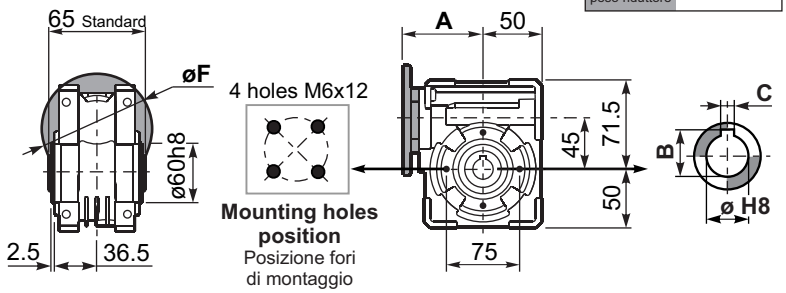
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

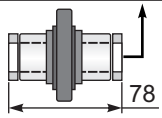
PQ45**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	80
71B5	K050.4.042	160	77.5
56B14	KC40.4.049	80	77.5
63B14	K050.4.047	90	80
71B14	K050.4.045	105	77.5



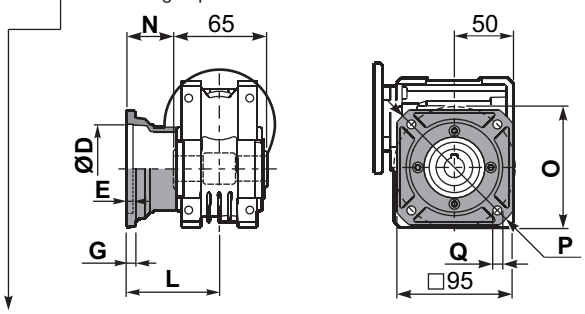
Gearbox weight peso riduttore **2.30 kg**

ø H8	B	C	*Spacer code
18 Standard	20.8	6	Q45.3.018
19 on request	21.8	6	Q45.3.019
20 on request	22.8	6	Q45.3.020



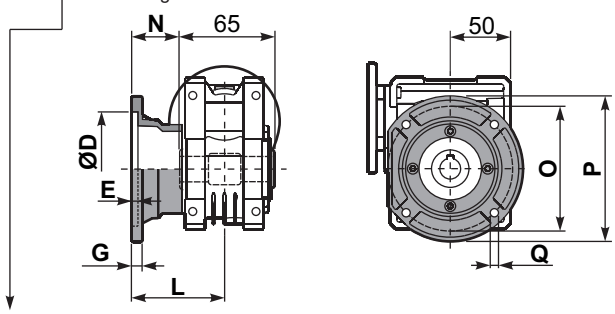
***On Request**
output shaft with spacers

PQ45**FC**... Square flange
Flangia quadrata



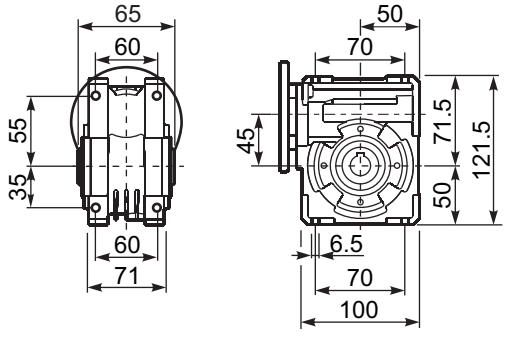
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	60 H8	4	7	67	34.5	75	110	9	KQ45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KQ45.9.011

PQ45**F1**... Round flange
Flangia rotonda

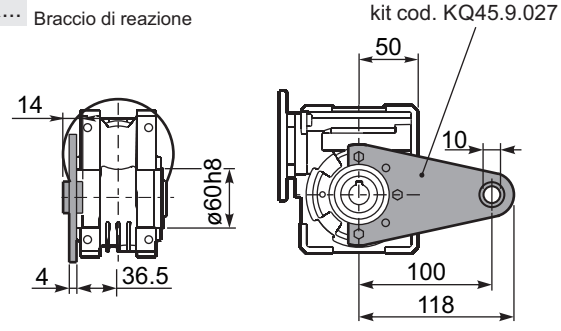


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	95H8	5	9	80	47.5	115	140	9.5	KSQ45.9.012
F2	-	-	-	-	-	-	-	-	-

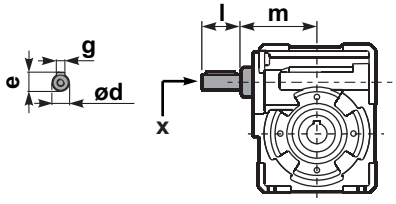
PQ45**FB**... Feet
Piedini



PQ45**BR**... Reaction arm
Braccio di reazione



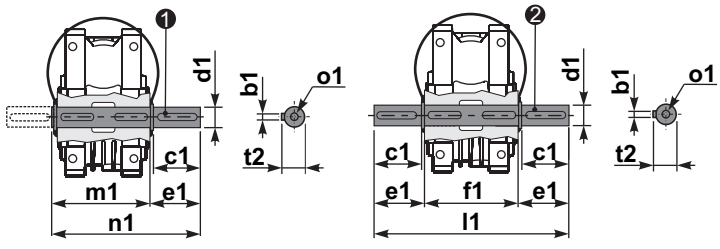
RQ45FB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	74	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

PQ45.....**S**... Single Shaft
Albero lento semplice

PQ45.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K045.5.028 type **B**
kit cod. KS045.5.030 type **S**

❷ kit cod. K045.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	6	32	$18^{-0.005}_{-0.020}$	43	65	151	70	113	20.5	M6x18
type **S**	6	40	$19^{-0.005}_{-0.020}$	58.5	-	-	70	128.5	21.5	M8x20

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	Available B14 motor flanges -O 56	-P 63	-Q 71	-R 80	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	0.75	29	1.9	1.5	57	B	**B**			B-C	**B**		82	2.5	01
140	**10**	0.75	41	1.5	1.1	62	B	**B**			B-C	**B**		80	2.4	02
100	**14**	0.75	57	1.2	0.90	68	B	**B**			B-C	**B**		79	2.6	03
78	**18**	0.55	51	1.2	0.67	62	B	**B**			B-C	**B**		75	2.0	04
54	**26**	0.55	67	1.0	0.54	66	B	**B**			B-C	**B**		69	2.7	05
47	**30**	0.55	79	0.9	0.50	72	B	**B**			B-C	**B**		70	2.5	12
39	**36**	0.37	63	1.2	0.43	72	B			B-C	B-C			69	2.1	06
33	**43**	0.37	72	1.0	0.35	68	B			B-C	B-C			66	1.8	07
28	**50**	0.25	53	1.2	0.31	66	B			B-C	B-C			62	1.5	13
23	**60**	0.25	59	1.0	0.26	62	B			B-C	B-C			58	1.3	08
21	**68**	0.25	66	0.9	0.22	58	B			B-C	B-C			57	1.2	09
17.5	**80**	0.18	53	1.1	0.19	57	B			B-C	B-C			54	1.0	10
14	**100**	0.12	41	1.3	0.15	51	B			B-C	B-C			50	0.8	11

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

EN Unit **Q50** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q50** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **Q50** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **Q50** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **Q50** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

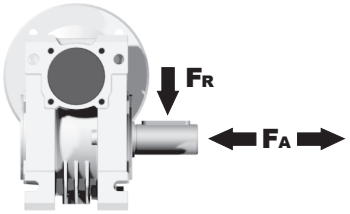
▪ LUBRICATION Q50 Oil Quantity 0.14 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

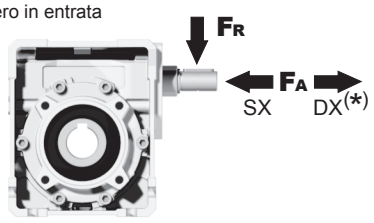
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	240	1200
150	280	1400
100	300	1500
75	340	1700
50	380	1900
25	480	2500
15	560	2800

Input shaft
albero in entrata



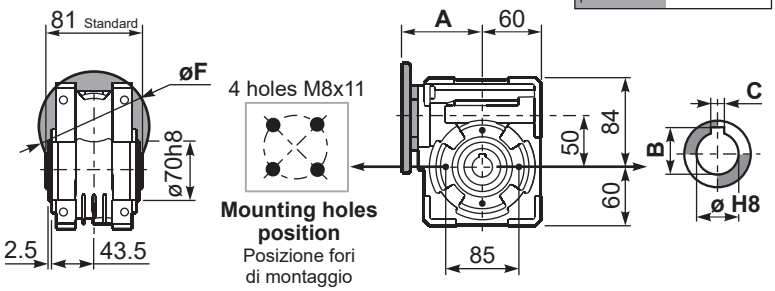
n_1 [min^{-1}]	FA [N]	FR [N]
1400	76	380

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

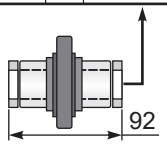
PQ50**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	83.5
71B5	K050.4.042	160	81
80B5	K050.4.043	200	81.5
56B14	KC40.4.049	80	81
63B14	K050.4.047	90	83.5
71B14	K050.4.045	105	81
80B14	K050.4.046	120	81.5



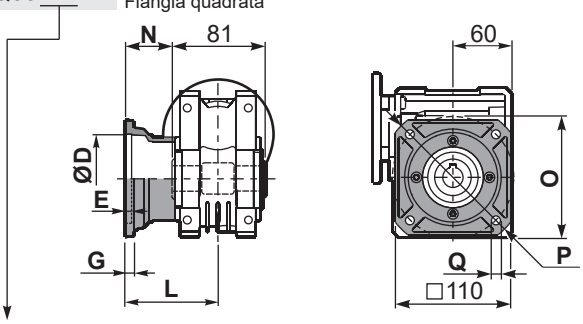
Gearbox weight / peso riduttore: **3.25 kg**

ø H8	B	C	*Spacer code
25 Standard	28.3	8	Q50.3.025
24 on request	27.3	8	Q50.3.024



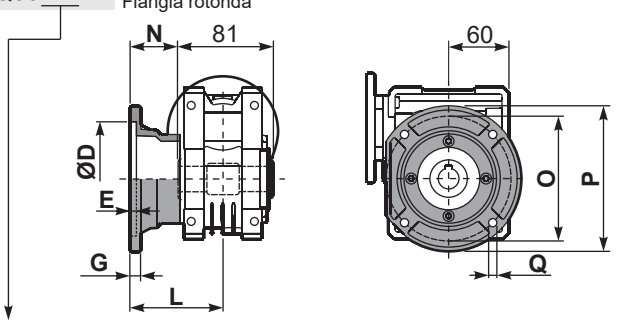
***On Request**
output shaft with spacers

PQ50**FC**... Square flange
Flangia quadrata



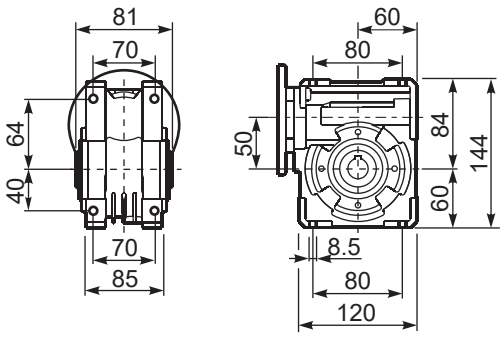
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	70 H8	5	9	90	49.5	85	125	11	KQ50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KQ50.9.011

PQ50**F1**... Round flange
Flangia rotonda

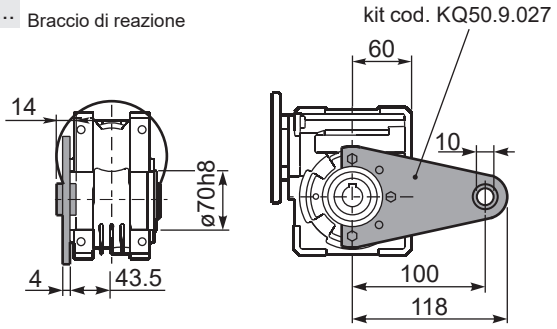


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	110 H8	5	10	89	48.5	130	160	9.5	KSQ50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KSQ50.9.013

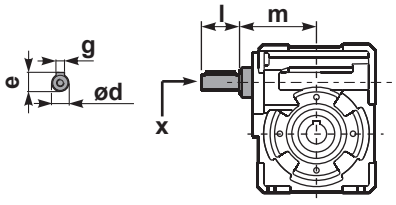
PQ50**FB**... Feet
Piedini



PQ50**BR**... Reaction arm
Braccio di reazione

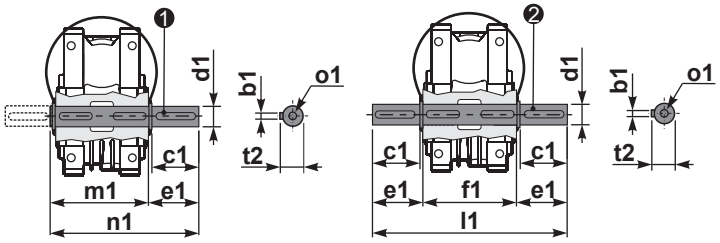


R**Q50FB**... Input shaft
Albero in entrata



PQ50.....**S**... Single Shaft
Albero lento semplice

PQ50.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K050.5.028 type **B**
kit cod. KS050.5.030 type **S**

❷ kit cod. K050.5.029 type **B**

	ød	e	g	l	m	x	kit code
type **B**	16 h6	18	5	30	79.5	M6x16	❶ K050.5.006 PAM71 ❷ K050.5.007 PAM80
type **S**	14 h6	16	5	30	79.5	M5x10	❶ KS050.5.008 PAM71 ❷ KS050.5.009 PAM80

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	52	$25^{-0.005}_{-0.020}$	59.5	81	200	86.5	146	28	M8x20
type **S**	8	50	$24^{-0.005}_{-0.020}$	68.8	-	-	86.5	155	27	M8x20

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	1.8	71	1.8	3.2	125		B	**B**		B-C	**B**-C		83	3.1	01
140	**10**	1.8	99	1.4	2.4	134		B	**B**		B-C	**B**-C		81	3.1	02
93	**15**	1.5	121	1.1	1.7	138		B	**B**		B-C	**B**-C		79	3.1	03
74	**19**	1.1	111	1.2	1.4	138		B	**B**		B-C	**B**-C		78	2.6	04
58	**24**	1.1	135	1.0	1.2	142		B	**B**		B-C	**B**-C		75	2.0	05
47	**30**	1.1	167	0.9	0.96	146		B	**B**		B-C	**B**-C		74	3.2	06
39	**36**	0.75	125	1.2	0.88	147		B	**B**		B-C	**B**-C		68	2.7	07
35	**40**	0.75	135	1.0	0.78	140		B	**B**		B-C	**B**-C		66	2.5	13
31	**45**	0.55	111	1.2	0.67	135	B	B			B-C	C		66	2.1	08
23	**60**	0.55	140	0.9	0.51	130	B	B			B-C	C		62	1.6	12
21	**67**	0.55	151	0.8	0.45	124	B	B			B-C	C		60	1.5	09
17.5	**80**	0.37	115	1.0	0.38	119	B	B			B-C	C		57	1.3	10
14.9	**94**	0.37	123	1.0	0.36	119	B	B			B-C	C		52	1.1	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **Q63** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q63** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **Q63** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **Q63** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **Q63** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

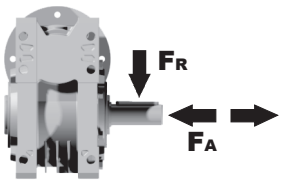
▪ LUBRICATION Q63 Oil Quantity 0.30 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

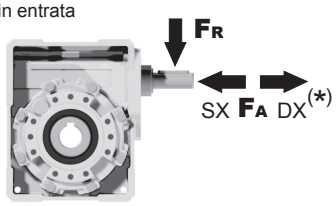
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	360	1800
150	400	2000
100	460	2300
75	500	2500
50	600	3000
25	700	3800
15	800	4000

Input shaft
albero in entrata



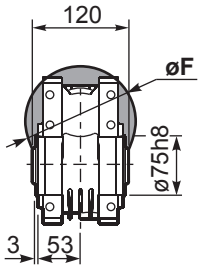
n_1 [min^{-1}]	FA [N]	FR [N]
1400	90	450

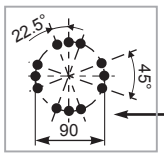
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

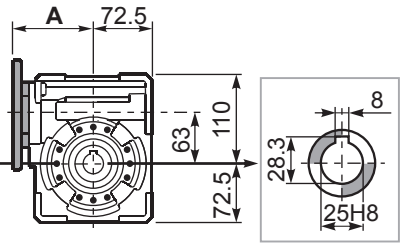
PQ63**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	99.5
71B5	K063.4.042	160	97.5
80/90B5	K063.4.043	200	99.5
71B14	K063.4.047	105	97.5
80B14	K063.4.046	120	99.5
90B14	K063.4.041	140	99.5





Mounting holes position
Posizione fori di montaggio

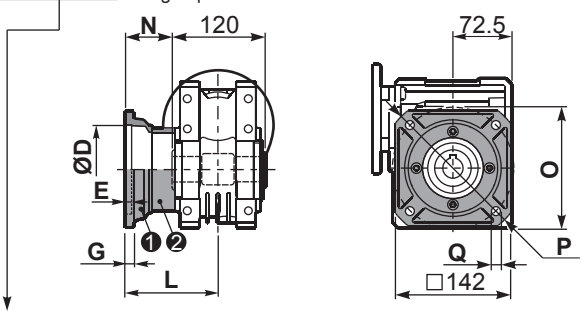


Standard
Hollow shaft

On request
A richiesta

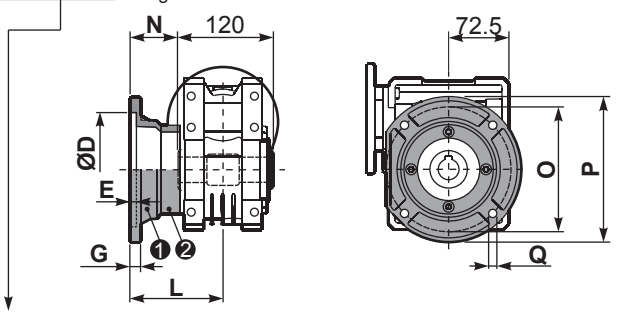
Gearbox weight peso riduttore: **6.00 kg**

PQ63**FC**... Square flange
Flangia quadrata



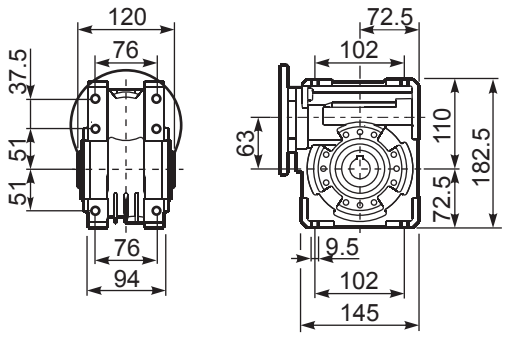
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 $^{+0.20}_{+0.15}$	6	12	86	26	150	180	11	❶ KQ63.9.010 ❷ -
FL	115 $^{+0.20}_{+0.15}$	6	12	116	56	150	180	11	❶ KQ63.9.010 ❷ K063.0.200

PQ63**F1**... Round flange
Flangia rotonda

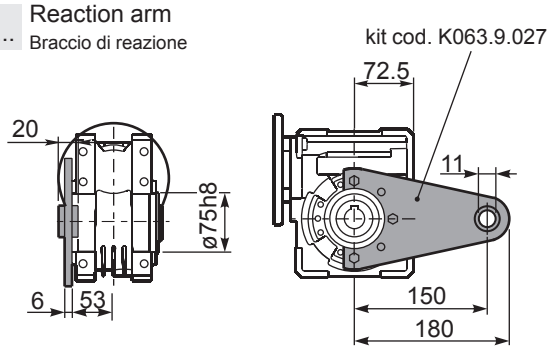


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	110	50	165	200	13	❶ KS070.9.013 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	124	64	150	175	11	❶ KS063.9.013 ❷ -
F3	110 $^{+0.035}_{0}$	5	11	90	30	130	160	10	❶ KS063.9.011 ❷ -

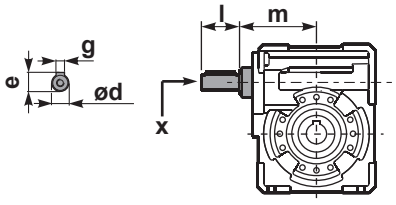
PQ63**FB**... Feet
Piedini



PQ63**BR**... Reaction arm
Braccio di reazione



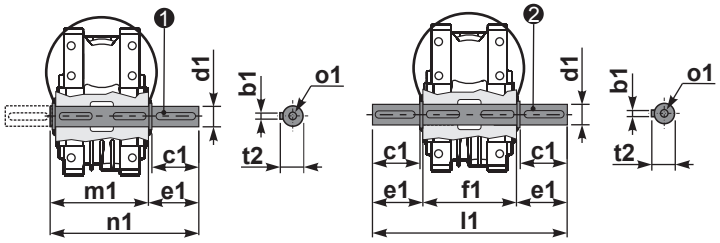
RQ63FB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	18 h6	20.5	6	45	93	M6x16	❶ K063.5.006 PAM80 ❷ K063.5.007 PAM90
type **S**	19 h6	21.5	6	40	93	M8x20	❶ KS063.5.008 PAM80 ❷ KS063.5.009 PAM90

PQ63.....**S**... Single Shaft
Albero lento semplice

PQ63.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	25 $^{-0.005}_{-0.020}$	63.2	120	246.4	126.8	190	28	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -R 80	-T 90	-U 100 112	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	4	172	1.1	**4.4**	**190**		B	B		B	B		90	3.75	01
140	**10**	4	240	1.0	**3.8**	**230**		B	B		B	B		88	3.75	02
93	**15**	3	261	1.0	**2.9**	**250**		B	B		B	B		85	3.75	03
70	**20**	2.2	249	1.0	**2.2**	**250**		B	B		B	B		83	3.00	04
56	**25**	1.5	205	1.2	**1.8**	**250**	B	B			B			80	2.41	05
45	**31**	1.5	244	1.1	**1.7**	**270**	B	B			B			77	3.75	06
35	**40**	1.5	295	0.9	**1.3**	**255**	B	B			B			72	3.10	07
28	**50**	0.75	174	1.3	**0.95**	**220**	B							68	2.41	08
23	**60**	0.75	200	1.0	**0.75**	**200**	B							65	2.10	09
17.5	**80**	0.55	177	1.0	**0.56**	**180**	B							59	1.53	10
14.0	**100**	0.55*	206	0.7	**0.40**	**150**	B							55	1.23	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **Q75** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q75** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **Q75** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **Q75** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **Q75** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

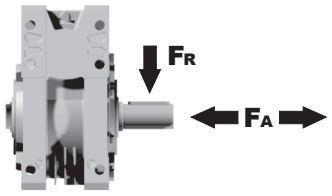
▪ LUBRICATION Q75 Oil Quantity 0.40 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

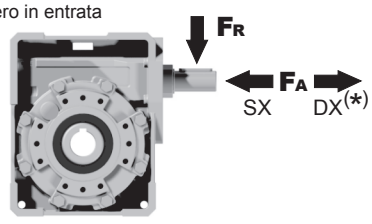
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	460	2300
150	520	2600
100	560	2800
75	620	3100
50	720	3600
25	880	4400
15	1000	5000

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	125	630

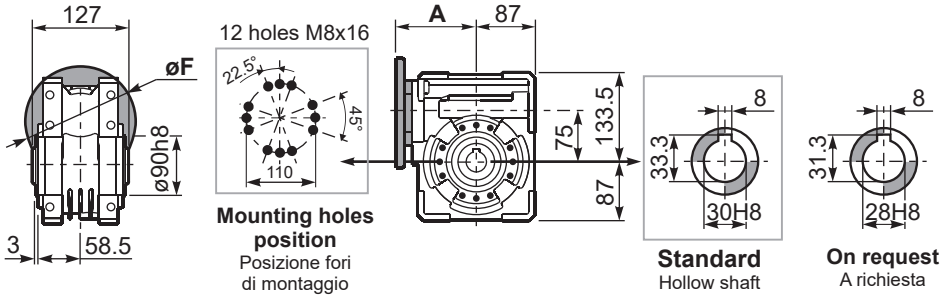
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

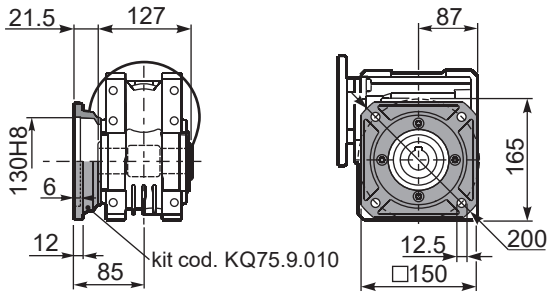
PQ75**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore: **8.70 kg**

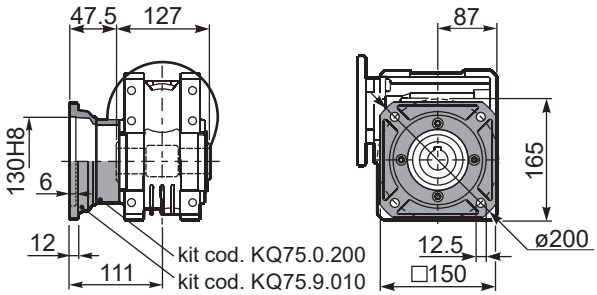
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	114
80/90B5	K023.4.042	200	116
100/112B5	K023.4.043	250	125
80B14	K085.4.046	120	116
90B14	K085.4.045	140	116
100/112B14	K085.4.047	160	125



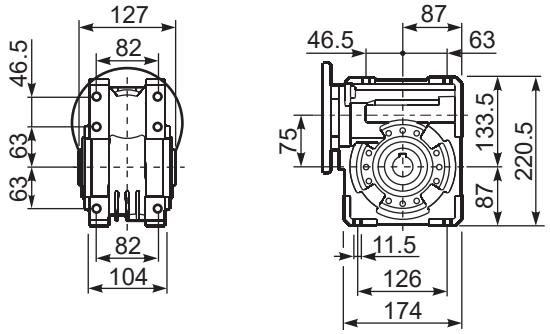
PQ75**FC**... Square flange
Flangia quadrata



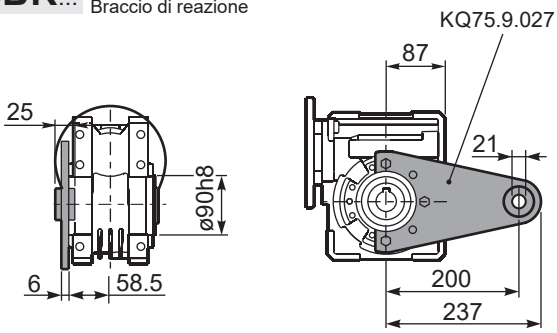
PQ75**FL**... Square flange
Flangia quadrata



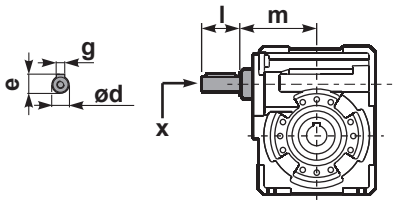
PQ75**FB**... Feet
Piedini



PQ75**BR**... Reaction arm
Braccio di reazione



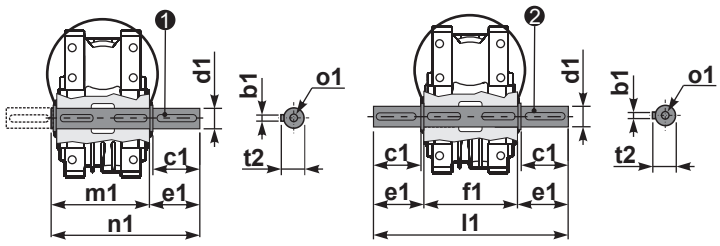
R**Q75FB**... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	25 h6	27.8	8	50	109.5	M8x20	KQ75.5.006 PAM80 K085.5.007 PAM90 K085.5.008 PAM100

PQ75.....**S**... Single Shaft
Albero lento semplice

PQ75.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. KQ75.5.028 Standard
kit cod. KQ75.5.026 On request

❷ kit cod. KQ75.5.029 Standard

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	8	60	$30^{-0.005}_{-0.020}$	65	127	255	134	199	33	M8x20
On request	8	60	$28^{-0.005}_{-0.020}$	65	-	-	134	199	31	M8x20

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -R 80	-T 90	-U 100 112	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	4.0	168	1.5	**6.1**	**257**		B	B		B	B		88	4.23	01
140	**10**	4.0	218	1.3	**5.2**	**284**		B	B		B	B		80	4.2	02
100	**14**	3.0	223	1.4	**4.1**	**305**		B	B		B	B		78	4.5	03
70	**20**	2.2	237	1.2	**2.7**	**294**		B	B		B	B		79	3.4	04
64	**22**	2.2	258	1.1	**2.5**	**294**		B	B		B	B		78	3.1	05
50	**28**	2.2	315	1.1	**2.4**	**347**		B	B		B	B		75	4.7	06
37	**38**	1.5	276	1.2	**1.8**	**336**	B	B			B			71	3.5	07
30	**46**	1.5	320	1.0	**1.5**	**326**	B	B			B			68	3.1	08
27	**52**	1.1	258	1.1	**1.2**	**289**	B	B			B			66	2.7	09
21	**67**	1.1	327	0.9	**0.97**	**289**	B	B			B			65	2.1	10
18.9	**74**	0.75	220	1.2	**0.91**	**268**	B	B			B			58	1.9	11
14.6	**96**	0.55	191	1.3	**0.70**	**242**	B	B			B			53	1.5	12

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

EN Unit **Q85** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q85** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **Q85** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **Q85** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **Q85** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

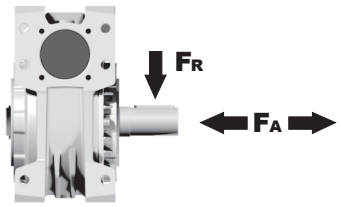
▪ LUBRICATION Q85 Oil Quantity 1.20 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website — **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

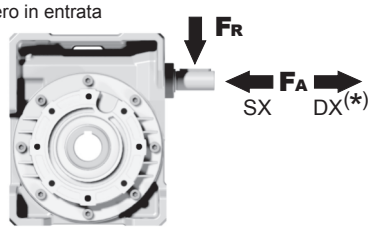
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	500	2500
150	580	2900
100	600	3000
75	700	3500
50	800	4000
25	1000	5000
15	1160	5800

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	130	650

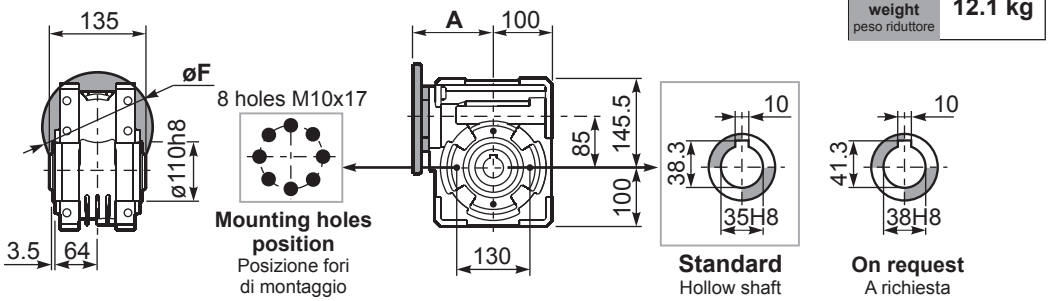
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

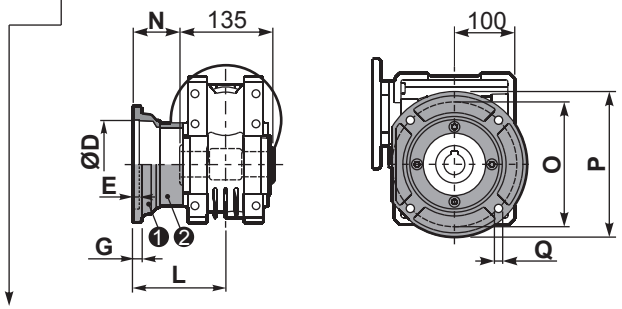
PQ85**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore: **12.1 kg**

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	116.5
80/90B5	K023.4.042	200	118.5
100/112B5	K023.4.043	250	127.5
80B14	K085.4.046	120	118.5
90B14	K085.4.045	140	118.5
100/112B14	K085.4.047	160	127.5

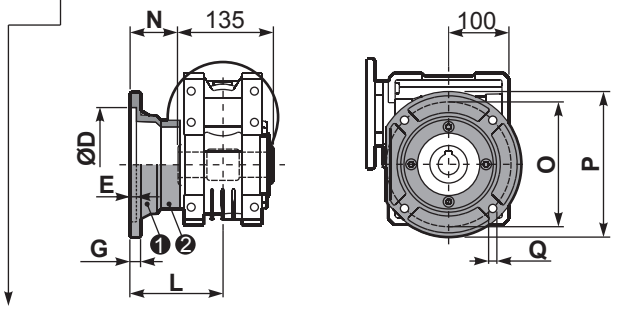


PQ85**FC**... Output flange
Flangia uscita



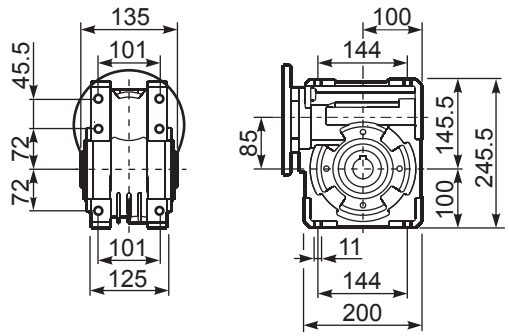
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	152 +0.06 +0.00	5	16	108	40.5	176	205	13	❶ K085.9.010 ❷ -
FL	152 +0.06 +0.00	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

PQ85**F1**... Output flange
Flangia usicta

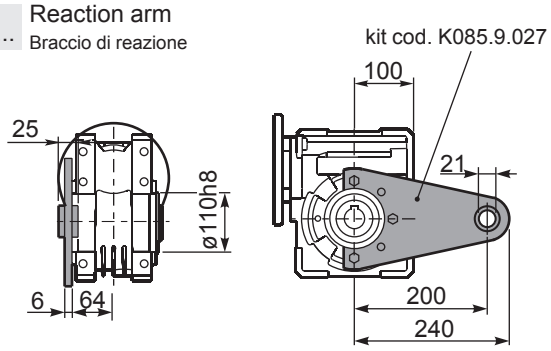


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 H7	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 +0.06 +0.00	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 H7	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

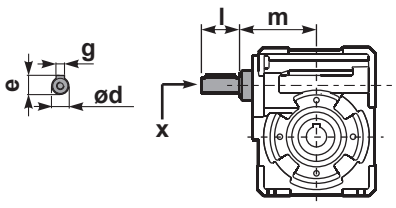
PQ85**FB**... Feet
Piedini



PQ85**BR**... Reaction arm
Braccio di reazione



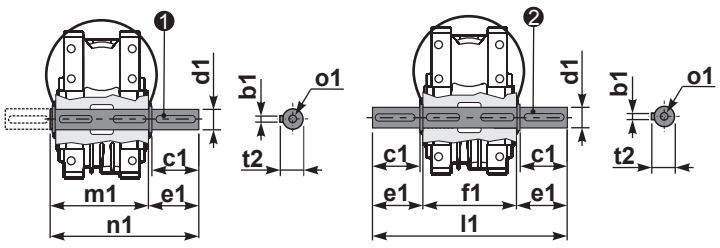
RQ85FB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	25 h6	28	8	50	112	M8x20	❶ K085.5.007 PAM90 ❷ K085.5.008 PAM100
type **S**	24 h6	27	8	50	112	M8x20	❶ KS085.5.009 PAM90 ❷ KS085.5.011 PAM100

PQ85.....**S**... Single Shaft
Albero lento semplice

PQ85.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K085.5.028 type **B**

❷ kit cod. K085.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	10	60	35 -0.005 -0.020	73.5	135	282	141	214.5	38	M10x23
type **S**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	7.5	315	1.5	**11.5**	**483**		B	B			B	B			88	5.5	01
140	**10**	7.5	440	1.2	**9.0**	**525**		B	B			B	B			86	5.4	02
88	**16**	5.5	492	1.1	**6.0**	**536**		B	B			B	B			82	5.3	03
70	**20**	4.0	447	1.2	**4.9**	**546**		B	B			B	B			82	4.5	04
61	**23**	3.0	377	1.4	**4.1**	**515**		B	B			B	B			80	3.9	05
47	**30**	3.0	467	1.4	**4.2**	**651**		B	B			B	B			76	5.6	06
37	**38**	3.0	583	1.1	**3.3**	**641**		B	B			B	B			75	4.7	07
31	**45**	2.2	493	1.2	**2.7**	**599**		B	B			B	B			73	4.0	08
26	**53**	2.2	557	1.1	**2.5**	**620**		B	B			B	B			70	3.5	09
22	**64**	1.5	452	1.2	**1.8**	**536**	B	B				B				69	2.9	10
16.7	**84**	1.1	410	1.2	**1.3**	**494**	B	B				B				65	2.2	11
14.1	**99**	1.1	446	1.1	**1.2**	**483**	B	B				B				60	1.9	12

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **Q11** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fit it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q11** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **Q11** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **Q11** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile.
L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **Q11** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes.
Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

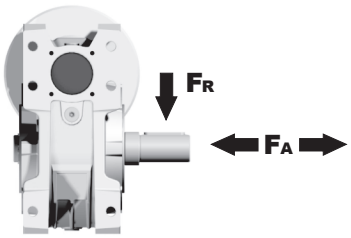
B3	B6	B7	B8	V5	V6
1.90 LT	1.35 LT	1.35 LT	2.00LT	2.00 LT	2.00LT

AGIP Blasia 460

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

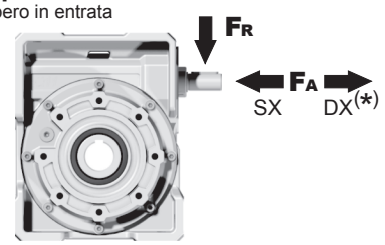
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	600	2900
150	700	3300
100	750	3600
75	800	4000
50	920	4600
25	1200	6000
15	1400	7000

Input shaft
albero in entrata



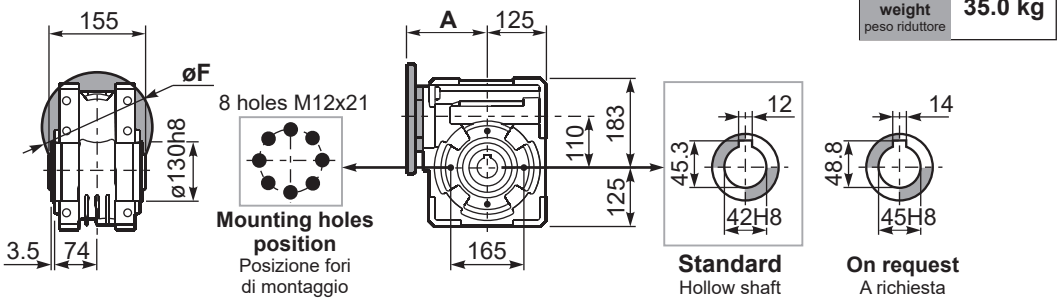
n_1 [min^{-1}]	FA [N]	FR [N]
1400	228	1140

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

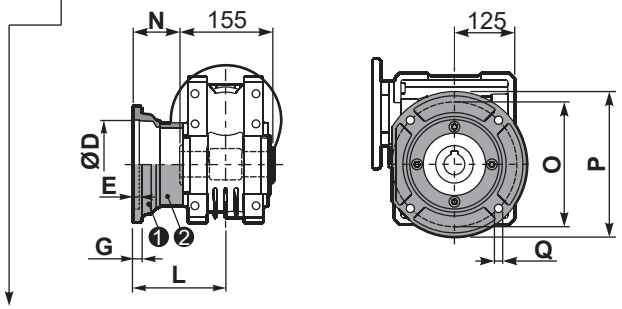
PQ11**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	136
80/90B5	K023.4.042	200	138
100/112B5	K023.4.043	250	147
132B5	-	300	187
80B14	K085.4.046	120	138
90B14	K085.4.045	140	138
100/112B14	K023.4.041	160	136
132B14	-	200	187



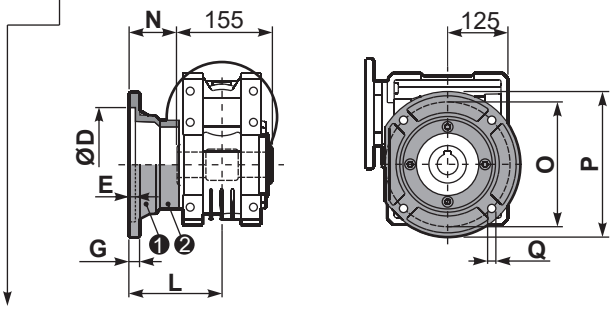
Gearbox weight peso riduttore **35.0 kg**

PQ11**FC**... Output flange
Flangia uscita



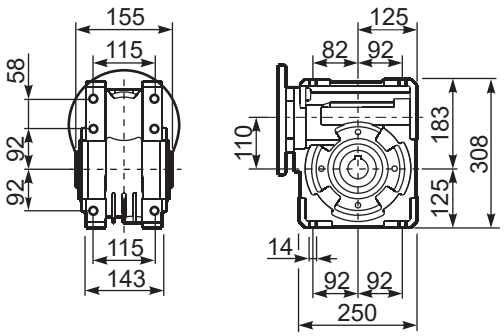
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	170 +0.083 +0.043	11	16.5	131.5	54	230	270	13	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

PQ11**F1**... Output flange
Flangia uscita

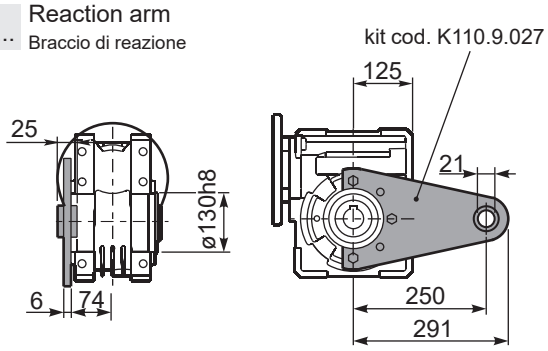


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

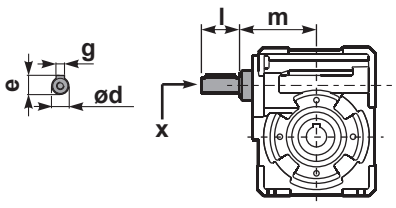
PQ11**FB**... Feet
Piedini



PQ11**BR**... Reaction arm
Braccio di reazione



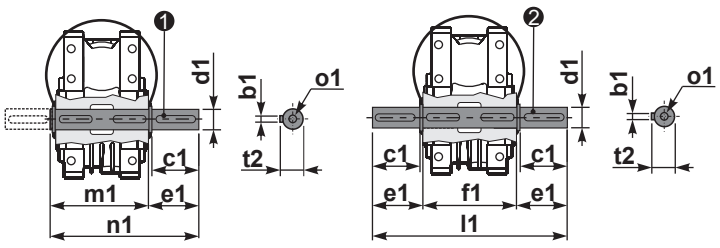
R**Q11FB**... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	25 h6	28	8	50	131.5	M8x20	❶ K085.5.007 PAM90 ❷ K085.5.008 PAM100
type **S**	24 h6	27	8	50	131.5	M8x20	❶ KS085.5.009 PAM90 ❷ KS085.5.011 PAM100

PQ11.....**S**... Single Shaft
Albero lento semplice

PQ11.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K110.5.028 type **B**

❷ kit cod. K110.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	12	75	42 -0.005 -0.020	96.5	155	348	163.5	260	45	M12x32
type **S**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -E 90	-F 100 112	-G 132	B14 motor flanges not available - - - - - - - -	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
187	**7.5**	7.5	345	2.1	**16.1**	**741**		B			90	6.11	01
140	**10**	7.5	455	1.8	**13.5**	**820**		B			89	6.45	02
93	**15**	7.5	668	1.4	**10.3**	**917**		B			87	6.72	03
70	**20**	7.5	870	1.0	**7.8**	**905**		B			85	5.24	04
56	**25**	5.5	788	1.2	**6.5**	**931**		B			84	4.28	05
46.7	**30**	5.5	900	1.2	**6.4**	**1047**		B			80	6.91	06
35	**40**	4.0	851	1.2	**4.9**	**1043**		B			78	5.36	07
28	**50**	4.0	1023	0.9	**3.8**	**972**	B				75	4.35	08
23.3	**60**	3.0	896	1.0	**3.1**	**928**	B				73	3.65	09
17.5	**80**	2.2	816	1.0	**2.3**	**853**	B				68	2.76	10
14	**100**	1.5	655	1.1	**1.7**	**742**	B				64	2.23	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **Q13** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q13** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **Q13** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **Q13** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **Q13** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6
4.50 LT	3.50 LT	3.50 LT	3.30LT	4.50 LT	3.30LT

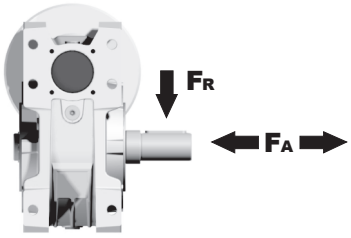
AGIP Blasia 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

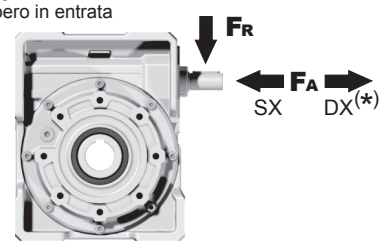
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	960	4800
150	1100	5500
100	1240	6200
75	1380	6900
50	1560	7800
25	2000	10000
15	2400	12000

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	300	1500

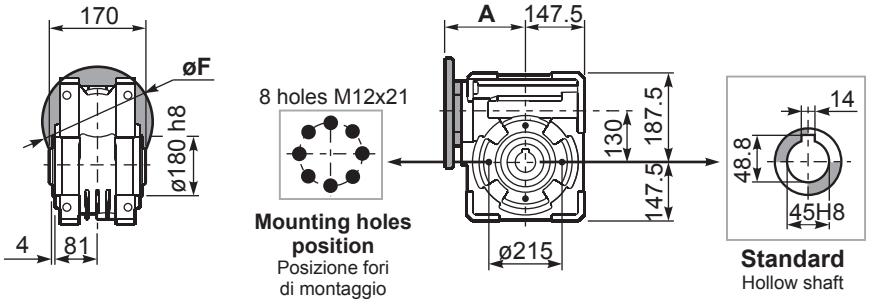
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

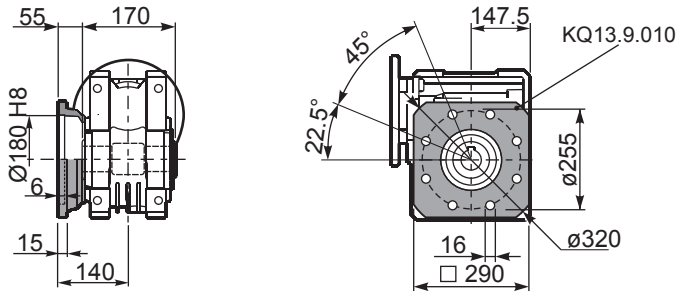
PQ13**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore	48.0 kg

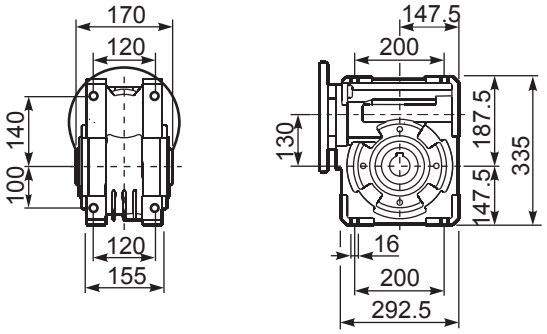
M. flanges	Kit code	øF	A
90B5	KQ13.4.041	200	180
100/112B5	KQ13.4.042	250	180
132B5	KQ13.4.043	300	180



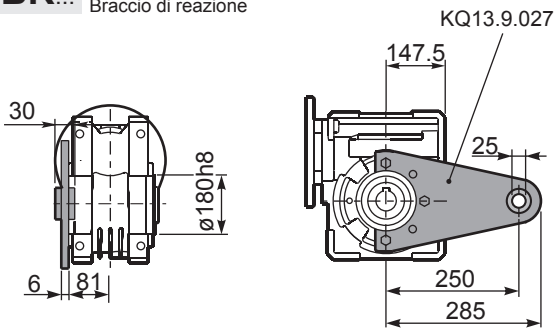
PQ13**FC**... Square flange
Flangia quadrata



PQ13**FB**... Feet
Piedini

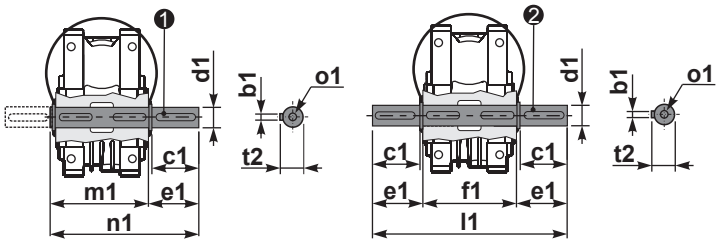


PQ13**BR**... Reaction arm
Braccio di reazione



PQ13.....**S**... Single Shaft
Albero lento semplice

PQ13.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. KQ13.5.028 type **B**

❷ kit cod. KQ13.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type	14	80	$45^{-0.005}_{-0.020}$	85	170	340	180	265	48.5	M16
type	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -F 100 112	-G 132	-H 160	B14 motor flanges not available - - - - - - - -	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
187	**7.5**	15	698	1.7	**25.8**	**1200**		B			91	5.5	01
140	**10**	15	921	1.3	**20.2**	**1240**		B			90	6.155	02
93	**15**	11	990	1.3	**13.9**	**1250**		B			88	5.5	03
70	**20**	11	1291	1.0	**11.1**	**1300**		B			86	6.155	04
56	**25**	9	1289	0.9	**8.4**	**1200**		B			84	5	05
46.7	**30**	7.5	1274	0.9	**7.1**	**1200**	B				83	4.193	06
35	**40**	7.5	1596	1.0	**7.3**	**1550**	B				78	6.155	07
28	**50**	5.5	1426	1.0	**5.4**	**1400**	B				76	5	08
23.3	**60**	4	1195	1.1	**4.2**	**1260**	B				73	4.193	09
17.5	**80**	3	1113	1.0	**3.1**	**1150**					68	3.17	10
14	**100**	2.2	960	1.0	**2.3**	**1000**					64	2.55	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

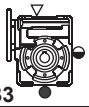
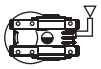
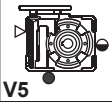
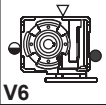
EN Unit **Q15** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q15** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **Q15** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **Q15** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **Q15** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

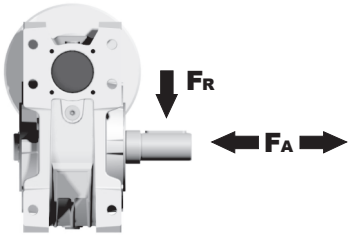
 B3	B6	 B7	B8	 V5	 V6
7.00 LT	5.40 LT	5.40 LT	5.10 LT	7.00 LT	5.10 LT

AGIP Blasia 460

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

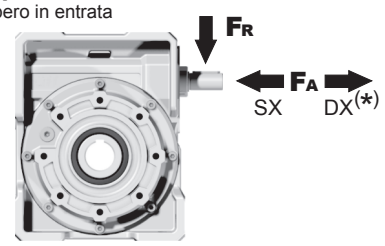
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	1300	6500
150	1440	7200
100	1640	8200
75	1800	9000
50	2120	10600
25	2700	13500
15	3300	16500

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	400	2000

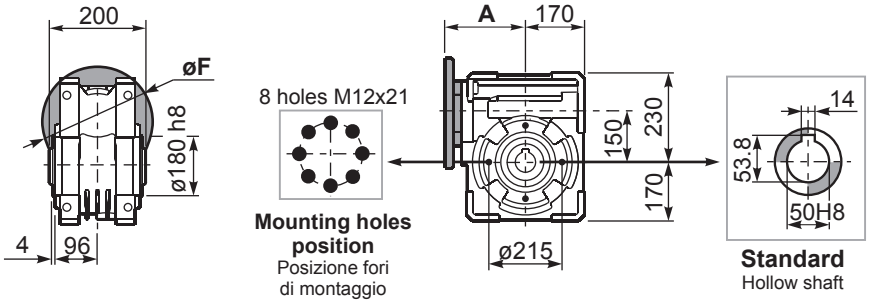
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

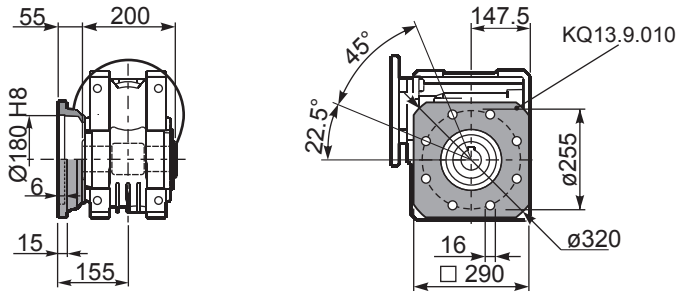
PQ15**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore: **84.0 kg**

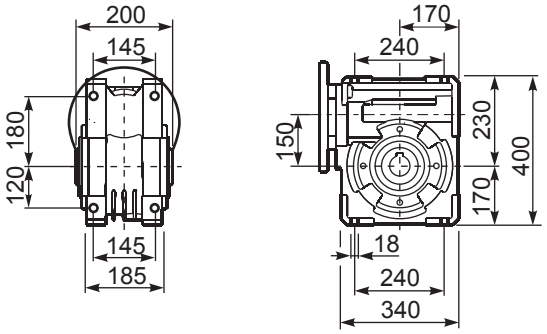
M. flanges	Kit code	øF	A
100/112B5	KQ15.4.042	250	210
132B5	KQ15.4.043	300	210
160B5	KQ15.4.044	350	210



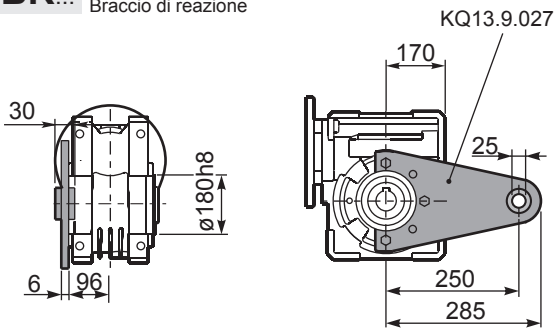
PQ15**FC**... Square flange
Flangia quadrata



PQ15**FB**... Feet
Piedini

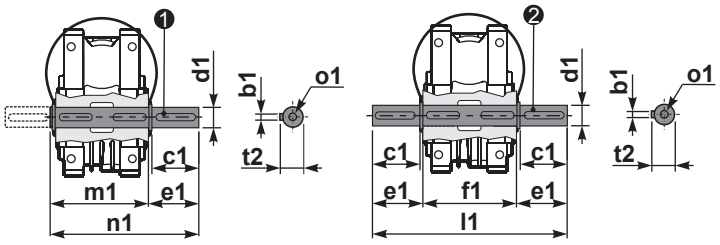


PQ15**BR**... Reaction arm
Braccio di reazione



PQ15.....**S**... Single Shaft
Albero lento semplice

PQ15.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. KQ15.5.028 type **B**

❷ kit cod. KQ15.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type	14	82	$50^{-0.005}_{-0.020}$	87	200	374	210	297	53.5	M16
type	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	-B 63	-C 71	Available B14 motor flanges -P 63	-Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
47	**30.1**	0.25	38	1.4	0.36	55				C		74	2.2	01
33	**43.0**	0.25	53	1.0	0.26	55				C		72	2.2	02
23	**60.2**	0.25	62	0.9	0.22	55				C		60	2.4	03
15.5	**90.3**	0.12	42	1.3	0.16	55				C		57	1.6	04
11.6	**120**	0.12	52	1.1	0.13	55				C		53	2.5	05
8.8	**159**	0.12	64	0.9	0.10	55				C		49	1.8	06
7.1	**198**	0.12*	55	<0.8	0.09	55				C		47	1.5	07
5.4	**258**	0.12*	55	<0.8	0.07	55				C		45	1.2	08
4.7	**301**	0.12*	39	<0.8	0.05	39				C		40	1.0	09
3.2	**439**	0.12*	39	<0.8	0.04	39				C		36	0.72	10

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **P4Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P4Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

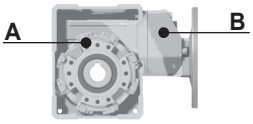
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P4Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P4Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P4Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION P4Q Oil

Common lubrication 0.17 l (A + B).

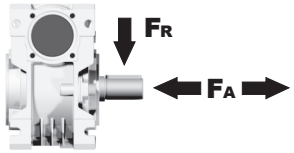


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

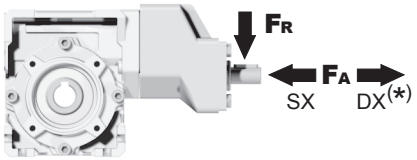
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	240	1200
50	260	1400
25	300	1800
15-6	400	2000

Input shaft
albero in entrata



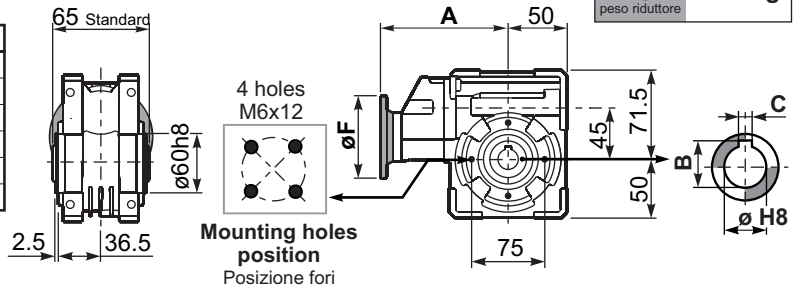
n_1 [min^{-1}]	FA [N]	FR [N]
1400	44	220

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

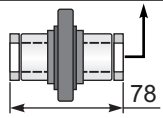
PP4Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K050.4.046	120	143.5
63B5	K050.4.041	138	145.5
71B5	K050.4.042	160	143
63B14	K050.4.047	90	145.5
71B14	K050.4.045	105	143



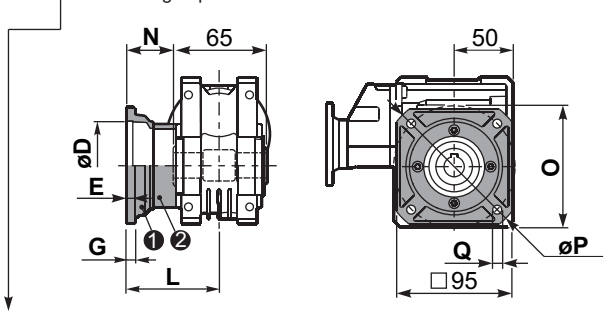
Gearbox weight peso riduttore **3.10 kg**

ø H8	B	C	*Spacer code
18 Standard	20.8	6	Q45.3.018
19 on request	21.8	6	Q45.3.019
20 on request	22.8	6	Q45.3.020



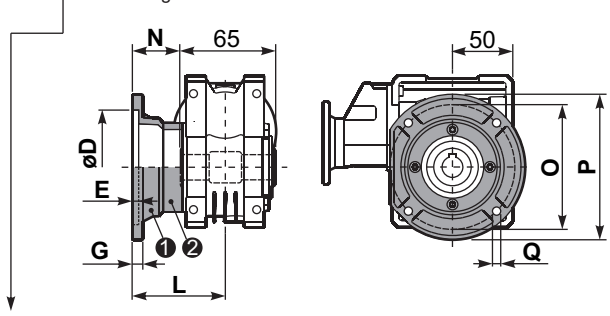
***On Request**
output shaft with spacers

PP4Q**FC**... Square flange
Flangia quadrata



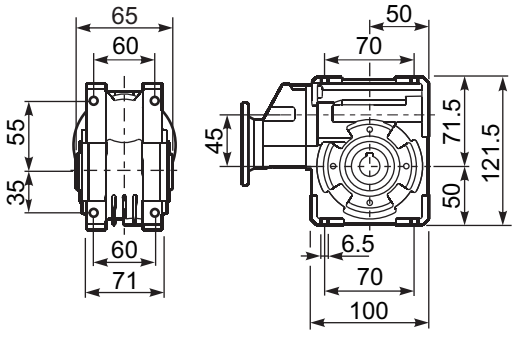
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	60 H8	4	7	67	34.5	75	110	9	KQ45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KQ45.9.011

PP4Q**F1**... Round flange
Flangia rotonda

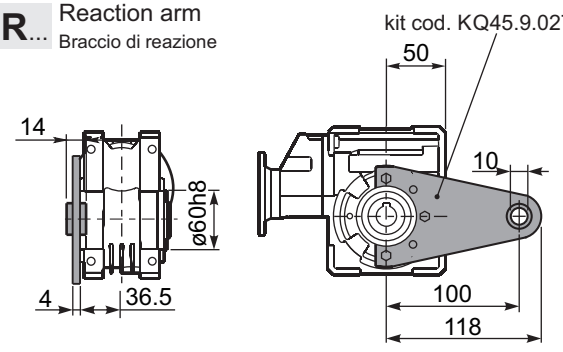


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	95H8	5	9	80	47.5	115	140	9.5	KSQ45.9.012
F2	-	-	-	-	-	-	-	-	-

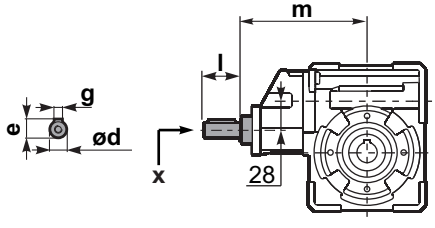
PP4Q**FB**... Feet
Piedini



PP4Q**BR**... Reaction arm
Braccio di reazione



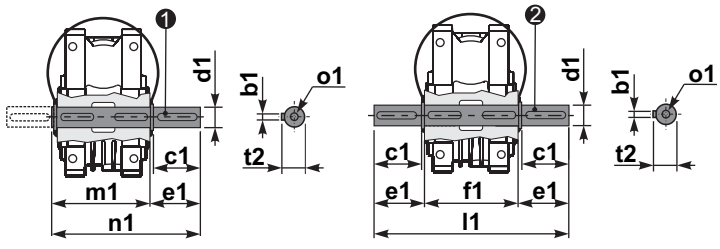
RP4QFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	
type **B**	14 h6	16	5	25	141	M5x13	C35.5.061
type **S**	-	-	-	-	-	-	

PP4Q.....**S**... Single Shaft
Albero lento semplice

PP4Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K045.5.028 type **B**
kit cod. KS045.5.030 type **S**

❷ kit cod. K045.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	6	32	$18^{-0.005}_{-0.020}$	43	65	151	70	113	20.5	M6x18
type **S**	6	40	$19^{-0.005}_{-0.020}$	58.5	-	-	70	128.5	21.5	M8x20

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	-B 63	-C 71	Available B14 motor flanges -P 63	-Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
47	**30.1**	0.37	58	1.3	**0.49**	**77**				C		76	2.5	01
33	**43.0**	0.25	55	1.4	**0.35**	**77**				C		75	2.4	02
23	**60.2**	0.25	71	1.1	**0.27**	**77**				C		69	2.6	03
18.1	**77.4**	0.25	81	1.1	**0.27**	**88**				C		61	2.0	04
12.5	**112**	0.18	84	1.1	**0.19**	**88**				C		61	2.7	05
9.0	**155**	0.12	71	1.2	**0.15**	**88**				C		56	2.1	06
7.6	**185**	0.12	74	1.0	**0.12**	**77**				C		49	1.8	07
5.4	**258**	0.12*	77	<0.8	**0.09**	**77**				C		47	1.3	08
4.8	**292**	0.12*	66	<0.8	**0.08**	**66**				C		44	1.2	09
4.1	**344**	0.12*	44	<0.8	**0.05**	**44**				C		40	1.0	10
3.3	**430**	0.12*	44	<0.8	**0.04**	**44**				C		36	0.8	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **P5Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P5Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

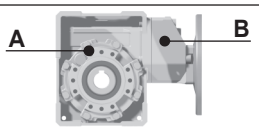
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P5Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P5Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P5Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION P5Q Oil

Common lubrication 0.26 l (A + B).

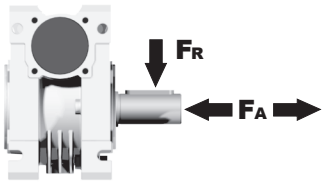


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

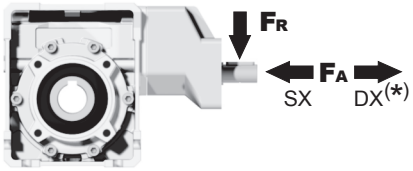
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	340	1700
50	380	1900
25	480	2500
15-6	560	2800

Input shaft
albero in entrata



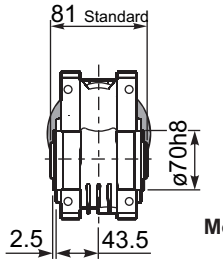
n_1 [min^{-1}]	FA [N]	FR [N]
1400	44	220

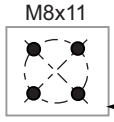
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

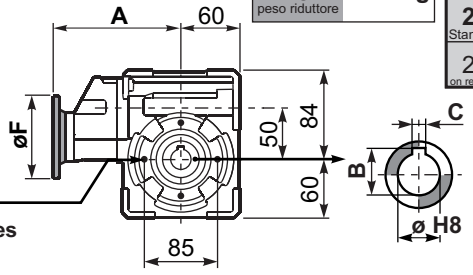
PP5Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K050.4.046	120	147
63B5	K050.4.041	138	149
71B5	K050.4.042	160	146.5
63B14	K050.4.047	90	149
71B14	K050.4.045	105	146.5



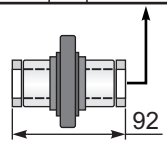


Mounting holes position
Posizione fori di montaggio



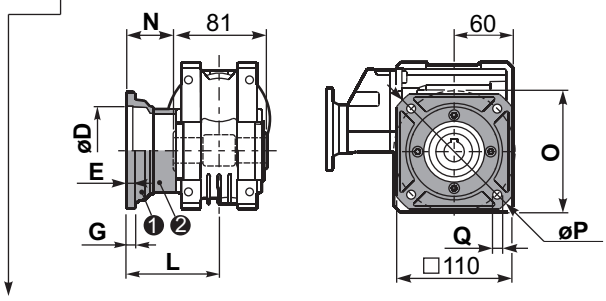
Gearbox weight peso riduttore **4.60 kg**

ø H8	B	C	*Spacer code
25 Standard	28.3	8	Q50.3.025
24 on request	27.3	8	Q50.3.024



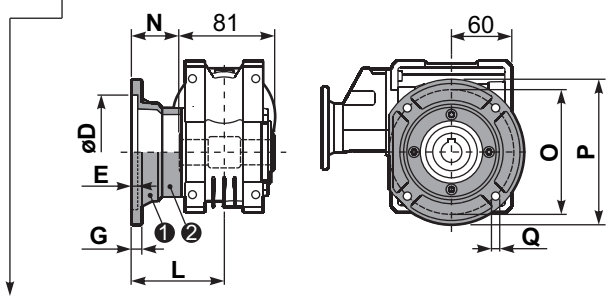
***On Request** output shaft with spacers

PP5Q**FC**... Square flange
Flangia quadrata



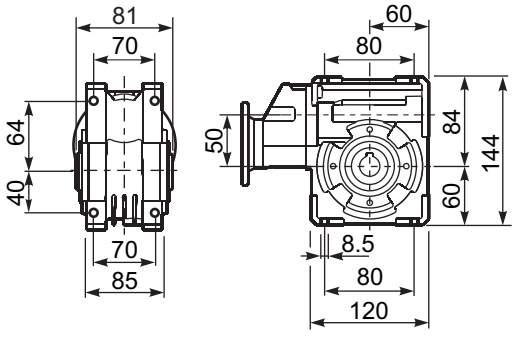
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	70 H8	5	9	90	49.5	85	125	11	KQ50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KQ50.9.011

PP5Q**F1**... Round flange
Flangia rotonda

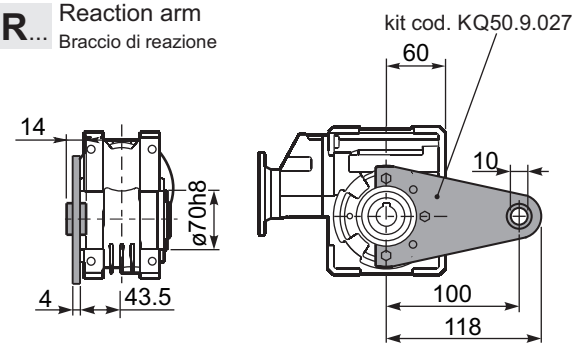


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	110 H8	5	10	89	69.5	130	160	9.5	KSQ50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KSQ50.9.013

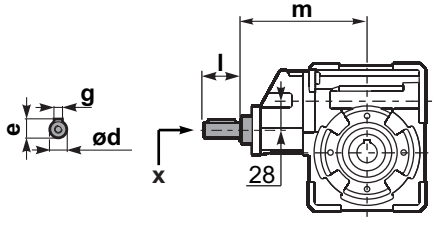
PP5Q**FB**... Feet
Piedini



PP5Q**BR**... Reaction arm
Braccio di reazione



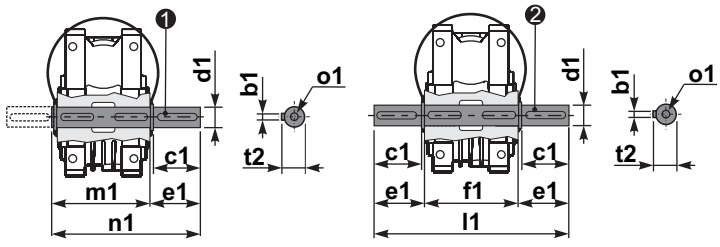
R**P5QFB**... Input shaft
Albero in entrata



	ød	e	g	l	m	x	
type **B**	14 h6	16	5	25	140.5	M5x13	C35.5.061
type **S**	-	-	-	-	-	-	

PP5Q.....**S**... Single Shaft
Albero lento semplice

PP5Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K050.5.028 type **B**
kit cod. KS050.5.030 type **S**

❷ kit cod. K050.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	52	$25^{-0.005}_{-0.020}$	59.5	81	200	86.5	146	28	M8x20
type **S**	8	50	$24^{-0.005}_{-0.020}$	68.8	-	-	86.5	155	27	M8x20

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

	Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -P 63	-Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
IEC 90 - 80 - 71	47	**29.9**	0.75	113	1.5	**1.1**	**165**						C	C		74	2.6	01
	37	**37.7**	0.75	141	1.2	**0.88**	**165**						C	C		73	2.0	02
	30	**47.1**	0.75	169	1.1	**0.83**	**187**						C	C		70	3.2	03
	25	**56.6**	0.55	136	1.4	**0.76**	**187**						C	C		64	2.7	04
	19.8	**70.7**	0.55	164	1.1	**0.63**	**187**						C	C		62	2.1	05
	15.9	**87.8**	0.37	162	1.2	**0.43**	**187**						C	C		73	2.6	06
	12.6	**111.0**	0.37	199	0.9	**0.35**	**187**						C	C		71	2.0	07
IEC 71 - 63	10.1	**139**	0.37	234	0.8	**0.30**	**187**					C				67	3.2	08
	8.4	**166**	0.25	173	1.1	**0.27**	**187**					C				61	2.7	09
	6.7	**208**	0.18	151	1.1	**0.20**	**165**					C				59	2.1	10
	4.5	**310**	0.12	129	1.3	**0.15**	**165**					C				51	1.5	11
	3.8	**370**	0.12	145	1.1	**0.14**	**165**					C				48	1.3	12
	3.2	**434**	0.12	149	0.9	**0.11**	**138**					C				42	1.1	13

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **P6Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P6Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

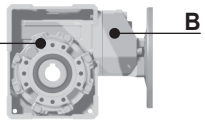
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P6Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P6Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P6Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION P6Q Oil

For B3-V5-V6 separate lubrication for A (0.30 l) B (0.08 l) , for B6-B7-B8 common lubrication 0.35 l (A + B).

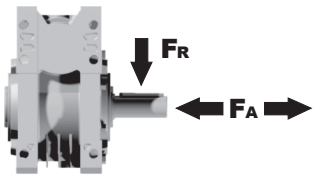


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

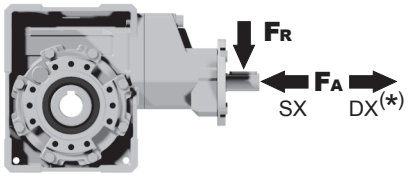
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	500	2500
50	600	3000
25	700	3800
15-6	800	4000

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	61	305

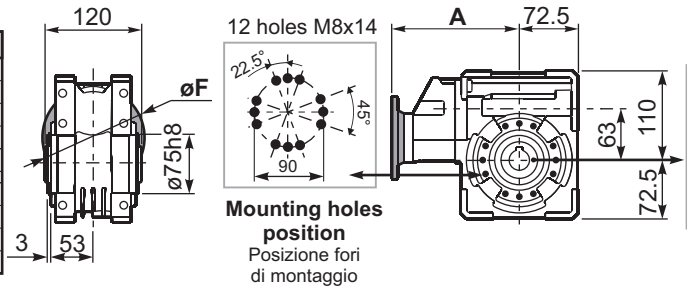
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PP6Q**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore	29.9÷111	139÷434
	7.05 Kg	6.60 Kg

	M.flange	Kit code	øF	A
29.9÷111	71B5	K063.4.042	160	176.5
	80/90B5	K063.4.043	200	178.5
	71B14	K063.4.047	105	176.5
	80B14	K063.4.046	120	178.5
	90B14	K063.4.041	140	178.5
139÷434	63B5	K050.4.041	138	162.5
	71B5	K050.4.042	160	160
	63B14	K050.4.047	90	162.5
	71B14	K050.4.045	105	160

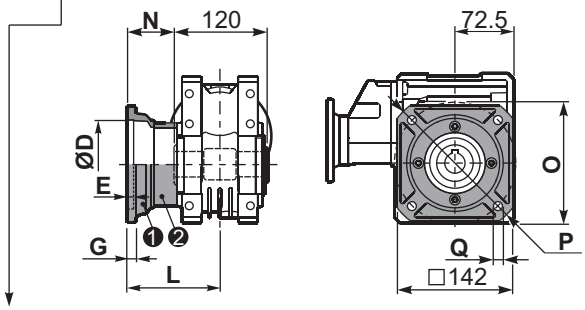


Mounting holes position
Posizione fori di montaggio

Standard
Hollow shaft

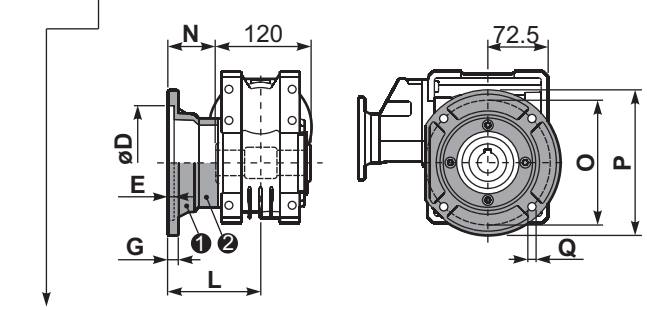
On request
A richiesta

PP6Q**FC**... Output flange
Flangia uscita



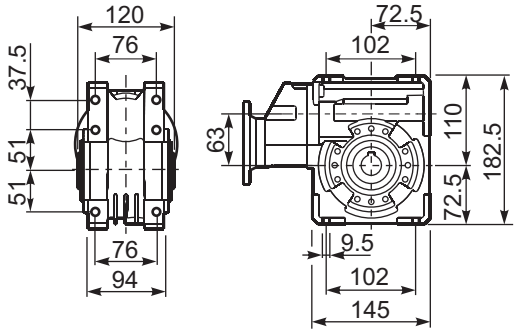
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 +0.20 +0.15	6	12	86	26	150	180	11	❶ KQ63.9.010 ❷ -
FL	115 +0.20 +0.15	6	12	116	56	150	180	11	❶ KQ63.9.010 ❷ K063.0.200

PP6Q**F1**... Output flange
Flangia uscita

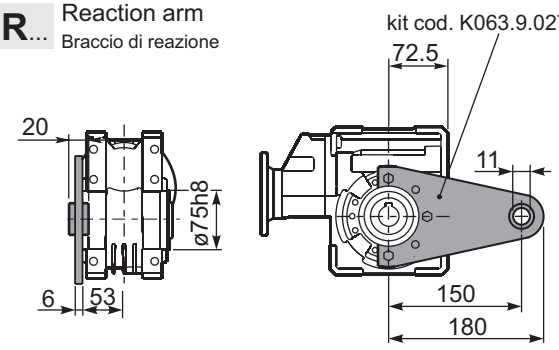


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	110	50	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	124	64	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	90	30	130	160	10	❶ KS063.9.011 ❷ -

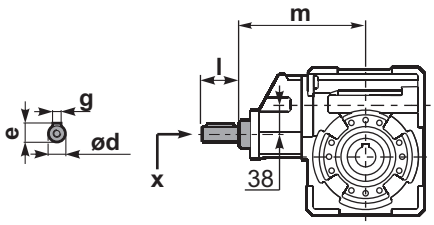
PP6Q**FB**... Feet
Piedini



PP6Q**BR**... Reaction arm
Braccio di reazione

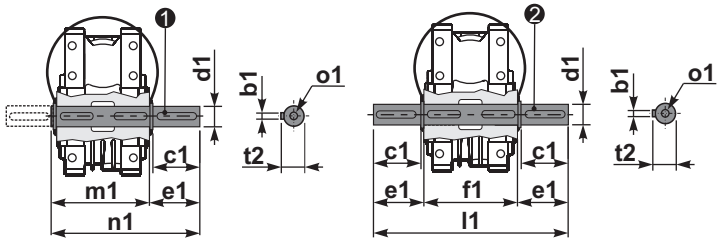


RP6QFB... Input shaft
Albero in entrata



PP6Q.....**S**... Single Shaft
Albero lento semplice

PP6Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	ød	e	g	l	m	x	
29.9÷111	19 h6	21.5	6	35	169.4	M6x16	C40.5.062
139÷434	14 h6	16	5	25	154.2	M5x13	C35.5.061

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	25 -0.005 -0.020	63.2	120	246.4	126.8	190	28	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
22	**62.9**	0.75	248	1.2	**0.87**	**286**					C	C		77	3.10	01
18	**78.5**	0.75	293	1.0	**0.73**	**286**					C	C		73	2.41	02
15	**94.2**	0.75	333	0.9	**0.70**	**310**					C	C		69	2.10	03
11	**126**	0.55	297	1.0	**0.55**	**296**	B				C	C		63	1.53	04
9	**157**	0.37	230	1.1	**0.41**	**252**	B				C	C		58	1.23	05
8	**185**	0.37	257	1.2	**0.43**	**296**	B				C	C		55	3.10	06
6	**231**	0.25	193	1.5	**0.38**	**296**	B				C	C		49	2.41	07
5	**277**	0.25	222	1.3	**0.33**	**296**	B				C	C		47	2.10	08
4	**378**	0.18	200	1.5	**0.27**	**296**	B				C	C		43	2.10	09

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **P7Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P7Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

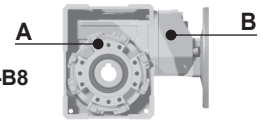
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P7Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P7Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P7Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION P7Q Oil

For B3-V5-V6 separate lubrication for A (0.40 l) B (0.14 l) , for B6-B7-B8 common lubrication 0.65 l (A + B).

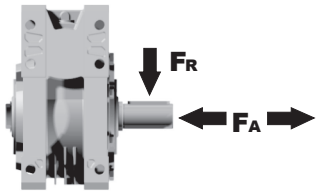


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

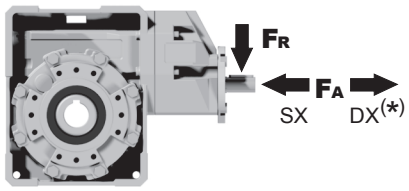
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	620	3100
50	720	3600
25	880	4400
15-6	1000	5000

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	108	540

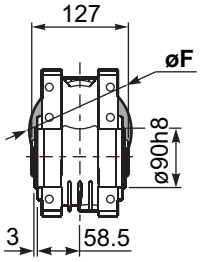
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

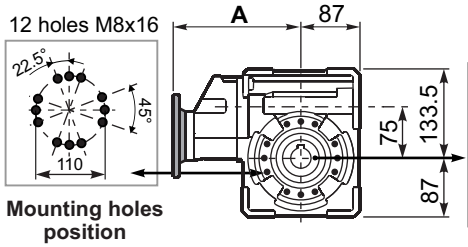
tab. 2

PP7Q**FB**... Basic wormbox
Riduttore base

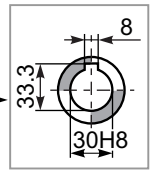
Gearbox weight peso riduttore: **9.90 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	192.7
71B5	K063.4.042	160	190.7
80/90B5	K063.4.043	200	192.7
71B14	K063.4.047	105	190.7
80B14	K063.4.046	120	192.7
90B14	K063.4.041	140	192.7

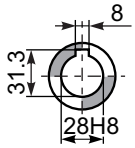




Mounting holes position
Posizione fori di montaggio

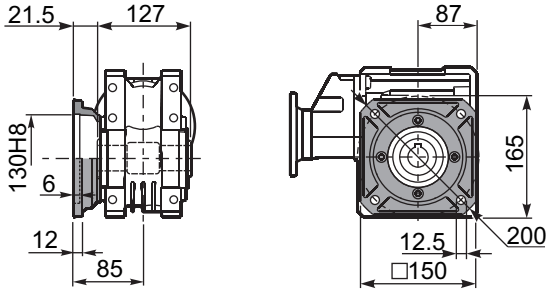


Standard
Hollow shaft

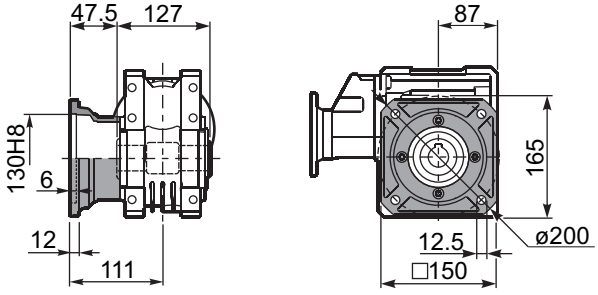


On request
A richiesta

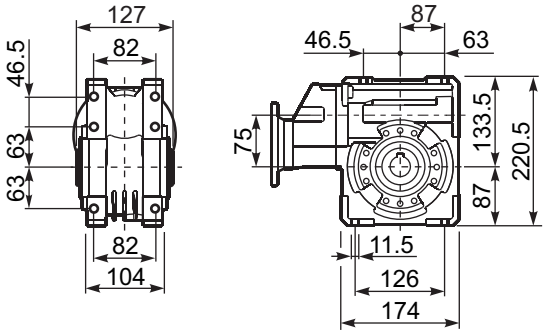
PP7Q**FC**... Square flange
Flangia quadrata



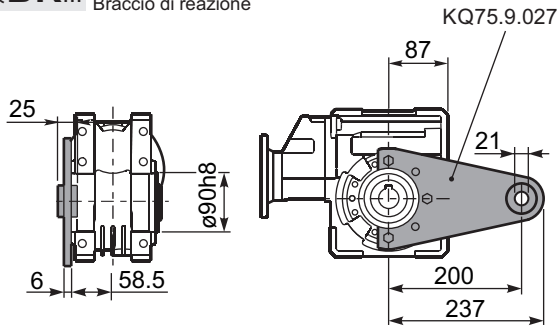
PP7Q**FL**... Square flange
Flangia quadrata



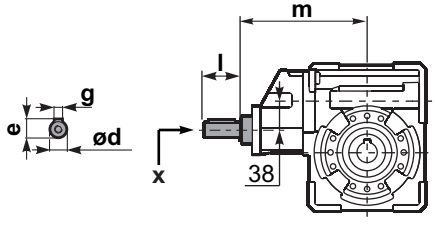
PP7Q**FB**... Feet
Piedini



PP7Q**BR**... Reaction arm
Braccio di reazione

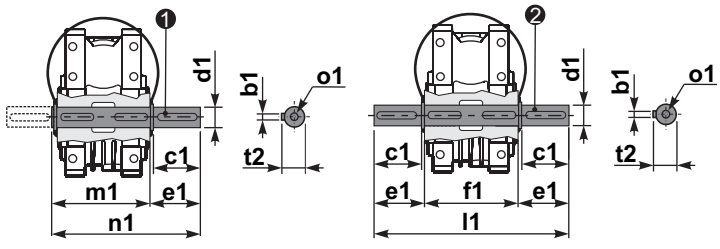


R**P7QFB**... Input shaft
Albero in entrata



PP7Q.....**S**... Single Shaft
Albero lento semplice

PP7Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. KQ75.5.028 Standard
kit cod. KQ75.5.026 On request

❷ kit cod. KQ75.5.029 Standard

	ød	e	g	l	m	x	
type **B**	19 h6	21.5	6	35	185.5	M6x16	C40.5.062
type **S**	-	-	-	-	-	-	

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	8	60	$30^{-0.005}_{-0.020}$	65	127	255	134	199	33	M8x20
On request	8	50	$28^{-0.005}_{-0.020}$	65	-	-	134	199	31	M8x20

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
23.5	**59.7**	1.1	300	1.4	**1.5**	**418**					C	C		67	3.5	01
19.4	**72.3**	1.1	347	1.2	**1.3**	**407**					C	C		64	3.1	02
17.1	**81.7**	1.1	374	1.1	**1.2**	**418**					C	C		61	2.7	03
13.3	**105**	0.75	323	1.2	**0.89**	**385**					C	C		60	2.1	04
8.0	**176**	0.55	415	1.1	**0.58**	**440**	B				C	C		63	3.5	05
6.6	**213**	0.37	322	1.3	**0.47**	**407**	B				C	C		60	3.1	06
5.8	**240**	0.37	321	1.3	**0.48**	**418**	B				C	C		53	2.7	07
4.3	**328**	0.37	438	1.0	**0.35**	**418**	B				C	C		53	2.7	08
3.3	**422**	0.25	374	1.0	**0.26**	**385**	B				C	C		52	2.1	09
3.0	**466**	0.25	358	0.9	**0.23**	**330**	B				C	C		45	1.9	10
2.3	**605**	0.18	297	1.1	**0.20**	**330**	B				C	C		40	1.5	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **P8Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P8Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

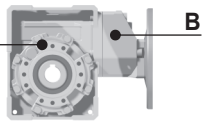
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P8Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P8Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **P8Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION P8Q Oil

For B3-V5-V6 separate lubrication for A (1.20 l) B (0.14 l) , for B6-B7-B8 common lubrication 1.00 l (A + B).

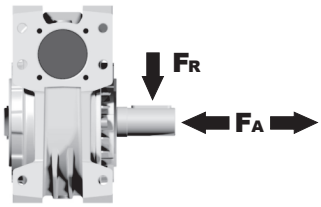


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

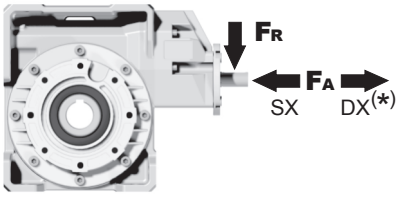
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	700	3500
50	800	4000
25	1000	5000
15-6	1160	5800

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	108	540

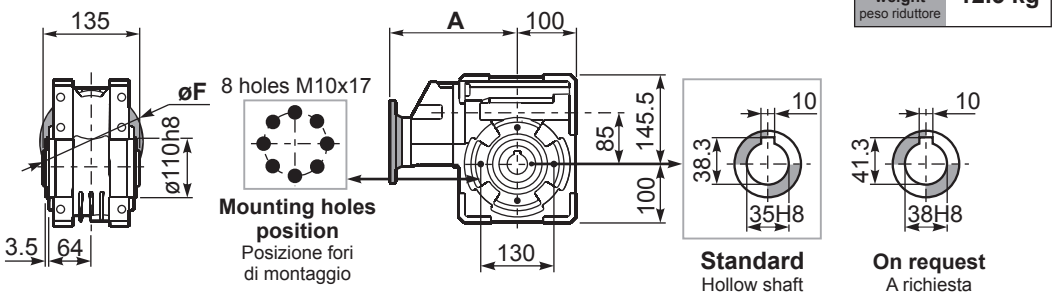
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

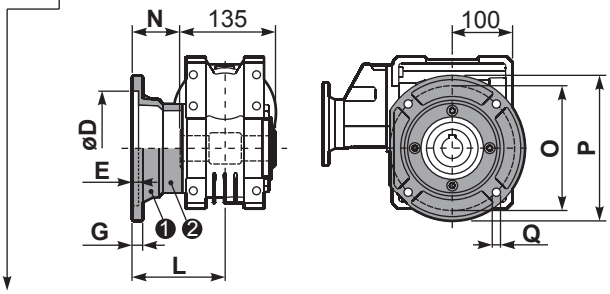
PP8Q**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore: **12.3 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	195.2
71B5	K063.4.042	160	193.2
80/90B5	K063.4.043	200	195.2
71B14	K063.4.047	105	193.2
80B14	K063.4.046	120	195.2
90B14	K063.4.041	140	195.2

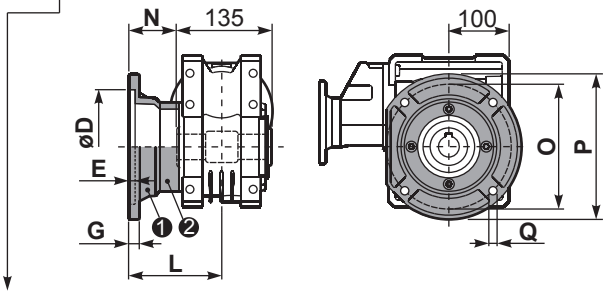


PP8Q**FC**... Output flange
Flangia uscita



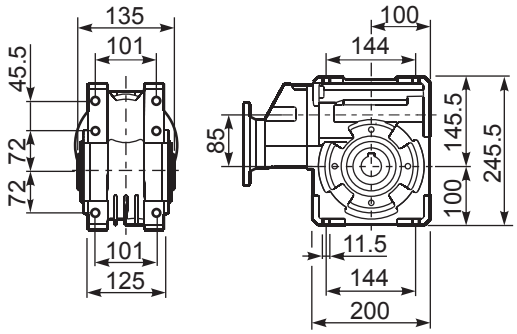
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	152 $^{+0.06}_{+0.00}$	5	16	108	40.5	176	205	13	❶ K085.9.010 ❷ -
FL	152 $^{+0.06}_{+0.00}$	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

PP8Q**F1**... Output flange
Flangia uscita

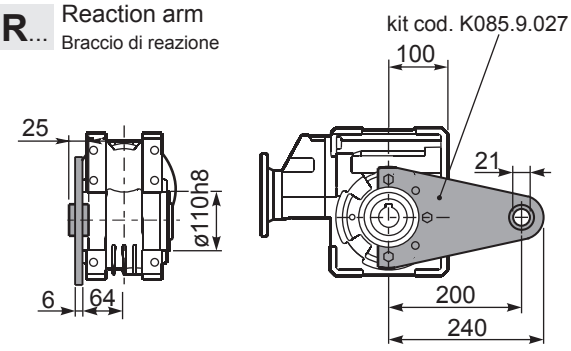


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.04}_{+0.00}$	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 $^{+0.06}_{+0.00}$	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 $^{+0.04}_{+0.00}$	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

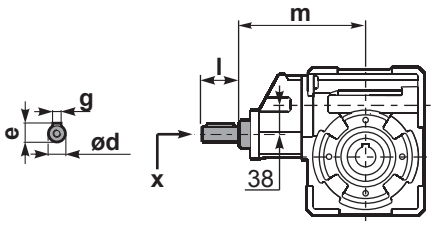
PP8Q**FB**... Feet
Piedini



PP8Q**BR**... Reaction arm
Braccio di reazione



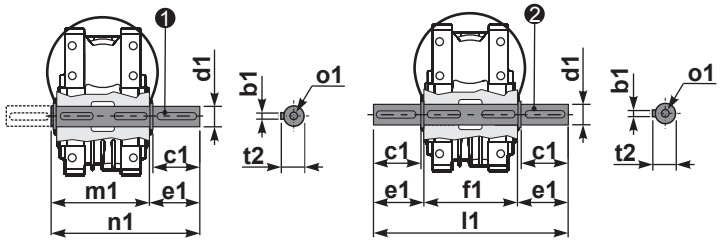
RP8QFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	
type **B**	19 h6	21.5	6	35	187.5	M6x16	C40.5.062
type **S**	-	-	-	-	-	-	

PP8Q.....**S**... Single Shaft
Albero lento semplice

PP8Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K085.5.028 type **B**

❷ kit cod. K085.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	10	60	35 $^{-0.005}_{-0.020}$	73.5	135	282	141	214.5	38	M10x23
type **S**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
16.8	**83.2**	1.5	587	1.1	1.7	660					C	C		69	3.5	01
13.9	**100.5**	1.5	699	0.8	1.3	594					C	C		68	2.9	02
10.6	**132**	1.1	634	0.9	0.95	550					C	C		64	2.2	03
8.0	**176**	0.75	666	1.2	0.90	803	B				C	C		74	4.7	04
6.7	**208**	0.75	766	0.9	0.65	660	B				C	C		72	4.0	05
5.7	**245**	0.55	634	1.0	0.57	660	B				C	C		69	3.5	06
4.7	**296**	0.55	755	0.8	0.43	594	B				C	C		68	2.9	07
4.2	**334**	0.55	865	0.8	0.42	660	B				C	C		69	3.5	08
3.5	**403**	0.37	692	0.9	0.32	594	B				C	C		68	2.9	09
2.6	**529**	0.25	577	1.0	0.24	550	B				C	C		64	2.2	10
2.2	**624**	0.25	628	0.8	0.21	528	B				C	C		59	1.9	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **P1Q** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
Primary reduction unit is supplied with closed plugs and lubricated for life with synthetic oil.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **P1Q** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. La precoppia è fornita con tappi chiusi e lubrificata a vita con olio sintetico.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **P1Q** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
Die Stirnradvorstufe ist Lebensdauergeschmiert und wird mit synthetischem Öl Geliefert. Die Stirnradvorstufe ist komplett geschlossen ohne Füllschauben.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **P1Q** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Le précouple est fourni lubrifié à vie avec de l'huile synthétique et avec des bouchons fermés.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **P1Q** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

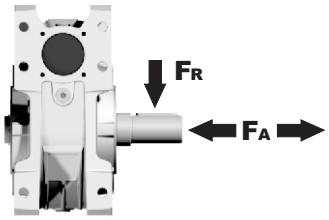
B3	B6	B7	B8	V5	V6
1.9/0.14LT	1.35/0.14 LT	1.35/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT
ENI Blasia 460					

For all details on lubrication and plugs check our website Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

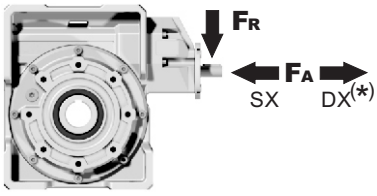
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	800	4000
50	920	4600
25	1200	6000
15-6	1400	7000

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	150	760

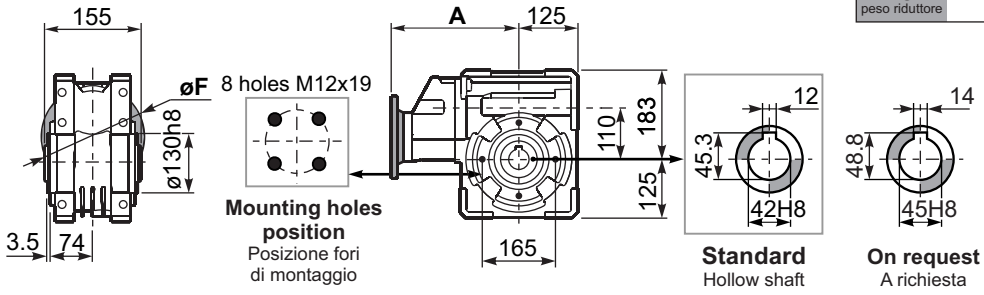
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

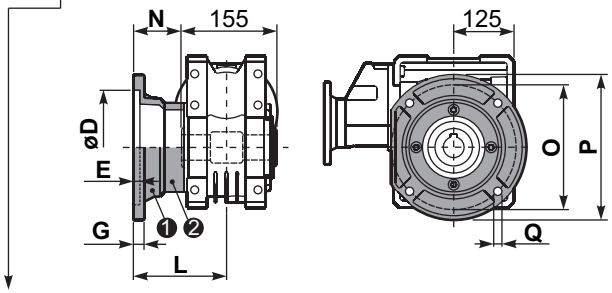
PP1Q**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore: **37.3 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	214.7
71B5	K063.4.042	160	212.7
80/90B5	K063.4.043	200	214.7
71B14	K063.4.047	105	212.7
80B14	K063.4.046	120	214.7
90B14	K063.4.041	140	214.7

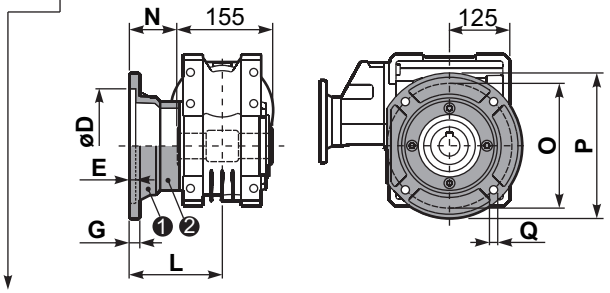


PP1Q**FC**... Output flange
Flangia uscita



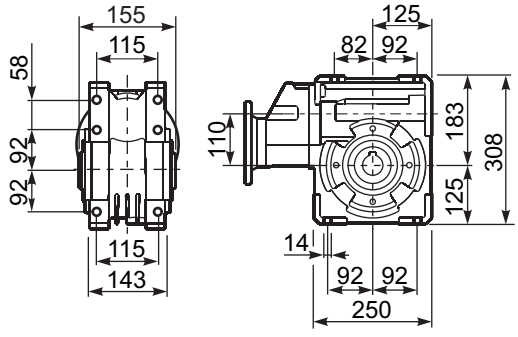
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	170 +0.083 +0.043	11	16.5	131.5	54	230	270	13	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

PP1Q**F1**... Output flange
Flangia uscita

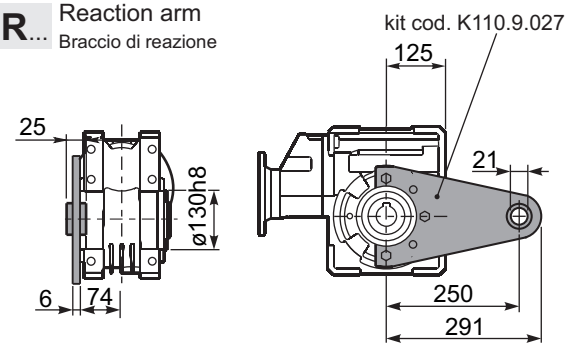


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

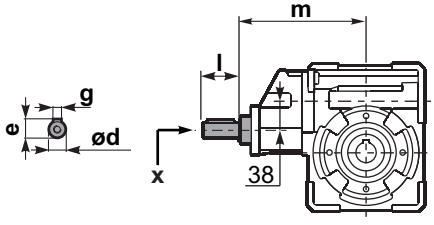
PP1Q**FB**... Feet
Piedini



PP1Q**BR**... Reaction arm
Braccio di reazione



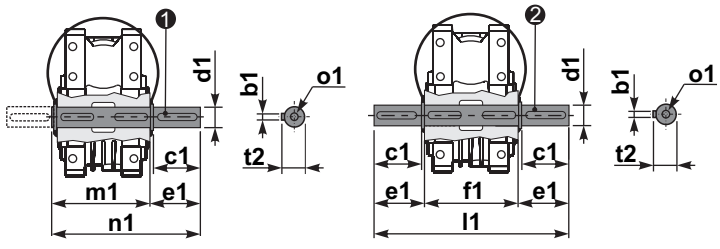
RP1QFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	
type **B**	19 h6	21.5	6	35	205	M6x16	C40.5.062
type **S**	-	-	-	-	-	-	

PP1Q.....**S**... Single Shaft
Albero lento semplice

PP1Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K110.5.028 type **B**

❷ kit cod. K110.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	12	75	42 -0.005 -0.020	96.5	155	348	163.5	260	45	M12x32
type **S**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
10.0	**140**	0.12	57	1.2	**0.14**	**69**	B		B-C		50	2.2	01
7.0	**200**	0.12	79	0.9	**0.11**	**69**	B		B-C		48	2.2	02
5.0	**280**	0.12*	69	<0.8	**0.08**	**69**	B		B-C		45	2.4	03
3.3	**420**	0.12*	69	<0.8	**0.07**	**69**	B		B-C		36	1.6	04
2.5	**560**	0.12*	69	<0.8	**0.05**	**69**	B		B-C		33	2.5	05
1.9	**740**	0.12*	69	<0.8	**0.05**	**69**	B		B-C		30	1.8	06
1.5	**920**	0.12*	69	<0.8	**0.04**	**69**	B		B-C		27	1.5	07
1.3	**1120**	0.12*	69	<0.8	**0.03**	**69**	B		B-C		26	2.5	08
0.9	**1480**	0.12*	69	<0.8	**0.03**	**69**	B		B-C		24	1.8	09
0.8	**1840**	0.12*	69	<0.8	**0.02**	**69**	B		B-C		22	1.5	10
0.6	**2400**	0.12*	69	<0.8	**0.02**	**69**	B		B-C		21	1.2	11

Motor Flanges Available Flange Motore Disponibili
B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione
B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione
C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **43Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

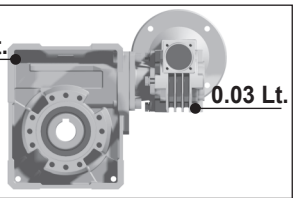
I Il riduttore tipo **43Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **43Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **43Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **43Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 43Q Oil Quantity 0.09/0.03 Lt.

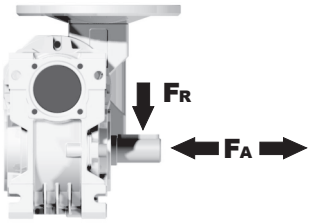


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

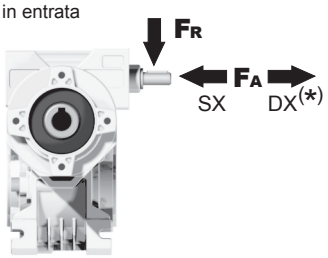
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	300	1800
15	400	2000

Input shaft
albero in entrata



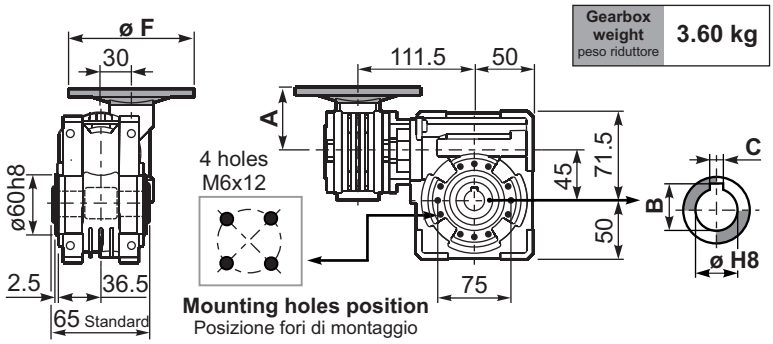
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P43Q**FB**... Basic wormbox
Riduttore base

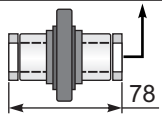
M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



Mounting holes position
Posizione fori di montaggio

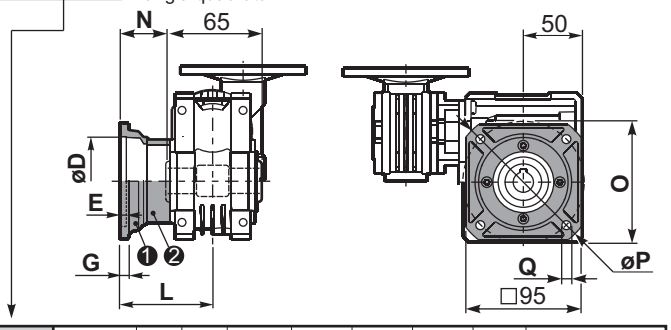
Gearbox weight / peso riduttore	3.60 kg

ø H8	B	C	*Spacer code
18 Standard	20.8	6	Q45.3.018
19 on request	21.8	6	Q45.3.019
20 on request	22.8	6	Q45.3.020



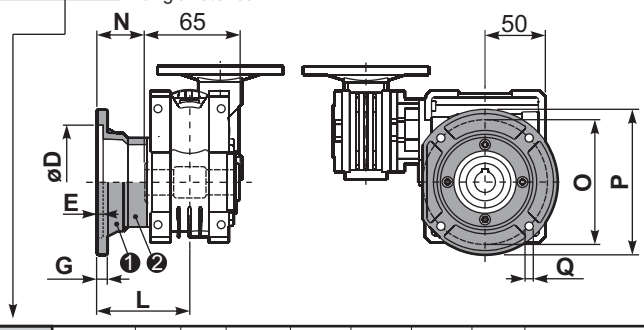
***On Request**
output shaft with spacers

P43Q**FC**... Square flange
Flangia quadrata



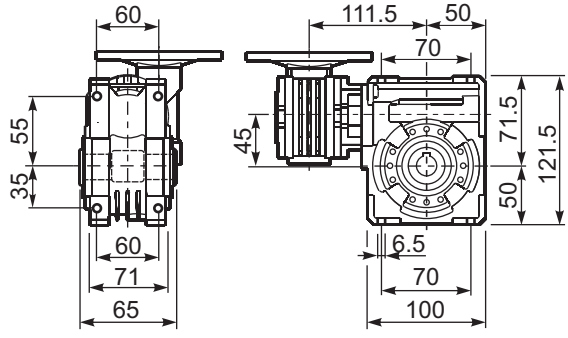
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	60 H8	4	7	67	34.5	75	110	9	KQ45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KQ45.9.011

P43Q**F1**... Round flange
Flangia rotonda

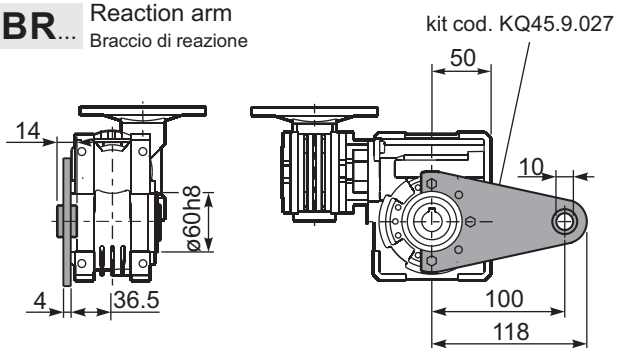


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	95H8	5	9	80	47.5	115	140	9.5	KSQ45.9.012
F2	-	-	-	-	-	-	-	-	-

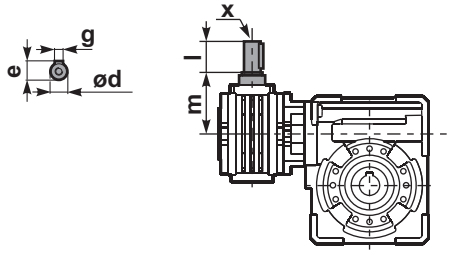
P43Q**FB**... Feet
Piedini



P43Q**BR**... Reaction arm
Braccio di reazione



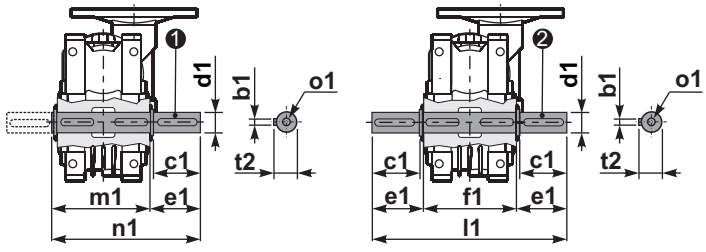
R43QFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type **S**	-	-	-	-	-	-	-

P43Q.....**S**... Single Shaft
Albero lento semplice

P43Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K045.5.028 type **B**
kit cod. KS045.5.030 type **S**

❷ kit cod. K045.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	6	32	$18^{-0.005}_{-0.020}$	43	65	151	70	113	20.5	M6x18
type **S**	6	40	$19^{-0.005}_{-0.020}$	58.5	-	-	70	128.5	21.5	M8x20

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
5.6	**252**	0.12	97	1.1	**0.14**	**109**	B		B-C		47	2.1	01
3.9	**360**	0.12	124	0.9	**0.11**	**109**	B		B-C		42	2.1	02
2.6	**540**	0.12*	109	<0.8	**0.08**	**109**	B		B-C		39	2.1	03
1.9	**720**	0.12*	109	<0.8	**0.06**	**109**	B		B-C		36	2.1	04
1.6	**860**	0.12*	109	<0.8	**0.06**	**109**	B		B-C		32	1.8	05
1.2	**1200**	0.12*	109	<0.8	**0.05**	**109**	B		B-C		27	1.3	06
1.0	**1440**	0.12*	109	<0.8	**0.04**	**109**	B		B-C		26	2.1	07
0.8	**1720**	0.12*	109	<0.8	**0.04**	**109**	B		B-C		25	1.8	08
0.6	**2400**	0.12*	104	<0.8	**0.03**	**104**	B		B-C		21	1.3	09

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **53Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

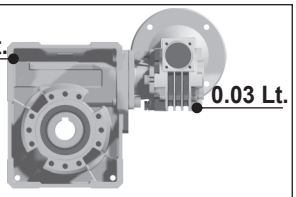
I Il riduttore tipo **53Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **53Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **53Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **53Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 53Q Oil Quantity 0.14/0.03 Lt.

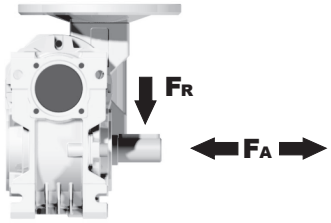


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

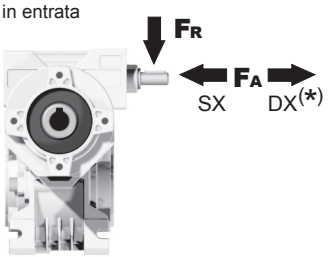
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	480	2500
15	560	2800

Input shaft
albero in entrata



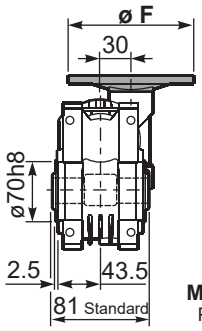
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

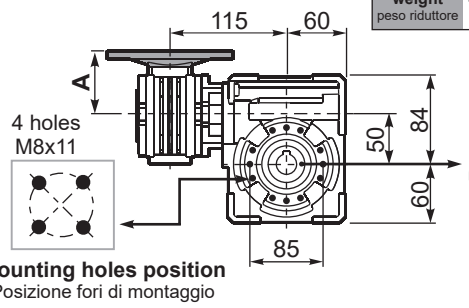
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P53Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5

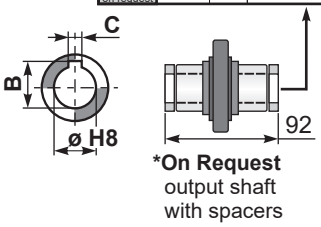




Mounting holes position
Posizione fori di montaggio

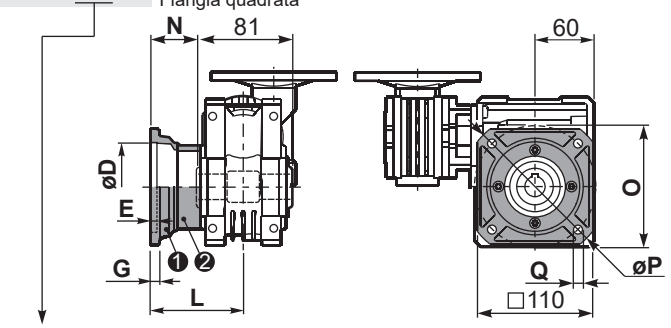
Gearbox weight peso riduttore **4.61 kg**

ø H8	B	C	*Spacer code
25 Standard	28.3	8	Q50.3.025
24 on request	27.3	8	Q50.3.024



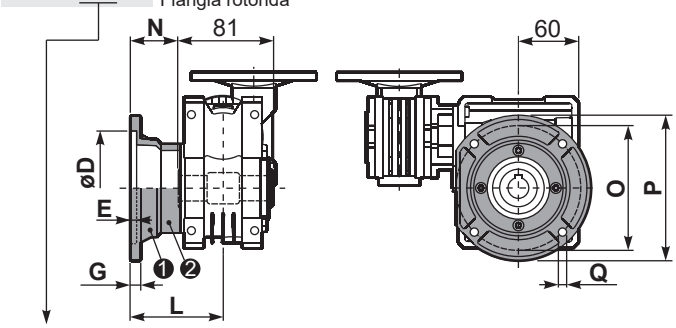
***On Request**
output shaft
with spacers

P53Q**FC**... Square flange
Flangia quadrata



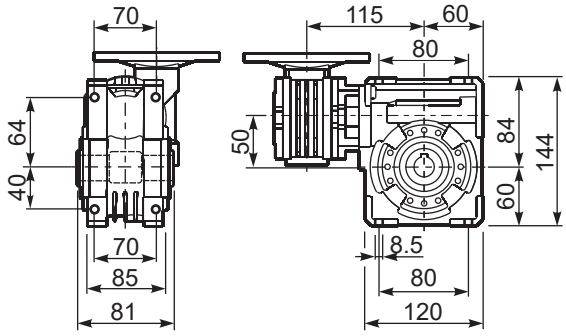
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	70 H8	5	9	90	49.5	85	125	11	KQ50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KQ50.9.011

P53Q**F1**... Round flange
Flangia rotonda

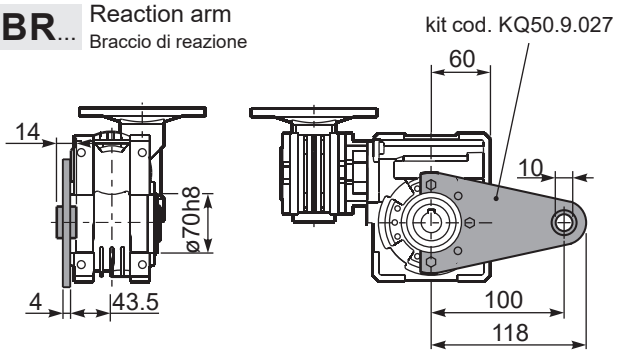


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	110 H8	5	10	89	48.5	130	160	9.5	KSQ50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KSQ50.9.013

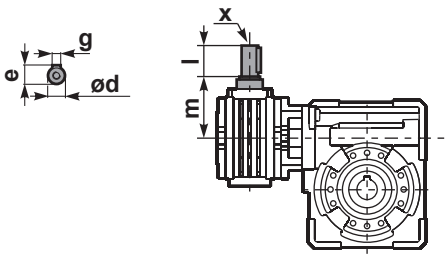
P53Q**FB**... Feet
Piedini



P53Q**BR**... Reaction arm
Braccio di reazione



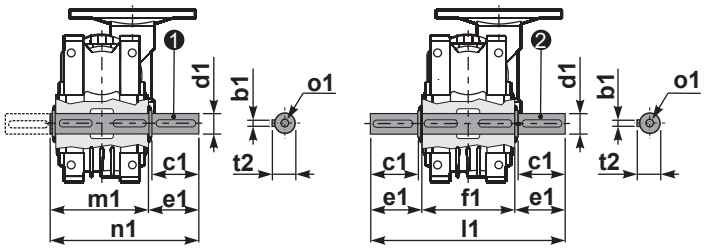
R53QFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type **S**	-	-	-	-	-	-	-

P53Q.....**S**... Single Shaft
Albero lento semplice

P53Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K050.5.028 type **B**
kit cod. KS050.5.030 type **S**

❷ kit cod. K050.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	52	$25^{-0.005}_{-0.020}$	59.5	81	200	86.5	146	28	M8x20
type **S**	8	50	$24^{-0.005}_{-0.020}$	68.8	-	-	86.5	155	27	M8x20

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -A 56	Available B5 motor flanges -B 63	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
5.6	**252**	0.18	142	1.6	**0.29**	**230**	B		B-C		46	2.7	01
3.9	**360**	0.18	181	1.3	**0.23**	**230**	B		B-C		41	2.7	02
2.6	**540**	0.12	164	1.4	**0.17**	**230**	B		B-C		37	2.7	03
1.9	**720**	0.12	200	1.1	**0.14**	**230**	B		B-C		34	2.7	04
1.3	**1080**	0.12	265	0.9	**0.10**	**230**	B		B-C		30	2.7	05
1.0	**1440**	0.12*	230	<0.8	**0.09**	**230**	B		B-C		27	2.7	06
0.5	**2745**	0.12*	230	<0.8	**0.05**	**230**	B		B-C		23	2.1	07

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **63Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

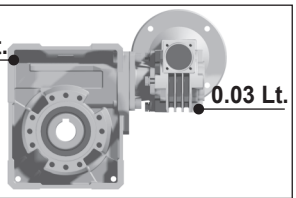
I Il riduttore tipo **63Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **63Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **63Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **63Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 63Q Oil Quantity 0.30/0.03 Lt.

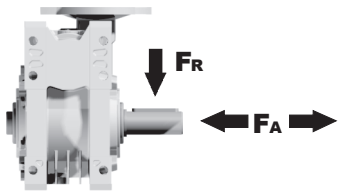


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

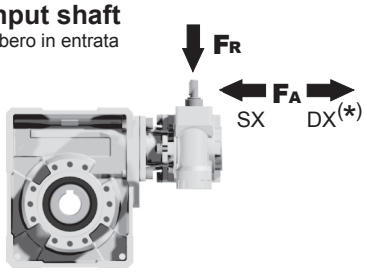
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



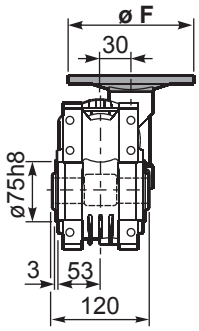
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

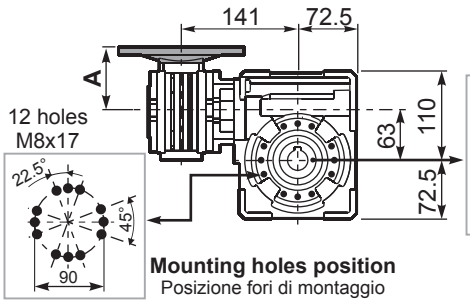
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

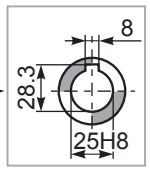
P63Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5

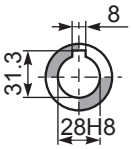




Mounting holes position
Posizione fori di montaggio



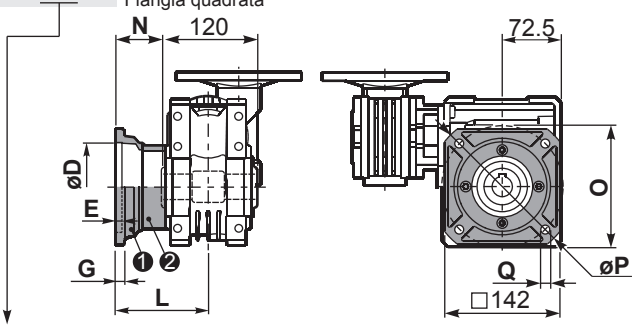
Standard
Hollow shaft



On Request
A richiesta

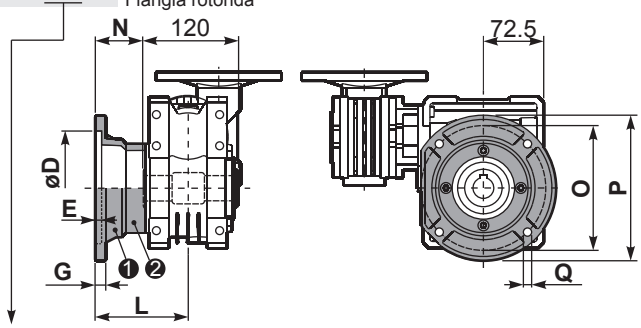
Gearbox weight peso riduttore **7.25 kg**

P63Q**FC**... Square flange
Flangia quadrata



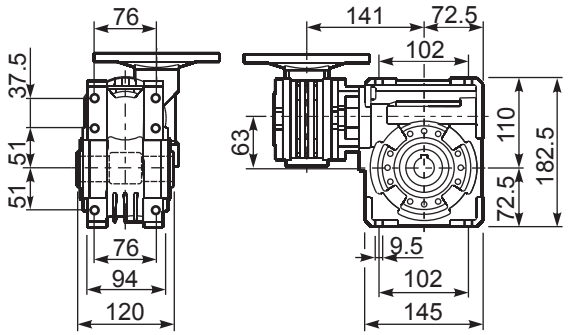
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 $^{+0.20}_{+0.15}$	6	12	86	26	150	180	11	❶ KQ63.9.010 ❷ -
FL	115 $^{+0.20}_{+0.15}$	6	12	116	56	150	180	11	❶ KQ63.9.010 ❷ K063.0.200

P63Q**F1**... Round flange
Flangia rotonda

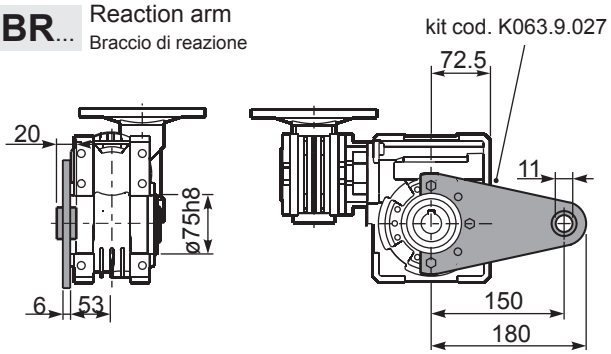


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	110	50	165	200	13	❶ KS070.9.013 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	124	64	150	175	11	❶ KS063.9.013 ❷ -
F3	110 $^{+0.035}_{0}$	5	11	90	30	130	160	10	❶ KS063.9.011 ❷ -

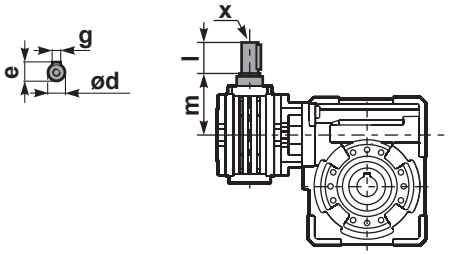
P63Q**FB**... Feet
Piedini



P63Q**BR**... Reaction arm
Braccio di reazione



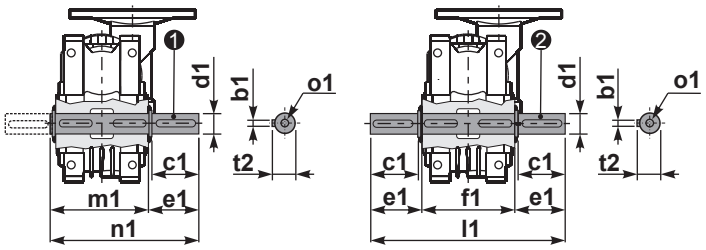
R63QFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P63Q.....**S**... Single Shaft
Albero lento semplice

P63Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	25 $^{-0.005}_{-0.020}$	63.2	120	246.4	126.8	190	28	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
5.6	**252**	0.25	198	1.3	**0.33**	**265**	**B**		B-C	**B**-C		46	2.7	01
3.9	**360**	0.18	186	1.4	**0.26**	**265**	**B**		B-C	**B**-C		42	2.7	02
2.8	**504**	0.18	241	1.1	**0.20**	**265**	**B**		B-C	**B**-C		39	2.7	03
1.9	**756**	0.12	204	1.3	**0.16**	**265**	**B**		B-C	**B**-C		33	2.7	04
1.4	**1008**	0.12	256	1.0	**0.12**	**265**	**B**		B-C	**B**-C		31	2.7	05
1.1	**1332**	0.12*	265	<0.8	**0.10**	**265**	**B**		B-C	**B**-C		30	2.7	06
0.8	**1656**	0.12*	265	<0.8	**0.08**	**265**	**B**		B-C	**B**-C		28	2.7	07
0.6	**2160**	0.12*	265	<0.8	**0.07**	**265**	**B**		B-C	**B**-C		26	2.7	08
0.6	**2520**	0.12*	265	<0.8	**0.06**	**265**	**B**		B-C	**B**-C		25	2.7	09

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

EN Unit **64Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

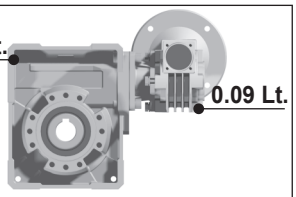
I Il riduttore tipo **64Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **64Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **64Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **64Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 64Q Oil Quantity 0.30/0.09 Lt.

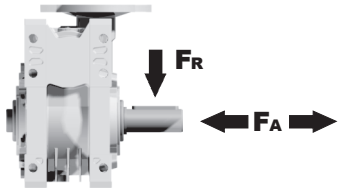


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

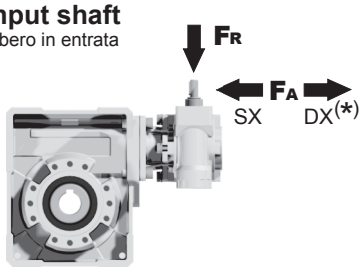
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	700	3800
15	800	4000

Input shaft
albero in entrata



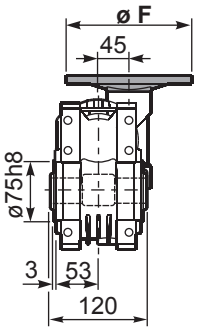
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

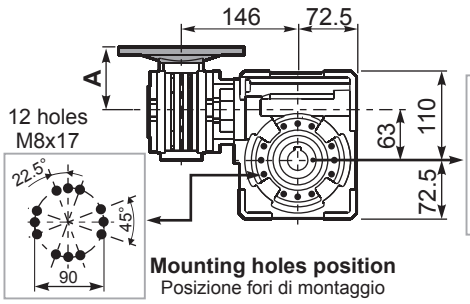
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

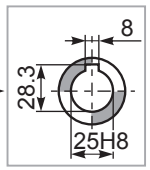
P64Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

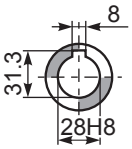




Mounting holes position
Posizione fori di montaggio



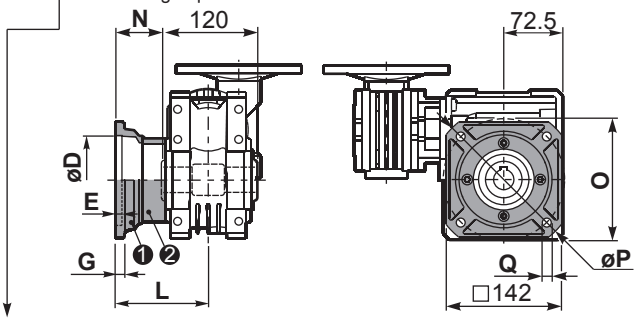
Standard
Hollow shaft



On Request
A richiesta

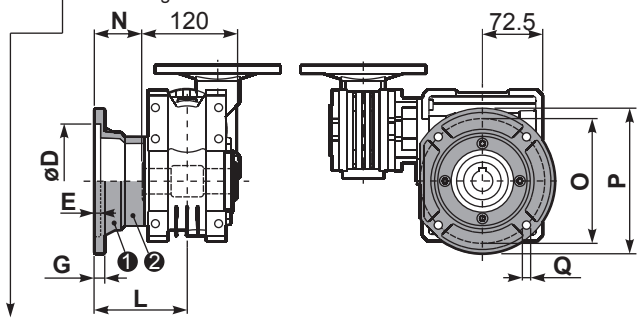
Gearbox weight peso riduttore	7.25 kg

P64Q**FC**... Square flange
Flangia quadrata



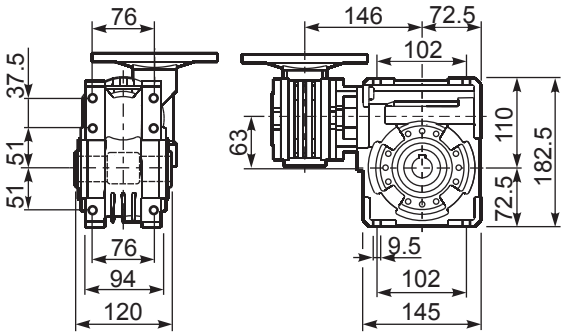
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 $^{+0.20}_{+0.15}$	6	12	86	26	150	180	11	❶ KQ63.9.010 ❷ -
FL	115 $^{+0.20}_{+0.15}$	6	12	116	56	150	180	11	❶ KQ63.9.010 ❷ K063.0.200

P64Q**F1**... Round flange
Flangia rotonda

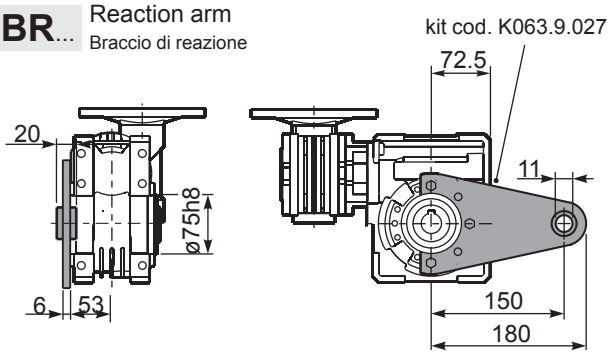


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	110	50	165	200	13	❶ KS070.9.013 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	124	64	150	175	11	❶ KS063.9.013 ❷ -
F3	110 $^{+0.035}_{0}$	5	11	90	30	130	160	10	❶ KS063.9.011 ❷ -

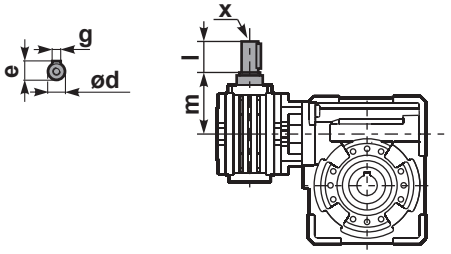
P64Q**FB**... Feet
Piedini



P64Q**BR**... Reaction arm
Braccio di reazione



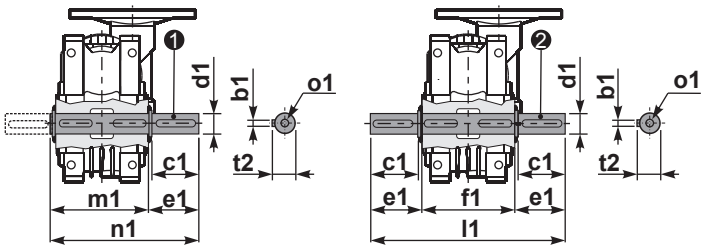
R64QFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P64Q.....**S**... Single Shaft
Albero lento semplice

P64Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K063.5.028 type **B**

❷ kit cod. K063.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	8	60	25 $^{-0.005}_{-0.020}$	63.2	120	246.4	126.8	190	28	M8x20
type **S**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
5	**280**	0.37	403	0.9	**0.33**	**359**	B		B-C	B-C		57	3.10	01
3.5	**400**	0.25	314	1.1	**0.29**	**359**	B		B-C	B-C		46	3.10	02
2.5	**560**	0.25	420	0.9	**0.21**	**359**	B		B-C	B-C		44	3.10	03
1.7	**840**	0.18	423	0.8	**0.15**	**359**	B		B-C	B-C		41	3.10	04
1.3	**1120**	0.12	339	1.1	**0.13**	**359**	B		B-C	B-C		37	3.10	05
0.9	**1480**	0.09	336	1.1	**0.10**	**359**	B		B-C	B-C		37	3.10	06
0.8	**1840**	0.09	373	1.0	**0.09**	**359**	B		B-C	B-C		33	3.10	07
0.6	**2400**	0.06	275	1.3	**0.08**	**359**	B		B-C	B-C		28	3.10	08
0.5	**2800**	0.06	298	1.2	**0.07**	**359**	B		B-C	B-C		26	3.10	09
0.3	**4080**	0.06	250	1.4	**0.09**	**359**	B		B-C	B-C		15	3.10	10

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **74Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

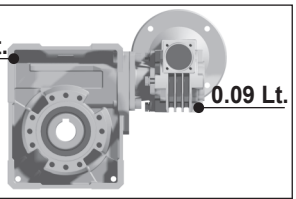
I Il riduttore tipo **74Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **74Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **74Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **74Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 74Q Oil Quantity 0.40/0.09 Lt.



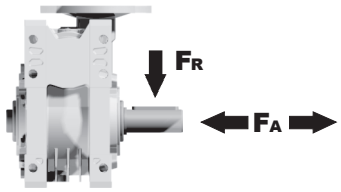
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

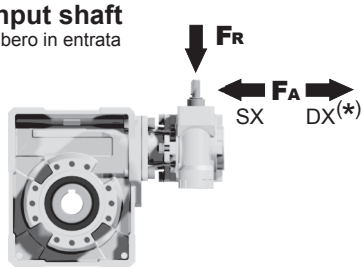
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	880	4400
15	1000	5000

Input shaft
albero in entrata



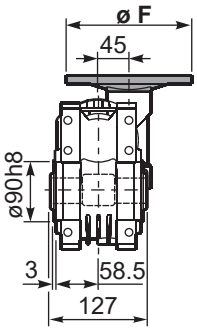
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

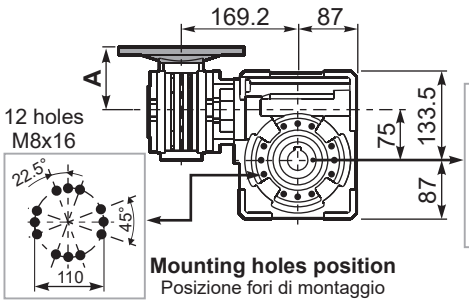
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

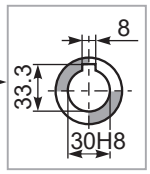
P74Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

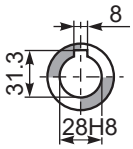




Mounting holes position
Posizione fori di montaggio



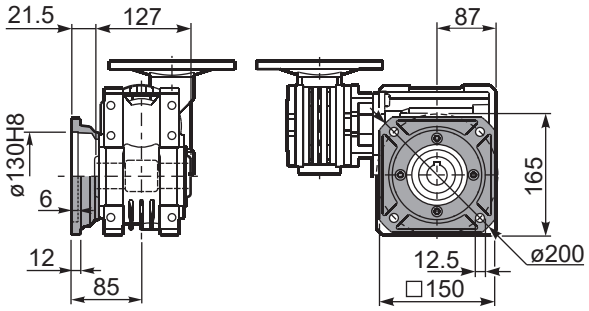
Standard
Hollow shaft



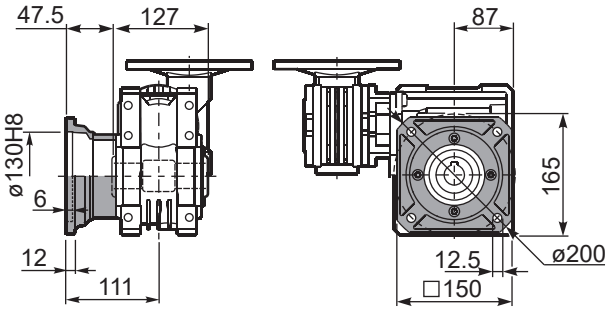
On request
A richiesta

Gearbox weight peso riduttore	11.4 kg

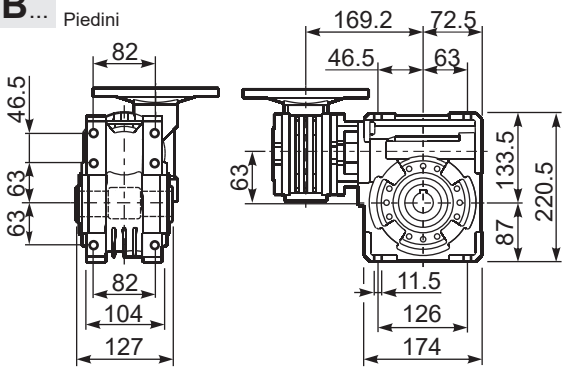
P74Q**FC**... Square flange
Flangia quadrata



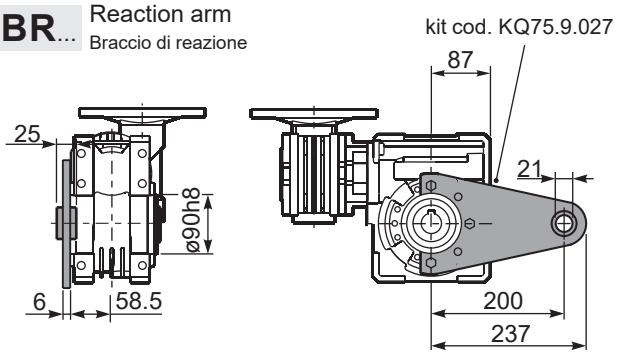
P74Q**FL**... Square flange
Flangia quadrata



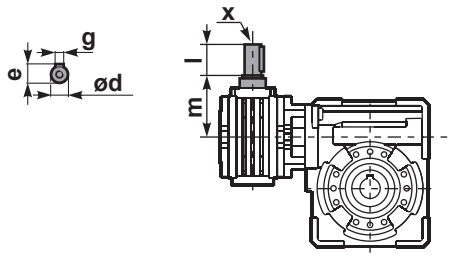
P74Q**FB**... Feet
Piedini



P74Q**BR**... Reaction arm
Braccio di reazione



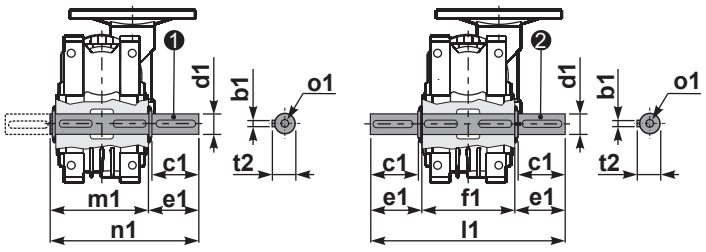
R74QFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P74Q.....**S**... Single Shaft
Albero lento semplice

P74Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. KQ75.5.028 Standard
kit cod. KQ75.5.026 On request

❷ kit cod. KQ75.5.029 Standard

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	8	60	$30^{-0.005}_{-0.020}$	65	127	255	134	199	33	M8x20
On request	8	60	$28^{-0.005}_{-0.020}$	65	-	-	134	199	31	M8x20

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
10	**140**	0.37	205	1.8	**0.66**	**368**	**B**		B-C	**B**-C		58	4.5	01
7.1	**196**	0.37	257	1.4	**0.53**	**368**	**B**		B-C	**B**-C		52	4.7	02
5.0	**280**	0.37	332	1.6	**0.58**	**518**	**B**		B-C	**B**-C		47	4.7	03
3.6	**392**	0.37	435	1.2	**0.44**	**518**	**B**		B-C	**B**-C		44	4.7	04
2.4	**588**	0.25	371	1.4	**0.35**	**518**	**B**		B-C	**B**-C		37	4.7	05
1.8	**784**	0.25	455	1.1	**0.28**	**518**	**B**		B-C	**B**-C		34	4.7	06
1.4	**1036**	0.18	420	1.2	**0.22**	**518**	**B**		B-C	**B**-C		33	4.7	07
1.1	**1288**	0.18	474	1.1	**0.20**	**518**	**B**		B-C	**B**-C		30	4.7	08
0.7	**1960**	0.12	449	1.2	**0.14**	**518**	**B**		B-C	**B**-C		28	4.7	09
0.5	**2856**	0.12	584	0.9	**0.11**	**518**	**B**		B-C	**B**-C		25	4.7	10

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **84Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

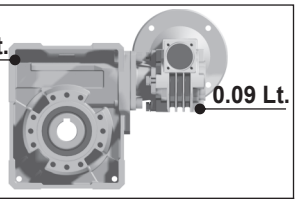
I Il riduttore tipo **84Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **84Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **84Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **84Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 84Q Oil Quantity 1.20/0.09 Lt.

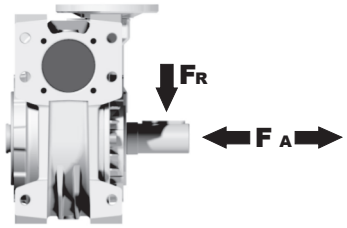


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

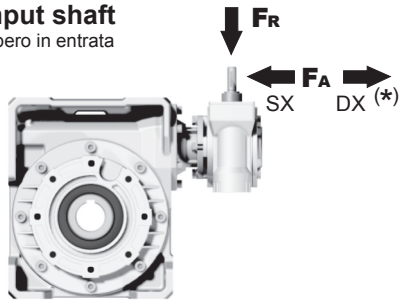
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n [min^{-1}] ^{2}	FA [N]	FR [N]
25	1000	5000
15	1160	5800

Input shaft
albero in entrata



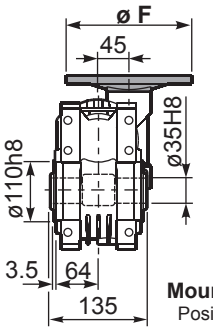
n [min^{-1}] ^{1}	FA [N]	FR [N]
1400	42	210

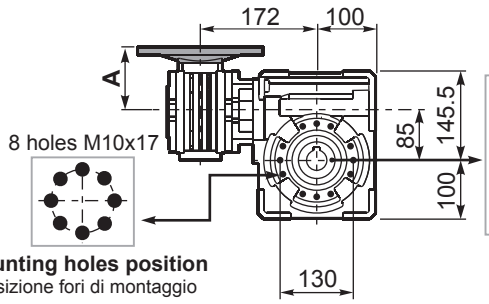
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

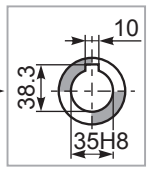
P84Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	74
71B5	K050.4.042	160	71.5
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

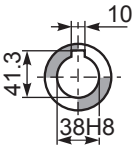




Mounting holes position
Posizione fori di montaggio



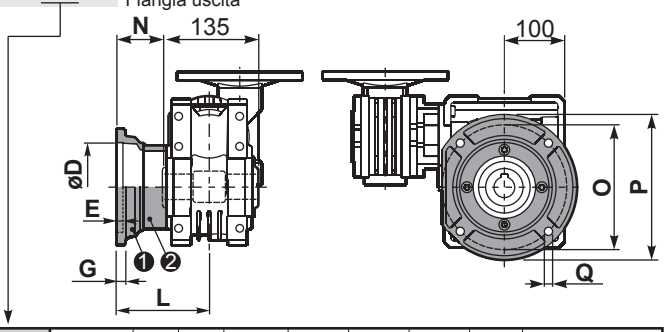
Standard
Hollow shaft



On request
A richiesta

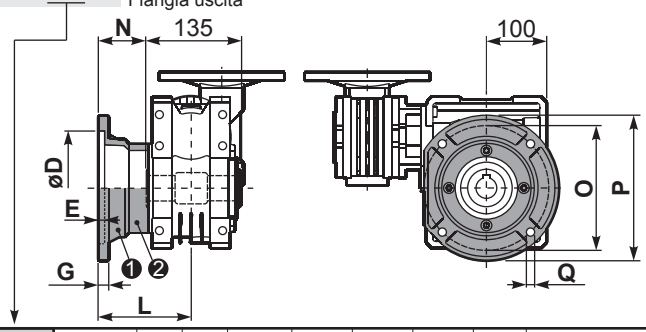
Gearbox weight peso riduttore	16.2 kg

P84Q**FC**... Output flange
Flangia uscita



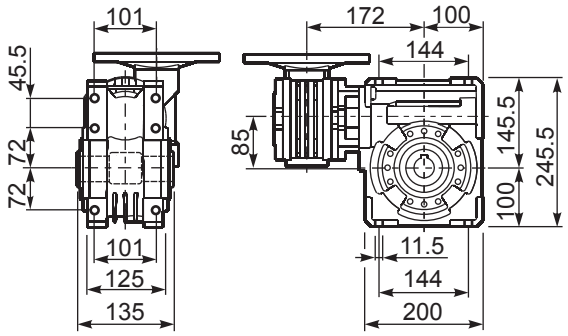
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	152 +0.06 +0.00	5	16	108	40.5	176	205	13	❶ K085.9.010 ❷ -
FL	152 +0.06 +0.00	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

P84Q**F1**... Output flange
Flangia uscita

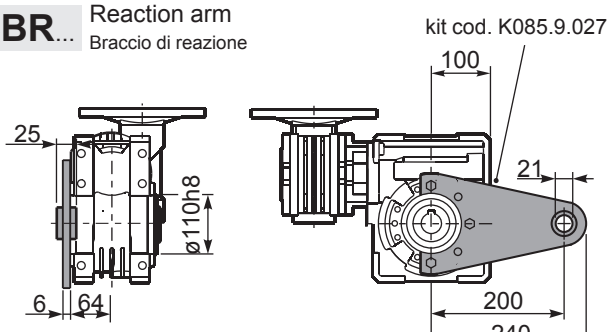


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 H7	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 +0.06 +0.00	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 H7	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

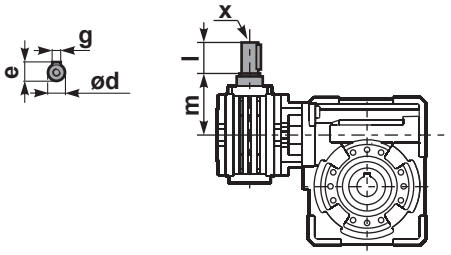
P84Q**FB**... Feet
Piedini



P84Q**BR**... Reaction arm
Braccio di reazione



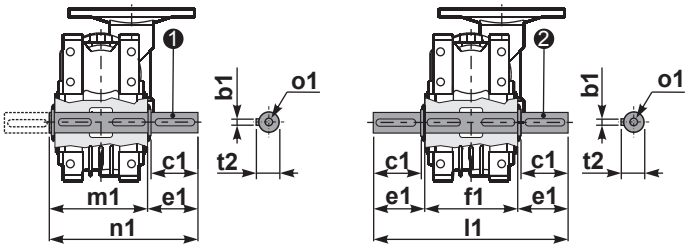
R84QFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

P84Q.....**S**... Single Shaft
Albero lento semplice

P84Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K085.5.028 type **B**

❷ kit cod. K085.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	10	60	35 -0.005 -0.020	73.5	135	282	141	214.5	38	M10x23
type **S**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	Available B14 motor flanges -O 56	-P 63	-Q 71	-R 80	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
6.7	**210**	0.75	591	1.5	**1.1**	**863**	B	**B**			B-C	**B**		55	5.6	01
4.7	**300**	0.75	752	1.3	**0.97**	**978**	B	**B**			B-C	**B**		49	5.6	02
3.3	**420**	0.55	741	1.3	**0.73**	**978**	B	**B**			B-C	**B**		47	5.6	03
2.6	**540**	0.55	851	1.1	**0.63**	**978**	B	**B**			B-C	**B**		42	5.6	04
1.8	**780**	0.37	748	1.3	**0.48**	**978**	B	**B**			B-C	**B**		38	5.6	05
1.3	**1080**	0.37	1009	1.0	**0.36**	**978**	B			B-C	B-C			37	5.6	06
1.1	**1290**	0.25	770	1.3	**0.32**	**978**	B			B-C	B-C			35	5.6	07
0.8	**1800**	0.25	921	1.1	**0.27**	**978**	B			B-C	B-C			30	5.6	08
0.7	**2040**	0.18	751	1.3	**0.23**	**978**	B			B-C	B-C			30	5.6	09
0.6	**2400**	0.18	825	1.2	**0.21**	**978**	B			B-C	B-C			28	5.6	10
0.5	**3000**	0.18	958	1.0	**0.18**	**978**	B			B-C	B-C			26	5.6	11

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

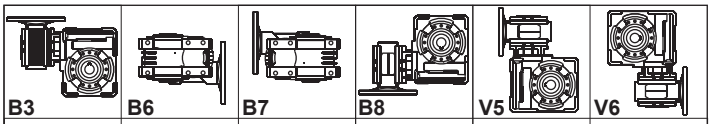
EN Unit **15Q** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a type that are closed.
Gearbox **050** is supplied lubricated for life.
See tab.1 for oils and recommended quantity.
In tab.2 there are radial loads and axial loads applicable to the gearbox.

I Il riduttore tipo **15Q** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Il riduttore **050** è fornito lubrificato a vita con olio sintetico.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **15Q** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
Das Getriebe der Baugröße **050** ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **15Q** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Le réducteur de type **050** est fourni lubrifié à vie avec de l'huile synthétique.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **15Q** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos.
El reductor **050** se suministra lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



B3	B6	B7	B8	V5	V6
1.9/0.14LT	1.35/0.14 LT	1.35/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT

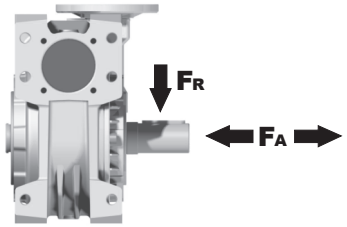
AGIP Blasia 460

For all details on lubrication and plugs check our website Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

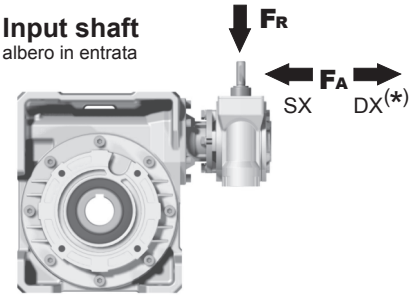
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	1200	6000
15	1400	7000

Input shaft
albero in entrata



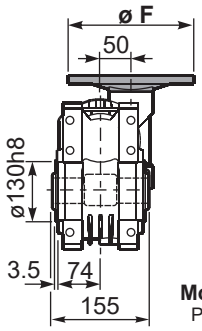
n_1 [min^{-1}]	FA [N]	FR [N]
1400	76	380

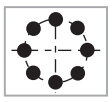
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

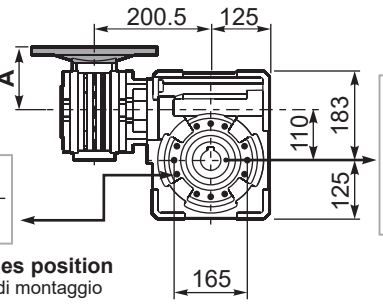
P15Q**FB**... Basic wormbox
Riduttore base

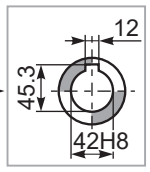
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	78.5
71B5	K050.4.042	160	76
80B5	K050.4.043	200	76.5
56B14	KC40.4.049	80	76
63B14	K050.4.047	90	78.5
71B14	K050.4.045	105	76
80B14	K050.4.046	120	76.5



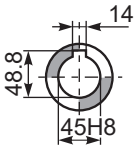


Mounting holes position
Posizione fori di montaggio





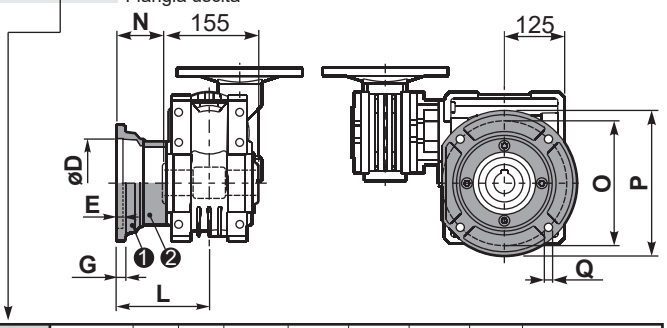
Standard
Hollow shaft



On request
A richiesta

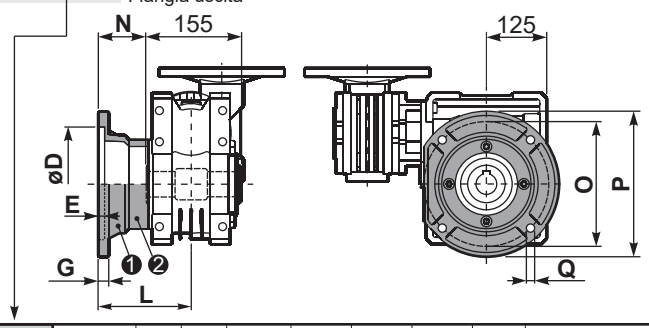
Gearbox weight peso riduttore	38.8 kg

P15Q**FC**... Output flange
Flangia uscita



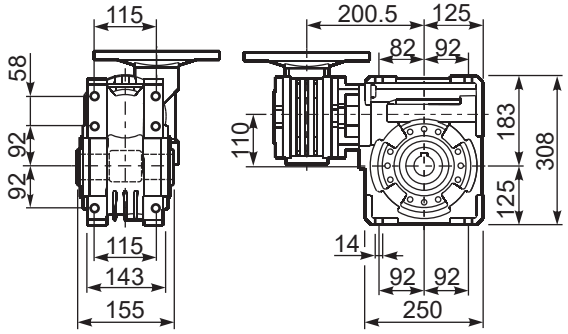
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	170 +0.083 +0.043	11	16.5	131.5	54	230	270	13	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

P15Q**F1**... Output flange
Flangia uscita

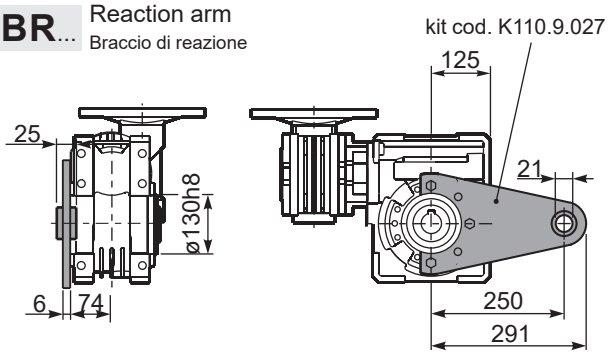


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

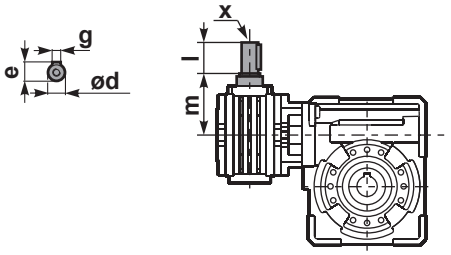
P15Q**FB**... Feet
Piedini



P15Q**BR**... Reaction arm
Braccio di reazione



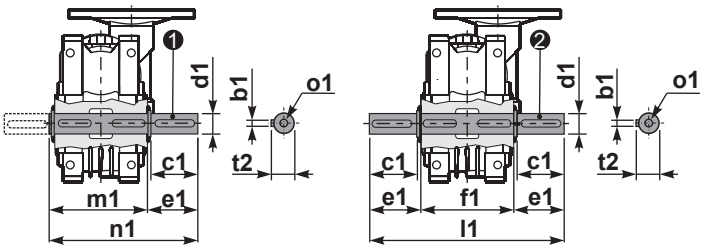
R15QFB... Input shaft
Albero in entrata



	ød	e	g	l	m	x	kit code
type **B**	16 h6	18	5	30	79.5	M6x16	❶ K050.5.006 PAM71 ❷ K050.5.007 PAM80
type **S**	14 h6	16	5	30	79.5	M5x10	❶ KS050.5.008 PAM71 ❷ KS050.5.009 PAM80

P15Q.....**S**... Single Shaft
Albero lento semplice

P15Q.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K110.5.028 type **B**

❷ kit cod. K110.5.029 type **B**

	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
type **B**	12	75	42 -0.005 -0.020	96.5	155	348	163.5	260	45	M12x32
type **S**	-	-	-	-	-	-	-	-	-	-

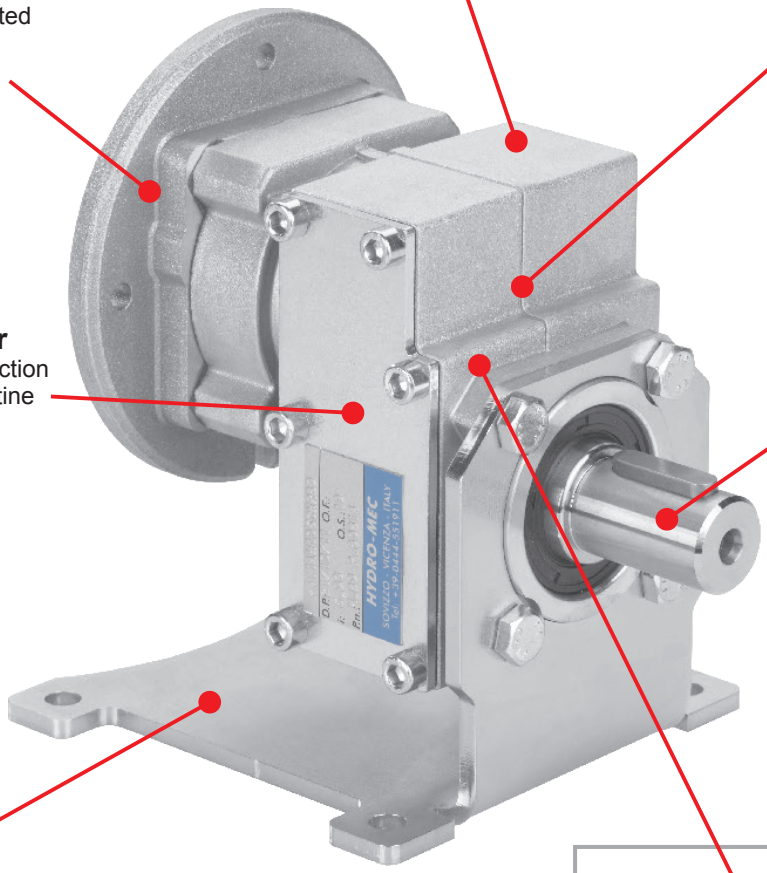
Aluminum one step gearboxes

A modular and compact product

Alloy housing
Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint

Flange
Fully modular to IEC and Compact integrated motor.
NEMA C flange

Gears
Hardened and ground gears.

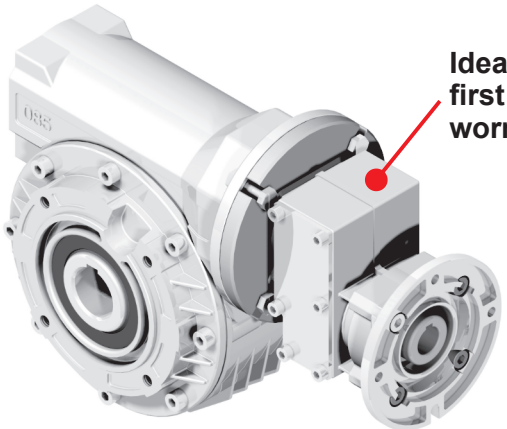


Removable inspection cover
Allows periodic inspection of gearing during routine maintenance

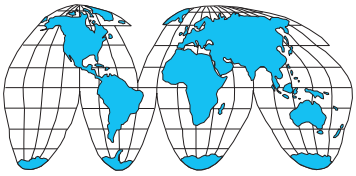
Output shaft
With well proportioned bearings

Feet
Removable feet.

Single-piece aluminum alloy housing
Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing



Ideal for use as first step with wormgearboxes.

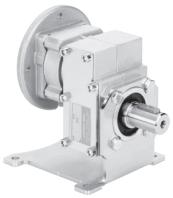


World wide sales network.

Lubricated for life with synthetic oil with operative range from -15° to +130°C

Specific type datasheet on page...

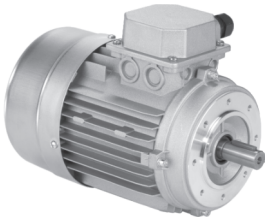
On page / A pagina / Auf Seite / À la page / En la página



Types / Tipi
Tipen / Types
Tipos

3-5	3-7	3-9	3-11
211A 20Nm	**311A** 30Nm	**411A** 38Nm	**511A** 110Nm

On page / A pagina / Auf Seite / À la page / En la página



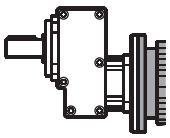
Types / Tipi
Tipen / Types
Tipos

M-1									
56A 56B	**63A 63B**	**71A 71B**	**80A 80B**	**90S 90L**	**100LA 100LB**	**112M**	**132S 132M**	**160M 160L**	**180M 180L**

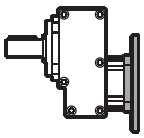
CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Type - Tipo - Typ Type - Tipo	**Size** - Grandezza - Grösse Taille - Tamaño	**Mounting** - Montaggio Montage - Fixation Tipo de montaje	**Ratio** - Rapporto Untersetzung Reduction Relaciòn
P	**311A**	**-F**	**2.84**

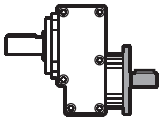
Aluminum one step gear
Riduttori in alluminio a uno stadio



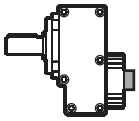
With IEC motor
M



With motor flange
P

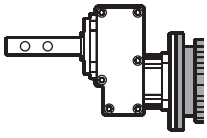


With male input shaft
R



Modular Base
B

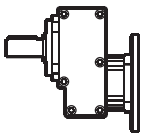
Special output shaft
Albero uscita speciale



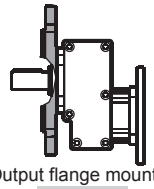
Only on request for Q.ty
A richiesta per quantità

1 Stages
Riduzioni
Stufen
Trains
Etapas

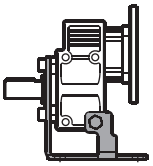
211A
311A
411A
511A



Without flange / feet
-N



Output flange mounted
-F



Mounted feet
H1

See technical data table

Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

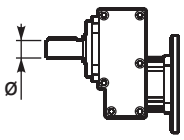
TÜV NORD 0032 — Dossier according to 94/9/EG 8. b ii stored

On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Output shaft
Albero uscita
Abtriebswelle
Arbre de sortie
Eje en salida

S



➡ **STANDARD**

211A
S ➡ **ø14**

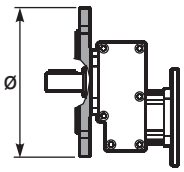
311A
S ➡ **ø14**
C ⇨ ø19
E ⇨ ø24

411A
S ⇨ ø14
C ➡ **ø19**
E ⇨ ø24

511A
C ⇨ ø19
E ⇨ ø24
G ➡ **ø28**

Output flange
Flangia uscita
Ausgangsflansch
Bride de sortie
Brida en salida

2



N Senza flangia
Without flange

211A
I ⇨ **ø105**

Flangia integrata
Integrated flange

311A
1 ⇨ ø120
2 ⇨ ø140
3 ➡ **ø160**
4 ⇨ ø200

411A
1 ⇨ ø120
2 ⇨ ø140
3 ⇨ ø160
4 ➡ **ø200**

511A
1 ⇨ ø120
2 ⇨ ø140
3 ⇨ ø160
4 ⇨ ø200
5 ➡ **ø250**

Motor size
Motor size - Grandezza motore
Motor Grösse
Grandeur moteur - Tamaño motor

-C

Flange
Flangia

B5
-A=56 (ø120)
-B=63 (ø140)
-C=71 (ø160)
-D=80 (ø200)
-E=90 (ø200)
-F=100÷112 (ø250)
-G=132 (ø300)

B14
-O=56 (ø80)
-P=63 (ø90)
-Q=71 (ø105)
-R=80 (ø120)
-T=90 (ø140)
-U=100÷112 (ø160)
-V=132 (ø200)

Type R
Tipo R

211A
311A
-1 ⇨ ø14

411A
-2 ⇨ ø19

511A
-3 ⇨ ø24

Without flange
Senza flangia

211A
311A
-Z ⇨ ø9 (56B5)
-0 ⇨ ø11 (63B5)
-1 ⇨ ø14 (71B5)

411A
-1 ⇨ ø14 (71B5)
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)

511A
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)
-4 ⇨ ø28 (100B5)

Input bore
Foro entrata
Eingangshohlwelle
Trou d'entree
Eje hueco de entrada

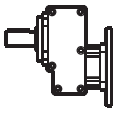
-

-
Nothing indication:
standard bore

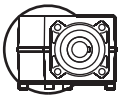
Nessuna indicazione:
foro standard

Mounting position
Posizione montaggio
Einbaulage
Position de montage
Position de montaje

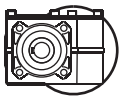
B3



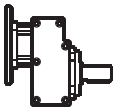
B3
STANDARD



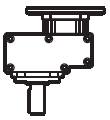
B6



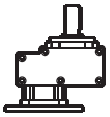
B7



B8



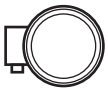
V5



V6

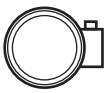
Terminal box position
Posizione morsettiera
Klemmkastenlage
Position boîte à bornes
Posición caja de bornes

B



A

B
STANDARD



C

D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

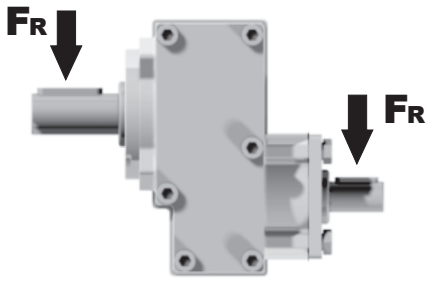
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$
Linear movement / traslazione / linearbewegung / translation / translacion	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

	$\mathbf{M}\ [Nm] = \frac{\mathbf{9550} \cdot \mathbf{P}[KW]}{\mathbf{n}\ [rpm]}$
	$\mathbf{M}\ [lb\ in] = \frac{\mathbf{63030} \cdot \mathbf{P}[HP]}{\mathbf{n}\ [rpm]}$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



$\mathbf{F_R}\ [N] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{2000}}{\mathbf{d}\ [mm]} \cdot \mathbf{f_K}$	$\mathbf{F_R}\ [N] = \frac{\mathbf{M}\ [lb\ in] \cdot \mathbf{8.9}}{\mathbf{d}\ [in]} \cdot \mathbf{f_K}$

M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo
$\mathbf{f_K}$	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión **1.15** Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje **1.25** Catena / Chain sprochets / Antriebskette / Chaîne / Cadena **1.75** Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal **2.50** Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana

— If your application requires higher radial loads, contact our technical office. Higher load may be possible.
— Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
— Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
— Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
— En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

B Output speed / Velocità in uscita / Abtriebsdrehzahl / Vitesse de sortie / Velocidad de salida

Nominal power / Potenza nominale / Max. mögliche Leistung / Poissance nominale / Potencia nominal

Gear size / Grandezza riduttore / Getriebegröße / Taille réducteur / Tamaño reductor

Motor power / Potenza motore / Motorleistung / Puissance moteur / Potencia motor

A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

Flange code / Codice flangia / Flanschtype / Code bride / Código bridas

Input speed / Velocità in entrata / Eintriebsdrehzahl / Vitesse en entrée / Velocidad de entrada

311A One step 30Nm

Rating - Aluminum ONE STEP GEARBOXES

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft	Ratios code
892	**1.57**	0.37	3.9	3.3	1.24	13			C	C		2844		01
493	**2.84**	0.37	7.0	3.3	1.21	23			C	C		1954		02
426	**3.29**	0.37	8.1	3.2	1.18	26			C	C		1756	**standard ø14**	03
362	**3.87**	0.37	9.6	2.9	1.08	28			C	C		1558		04

C Ratio / Rapporto / Untersetzung / Rapport de réduction / Relación

Transmitted torque / Momento torcente trasmesso / Mögliche Drehmomente / Couple de sortie / Par transmitido

Service factor / Fattore di servizio / Betriebsfaktor / Facteur de service / Factor de servicio

Output shaft diam. / Diam. albero uscita / Durchmesser abtriebswelle / Diametre arbre lent / Diametro eje de salida

Notes / Note / Anmerkungen / Note / Notas

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. 3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora **≤ 10**	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora **> 10**	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D Motor flange available / Flange disponibili / Erhältliche Motorflansche / Brides disponibles / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Reduzierhülsen / Montage avec douille de réduction / Montaje con casquillo de reducción

C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur / Posición agujeros brida / base motor

B) Available without reduction bushes / Disponibile anche senza boccola / Auch ohne Reduzierbuchse verfügbar / Disponible aussi sans douille de réduction / Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -O 56	-P 63	-Q 71	-R 80		Output Shaft ø	Ratios code
682	**2.05**	0.37	5	2.0	**0.73**	**10**					C	C			1939		01
595	**2.35**	0.37	6	2.1	**0.76**	**12**					C	C			1740		02
500	**2.80**	0.37	7	2.0	**0.75**	**14**					C	C			1542		03
414	**3.38**	0.37	8	2.0	**0.75**	**17**					C	C			1344	**standard**	04
298	**4.70**	0.37	12	1.7	**0.64**	**20**					C	C			1047	**ø14**	05
225	**6.22**	0.37	15	1.5	**0.55**	**23**					C	C			956		06
169	**8.29**	0.37	20	1.0	**0.36**	**20**					C	C			758		07
142	**9.83**	0.25	16	1.0	**0.24**	**16**					C	C			659		08

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **211A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **211A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **211A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **211A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **211A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

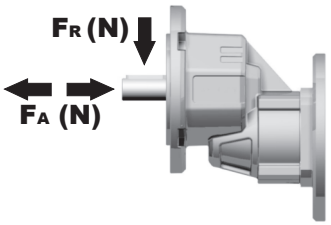
▪ LUBRICATION 211A Oil Quantity 0.05 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

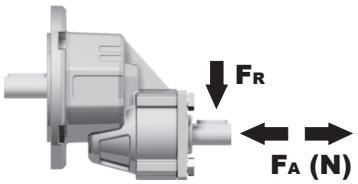
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2	FA	FR
700	101	504
600	120	600
400	138	696
300	151	756
200	175	876
140	192	960

Input shaft
albero in entrata



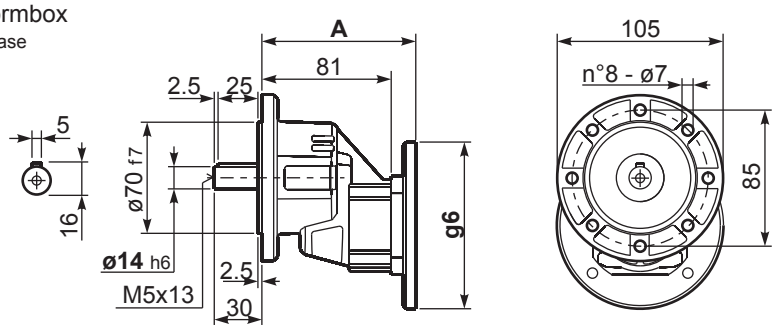
n_1	FA	FR
1400	168	840
900	192	960

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P211A-**F**... Basic wormbox
Riduttore base

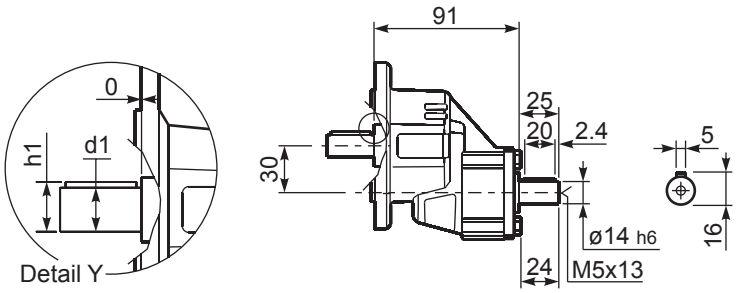
Gearbox weight peso riduttore	1.40 kg



B5 Motor Flanges	A	g6	kit code
63 B5	99.5	138	K050.4.041
71 B5	97	160	K050.4.042

B14 Motor Flanges	A	g6	kit code
56 B14	97	80	KC40.4.049
63 B14	99.5	90	K050.4.047
71 B14	97	105	K050.4.045

R211A-F... Basic wormbox
Riduttore base



***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 14x30	5	16	M5x13

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft	Ratios code
891	**1.57**	0.37	4	3.3	**1.2**	**13**			C	C		2844	**standard ø14**	01
493	**2.84**	0.37	7	3.3	**1.2**	**23**			C	C		1954		02
425	**3.29**	0.37	8	3.2	**1.2**	**26**			C	C		1756		03
362	**3.87**	0.37	10	2.9	**1.1**	**28**			C	C		1558		04
303	**4.62**	0.37	11	2.6	**0.97**	**30**			C	C		1360	On request ø19 ø24	05
222	**6.30**	0.37	16	2.2	**0.83**	**35**			C	C		1063		06
170	**8.22**	0.37	20	1.9	**0.69**	**38**			C	C		974		07
129	**10.86**	0.37	27	1.0	**0.39**	**28**			C	C		776		08

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

EN Unit **311A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **311A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **311A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **311A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **311A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 311A Oil Quantity 0.10 Lt.

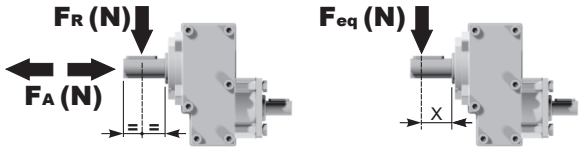
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website — **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

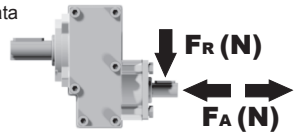
Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{38.5}{X+18.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	120	640	**400**	160	800	**200**	200	1020
600	140	700	**300**	175	880	**140**	225	1120

Input shaft
Albero in entrata

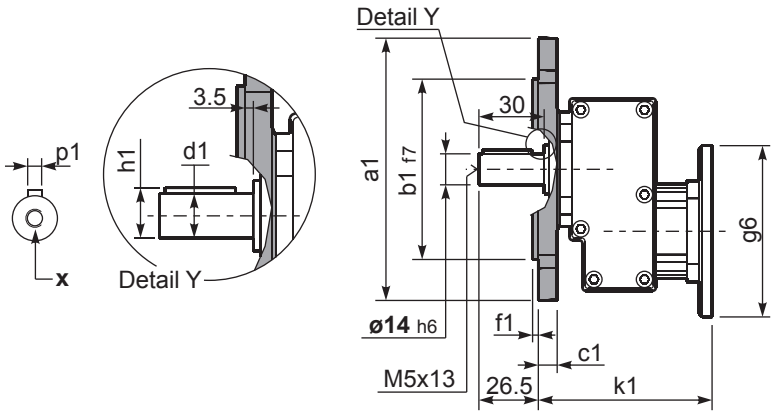


n_1	FA	FR
1400	180	860
900	200	980

tab. 2

Gearbox weight peso riduttore	2.50 kg

P311-F... Output flange
flange di uscita



***Available output shaft** / Albero di uscita

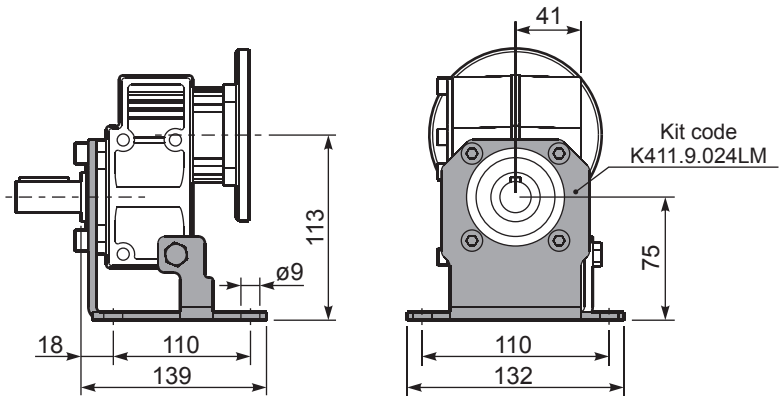
	Shaft - d1	p1	h1	x
Standard	ø 14x30	5	16	M5x13
On request A richiesta	ø 19x40 ø 24x40	6 8	21.5 27	M6x16 M6x16

Available output flanges / flange di uscita

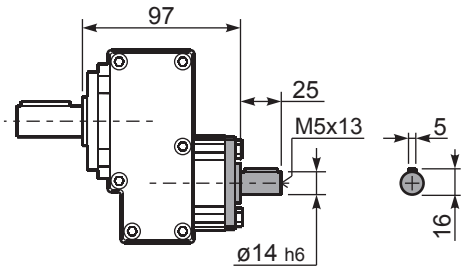
a1 ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

*Holes position
posizione fori

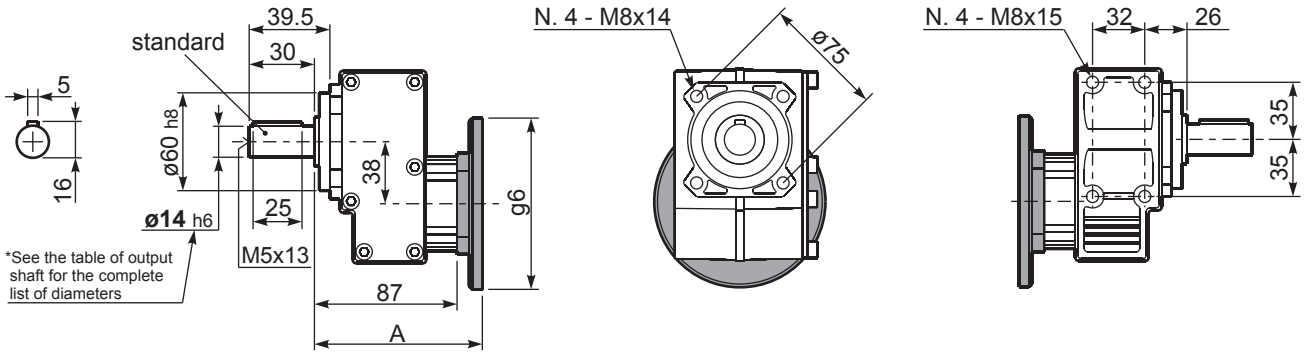
P311-H1... With feet
Con piedini



R311-N... Input Shaft
Albero in entrata



P311-N... Basic gearbox
Riduttore base



B14 Motor Flanges	A	g6	k1	kit code
56 B14	103	80	106.5	KC40.4.049
63 B14	105.5	90	109	K050.4.047
71 B14	103	105	106.5	K050.4.045

B5 Motor Flanges	A	g6	k1	kit code
63 B5	105.5	138	109	K050.4.041
71 B5	103	160	106.5	K050.4.042

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
891	**1.57**	1.5	16	1.3	**1.9**	**20**	B				C	C		2844		01
493	**2.84**	1.5	28	1.2	**1.8**	**35**	B				C	C		1954	**standard ø19**	02
425	**3.29**	1.5	33	1.2	**1.7**	**38**	B				C	C		1756		03
362	**3.87**	1.5	39	1.0	**1.5**	**40**	B				C	C		1558		04
303	**4.62**	1.5	46	1.0	**1.5**	**47**	B				C	C		1360	On request ø14 ø24	05
222	**6.30**	1.1	46	1.0	**1.1**	**46**	B				C	C		1063		06
170	**8.22**	0.55	30	1.3	**0.69**	**38**	B				C	C		974		07
129	**10.86**	0.37	27	1.0	**0.39**	**28**	B				C	C		776		08

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

EN Unit **411A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **411A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **411A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **411A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **411A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 411A Oil Quantity 0.10 Lt.

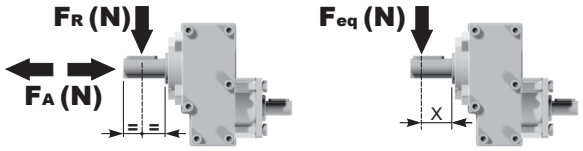
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website — **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

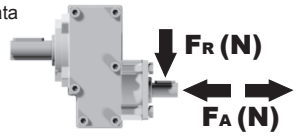
Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{40}{X+20}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	182	910	**400**	230	1150	**200**	290	1450
600	200	1000	**300**	250	1250	**140**	320	1600

Input shaft
Albero in entrata

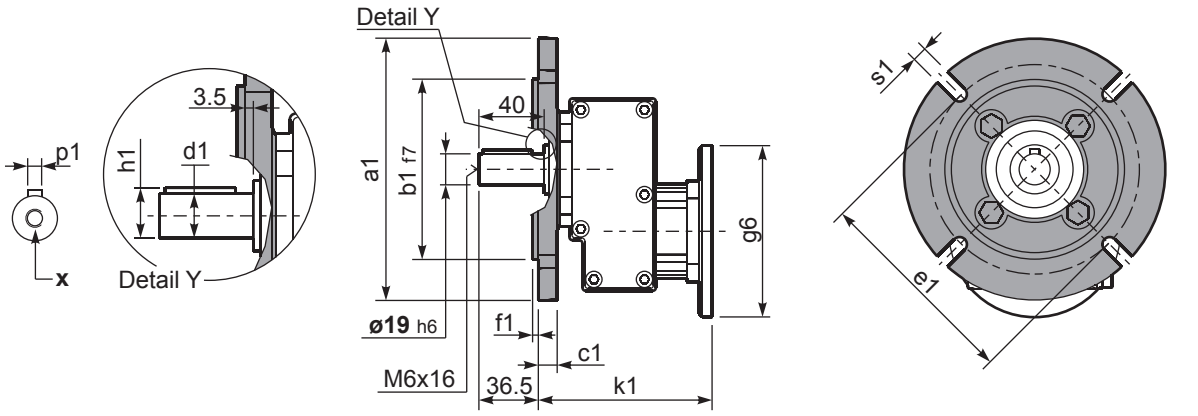


n_1	FA	FR
1400	240	1200
900	280	1400

tab. 2

P411-F... Output flange
flange di uscita

Gearbox weight peso riduttore	3.20 kg



***Available output shaft** / Albero di uscita

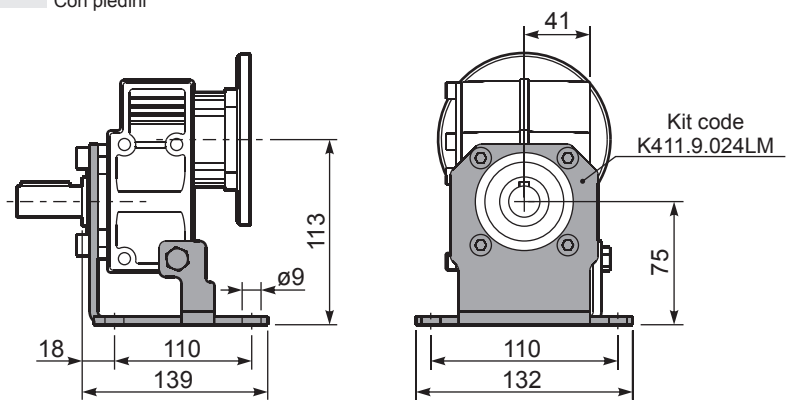
	Shaft - d1	p1	h1	x
Standard	ø 19x40	6	21.5	M6x16
On request A richiesta	ø 14x30 ø 24x40	5 8	16 27	M5x13 M6x16

Available output flanges / flange di uscita

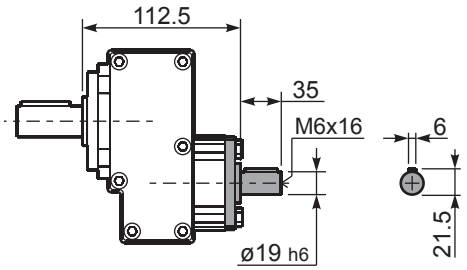
a1 ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

*Holes position
posizione fori

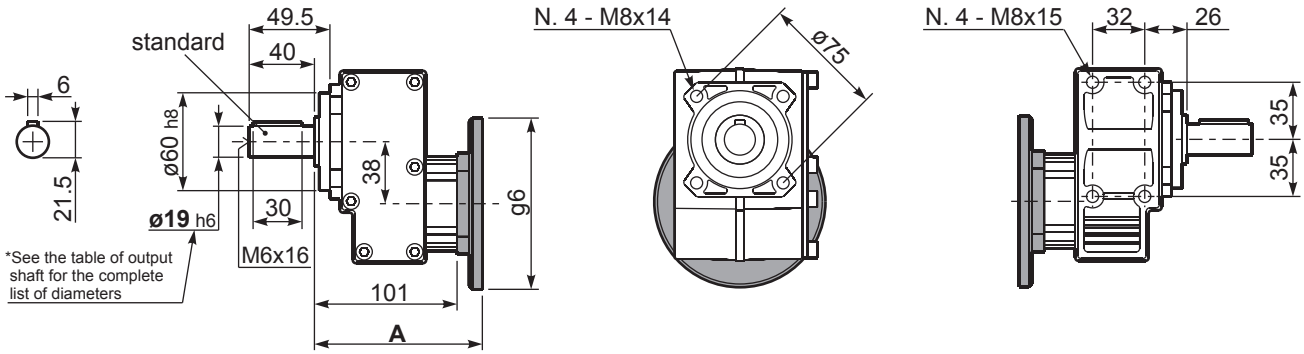
P411-H1... With feet
Con piedini



R411-N... Input Shaft
Albero in entrata



P411-N... Basic gearbox
Riduttore base



B5 Motor Flanges	A	g6	k1	kit code
63 B5	121.5	140	125	K063.4.041
71 B5	119.5	160	123	K063.4.042
80/90 B5	121.5	200	125	K063.4.043

B14 Motor Flanges	A	g6	k1	kit code
71 B14	119.5	105	123	K063.4.047
80 B14	121.5	120	125	K063.4.046
90 B14	121.5	140	125	K063.4.041

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
1077	**1.30**	4	34	1.2	**4.6**	**40**	B									3039	**standard ø28**	01
571	**2.45**	4	64	1.1	**4.3**	**70**	B									2049		02
423	**3.31**	4	87	1.0	**4.1**	**90**	B									1653		03
325	**4.31**	4	113	1.0	**3.8**	**110**	B									1356		04
266	**5.27**	3	104	1.1	**3.1**	**110**	B									1158	On request ø19 ø24	05
184	**7.63**	2.2	111	1.0	**2.2**	**110**	B									861		06
133	**10.50**	1.1	77	1.0	**1.1**	**80**	B									663		07

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

EN Unit **511A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **511A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **511A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **511A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **511A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 511A Oil Quantity 0.29 Lt.

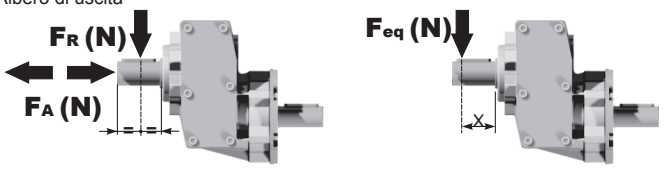
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

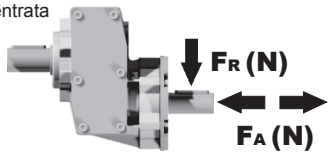
Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{47.5}{X+22.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	294	1470	**400**	370	1850	**200**	460	2300
600	320	1600	**300**	400	2000	**140**	510	2550

Input shaft
Albero in entrata

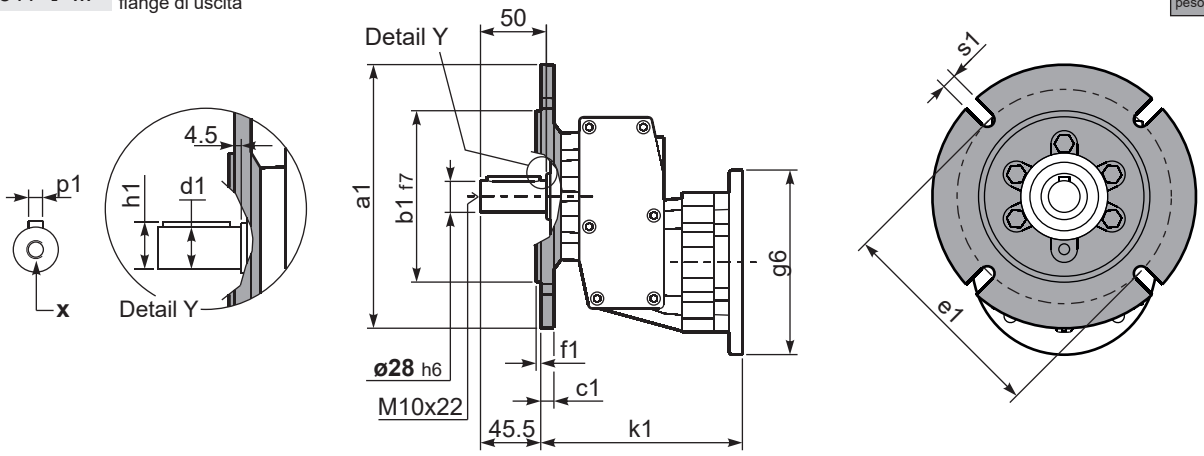


n_1	FA	FR
1400	400	2000
900	440	2200

tab. 2

Gearbox weight peso riduttore	5.00 kg

P511-F... Output flanges
flange di uscita



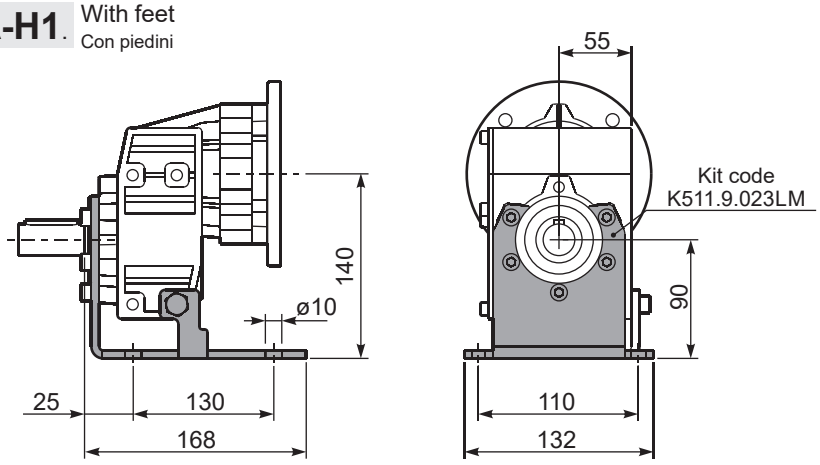
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 28x50	8	31	M10x22
On request A richiesta	ø 24x50 ø 19x40	8 6	27 21.5	M8x19 M6x16

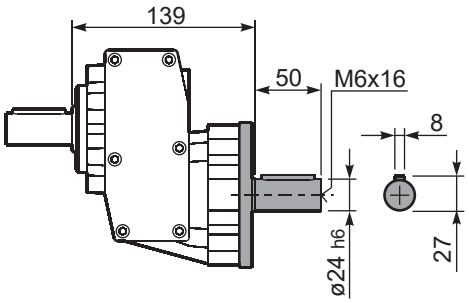
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	7	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3.5	9	KC40.9.012
200	130	11	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014

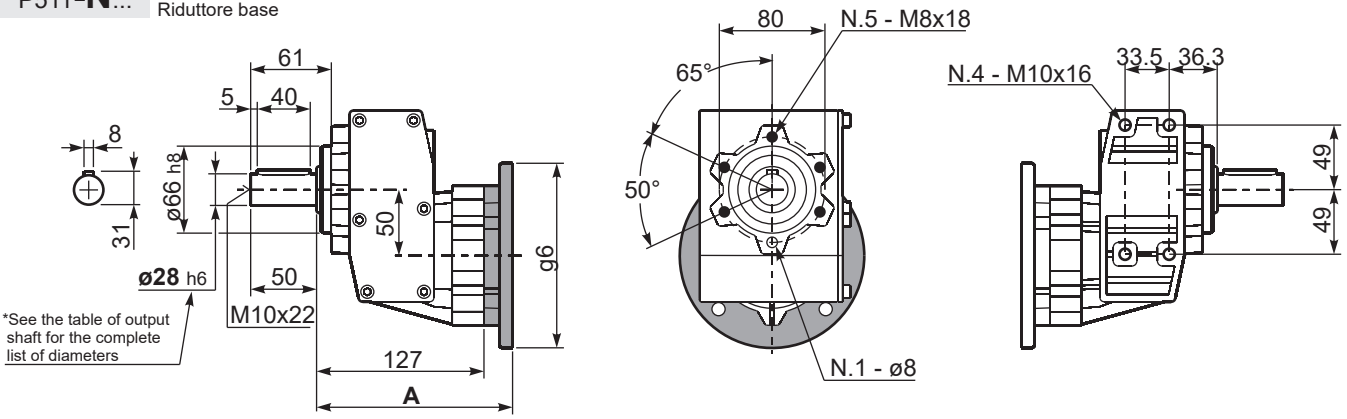
P511A-H1. With feet
Con piedini



R511A-N... Input Shaft
Albero in entrata



P511-N... Basic gearbox
Riduttore base



B5 Motor Flanges	A	g6	k1	kit code
71 B5	145.5	160	150	K023.4.041
80/90 B5	147.5	200	152	K023.4.042
100/112 B5	156.5	250	161	K023.4.043
132 B5	174.5	300	179	KC50.4.043

B14 Motor Flanges	A	g6	k1	kit code
80 B14	147.5	120	152	K085.4.046
90 B14	147.5	140	152	K085.4.045
100/112 B14	156.5	160	161	K085.4.047
132 B14	174.5	200	179	KC50.4.041

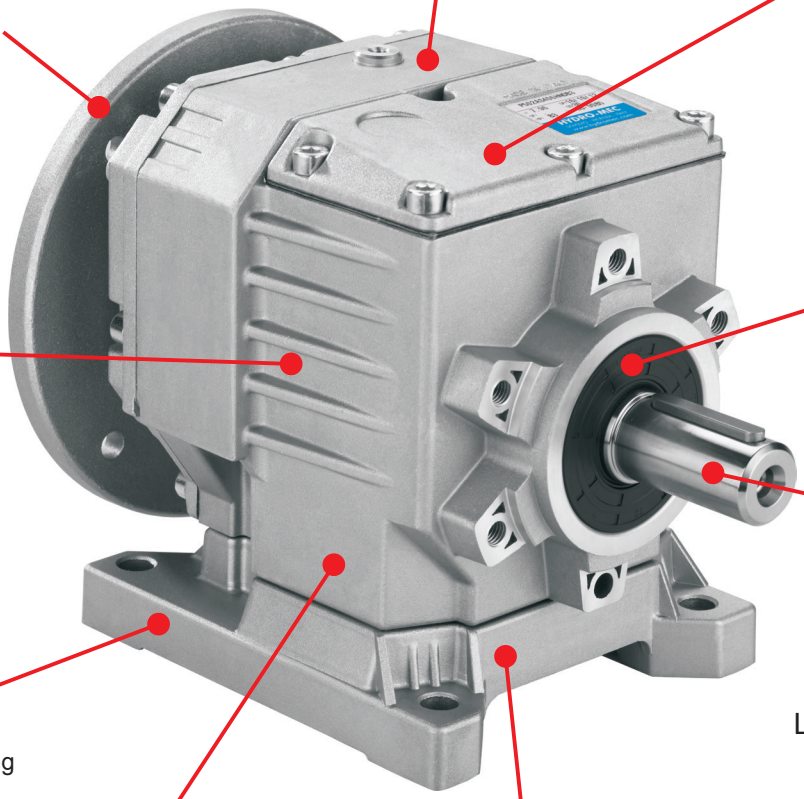
Aluminum in line gearboxes

A modular and compact product

Alloy housing
Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint

Flange
Fully modular to IEC and Compact integrated motor.
NEMA C flange

Removable inspection cover
Allows periodic inspection of gearing during routine maintenance



Oil seals
Two oil seals on request

Gears
Hardened and ground gears.

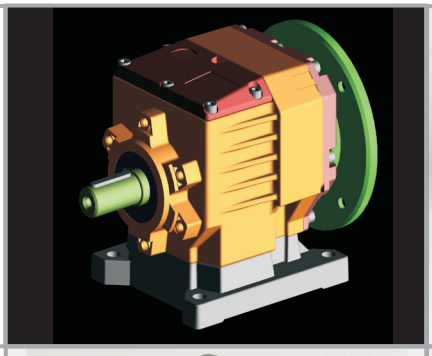
Output shaft
With well proportioned bearings

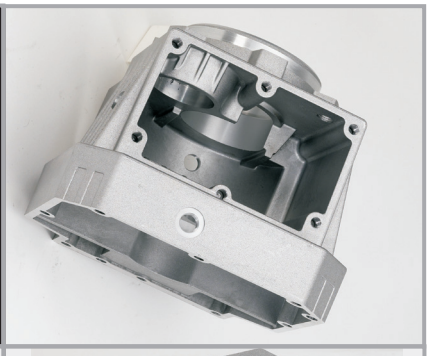
Feet
Removable feet.
With patented locking system.

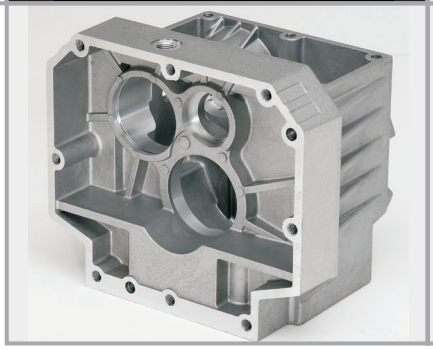
Foot prints
Compatible to the main standard of the market.

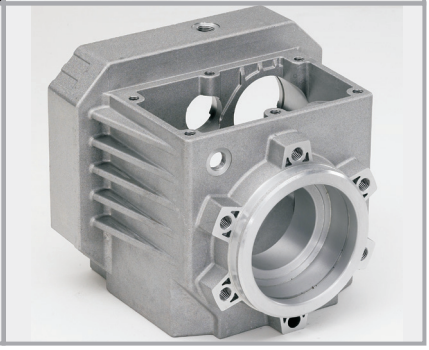
Lubricated for life with synthetic oil
with operative range
from -15° to +130°C

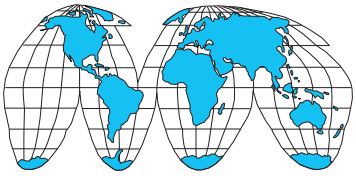
Single-piece aluminum alloy housing
Combines light weight with high tensile strength.
Precision machined for alignment of bearings and gearing











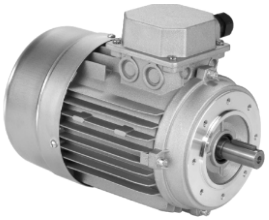
World wide sales network.

Specific type datasheet on page...

Types / Tipi
Tipen / Types
Tipos

On page / A pagina / Auf Seite / À la page / En la página

4-5	4-7	4-9	4-11	4-13	4-15	4-17	4-19	4-21
202A 70Nm	**302A** 120Nm	**412A** 175Nm	**413A** 175Nm	**452A** 300Nm	**512A** 360Nm	**513A** 360Nm	**612A** 530Nm	**613A** 530Nm



Types / Tipi
Tipen / Types
Tipos

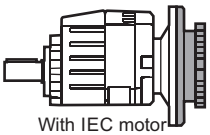
On page / A pagina / Auf Seite / À la page / En la página

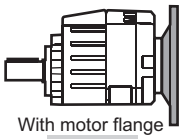
M-1									
56A 56B	**63A 63B**	**71A 71B**	**80A 80B**	**90S 90L**	**100LA 100LB**	**112M**	**132S 132M**	**160M 160L**	**180M 180L**

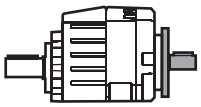
Type - Tipo - Typ
Type - Tipo

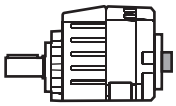
P

Aluminum coaxial gear boxes
Riduttori coassiali in alluminio


With IEC motor
M


With motor flange
P


With male input shaft
R


Modular base
B

Size - Grandezza - Grösse
Taille - Tamaño

412A

2 Stages
Riduzioni
Stufen
Trains
Etapas

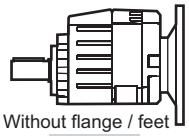
202A
302A
412A
452A
512A
612A

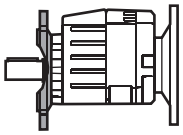
3 Stages
Riduzioni
Stufen
Trains
Etapas

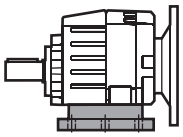
413A
513A
613A

Mounting - Montaggio
Montage - Fixation
Tipo de montaje

-F


Without flange / feet
-N


Output flange mounted
-F


Mounted feet
B..

Feet / piedini

Feet Code	Market reference	G	H	R	L	L1	S
B1	112	18	85	110	87	50	
B2	212/3	18	100	130	107.5		
S1	17	18	75	110	90+20		
S2	27	25	90	110	130		
M1	42/3	25	80	110+120	85		
L4	04	13	80	105			
L5	05	16	100	125			

You see feet code in the chart of the dimensions
Vedi codice piede nella tabella delle dimensioni

Ratio - Rapporto
Untersetzung - Reduction
Relaciòn

7.33

See technical data table

Vedi tabelle dati tecnici

Ver tabla datos técnicos

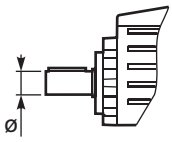
4

Dossier according to 94/9/EG 8. b ii stored
0032

On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Output shaft
Albero uscita
Abtriebswelle
Arbre de sortie
Eje en salida

V



➡ **STANDARD**

202A

S ⇨ Ø14
B ➡ **Ø16**
D ⇨ Ø20
V ⇨ Ø25

302A

S ⇨ ø14
B ⇨ ø16
C ⇨ ø19
D ➡ **ø20**
E ⇨ ø24
V ⇨ ø25

412A 413A

B ⇨ ø16
C ⇨ ø19
D ⇨ ø20
E ⇨ ø24
V ➡ **ø25**

452A 512A 513A

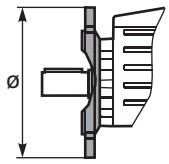
E ⇨ ø24
V ⇨ ø25
G ⇨ ø28
H ➡ **ø30**
I ⇨ ø35

612A 613A

G ⇨ ø28
H ⇨ ø30
I ➡ **ø35**
L ⇨ ø38
M ⇨ ø40

Output flange
Flangia uscita
Ausgangsflansch
Bride de sortie
Brida en salida

2



N Senza flangia
Without flange

202A 302A

1 ⇨ ø120
2 ➡ **ø140**
3 ⇨ ø160
4 ⇨ ø200

412A 413A

1 ⇨ ø120
2 ➡ **ø140**
3 ⇨ ø160
4 ⇨ ø200
5 ⇨ ø250

452A 512A 513A

3 ⇨ ø160
4 ➡ **ø200**
5 ⇨ ø250

612A 613A

3 ⇨ ø160
4 ⇨ ø200
5 ➡ **ø250**

Motor size - Grandezza motore
Motor Grösse
Grandeur moteur - Tamaño motor

-C

Flange
Flangia

B5

-A=56 (ø120)
-B=63 (ø140)
-C=71 (ø160)
-D=80 (ø200)
-E=90 (ø200)
-F=100÷112 (ø250)
-G=132 (ø300)

B14

-O=56 (ø80)
-P=63 (ø90)
-Q=71 (ø105)
-R=80 (ø120)
-T=90 (ø140)
-U=100÷112 (ø160)
-V=132 (ø200)

Type R
Tipo R

202A 413A

-1 ⇨ ø14

302A 412A 513A 613A

-2 ⇨ ø19

452A 512A 612A

-3 ⇨ ø24

Without flange
Senza flangia

-M ⇨ With coupling

202A 413A

-Z ⇨ ø9 (56B5)
-0 ⇨ ø11 (63B5)
-1 ⇨ ø14 (71B5)

302A 412A 513A 613A

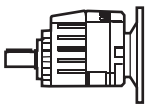
-1 ⇨ ø14 (71B5)
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)

452A 512A 612A

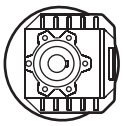
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)
-4 ⇨ ø28 (100B5)

Mounting position
Posizione montaggio
Einbaulage
Position de montage
Position de montaje

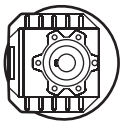
B3



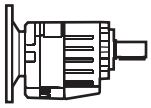
B3
STANDARD



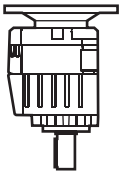
B6



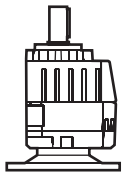
B7



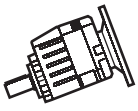
B8



V5



V6



V8

Input bore
Foro entrata
Eingangshohlwelle
Trou d'entree
Eje hueco de entrada

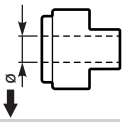
-

-

Nothing indication:
standard bore

Nessuna indicazione:
foro standard

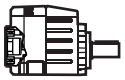
COUPLING



A = 9mm
B = 11mm
C = 14mm
D = 19mm
E = 24mm
F = 28mm

0

Ready for input coupling
Predisposto per giunto



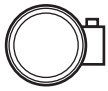
Terminal box position
Posizione morsettiera
Klemmkastenlage
Position boîte à bornes
Posición caja de bornes

With Type M specify terminal box position

Con tipo M specificare posizione morsettiera

A

B
STANDARD



C

D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$
Linear movement / traslazione / linearbewegung / translation / translacion	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

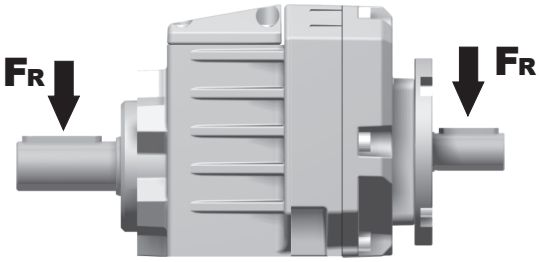
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

	$\mathbf{M}\ [Nm] = \frac{\mathbf{9550} \cdot \mathbf{P}[KW]}{\mathbf{n}\ [rpm]}$
	$\mathbf{M}\ [lb\ in] = \frac{\mathbf{63030} \cdot \mathbf{P}[HP]}{\mathbf{n}\ [rpm]}$

4

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



$F_R\ [N] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{2000}}{\mathbf{d}\ [mm]} \cdot f_K$	$F_R\ [N] = \frac{\mathbf{M}\ [lb\ in] \cdot \mathbf{8.9}}{\mathbf{d}\ [in]} \cdot f_K$

M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo
f_K	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión **1.15** Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje **1.25** Catena / Chain sprochets / Antriebskette / Chaîne / Cadena **1.75** Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal **2.50** Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana

— If your application requires higher radial loads, contact our technical office. Higher load may be possible.
— Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
— Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
— Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
— En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

B Output speed / Velocità in uscita / Abtriebsdrehzahl / Vitesse de sortie / Velocidad de salida

Nominal power / Potenza nominale / Max. mögliche Leistung / Poissance nominale / Potencia nominal

Gear size / Grandezza riduttore / Getriebegröße / Taille réducteur / Tamaño reductor

Motor power / Potenza motore / Motorleistung / Puissance moteur / Potencia motor

A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

Flange code / Codice flangia / Flanschtype / Code bride / Código bridas

Input speed / Velocità in entrata / Eintriebsdrehzahl / Vitesse en entrée / Velocidad de entrada

412A Coaxial - Gear 160Nm

Rating - Aluminum COAXIAL GEARBOXES

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80*	-E 90*	Available B14 motor flanges -Q 71	-R 80	-T 90	-U 100 112		Output Shaft ø	Ratios code
398	**3.52**	3	69	1.2	3.5	80	B				C	C			2821		01
320	**4.37**	3	86	1.0	3.1	90	B				C	C			2818		02
252	**5.55**	3	109	0.9	2.8	100	B				C	C			2813		03
220	**6.36**	2.2	92	1.0	2.3	95	B				C	C			1921		04
191	**7.33**	2.2	106	1.1	2.5	120	B				C	C			2812		05

C Ratio / Rapporto / Untersetzung / Rapport de réduction / Relación

Transmitted torque / Momento torcente trasmesso / Mögliche Drehmomente / Couple de sortie / Par transmitido

Service factor / Fattore di servizio / Betriebsfaktor / Facteur de service / Factor de servicio

Output shaft diam. / Diam. albero uscita / Durchmesser abtriebswelle / Diametre arbre lent / Diametro eje de salida

Notes / Note / Anmerkungen / Note / Notas

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. 3 h	10 h	24 h
Continuous or intermittent appl. with start / hour ≤ 10 / Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour > 10 / Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D Motor flange available / Flange disponibili / Erhältliche Motorflansche / Brides disponibles / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Reduzierhülsen / Montage avec douille de réduction / Montaje con casquillo de reducción

C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur / Posición agujeros brida / base motor

B) Available without reduction bushes / Disponibile anche senza boccola / Auch ohne Reduzierbuchse verfügbar / Disponible aussi sans douille de réduction / Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)

▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71*	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft ø	Ratios code
407	**3.44**	0.55**	12	2.0	**1.1**	**25**			C	C		2821		01
327	**4.28**	0.55**	15	1.9	**1.1**	**30**			C	C		2818		02
257	**5.45**	0.55**	20	2.0	**1.1**	**40**			C	C		2815		03
225	**6.23**	0.55**	23	2.0	**1.1**	**45**			C	C		1921		04
194	**7.20**	0.55**	26	1.9	**1.1**	**50**			C	C		2812		05
181	**7.74**	0.55**	28	1.8	**0.99**	**50**			C	C		1918		06
142	**9.85**	0.55**	36	1.7	**0.93**	**60**			C	C		1915	**standard**	07
123	**11.42**	0.55**	41	1.5	**0.80**	**60**			C	C		1715	**ø16**	08
107	**13.03**	0.55**	47	1.3	**0.70**	**60**			C	C		1912		09
93	**15.10**	0.37	37	1.6	**0.61**	**60**			C	C		1712	ø14	10
86	**16.20**	0.37	39	1.5	**0.57**	**60**			C	C		1910	ø20	11
75	**18.78**	0.37	45	1.3	**0.49**	**60**			C	C		1710	ø25	12
66	**21.15**	0.37	51	1.2	**0.43**	**60**			C	C		1312	On request	13
64	**21.84**	0.37	53	1.1	**0.42**	**60**			C	C		1015		14
53	**26.31**	0.37	64	0.9	**0.35**	**60**			C	C		1310		15
48.5	**28.88**	0.37	70	1.0	**0.37**	**70**			C	C		1012		16
39	**35.91**	0.37	87	0.8	**0.30**	**70**			C	C		1010		17
37.1	**37.69**	0.25	62	1.1	**0.28**	**70**			C	C		912		18
29.9	**46.87**	0.25	77	0.9	**0.23**	**70**			C	C		910		19
28.1	**49.76**	0.25	81	0.9	**0.21**	**70**			C	C		712		20
22.6	**61.89**	0.18	77	0.9	**0.17**	**70**			C	C		710		21

**** Concerning a reduced dimensions electric motor.** Riferito a motore con grandezza ridotta

* Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14

* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **202A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **202A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **202A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **202A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **202A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 202A Oil Quantity 0.15 Lt.

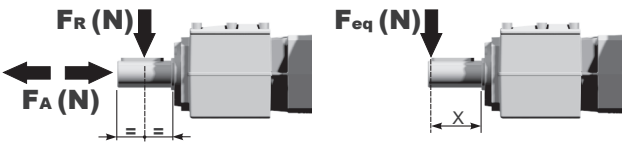
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

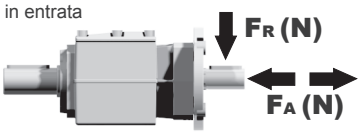
Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{35.7}{X+20.7}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	140	700	**140**	246	1320	**70**	340	1700
250	151	756	**120**	270	1350	**40**	380	1900
200	185	924	**85**	300	1500	**15**	-	-

Input shaft
Albero in entrata

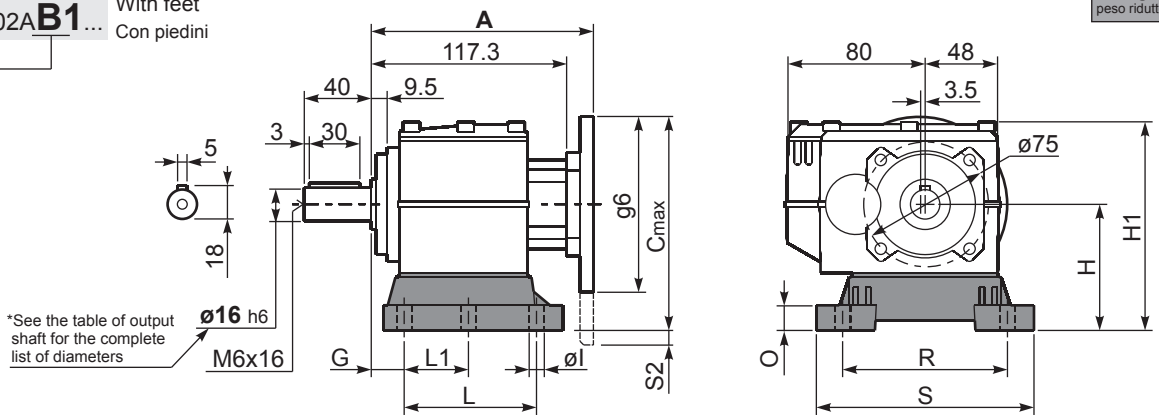


n_1	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

Gearbox weight peso riduttore	With flange 3.3 kg
	With feet 3.7 Kg

P202A**B1**... With feet
Con piedini



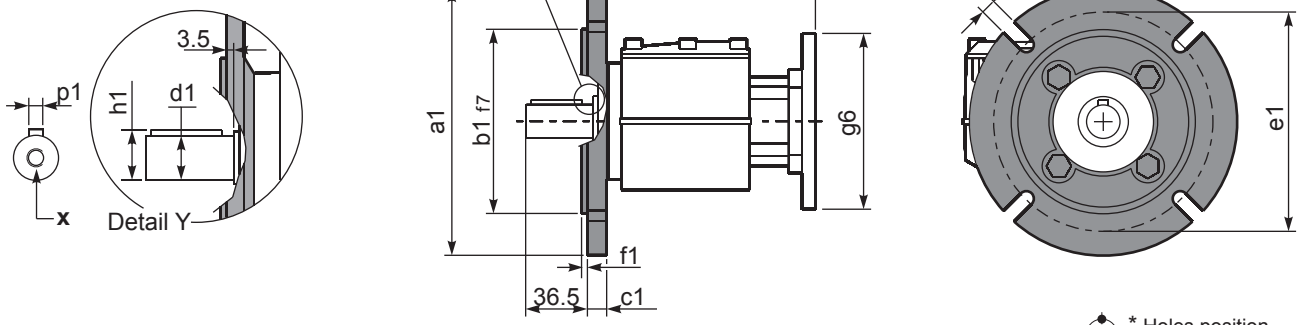
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øI	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	133	15	9	-	-	KC30.9.022
B2	212/3	18	100	130	107.5	60	155	145	5	11	-	-	KC30.9.023LM
S1	17-32	18	75	110	110	50	130	123	15	9	-	63B5	KC30.9.024

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

P202A-**F**... Output flanges
flange di uscita



* Holes position
Posizione fori

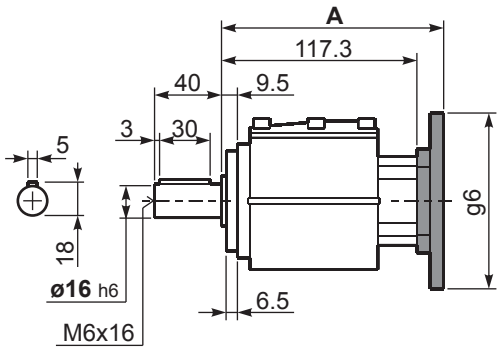
***Available output shaft** / Albero di uscita

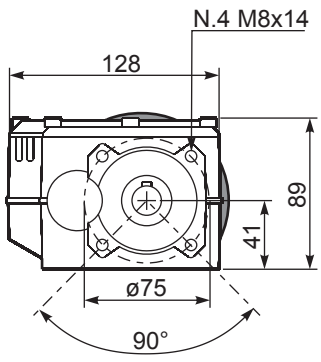
	Shaft - d1	p1	h1	x
Standard	ø 16x40	5	18	M6x16
On request A richiesta	ø 14x30	5	16	M6x16
	ø 20x40	6	22.5	M8x19
	ø 25x50	8	28	M8x19

Available output flanges / flange di uscita

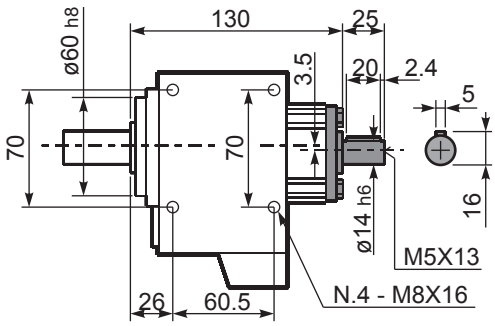
a1 ø	b1	c1	e1	f1	s1	kit code	
120	80	11.5	100	3	9*	KC30.9.010	With flange and feet only on request. Ask for compatibility
140	95	11.5	115	3	9	KC30.9.011	
160	110	11.5	130	3.5	9	KC30.9.012	
200	130	11.5	165	3.5	11	KC30.9.013	

P202A-**N**... Basic gearbox
Riduttore base





R202A-**N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
63 B5	135.8	170	140	139.3	K050.4.041
71 B5	133.3	180	160	136.8	K050.4.042

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
56 B14	133.3	139	80	136.8	KC40.4.049
63 B14	135.8	146	90	139.3	K050.4.047
71 B14	133.3	152.5	105	136.8	K050.4.045

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71*	-D 80*	-E 90*	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft	Ratios code
407	**3.44**	1.5	34	1.0	**1.6**	**35**	B				C	C		2821		01
327	**4.28**	1.5	42	1.0	**1.4**	**40**	B				C	C		2818		02
257	**5.45**	1.5	53	1.0	**1.5**	**52**	B				C	C		2815		03
225	**6.23**	1.5	61	1.1	**1.7**	**70**	B				C	C		1921		04
194	**7.20**	1.5	71	1.0	**1.5**	**70**	B				C	C		2812		05
181	**7.74**	1.5	76	1.1	**1.6**	**80**	B				C	C		1918	**standard**	06
142	**9.85**	1.5	97	1.0	**1.5**	**95**	B				C	C		1915	**ø20**	07
123	**11.42**	1.5	112	1.0	**1.5**	**115**	B				C	C		1715		08
107	**13.03**	1.1	93	1.2	**1.3**	**114**	B				C	C		1912	ø14	09
93	**15.10**	1.1	108	1.1	**1.2**	**114**	B				C	C		1712	ø16	10
86	**16.20**	0.75	80	1.3	**1.0**	**107**	B				C	C		1910	ø19	11
75	**18.78**	0.75	92	1.2	**0.87**	**107**	B				C	C		1710	ø24	12
66	**21.15**	0.75	104	1.1	**0.82**	**114**	B				C	C		1312	ø25	13
64	**21.84**	0.75	107	1.1	**0.83**	**119**	B				C	C		1015	On request	14
53	**26.31**	0.55	95	1.1	**0.62**	**107**	B				C	C		1310		15
48.5	**28.88**	0.55	105	1.1	**0.60**	**114**	B				C	C		1012		16
39	**35.91**	0.37	87	1.2	**0.46**	**107**	B				C	C		1010		17
37.1	**37.69**	0.37	91	1.1	**0.41**	**102**	B				C	C		912		18
29.9	**46.87**	0.37	113	0.9	**0.35**	**107**	B				C	C		910		19
28.1	**49.76**	0.25	81	1.2	**0.31**	**101**	B				C	C		712		20
22.6	**61.89**	0.25	101	1.1	**0.26**	**107**	B				C	C		710		21

The dynamic efficiency is **0.96** for all ratios

*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14
* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **302A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **302A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **302A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **302A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **302A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

▪ LUBRICATION 302A Oil Quantity 0.15 Lt.

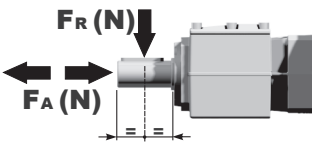
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

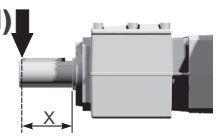
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{35.7}{X+20.7}$$



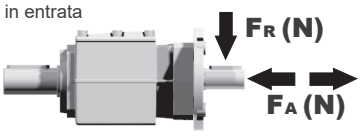


n_2	FA	FR
300	140	700
250	151	756
200	185	924

n_2	FA	FR
140	246	1320
120	270	1350
85	300	1500

n_2	FA	FR
70	340	1700
40	380	1900
15	-	-

Input shaft
Albero in entrata

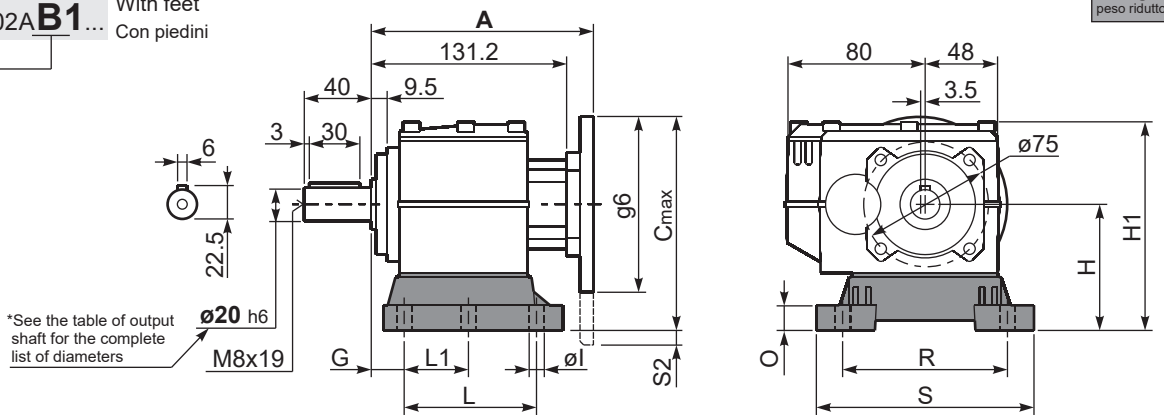


n_1	FA	FR
1400	226	1130
900	264	1320
500	322	1610

tab. 2

Gearbox weight peso riduttore	With flange 3.5 kg With feet 4.0 Kg

P302A**B1**... With feet
Con piedini



Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	133	15	9	15 80/90B5	-	KC30.9.022
B2	212/3	18	100	130	107.5	60	155	145	5	11	3.5 80/90B5	-	KC30.9.023LM
S1	17-32	18	75	110	110	50	130	123	15	9	5 71B5	71B5	KC30.9.024

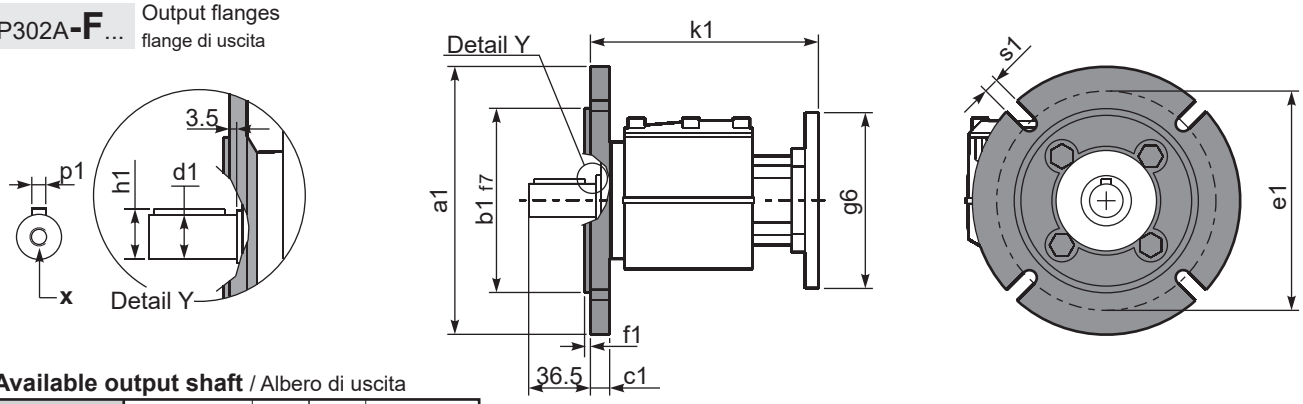
Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

4

P302A-**F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 20x40	6	22.5	M8x19
On request A richiesta	ø 14x30 ø 16x40 ø 19x40 ø 24x50 ø 25x50	5 5 6 8 8	16 18 21.5 27 28	M6x16 M6x16 M6x16 M8x19 M8x19

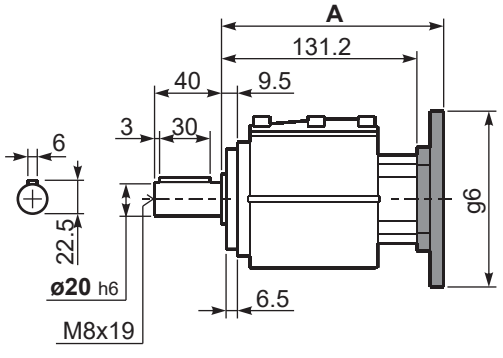
* Holes position
Posizione fori

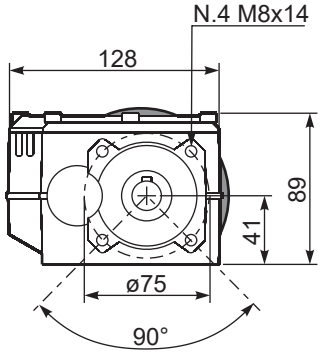
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

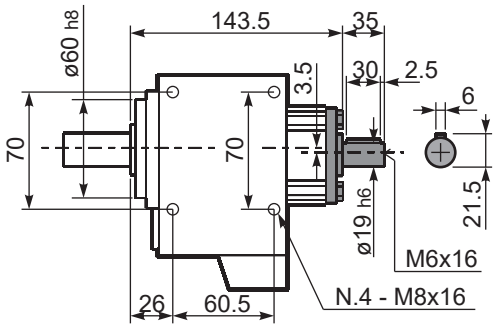
With flange and feet only on request. Ask for compatibility

P302A-**N**... Basic gearbox
Riduttore base





R302A-**N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
63 B5	151.7	170	140	155.2	K063.4.041
71 B5	149.7	180	160	153.2	K063.4.042
80/90 B5	151.7	200	200	155.2	K063.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B14	149.7	152.5	105	153.2	K063.4.047
80 B14	151.7	160	120	155.2	K063.4.046
90 B14	151.7	170	140	155.2	K063.4.041

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80*	-E 90*	-F 100* 112	Available B14 motor flanges -Q 71	-R 80	-T 90	-U 100 112		Output Shaft ø	Ratios code
398	**3.52**	3	68	1.2	3.5	80	B					C	C			2821		01
321	**4.37**	3	84	1.1	3.1	90	B					C	C			2818		02
252	**5.56**	3	107	0.9	2.7	100	B					C	C			2813		03
220	**6.36**	2.2	90	1.2	2.5	105	B					C	C			1921		04
191	**7.33**	2.2	104	1.2	2.5	120	B					C	C			2812		05
177	**7.89**	2.2	112	1.2	2.5	130	B					C	C			1918		06
139	**10.06**	2.2	143	1.2	2.5	165	B					C	C			1913		08
120	**11.66**	2.2	166	1.0	2.2	165	B					C	C			1713	**standard**	09
106	**13.26**	1.5	130	1.3	1.9	165	B					C	C			1912	**ø25**	10
102	**13.68**	1.5	134	1.2	1.8	165	B					C	C			1513		25
91	**15.37**	1.5	151	1.1	1.6	165	B					C	C			1712	ø16	11
86	**16.33**	1.5	160	1.0	1.5	165	B					C	C			1313	ø19	26
78	**18.04**	1.5	177	0.9	1.4	165	B					C	C			1512	ø20	23
65	**21.54**	1.1	154	1.1	1.2	165	B					C	C			1312	ø24	14
63	**22.29**	1.1	160	1.0	1.1	165	B					C	C			1013	On request	15
53	**26.31**	0.75	129	1.2	0.90	155	B					C	C			1310		16
47.6	**29.40**	0.75	144	1.1	0.86	165	B					C	C			1012		17
39	**35.91**	0.55	130	1.2	0.66	155	B					C	C			1010		18
36.5	**38.37**	0.55	139	1.2	0.66	165	B					C	C			912		19
29.9	**46.87**	0.55	170	0.9	0.51	155	B					C	C			910		20
27.6	**50.67**	0.37	123	1.1	0.41	137	B					C	C			712		21
22.6	**61.89**	0.37	150	1.0	0.38	155	B					C	C			710		22

The dynamic efficiency is **0.96** for all ratios

*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14
* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

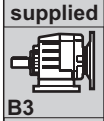
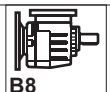
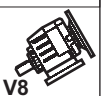
EN Unit **412A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **412A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **412A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **412A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **412A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

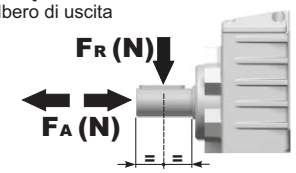
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	**B6**	**B7**	 **B8**	**V5**	**V6**	 **V8**
0.25 LT	0.35 LT	0.40 LT	0.45 LT	0.40 LT	0.50 LT	Ask
SHELL Omala S4 WE 320				**ENI** Telium VSF 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

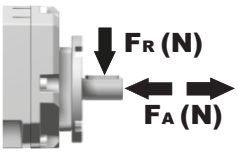
Output shaft
Albero di uscita

$F_{eq} = F_R \cdot \frac{46}{X+21}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	310	1550	**140**	406	2030	**70**	540	2700
250	330	1650	**120**	448	2240	**40**	600	3000
200	360	1800	**85**	480	2400	**15**	600	3000

Input shaft
Albero in entrata

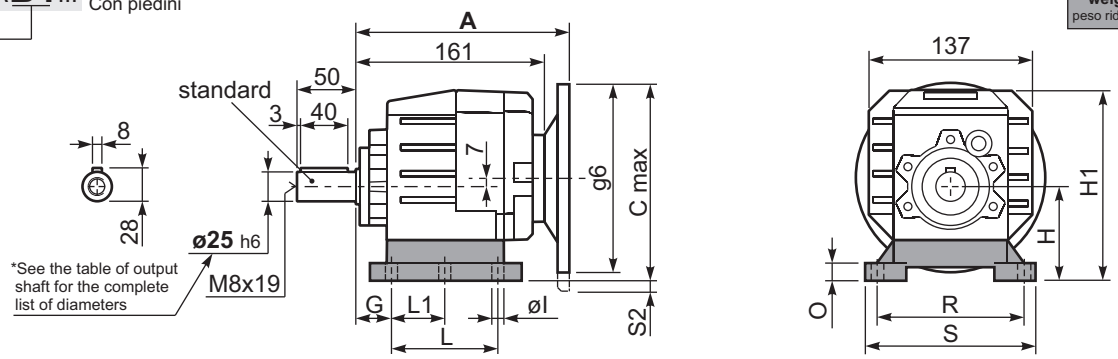


n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

P412A**B1**... With feet
Con piedini

Gearbox weight peso riduttore	With flange **5.7 kg**
	With feet **5.9 Kg**



Feet / piedini

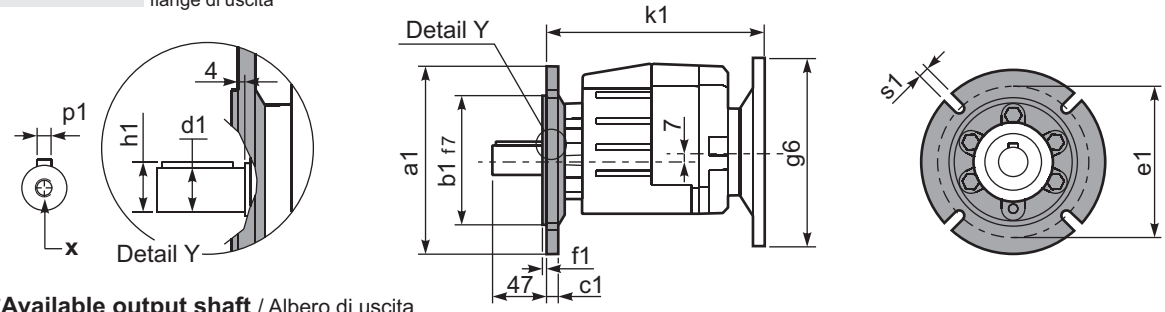
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167.5	15	-	8 80/90B5 33 100/112B5	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182.5	17	11	18 100/112B5	-	KC40.9.025
S1	17	18	75	110	90÷110	50	145	155.5	15	9	18 80/90B5 43 100/112B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172.5	20	9	3 80/90B5 28 100/112B5	-	KC40.9.024
H2	022-223	25	100	110	115	-	145	182.5	20	9	18 100/112B5	-	KC40.9.026
M1	42/3	25	80	110÷120	85	-	145	162.5	15	9	13 80/90B5 38 100/112B5	-	KC40.9.023

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

P412A**-F**... Output flanges
flange di uscita

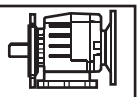


***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 25x50	8	28	M8x19
On request A richiesta	ø 16x40	5	18	M6x16
	ø 19x40	6	21.5	M6x16
	ø 20x40	6	22.5	M8x19
	ø 24x50	8	27	M8x19

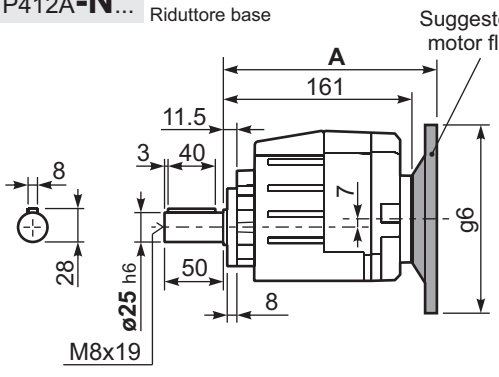
Available output flanges / flange di uscita

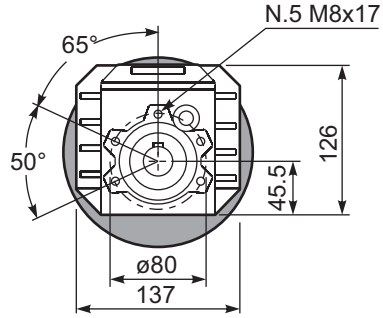
a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	7	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3.5	9	KC40.9.012
200	130	10	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014



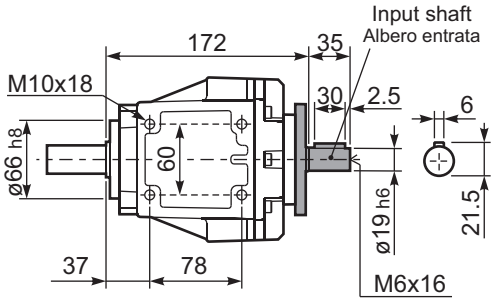
With flange and feet only on request. Ask for compatibility

P412A**-N**... Basic gearbox
Riduttore base





R412A**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
63 B5	181.5	177	140	185.5	K063.4.041
71 B5	179.5	187	160	183.5	K063.4.042
80/90 B5	181.5	207	200	185.5	K063.4.043
100/112 B5	196.5	232	250	200.5	KC40.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B14	179.5	159.5	105	183.5	K063.4.047
80 B14	181.5	167	120	185.5	K063.4.046
90 B14	181.5	177	140	185.5	K063.4.041
100/112 B14	196.5	187	160	200.5	KC40.4.041

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft ø	Ratios code
36.5	**38.40**	0.37	91	1.8	**0.67**	**165**			C	C		171713		02
32.0	**43.69**	0.37	104	1.6	**0.59**	**165**			C	C		191712		03
27.6	**50.64**	0.37	120	1.4	**0.51**	**165**			C	C		171712		04
26.2	**53.36**	0.37	127	1.3	**0.47**	**160**			C	C		191710		05
22.9	**61.21**	0.37	145	1.2	**0.43**	**170**			C	C		191312	**standard**	06
22.6	**61.85**	0.37	147	1.1	**0.40**	**160**			C	C		171710	**ø25**	07
19.7	**70.95**	0.37	168	1.0	**0.37**	**170**			C	C		131712		08
19.1	**73.43**	0.37	174	1.0	**0.37**	**175**			C	C		101713	ø16	09
18.7	**74.77**	0.37	177	0.9	**0.33**	**160**			C	C		191310	ø19	10
16.2	**86.66**	0.25	139	1.2	**0.29**	**160**			C	C		131710	ø20	11
14.5	**96.85**	0.25	155	1.1	**0.27**	**170**			C	C		101712	ø24	12
13.6	**102.89**	0.25	165	1.1	**0.27**	**175**			C	C		101313	On request	13
11.1	**126.40**	0.18	155	1.1	**0.21**	**170**			C	C		91712		17
10.3	**135.69**	0.18	166	1.0	**0.20**	**170**			C	C		101312		15
8.4	**165.74**	0.12	131	1.2	**0.15**	**160**			C	C		101310		16
7.9	**177.09**	0.12	140	1.2	**0.15**	**170**			C	C		91312		18
6.5	**216.31**	0.09	136	1.2	**0.12**	**160**			C	C		91310		19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

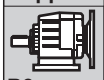
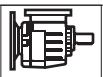
EN Unit **413A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **413A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **413A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **413A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **413A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

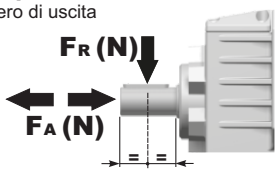
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
0.30 LT	0.35 LT	0.45 LT	0.45 LT	0.45 LT	0.55 LT	Ask
SHELL Omala S4 WE 320				**ENI** Telium VSF 320		

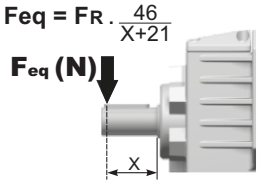
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

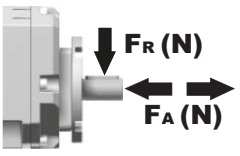
$F_{eq} = F_R \cdot \frac{46}{X+21}$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	310	1550	**140**	406	2030	**70**	540	2700
250	330	1650	**120**	448	2240	**40**	600	3000
200	360	1800	**85**	480	2400	**15**	600	3000

Input shaft
Albero in entrata

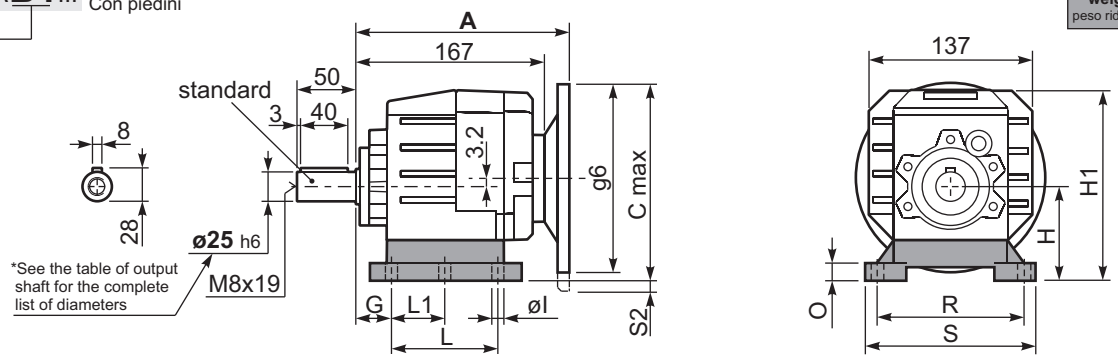


n_1	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

P413A**B1**... With feet
Con piedini

Gearbox weight peso riduttore	With flange **6.1 kg**
	With feet **6.3 Kg**



Feet / piedini

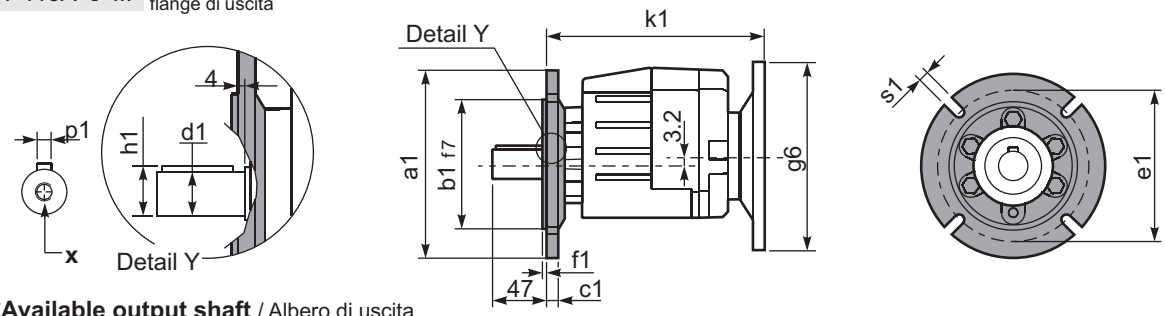
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167.5	15	-	-	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182.5	17	11	-	-	KC40.9.025
S1	17	18	75	110	90÷110	50	145	155.5	15	9	2 80/90B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172.5	20	9	-	-	KC40.9.024
H2	022-223	25	100	110	115	-	145	182.5	20	9	-	-	KC40.9.026
M1	42/3	25	80	110÷120	85		145	162.5	15	9			KC40.9.023

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

P413A**-F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

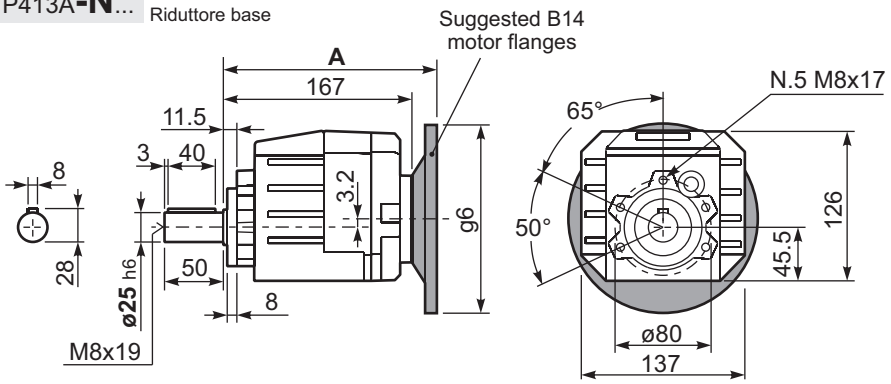
	Shaft - d1	p1	h1	x
Standard	ø 25x50	8	28	M8x19
On request A richiesta	ø 16x40	5	18	M6x16
	ø 19x40	6	21.5	M6x16
	ø 20x40	6	22.5	M8x19
	ø 24x50	8	27	M8x19

Available output flanges / flange di uscita

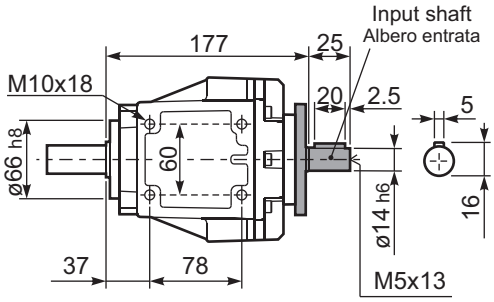
a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	7	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3.5	9	KC40.9.012
200	130	10	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014

With flange and feet only on request. Ask for compatibility

P413A**-N**... Basic gearbox
Riduttore base



R413A**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
63 B5	185.5	173.2	140	189.5	K050.4.041
71 B5	183	183.2	160	187	K050.4.042

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
56 B14	183	143.2	80	187	KC40.4.049
63 B14	185.5	148.2	90	189.5	K050.4.047
71 B14	183	155.7	105	187	K050.4.045

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100* 112	-G 132*	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
388	**3.61**	4	93	1.6	**6.3**	**150**	B									3018		01
331	**4.23**	4	108	1.6	**6.1**	**170**	B									3016		02
279	**5.01**	4	129	1.6	**6.1**	**200**	B									3014		03
231	**6.07**	4	156	1.6	**6.3**	**250**	B									3012		04
206	**6.81**	4	175	1.6	**6.2**	**277**	B									2018		05
176	**7.96**	4	204	1.5	**5.8**	**300**	B									2016	**standard ø30**	06
148	**9.45**	4	242	1.3	**4.9**	**304**	B									2014		07
122	**11.43**	4	293	1.0	**4.0**	**300**	B									2012		08
99	**14.21**	3	274	1.0	**2.8**	**265**	B									2010	ø24	09
84	**16.62**	3	321	0.9	**2.8**	**304**	B									1314	ø25	10
70	**20.10**	2.2	286	1.0	**2.3**	**300**	B									1312	ø28	11
56	**24.98**	1.85	302	0.9	**1.6**	**265**	B									1310	ø35	12
47.6	**29.41**	1.5	288	1.1	**1.6**	**304**	B									814	On request	13
39.3	**35.58**	1.5	349	0.9	**1.3**	**300**	B									812		14
34.6	**40.50**	1.1	290	1.0	**1.1**	**290**	B									614		15
31.7	**44.23**	1.1	316	0.8	**0.92**	**265**	B									810		16
28.6	**49.00**	0.75	240	1.2	**0.93**	**300**	B									612		17
23.0	**60.90**	0.75	299	0.9	**0.66**	**265**	B									610		18

The dynamic efficiency is **0.96** for all ratios

*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14
* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

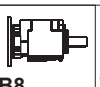
EN Unit **452A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **452A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **452A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **452A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

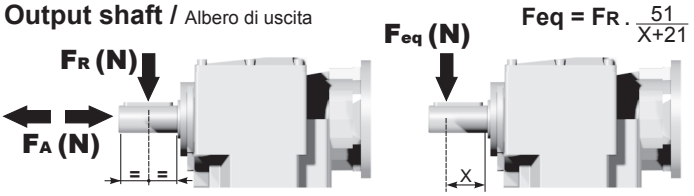
E El reductor tamaño **452A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	 **B8**	**V5**	**V6**	**V8**
0.31 LT	0.31 LT	0.31 LT	0.31 LT	0.31 LT	0.31 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

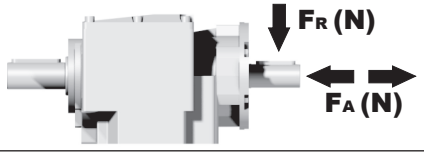
Output shaft / Albero di uscita



$$Feq = FR \cdot \frac{51}{X+21}$$

n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	415	2070	**140**	540	2700	**70**	700	3510
250	430	2160	**120**	560	2790	**40**	810	4050
200	470	2340	**85**	630	3150	**15**	900	4500

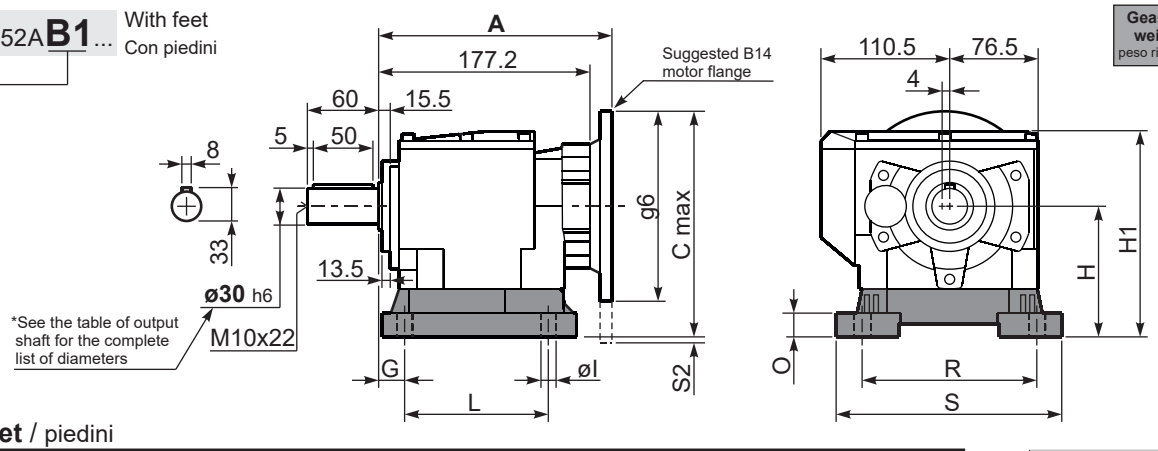
Input shaft / Albero in entrata



n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P452A**B1**... With feet / Con piedini



Gearbox weight / peso riduttore: With flange **8.7 kg** / With feet **8.9 Kg**

Feet / piedini

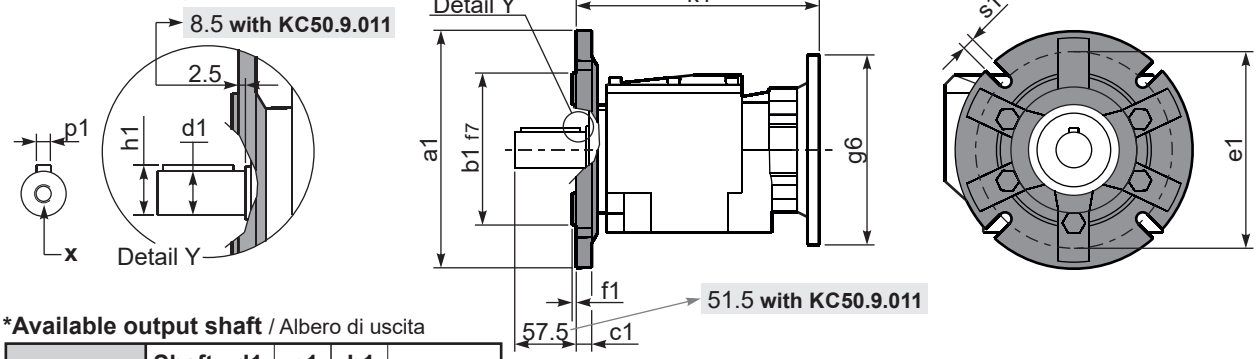
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	173	20	11	15 100/112B5 40 132B5	-	KC50.9.024
B4	30/35	20	130	180	149.5	216	193	18	14	20 132B5	-	KC60.9.024
S4	47-57	30	115	135	165	170	178	24	13.5	-	80/90B5	KC50.9.022
H3	023-233	30	130	135	135	185	193	25	14	20 132B5	-	KC50.9.025
M2	52/3	30	110	135÷150	100	190	173	18	11	15 100/112B5 40 132B5	-	KC50.9.023

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

P452A-**F**... Output flanges / flange di uscita



***Available output shaft** / Albero di uscita

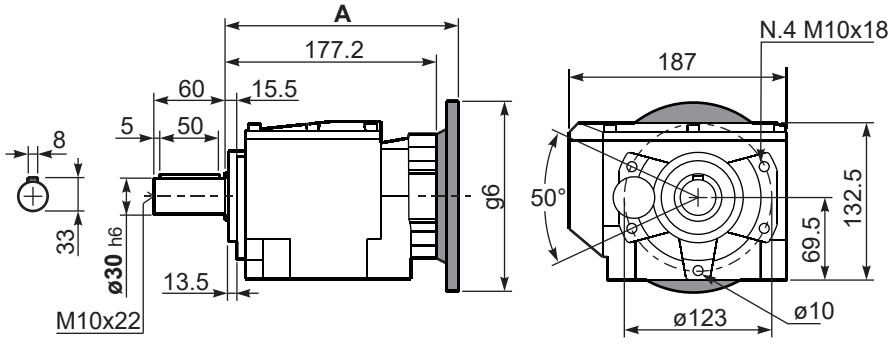
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request / A richiesta	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x60	8	31	M8x19
	ø 35x60	10	38	M10x22

Available output flanges / flange di uscita

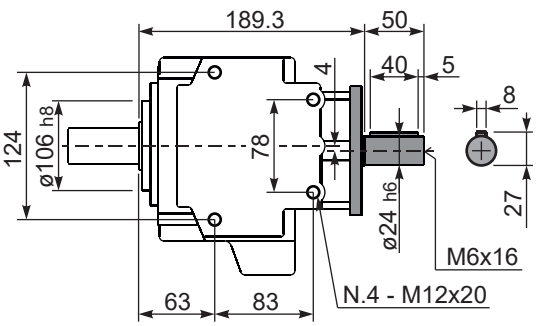
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P452A-**N**... Basic gearbox / Riduttore base



R452A-**N**... Input Shaft / Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
71 B5	195.7	222	160	198.2	K023.4.041	204.2
80/90 B5	197.7	242	200	200.2	K023.4.042	206.2
100/112 B5	206.7	267	250	209.2	K023.4.043	215.2
132 B5	224.7	292	300	227.2	KC50.4.043	233.2

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
80 B14	197.7	202	120	200.2	K085.4.046	206.2
90 B14	197.7	212	140	200.2	K085.4.045	206.2
100/112 B14	206.7	222	160	209.2	K085.4.047	215.2
132 B14	224.7	242	200	227.2	KC50.4.041	233.2

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100* 112	-G 132*	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
388	**3.61**	5.5	127	1.2	**6.6**	**155**	B									3018		01
331	**4.23**	5.5	148	1.2	**6.5**	**180**	B									3016		02
279	**5.01**	5.5	176	1.2	**6.4**	**210**	B									3014		03
231	**6.07**	5.5	213	1.2	**6.4**	**255**	B									3012		04
206	**6.81**	5.5	239	1.3	**6.7**	**300**	B									2018		05
176	**7.96**	5.5	279	1.2	**6.4**	**335**	B									2016		07
148	**9.45**	5.5	331	1.1	**5.8**	**360**	B									2014	**standard ø30**	08
122	**11.43**	4	293	1.1	**4.4**	**330**	B									2012		09
100	**14.00**	3	270	1.3	**3.9**	**360**	B									1316		21
84	**16.62**	3	321	1.1	**3.3**	**360**	B									1314	ø24	11
70	**20.10**	2.2	286	1.2	**2.5**	**330**	B									1312	ø25	12
57	**24.61**	2.2	350	0.9	**2.0**	**330**	B									1112	ø28	20
47.6	**29.41**	1.5	288	1.2	**1.9**	**360**	B									814	ø35	14
39.3	**35.58**	1.5	349	0.9	**1.4**	**330**	B									812	On request	15
34.6	**40.50**	1.1	290	1.1	**1.2**	**320**	B									614		16
31.7	**44.23**	1.1	316	0.8	**0.88**	**255**	B									810		17
28.6	**49.00**	1.1	351	0.9	**1.0**	**330**	B									612		18
23.0	**60.90**	0.75	299	0.8	**0.64**	**255**	B									610		19

The dynamic efficiency is **0.96** for all ratios

*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14
* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

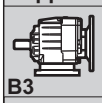
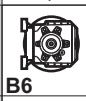
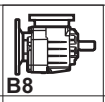
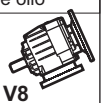
EN Unit **512A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **512A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **512A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **512A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **512A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

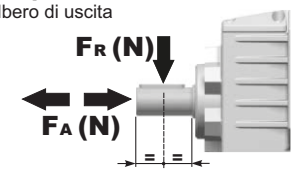
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 B3	 B6	B7	 B8	V5	V6	 V8
0.70 LT	0.80 LT	1.15 LT	1.20 LT	1.15 LT	1.25 LT	Ask
SHELL Omala S4 WE 320				**ENI** Telium VSF 320		

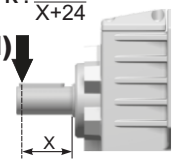
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

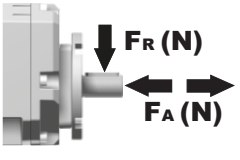
$F_{eq} = F_R \cdot \frac{54}{X+24}$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	460	2300	**140**	600	3000	**70**	780	3900
250	480	2400	**120**	620	3100	**40**	900	4500
200	520	2600	**85**	700	3500	**15**	1000	5000

Input shaft
Albero in entrata

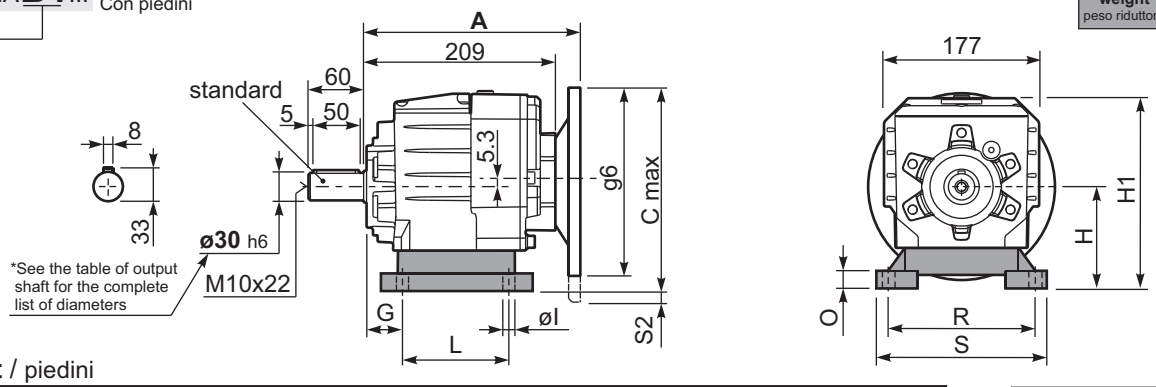


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

P512A**B1**... With feet
Con piedini

Gearbox weight peso riduttore	With flange **11.7 kg**
	With feet **11.9 Kg**



Feet / piedini

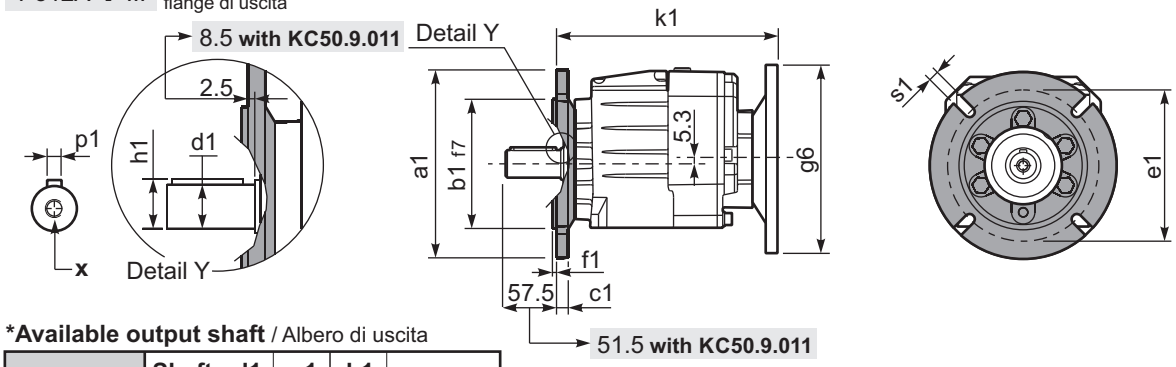
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	211	20	11	10 100/112B5 35 132B5	-	KC50.9.024
B4	30/35	20	130	180	149.5	216	231	18	14	15 132B5	-	KC60.9.024
S4	47-57	30	115	135	165	170	216	25	14	5 100/112B5 30 132B5	-	KC50.9.022
H3	023-233	30	130	135	135	185	231	25	14	15 132B5	-	KC50.9.025
M2	52/3	30	110	135÷150	100	190	211	18	11	10 100/112B5 35 132B5	-	KC50.9.023

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

P512A**-F**... Output flanges
flange di uscita

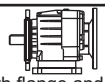


***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x60	8	31	M8x19
	ø 35x60	10	38	M10x22

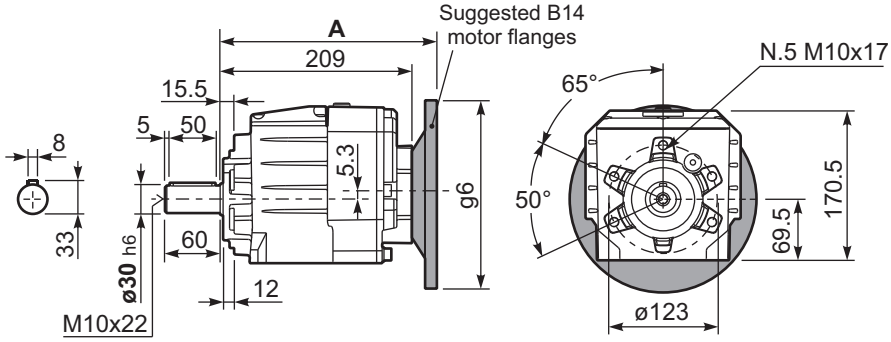
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

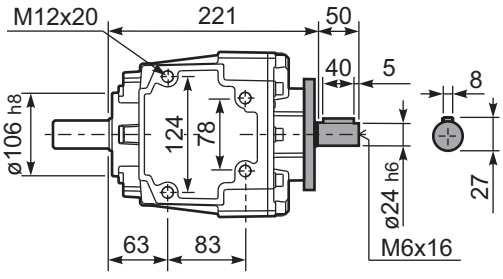


With flange and feet only on request. Ask for compatibility

P512A**-N**... Basic gearbox
Riduttore base



R512A**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
71 B5	227.5	215.3	160	230	K023.4.041	236
80/90 B5	229.5	235.3	200	232	K023.4.042	238
100/112 B5	238.5	260.3	250	241	K023.4.043	247
132 B5	259.5	285.3	300	259	KC51.4.043	265

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
80 B14	229.5	195.3	120	232	K085.4.046	238
90 B14	229.5	205.3	140	232	K085.4.045	238
100/112 B14	238.5	215.3	160	241	K085.4.047	247
132 B14	259.5	235.3	200	259	KC51.4.041	265

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
35.2	**39.79**	1.5	382	0.9	**1.4**	**360**	B				C	C		191316		01
29.6	**47.22**	1.1	331	1.1	**1.2**	**360**	B				C	C		191314		02
25.6	**54.73**	1.1	384	0.9	**1.0**	**360**	B				C	C		171314		03
21.1	**66.22**	0.75	318	1.0	**0.78**	**330**	B				C	C		171312		04
18.3	**76.69**	0.75	369	1.0	**0.73**	**360**	B				C	C		131314		05
16.7	**83.59**	0.55	297	1.2	**0.67**	**360**	B				C	C		190814	**standard ø30**	06
15.1	**92.78**	0.55	329	1.0	**0.55**	**330**	B				C	C		131312		07
13.4	**104.68**	0.55	371	1.0	**0.54**	**360**	B				C	C		101314		08
11.9	**117.22**	0.37	278	1.2	**0.44**	**330**	B				C	C		170812	ø24	09
11.1	**126.65**	0.37	300	1.1	**0.41**	**330**	B				C	C		101312	ø25	10
10.2	**136.62**	0.37	324	1.1	**0.41**	**360**	B				C	C		91314	ø28	11
8.5	**165.29**	0.25	264	1.2	**0.31**	**330**	B				C	C		91312	ø35	12
7.8	**180.40**	0.25	289	1.2	**0.31**	**360**	B				C	C		71314	On request	13
6.4	**218.26**	0.25	349	0.9	**0.24**	**330**	B				C	C		71312		14
5.8	**241.82**	0.25	387	0.9	**0.23**	**360**	B				C	C		90814		15
4.8	**292.57**	0.18	358	0.9	**0.18**	**330**	B				C	C		90812		16
4.4	**319.32**	0.18	391	0.9	**0.18**	**360**	B				C	C		70814		17
3.6	**386.33**	0.12	305	1.1	**0.13**	**330**	B				C	C		70812		18
2.9	**480.16**	0.12	380	0.7	**0.08**	**255**	B				C	C		70810		19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

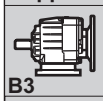
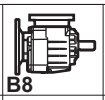
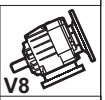
EN Unit **513A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **513A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **513A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **513A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

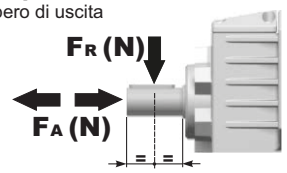
E El reductor tamaño **513A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 B3	B6	B7	 B8	V5	V6	 V8
1.00 LT	0.90 LT	1.25 LT	1.15 LT	1.45 LT	1.40 LT	Ask
SHELL Omala S4 WE 320			**ENI** Telium VSF 320			

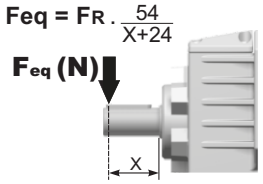
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$Feq = FR \cdot \frac{54}{X+24}$

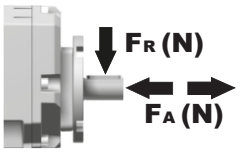


n_2	FA	FR
300	460	2300
250	480	2400
200	520	2600

n_2	FA	FR
140	600	3000
120	620	3100
85	700	3500

n_2	FA	FR
70	780	3900
40	900	4500
15	1000	5000

Input shaft
Albero in entrata

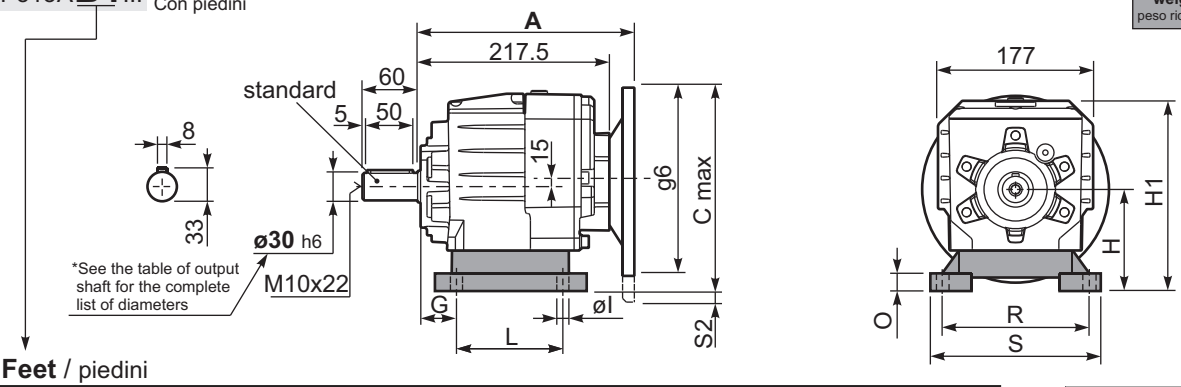


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P513A**B1**... With feet
Con piedini

Gearbox weight / peso riduttore: With flange **11.9 kg**, With feet **12.1 Kg**



Feet / piedini

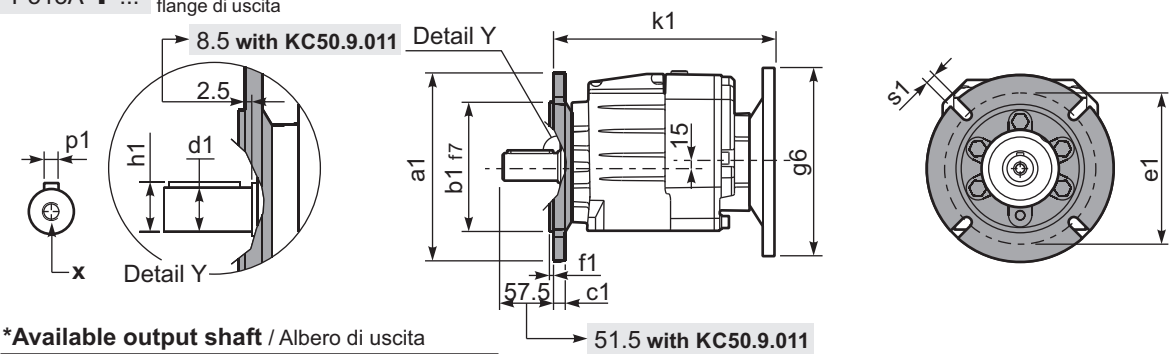
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	211	20	11	-	-	KC50.9.024
B4	30/35	20	130	180	149.5	216	231	18	14	-	-	KC60.9.024
S4	47-57	30	115	135	165	170	216	25	14	-	-	KC50.9.022
H3	023-233	30	130	135	135	185	231	25	14	-	-	KC50.9.025
M2	52/3	30	110	135÷150	100	190	211	18	11	-	-	KC50.9.023

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

P513A**-F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

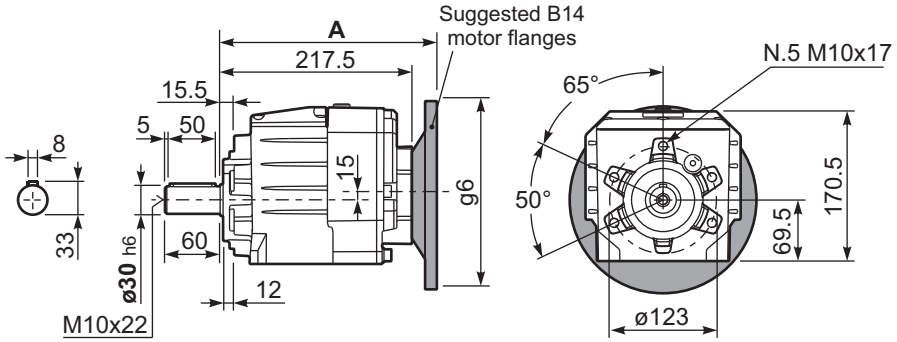
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x60	8	31	M8x19
	ø 35x60	10	38	M10x22

Available output flanges / flange di uscita

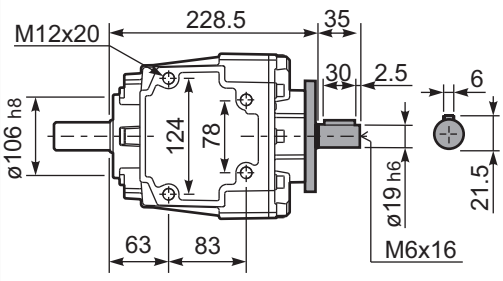
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P513A**-N**... Basic gearbox
Riduttore base



R513A**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
63 B5	238	215	140	240.5	K063.4.041	246.5
71 B5	236	225	160	238.5	K063.4.042	244.5
80/90 B5	238	245	200	240.5	K063.4.043	246.5

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
71 B14	236	197.5	105	238.5	K063.4.047	244.5
80 B14	238	205	120	240.5	K063.4.046	246.5
90 B14	238	215	140	240.5	K063.4.041	246.5

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132*	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
388	**3.61**	7.5	171	1.1	**8.0**	**190**	B									3018		01
331	**4.23**	7.5	200	1.1	**8.3**	**230**	B									3016		02
279	**5.01**	7.5	238	1.1	**7.9**	**260**	B									3014		03
231	**6.07**	7.5	288	1.1	**7.8**	**310**	B									3012		04
206	**6.81**	7.5	323	1.1	**7.9**	**350**	B									2018		05
176	**7.96**	7.5	378	1.0	**7.1**	**370**	B									2016		07
148	**9.45**	5.5	331	1.2	**6.6**	**410**	B									2014	**standard ø35**	08
122	**11.43**	5.5	401	1.1	**5.7**	**425**	B									2012		09
100	**14.00**	4	359	1.2	**4.7**	**435**	B									1316		10
84	**16.62**	4	426	1.2	**4.7**	**515**	B									1314	ø28 ø30 ø38 ø40	11
70	**20.10**	4	515	1.0	**4.0**	**530**	B									1312		12
57	**24.61**	3	475	1.1	**3.3**	**530**	B									1112		20
47.6	**29.41**	2.2	418	1.1	**2.3**	**450**	B									814		14
39.3	**35.58**	2.2	506	1.0	**2.3**	**530**	B									812	On request	15
34.6	**40.50**	1.1	290	1.1	**1.2**	**320**	B									614		16
31.7	**44.23**	1.5	433	0.9	**1.4**	**410**	B									810		17
28.6	**49.00**	1.1	351	1.1	**1.2**	**400**	B									612		18
23.0	**60.90**	1.1	436	0.9	**1.0**	**410**	B									610		19

The dynamic efficiency is **0.96** for all ratios

*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14
* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

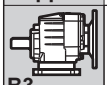
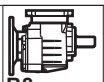
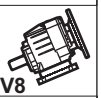
EN Unit **612A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **612A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **612A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **612A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **612A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

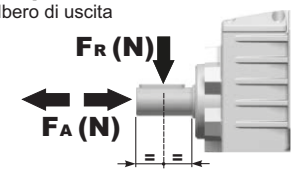
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	**B6**	**B7**	 **B8**	**V5**	**V6**	 **V8**
0.80 LT	1.00 LT	1.20 LT	1.20 LT	1.30 LT	1.35 LT	Ask
SHELL Omala S4 WE 320				**ENI** Telium VSF 320		

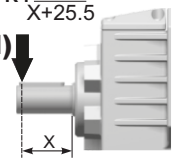
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$F_{eq} = F_R \cdot \frac{60.5}{X+25.5}$



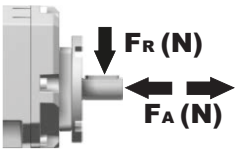


n_2	FA	FR
300	560	2800
250	600	3000
200	640	3200

n_2	FA	FR
140	740	3700
120	760	3800
85	840	4000

n_2	FA	FR
70	890	4200
40	1160	5800
15	1300	6500

Input shaft
Albero in entrata

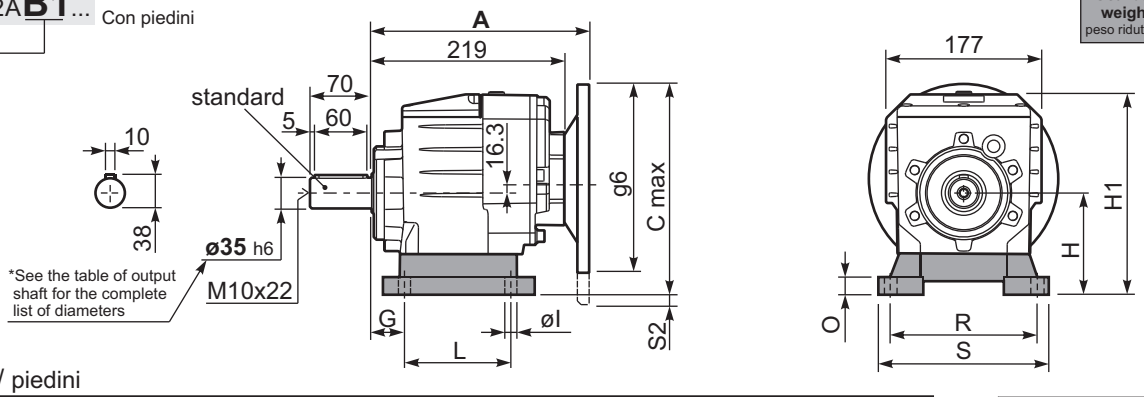


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

P612A**B1**... With feet
Con piedini

Gearbox weight peso riduttore	With flange **14.1 kg**
	With feet **14.5 kg**



Feet / piedini

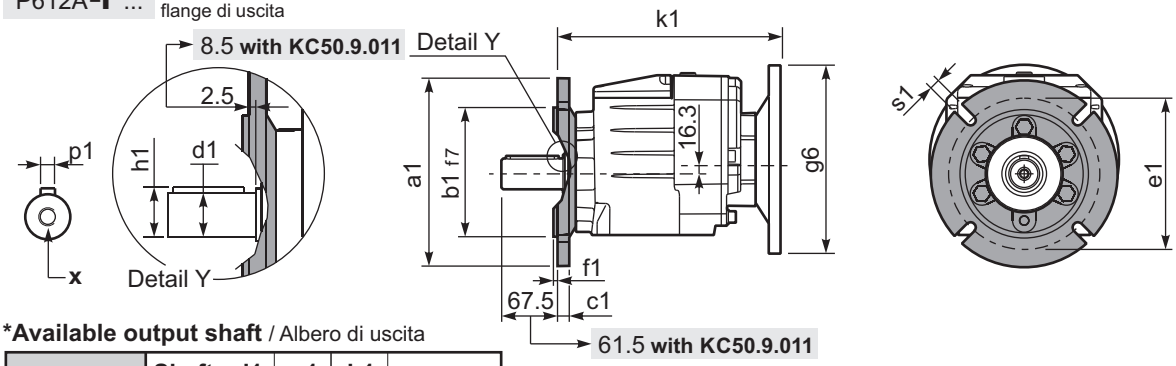
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B4	412/3	20	130	180	149.5	216	242	18	14	-	-	KC60.9.024
S4	47-57	30	115	135	165	170	227	25	14	13 132B5	-	KC50.9.022
M3	62/3	35	120	170÷185	110	230	232	20	14	8 132B5	-	KC60.9.023
S7	77	35	140	170	205	204	252	8	14	-	-	KC60.9.029LM
H4	024-243	35	155	170	150	225	267	30	14	-	-	KC60.9.025

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

P612A**-F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

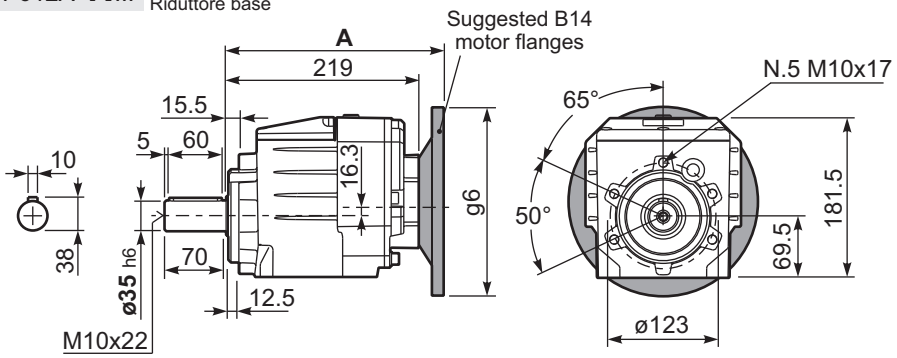
	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 28x60	8	31	M8x20
	ø 30x60	8	33	M10x22
	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M12x28

Available output flanges / flange di uscita

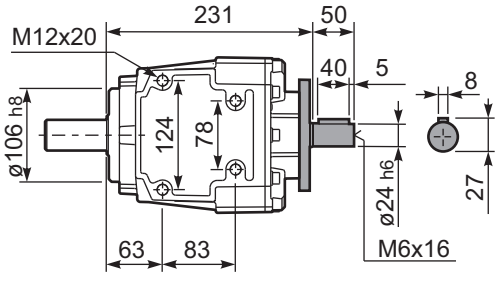
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	164	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P612A**-N**... Basic gearbox
Riduttore base



R612A**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
71 B5	237.5	251.3	160	240	K023.4.041	246
80/90 B5	239.5	271.3	200	242	K023.4.042	248
100/112 B5	248.5	296.3	250	251	K023.4.043	257
132 B5	269.5	321.3	300	269	KC51.4.043	275

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
80 B14	239.5	231.3	120	242	K085.4.046	248
90 B14	239.5	241.3	140	242	K085.4.045	248
100/112 B14	248.5	251.3	160	251	K085.4.047	257
132 B14	269.5	271.3	200	269	KC51.4.041	275

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
35.2	**39.79**	1.5	382	1.1	**1.7**	**434**	B				C	C		191316		05
29.6	**47.22**	1.5	453	1.1	**1.7**	**515**	B				C	C		191314		06
25.6	**54.73**	1.5	525	1.0	**1.5**	**515**	B				C	C		171314		07
24.5	**57.13**	1.5	548	1.0	**1.4**	**530**	B				C	C		191312		08
21.1	**66.22**	1.1	464	1.1	**1.2**	**530**	B				C	C		171312		09
19.7	**71.01**	1.1	498	0.9	**0.96**	**435**	B				C	C		191310		10
18.3	**76.69**	1.1	538	1.0	**1.0**	**515**	B				C	C		131314		11
17.0	**82.30**	0.75	396	1.1	**0.82**	**435**	B				C	C		171310		12
16.7	**83.59**	0.75	402	1.1	**0.82**	**440**	B				C	C		190814	**standard ø35**	13
15.1	**92.78**	0.75	446	1.2	**0.89**	**530**	B				C	C		131312		14
13.4	**104.68**	0.75	503	1.0	**0.77**	**515**	B				C	C		101314	ø28	15
11.9	**117.22**	0.75	564	0.9	**0.71**	**530**	B				C	C		170812	ø30	16
11.1	**126.65**	0.55	449	1.2	**0.65**	**530**	B				C	C		101312	ø38	17
10.3	**135.74**	0.55	482	0.9	**0.51**	**440**	B				C	C		130814	ø40	18
9.6	**145.68**	0.37	346	1.3	**0.47**	**435**	B				C	C		170810	On request	19
8.9	**157.40**	0.37	373	1.2	**0.43**	**435**	B				C	C		101310		20
8.5	**165.29**	0.37	392	1.3	**0.50**	**525**	B				C	C		91312		21
7.6	**185.29**	0.37	439	1.0	**0.37**	**440**	B				C	C		100814		22
6.8	**205.43**	0.37	487	0.9	**0.33**	**435**	B				C	C		91310		23
6.2	**224.18**	0.37	532	1.0	**0.37**	**530**	B				C	C		100812		24
5.8	**241.82**	0.25	387	1.1	**0.28**	**440**	B				C	C		90814		25
5.0	**278.62**	0.25	446	1.0	**0.24**	**435**	B				C	C		100810		26
4.8	**292.57**	0.25	468	1.1	**0.28**	**530**	B				C	C		90812		27
3.9	**363.63**	0.18	445	1.0	**0.19**	**435**	B				C	C		90810		28

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

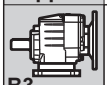
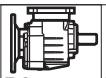
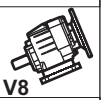
EN Unit **613A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **613A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **613A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **613A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

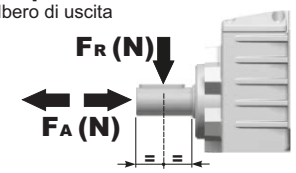
E El reductor tamaño **613A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.05 LT	1.10 LT	1.25 LT	1.25 LT	1.35 LT	1.50 LT	Ask
SHELL Omala S4 WE 320				**ENI** Telium VSF 320		

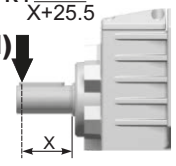
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{60.5}{X+25.5}$$

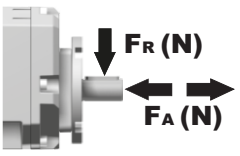


n_2	FA	FR
300	560	2800
250	600	3000
200	640	3200

n_2	FA	FR
140	740	3700
120	760	3800
85	840	4000

n_2	FA	FR
70	890	4200
40	1160	5800
15	1300	6500

Input shaft
Albero in entrata

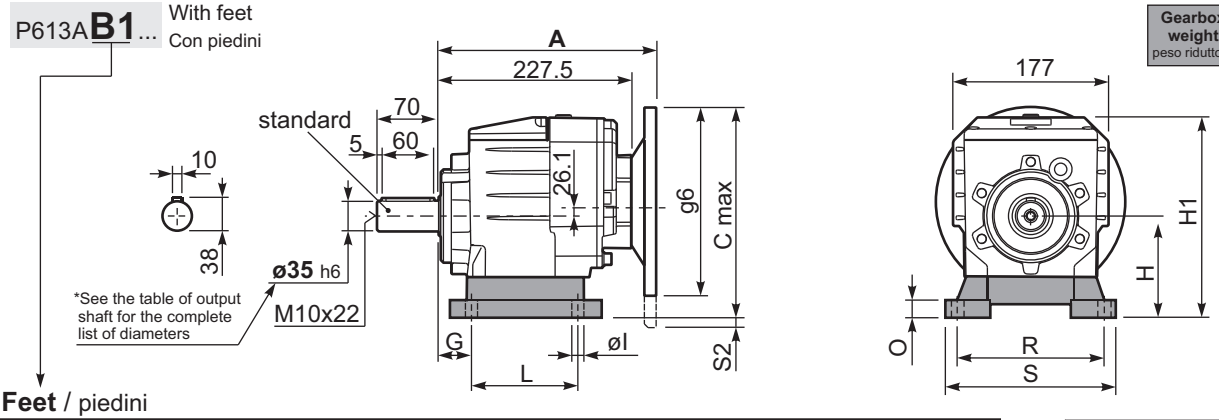


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P613A**B1**... With feet / Con piedini

Gearbox weight / peso riduttore: With flange **14.3 kg** / With feet **14.7 Kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B4	412/3	20	130	180	149.5	216	242	18	14	-	-	KC60.9.024
S4	47-57	30	115	135	165	170	227	25	14	13 132B5	-	KC50.9.022
M3	62/3	35	120	170÷185	110	230	232	20	14	8 132B5	-	KC60.9.023
S7	77	35	140	170	205	204	252	8	14	-	-	KC60.9.029LM
H4	024-243	35	155	170	150	225	267	30	14	-	-	KC60.9.025

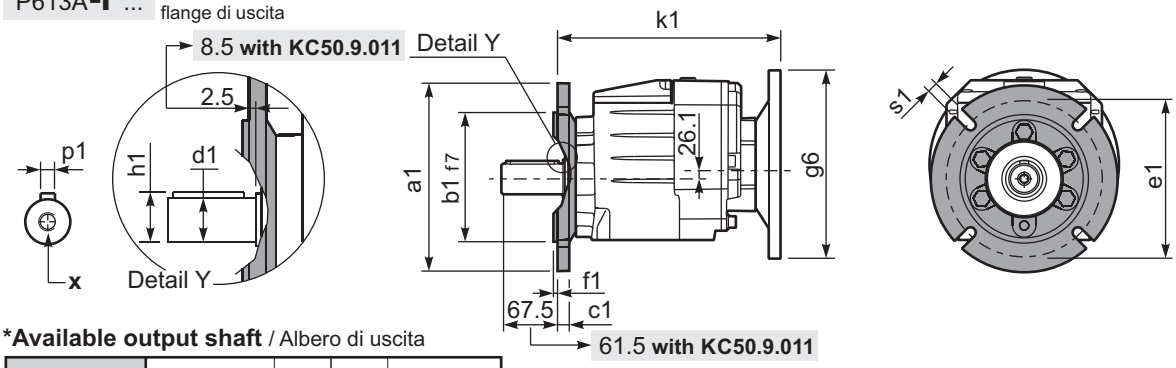
Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types
Tipi più diffusi

4

P613A**-F**... Output flanges / flange di uscita

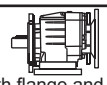


***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request / A richiesta	ø 28x60	8	31	M8x20
	ø 30x60	8	33	M10x22
	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M12x28

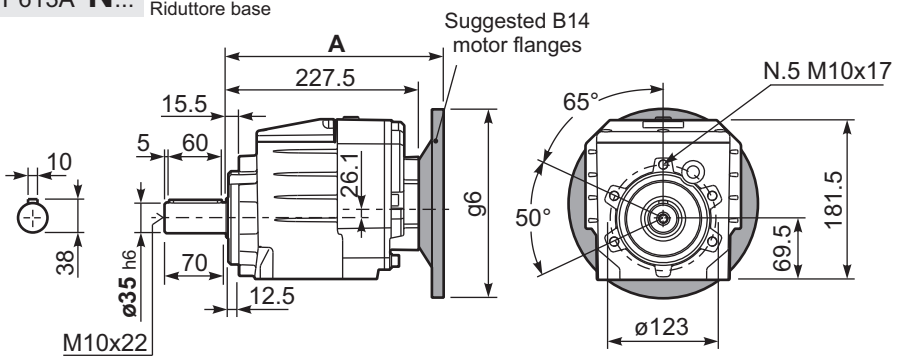
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	164	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

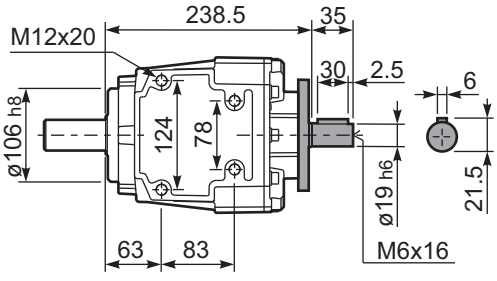


With flange and feet only on request. Ask for compatibility

P613A**-N**... Basic gearbox / Riduttore base



R613A**-N**... Input Shaft / Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
63 B5	248	251.1	140	250.5	K063.4.041	256.5
71 B5	246	261.1	160	248.5	K063.4.042	254.5
80/90 B5	248	281.1	200	250.5	K063.4.043	256.5

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
71 B14	246	233.6	105	248.5	K063.4.047	254.5
80 B14	248	241.1	120	250.5	K063.4.046	256.5
90 B14	248	251.1	140	250.5	K063.4.041	256.5

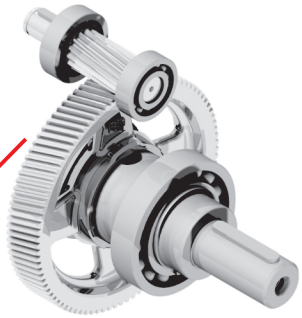
Cast iron in line gearboxes

A modular and compact product

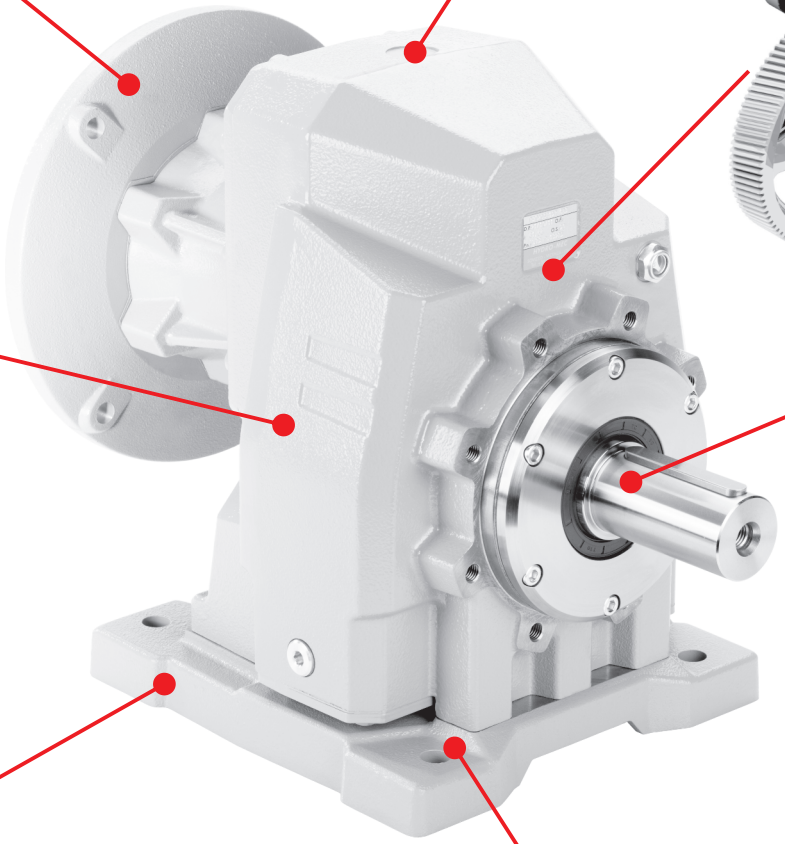
Flange
Fully modular to IEC and compact integrated motor. NEMA C flange.

Housing
Robust cast iron housing

Large center distance gears



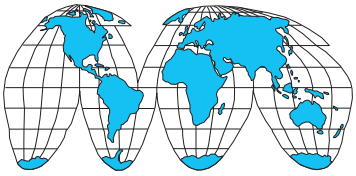
Gears
Hardened and ground gears.



Output shaft
With well proportioned bearings

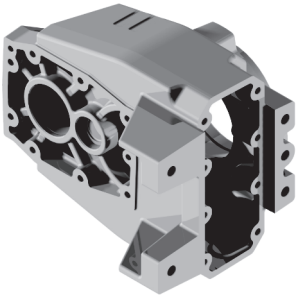
Feet
Removable feet.

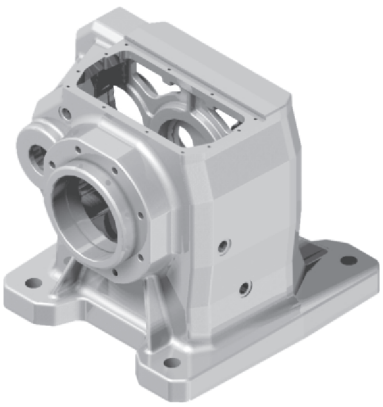
Foot prints
Compatible to the main standard of the market.



World wide sales network.

Single-piece Cast Iron housing
with high tensile strength. Precision machined for alignment of bearings and gearing





Specific type datasheet on page...

On page / A pagina /Auf Seite / À la page / En la página

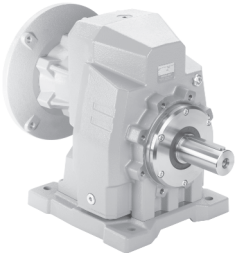
1 Stage

5-5	5-11	5-17	5-23	5-29
501C 225Nm	**701C** 380Nm	**801C** 670Nm	**851C** 700Nm	**901C** 1175Nm

Types / Tipi Tipen / Types Tipos

On page / A pagina / Auf Seite / À la page / En la página

2 and 3 Stages

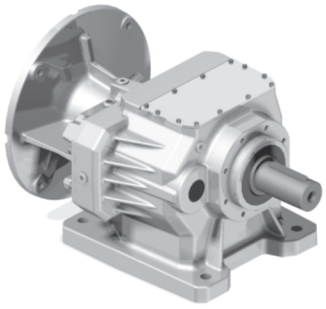


5-7	5-9	5-13	5-15	5-19	5-21	5-25	5-27	5-31	5-33
502C 320Nm	**503C** 320Nm	**702C** 675Nm	**703C** 675Nm	**802C** 900Nm	**803C** 900Nm	**852C** 1600Nm	**853C** 1800Nm	**902C** 2100Nm	**903C** 2100Nm

Types / Tipi Tipen / Types Tipos

On page / A pagina / Auf Seite / À la page / En la página

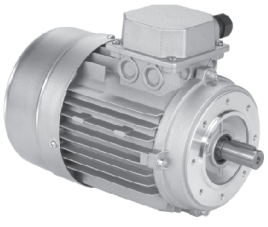
2 and 3 Stages



5-35	5-37	5-39	5-41
1002 2900Nm	**1003** 3000Nm	**1102** 4500Nm	**1103** 4600Nm

Types / Tipi Tipen / Types Tipos

On page / A pagina / Auf Seite / À la page / En la página



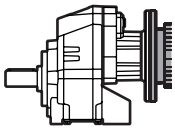
M-1									
56A 56B	**63A 63B**	**71A 71B**	**80A 80B**	**90S 90L**	**100LA 100LB**	**112M**	**132S 132M**	**160M 160L**	**180M 180L**

Types / Tipi Tipen / Types Tipos

Type - Tipo - Typ
Type - Tipo

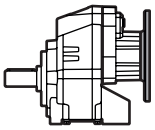
P

Cast iron coaxial gear boxes
Riduttori coassiali in Ghisa



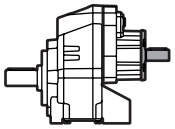
With IEC motor

M



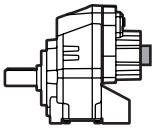
With motor flange

P



With male input shaft

R



Modular base

B

Not available for:
701C, 801C,
851C, 901C,
852C, 902C,
1002 , 1102,
1003 , 1103 .

Size - Grandezza - Grösse
Taille - Tamaño

702C

1 Stage
Riduzione
Stufe
Trains
Etapa

501C
701C
801C
851C
901C

2 Stages
Riduzioni
Stufen
Trains
Etapas

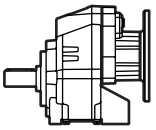
502C
702C
802C
852C
902C
1002
1102

3 Stages
Riduzioni
Stufen
Trains
Etapas

503C
703C
803C
853C
903C
1003
1103

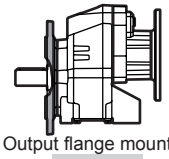
Mounting - Montaggio
Montage - Fixation
Tipo de montaje

-F



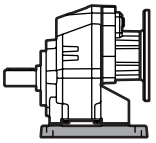
Without flange / feet

-N



Output flange mounted

-F



Mounted feet

B..

Feet / piedini

Feet Code	Market reference	G	H	R	L
B1	112	18	85	110	
B2	212/3	18	100	130	
S1	17	18	75	110	
S2	27	25	90		
M1	42/3	25	80		
L4	04	13	80		
L5	05	16	100		

You see feet code in the chart of the dimensions
Vedi codice piede nella tabella delle dimensioni

Ratio - Rapporto
Untersetzung
Reduction
Relaciòn

6.57

See technical data table

Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir Tableau données techniques

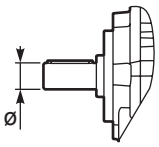
Ver tabla datos técnicos

Dossier according to 94/9/EG 8. b ii stored
0032

On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Output shaft
Albero uscita
Abtriebswelle
Arbre de sortie
Eje en salida

H



➡ **STANDARD**

501C 502C 503C
- **H** ➡ **ø30**
- **I** ⇨ ø35

701C 702C 703C
- **I** ➡ **ø35**
- **L** ⇨ ø38
- **M** ⇨ ø40

801C 802C 803C
- **M** ➡ **ø40**
- **P** ⇨ ø50

851C 852C 853C
- **P** ➡ **ø50**
- **J** ⇨ ø60

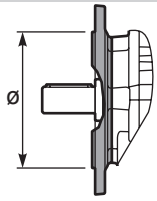
901C 902C 903C
- **P** ⇨ ø50
- **J** ➡ **ø60**

1002 1003
- **J** ➡ ø60

1102 1103
- **A** ➡ ø70

Output flange
Flangia uscita
Ausgangsflansch
Bride de sortie
Brida en salida

4



➡ **STANDARD**

- **N** Senza flangia / Without flange

501C 502C 503C
- **3** ⇨ ø160
- **4** ⇨ ø200
- **5** ➡ **ø250**

701C 702C 703C
- **4** ⇨ ø200
- **5** ➡ **ø250**

801C 802C 803C
- **5** ⇨ ø250
- **6** ➡ **ø300**

851C 852C 853C
- **6** ⇨ ø300
- **7** ➡ **ø350**

901C 902C 903C 1002 1003
- **6** ⇨ ø300
- **7** ➡ **ø350**
- **8** ⇨ ø450

1102 1103
- **7** ⇨ ø350
- **8** ➡ **ø450**

Motor size
Motor size - Grandezza motore
Motor Grösse
Grandeur moteur - Tamaño motor

-F

Flange
Flangia

B5
- **-A**=56 (ø120)
- **-B**=63 (ø140)
- **-C**=71 (ø160)
- **-D**=80 (ø200)
- **-E**=90 (ø200)
- **-F**=100÷112 (ø250)
- **-G**=132 (ø300)
- **-H**=160 (ø350)
- **-I**=180 (ø350)
- **-L**=200 (ø400)
- **CA**=225 (ø450)

B14
- **-O**=56 (ø80)
- **-P**=63 (ø90)
- **-Q**=71 (ø105)
- **-R**=80 (ø120)
- **-T**=90 (ø140)
- **-U**=100÷112 (ø160)
- **-V**=132 (ø200)

Type R
Tipo R

503C
- **-1** ⇨ ø14

502C 703C 803C
- **-2** ⇨ ø19

702C 802C 853C 903C
- **-3** ⇨ ø24

852C 902C 1003 1103
- **-4** ⇨ ø28

1002 1102
- **-6** ⇨ ø42

Without flange
Senza flangia

- **-M** ⇨ With coupling

503C
- **-Z** ⇨ ø9 (56B5)
- **-0** ⇨ ø11 (63B5)
- **-1** ⇨ ø14 (71B5)

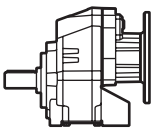
502C 703C 803C
- **-1** ⇨ ø14 (71B5)
- **-2** ⇨ ø19 (80B5)
- **-3** ⇨ ø24 (90B5)

702C 802C 853C 903C
- **-2** ⇨ ø19 (80B5)
- **-3** ⇨ ø24 (90B5)
- **-4** ⇨ ø28 (100B5)

501C
- **-4** ⇨ ø28 (100B5)

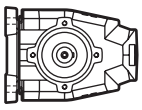
Mounting position
Posizione montaggio
Einbaulage
Position de montage
Posición de montaje

B3

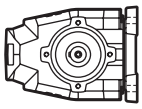


B3

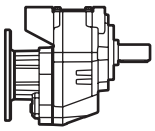
STANDARD



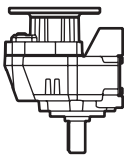
B6



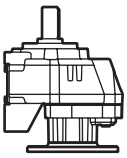
B7



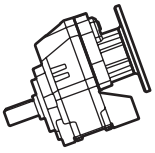
B8



V5



V6



V8

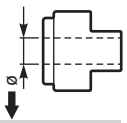
Input bore
Foro entrata
Eingangshohlwelle
Trou d'entree
Eje hueco de entrada

-

- **-** Nothing indication: **standard bore**

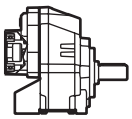
Nessuna indicazione: **foro standard**

COUPLING



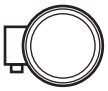
- **A** = 9mm
- **B** = 11mm
- **C** = 14mm
- **D** = 19mm
- **E** = 24mm
- **F** = 28mm

- **0** Ready for input coupling / Predisposto per giunto



Terminal box position
Posizione morsettiera
Klemmkastenlage
Position boîte à bornes
Posición caja de bornes

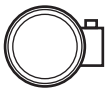
B



A

B

STANDARD



C

D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

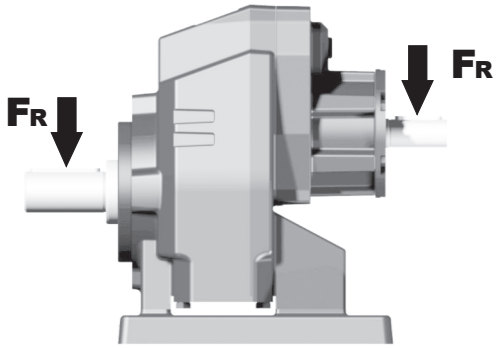
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$
Linear movement / traslazione / linearbewegung / translation / translacion	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

	$\mathbf{M}\ [Nm] = \frac{\mathbf{9550} \cdot \mathbf{P}[KW]}{\mathbf{n}\ [rpm]}$
	$\mathbf{M}\ [lb\ in] = \frac{\mathbf{63030} \cdot \mathbf{P}[HP]}{\mathbf{n}\ [rpm]}$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



$\mathbf{F_R}\ [N] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{2000}}{\mathbf{d}\ [mm]} \cdot \mathbf{f_K}$	$\mathbf{F_R}\ [N] = \frac{\mathbf{M}\ [lb\ in] \cdot \mathbf{8.9}}{\mathbf{d}\ [in]} \cdot \mathbf{f_K}$

M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo
$\mathbf{f_K}$	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión **1.15** Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje **1.25** Catena / Chain sprochets / Antriebskette / Chaîne / Cadena **1.75** Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal **2.50** Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana

— If your application requires higher radial loads, contact our technical office. Higher load may be possible.
— Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
— Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
— Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
— En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

B Output speed / Velocità in uscita / Abtriebsdrehzahl / Vitesse de sortie / Velocidad de salida

Nominal power / Potenza nominale / Max. mögliche Leistung / Poissance nominale / Potencia nominal

Gear size / Grandezza riduttore / Getriebegröße / Taille réducteur / Tamaño reductor

Motor power / Potenza motore / Motorleistung / Puissance moteur / Potencia motor

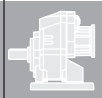
A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

Flange code / Codice flangia / Flanschtype / Code bride / Código bridas

Input speed / Velocità in entrata / Eintriebsdrehzahl / Vitesse en entrée / Velocidad de entrada

702C Coaxial - Gear 675Nm

Rating - Cast Iron COAXIAL GEARBOXES



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft	Ratios code
213	**6.57**	7.5	312	1.2	8.8	380	B									3018		01
185	**7.56**	7.5	359	1.1	7.9	390	B									3016		02
159	**8.82**	7.5	419	1.0	7.1	410	B									3014		03
113	**12.39**	7.5	588	1.0	7.2	580	B									2018		04
98	**14.24**	5.5	499	1.2	6.4	600	B									2016		05

C Ratio / Rapporto / Untersetzung / Rapport de réduction / Relación

Transmitted torque / Momento torcente trasmesso / Mögliche Drehmomente / Couple de sortie / Par transmitido

Service factor / Fattore di servizio / Betriebsfaktor / Facteur de service / Factor de servicio

Output shaft diam. / Diam. albero uscita / Durchmesser abtriebswelle / Diametre arbre lent / Diametro eje de salida

Notes / Note / Anmerkungen / Note / Notas

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. 3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora **≤ 10**	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora **> 10**	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D Motor flange available / Flange disponibili / Erhältliche Motorflansche / Brides disponibles / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Reduzierhülsen / Montage avec douille de réduction / Montaje con casquillo de reducción

C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur / Posición agujeros brida / base motor

B) Available without reduction bushes / Disponibile anche senza boccola / Auch ohne Reduzierbuchse verfügbar / Disponible aussi sans douille de réduction / Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -D 80	-E 90	-F 100 112	Available B14 motor flanges -R 80	-T 90	-U 100 112		Output Shaft	Ratios code
481	**2.91**	4	76	1.8	7.2	140	B	B		B	B		3499	standard ø30	01
373	**3.75**	4	98	1.6	6.4	160	B	B		B	B		28105		02
263	**5.33**	4	140	1.2	4.8	170	B	B		B	B		21112		03
219	**6.39**	4	167	1.0	4.0	170	B	B		B	B		18115		04
178	**7.85**	4	205	1.1	4.3	225	B	B		B	B		13102		05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

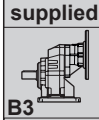
EN Unit **501C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **501C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **501C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **501C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **501C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

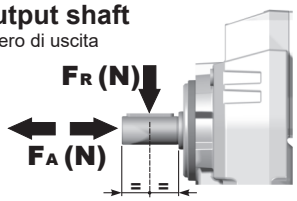
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.25 LT	0.80 LT	0.80 LT	0.70 LT	1.40 LT	0.80 LT	Ask
SHELL Omala S4 WE 320				**ENI** Telium VSF 320		

For all details on lubrication and plugs check our website Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

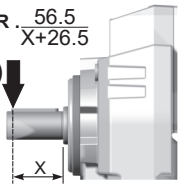
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{56.5}{X+26.5}$$



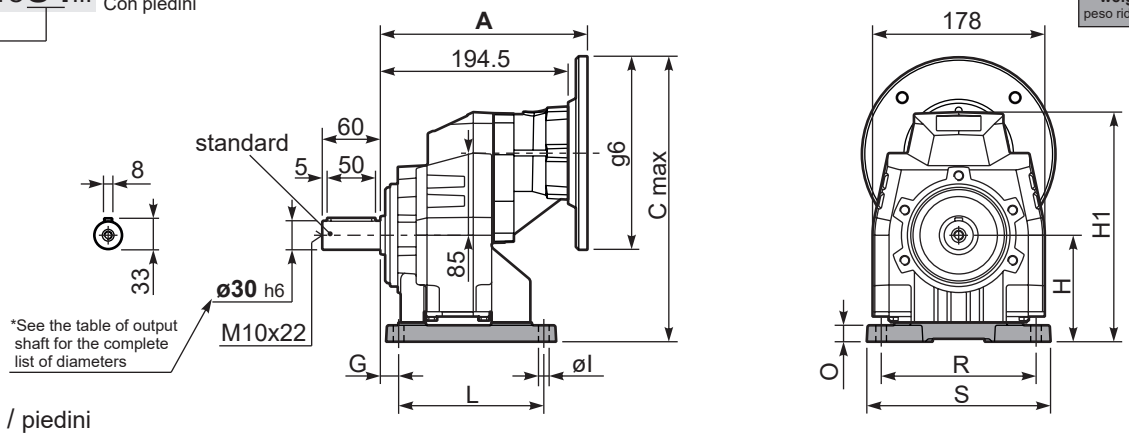
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	500	2500	**140**	640	3200	**70**	820	4100
250	540	2700	**120**	680	3400	**40**	1020	5100
200	580	2900	**85**	760	3800	**15**	1100	5500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

P501C**S4**... With feet
Con piedini

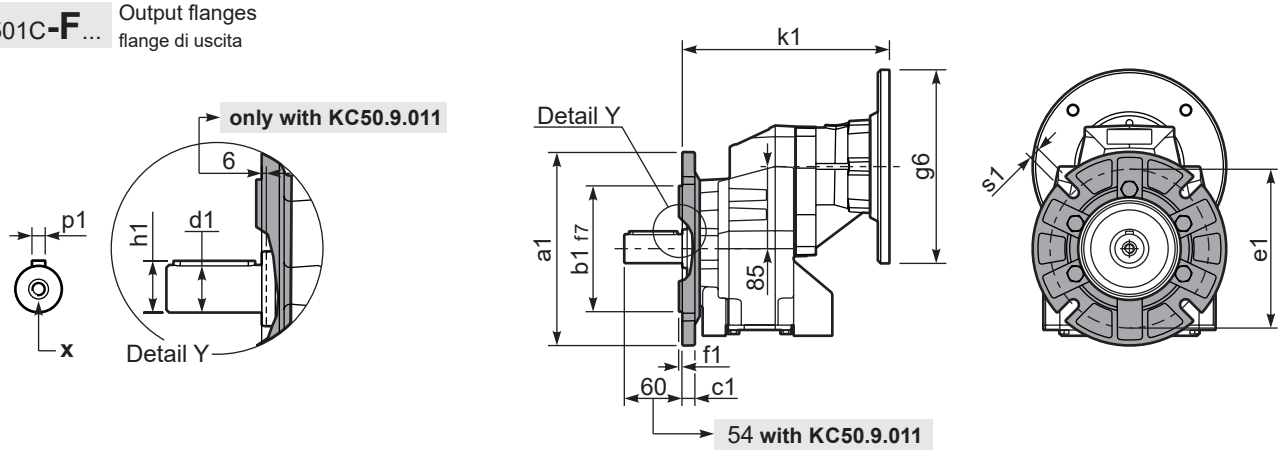
Gearbox weight peso riduttore	
With flange	**20.0 kg**
With feet	**22.0 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
S4	47	30	115	135	165	170	242	22	13.5	-	C50C.9.024
-	-	-	-	-	-	-	-	-	-	-	-

P501C**-F**... Output flanges
flange di uscita



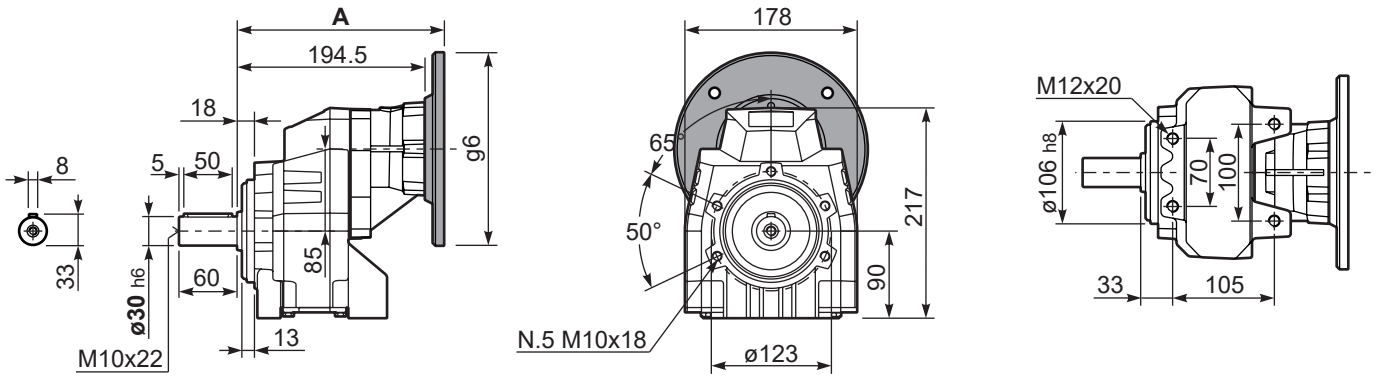
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	-	-	-	-

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	
160	110	14	130	3.5	11	KC50.9.011	With flange and feet only on request. Ask for compatibility
200	130	13	165	3.5	11	KC50.9.012	
250	180	15.5	215	4	14	KC50.9.013	

P501C**-N**... Basic gearbox
Riduttore base



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
80/90 B5	215	300	200	215	K023.4.042	221
100/112 B5	224	325	250	224	K023.4.043	230

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
80 B14	215	260	120	215	K085.4.046	221
90 B14	215	270	140	215	K085.4.045	221
100/112 B14	224	280	160	224	K085.4.047	230

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -Q 71	-R 80	-T 90	-U 100 112		Output Shaft ø	Ratios code
167	**8.38**	4	215	1.0	**4.1**	**225**	B					C	C			2821		01
139	**10.04**	3	194	1.2	**3.7**	**240**	B					C	C			2818		02
114	**12.33**	3	238	1.1	**3.2**	**260**	B					C	C			2813		03
92	**15.16**	2.2	215	1.2	**2.6**	**260**	B					C	C			1921		04
80	**17.57**	2.2	250	1.1	**2.3**	**270**	B					C	C			1721		05
77	**18.16**	2.2	258	1.1	**2.4**	**290**	B					C	C			1918		06
67	**21.05**	2.2	299	1.1	**2.3**	**320**	B					C	C			1718		07
63	**22.30**	2.2	317	1.0	**2.2**	**320**	B					C	C			1913		08
57	**24.70**	1.5	242	1.3	**2.0**	**320**	B					C	C			1518		09
54	**25.85**	1.5	253	1.3	**1.9**	**320**	B					C	C			1713	**standard**	10
47.5	**29.49**	1.5	289	1.1	**1.7**	**320**	B					C	C			1318	**ø30**	11
46.1	**30.34**	1.5	297	1.1	**1.6**	**320**	B					C	C			1513		12
41.7	**33.60**	1.1	240	1.0	**1.1**	**250**	B					C	C			1021		13
38.7	**36.21**	1.1	259	1.2	**1.3**	**320**	B					C	C			1313		14
34.8	**40.25**	1.1	288	1.0	**1.1**	**300**	B					C	C			1018		15
28.3	**49.43**	1.1	354	0.9	**0.99**	**320**	B					C	C			1013		16
26.7	**52.53**	0.75	258	1.0	**0.76**	**260**	B					C	C			918		17
21.7	**64.51**	0.75	317	1.0	**0.75**	**315**	B					C	C			913		18
20.2	**69.37**	0.37	168	1.1	**0.42**	**190**	B					C	C			718		19
16.4	**85.19**	0.37	206	1.1	**0.41**	**230**	B					C	C			713		20

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

EN Unit **502C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **502C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **502C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **502C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

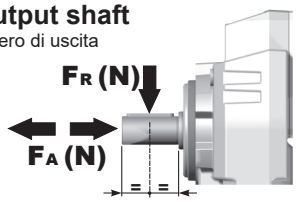
E El reductor tamaño **502C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.25 LT	0.80 LT	0.80 LT	0.70 LT	1.40 LT	0.80 LT	Ask
SHELL Omala S4 WE 320				**ENI** Telium VSF 320		

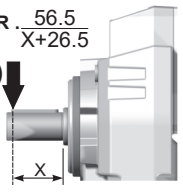
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



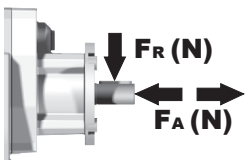
$F_{eq} = F_R \cdot \frac{56.5}{X+26.5}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	500	2500	**140**	640	3200	**70**	820	4100
250	540	2700	**120**	680	3400	**40**	1020	5100
200	580	2900	**85**	760	3800	**15**	1100	5500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

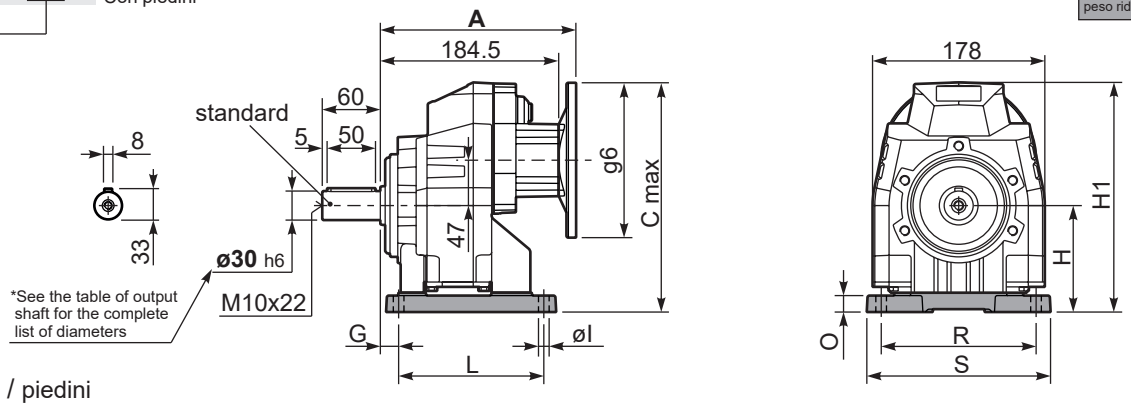


n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

P502C**S4**... With feet
Con piedini

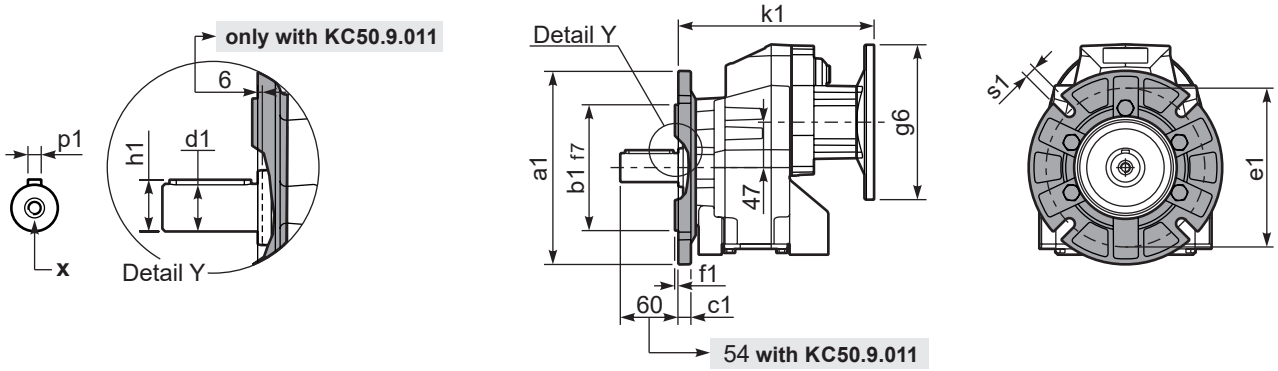
Gearbox weight peso riduttore	With flange **15.0 kg**
	With feet **17.0 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
S4	47	30	115	135	165	170	242	22	13.5	-	C50C.9.024
-	-	-	-	-	-	-	-	-	-	-	-

P502C**-F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

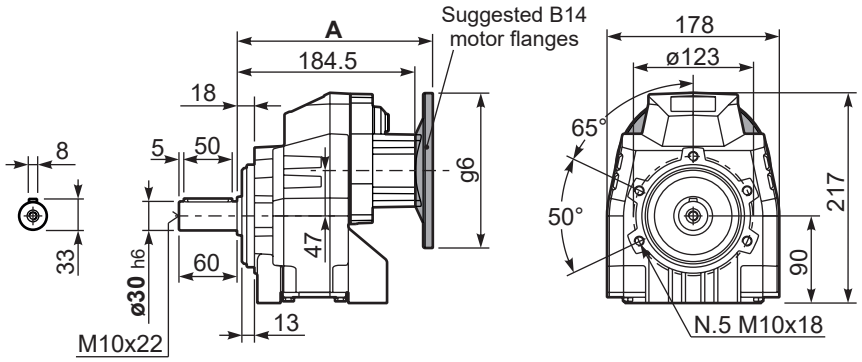
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	-	-	-	-

Available output flanges / flange di uscita

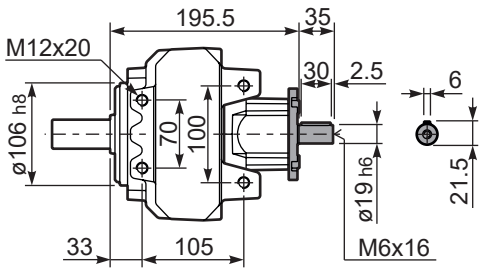
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P502C**-N**... Basic gearbox
Riduttore base



R502C**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
63 B5	205	232	140	205	K063.4.041
71 B5	203	242	160	203	K063.4.042
80/90 B5	205	262	200	205	K063.4.043
100/112 B5	220.3	287	250	220.3	KC40.4.043

k1 with KC50.9.011
211
209
211
226.3

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B14	203	214.5	105	203	K063.4.047
80 B14	205	222	120	205	K063.4.046
90 B14	205	232	140	205	K063.4.041
100/112 B14	220.3	242	160	220.3	KC40.4.041

k1 with KC50.9.011
209
211
211
226.3

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft ø	Ratios code
18.8	**74.33**	0.37	176	1.8	**0.67**	320			C	C		191313		01
17.0	**82.56**	0.37	196	1.6	**0.60**	320			C	C		151318		02
16.0	**87.48**	0.37	207	1.5	**0.57**	320			C	C		131713		03
13.8	**101.40**	0.37	240	1.3	**0.49**	320			C	C		151313		04
11.4	**122.57**	0.37	291	1.1	**0.41**	320			C	C		131313		05
10.1	**138.59**	0.37	329	1.0	**0.36**	320			C	C		101318		06
8.7	**160.82**	0.25	257	1.2	**0.31**	320			C	C		91713		07
8.2	**170.20**	0.25	272	1.2	**0.29**	320			C	C		101313	**standard**	08
7.6	**183.48**	0.25	294	1.1	**0.27**	320			C	C		91318	**ø30**	09
6.5	**214.15**	0.18	262	1.2	**0.23**	320			C	C		71713		10
6.2	**225.33**	0.18	276	1.2	**0.22**	320			C	C		91313		11
5.7	**244.32**	0.18	299	1.1	**0.20**	320			C	C		71318		12
5.5	**254.15**	0.18	311	1.0	**0.20**	320			C	C		61713		13
4.8	**289.96**	0.18	355	0.9	**0.17**	320			C	C		61318		14
4.7	**300.05**	0.18	367	0.9	**0.17**	320			C	C		71313		15
3.9	**356.09**	0.12	282	1.1	**0.14**	320			C	C		61313		16

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

5

EN Unit **503C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **503C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **503C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **503C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

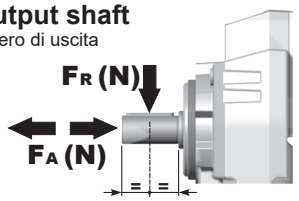
E El reductor tamaño **503C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.35 LT	0.80 LT	0.80 LT	0.70 LT	1.50 LT	0.85 LT	Ask
SHELL Omala S4 WE 320			**ENI** Telium VSF 320			

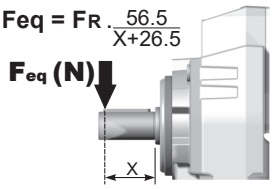
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



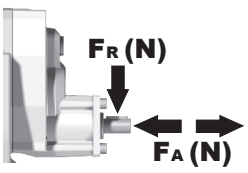
$F_{eq} = F_R \cdot \frac{56.5}{X+26.5}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	500	2500	**140**	640	3200	**70**	820	4100
250	540	2700	**120**	680	3400	**40**	1020	5100
200	580	2900	**85**	760	3800	**15**	1100	5500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

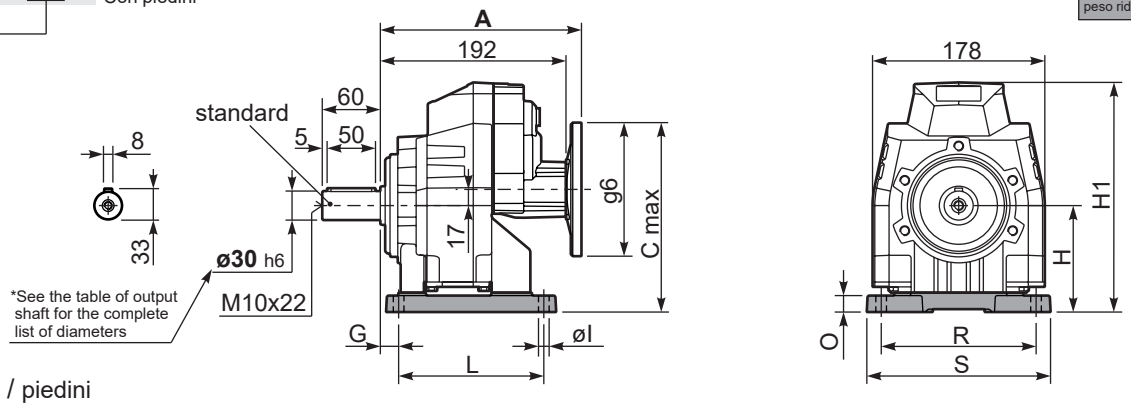


n_1	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

P503C**S4**... With feet
Con piedini

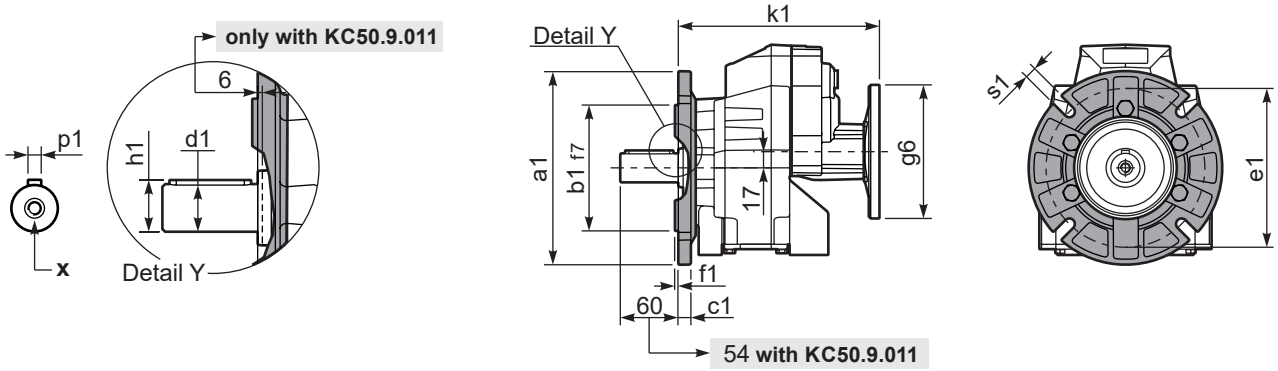
Gearbox weight peso riduttore	With flange **15.0 kg**
	With feet **17.0 Kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
S4	47	30	115	135	165	170	242	22	13.5	-	C50C.9.024
-	-	-	-	-	-	-	-	-	-	-	-

P503C**-F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

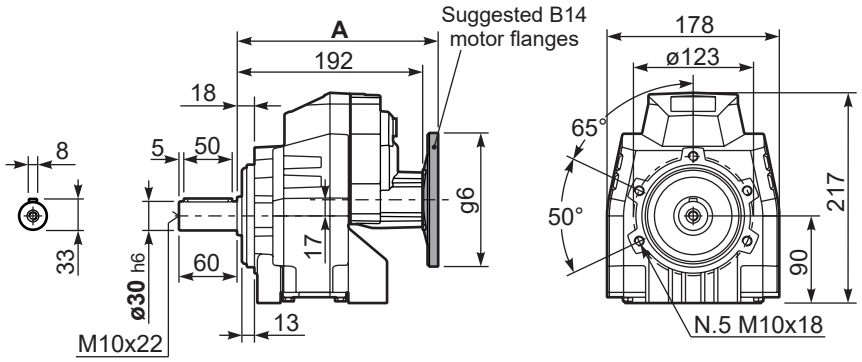
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	-	-	-	-

Available output flanges / flange di uscita

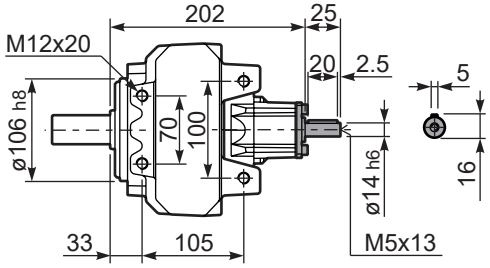
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	11	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P503C**-N**... Basic gearbox
Riduttore base



R503C**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
63 B5	210.5	202	140	210.5	K050.4.041
71 B5	208	212	160	208	K050.4.042

k1 with KC50.9.011
216.5
214

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
56 B14	208	172	80	208	KC40.4.049
63 B14	210.5	177	90	210.5	K050.4.047
71 B14	208	184.5	105	208	K050.4.045

k1 with KC50.9.011
214
216.5
214

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -G	B14 motor flanges - - - -		Output Shaft	Ratios code
507	**2.76**	9	166	1.6	**14.4**	**265**	132	- - - -	2980	**standard**	01
395	**3.54**	9	213	1.3	**11.6**	**275**			2485	**ø35**	02
277	**5.06**	9	304	1.0	**8.6**	**290**		**not available**	1891		03
241	**5.81**	7.5	281	1.2	**8.5**	**330**			1693	ø40	04
206	**6.79**	7.5	329	1.2	**8.4**	**380**			1495	On request	05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **701C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **701C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **701C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **701C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

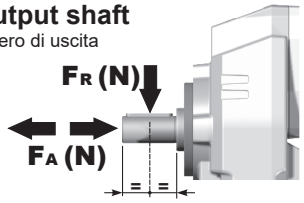
E El reductor tamaño **701C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.85 LT	1.40 LT	1.40 LT	1.30 LT	2.25 LT	1.60 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

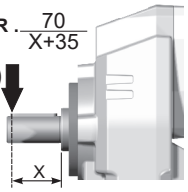
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$Feq = FR \cdot \frac{70}{X+35}$



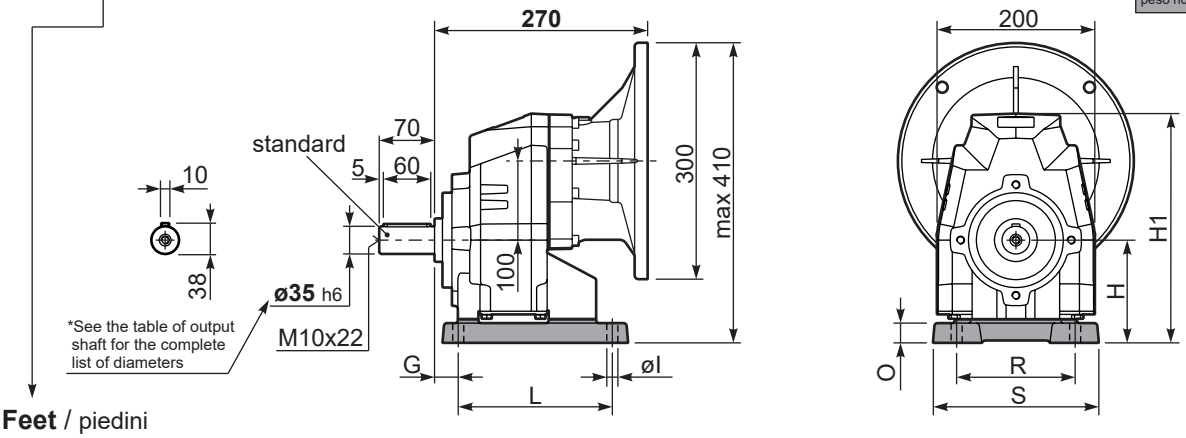
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	680	3400	**140**	960	4800	**70**	1300	6500
250	760	3800	**120**	1040	5200	**40**	1460	7300
200	900	4500	**85**	1120	5600	**15**	1800	9000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

P701C**S6**... With feet
Con piedini

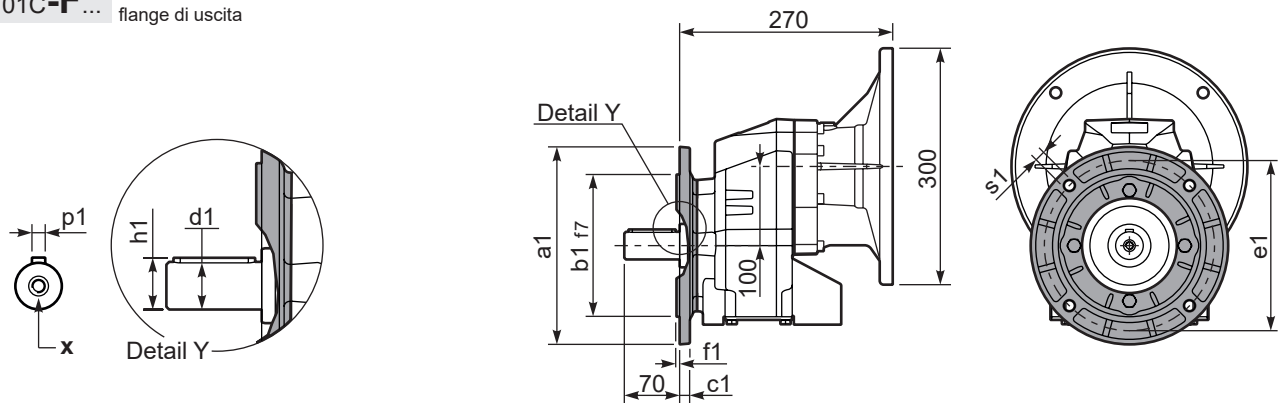
Gearbox weight peso riduttore		
	With flange	**36.0 kg**
	With feet	**39.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øI	B5 max. Flange	kit code
B4	412/3	19.5	130	180	149.5	216	290	25	14	-	KC70.9.022
S6	67	30	130	150	195	210	290	25	14	-	KC70.9.024
H5	025/253	35	160	170	175	220	320	30	16	-	KC70.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P701C**-F**... Output flanges
flange di uscita



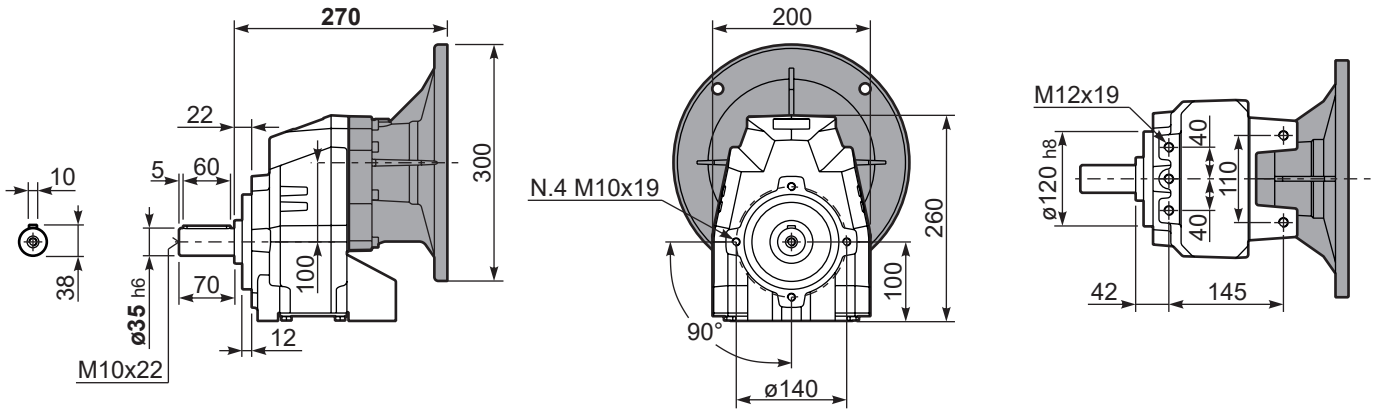
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 40x80	12	43	M12x28

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	
200	130	11	165	3.5	11	KC70.9.012	With flange and feet only on request. Ask for compatibility
250	180	13	215	4	14	KC70.9.013	
-	-	-	-	-	-	-	

P701C**-N**... Basic gearbox
Riduttore base



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
213	**6.57**	7.5	312	1.2	**8.8**	**380**	B									3018		01
185	**7.56**	7.5	358	1.1	**7.9**	**390**	B									3016		02
159	**8.82**	7.5	419	1.0	**7.1**	**410**	B									3014		03
113	**12.39**	7.5	588	1.0	**7.2**	**580**	B									2018		04
98	**14.24**	5.5	499	1.2	**6.4**	**600**	B									2016	**standard**	05
84	**16.75**	5.5	587	1.1	**6.1**	**665**	B									1618	**ø35**	06
73	**19.25**	5.5	675	1.0	**5.4**	**675**	B									1616		07
64	**21.78**	4	558	1.2	**4.7**	**675**	B									1318	ø40	08
56	**25.04**	4	642	1.1	**4.1**	**675**	B									1316	On request	09
47.9	**29.23**	4	750	0.9	**3.5**	**675**	B									1314		10
45.7	**30.65**	3	592	1.1	**3.4**	**675**	B									1116		11
39.1	**35.78**	3	691	1.0	**2.9**	**675**	B									1114		12
36.3	**38.55**	2.2	548	1.1	**2.3**	**580**	B									818		13
31.6	**44.32**	2.2	630	1.1	**2.3**	**665**	B									816		14
27.1	**51.74**	2.2	735	0.9	**2.0**	**675**	B									814		15
22.9	**61.03**	1.1	437	1.1	**1.2**	**480**	B									616		16
19.6	**71.25**	1.1	510	1.1	**1.2**	**560**	B									614		17

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **702C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **702C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **702C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **702C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

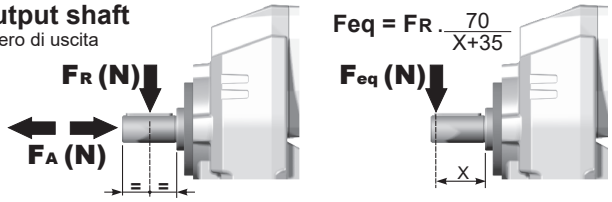
E El reductor tamaño **702C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
2.10 LT	1.40 LT	1.40 LT	1.30 LT	2.25 LT	1.60 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

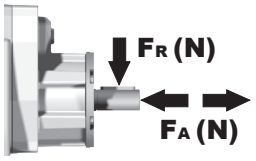
Output shaft
Albero di uscita



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	680	3400	**140**	960	4800	**70**	1300	6500
250	760	3800	**120**	1040	5200	**40**	1460	7300
200	900	4500	**85**	1120	5600	**15**	1800	9000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

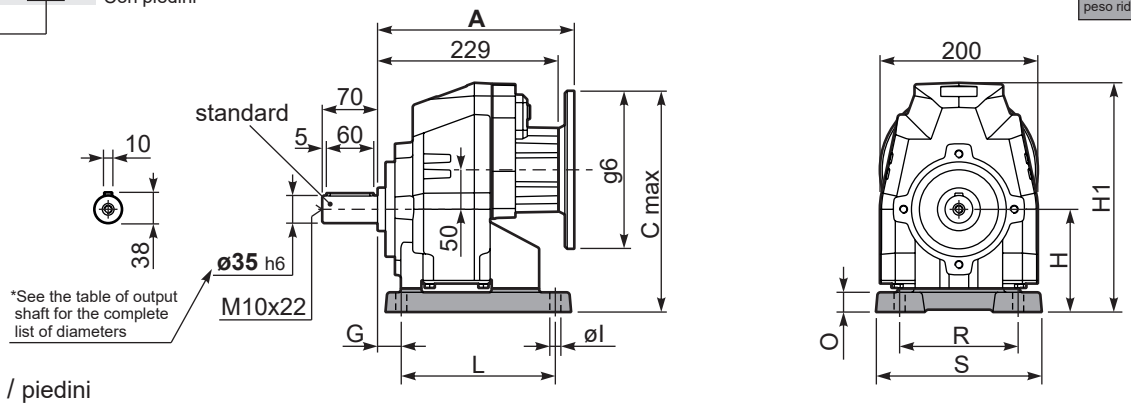


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P702C**S6**... With feet
Con piedini

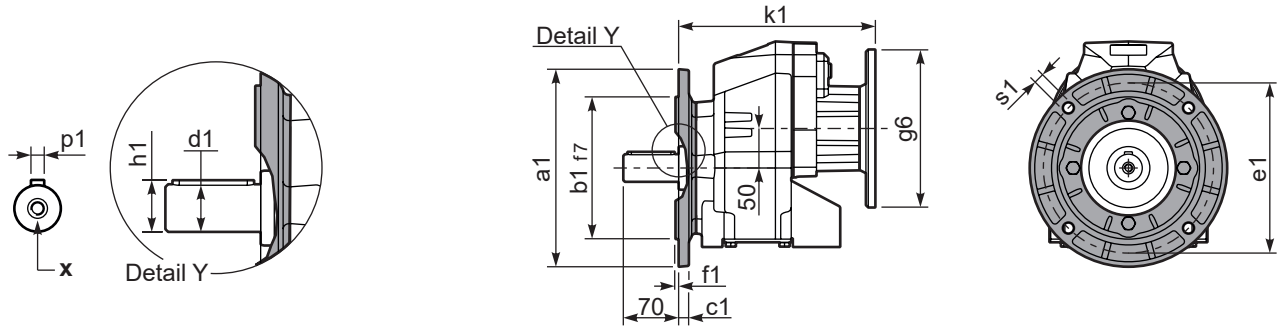
Gearbox weight peso riduttore	With flange **30.0 kg**
	With feet **33.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B4	412/3	19.5	130	180	149.5	216	290	25	14	-	KC70.9.022
S6	67	30	130	150	195	210	290	25	14	-	KC70.9.024
H5	025/253	35	160	170	175	220	320	30	16	-	KC70.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P702C**-F**... Output flanges
flange di uscita



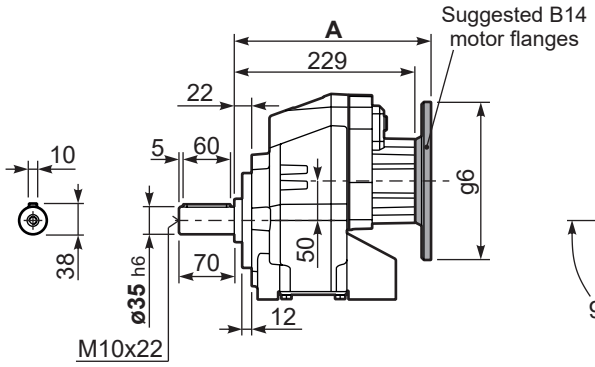
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 40x80	12	43	M12x28

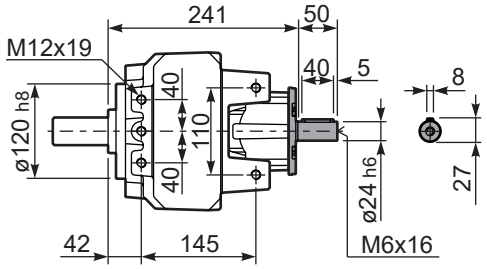
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	
200	130	11	165	3.5	11	KC70.9.012	With flange and feet only on request. Ask for compatibility
250	180	13	215	4	14	KC70.9.013	
-	-	-	-	-	-	-	

P702C**-N**... Basic gearbox
Riduttore base



R702C**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B5	247.5	290	160	247.5	K023.4.041
80/90 B5	249.5	310	200	249.5	K023.4.042
100/112 B5	258.5	335	250	258.5	K023.4.043
132 B5	276.5	360	300	276.5	KC50.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
80 B14	249.5	270	120	249.5	K085.4.046
90 B14	249.5	280	140	249.5	K085.4.045
100/112 B14	258.5	290	160	258.5	K085.4.047
132 B14	276.5	310	200	276.5	KC50.4.041

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
22.6	**61.89**	1.5	594	1.1	**1.7**	675	B				C	C		191318		01
19.7	**71.16**	1.5	683	1.0	**1.5**	675	B				C	C		191316		02
17.0	**82.48**	1.5	792	0.9	**1.3**	675	B				C	C		171316		03
14.5	**96.29**	1.1	675	1.0	**1.1**	675	B				C	C		171314		04
13.9	**100.51**	1.1	705	1.0	**1.0**	675	B				C	C		131318		05
12.1	**115.56**	0.75	556	1.2	**0.91**	675	B				C	C		131316		06
11.1	**125.96**	0.75	606	1.1	**0.82**	665	B				C	C		190816	**standard ø35**	07
10.4	**134.91**	0.75	649	1.0	**0.78**	675	B				C	C		131314		08
9.5	**147.05**	0.75	707	1.0	**0.72**	675	B				C	C		190814		09
8.2	**170.44**	0.55	605	1.1	**0.62**	675	B				C	C		170814	ø40	10
7.6	**184.15**	0.55	653	1.0	**0.57**	675	B				C	C		101314	On request	11
6.8	**205.87**	0.55	730	0.9	**0.51**	675	B				C	C		91316		12
5.8	**240.34**	0.37	570	1.2	**0.44**	675	B				C	C		91314		13
5.0	**279.22**	0.37	662	1.0	**0.37**	665	B				C	C		100816		14
4.3	**325.97**	0.37	773	0.9	**0.32**	675	B				C	C		100814		15
3.8	**364.41**	0.25	583	1.1	**0.28**	665	B				C	C		90816		16
3.3	**425.43**	0.25	681	1.0	**0.25**	675	B				C	C		90814		17
2.9	**481.19**	0.18	589	1.1	**0.22**	665	B				C	C		70816		18
2.5	**561.76**	0.18	687	1.0	**0.19**	675	B				C	C		70814		19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **703C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **703C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **703C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **703C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

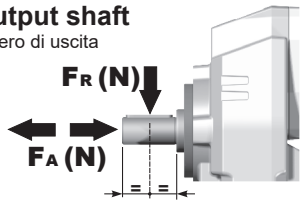
E El reductor tamaño **703C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
2.20 LT	1.40 LT	1.40 LT	1.30 LT	2.40 LT	1.70 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

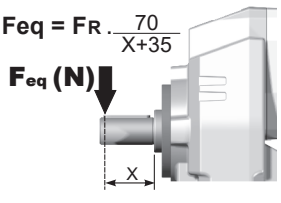
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$F_{eq} = F_R \cdot \frac{70}{X+35}$



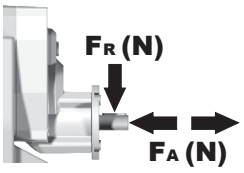
n_2	FA	FR
300	680	3400
250	760	3800
200	900	4500

n_2	FA	FR
140	960	4800
120	1040	5200
85	1120	5600

n_2	FA	FR
70	1300	6500
40	1460	7300
15	1800	9000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

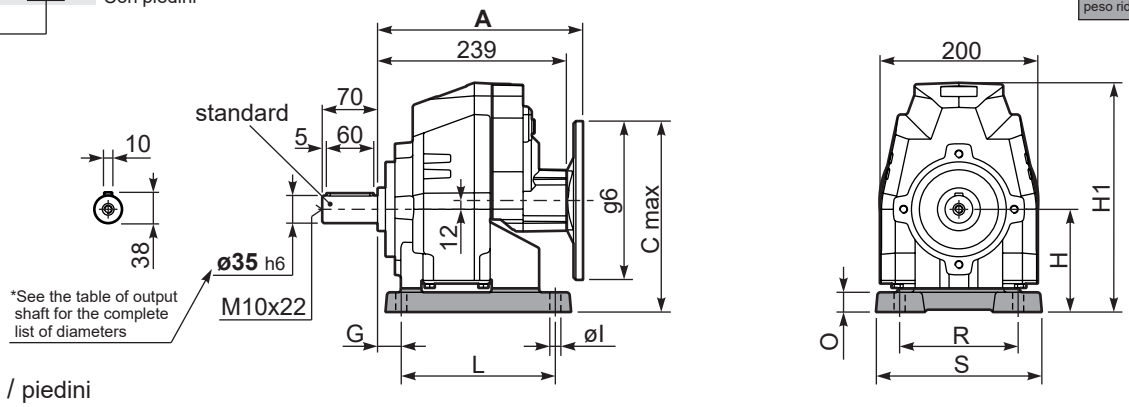


n_1	FA	FR
1400	240	1200
900	280	1400
500	310	1700

tab. 2

P703C**S6**... With feet
Con piedini

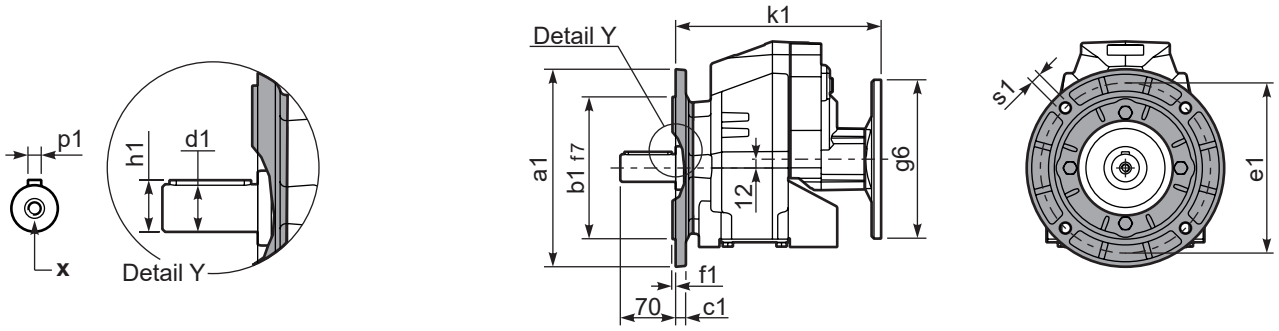
Gearbox weight peso riduttore	
With flange	**30.0 kg**
With feet	**33.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B4	412/3	19.5	130	180	149.5	216	290	25	14	-	KC70.9.022
S6	67	30	130	150	195	210	290	25	14	-	KC70.9.024
H5	025/253	35	160	170	175	220	320	30	16	-	KC70.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P703C**-F**... Output flanges
flange di uscita



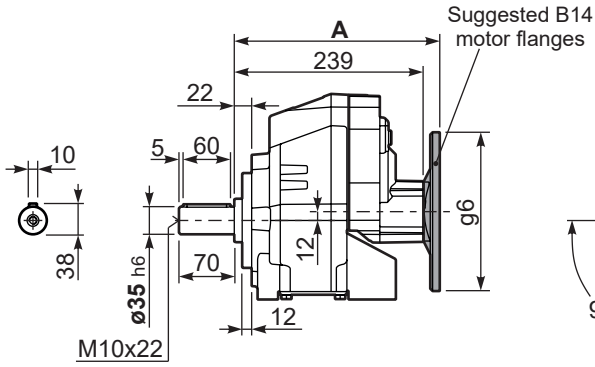
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 40x80	12	43	M12x28

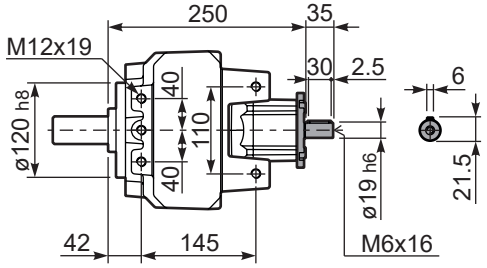
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	
200	130	11	165	3.5	11	KC70.9.012	With flange and feet only on request. Ask for compatibility
250	180	13	215	4	14	KC70.9.013	
-	-	-	-	-	-	-	

P703C**-N**... Basic gearbox
Riduttore base



R703C**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
63 B5	259.5	242	140	259.5	K063.4.041
71 B5	257.5	252	160	257.5	K063.4.042
80/90 B5	259.5	272	200	259.5	K063.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B14	257.5	224.5	105	257.5	K063.4.047
80 B14	259.5	232	120	259.5	K063.4.046
90 B14	259.5	242	140	259.5	K063.4.041

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges	B14 motor flanges					Output Shaft	Ratios code
							-G	-	-	-	-			
							132	-	-	-	-			
227	**6.17**	9	371	1.2	**10.9**	**450**		**not available**				18111	**standard**	01
198	**7.06**	9	425	1.4	**12.7**	**600**						16113	**ø40**	02
170	**8.21**	9	494	1.4	**12.2**	**670**						14115	ø50 On request	03

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

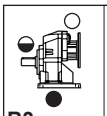
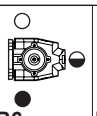
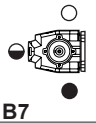
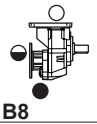
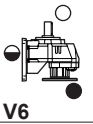
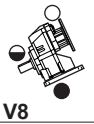
EN Unit **801C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **801C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **801C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **801C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **801C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

 B3	 B6	 B7	 B8	V5	 V6	 V8
3.20 LT	1.90 LT	1.90 LT	1.55 LT	3.20 LT	2.20 LT	Ask

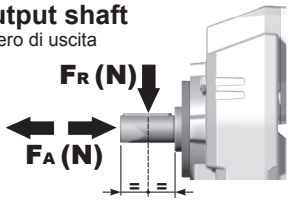
AGIP Blasia 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

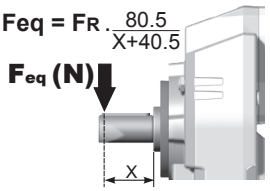
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{80.5}{X+40.5}$$



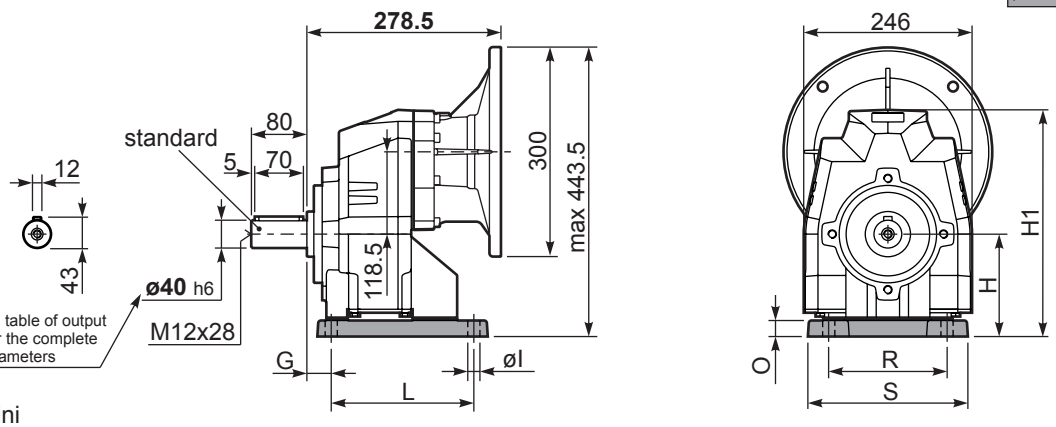
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1200	6000	**140**	1600	8000	**70**	2200	11000
250	1400	7000	**120**	1800	9000	**40**	2600	13000
200	1500	7500	**85**	2000	10000	**15**	3000	15000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

P801C**S7**... With feet
Con piedini

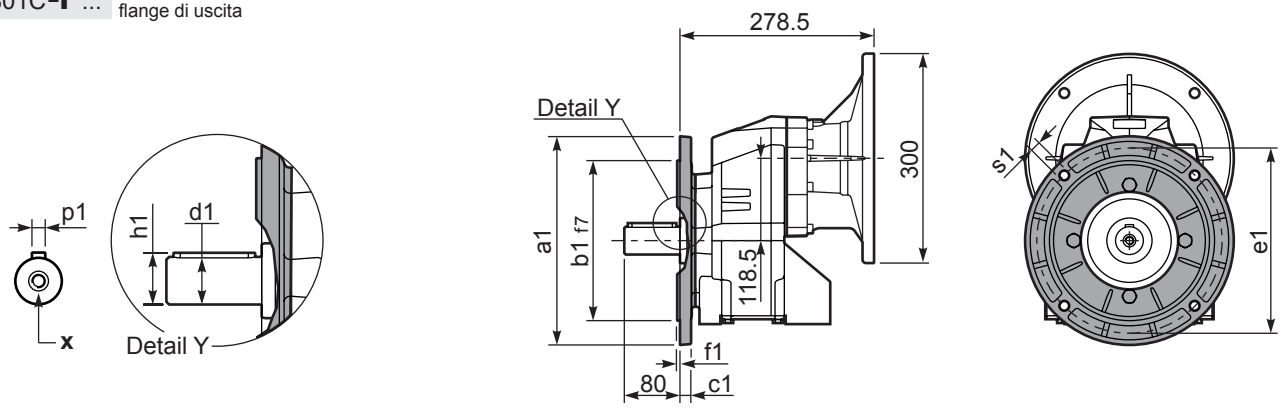
Gearbox weight peso riduttore	With flange	**45.5 kg**
	With feet	**49.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øI	B5 max. Flange	kit code
B5	512/3	25	155	225	156	270	333.5	30	18	-	KC80.9.022
S7	77	35	140	170	205	230	318.5	18	17.5	-	KC80.9.024
H6	026/263	40	175	215	215	265	353.5	30	16	-	KC80.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P801C**-F**... Output flanges
flange di uscita



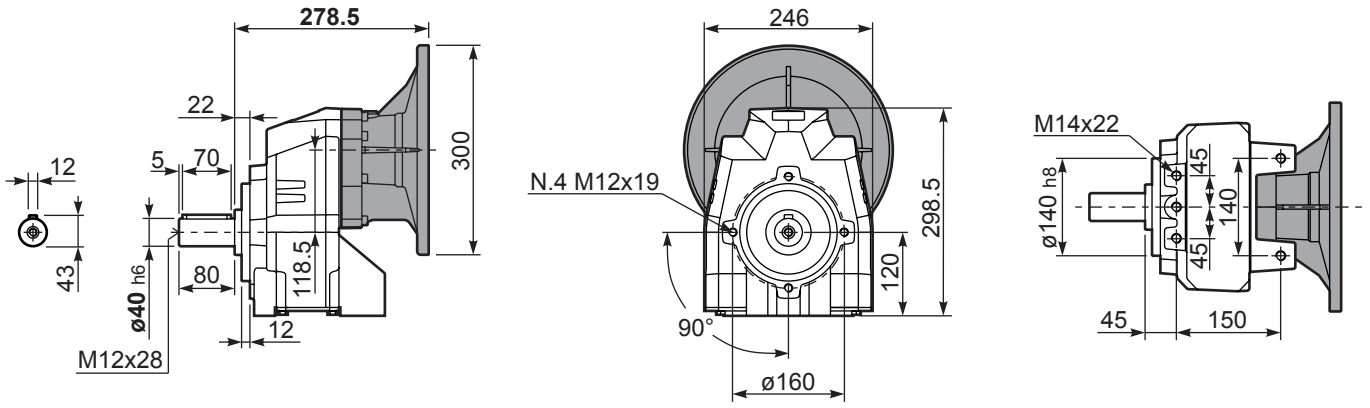
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100	14	53.5	M16x36
	-	-	-	-

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	
250	180	13	215	4	14	KC80.9.013	With flange and feet only on request. Ask for compatibility
300	230	16	265	4	14	KC80.9.014	
-	-	-	-	-	-	-	

P801C**-N**... Basic gearbox
Riduttore base



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
175	**8.02**	9	473	1.1	**9.9**	**520**	B									3018		01
152	**9.18**	9	541	1.1	**9.8**	**590**	B									3016		02
131	**10.68**	9	630	1.1	**9.7**	**680**	B									3014		03
93	**15.11**	7.5	717	1.1	**7.8**	**775**	B									2018		04
81	**17.30**	7.5	821	1.1	**7.8**	**885**	B									2016		05
70	**20.13**	7.5	955	0.9	**6.8**	**900**	B									2014	**standard**	06
60	**23.39**	5.5	820	1.1	**5.9**	**900**	B									1616	**ø40**	07
51	**27.21**	5.5	954	0.9	**5.1**	**900**	B									1614		08
46.0	**30.42**	4	780	1.2	**4.5**	**900**	B									1316	ø50	09
39.6	**35.38**	4	907	1.0	**3.9**	**900**	B									1314	On request	10
37.6	**37.24**	3	719	1.2	**3.7**	**895**	B									1116		11
32.3	**43.31**	3	836	1.1	**3.2**	**900**	B									1114		12
29.8	**47.02**	2.2	668	1.1	**2.3**	**705**	B									818		13
26.0	**53.85**	2.2	765	1.1	**2.3**	**810**	B									816		14
22.4	**62.63**	2.2	890	1.0	**2.2**	**900**	B									814		15
18.9	**74.16**	1.1	531	1.1	**1.2**	**585**	B									616		16
16.2	**86.25**	1.1	617	1.1	**1.2**	**680**	B									614		17

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

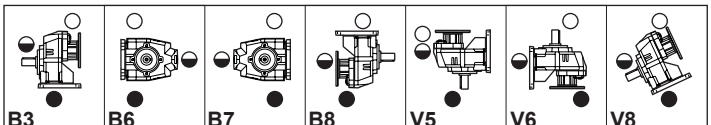
EN Unit **802C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **802C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **802C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **802C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **802C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



B3	B6	B7	B8	V5	V6	V8
3.20 LT	1.90 LT	1.90 LT	1.55 LT	3.20 LT	2.20 LT	Ask

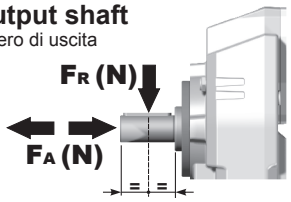
AGIP Blasia 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

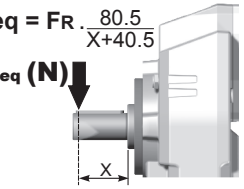
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{80.5}{X+40.5}$$



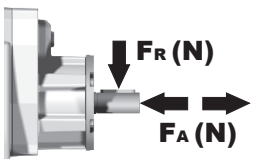
n_2	FA	FR
300	1200	6000
250	1400	7000
200	1500	7500

n_2	FA	FR
140	1600	8000
120	1800	9000
85	2000	10000

n_2	FA	FR
70	2200	11000
40	2600	13000
15	3000	15000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

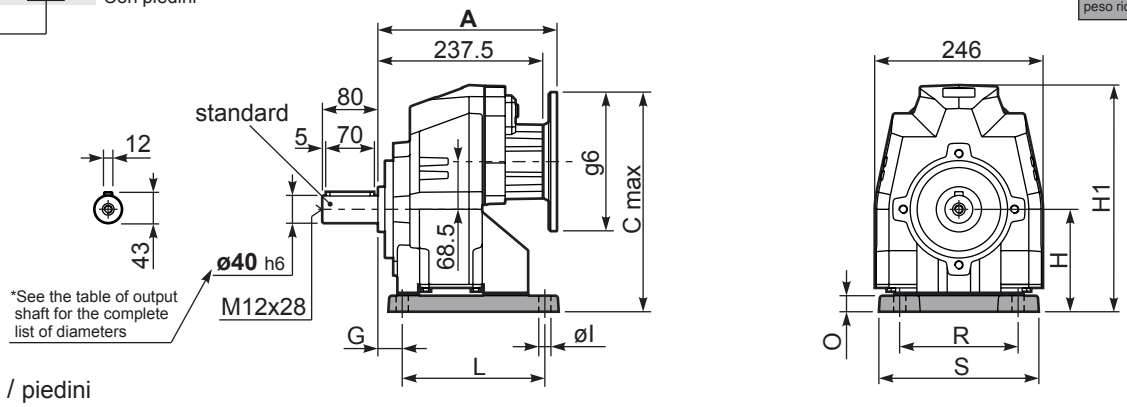


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

P802C**S7**... With feet
Con piedini

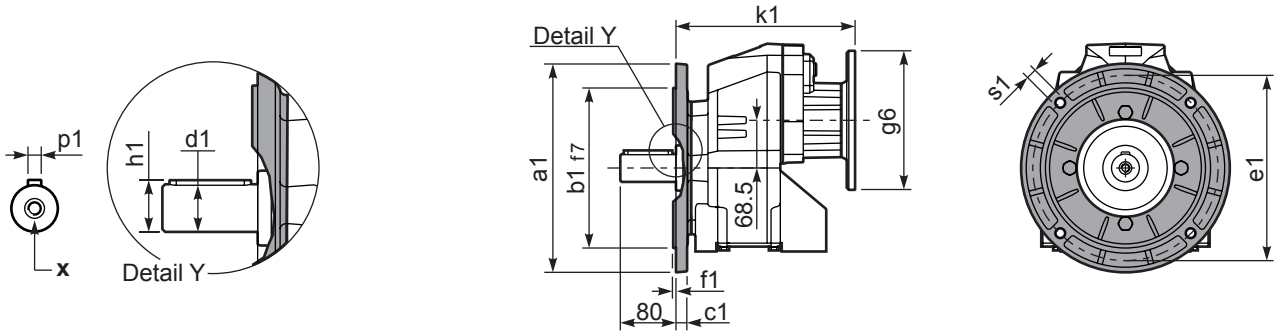
Gearbox weight peso riduttore	With flange **39.5 kg**
	With feet **43.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B5	512/3	25	155	225	156	270	333.5	30	18	-	KC80.9.022
S7	77	35	140	170	205	230	318.5	18	17.5	-	KC80.9.024
H6	026/263	40	175	215	215	265	353.5	30	16	-	KC80.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P802C-**F**... Output flanges
flange di uscita



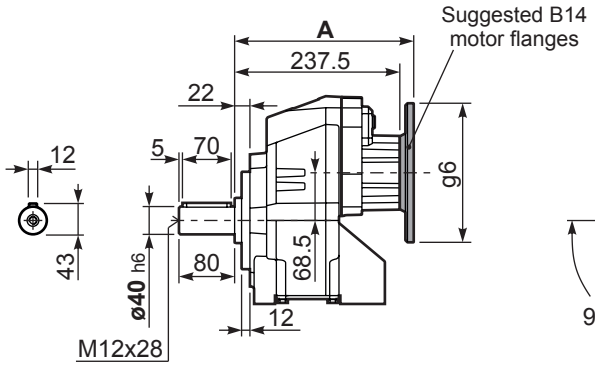
***Available output shaft** / Albero di uscita

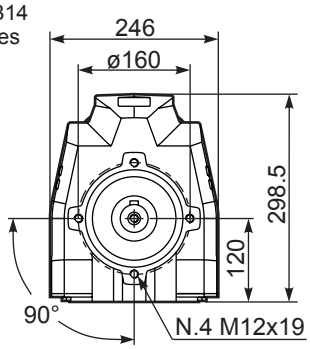
	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100	14	53.5	M16x36
	-	-	-	-

Available output flanges / flange di uscita

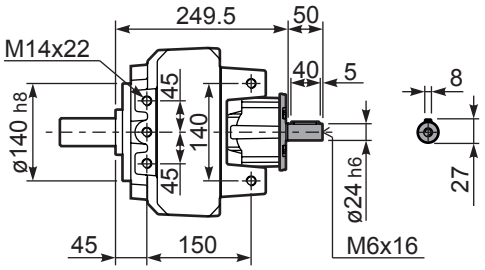
a1 ø	b1	c1	e1	f1	s1	kit code	
250	180	13	215	4	14	KC80.9.013	With flange and feet only on request. Ask for compatibility
300	230	16	265	4	14	KC80.9.014	
-	-	-	-	-	-	-	

P802C-**N**... Basic gearbox
Riduttore base





R802C-**N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B5	256	323.5	160	256	K023.4.041
80/90 B5	258	343.5	200	258	K023.4.042
100/112 B5	267	368.5	250	267	K023.4.043
132 B5	285	393.5	300	285	KC50.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
80 B14	258	303.5	120	258	K085.4.046
90 B14	258	313.5	140	258	K085.4.045
100/112 B14	267	323.5	160	267	K085.4.047
132 B14	285	343.5	200	285	KC50.4.041

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
18.5	**75.50**	1.5	725	1.1	**1.7**	**825**	B				C	C		191318		01
16.2	**86.47**	1.5	830	1.1	**1.6**	**900**	B				C	C		191316		02
14.0	**100.22**	1.5	962	0.9	**1.4**	**900**	B				C	C		171316		03
12.0	**116.56**	1.1	817	1.1	**1.2**	**900**	B				C	C		171314		04
10.2	**136.82**	1.1	959	0.9	**1.0**	**900**	B				C	C		151314		05
9.1	**153.05**	0.75	736	1.1	**0.83**	**810**	B				C	C		190816		06
8.6	**163.31**	0.75	785	1.1	**0.86**	**900**	B				C	C		131314	**standard**	07
7.9	**178.01**	0.75	856	1.1	**0.79**	**900**	B				C	C		190814	**ø40**	08
7.3	**191.67**	0.75	922	1.0	**0.73**	**900**	B				C	C		101316		09
6.8	**206.32**	0.75	992	0.9	**0.68**	**900**	B				C	C		170814	ø50	10
6.3	**222.92**	0.55	791	1.1	**0.63**	**900**	B				C	C		101314	On request	11
5.8	**242.18**	0.55	859	1.0	**0.58**	**900**	B				C	C		150814		12
5.6	**250.15**	0.55	888	1.0	**0.56**	**900**	B				C	C		91316		13
4.8	**289.08**	0.55	1026	0.9	**0.49**	**900**	B				C	C		130814		14
4.2	**330.31**	0.37	783	1.1	**0.42**	**890**	B				C	C		71316		15
3.5	**394.59**	0.37	936	1.0	**0.36**	**900**	B				C	C		100814		16
2.7	**514.99**	0.25	824	1.1	**0.27**	**900**	B				C	C		90814		17
2.1	**680.03**	0.18	832	1.1	**0.21**	**900**	B				C	C		70814		18

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

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In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **803C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **803C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

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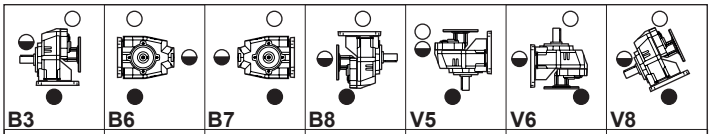
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **803C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

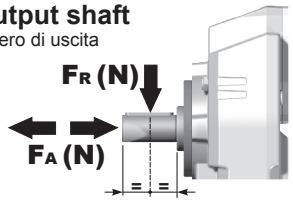


B3	B6	B7	B8	V5	V6	V8
3.30 LT	1.90 LT	1.90 LT	1.55 LT	3.40 LT	2.30 LT	Ask
AGIP Blasia 460						

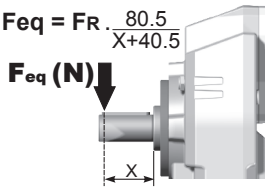
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = F_R \cdot \frac{80.5}{X+40.5}$$



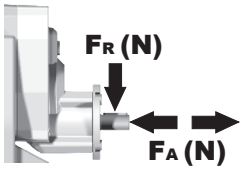
n_2	FA	FR
300	1200	6000
250	1400	7000
200	1500	7500

n_2	FA	FR
140	1600	8000
120	1800	9000
85	2000	10000

n_2	FA	FR
70	2200	11000
40	2600	13000
15	3000	15000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

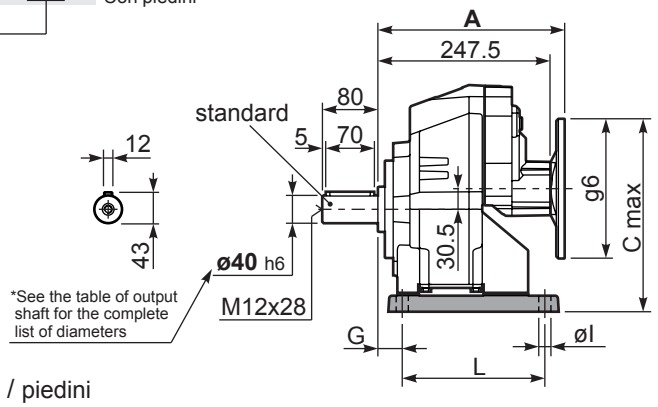


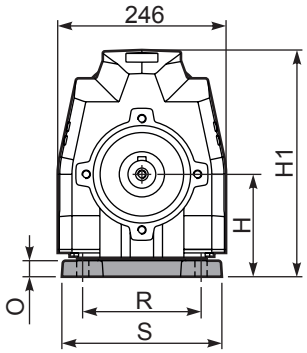
n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P803C**S7**... With feet
Con piedini

Gearbox weight peso riduttore	With flange **39.5 kg**
	With feet **43.5 kg**

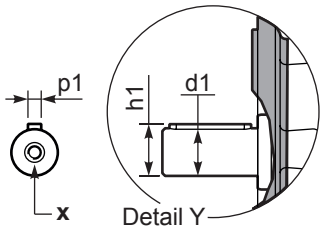


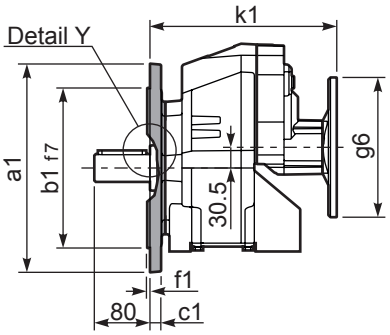


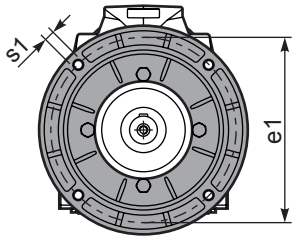
Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B5	512/3	25	155	225	156	270	333.5	30	18	-	KC80.9.022
S7	77	35	140	170	205	230	318.5	18	17.5	-	KC80.9.024
H6	026/263	40	175	215	215	265	353.5	30	16	-	KC80.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P803C**-F**... Output flanges
flange di uscita







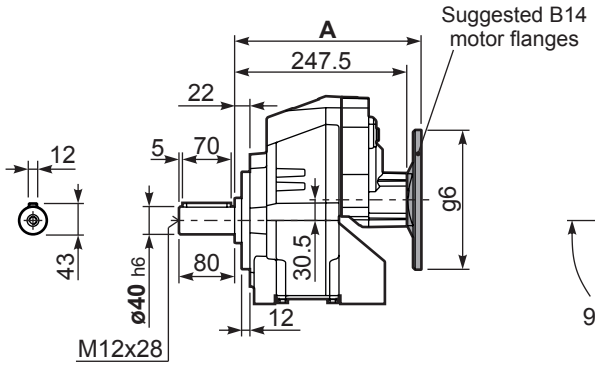
***Available output shaft** / Albero di uscita

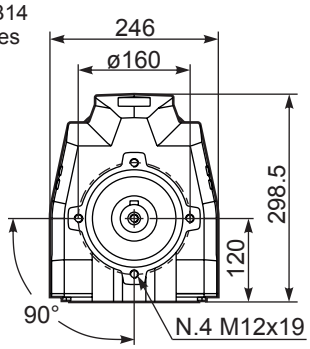
	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100 -	14 -	53.5 -	M16x36 -

Available output flanges / flange di uscita

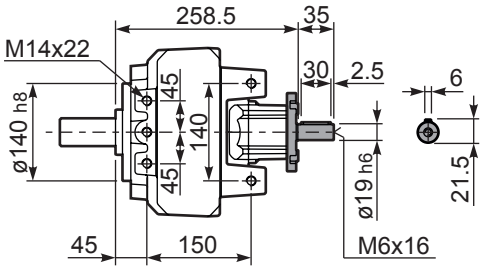
a1 ø	b1	c1	e1	f1	s1	kit code	
250	180	13	215	4	14	KC80.9.013	With flange and feet only on request. Ask for compatibility
300	230	16	265	4	14	KC80.9.014	
-	-	-	-	-	-	-	

P803C**-N**... Basic gearbox
Riduttore base





R803C**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
63 B5	268	275.5	140	268	K063.4.041
71 B5	266	285.5	160	266	K063.4.042
80/90 B5	268	305.5	200	268	K063.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B14	266	258	105	266	K063.4.047
80 B14	268	265.5	120	268	K063.4.046
90 B14	268	275.5	140	268	K063.4.041

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -H	Available B5 motor flanges -I	B14 motor flanges	Output Shaft	Ratios code
412	**3.40**	22	480	1.3	**26.4**	**600**	160	180	- - - -	1551	**standard**	01
343	**4.08**	22	575	1.2	**25.7**	**700**			- - - -	1353	**ø50**	02
285	**4.91**	22	693	1.0	**21.3**	**700**			**not available**	1154	ø60	03
										On request		

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

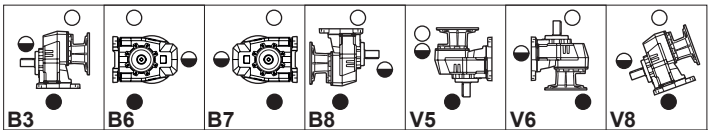
EN Unit **851C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **851C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **851C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **851C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **851C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



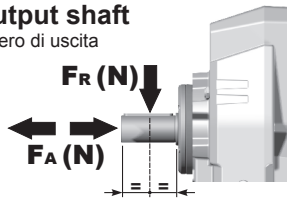
B3	B6	B7	B8	V5	V6	V8
5.30 LT	3.60 LT	3.60 LT	2.80 LT	5.80 LT	4.10 LT	Ask

AGIP Blasia 460

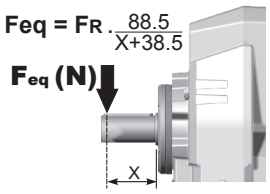
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{88.5}{X+38.5}$$



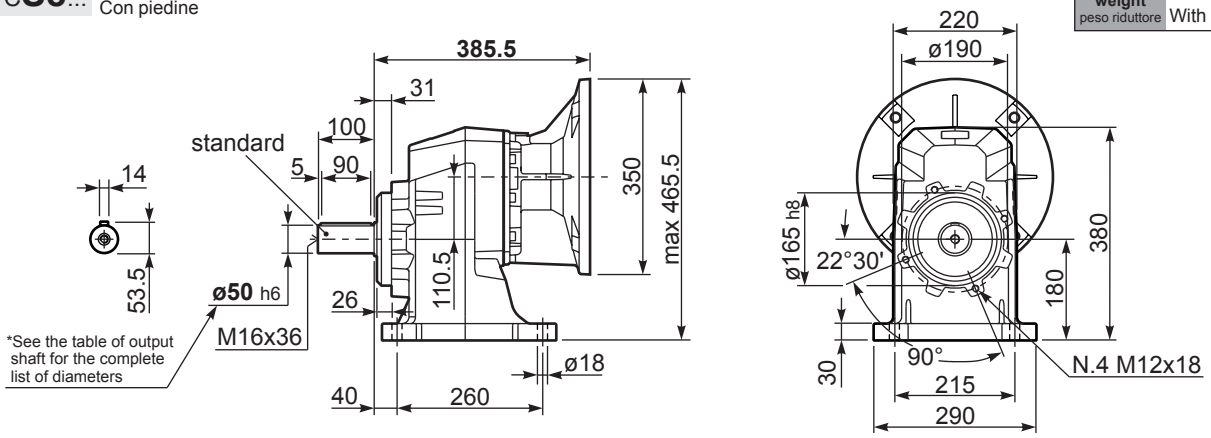
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	**140**	2400	12000	**70**	3000	15000
250	2000	10000	**120**	2600	13000	**40**	3200	16000
200	2200	11000	**85**	2800	14000	**15**	4000	20000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

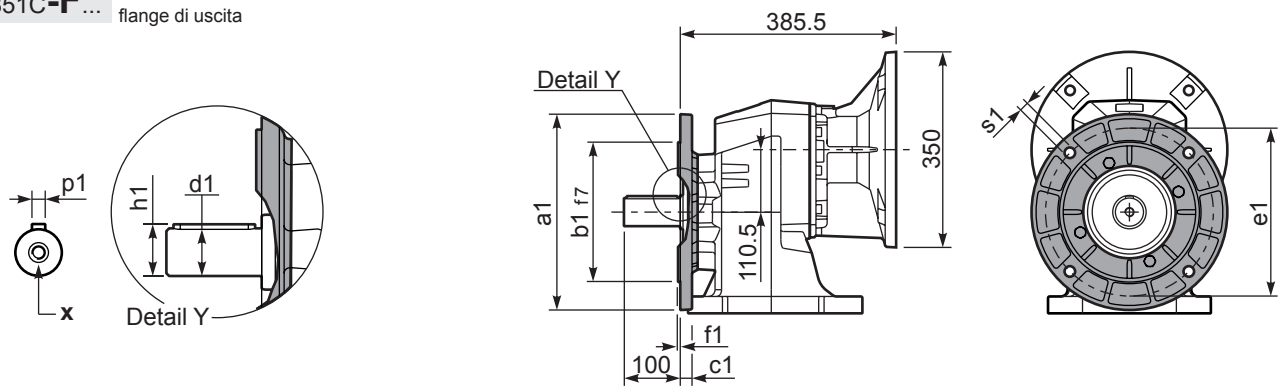
tab. 2

P851C**S8**... With foot
Con piedine

Gearbox weight peso riduttore	
With flange	**90.0 kg**
With feet	**80.5 kg**



P851C**-F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 50x100	14	53.5	M16x36
On request A richiesta	ø 60x120 -	18 -	64 -	M20x42 -

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-

All flanges are compatible with the foot

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -F 100 112	B5 -G 132	B5 -H 160	B5 -I 180	B14 motor flanges - - - - - - - -		Output Shaft ø	Ratios code
317	**4.42**	22	611	1.1	**24.2**	**700**	B					3015		01
264	**5.30**	22	733	1.0	**20.2**	**700**	B					3013		02
219	**6.38**	18.5	742	1.1	**19.1**	**800**	B					3011		03
168	**8.33**	15	784	1.0	**14.7**	**800**	B					2015		04
140	**9.99**	15	940	1.0	**13.8**	**900**	B					2013	**standard**	05
124	**11.26**	15	1060	1.0	**14.9**	**1100**	B					1615	**ø50**	06
116	**12.03**	15	1132	1.1	**15.2**	**1200**	B					2011		07
104	**13.50**	15	1271	1.1	**15.8**	**1400**	B				**not available**	1613	ø60	08
96	**14.65**	15	1378	1.1	**15.6**	**1500**	B					1315	On request	09
86	**16.26**	15	1531	1.0	**14.1**	**1500**	B					1611		10
80	**17.56**	11	1214	1.2	**13.0**	**1500**	B					1313		11
65	**21.50**	11	1486	1.1	**11.4**	**1600**	B					1113		12
54	**25.88**	9	1526	1.0	**9.4**	**1600**	B					1111		13
45.0	**31.09**	7.5	1475	1.0	**7.2**	**1460**	B					813		14
37.4	**37.43**	5.5	1312	1.2	**6.5**	**1600**	B					811		15

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

5

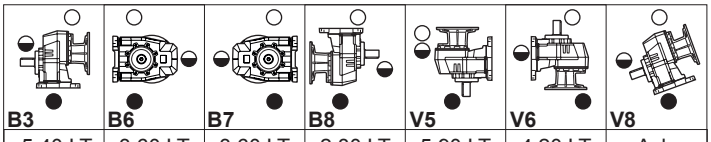
EN Unit **852C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **852C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **852C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **852C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **852C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



B3	B6	B7	B8	V5	V6	V8
5.40 LT	3.60 LT	3.60 LT	2.80 LT	5.90 LT	4.20 LT	Ask

AGIP Blasia 460

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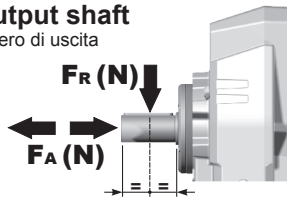
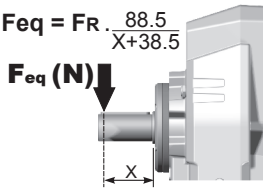
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



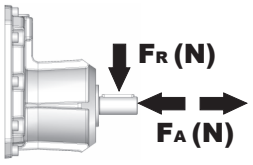
$$Feq = FR \cdot \frac{88.5}{X+38.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	**140**	2400	12000	**70**	3000	15000
250	2000	10000	**120**	2600	13000	**40**	3200	16000
200	2200	11000	**85**	2800	14000	**15**	4000	20000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

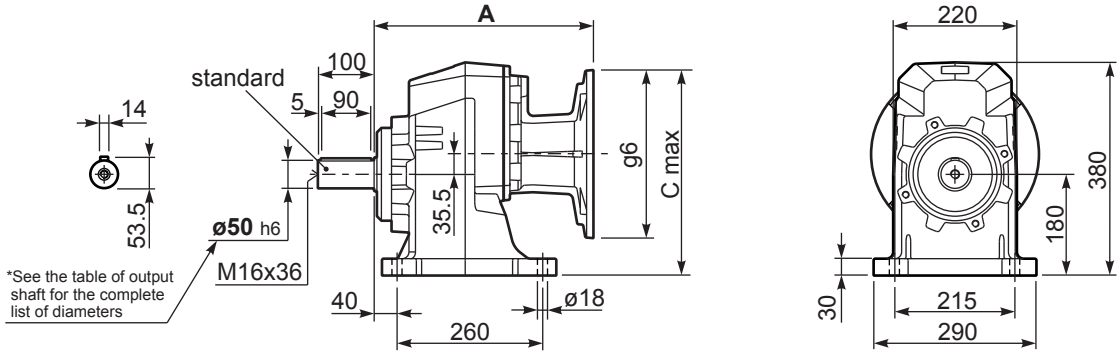


n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

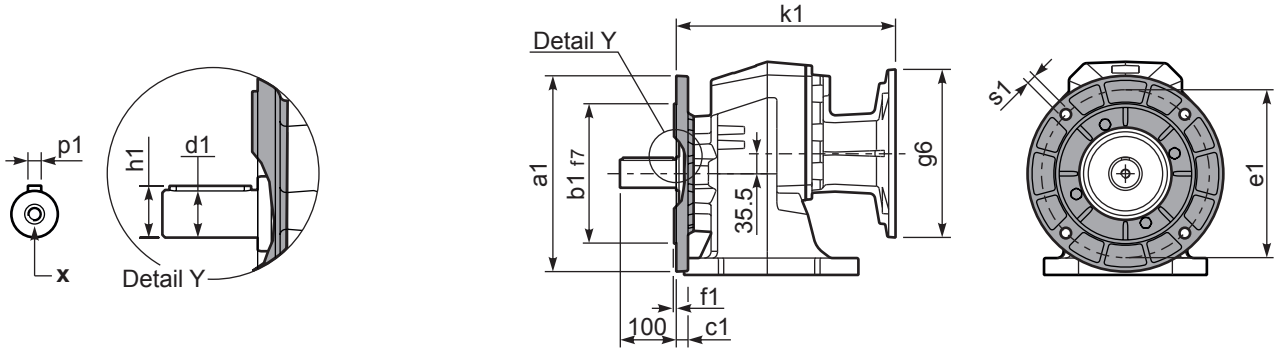
tab. 2

P852C**S8**... With foot / Con piedino

Gearbox weight / peso riduttore: With flange **86.0 kg**, With feet **76.5 kg**



P852C-**F**... Output flanges / flange di uscita



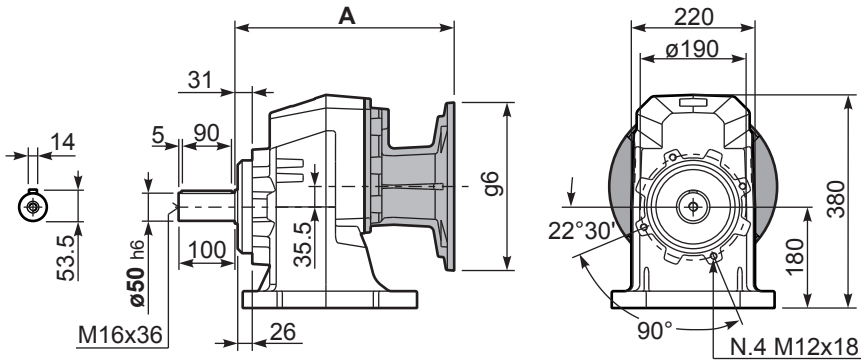
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 50x100	14	53.5	M16x36
On request A richiesta	ø 60x120 -	18 -	64 -	M20x42 -

Available output flanges / flange di uscita

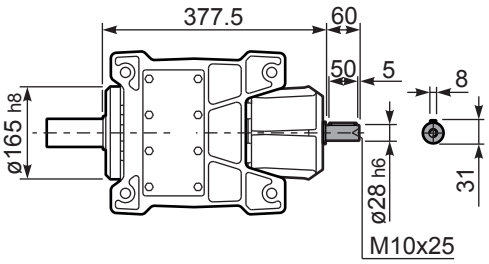
a1 ø	b1	c1	e1	f1	s1	kit code	
300	230	21	265	4	14	KC90.9.014	All flanges are compatible with the foot
350	250	21	300	5	18	KC90.9.015	
-	-	-	-	-	-	-	

P852C**S8**... Basic gearbox / Riduttore base



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
100/112 B5	387	340.5	250	387	-
132 B5	391	365.5	300	391	-
160/180 B5	402	390.5	350	402	-

R852C**S8**... Input Shaft / Albero in entrata



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
32.5	**43.03**	5.5	1478	1.1	**5.8**	**1600**	B									201313		01
28.9	**48.52**	5.5	1667	0.9	**5.0**	**1550**	B									161315		02
27.0	**51.81**	4	1302	1.2	**4.8**	**1600**	B									201311		03
24.1	**58.17**	4	1462	1.1	**4.3**	**1600**	B									161313	**standard ø50**	04
22.2	**63.09**	4	1585	1.0	**3.8**	**1550**	B									131315		05
20.0	**70.05**	4	1760	1.0	**4.0**	**1800**	B									161311		06
18.5	**75.65**	4	1901	0.9	**3.7**	**1800**	B									131313	ø60	07
15.4	**91.09**	3	1723	1.0	**3.1**	**1800**	B									131311	On request	08
12.6	**111.50**	2.2	1553	1.2	**2.5**	**1800**	B									111311		09
10.5	**133.91**	2.2	1865	1.0	**2.1**	**1800**	B									81313		10
8.7	**161.24**	1.5	1548	1.2	**1.7**	**1800**	B									81311		11
7.6	**184.40**	1.1	1293	1.1	**1.2**	**1450**	B									61313		12
6.3	**222.04**	1.1	1557	1.1	**1.2**	**1750**	B									61311		13

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **853C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **853C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **853C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **853C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
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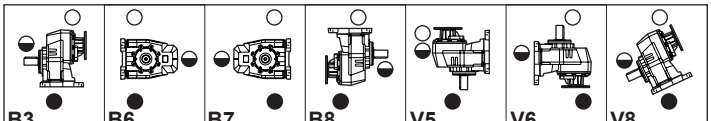
Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



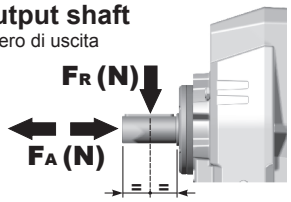
B3	B6	B7	B8	V5	V6	V8
5.50 LT	3.80 LT	3.80 LT	3.20 LT	7.00 LT	4.60 LT	Ask

AGIP Blasia 460

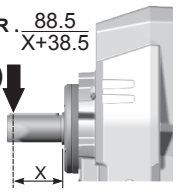
For all details on lubrication and plugs check our website Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web **tab. 1**

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



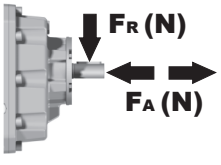
$$Feq = FR \cdot \frac{88.5}{X+38.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	**140**	2400	12000	**70**	3000	15000
250	2000	10000	**120**	2600	13000	**40**	3200	16000
200	2200	11000	**85**	2800	14000	**15**	4000	20000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

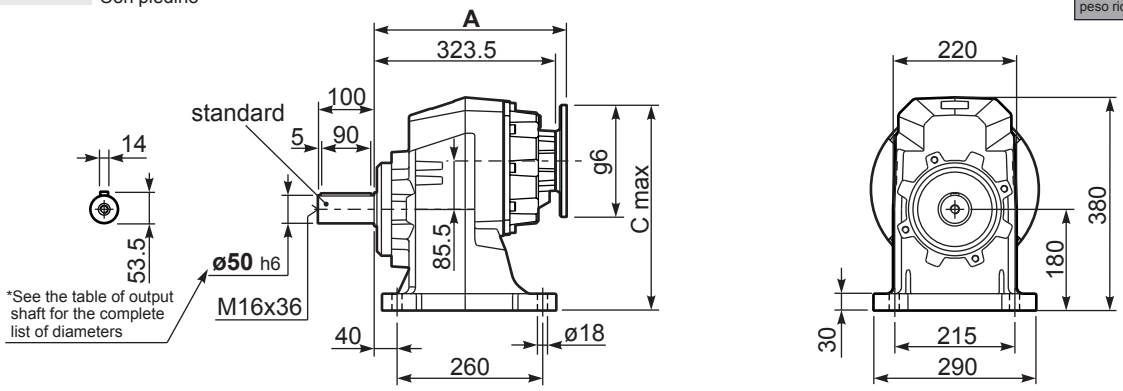


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

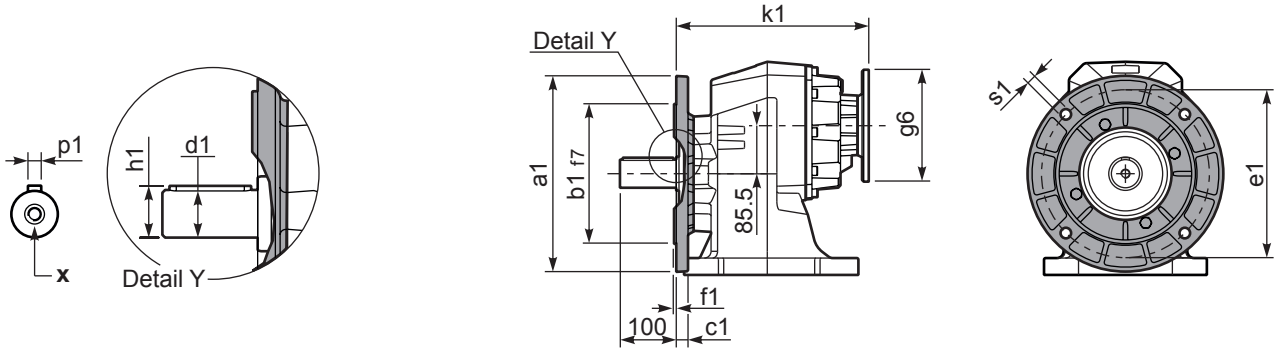
tab. 2

P853C**S8**... With foot
Con piedino

Gearbox weight peso riduttore		
	With flange	**80.5 kg**
	With feet	**71.0 kg**



P853C-**F**... Output flanges
flange di uscita



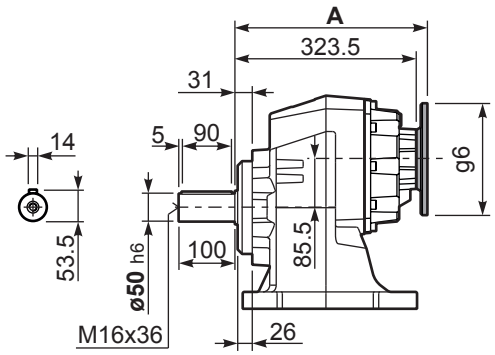
***Available output shaft** / Albero di uscita

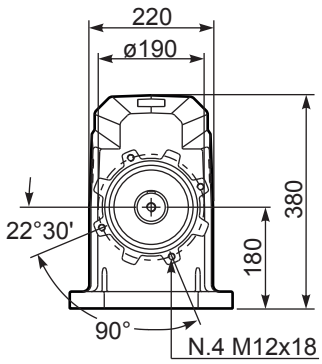
	Shaft - d1	p1	h1	x
Standard	ø 50x100	14	53.5	M16x36
On request A richiesta	ø 60x120 -	18 -	64 -	M20x42 -

Available output flanges / flange di uscita

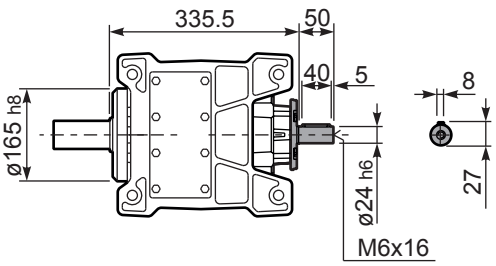
a1 ø	b1	c1	e1	f1	s1	kit code	
300	230	21	265	4	14	KC90.9.014	All flanges are compatible with the foot
350	250	21	300	5	18	KC90.9.015	
-	-	-	-	-	-	-	

P853C**S8**... Basic gearbox
Riduttore base





R853C**S8**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B5	342	345.5	160	342	K023.4.041
80/90 B5	344	365.5	200	344	K023.4.042
100/112 B5	353	390.5	250	353	K023.4.043
132 B5	371	415.5	300	371	KC50.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
80 B14	344	325.5	120	344	K085.4.046
90 B14	344	335.5	140	344	K085.4.045
100/112 B14	353	345.5	160	353	K085.4.047
132 B14	371	365.5	200	371	KC50.4.041

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -H 160	Available B5 motor flanges -I 180	B14 motor flanges - - - -	B14 motor flanges - - - -		Output Shaft	Ratios code
528	**2.65**	22	374	1.7	**36.7**	**650**					2361	**standard**	01
409	**3.42**	22	483	1.6	**32.8**	**750**					1965	**ø60**	02
304	**4.60**	22	649	1.5	**30.9**	**950**			**not available**		1569		03
256	**5.46**	22	771	1.3	**27.4**	**1000**					1371	ø50	04
211	**6.64**	22	937	1.3	**26.5**	**1175**					1173	On request	05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

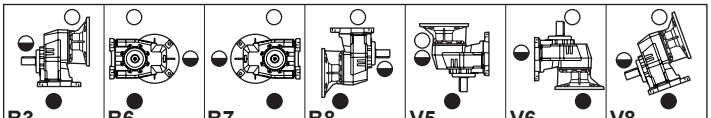
EN Unit **901C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **901C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **901C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **901C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **901C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



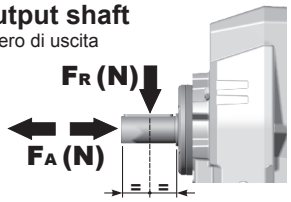
B3	B6	B7	B8	V5	V6	V8
5.90 LT	3.80 LT	3.80 LT	3.50 LT	6.80 LT	4.50 LT	Ask

AGIP Blasia 460

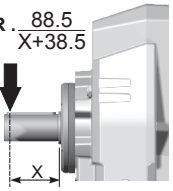
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{88.5}{X+38.5}$$



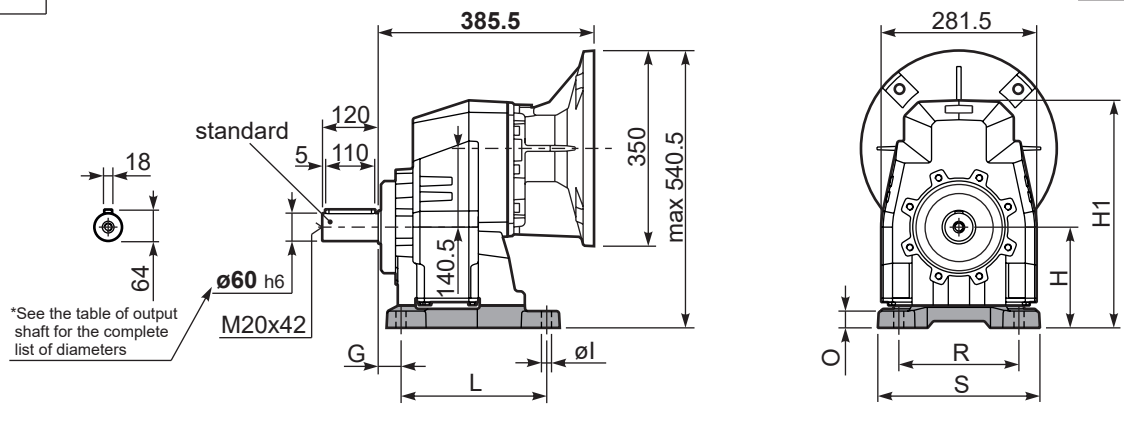
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2070	10350	**140**	2760	13800	**70**	3450	17250
250	2300	11500	**120**	2990	14950	**40**	3680	18400
200	2530	12650	**85**	3220	16100	**15**	4600	23000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

P901C**S8**... With feet
Con piedini

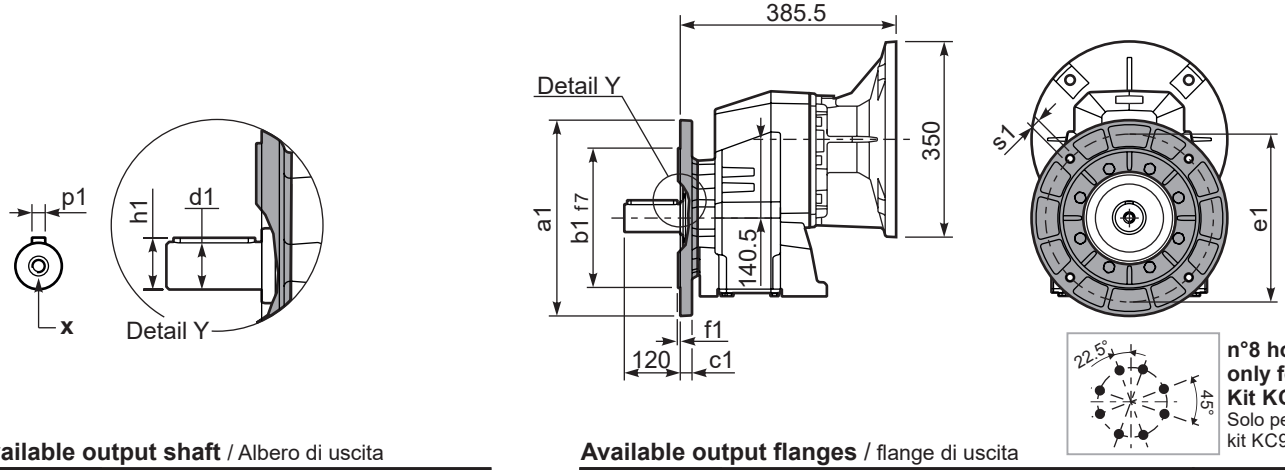
Gearbox weight peso riduttore	With flange **102 kg**
	With feet **110.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B6	612/3	25	195	250	180	300	422	25	18	-	KC90.9.022
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
S9	97	40	225	250	310	340	452	45	22	-	KC90.9.026

P901C**-F**... Output flanges
flange di uscita



n°8 holes only for Kit KC909016
Solo per il kit KC909016

***Available output shaft** / Albero di uscita

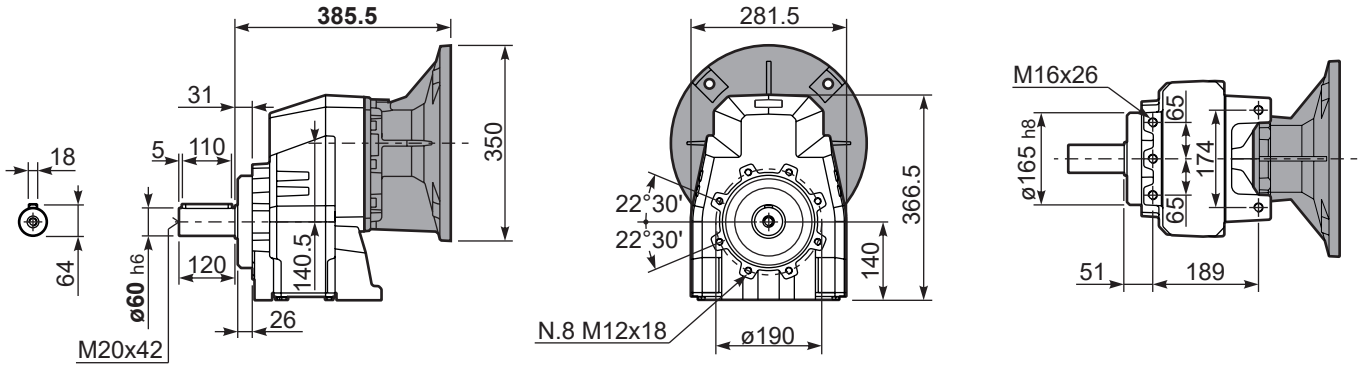
	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	ø 50x100 -	14 -	53.5 -	M16x36 -

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
450	350	22	400	5	18	KC90.9.016

With flange and feet only on request. Ask for compatibility

P901C**-N**... Basic gearbox
Riduttore base



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -F / 100 112	B5 -G / 132	B5 -H / 160	B5 -I / 180	B14 motor flanges - - - - / - - - -		Output Shaft	Ratios code
234	**5.98**	22	827	1.2	**25.5**	**1000**	B					3015		01
197	**7.10**	22	982	1.2	**25.3**	**1175**	B					3013		02
162	**8.63**	22	1193	1.1	**23.9**	**1350**	B					3011		03
124	**11.27**	18.5	1310	1.1	**20.3**	**1500**	B					2015		04
105	**13.38**	18.5	1555	1.1	**19.4**	**1700**	B					2013		05
92	**15.24**	18.5	1771	1.1	**19.0**	**1900**	B					1615	**standard ø60**	06
86	**16.26**	18.5	1889	1.1	**19.7**	**2100**	B					2011		07
77	**18.09**	18.5	2102	1.0	**17.7**	**2100**	B				**not available**	1613		08
71	**19.82**	15	1865	1.1	**15.9**	**2060**	B					1315	ø50	09
64	**21.98**	15	2069	1.0	**14.6**	**2100**	B					1611	On request	10
60	**23.53**	15	2214	0.9	**13.6**	**2100**	B					1313		11
58	**24.25**	11	1677	1.2	**12.2**	**1940**	B					1115		12
48.6	**28.80**	11	1991	1.1	**11.1**	**2100**	B					1113		13
40.0	**34.99**	9	2063	1.0	**9.2**	**2100**	B					1111		14
33.6	**41.64**	7.5	1976	1.0	**7.2**	**1960**	B					813		15
27.7	**50.60**	5.5	1774	1.2	**6.3**	**2100**	B					811		16

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

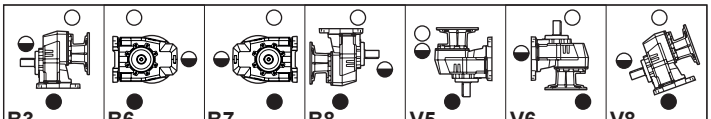
EN Unit **902C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **902C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **902C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **902C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **902C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes.
Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



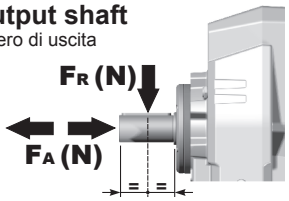
B3	B6	B7	B8	V5	V6	V8
5.90 LT	3.80 LT	3.80 LT	3.40 LT	6.70 LT	4.40 LT	Ask

AGIP Blasia 460

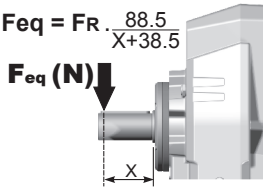
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



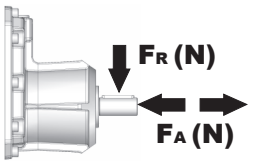
$$Feq = FR \cdot \frac{88.5}{X+38.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2070	10350	**140**	2760	13800	**70**	3450	17250
250	2300	11500	**120**	2990	14950	**40**	3680	18400
200	2530	12650	**85**	3220	16100	**15**	4600	23000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

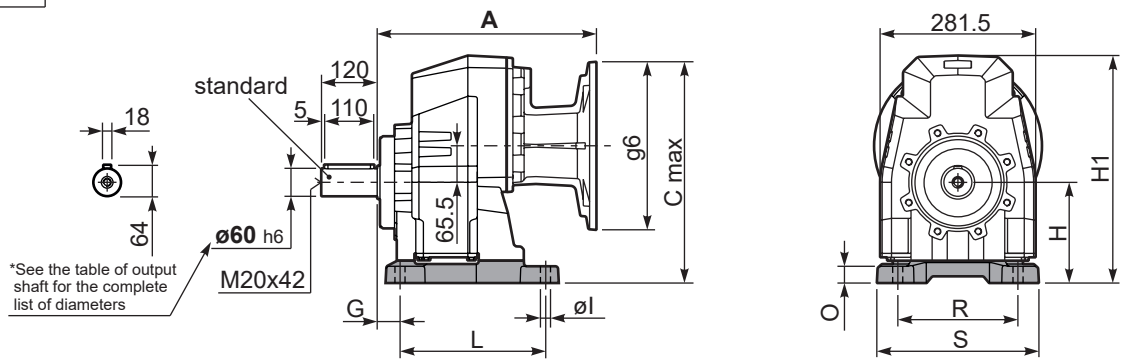


n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2

P902C**S8**... With feet
Con piedini

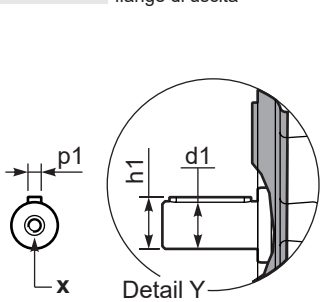
Gearbox weight peso riduttore	With flange **98.5 kg**
	With feet **107.0 kg**

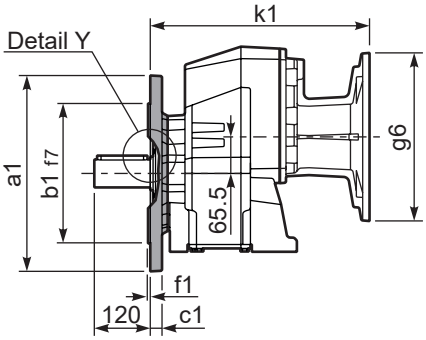


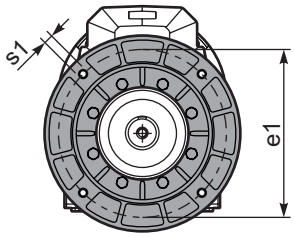
Feet / piedini

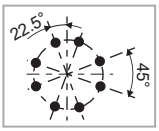
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B6	612/3	25	195	250	180	300	422	25	18	-	KC90.9.022
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
S9	97	40	225	250	310	340	452	45	22	-	KC90.9.026

P902C-**F**... Output flanges
flange di uscita









n° 8 holes only for Kit KC909016
Solo per il kit KC909016

***Available output shaft** / Albero di uscita

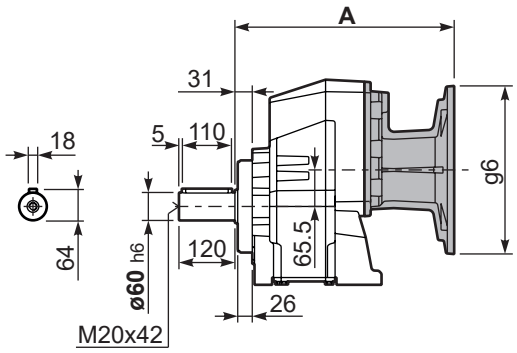
	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	ø 50x100	14	53.5	M16x36
	-	-	-	-

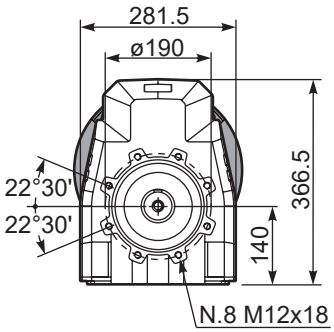
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
450	350	22	400	5	18	KC90.9.016

With flange and feet only on request. Ask for compatibility

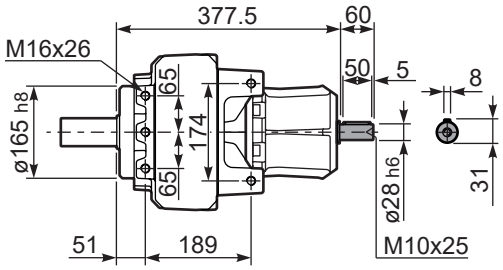
P902C-**N**... Basic gearbox
Riduttore base





B5 Motor Flanges	A	C_{max}	g6	k1	kit code
100/112 B5	387	415.5	250	387	-
132 B5	391	440.5	300	391	-
160/180 B5	402	465.5	350	402	-

R902C-**N**... Input Shaft
Albero in entrata



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
28.8	**48.55**	7.5	2257	0.9	**6.7**	**2100**	B									201315		01
24.3	**57.64**	5.5	1980	1.1	**5.7**	**2100**	B									201313		02
21.3	**65.64**	5.5	2255	0.9	**5.0**	**2100**	B									161315		03
20.0	**70.04**	4	1760	1.2	**4.7**	**2100**	B									201311		04
18.0	**77.93**	4	1958	1.1	**4.2**	**2100**	B									161313	**standard**	05
16.4	**85.36**	4	2145	1.0	**3.8**	**2100**	B									131315	**ø60**	06
14.8	**94.70**	4	2380	0.9	**3.5**	**2100**	B									161311		07
13.8	**101.35**	3	1917	1.1	**3.2**	**2100**	B									131313	ø50	08
11.4	**123.15**	3	2330	0.9	**2.7**	**2100**	B									131311	On request	09
9.3	**150.73**	2.2	2100	1.0	**2.2**	**2100**	B									111311		10
7.8	**179.39**	1.5	1722	1.2	**1.8**	**2100**	B									81313		11
6.4	**217.98**	1.5	2093	1.0	**1.5**	**2100**	B									81311		12
5.7	**247.03**	1.1	1732	1.1	**1.2**	**1950**	B									61313		13
4.7	**300.17**	1.1	2105	1.0	**1.1**	**2100**	B									61311		14

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

5

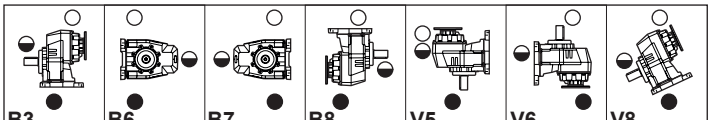
EN Unit **903C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **903C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **903C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **903C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **903C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



B3	B6	B7	B8	V5	V6	V8
6.00 LT	4.10 LT	4.10 LT	3.70 LT	7.30 LT	4.90 LT	Ask

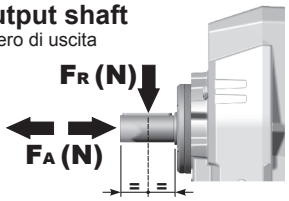
AGIP Blasia 460

For all details on lubrication and plugs check our website Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

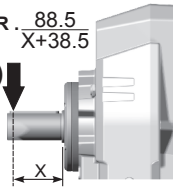
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



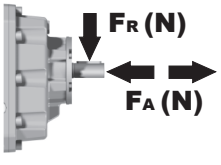
$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2070	10350	**140**	2760	13800	**70**	3450	17250
250	2300	11500	**120**	2990	14950	**40**	3680	18400
200	2530	12650	**85**	3220	16100	**15**	4600	23000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

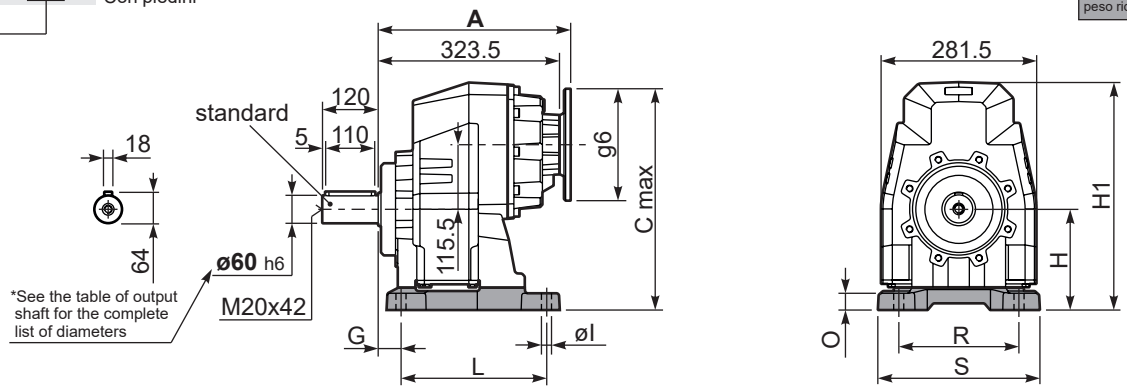


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

P903C**S8**... With feet
Con piedini

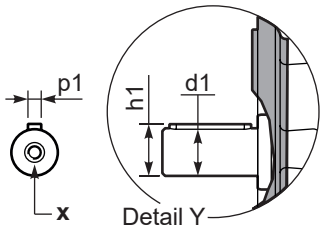
Gearbox weight / peso riduttore: With flange **86.0 kg** / With feet **94.5 Kg**

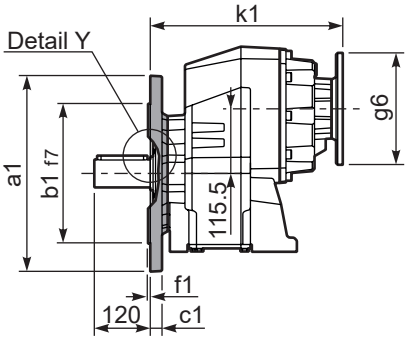


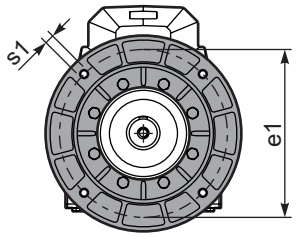
Feet / piedini

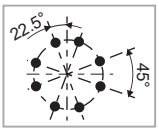
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B6	612/3	25	195	250	180	300	422	25	18	-	KC90.9.022
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
S9	97	40	225	250	310	340	452	45	22	-	KC90.9.026

P903C-**F**... Output flanges
flange di uscita









n° 8 holes only for Kit KC909016
Solo per il kit KC909016

***Available output shaft** / Albero di uscita

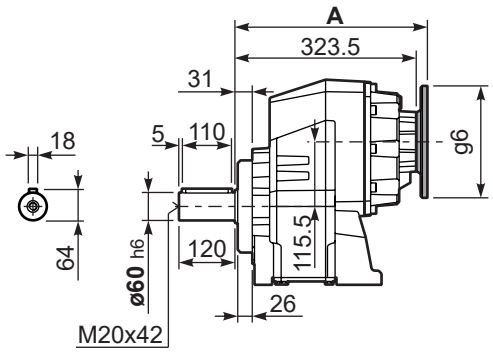
	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	ø 50x100 -	14 -	53.5 -	M16x36 -

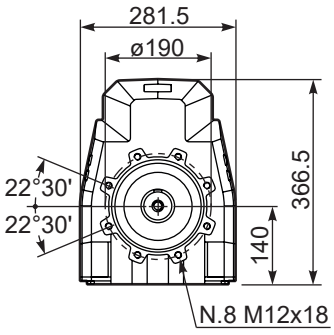
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
450	350	22	400	5	18	KC90.9.016

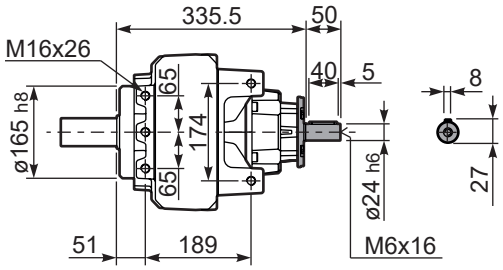
With flange and feet only on request. Ask for compatibility

P903C-**N**... Basic gearbox
Riduttore base



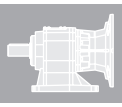


R903C-**N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B5	342	420.5	160	342	K023.4.041
80/90 B5	344	440.5	200	344	K023.4.042
100/112 B5	353	465.5	250	353	K023.4.043
132 B5	371	490.5	300	371	KC50.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
80 B14	344	400.5	120	344	K085.4.046
90 B14	344	410.5	140	344	K085.4.045
100/112 B14	353	420.5	160	353	K085.4.047
132 B14	371	440.5	200	371	KC50.4.041



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -G 132	-H 160	-I 180	-L 200	B14 motor flanges - - - -	- - - -		Output Shaft ø	Ratios code
294	**4.75**	30	895	1.8	**53.0**	**1650**							3914		01
269	**5.21**	30	980	1.8	**51.3**	**1750**							3913		02
220	**6.36**	30	1197	1.6	**45.6**	**1900**							3911		03
188	**7.45**	30	1401	1.5	**43.1**	**2100**							3014		04
172	**8.15**	30	1535	1.4	**39.3**	**2100**							3013		05
141	**9.96**	30	1874	1.2	**33.7**	**2200**							3011		06
120	**11.69**	30	2200	1.0	**30.1**	**2300**							2214		07
109	**12.80**	30	2409	1.0	**27.4**	**2300**							2213		08
90	**15.63**	22	2161	1.1	**23.5**	**2400**					**not available**		2211	**standard ø60**	09
79	**17.65**	22	2441	1.1	**22.5**	**2600**							1614		10
72	**19.33**	22	2673	1.1	**22.9**	**2900**							1613		11
67	**20.77**	22	2872	1.0	**21.3**	**2900**							1414		12
62	**22.75**	18.5	2643	1.1	**19.5**	**2900**							1413		13
59	**23.60**	18.5	2743	1.1	**18.8**	**2900**							1611		14
50	**27.78**	15	2615	1.1	**15.9**	**2900**							1411		15
45.5	**30.76**	15	2896	1.0	**14.4**	**2900**							1014		16
41.6	**33.69**	11	2330	1.2	**13.1**	**2900**							1013		17
34.0	**41.15**	11	2845	1.0	**10.8**	**2900**							1011		18

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

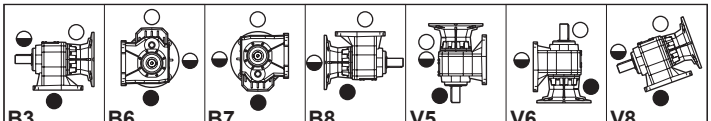
EN Unit **1002** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **1002** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **1002** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **1002** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **1002** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



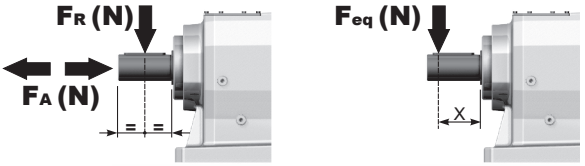
B3	B6	B7	B8	V5	V6	V8
4.50 LT	8.00 LT	5.50 LT	6.00 LT	10.00 LT	7.50 LT	Ask
AGIP Blasia 460						

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

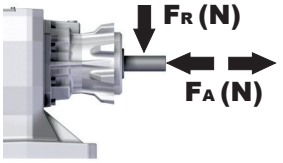
Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{117}{X+57}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2300	11500	**140**	2980	14900	**70**	3660	18300
250	2480	12400	**120**	3180	15900	**40**	4220	21100
200	2680	13400	**85**	3440	17200	**15**	4820	24100

Input shaft
Albero in entrata

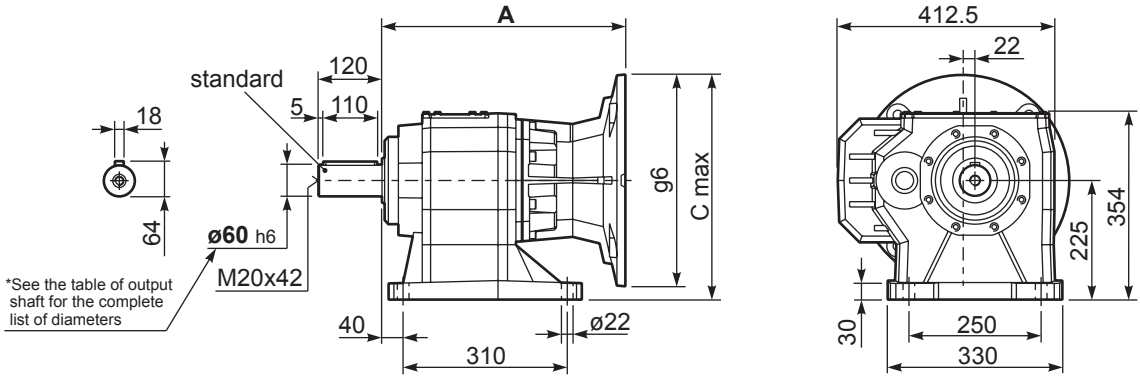


n_1	FA	FR
1400	1120	5600
900	1220	6100
500	1300	6500

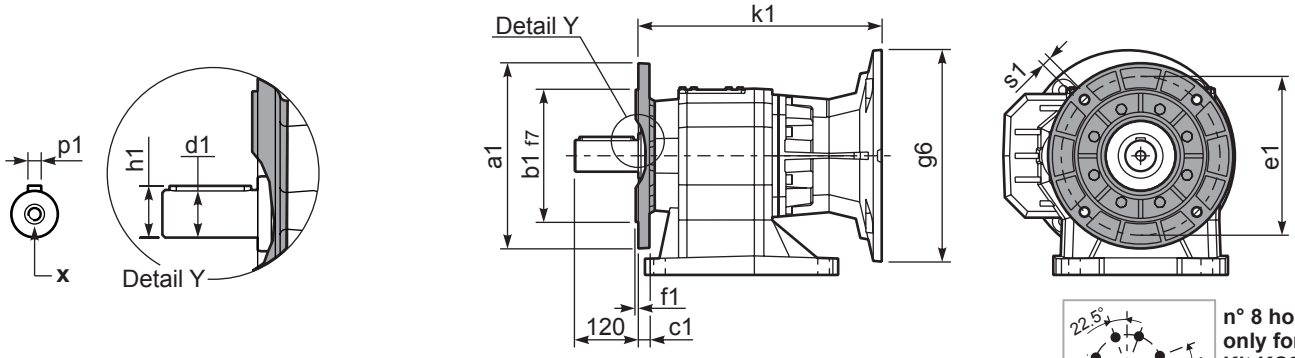
tab. 2

P1002**S9**... With foot
Con piedino

Gearbox weight peso riduttore	120.0 kg



P1002-**F**... Output flanges
flange di uscita



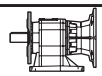
n° 8 holes only for Kit KC909016
Solo per il kit KC909016

***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	-	-	-	-

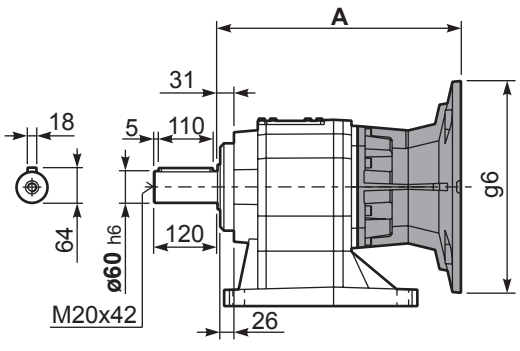
Available output flanges / flange di uscita

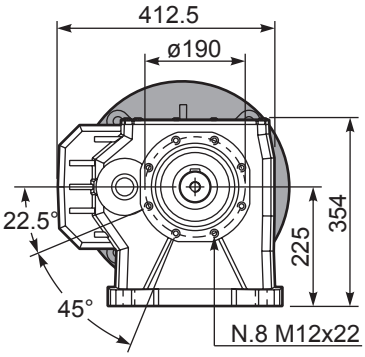
a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
450	350	22	400	5	18	KC90.9.016



All flanges are compatible with the foot

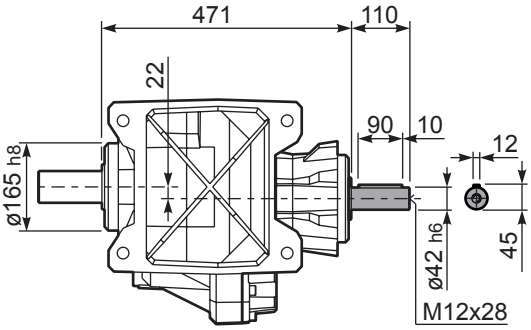
P1002**S9**... Basic gearbox
Riduttore base

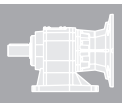




B5 Motor Flanges	A	C_{max}	g6	k1	kit code
132 B5	435	375	300	435	KC1109052
160 B5	460	400	350	460	KC1109053
180 B5	460	400	350	460	KC1109053_B
200 B5	460	425	400	460	KC1109054

R1002**S9**... Input Shaft
Albero in entrata





▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -F (100 112)	B5 motor flanges -G (132)	B5 motor flanges -H (160)	B14 motor flanges - - -	B14 motor flanges - - -	B14 motor flanges - - -		Output Shaft ø	Ratios code
38.8	**36.11**	11	2447	1.2	**12.5**	**2900**	B						301411		01
27.5	**50.89**	9	2941	1.0	**9.2**	**3000**	B						201414		02
25.1	**55.73**	7.5	2591	1.2	**8.4**	**3000**	B						201413		03
20.3	**68.80**	7.5	3199	0.9	**6.8**	**3000**	B						161414		04
18.6	**75.35**	5.5	2589	1.2	**6.2**	**3000**	B						161413		05
15.6	**89.47**	5.5	3074	1.0	**5.2**	**3000**	B						131414		06
15.2	**92.02**	5.5	3161	0.9	**5.1**	**3000**	B						161411		07
14.3	**97.99**	4	2462	1.2	**4.8**	**3000**	B						131413		08
12.8	**109.52**	4	2752	1.1	**4.3**	**3000**	B						111414		09
11.7	**119.94**	4	3014	1.0	**3.9**	**3000**	B						111413		10
9.6	**146.47**	3	2771	1.1	**3.2**	**3000**	B						111411		11
8.8	**158.37**	3	2996	1.0	**3.0**	**3000**	B						81414		12
8.1	**173.45**	2.2	2416	1.2	**2.7**	**3000**	B						81413		13
6.6	**211.82**	2.2	2951	1.0	**2.2**	**3000**	B						81411		14

not available — **standard ø60**

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **1003** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **1003** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **1003** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **1003** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **1003** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
5.00 LT	9.00 LT	6.50 LT	6.50 LT	11.00 LT	9.00 LT	Ask

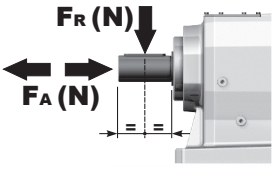
AGIP Blasia 460

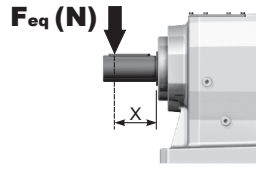
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

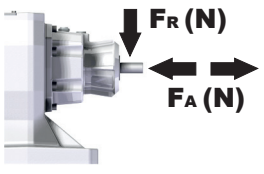
$$Feq = FR \cdot \frac{117}{X+57}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2300	11500	**140**	2980	14900	**70**	3660	18300
250	2480	12400	**120**	3180	15900	**40**	4220	21100
200	2680	13400	**85**	3440	17200	**15**	4820	24100

Input shaft
Albero in entrata

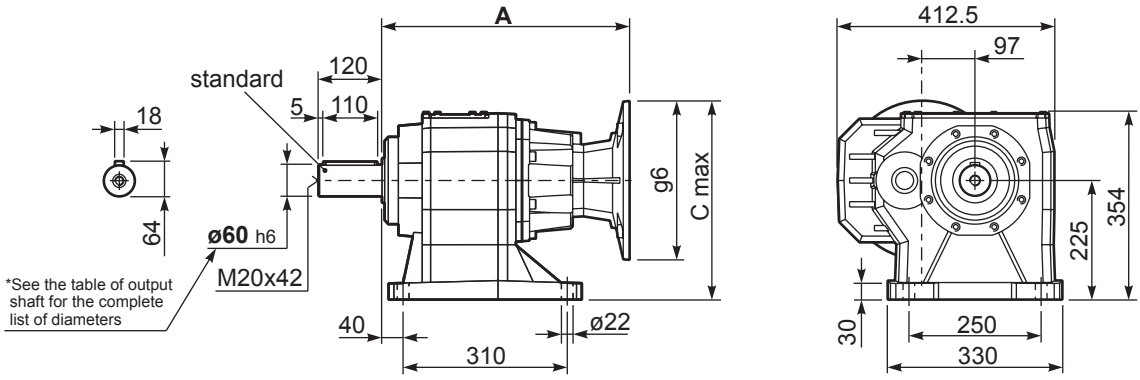


n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

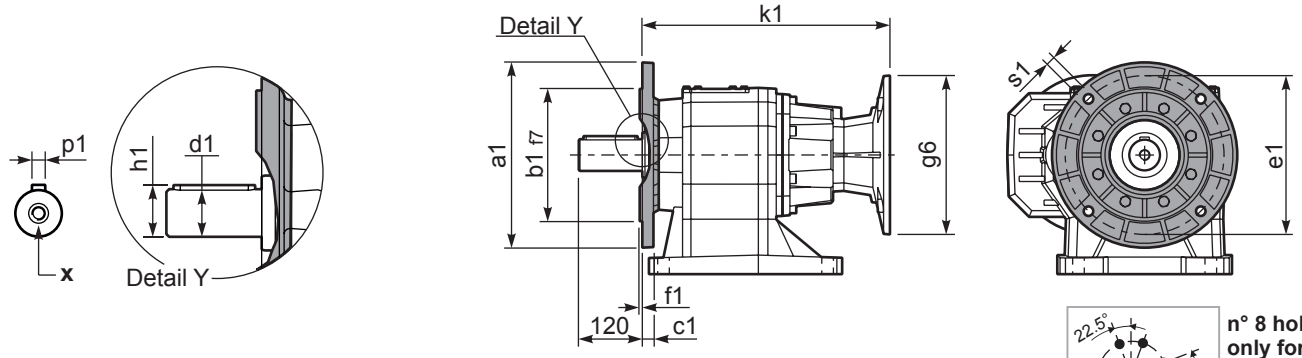
tab. 2

P1003**S9**... With foot / Con piedino

Gearbox weight / peso riduttore	116 kg



P1003-**F**... Output flanges / flange di uscita



n° 8 holes only for Kit KC909016
Solo per il kit KC909016

***Available output shaft** / Albero di uscita

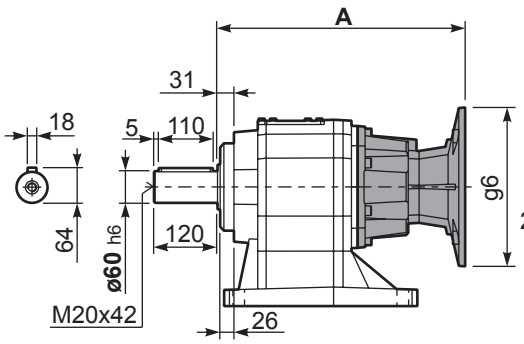
	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request / A richiesta	-	-	-	-

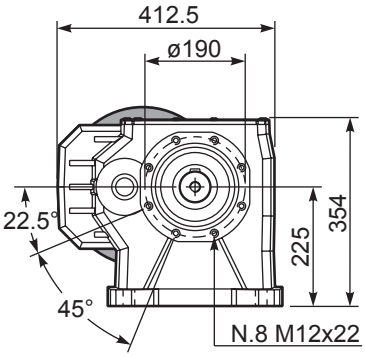
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
450	350	22	400	5	18	KC90.9.016

All flanges are compatible with the foot

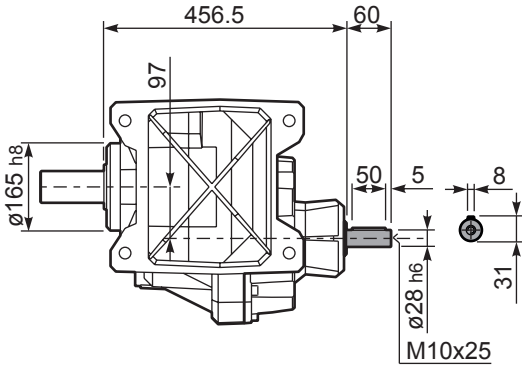
P1003**S9**... Basic gearbox / Riduttore base

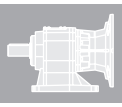




B5 Motor Flanges	A	C_{max}	g6	k1	kit code
100/112 B5	468	350	250	468	KC1109056
132 B5	468	375	300	468	KC1109057
160 B5	483	400	350	483	KC1109058

R1003**S9**... Input Shaft / Albero in entrata





▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -G 132	-H 160	-I 180	-L 200	CA 225	B14 motor flanges – –	- -	- -		Output Shaft ø	Ratios code
294	**4.75**	45	1333	2.0	**86.7**	**2700**									3914		01
269	**5.21**	45	1460	1.9	**82.1**	**2800**									3913		02
220	**6.36**	45	1783	1.7	**72.0**	**3000**									3911		03
188	**7.45**	45	2088	1.6	**67.7**	**3300**									3014		04
172	**8.15**	45	2287	1.5	**63.7**	**3400**									3013		05
141	**9.96**	45	2792	1.3	**55.2**	**3600**									3011		06
120	**11.69**	45	3277	1.2	**49.7**	**3800**									2214		07
109	**12.80**	45	3589	1.1	**47.7**	**4000**									2213		08
90	**15.63**	45	4383	1.0	**42.0**	**4300**						**not**			2211	**standard**	09
79	**17.65**	37	4068	1.1	**38.9**	**4500**						**available**			1614	**ø70**	10
72	**19.33**	37	4455	1.0	**35.6**	**4500**									1613		11
67	**20.77**	30	3910	1.2	**33.1**	**4500**									1414		12
62	**22.75**	30	4282	1.1	**30.2**	**4500**									1413		13
59	**23.60**	30	4443	1.0	**29.1**	**4500**									1611		14
50	**27.78**	22	3842	1.2	**24.7**	**4500**									1411		15
45.5	**30.76**	22	4255	1.1	**22.3**	**4500**									1014		16
41.6	**33.69**	22	4660	1.0	**20.4**	**4500**									1013		17
34.0	**41.15**	18.5	4781	0.9	**16.7**	**4500**									1011		18

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

5

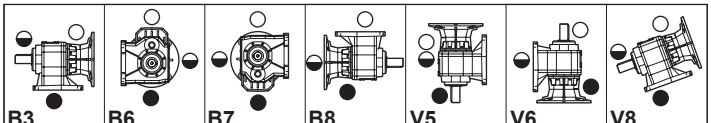
EN Unit **1102** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **1102** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **1102** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **1102** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **1102** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



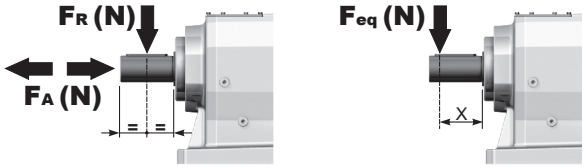
B3	B6	B7	B8	V5	V6	V8
6.50 LT	12.50 LT	7.50 LT	8.50 LT	14.50 LT	11.50 LT	Ask
AGIP Blasia 460						

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

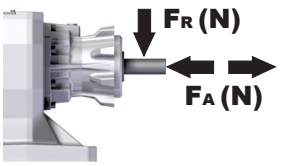
Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{138}{X+68}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2600	13000	**140**	3300	16500	**70**	4300	21500
250	2700	13500	**120**	3500	17500	**40**	5000	25000
200	3000	15000	**85**	3900	19500	**15**	5900	29500

Input shaft
Albero in entrata

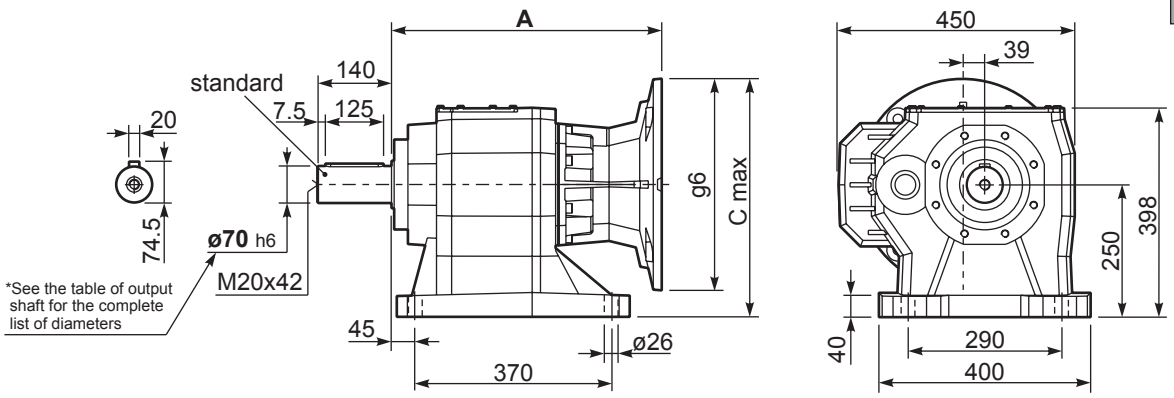


n_1	FA	FR
1400	1120	5600
900	1220	6100
500	1300	6500

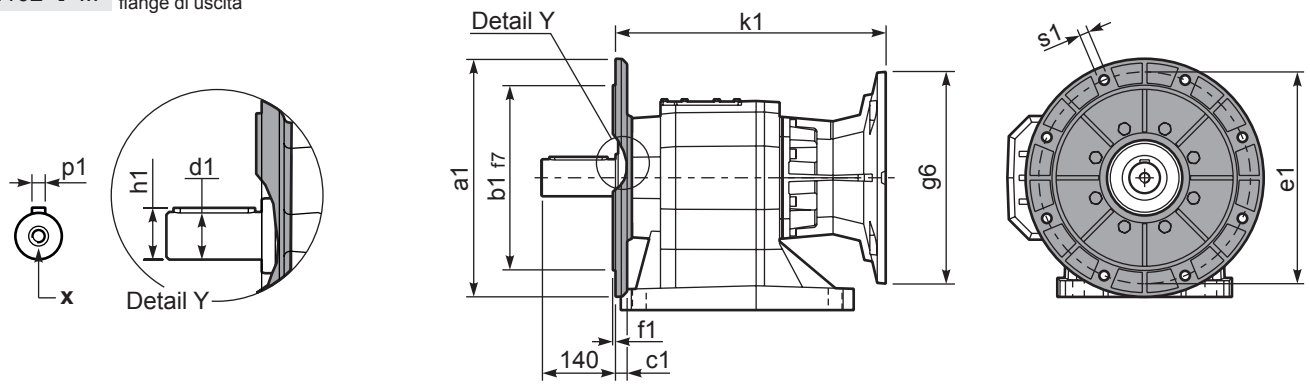
tab. 2

P1102**S0**... With foot / Con piedino

Gearbox weight / peso riduttore	165 kg



P1102-**F**... Output flanges / flange di uscita

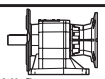


***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 70x140	20	74.5	M20x42
On request / A richiesta	-	-	-	-

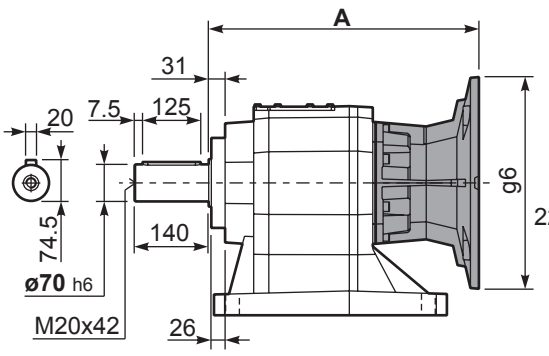
Available output flanges / flange di uscita

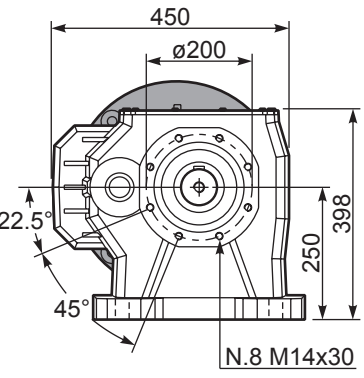
a1 ø	b1	c1	e1	f1	s1	kit code
350	250	21	300	5	18	KC110.9.015
450	350	22	400	5	18	KC110.9.016
-	-	-	-	-	-	-



All flanges are compatible with the foot

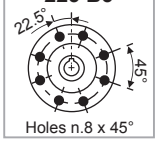
P1102**S0**... Basic gearbox / Riduttore base



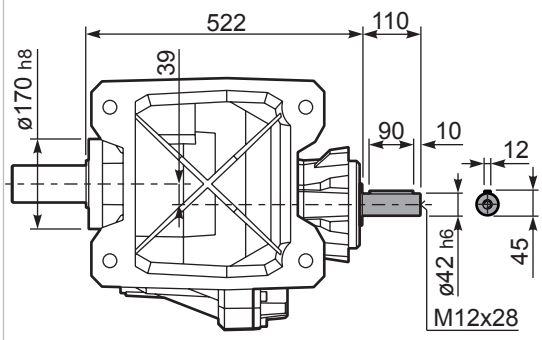


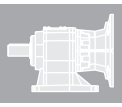
B5 Motor Flanges	A	C_{max}	g6	k1	kit code
132 B5	485.5	400	300	485.5	KC1109052
160 B5	510.5	425	350	510.5	KC1109053
180 B5	510.5	425	350	510.5	KC1109053_B
200 B5	510.5	450	400	510.5	KC1109054
225 B5	537.5	475	450	537.5	KC1109055

Input 225 B5



R1102**S0**... Input Shaft / Albero in entrata





▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -F 100 112	-G 132	-H 160	-I 180	B14 motor flanges –	-	-	–	-	-		Output Shaft	Ratios code
38.8	**36.11**	18.5	4113	1.1	**19.4**	**4500**	B										301411		01
27.5	**50.89**	15	4694	1.0	**14.1**	**4600**	B										201414		02
25.1	**55.73**	11	3777	1.2	**12.9**	**4600**	B										201413		03
20.3	**68.80**	11	4662	1.0	**10.4**	**4600**	B										161414		04
18.6	**75.35**	9	4354	1.1	**9.5**	**4600**	B										161413		05
15.6	**89.47**	7.5	4160	1.1	**8.0**	**4600**	B										131414		06
15.2	**92.02**	7.5	4278	1.1	**7.6**	**4500**	B										161411		07
14.3	**97.99**	7.5	4556	1.0	**7.3**	**4600**	B										131413		08
12.8	**109.52**	5.5	3762	1.2	**6.6**	**4600**	B										111414		09
11.7	**119.94**	5.5	4120	1.1	**6.0**	**4600**	B										111413		10
9.6	**146.47**	4	3681	1.2	**4.8**	**4500**	B										111411		11
8.8	**158.37**	4	3980	1.2	**4.5**	**4600**	B										81414		12
8.1	**173.45**	4	4359	1.1	**4.1**	**4600**	B										81413		13
6.6	**211.82**	3	4007	1.1	**3.3**	**4500**	B										81411		14

not available

standard ø70

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

5

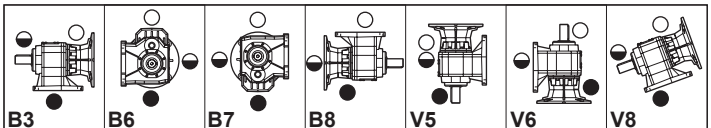
EN Unit **1103** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **1103** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **1103** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **1103** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **1103** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



B3	B6	B7	B8	V5	V6	V8
7.00 LT	13.00 LT	8.00 LT	9.00 LT	16.00 LT	13.50 LT	Ask

AGIP Blasia 460

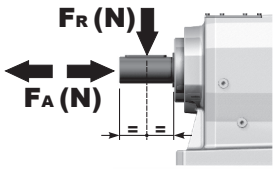
For all details on lubrication and plugs check our website Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

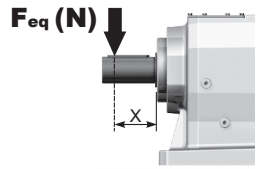
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

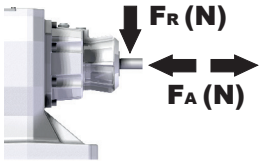
$$Feq = FR \cdot \frac{138}{X+68}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2600	13000	**140**	3300	16500	**70**	4300	21500
250	2700	13500	**120**	3500	17500	**40**	5000	25000
200	3000	15000	**85**	3900	19500	**15**	5900	29500

Input shaft
Albero in entrata

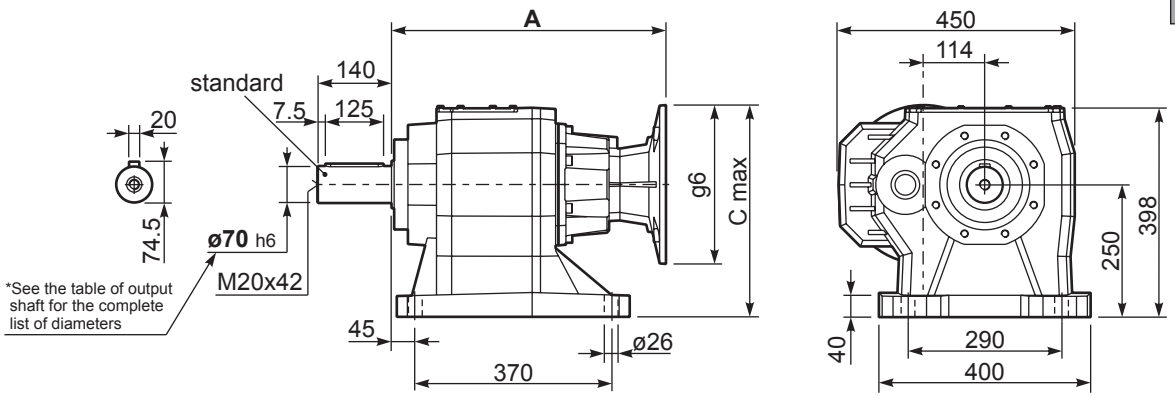


n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

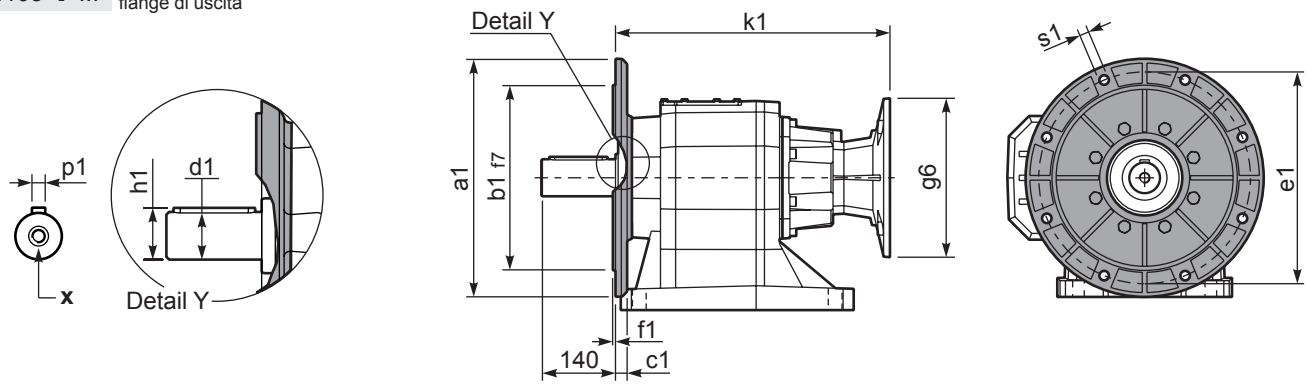
tab. 2

P1103**S0**... With foot
Con piedino

Gearbox weight peso riduttore	156 kg



P1103-**F**... Output flanges
flange di uscita

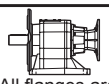


***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 70x140	20	74.5	M20x42
On request A richiesta	-	-	-	-

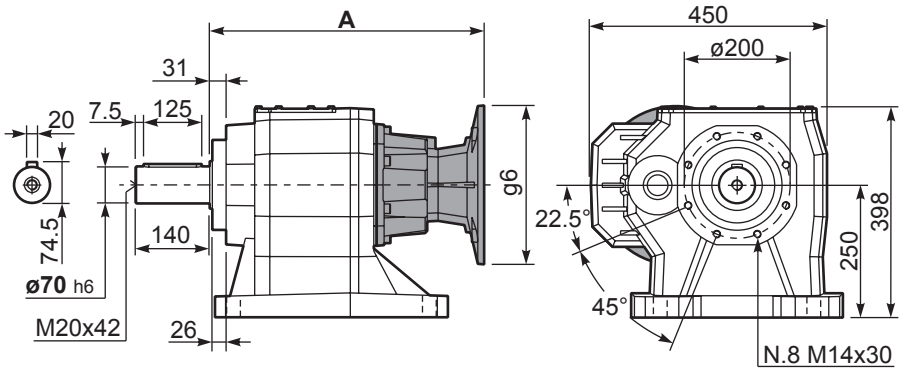
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
350	250	21	300	5	18	KC110.9.015
450	350	22	400	5	18	KC110.9.016
-	-	-	-	-	-	-



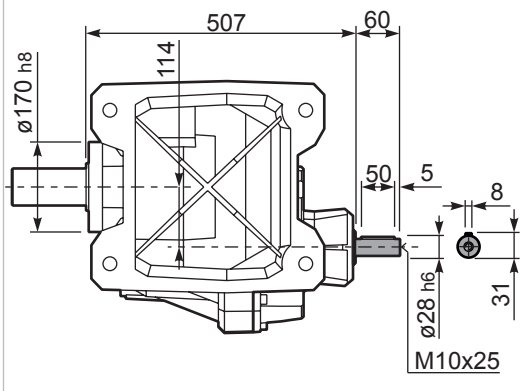
All flanges are compatible with the foot

P1103**S0**... Basic gearbox
Riduttore base



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
100/112 B5	518.5	375	250	518.5	KC1109056
132 B5	518.5	400	300	518.5	KC1109057
160 B5	533.5	425	350	533.5	KC1109058
180 B5	533.5	425	350	533.5	KC1109058_B

R1103**S0**... Input Shaft
Albero in entrata

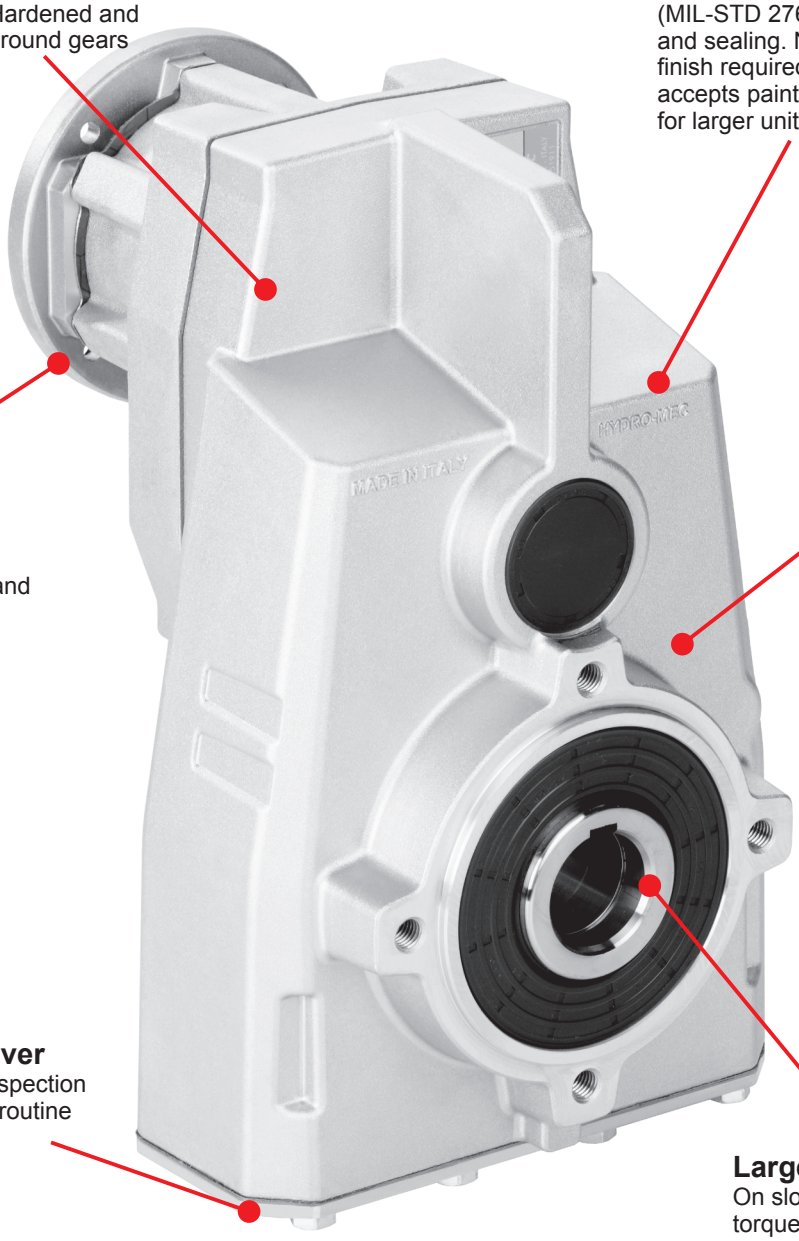


Aluminum & cast iron shaft mounted gearboxes

A modular and compact product

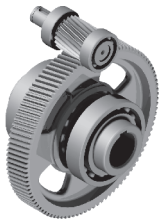
Gears
Hardened and ground gears

Alloy housing
Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint or cast iron for larger units.



Flange
Fully modular to IEC and Compact integrated motor.
NEMA C flange

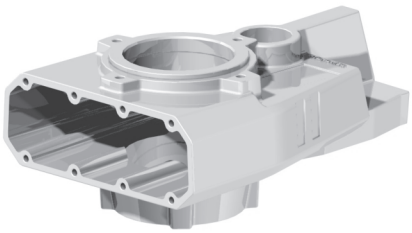
Large center distance

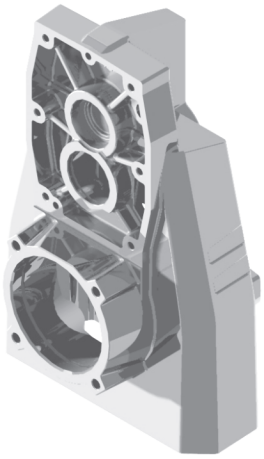


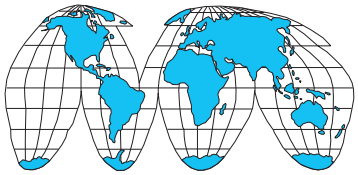
Removable inspection cover
Allows periodic inspection of gearing during routine maintenance

Large center distance
On slow gears for safe torque trasmission.

Single-piece aluminum / Cast Iron housing
Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing







World wide sales network.

Specific type datasheet on page...

On page / A pagina / Auf Seite / À la page / En la página

3 Stage

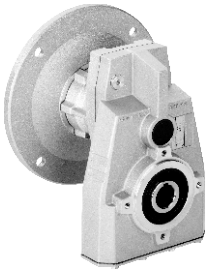
6-5	6-7

Types / Tipi / Tipen / Types / Tipos

FS10	FS20
60Nm	90Nm

On page / A pagina /Auf Seite / À la page / En la página

1 Stage



6-15	6-25	6-31	6-37

Types / Tipi / Tipen / Types / Tipos

FA41	FC61	FC71	FC81
225Nm	380Nm	670Nm	1175Nm

On page / A pagina / Auf Seite / À la page / En la página

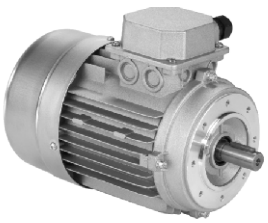
2 and 3 Stage

6-11	6-13	6-17	6-19	6-21	6-23	6-27	6-29	6-33	6-35	6-39	6-41

Types / Tipi / Tipen / Types / Tipos

FA32	FA33	FA42	FA43	FA52	FA53	FC62	FC63	FC72	FC73	FC82	FC83
150Nm	150Nm	320Nm	320Nm	490Nm	510Nm	675Nm	675Nm	900Nm	900Nm	2100Nm	2100Nm

On page / A pagina / Auf Seite / À la page / En la página



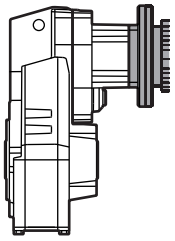
M-1

Types / Tipi / Tipen / Types / Tipos

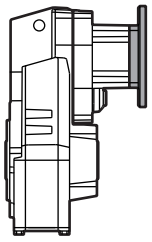
56A 56B	63A 63B	71A 71B	80A 80B	90S 90L	100LA 100LB	112M	132S 132M	160M 160L	180M 180L

Type - Tipo - Typ Type - Tipo	**Size** - Grandezza - Grösse Taille - Tamaño	**Mounting** - Montaggio Montage - Fixation Tipo de montaje	**Rapporto** - Ratio Untersetzung Reduction - Relacion	**Output shaft** Albero uscita Abtriebswelle Arbre de sortie Eje en salida
M	**FA42**	**C**	**10.04**	**-D**

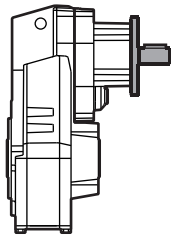
Shaft mounted helical
Riduttori ad assi paralleli



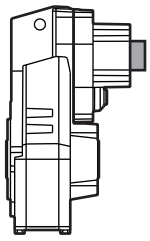
With IEC motor
M



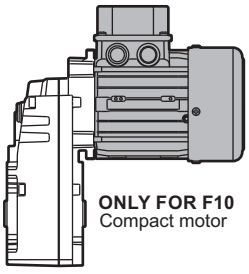
With motor flange
P



With male input shaft
R



Modular base
B
Not available for: FC61, FC71, FC81, FC82 .



ONLY FOR F10
Compact motor
C

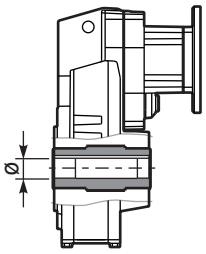
1 Stage Riduzione Stufe Trains Etapa
2 Stages Riduzioni Stufen Trains Etapas
3 Stages Riduzioni Stufen Trains Etapas

Aluminum/Alluminio/Aluminium/Aluminio

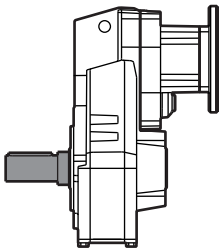
FA41
FA32 FA42 FA52
FS10 FS20
FA33 FA43 FA53

Cast Iron/Ghisa/Grauguss/Fonte/Fundicion

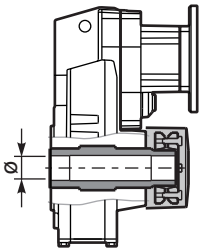
FC61 FC71 FC81
FC62 FC72 FC82
FC63 FC73 FC83



Hollow output shaft
C



Single output shaft
A



Shrink Disk
D
Only on request for Q.ty
A richiesta per quantità

See technical data table

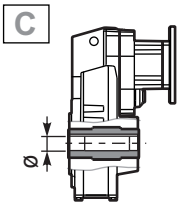
Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

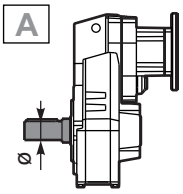
C



STANDARD
Only on request for Q.ty
A richiesta per quantità

FS10
-J ➡ ø17
FS20
-B ➡ ø20
FA32-3
-C ➡ ø25
FA41 FA42 FA43
-C ⇨ ø25
-D ➡ **ø30**
-E ⇨ ø35
FA52 FA53 FC61 FC62 FC63
-E ➡ **ø35**
-F ⇨ ø40
FC71 FC72 FC73
-F ➡ **ø40**
-G ⇨ ø45
FC81 FC82 FC83
-H ➡ **ø50**
-I ⇨ ø55

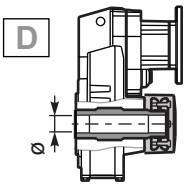
A



Single output shaft

-L FA32/3 ⇨ø25
-M FA41/2/3⇨ø30
-N FA52/3 FC61/2/3⇨ø35
-O FC71/2/3⇨ø40
-K FC81/2/3⇨ø50

D



Shrink disk

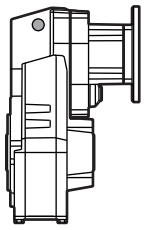
-Q FA42/3 ⇨ø30
-T FA52/3 FC62/3 ⇨ø35
-U FC72/3 ⇨ø40
-V FC82/3 ⇨ø50

Dossier according to 94/9/EG 8. b ii stored
0032

On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

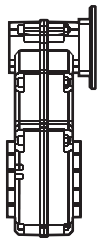
Type - Tipo - Typ
Types - Tipo

ST



ST

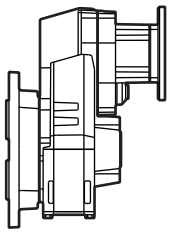
Foro standard
Standard bore



only for FS10 / FS20

ST

Senza braccio
di reazione
Without reaction arm

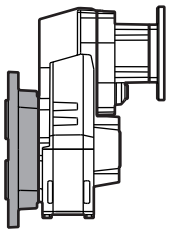


-F

Whit output flange
con flangia uscita

Output flange
Flangia uscita
Ausgangsflansch
Bride de sortie
Brida en salida

N



N Senza flangia
Without flange

FS20

1 ➡ **ø140**

FA32-3 FA41-2-3

2 ➡ **ø160**
3 ⇨ ø200
4 ⇨ ø250

FA52 FA53
FC61 FC62 FC63

4 ➡ **ø250**

FC71 FC72 FC73

4 ➡ **ø250**
5 ⇨ ø300

FC81 FC82 FC83

5 ➡ **ø300**
6 ⇨ ø350
7 ⇨ ø400

Motor size - Grandezza motore
Motor Grösse
Grandeur moteur - Tamaño motor

-C

Flange
Flangia

B5

-A=56 (ø120)
-B=63 (ø140)
-C=71 (ø160)
-D=80 (ø200)
-E=90 (ø200)
-F=100÷112 (ø250)
-G=132 (ø300)
-H=160 (ø350)
-I=180 (ø350)

B14

-O=56 (ø80)
-P=63 (ø90)
-Q=71 (ø105)
-R=80 (ø120)
-T=90 (ø140)
-U=100÷112 (ø160)
-V=132 (ø200)

COMPACT

CZ = 56
C0 = 63

Type R
Tipo R

FA33 FA43
FS10 FS20

-1 ⇨ ø14

FA32 FA42
FA53 FC63 FC73

-2 ⇨ ø19

FA52 FC62
FC72 FC83

-3 ⇨ ø24

FC82

-4 ⇨ ø28

Without flange
Senza flangia

-M ⇨ With coupling

FA33 FA43
FS10 FS20

-Z ⇨ ø9 (56B5)
-0 ⇨ ø11 (63B5)
-1 ⇨ ø14 (71B5)

FA32 FA42 FA53
FC63 FC73

-1 ⇨ ø14 (71B5)
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)

FA52 FC62
FC72 FC83

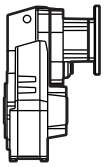
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)
-4 ⇨ ø28 (100B5)

FA41

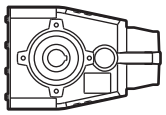
-4 ⇨ ø28 (100B5)

Mounting position
Posizione montaggio
Einbaulage
Position de montage
Position de montaje

H1



H1
STANDARD



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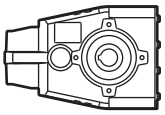

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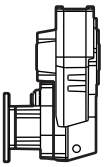
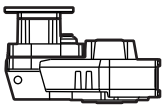
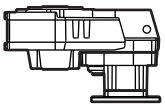


H2



H5



H6

Input bore
Foro entrata
Eingangshohlwelle
Trou d'entree
Eje hueco de entrada

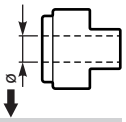
-

-

Nothing
indication:
standard bore

Nessuna
indicazione:
foro standard

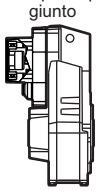
COUPLING



A = 9mm
B = 11mm
C = 14mm
D = 19mm
E = 24mm
F = 28mm

0

Ready for input
coupling
Predisposto per
giunto



Terminal box position
Posizione morsettiera
Klemmkastenlage
Position boîte à bornes
Posición caja de bornes

With Type M specify terminal box position

Con tipo M specificare posizione morsettiera

A

B
STANDARD

C

D

FORMULE UTILI / USEFUL FORMULAS / NÜTZLICHE FORMELIN / FORMULES UTILES / FÓRMULAS ÚTILES

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

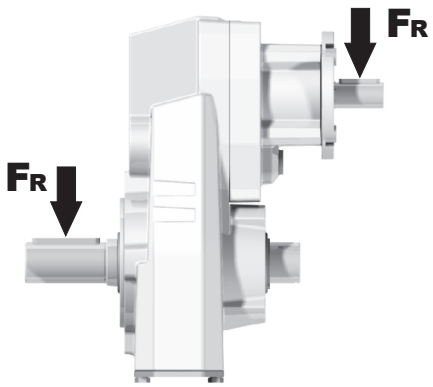
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$
Linear movement / traslazione / linearbewegung / translation / translacion	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

	$\mathbf{M}\ [Nm] = \frac{\mathbf{9550} \cdot \mathbf{P}[KW]}{\mathbf{n}\ [rpm]}$
	$\mathbf{M}\ [lb\ in] = \frac{\mathbf{63030} \cdot \mathbf{P}[HP]}{}$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



$F_R\ [N] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{2000}}{\mathbf{d}\ [mm]} \cdot f_K$	$F_R\ [N] = \frac{\mathbf{M}\ [lb\ in] \cdot \mathbf{8.9}}{\mathbf{d}\ [in]} \cdot f_K$

M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo
f_K	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión **1.15** Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje **1.25** Catena / Chain sprochets / Antriebskette / Chaîne / Cadena **1.75** Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal **2.50** Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana

— If your application requires higher radial loads, contact our technical office. Higher load may be possible.
— Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
— Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
— Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
— En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

B Output speed / Velocità in uscita / Abtriebsdrehzahl / Vitesse de sortie / Velocidad de salida

Nominal power / Potenza nominale / Max. mögliche Leistung / Poissance nominale / Potencia nominal

Gear size / Grandezza riduttore / Getriebegröße / Taille réducteur / Tamaño reductor

Motor power / Potenza motore / Motorleistung / Puissance moteur / Potencia motor

A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

Flange code / Codice flangia / Flanschtype / Code bride / Código bridas

Input speed / Velocità in entrata / Eintriebsdrehzahl / Vitesse en entrée / Velocidad de entrada

FA42 Compact- Gear 320Nm

Rating - Aluminum
SHAFT MOUNTED HELICAL

QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -Q 71	-R 80	-T 90	-U 100 112		Output Shaft ø	Ratios code
167	**8.38**	4	215	1.0	**4.1**	**225**	B					C	C			2821		01
139	**10.04**	3	194	1.2	**3.7**	**240**	B					C	C			2818		02
114	**12.33**	3	238	1.1	**3.2**	**260**	B					C	C			2813		03
92	**15.16**	2.2	216	1.2	**2.6**	**260**	B					C	C			1921		04

C Ratio / Rapporto / Untersetzung / Rapport de réduction / Relación

Transmitted torque / Momento torcente trasmesso / Mögliche Drehmomente / Couple de sortie / Par transmitido

Service factor / Fattore di servizio / Betriebsfaktor / Facteur de service / Factor de servicio

Output shaft diam. / Diam. albero uscita / Durchmesser abtriebswelle / Diametre arbre lent / Diametro eje de salida

Notes / Note / Anmerkungen / Note / Notas

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. 3 h	10 h	24 h
Continuous or intermittent appl. with start / hour ≤ 10 / Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour > 10 / Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D Motor flange available / Flange disponibili / Erhältliche Motorflansche / Brides disponibles / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Reduzierhülsen / Montage avec douille de réduction / Montaje con casquillo de reducción

C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur / Posición agujeros brida / base motor

B) Available without reduction bushes / Disponibile anche senza boccola / Auch ohne Reduzierbuchse verfügbar / Disponible aussi sans douille de réduction / Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Hollow Shaft	Ratios code
72	**19.42**	0.37	46	1.3	0.48	60			C	C		281713		01
51	**27.21**	0.37	65	0.9	0.34	60			C	C		281313		02
36.4	**38.49**	0.25	62	1.0	0.24	60			C	C		191713		03
31.7	**44.12**	0.18	54	1.1	0.21	60			C	C		171713		04
26.7	**52.50**	0.18	64	0.9	0.18	60			C	C		151713		05
22.6	**61.82**	0.12	49	1.2	0.15	60			C	C		171313		06
19.0	**73.56**	0.12	58	1.0	0.13	60			C	C		151313		07
15.9	**88.13**	0.09	56	1.1	0.11	60			C	C		101713	**standard ø17**	08
12.0	**116.67**	0.06	48	1.2	0.08	60			C	C		91713		09
11.3	**123.48**	0.06	51	1.2	0.08	60			C	C		101313		10
9.0	**155.37**	0.06	64	0.9	0.06	60			C	C		71713		11
8.6	**163.47**	0.06	68	0.9	0.06	60			C	C		91313		12
7.6	**184.39**	0.06	76	0.8	0.05	60			C	C		61713		13
6.4	**217.68**	0.06*	90	0.7	0.04	60			C	C		71313		14
5.4	**258.34**	0.06*	107	0.6	0.04	60			C	C		61313		15

The dynamic efficiency is **0.94** for all ratios

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing**
Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

EN Unit **FS10** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FS10** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FS10** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FS10** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FS10** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

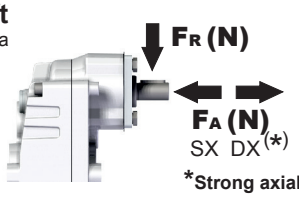
▪ LUBRICATION FS10 Oil Quantity 0.35 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL LOADS

Input shaft
Albero in entrata



n_1	FA	FR
1400	140	700
900	160	800

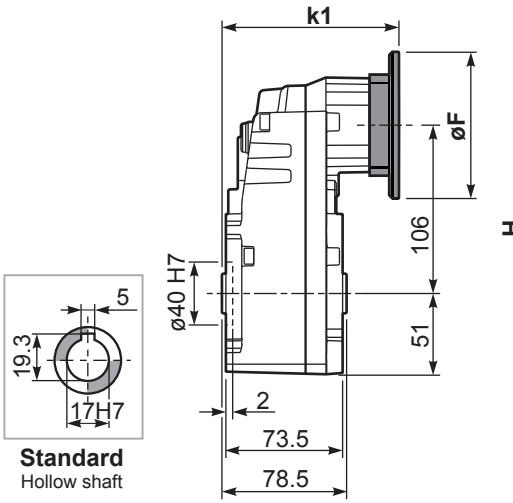
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

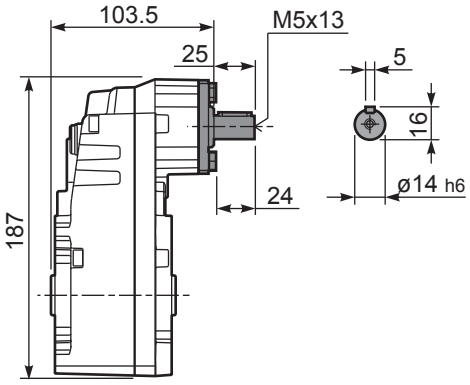
tab. 2

PFS10... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	3.1 kg

RFS10... Input Shaft
Albero in entrata





B14 Motor Flanges	H	øF	k1	kit code
56 B14	197	80	109.3	KC40.4.049
63 B14	202	90	111.8	K050.4.047
71 B14	209.5	105	109.3	K050.4.045

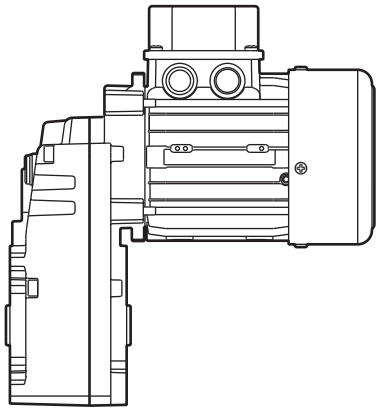
B5 Motor Flanges	H	øF	k1	kit code
63 B5	226	138	111.8	K050.4.041
71 B5	237	160	109.3	K050.4.042

Available with integrated motor
Disponibile con motore integrato

Motor sizes available :
Grandezza motore disponibile:

- 56 IEC
- 63 IEC

For more information, contact us.
Per maggiori informazioni, contattaci.



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Hollow Shaft	Ratios code
24.2	**57.95**	0.25	93	1.0	**0.24**	**90**			C	C		2844		01
13.4	**104.80**	0.12	83	1.1	**0.13**	**90**			C	C		1954		02
11.5	**121.47**	0.12	96	0.9	**0.12**	**90**			C	C		1756		03
9.8	**142.59**	0.09	90	1.0	**0.10**	**90**			C	C		1558	**standard ø20**	04
8.2	**170.20**	0.06	70	1.3	**0.08**	**90**			C	C		1360		05
6.0	**232.32**	0.06	96	0.9	**0.06**	**90**			C	C		1063		06
4.6	**303.20**	0.06*	126	0.7	**0.05**	**90**			C	C		974		07
3.5	**400.37**	0.06*	166	0.5	**0.04**	**90**			C	C		776		08

The dynamic efficiency is **0.94** for all ratios

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

EN Unit **FS20** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FS20** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FS20** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FS20** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FS20** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

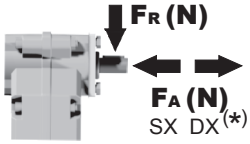
▪ LUBRICATION FS20 Oil Quantity 0.50 Lt.

AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL LOADS

Input shaft
Albero in entrata



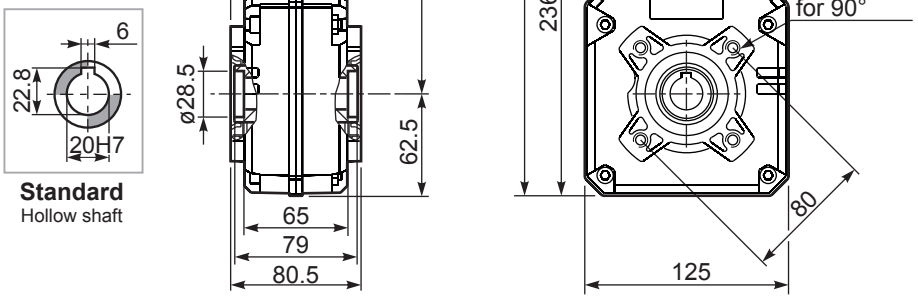
n_1	FA	FR
1400	140	700
900	160	800

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PFS20... Basic gearbox
Riduttore base

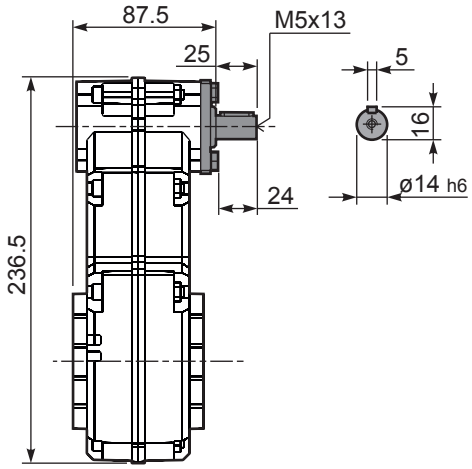
Gearbox weight / peso riduttore	4.3 kg



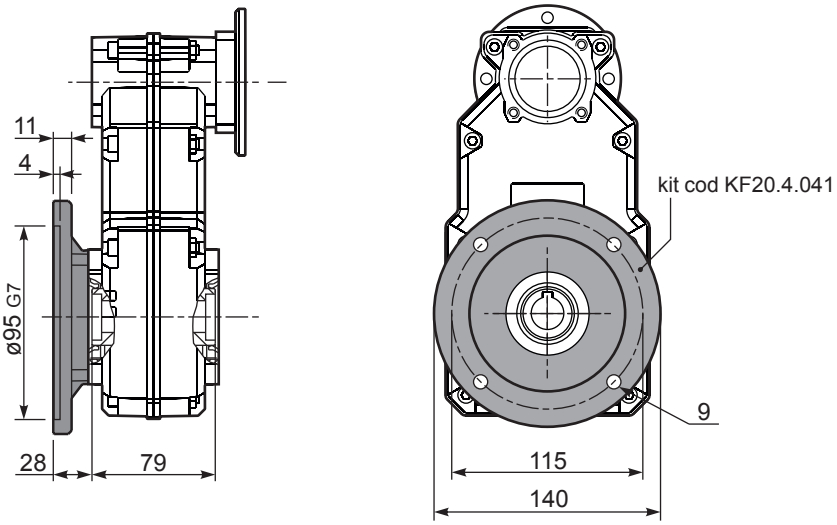
B14 Motor Flanges	H	øF	k1	kit code
56 B14	246.5	80	94.3	KC40.4.049
63 B14	251.5	90	96.8	K050.4.047
71 B14	259	105	94.3	K050.4.045

B5 Motor Flanges	H	øF	k1	kit code
63 B5	275.5	138	96.8	K050.4.041
71 B5	286.5	160	94.3	K050.4.042

RFS20... Input Shaft
Albero in entrata



PFS20-F Output flange
flangia di uscita



6

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -Q 71	-R 80	-T 90	-U 100 112		Output Shaft ø	Ratios code
231	**6.06**	2.2	86	0.9	**2.02**	**80**	B					C	C			2821		01
150	**9.31**	1.5	91	1.0	**1.48**	**90**	B					C	C			2813		02
128	**10.96**	1.5	107	1.0	**1.53**	**110**	B					C	C			1921		03
110	**12.71**	1.5	124	1.0	**1.50**	**125**	B					C	C			1721		04
94	**14.91**	1.5	146	1.0	**1.45**	**142**	B					C	C			1521		05
83	**16.83**	1.5	165	0.9	**1.36**	**150**	B					C	C			1913		06
79	**17.80**	1.1	127	1.2	**1.29**	**150**	B					C	C			1321		07
72	**19.51**	1.1	140	1.1	**1.17**	**150**	B					C	C			1713		08
61	**22.90**	1.1	164	0.9	**1.00**	**150**	B					C	C			1513		09
58	**24.30**	1.1	174	0.9	**0.94**	**150**	B					C	C			1021		10
54	**26.15**	0.75	128	1.2	**0.88**	**150**	B					C	C			1910	**standard**	11
51	**27.34**	0.75	134	1.1	**0.84**	**150**	B					C	C			1313	**ø25**	12
46.2	**30.31**	0.75	149	1.0	**0.76**	**150**	B					C	C			1710		13
44.1	**31.71**	0.75	156	1.0	**0.72**	**150**	B					C	C			921		14
39.4	**35.57**	0.75	175	0.9	**0.64**	**150**	B					C	C			1510		15
37.5	**37.32**	0.55	135	1.1	**0.61**	**150**	B					C	C			1013		16
33.0	**42.46**	0.55	154	1.0	**0.54**	**150**	B					C	C			1310		17
28.7	**48.70**	0.55	176	0.9	**0.47**	**150**	B					C	C			913		18
24.2	**57.96**	0.37	140	1.1	**0.40**	**150**	B					C	C			1010		19
21.8	**64.31**	0.37	156	1.0	**0.36**	**150**	B					C	C			713		20
18.5	**75.64**	0.25	124	1.2	**0.30**	**150**	B					C	C			910		21
14.0	**99.89**	0.25	163	0.9	**0.23**	**150**	B					C	C			710		22

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

6

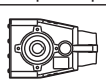
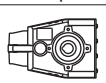
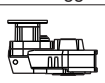
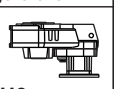
EN Unit **FA32** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA32** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA32** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA32** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

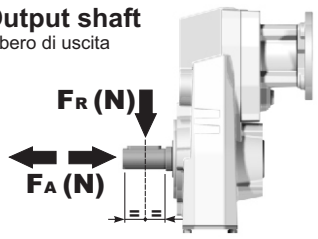
E El reductor tamaño **FA32** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	 H4	 H3	H2	 H5	 H6
0.65 LT	0.50 LT	0.50 LT	0.60 LT	0.80 LT	0.65 LT
SHELL Omala S4 WE 320			**ENI** Telium VSF 320		

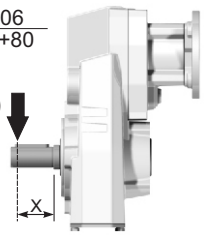
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



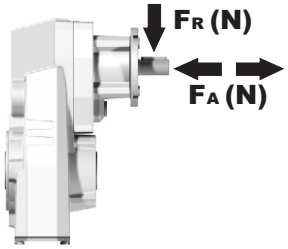
$F_{eq} = F_R \cdot \frac{106}{X+80}$



n_2 [min^{-1}]	FA	FR	n_2 [min^{-1}]	FA	FR	n_2 [min^{-1}]	FA	FR
300	250	1250	**140**	360	1800	**70**	470	2350
250	270	1350	**120**	380	1900	**40**	550	2750
200	320	1600	**85**	440	2200	**15**	560	2800

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



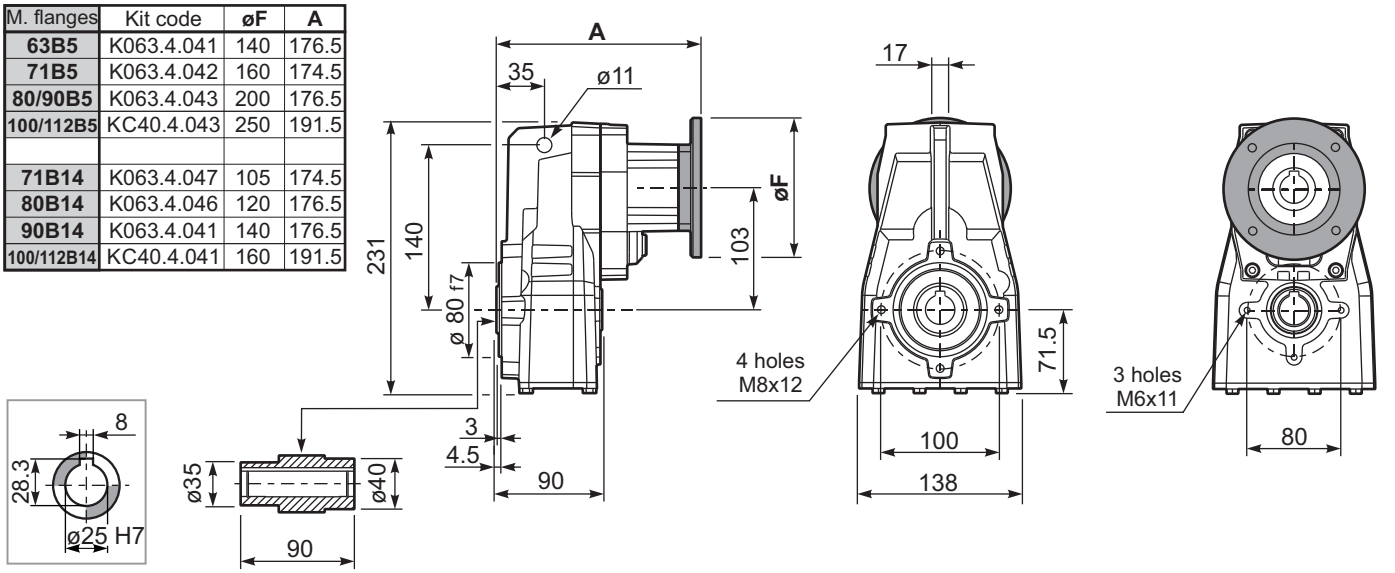
n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

PFA32C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	7.0 kg

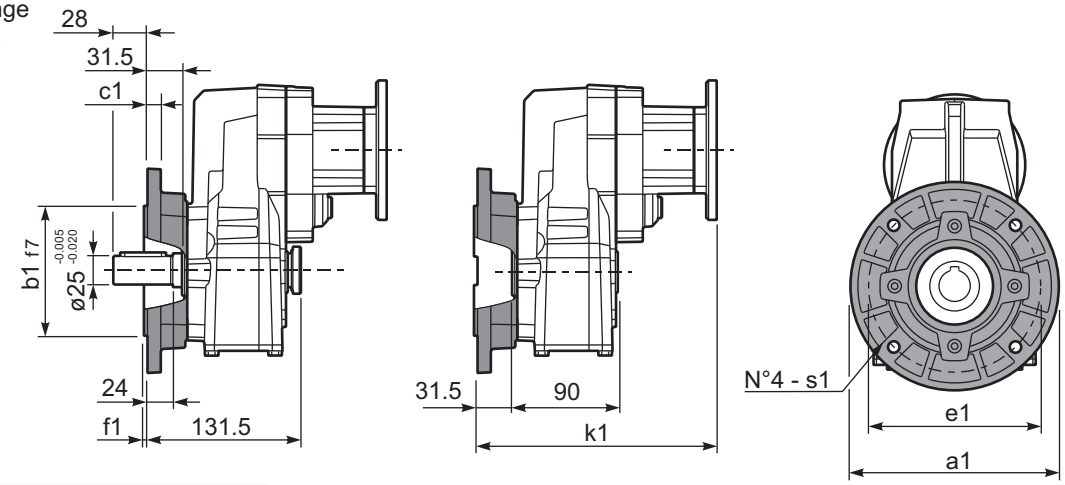
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	176.5
71B5	K063.4.042	160	174.5
80/90B5	K063.4.043	200	176.5
100/112B5	KC40.4.043	250	191.5
71B14	K063.4.047	105	174.5
80B14	K063.4.046	120	176.5
90B14	K063.4.041	140	176.5
100/112B14	KC40.4.041	160	191.5



Standard
Hollow shaft

PFA32...-F... Output flange
Flangia uscita

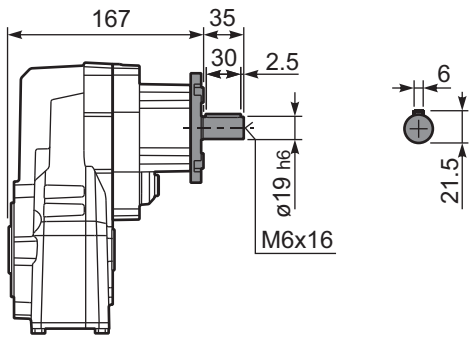
Motor Flange	k1
63B5	208
71B5	206
80/90B5	208
100/112B5	223
71B14	206
80B14	208
90B14	208
100/112B14	223



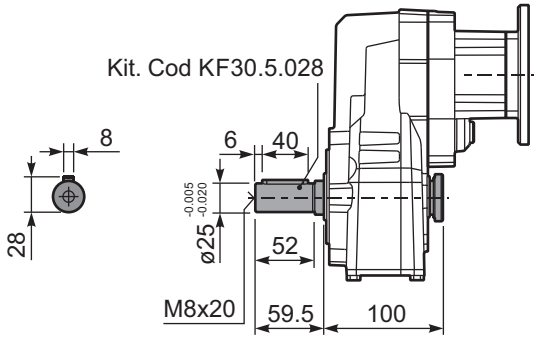
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX4A.9.010
200	130	11	165	3.5	11	KX4A.9.011
-	-	-	-	-	-	-

RFA32C... Input Shaft
Albero in entrata



PFA32 A... Single output shaft
Albero uscita semplice



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft ø	Ratios code
13.6	**102.57**	0.25	164	0,9	**0.23**	**150**			C	C		131710		01
12.6	**110.77**	0.18	136	1.1	**0.21**	**150**			C	C		91321		02
11.8	**118.89**	0.18	145	1.0	**0.20**	**150**			C	C		151310		03
10.9	**128.49**	0.18	157	1.0	**0.18**	**150**			C	C		101313		04
9.7	**143.72**	0.18	176	0.9	**0.16**	**150**			C	C		131310		05
8.7	**161.67**	0.12	128	1.2	**0.14**	**150**			C	C		71713		06
8.2	**170.10**	0.12	134	1.1	**0.14**	**150**			C	C		91313		07
7.4	**188.57**	0.12	149	1.0	**0.12**	**150**			C	C		91710	**standard**	08
7.0	**199.57**	0.12	158	1.0	**0.12**	**150**			C	C		101310	**ø25**	09
6.2	**226.51**	0.09	143	1.1	**0.10**	**150**			C	C		71313		10
5.6	**251.11**	0.09	158	0.9	**0.09**	**150**			C	C		71710		11
5.3	**264.21**	0.09	167	0.9	**0.09**	**150**			C	C		91310		12
4.7	**298.01**	0.06	123	1.2	**0.08**	**150**			C	C		61710		13
4.0	**351.82**	0.06	146	1.0	**0.07**	**150**			C	C		71310		14
3.4	**417.54**	0.06	173	0.9	**0.06**	**150**			C	C		61310		15

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

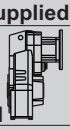
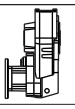
EN Unit **FA33** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA33** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA33** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA33** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

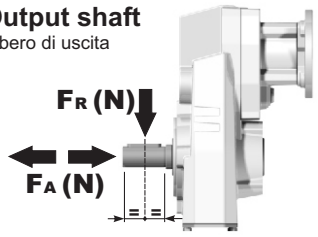
E El reductor tamaño **FA33** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
 H1	H4	H3	 H2	H5	H6
0.90 LT	0.55 LT	0.55 LT	0.65 LT	0.95 LT	0.70 LT
SHELL Omala S4 WE 320			**ENI** Telium VSF 320		

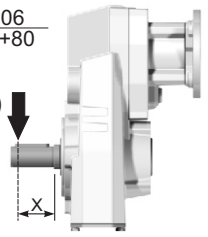
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



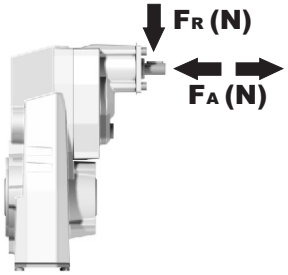
$F_{eq} = F_R \cdot \frac{106}{X+80}$



n_2 [min^{-1}]	FA	FR	n_2 [min^{-1}]	FA	FR	n_2 [min^{-1}]	FA	FR
300	250	1250	**140**	360	1800	**70**	470	2350
250	270	1350	**120**	380	1900	**40**	550	2750
200	320	1600	**85**	440	2200	**15**	560	2800

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



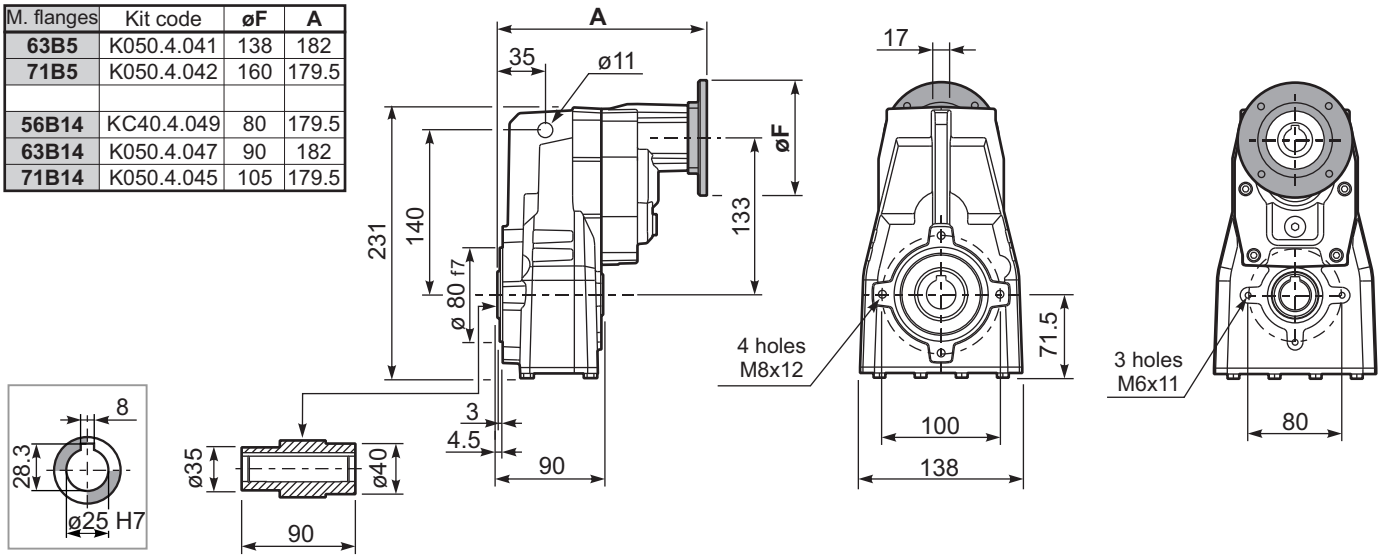
n_1	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

PFA33C... Basic gearbox
Riduttore base

Gearbox weight / peso riduttore	7.0 kg

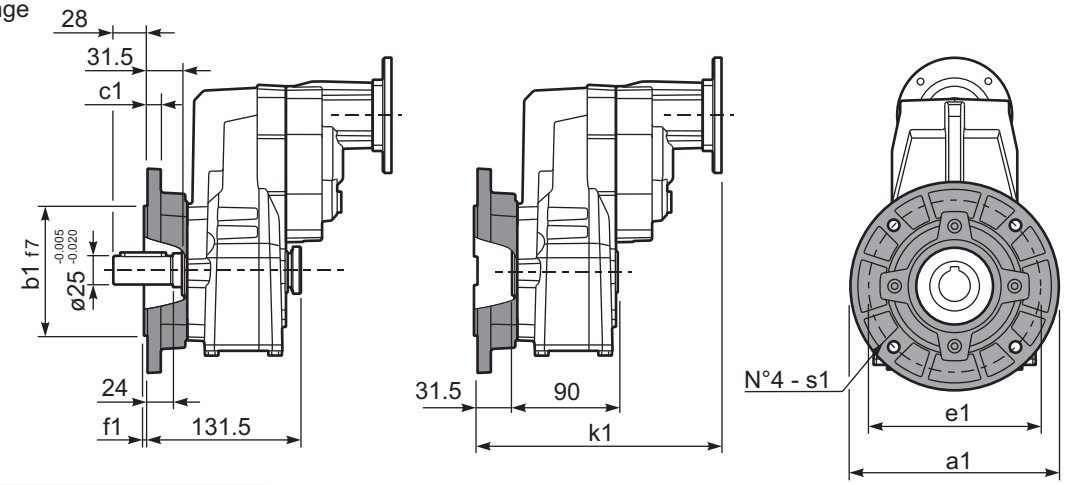
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	182
71B5	K050.4.042	160	179.5
56B14	KC40.4.049	80	179.5
63B14	K050.4.047	90	182
71B14	K050.4.045	105	179.5



Standard
Hollow shaft

PFA33...**-F**... Output flange
Flangia uscita

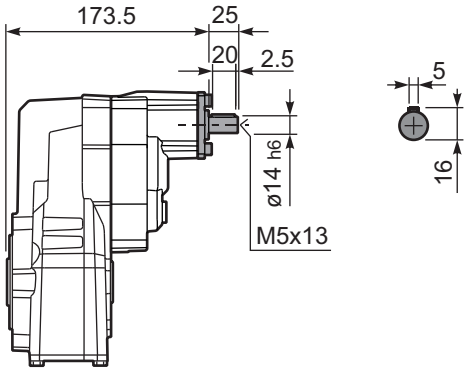
Motor Flange	k1
63B5	213.5
71B5	211
56B14	211
63B14	213.5
71B14	211



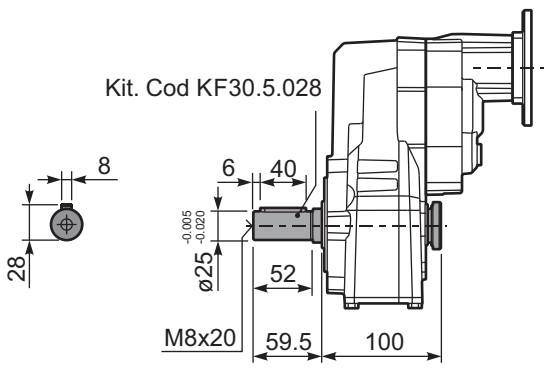
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX4A.9.010
200	130	11	165	3.5	11	KX4A.9.011
-	-	-	-	-	-	-

RFA33C... Input Shaft
Albero in entrata



PFA33 **A**... Single output shaft
Albero uscita semplice



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -D 80	-E 90	-F 100 112	Available B14 motor flanges -R 80	-T 90	-U 100 112		Output Shaft	Ratios code
481	**2.91**	4	76	1.8	7.2	140	B	B		B	B		3499	**standard**	01
373	**3.75**	4	98	1.6	6.4	160	B	B		B	B		28105	**ø30**	02
263	**5.33**	4	140	1.2	4.8	170	B	B		B	B		21112		03
219	**6.39**	4	167	1.0	4.0	170	B	B		B	B		18115	ø25	04
178	**7.85**	4	205	1.1	4.3	225	B	B		B	B		13102	ø35	05
														On request	

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

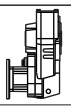
EN Unit **FA41** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA41** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA41** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA41** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

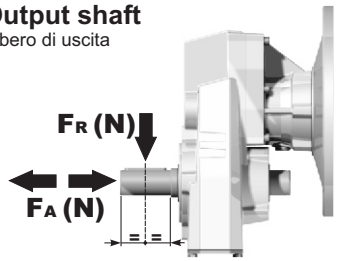
E El reductor tamaño **FA41** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	**H4**	**H3**	 **H2**	**H5**	**H6**
1.10 LT	0.65 LT	0.65 LT	0.65 LT	1.15 LT	0.80 LT
SHELL Omala S4 WE 320			**ENI** Telium VSF 320		

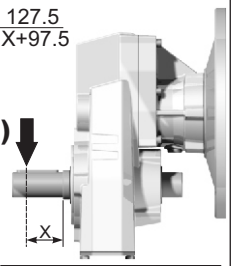
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$F_{eq} = F_R \cdot \frac{127.5}{X+97.5}$



n_2 [min^{-1}]	FA	FR	n_2 [min^{-1}]	FA	FR	n_2 [min^{-1}]	FA	FR
300	300	1500	**140**	390	1950	**70**	490	2450
250	320	1600	**120**	410	2050	**40**	590	2950
200	350	1750	**85**	460	2300	**15**	800	4000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

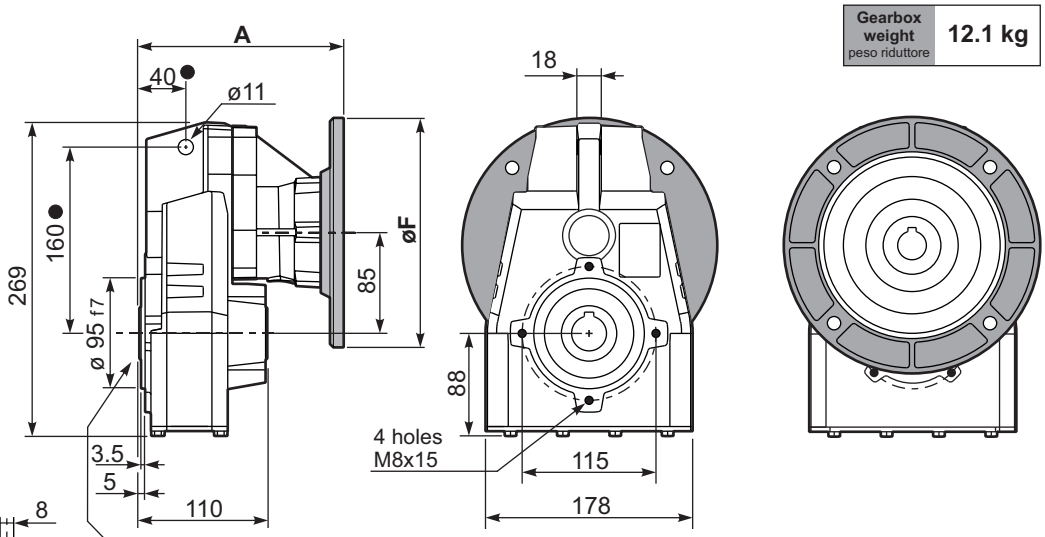
tab. 2

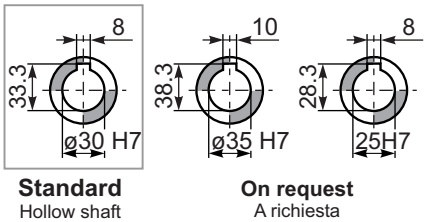
PFA41C... Basic gearbox
Riduttore base

Gearbox weight / peso riduttore: 12.1 kg

M. flanges	Kit code	øF	A
80/90B5	K023.4.042	200	179.5
100/112B5	K023.4.043	250	188.5
80B14	K085.4.046	120	179.5
90B14	K085.4.045	140	179.5
100/112B14	K085.4.047	160	188.5

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



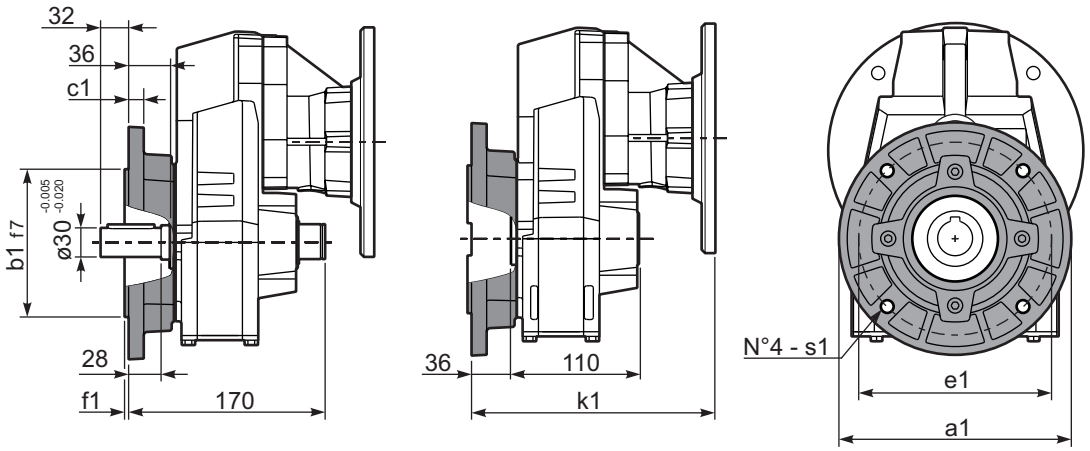


Standard
Hollow shaft

On request
A richiesta

PFA41...-F... Output flange
Flangia uscita

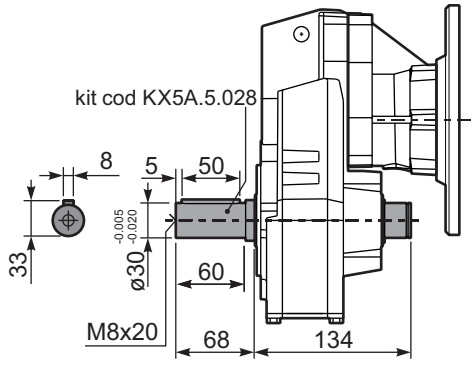
M. flanges	k1
80/90B5	215.5
100/112B5	221.5
80B14	213.5
90B14	213.5
100/112B14	224.5



Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX5A.9.010
200	130	13	165	3.5	11	KX5A.9.011
250	180	14	215	4	14	KX5A.9.012

PFA41 A... Single output shaft
Albero uscita semplice



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -Q 71	-R 80	-T 90	-U 100 112		Output Shaft ø	Ratios code
167	**8.38**	4	215	1.0	4.1	225	B					C	C			2821		01
139	**10.04**	3	194	1.2	3.7	240	B					C	C			2818		02
114	**12.33**	3	238	1.1	3.2	260	B					C	C			2813		03
92	**15.16**	2.2	215	1.2	2.6	260	B					C	C			1921		04
80	**17.57**	2.2	250	1.1	2.3	270	B					C	C			1721		05
77	**18.16**	2.2	258	1.1	2.4	290	B					C	C			1918		06
67	**21.05**	2.2	299	1.1	2.3	320	B					C	C			1718		07
63	**22.30**	2.2	317	1.0	2.2	320	B					C	C			1913	**standard**	08
57	**24.70**	1.5	242	1.3	2.0	320	B					C	C			1518	**ø30**	09
54	**25.85**	1.5	253	1.3	1.9	320	B					C	C			1713		10
47.5	**29.49**	1.5	289	1.1	1.7	320	B					C	C			1318	ø25	11
46.1	**30.34**	1.5	297	1.1	1.6	320	B					C	C			1513	ø35	12
41.7	**33.60**	1.1	240	1.0	1.1	250	B					C	C			1021	On request	13
38.7	**36.21**	1.1	259	1.2	1.3	320	B					C	C			1313		14
34.8	**40.25**	1.1	288	1.0	1.1	300	B					C	C			1018		15
28.3	**49.43**	1.1	354	0.9	0.99	320	B					C	C			1013		16
26.7	**52.53**	0.75	258	1.0	0.76	260	B					C	C			918		17
21.7	**64.51**	0.75	317	1.0	0.75	315	B					C	C			913		18
20.2	**69.37**	0.37	168	1.1	0.42	190	B					C	C			718		19
16.4	**85.19**	0.37	206	1.1	0.41	230	B					C	C			713		20

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

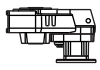
EN Unit **FA42** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA42** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA42** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA42** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

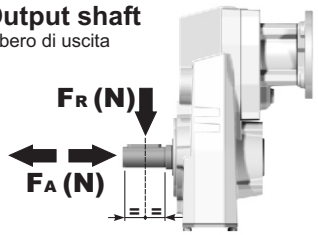
E El reductor tamaño **FA42** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	H4	H3	H2	H5	 H6
1.15 LT	0.70 LT	0.70 LT	0.70 LT	1.20 LT	0.80 LT
SHELL Omala S4 WE 320			**ENI** Telium VSF 320		

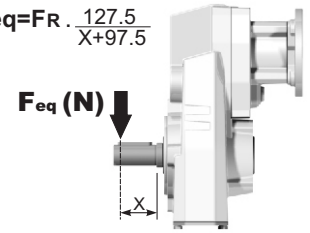
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



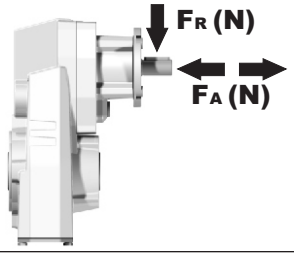
$F_{eq}=F_R \cdot \frac{127.5}{X+97.5}$



n_2 [min^{-1}]	FA	FR	n_2 [min^{-1}]	FA	FR	n_2 [min^{-1}]	FA	FR
300	300	1500	**140**	390	1950	**70**	490	2450
250	320	1600	**120**	410	2050	**40**	590	2950
200	350	1750	**85**	460	2300	**15**	800	4000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

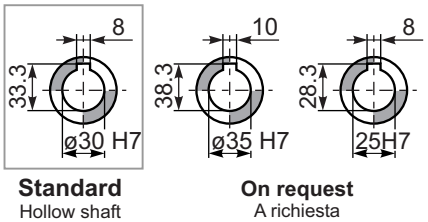
tab. 2

PFA42C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore: **9.0 kg**

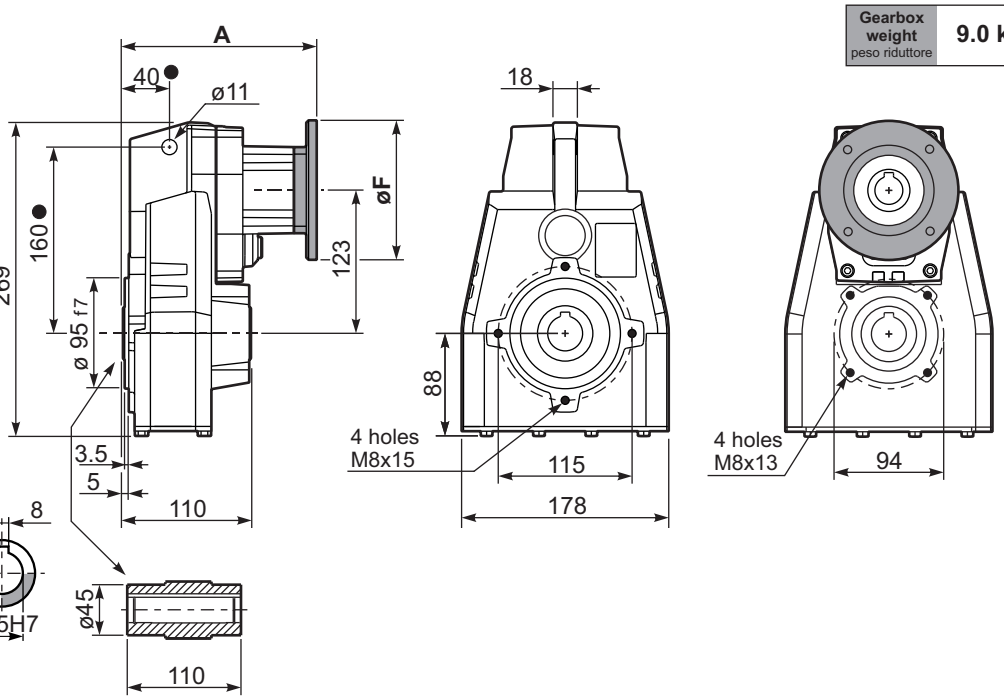
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	169.5
71B5	K063.4.042	160	167.5
80/90B5	K063.4.043	200	169.5
100/112B5	KC40.4.043	250	184.5
71B14	K063.4.047	105	167.5
80B14	K063.4.046	120	169.5
90B14	K063.4.041	140	169.5
100/112B14	KC40.4.041	160	184.5

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



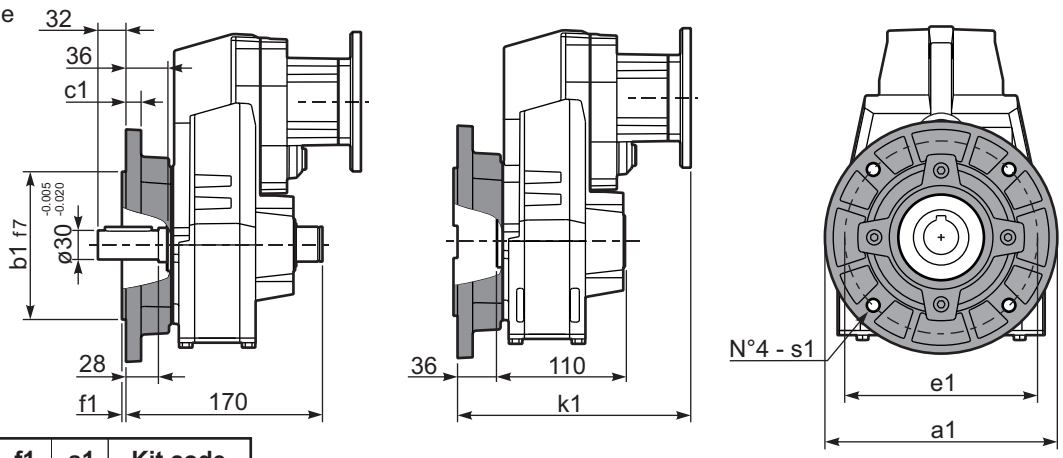
Standard
Hollow shaft

On request
A richiesta



PFA42...-F... Output flange
Flangia uscita

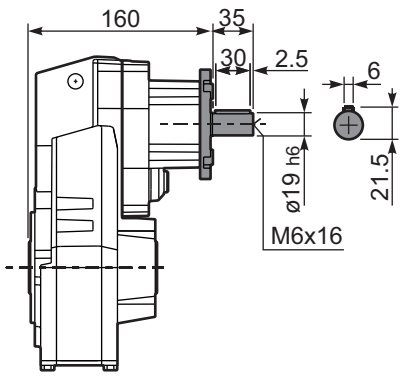
Motor Flange	k1
63B5	205.5
71B5	203.5
80/90B5	205.5
100/112B5	220.5
71B14	203.5
80B14	205.5
90B14	205.5
100/112B14	220.5



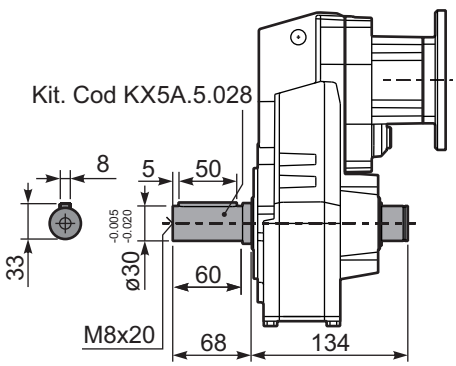
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX5A.9.010
200	130	13	165	3.5	11	KX5A.9.011
250	180	14	215	4	14	KX5A.9.012

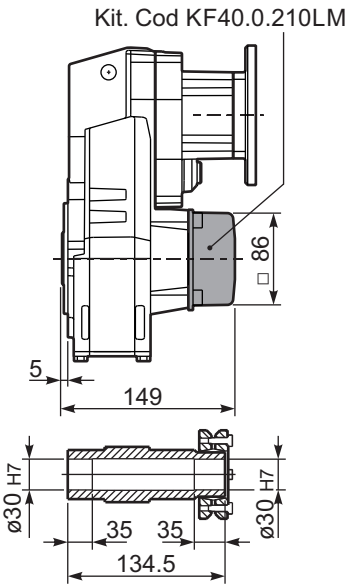
RFA42C... Input Shaft
Albero in entrata



PFA42 A... Single output shaft
Albero uscita semplice



PFA42D... Shrink disk
Calettatore



6

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft ø	Ratios code
18.8	**74.33**	0.37	176	1.8	**0.67**	**320**			C	C		191313		01
17.0	**82.56**	0.37	196	1.6	**0.60**	**320**			C	C		151318		02
16.0	**87.48**	0.37	207	1.5	**0.57**	**320**			C	C		131713		03
13.8	**101.40**	0.37	240	1.3	**0.49**	**320**			C	C		151313		04
11.4	**122.57**	0.37	291	1.1	**0.41**	**320**			C	C		131313		05
10.1	**138.59**	0.37	329	1.0	**0.36**	**320**			C	C		101318	**standard**	06
8.7	**160.82**	0.25	257	1.2	**0.31**	**320**			C	C		91713	**ø30**	07
8.2	**170.20**	0.25	272	1.2	**0.29**	**320**			C	C		101313		08
7.6	**183.48**	0.25	294	1.1	**0.27**	**320**			C	C		91318	ø25	09
6.5	**214.15**	0.18	262	1.2	**0.23**	**320**			C	C		71713	ø35	10
6.2	**225.33**	0.18	276	1.2	**0.22**	**320**			C	C		91313	On request	11
5.7	**244.32**	0.18	299	1.1	**0.20**	**320**			C	C		71318		12
5.5	**254.15**	0.18	311	1.0	**0.20**	**320**			C	C		61713		13
4.8	**289.96**	0.18	355	0.9	**0.17**	**320**			C	C		61318		14
4.7	**300.05**	0.18	367	0.9	**0.17**	**320**			C	C		71313		15
3.9	**356.09**	0.12	282	1.1	**0.14**	**320**			C	C		61313		16

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

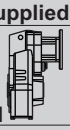
EN Unit **FA43** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA43** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA43** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA43** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

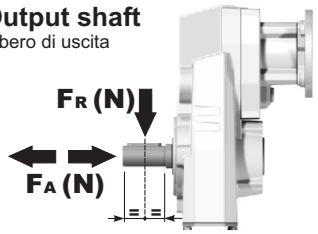
E El reductor tamaño **FA43** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
 H1	H4	H3	H2	H5	H6
1.30 LT	0.70 LT	0.70 LT	0.70 LT	1.35 LT	0.90 LT
SHELL Omala S4 WE 320			**ENI** Telium VSF 320		

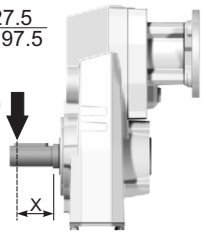
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



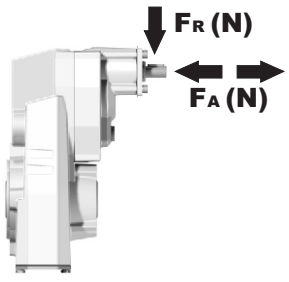
$F_{eq} = F_R \cdot \frac{127.5}{X+97.5}$



n_2 [min^{-1}]	FA	FR	n_2 [min^{-1}]	FA	FR	n_2 [min^{-1}]	FA	FR
300	300	1500	**140**	390	1950	**70**	490	2450
250	320	1600	**120**	410	2050	**40**	590	2950
200	350	1750	**85**	460	2300	**15**	800	4000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



n_1	FA	FR
1400	140	700
900	160	800
500	190	950

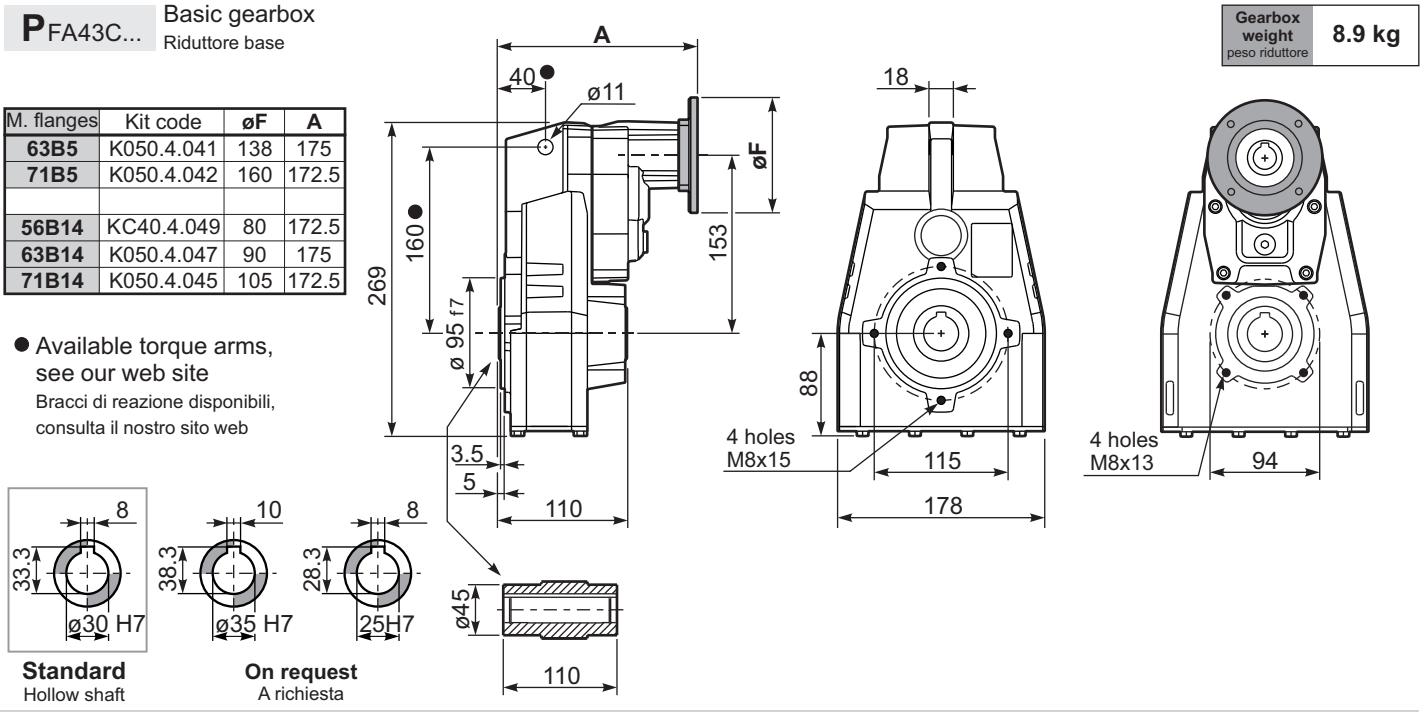
tab. 2

PFA43C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore **8.9 kg**

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	175
71B5	K050.4.042	160	172.5
56B14	KC40.4.049	80	172.5
63B14	K050.4.047	90	175
71B14	K050.4.045	105	172.5

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

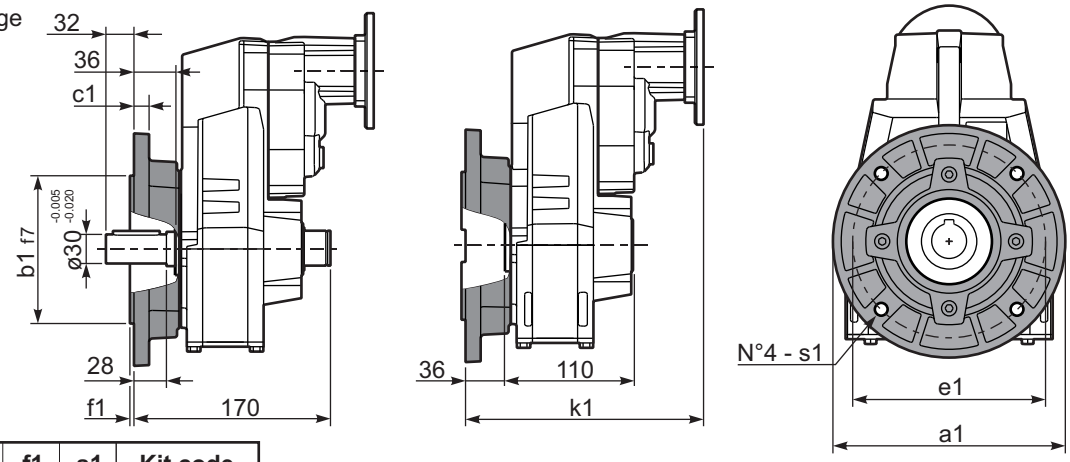


Standard
Hollow shaft

On request
A richiesta

PFA43...-F... Output flange
Flangia uscita

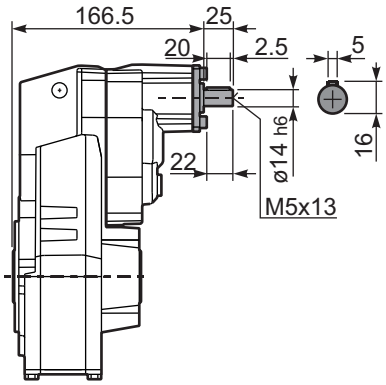
Motor Flange	k1
63B5	211
71B5	208.5
56B14	208.5
63B14	211
71B14	208.5



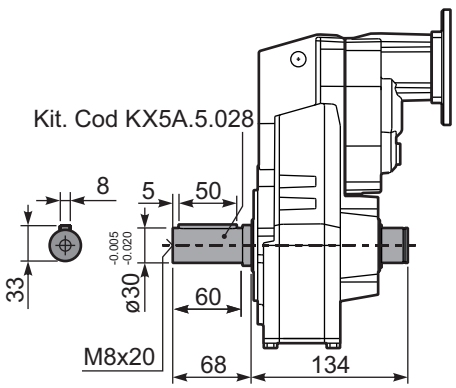
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX5A.9.010
200	130	13	165	3.5	11	KX5A.9.011
250	180	14	215	4	14	KX5A.9.012

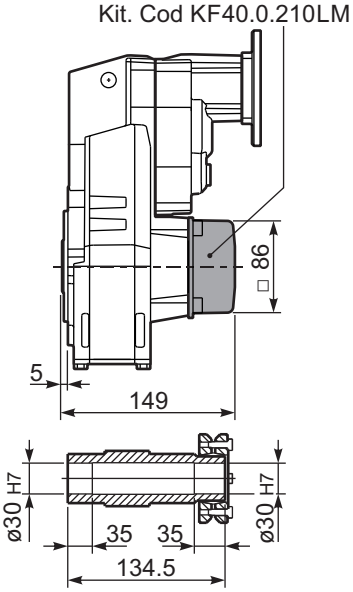
RFA43C... Input Shaft
Albero in entrata



PFA43 A... Single output shaft
Albero uscita semplice



PFA43D... Shrink disk
Calettatore



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
213	**6.57**	5.5	230	1.2	6.5	280	B									3018		01
185	**7.56**	5.5	265	1.1	5.9	290	B									3016		02
159	**8.82**	5.5	309	1.0	5.5	320	B									3014		03
113	**12.39**	5.5	434	1.0	5.5	450	B									2018		04
98	**14.24**	5.5	499	0.9	4.8	450	B									2016		05
84	**16.75**	4	429	1.1	4.3	470	B									1618		06
73	**19.25**	4	494	1.0	3.9	490	B									1616	**standard ø35**	07
64	**21.78**	4	558	0.9	3.4	490	B									1318		08
56	**25.04**	3	483	1.0	3.0	490	B									1316	ø40	09
47.9	**29.23**	3	564	0.9	2.6	490	B									1314	On request	10
45.7	**30.65**	2.2	436	1.1	2.4	490	B									1116		11
39.1	**35.78**	2.2	509	1.0	2.1	490	B									1114		12
36.3	**38.55**	2.2	548	0.9	1.9	490	B									818		13
31.6	**44.32**	1.5	434	1.1	1.7	490	B									816		14
27.1	**51.74**	1.5	507	1.0	1.4	490	B									814		15
22.9	**61.03**	1.1	437	1.1	1.2	480	B									616		16
19.6	**71.25**	1.1	510	1.0	1.1	490	B									614		17

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

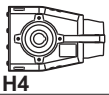
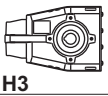
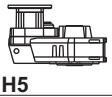
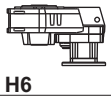
EN Unit **FA52** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA52** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA52** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA52** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FA52** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

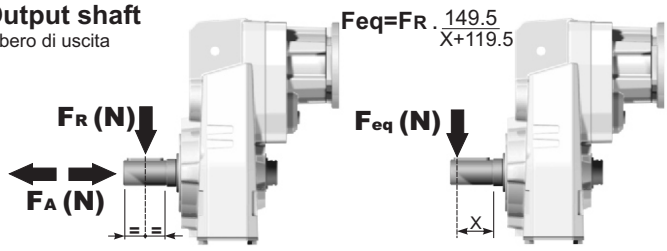
Standard supplied	**For these mounting position specify in the order or add oil** / Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	 H4	 H3	H2	 H5	 H6
1.85 LT	1.15 LT	1.15 LT	1.30 LT	2.10 LT	1.30 LT
SHELL Omala S4 WE 320			**ENI** Telium VSF 320		

For all details on lubrication and plugs check our website / Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

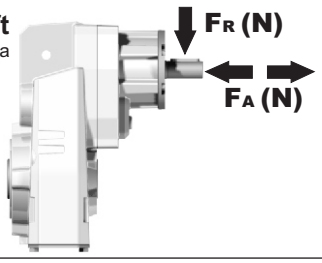
Output shaft
Albero di uscita



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	400	2000	**140**	460	2300	**70**	580	2900
250	420	2100	**120**	500	2500	**40**	780	3900
200	440	2200	**85**	550	2750	**15**	1140	5700

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

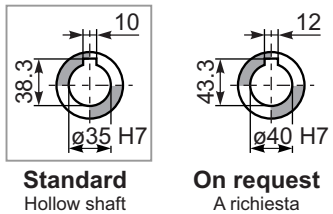
tab. 2

PFA52C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore **15.5 kg**

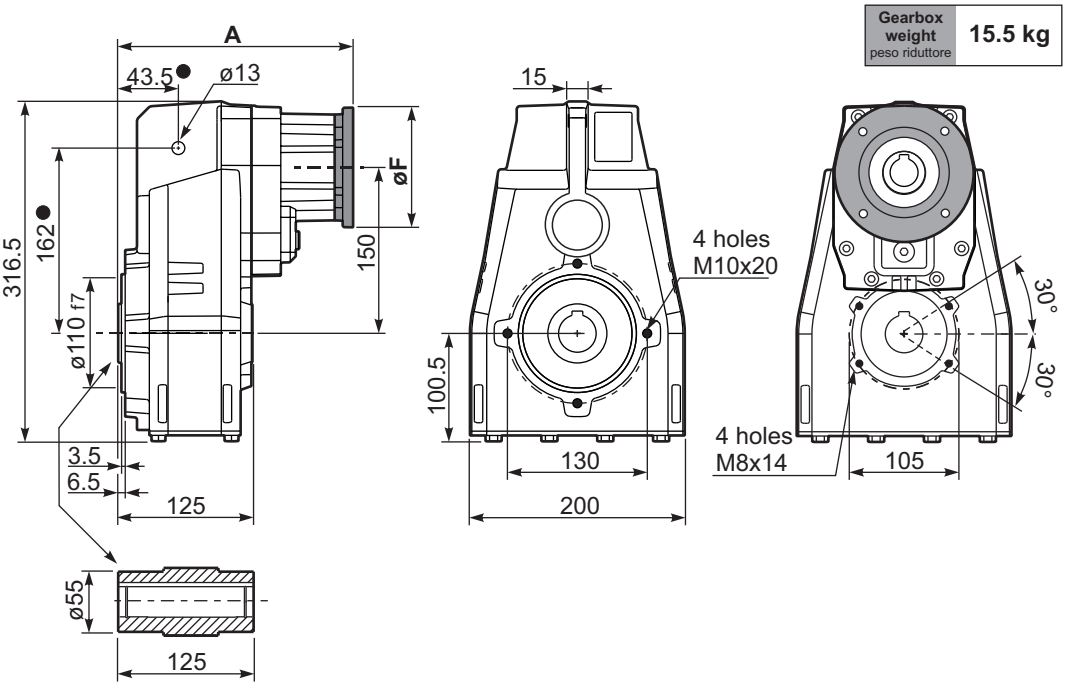
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	227
80/90B5	K023.4.042	200	229
100/112B5	K023.4.043	250	238
132B5	KC50.4.043	300	256
80B14	K085.4.046	120	229
90B14	K085.4.045	140	229
100/112B14	K085.4.047	160	238
132B14	KC50.4.041	200	256

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



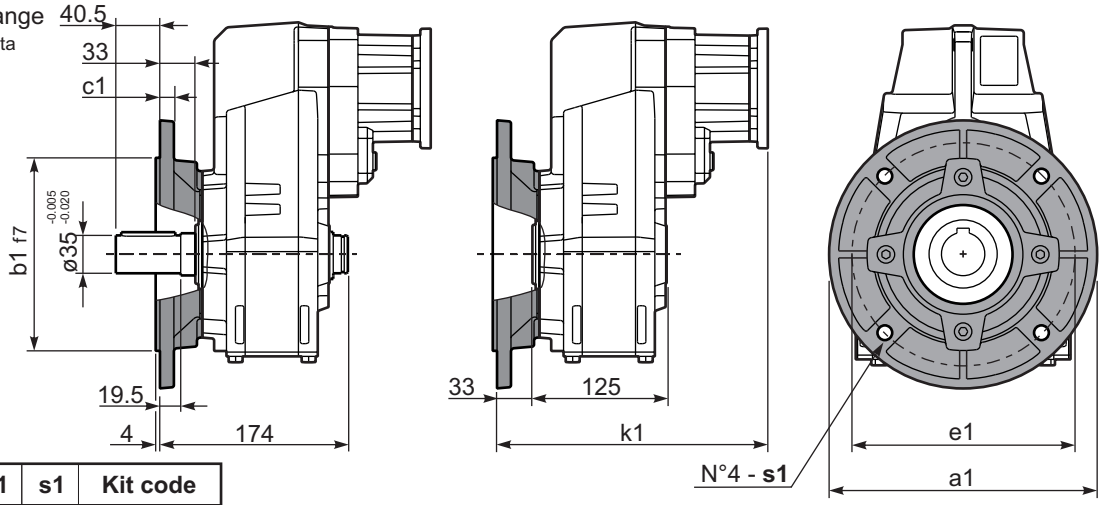
Standard Hollow shaft

On request A richiesta



PFA52...**-F**... Output flange
Flangia uscita

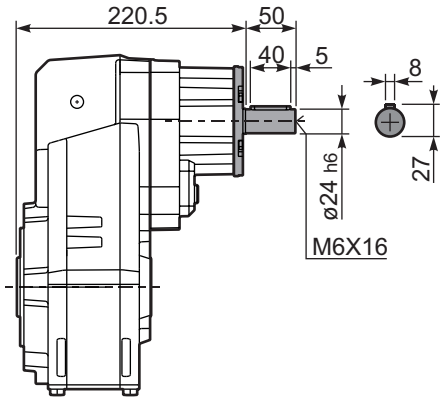
M. flanges	k1
71B5	260
80/90B5	262
100/112B5	271
132B5	289
80B14	262
90B14	262
100/112B14	271
132B14	289



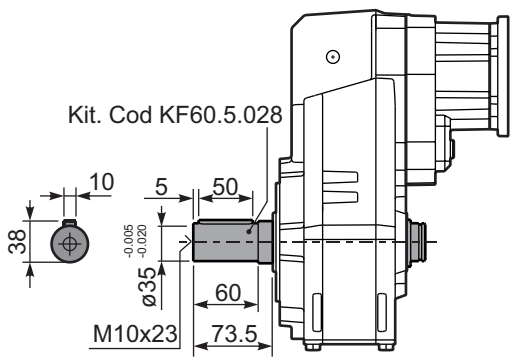
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
-	-	-	-	-	-

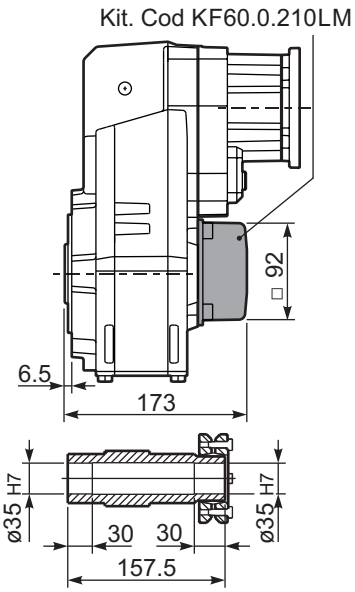
RFA52C... Input Shaft
Albero in entrata



PFA52 **A**... Single output shaft
Albero uscita semplice



PFA52**D**... Shrink disk
Calettatore



6

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
22.6	**61.89**	1.1	434	1.2	1.3	510	B				C	C		191318		01
19.7	**71.16**	1.1	499	1.0	1.1	510	B				C	C		191316		02
17.0	**82.48**	1.1	578	0.9	0.96	510	B				C	C		171316		03
14.5	**96.29**	0.75	463	1.1	0.83	510	B				C	C		171314		04
13.9	**100.51**	0.75	483	1.1	0.79	510	B				C	C		131318		05
12.1	**115.56**	0.55	410	1.2	0.69	510	B				C	C		131316		06
11.1	**125.96**	0.55	447	1.1	0.63	510	B				C	C		190816		07
10.4	**134.91**	0.55	479	1.1	0.59	510	B				C	C		131314	**standard ø35**	08
9.5	**147.05**	0.55	522	1.0	0.54	510	B				C	C		190814		09
8.2	**170.44**	0.37	404	1.3	0.47	510	B				C	C		170814		10
7.6	**184.15**	0.37	437	1.2	0.43	510	B				C	C		101314	ø40	11
6.8	**205.87**	0.37	488	1.0	0.39	510	B				C	C		91316	On request	12
5.8	**240.34**	0.37	570	0.9	0.33	510	B				C	C		91314		13
5.0	**279.22**	0.25	447	1.1	0.28	510	B				C	C		100816		14
4.3	**325.97**	0.25	522	1.0	0.24	510	B				C	C		100814		15
3.8	**364.41**	0.18	446	1.1	0.22	510	B				C	C		90816		16
3.3	**425.43**	0.18	521	1.0	0.19	510	B				C	C		90814		17
2.9	**481.19**	0.18	589	0.9	0.17	510	B				C	C		70816		18
2.5	**561.76**	0.12	444	1.1	0.14	510	B				C	C		70814		19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

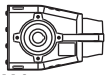
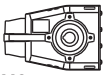
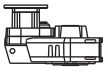
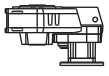
EN Unit **FA53** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FA53** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FA53** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FA53** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FA53** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

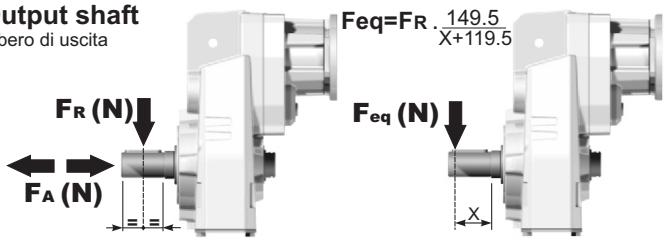
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	 **H4**	 **H3**	**H2**	 **H5**	 **H6**
2.15 LT	1.25 LT	1.25 LT	1.45 LT	2.35 LT	1.45 LT
SHELL Omala S4 WE 320			**ENI** Telium VSF 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

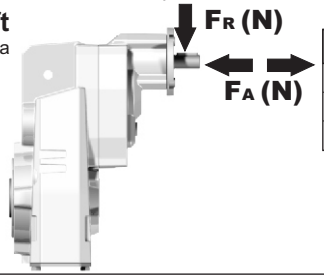
$F_{eq} = F_R \cdot \frac{149.5}{X+119.5}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	400	2000	**140**	460	2300	**70**	580	2900
250	420	2100	**120**	500	2500	**40**	780	3900
200	440	2200	**85**	550	2750	**15**	1140	5700

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

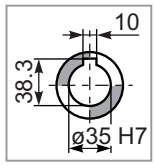
tab. 2

PFA53C... Basic gearbox
Riduttore base

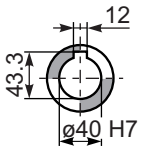
Gearbox weight peso riduttore **15.5 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	239
71B5	K063.4.042	160	237
80/90B5	K063.4.043	200	239
71B14	K063.4.047	105	237
80B14	K063.4.046	120	239
90B14	K063.4.041	140	239

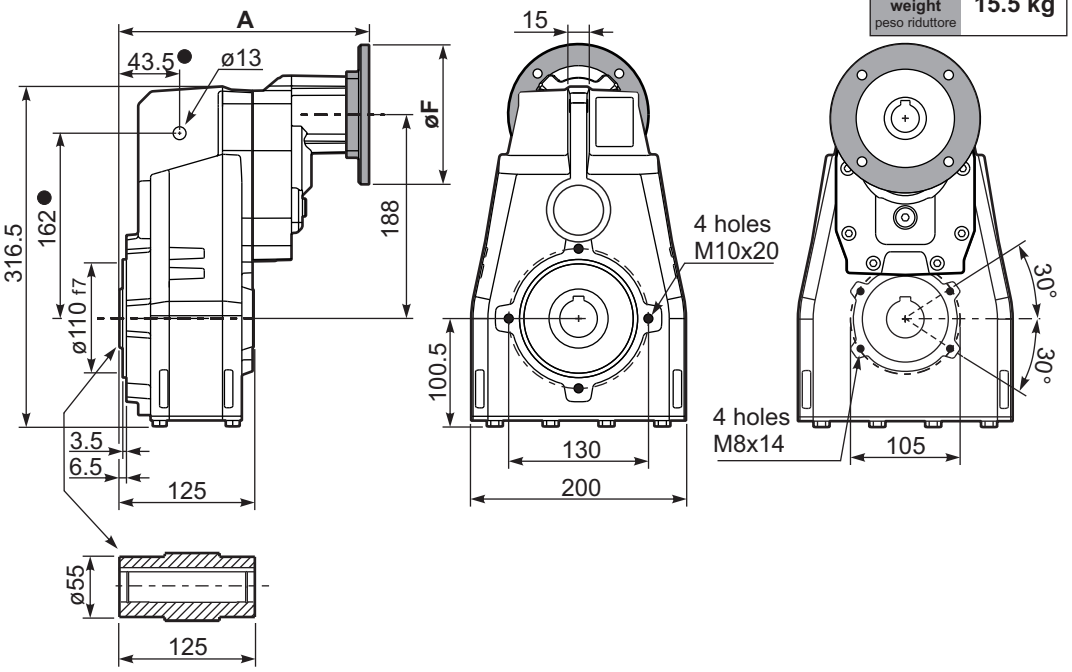
● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



Standard
Hollow shaft

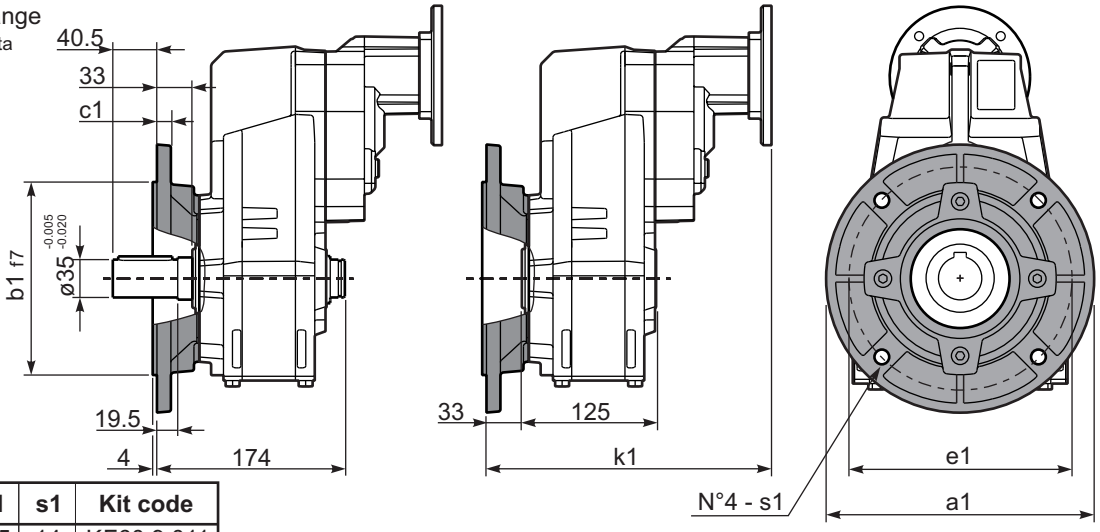


On request
A richiesta



PFA53...-F... Output flange
Flangia uscita

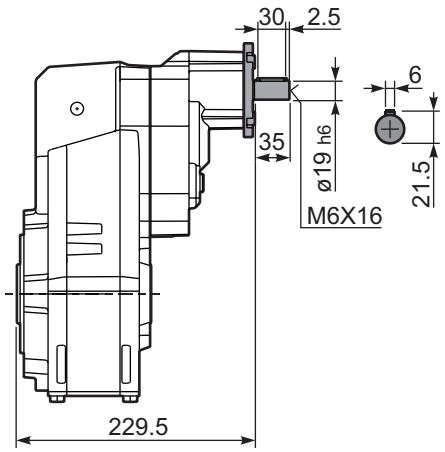
Motor Flange	k1
63B5	272
71B5	270
80/90B5	272
71B14	270
80B14	272
90B14	272



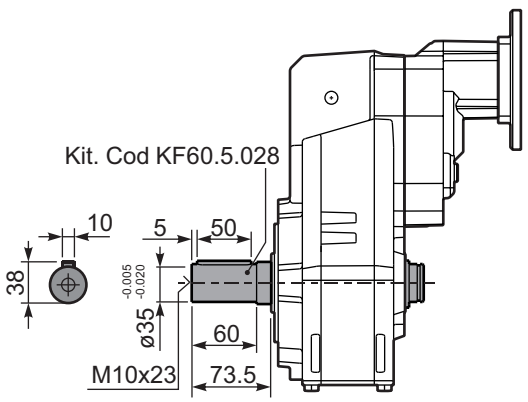
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
-	-	-	-	-	-

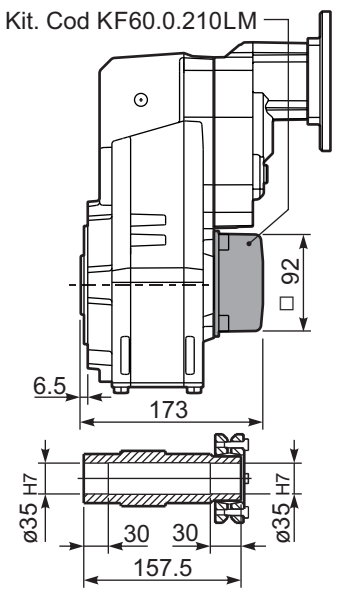
RFA53C... Input Shaft
Albero in entrata



PFA53 A... Single output shaft
Albero uscita semplice



PFA53D... Shrink disk
Calettatore



6

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -G	B14 motor flanges - - - -		Output Shaft ø	Ratios code
507	**2.76**	9	166	1.6	**14.4**	**265**	132	- - - -	2980	**standard**	01
395	**3.54**	9	213	1.3	**11.6**	**275**			2485	**ø35**	02
277	**5.06**	9	304	1.0	**8.6**	**290**		**not available**	1891		03
241	**5.81**	7.5	281	1.2	**8.5**	**330**			1693	ø40	04
206	**6.79**	7.5	329	1.2	**8.4**	**380**			1495	On request	05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing**
Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

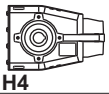
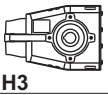
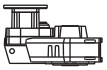
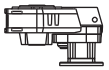
EN Unit **FC61** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FC61** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FC61** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FC61** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **FC61** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	 **H4**	 **H3**	**H2**	 **H5**	 **H6**
2.05 LT	1.25 LT	1.25 LT	1.40 LT	2.05 LT	1.40 LT
SHELL Omala S4 WE 320			**ENI** Telium VSF 320		

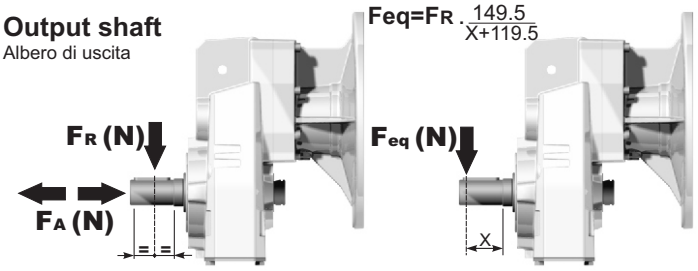
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$F_{eq} = F_R \cdot \frac{149.5}{X+119.5}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	600	3000	**140**	720	3600	**70**	940	4700
250	640	3200	**120**	740	3700	**40**	1220	6100
200	690	3460	**85**	860	4300	**15**	1300	6500

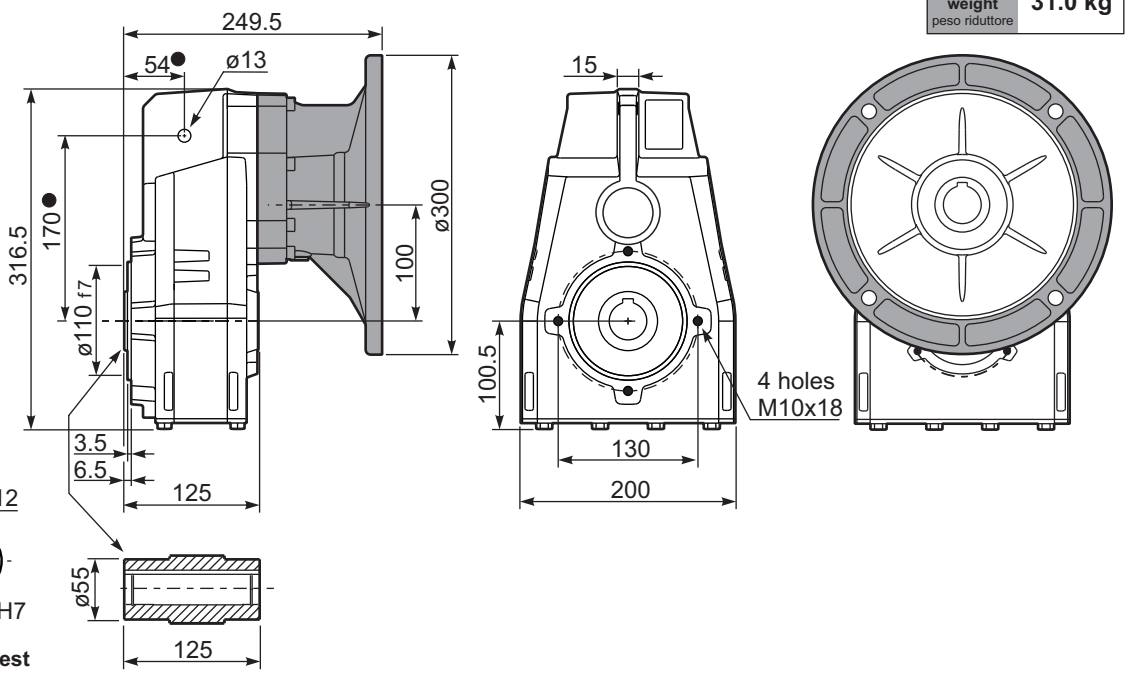
On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

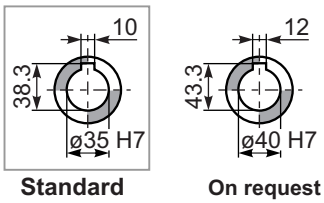
tab. 2

PFC61C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	31.0 kg

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

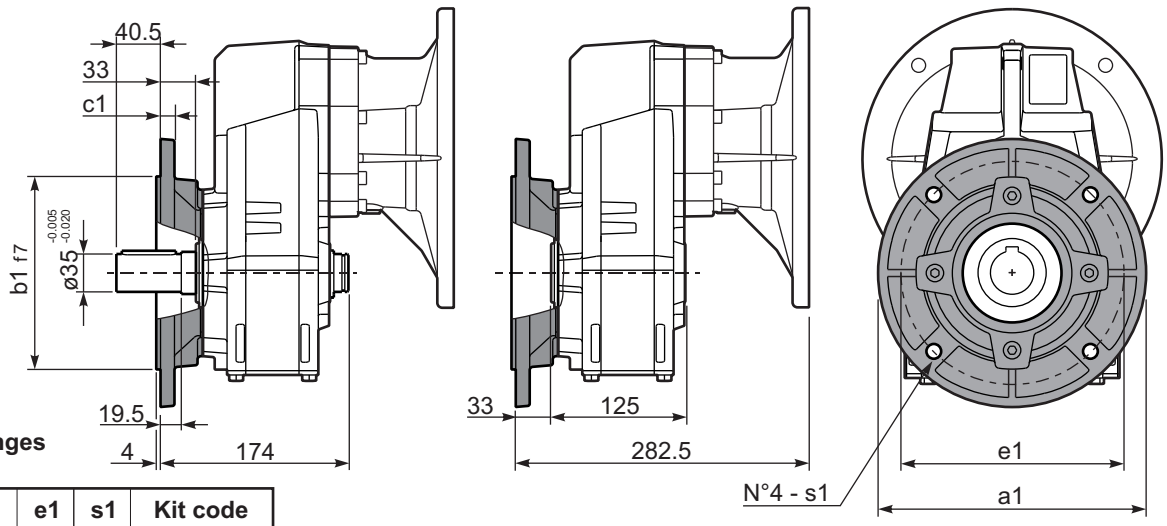




Standard
Hollow shaft

On request
A richiesta

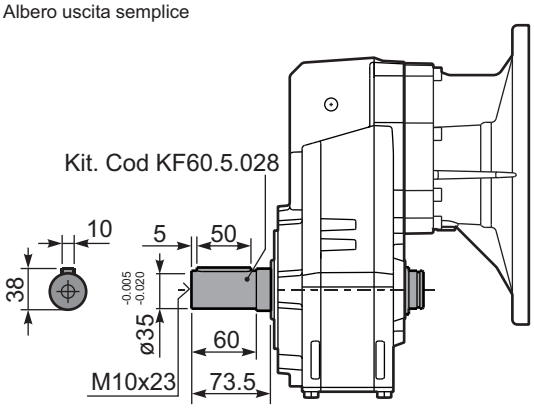
PFC61...**-F**... Output flange
Flangia uscita



Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
-	-	-	-	-	-

PFC61 **A**... Single output shaft
Albero uscita semplice



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
213	**6.57**	7.5	312	1.2	**8.8**	**380**	B									3018		01
185	**7.56**	7.5	358	1.1	**7.9**	**390**	B									3016		02
159	**8.82**	7.5	419	1.0	**7.1**	**410**	B									3014		03
113	**12.39**	7.5	588	1.0	**7.2**	**580**	B									2018		04
98	**14.24**	5.5	499	1.2	**6.4**	**600**	B									2016		05
84	**16.75**	5.5	587	1.1	**6.1**	**665**	B									1618		06
73	**19.25**	5.5	675	1.0	**5.4**	**675**	B									1616	**standard ø35**	07
64	**21.78**	4	558	1.2	**4.7**	**675**	B									1318		08
56	**25.04**	4	642	1.1	**4.1**	**675**	B									1316		09
47.9	**29.23**	4	750	0.9	**3.5**	**675**	B									1314	ø40 On request	10
45.7	**30.65**	3	592	1.1	**3.4**	**675**	B									1116		11
39.1	**35.78**	3	691	1.0	**2.9**	**675**	B									1114		12
36.3	**38.55**	2.2	548	1.1	**2.3**	**580**	B									818		13
31.6	**44.32**	2.2	630	1.1	**2.3**	**665**	B									816		14
27.1	**51.74**	2.2	735	0.9	**2.0**	**675**	B									814		15
22.9	**61.03**	1.1	437	1.1	**1.2**	**480**	B									616		16
19.6	**71.25**	1.1	510	1.1	**1.2**	**560**	B									614		17

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

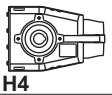
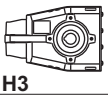
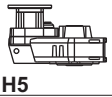
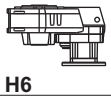
EN Unit **FC62** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FC62** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FC62** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FC62** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

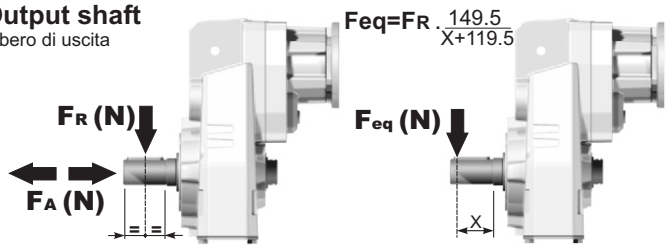
E El reductor tamaño **FC62** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	 H4	 H3	H2	 H5	 H6
2.05 LT	1.25 LT	1.25 LT	1.40 LT	2.20 LT	1.40 LT
SHELL Omala S4 WE 320			**ENI** Telium VSF 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

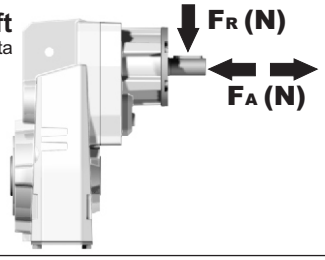
Output shaft
Albero di uscita



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	600	3000	**140**	720	3600	**70**	940	4700
250	640	3200	**120**	740	3700	**40**	1220	6100
200	690	3460	**85**	860	4300	**15**	1300	6500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



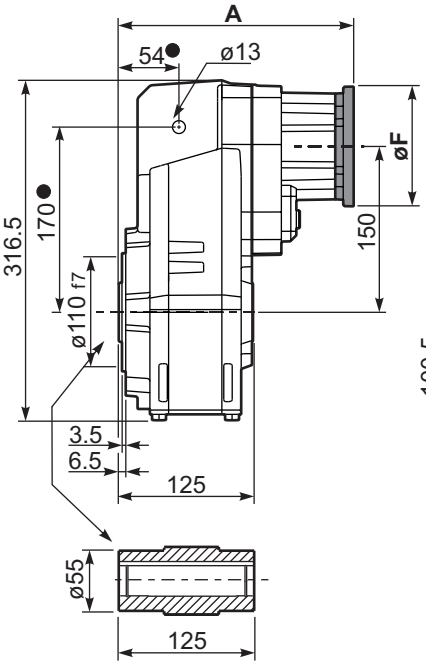
n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

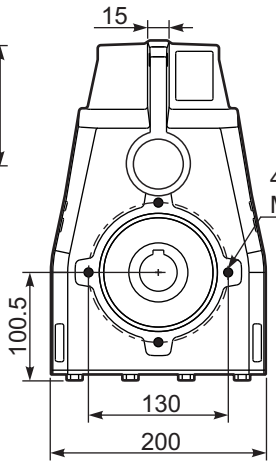
tab. 2

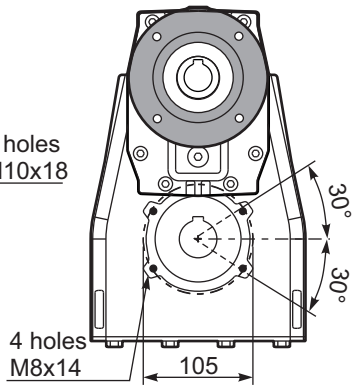
PFC62C... Basic gearbox
Riduttore base

Gearbox weight / peso riduttore: **20.8 kg**

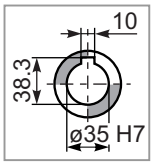
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	227
80/90B5	K023.4.042	200	229
100/112B5	K023.4.043	250	238
132B5	KC50.4.043	300	256
80B14	K085.4.046	120	229
90B14	K085.4.045	140	229
100/112B14	K085.4.047	160	238
132B14	KC50.4.041	200	256



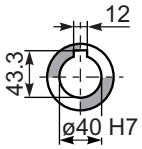




- Available torque arms, see our web site
  Bracci di reazione disponibili, consulta il nostro sito web



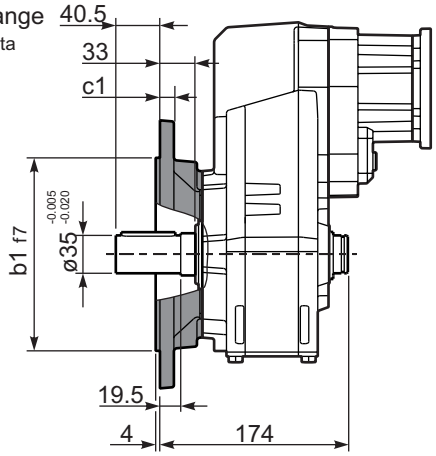
Standard
Hollow shaft

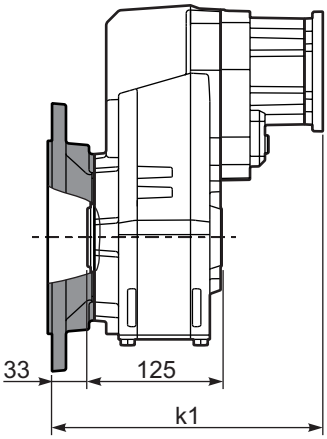


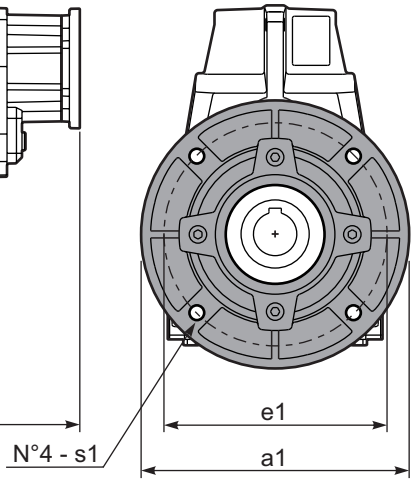
On request
A richiesta

PFC62...-F... Output flange
Flangia uscita

M. flanges	k1
71B5	260
80/90B5	262
100/112B5	271
132B5	289
80B14	262
90B14	262
100/112B14	271
132B14	289



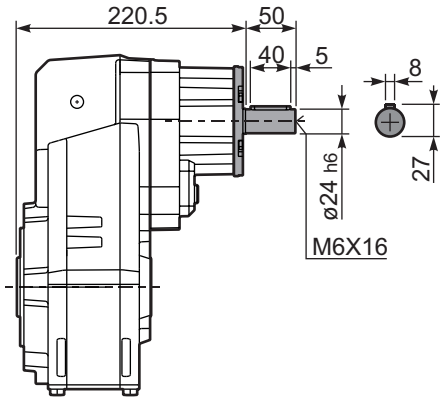




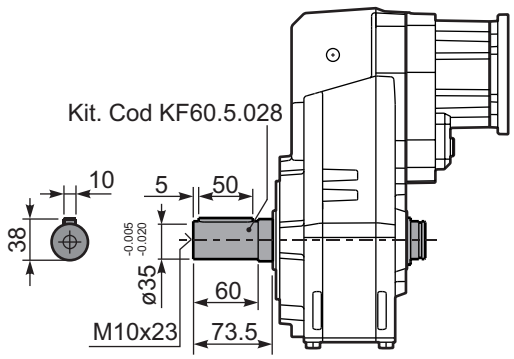
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
-	-	-	-	-	-

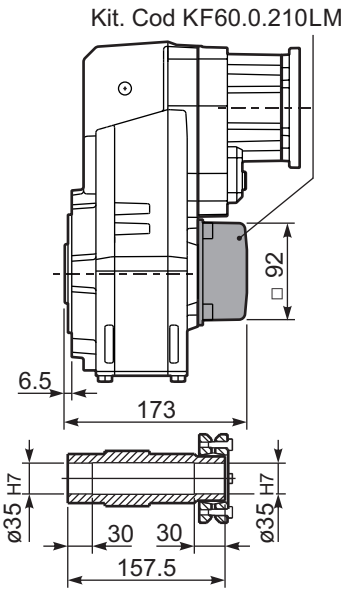
RFC62C... Input Shaft
Albero in entrata



PFC62 A... Single output shaft
Albero uscita semplice



PFC62D... Shrink disk
Calettatore



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
22.6	**61.89**	1.5	594	1.1	1.7	675	B				C	C		191318		01
19.7	**71.16**	1.5	683	1.0	1.5	675	B				C	C		191316		02
17.0	**82.48**	1.5	792	0.9	1.3	675	B				C	C		171316		03
14.5	**96.29**	1.1	675	1.0	1.1	675	B				C	C		171314		04
13.9	**100.51**	1.1	705	1.0	1.0	675	B				C	C		131318		05
12.1	**115.56**	0.75	556	1.2	0.91	675	B				C	C		131316		06
11.1	**125.96**	0.75	606	1.1	0.82	665	B				C	C		190816		07
10.4	**134.91**	0.75	649	1.0	0.78	675	B				C	C		131314	**standard ø35**	08
9.5	**147.05**	0.75	707	1.0	0.72	675	B				C	C		190814		09
8.2	**170.44**	0.55	605	1.1	0.62	675	B				C	C		170814	ø40	10
7.6	**184.15**	0.55	653	1.0	0.57	675	B				C	C		101314	On request	11
6.8	**205.87**	0.55	730	0.9	0.51	675	B				C	C		91316		12
5.8	**240.34**	0.37	570	1.2	0.44	675	B				C	C		91314		13
5.0	**279.22**	0.37	662	1.0	0.37	665	B				C	C		100816		14
4.3	**325.97**	0.37	773	0.9	0.32	675	B				C	C		100814		15
3.8	**364.41**	0.25	583	1.1	0.28	665	B				C	C		90816		16
3.3	**425.43**	0.25	681	1.0	0.25	675	B				C	C		90814		17
2.9	**481.19**	0.18	589	1.1	0.22	665	B				C	C		70816		18
2.5	**561.76**	0.18	687	1.0	0.19	675	B				C	C		70814		19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

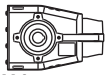
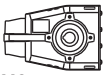
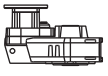
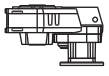
EN Unit **FC63** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **FC63** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **FC63** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **FC63** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

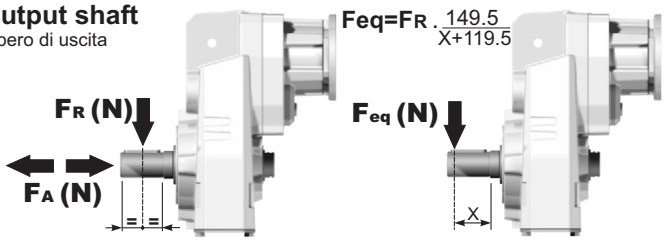
E El reductor tamaño **FC63** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
H1	 H4	 H3	H2	 H5	 H6
2.30 LT	1.35 LT	1.35 LT	1.55 LT	2.45 LT	1.55 LT
SHELL Omala S4 WE 320			**ENI** Telium VSF 320		

For all details on lubrication and plugs check our website / Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web **tab. 1**

RADIAL AND AXIAL LOADS

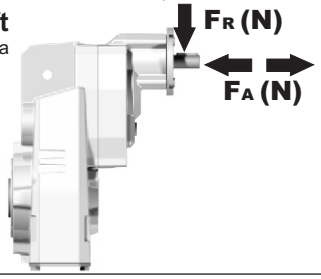
Output shaft
Albero di uscita



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	600	3000	**140**	720	3600	**70**	940	4700
250	640	3200	**120**	740	3700	**40**	1220	6100
200	690	3460	**85**	860	4300	**15**	1300	6500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



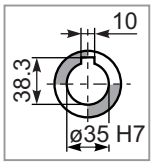
n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

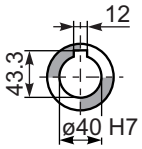
PFC63C... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	239
71B5	K063.4.042	160	237
80/90B5	K063.4.043	200	239
71B14	K063.4.047	105	237
80B14	K063.4.046	120	239
90B14	K063.4.041	140	239

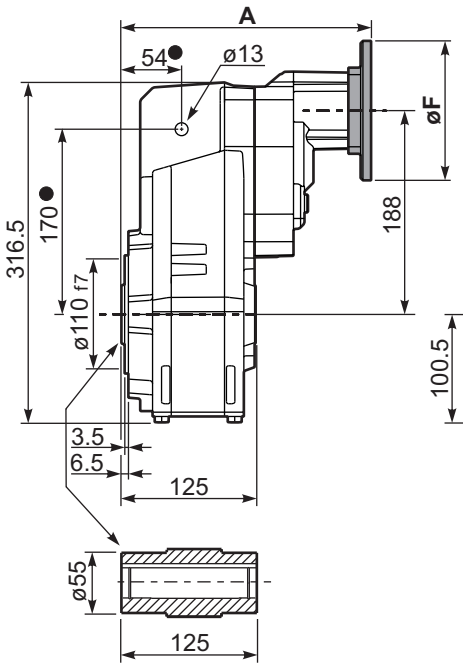
● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

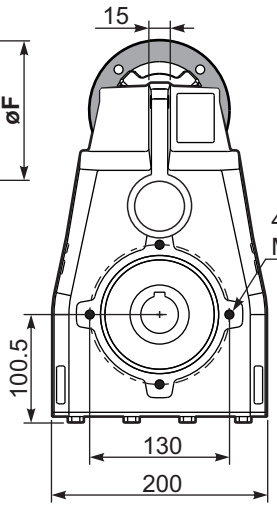


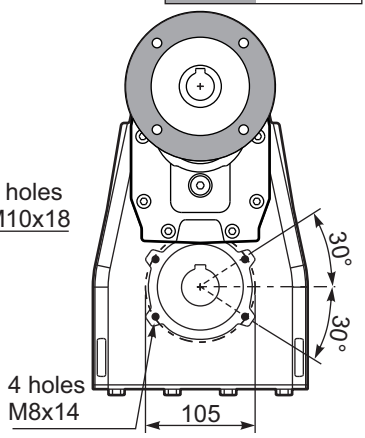
Standard
Hollow shaft



On request
A richiesta



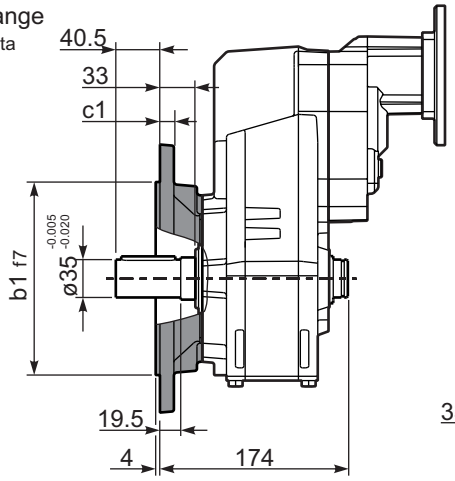


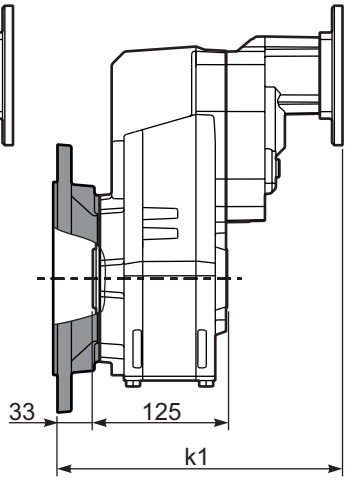


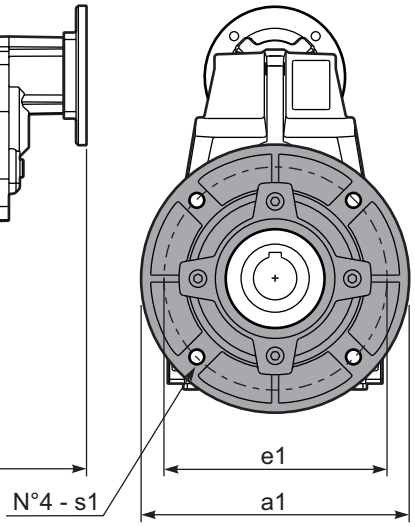
Gearbox weight / peso riduttore: **20.8 kg**

PFC63...-F... Output flange
Flangia uscita

Motor Flange	k1
63B5	272
71B5	270
80/90B5	272
71B14	270
80B14	272
90B14	272



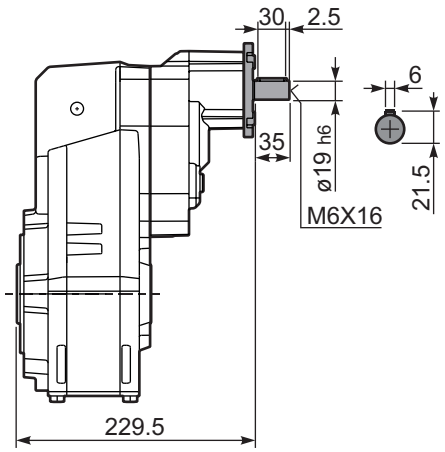




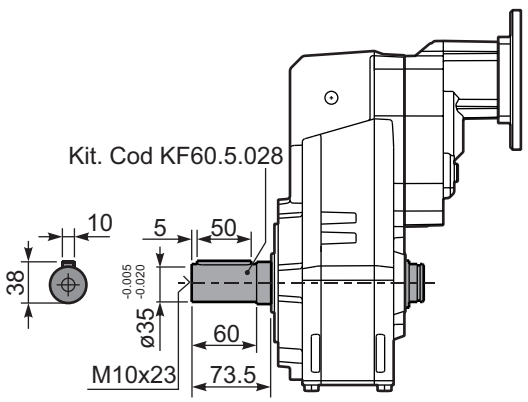
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
-	-	-	-	-	-

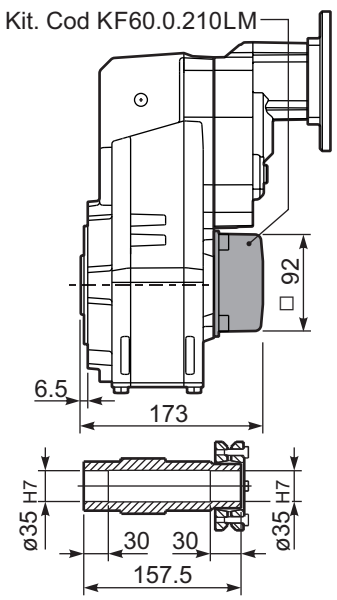
RFC63C... Input Shaft
Albero in entrata



PFC63A... Single output shaft
Albero uscita semplice



PFC63D... Shrink disk
Calettatore



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges	B14 motor flanges					Output Shaft		Ratios code
							-G	-	-	-	-				
							132	-	-	-	-				
227	**6.17**	9	371	1.2	**10.9**	**450**		**not available**				18111	**standard**	01
198	**7.06**	9	425	1.4	**12.7**	**600**						16113	**ø40**	02
170	**8.21**	9	494	1.4	**12.2**	**670**						14115	ø45	03
													On request	

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **FC71** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC71** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC71** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC71** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC71** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
3.30 LT	1.90 LT	1.90 LT	1.80 LT	3.30 LT	1.90 LT

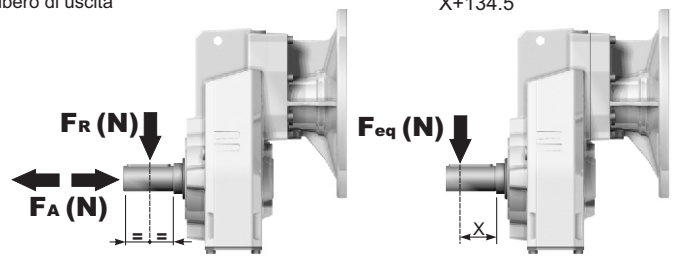
ENI Blasia 460

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{174.5}{X+134.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	740	3700	**140**	860	4300	**70**	1020	5100
250	800	4000	**120**	900	4500	**40**	1300	6500
200	830	4150	**85**	970	4850	**15**	1700	8500

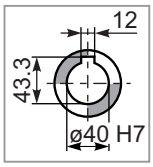
On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

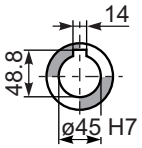
PFC71C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	35.0 kg

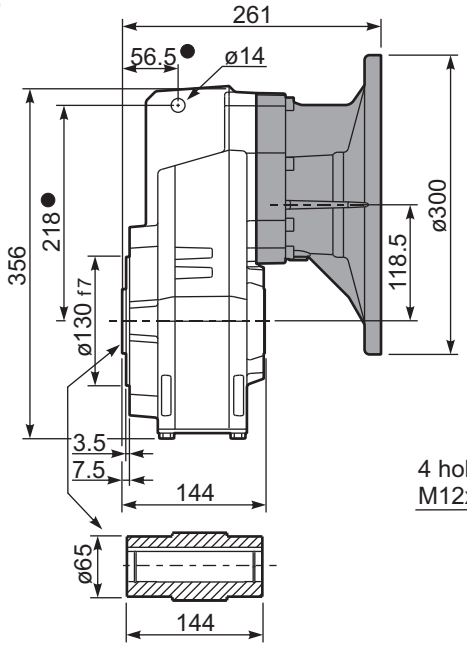
● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

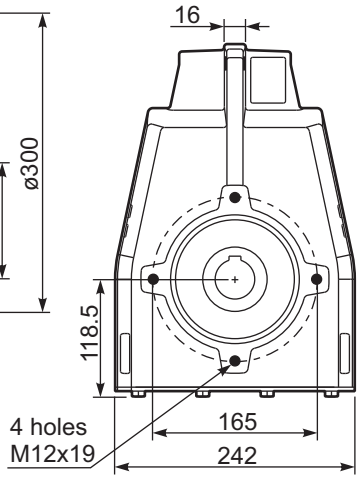


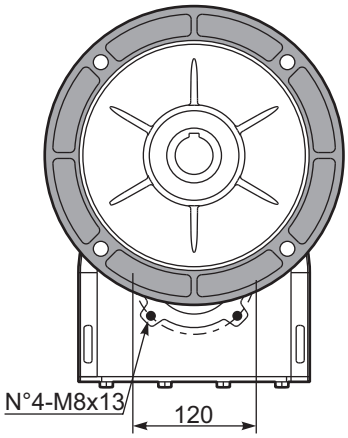
Standard
Hollow shaft



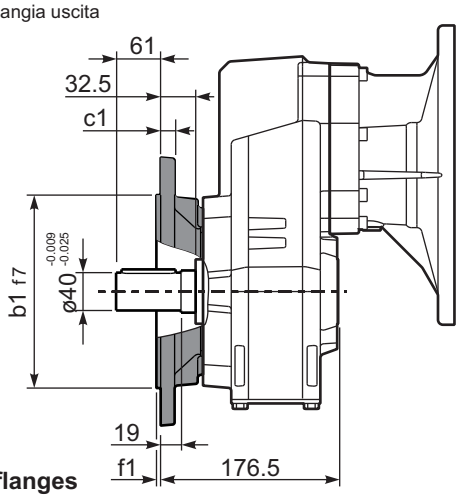
On request
A richiesta

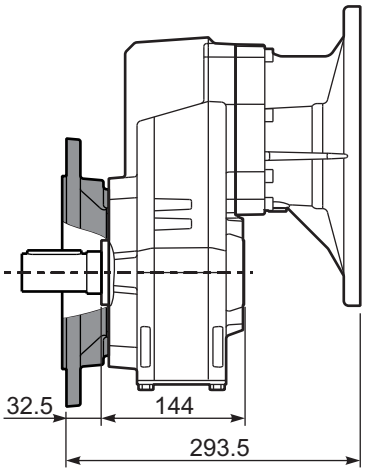


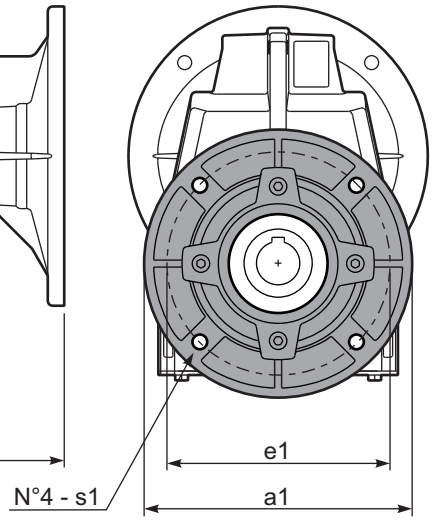




PFC71...-F... Output flange
Flangia uscita



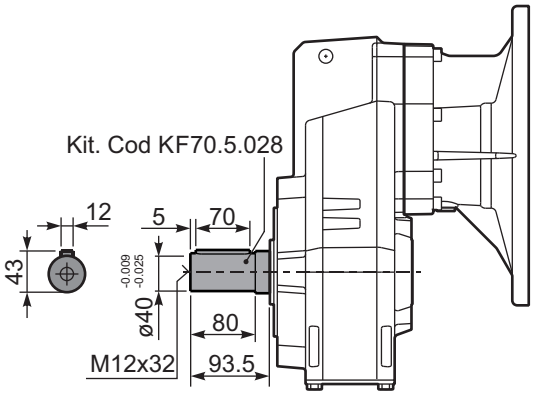




Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012

PFC71 A... Single output shaft
Albero uscita semplice



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft	Ratios code
175	**8.02**	9	473	1.1	**9.9**	**520**	B									3018		01
152	**9.18**	9	541	1.1	**9.8**	**590**	B									3016		02
131	**10.68**	9	630	1.1	**9.7**	**680**	B									3014		03
93	**15.11**	7.5	717	1.1	**7.8**	**775**	B									2018		04
81	**17.30**	7.5	821	1.1	**7.8**	**885**	B									2016		05
70	**20.13**	7.5	955	0.9	**6.8**	**900**	B									2014		06
60	**23.39**	5.5	820	1.1	**5.9**	**900**	B									1616	**standard ø40**	07
51	**27.21**	5.5	954	0.9	**5.1**	**900**	B									1614		08
46.0	**30.42**	4	780	1.2	**4.5**	**900**	B									1316		09
39.6	**35.38**	4	907	1.0	**3.9**	**900**	B									1314	ø45 On request	10
37.6	**37.24**	3	719	1.2	**3.7**	**895**	B									1116		11
32.3	**43.31**	3	836	1.1	**3.2**	**900**	B									1114		12
29.8	**47.02**	2.2	668	1.1	**2.3**	**705**	B									818		13
26.0	**53.85**	2.2	765	1.1	**2.3**	**810**	B									816		14
22.4	**62.63**	2.2	890	1.0	**2.2**	**900**	B									814		15
18.9	**74.16**	1.1	531	1.1	**1.2**	**585**	B									616		16
16.2	**86.25**	1.1	617	1.1	**1.2**	**680**	B									614		17

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **FC72** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC72** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC72** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC72** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC72** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
3.50 LT	1.90 LT	1.90 LT	1.80 LT	3.60 LT	1.90 LT
ENI Blasia 460					

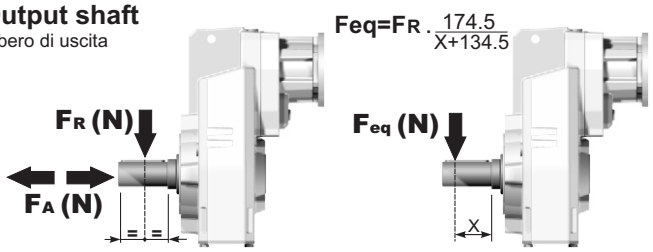
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

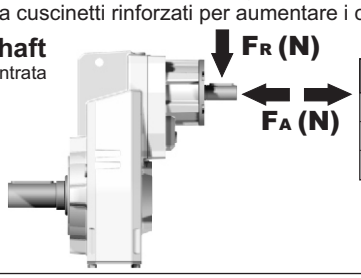
$F_{eq} = F_R \cdot \frac{174.5}{X+134.5}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	740	3700	**140**	860	4300	**70**	1020	5100
250	800	4000	**120**	900	4500	**40**	1300	6500
200	830	4150	**85**	970	4850	**15**	1700	8500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



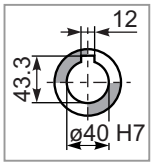
n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

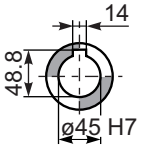
PFC72C... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	238.5
80/90B5	K023.4.042	200	240.5
100/112B5	K023.4.043	250	249.5
132B5	KC50.4.043	300	267.5
80B14	K085.4.046	120	240.5
90B14	K085.4.045	140	240.5
100/112B14	K085.4.047	160	249.5
132B14	KC50.4.041	200	267.5

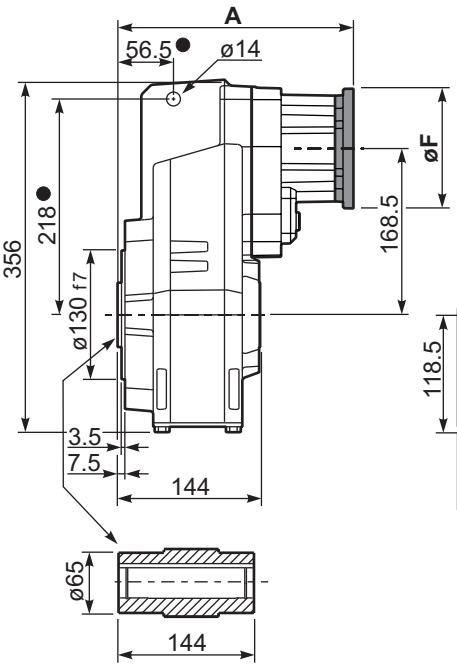
● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

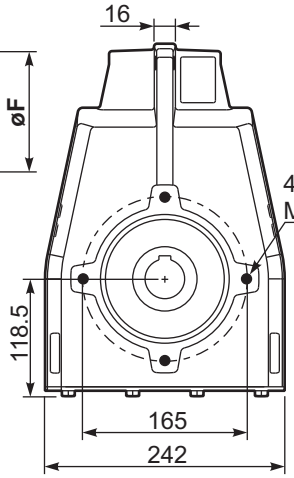


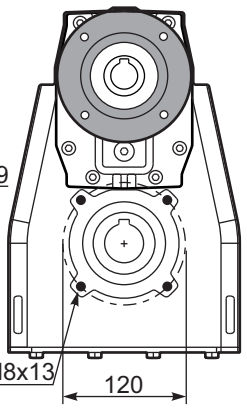
Standard
Hollow shaft



On request
A richiesta



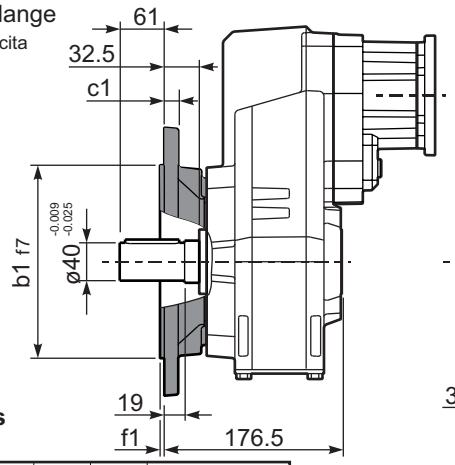


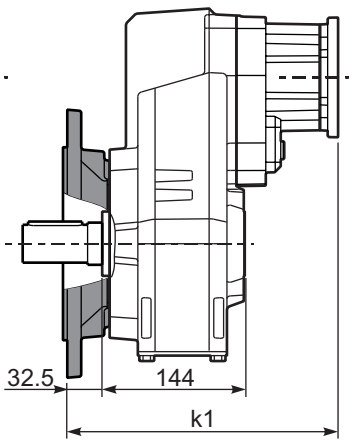


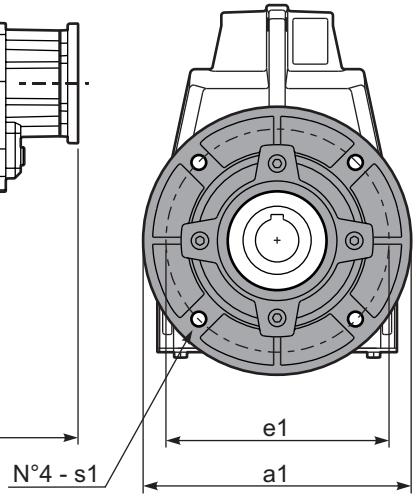
Gearbox weight peso riduttore **30.5 kg**

PFC72...-F... Output flange
Flangia uscita

M. flanges	k1
71B5	271
80/90B5	273
100/112B5	282
132B5	300
80B14	273
90B14	273
100/112B14	282
132B14	300



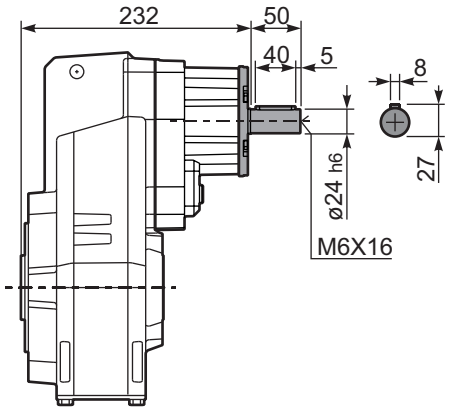




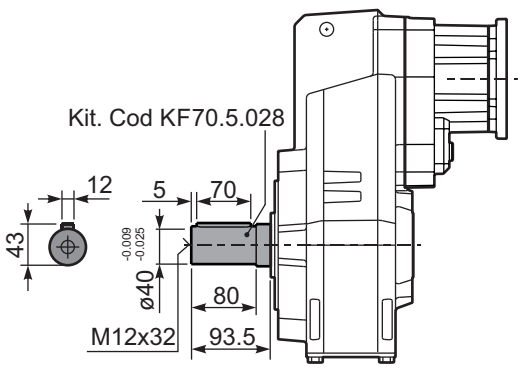
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012

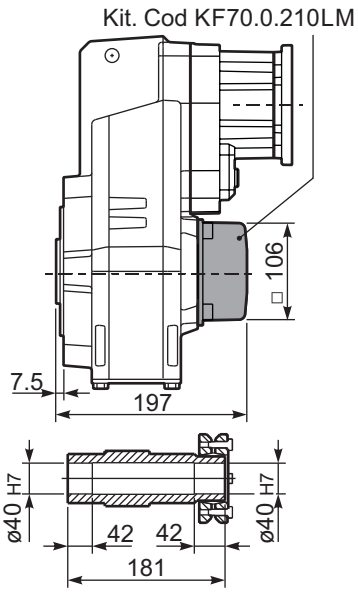
RFC72C... Input Shaft
Albero in entrata



PFC72 A... Single output shaft
Albero uscita semplice



PFC72D... Shrink disk
Calettatore



6

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
18.5	**75.50**	1.5	725	1.1	**1.7**	**825**	B				C	C		191318		01
16.2	**86.47**	1.5	830	1.1	**1.6**	**900**	B				C	C		191316		02
14.0	**100.22**	1.5	962	0.9	**1.4**	**900**	B				C	C		171316		03
12.0	**116.56**	1.1	817	1.1	**1.2**	**900**	B				C	C		171314		04
10.2	**136.82**	1.1	959	0.9	**1.0**	**900**	B				C	C		151314		05
9.1	**153.05**	0.75	736	1.1	**0.83**	**810**	B				C	C		190816		06
8.6	**163.31**	0.75	785	1.1	**0.86**	**900**	B				C	C		131314	**standard ø40**	07
7.9	**178.01**	0.75	856	1.1	**0.79**	**900**	B				C	C		190814		08
7.3	**191.67**	0.75	922	1.0	**0.73**	**900**	B				C	C		101316		09
6.8	**206.32**	0.75	992	0.9	**0.68**	**900**	B				C	C		170814	ø45 On request	10
6.3	**222.92**	0.55	791	1.1	**0.63**	**900**	B				C	C		101314		11
5.8	**242.18**	0.55	859	1.0	**0.58**	**900**	B				C	C		150814		12
5.6	**250.15**	0.55	888	1.0	**0.56**	**900**	B				C	C		91316		13
4.8	**289.08**	0.55	1026	0.9	**0.49**	**900**	B				C	C		130814		14
4.2	**330.31**	0.37	783	1.1	**0.42**	**890**	B				C	C		71316		15
3.5	**394.59**	0.37	936	1.0	**0.36**	**900**	B				C	C		100814		16
2.7	**514.99**	0.25	824	1.1	**0.27**	**900**	B				C	C		90814		17
2.1	**680.03**	0.18	832	1.1	**0.21**	**900**	B				C	C		70814		18

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **FC73** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC73** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC73** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC73** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC73** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
3.55 LT	1.95 LT	1.95 LT	1.95 LT	3.75 LT	2.00 LT

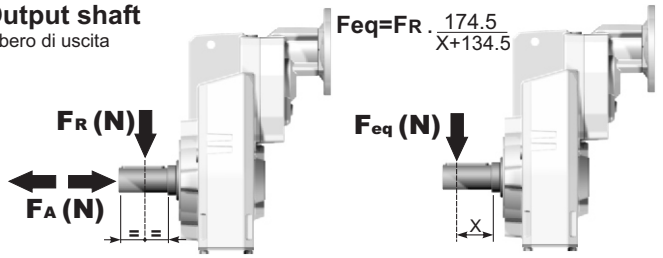
ENI Blasia 460

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

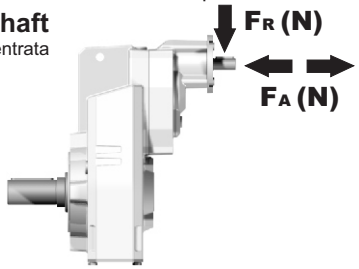
$$F_{eq} = F_R \cdot \frac{174.5}{X+134.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	740	3700	**140**	860	4300	**70**	1020	5100
250	800	4000	**120**	900	4500	**40**	1300	6500
200	830	4150	**85**	970	4850	**15**	1700	8500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

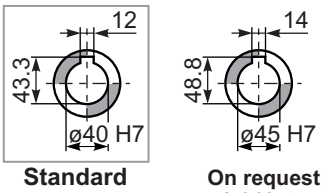
tab. 2

PFC73C... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	250.5
71B5	K063.4.042	160	248.5
80/90B5	K063.4.043	200	250.5
71B14	K063.4.047	105	248.5
80B14	K063.4.046	120	250.5
90B14	K063.4.041	140	250.5

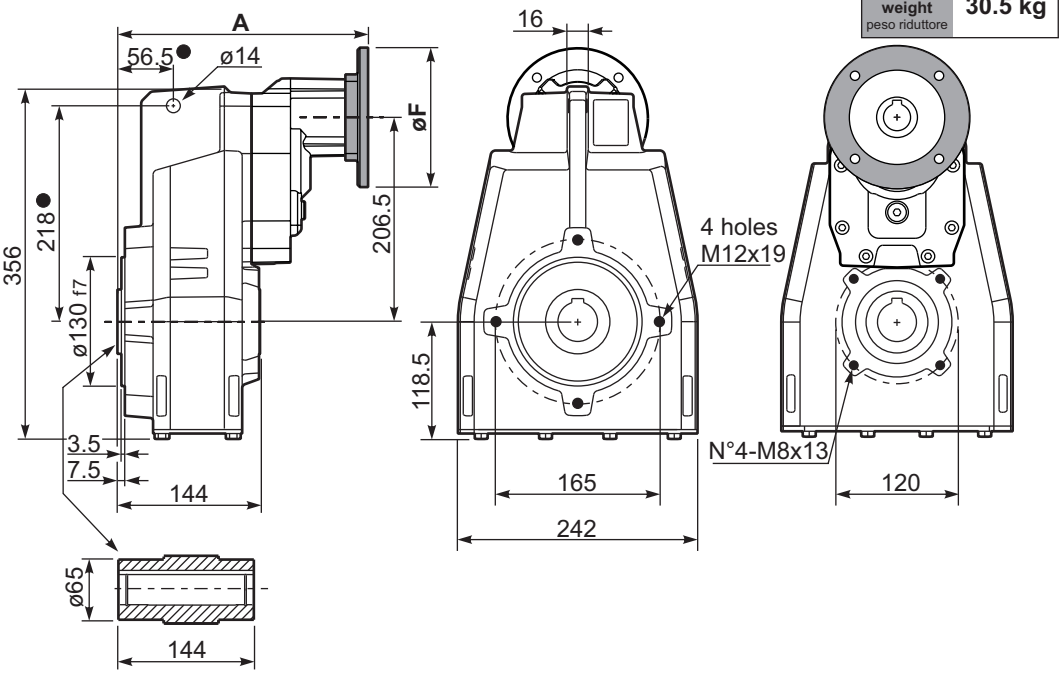
Gearbox weight peso riduttore **30.5 kg**

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



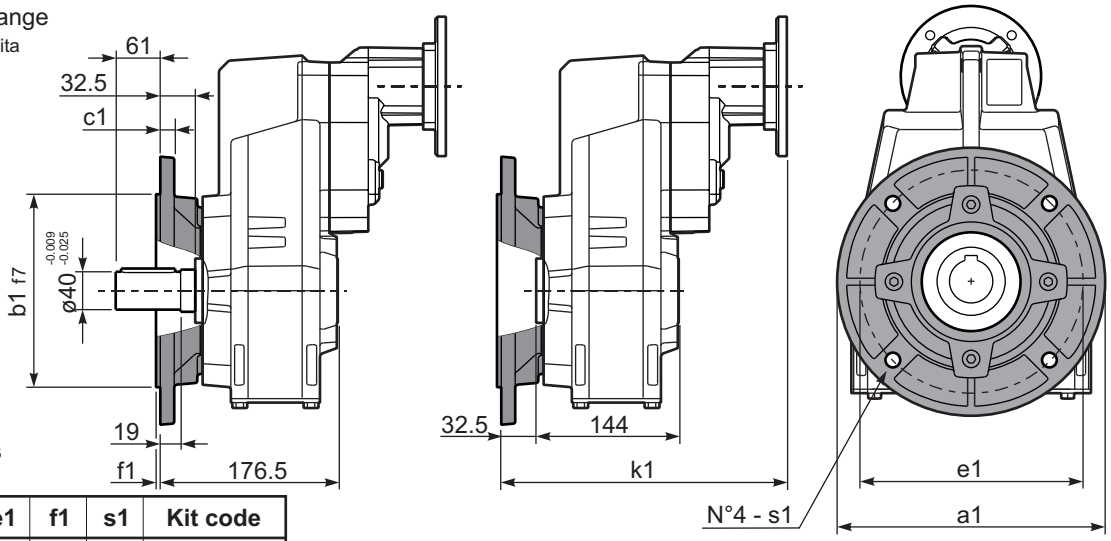
Standard Hollow shaft

On request A richiesta



PFC73...-F... Output flange
Flangia uscita

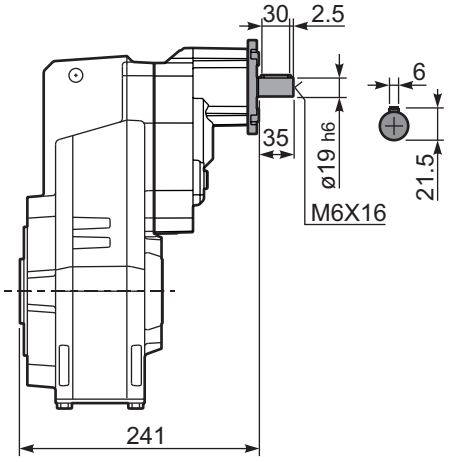
M. flanges	k1
63B5	283
71B5	281
80/90B5	283
71B14	281
80B14	283
90B14	283



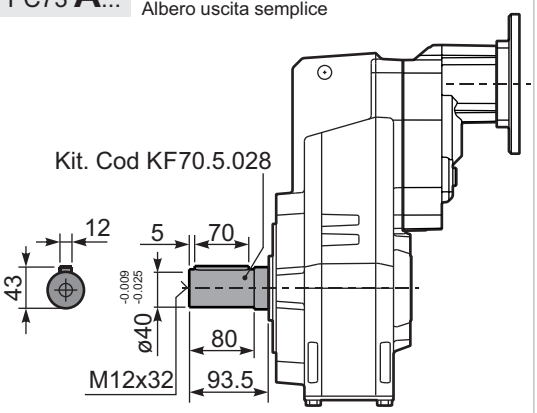
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012

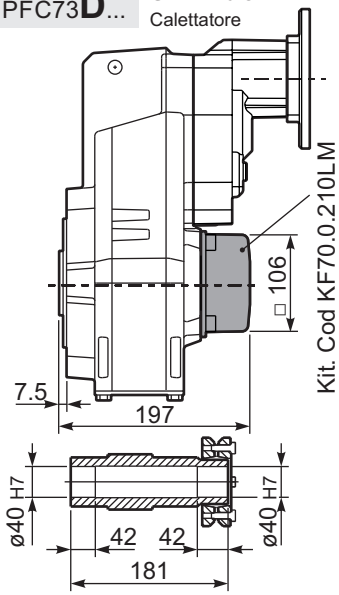
RFC73C... Input Shaft
Albero in entrata



PFC73A... Single output shaft
Albero uscita semplice



PFC73D... Shrink disk
Calettatore



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -H	Available B5 motor flanges -I	B14 motor flanges					Output Shaft	Ratios code
									-	-	-	-			
							160	180	-	-	-	-			
528	**2.65**	22	374	1.7	**36.7**	**650**							2361	**standard**	01
409	**3.42**	22	483	1.6	**32.8**	**750**							1965	**ø50**	02
304	**4.60**	22	649	1.5	**30.9**	**950**			**not available**				1569		03
256	**5.46**	22	771	1.3	**27.4**	**1000**							1371	ø55	04
211	**6.64**	22	937	1.3	**26.5**	**1175**							1173	On request	05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

EN Unit **FC81** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC81** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC81** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC81** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC81** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
5.50 LT	3.50 LT	3.50 LT	3.50 LT	6.20 LT	4.40 LT

ENI Blasia 460

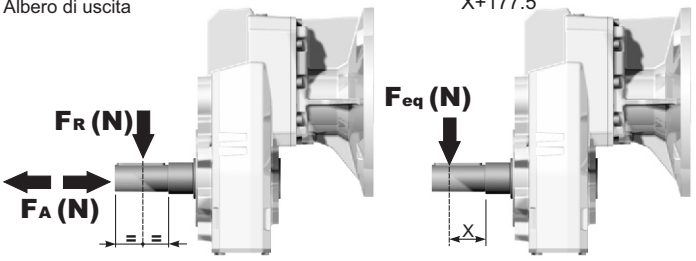
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{227.5}{X+177.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	920	4600	**140**	1120	5600	**70**	1400	7000
250	1000	5000	**120**	1140	5700	**40**	1800	9000
200	1060	5300	**85**	1300	6500	**15**	2400	12000

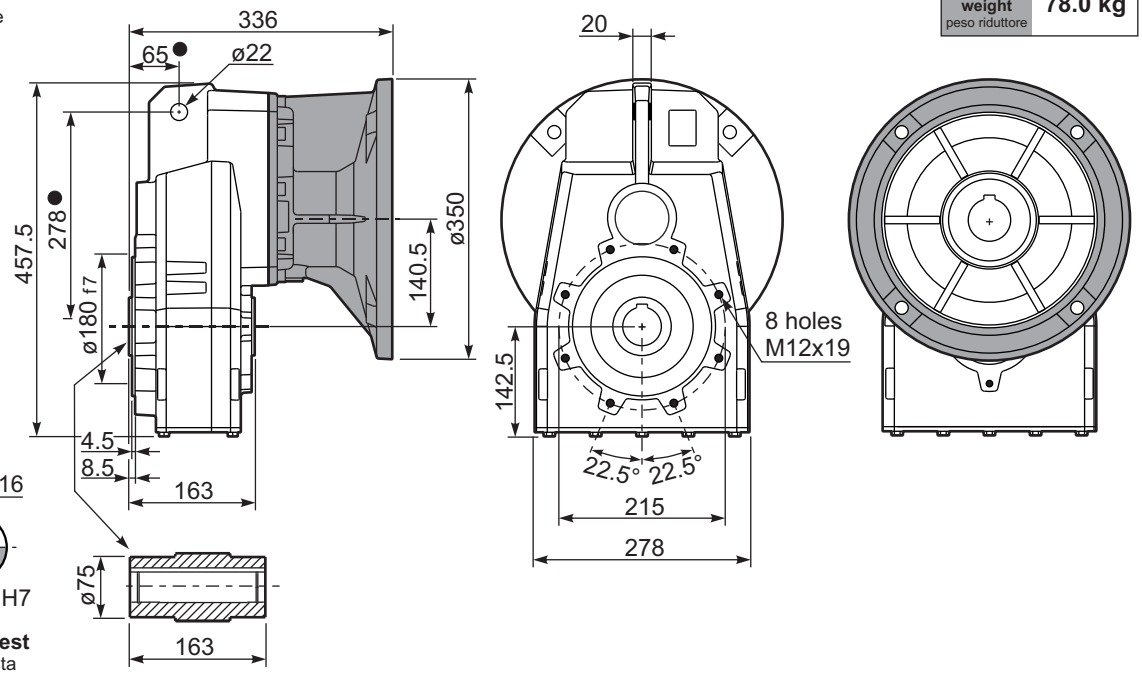
On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

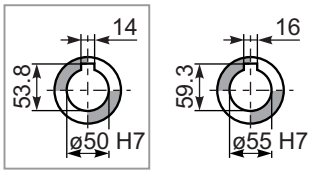
tab. 2

PFC81C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	78.0 kg

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

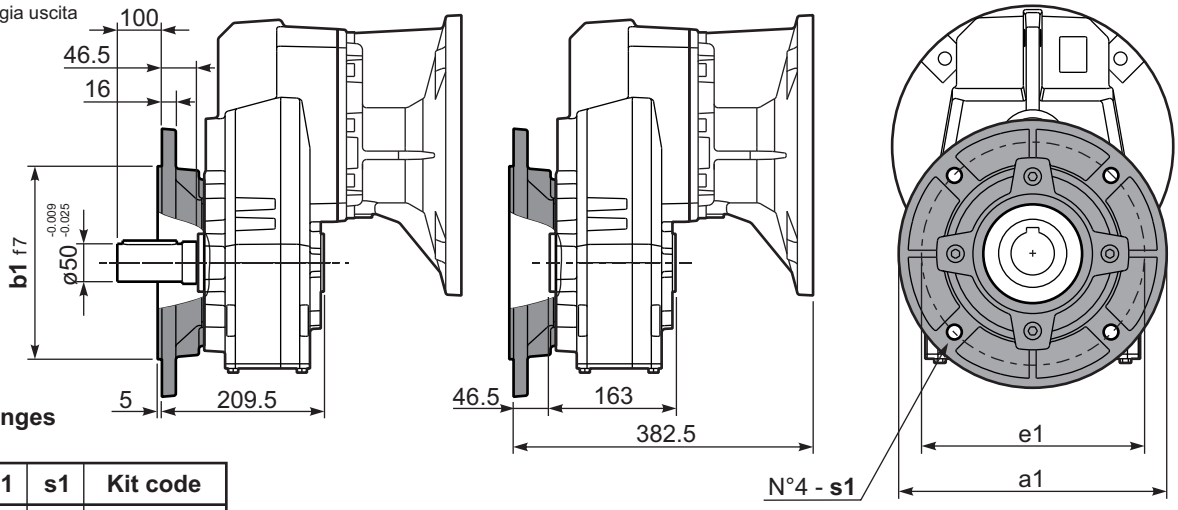




Standard
Hollow shaft

On request
A richiesta

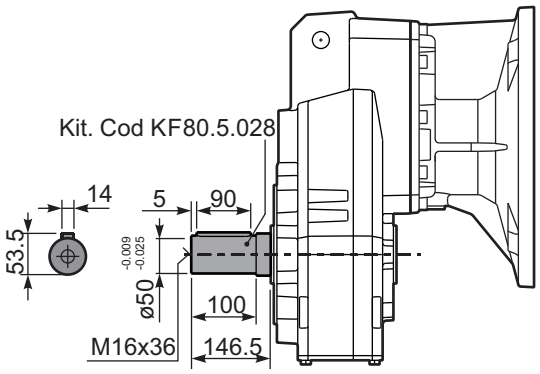
PFC81...**-F**... Output flange
Flangia uscita



Available output flanges
Flange di uscita

a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012

PFC81**A**... Single output shaft
Albero uscita semplice



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -F 100 112	B5 -G 132	B5 -H 160	B5 -I 180	B14 motor flanges -U 100 112	B14 -V 132		Output Shaft	Ratios code
234	**5.98**	22	827	1.2	**25.5**	**1000**	B				B		3015		01
197	**7.10**	22	982	1.2	**25.3**	**1175**	B				B		3013		02
162	**8.63**	22	1193	1.1	**23.9**	**1350**	B				B		3011		03
124	**11.27**	18.5	1310	1.1	**20.3**	**1500**	B				B		2015		04
105	**13.38**	18.5	1555	1.1	**19.4**	**1700**	B				B		2013		05
92	**15.24**	18.5	1771	1.1	**19.0**	**1900**	B				B		1615		06
86	**16.26**	18.5	1889	1.1	**19.7**	**2100**	B				B		2011	**standard ø50**	07
77	**18.09**	18.5	2102	1.0	**17.7**	**2100**	B				B		1613		08
71	**19.82**	15	1865	1.1	**15.9**	**2060**	B				B		1315		09
64	**21.98**	15	2069	1.0	**14.6**	**2100**	B				B		1611	ø55 On request	10
60	**23.53**	15	2214	0.9	**13.6**	**2100**	B				B		1313		11
58	**24.25**	11	1677	1.2	**12.2**	**1940**	B				B		1115		12
48.6	**28.80**	11	1991	1.1	**11.1**	**2100**	B				B		1113		13
40.0	**34.99**	9	2063	1.0	**9.2**	**2100**	B				B		1111		14
33.6	**41.64**	7.5	1976	1.0	**7.2**	**1960**	B				B		813		15
27.7	**50.60**	5.5	1774	1.2	**6.3**	**2100**	B				B		811		16

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **FC82** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC82** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC82** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

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Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

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Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

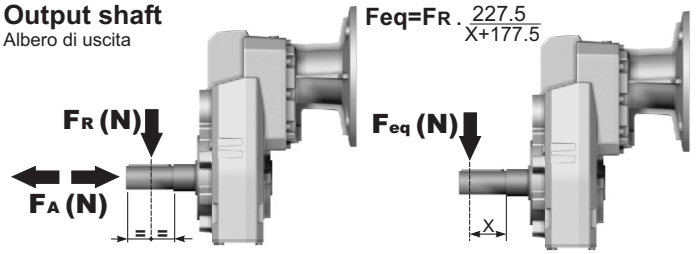
H1	H4	H3	H2	H5	H6
5.70 LT	3.60 LT	3.60 LT	3.60 LT	6.60 LT	4.50 LT
ENI Blasia 460					

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

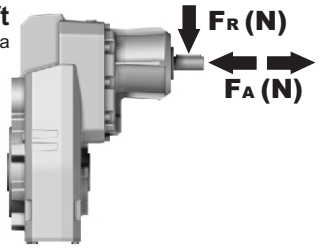
$F_{eq} = F_R \cdot \frac{227.5}{X+177.5}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	920	4600	**140**	1120	5600	**70**	1400	7000
250	1000	5000	**120**	1140	5700	**40**	1800	9000
200	1060	5300	**85**	1300	6500	**15**	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



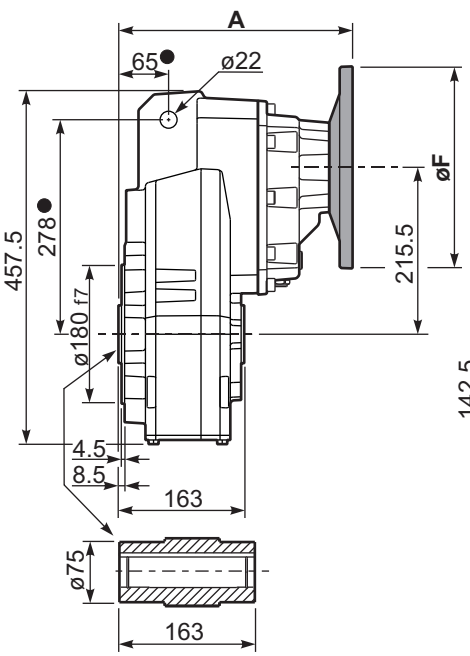
n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

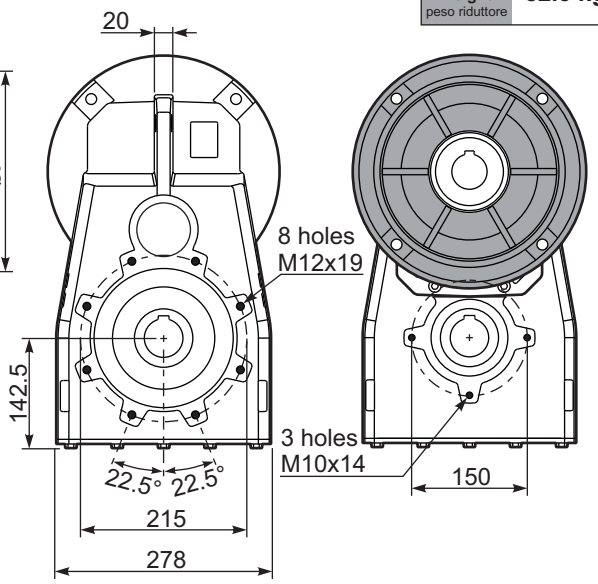
tab. 2

PFC82C... Basic gearbox
Riduttore base

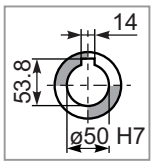
Gearbox weight peso riduttore	82.5 kg

M. flanges	Kit code	øF	A
100/112B5	K023.4.043	250	299
132B5	KC51.4.043	300	320.5
160/180B5	KC86.4.0.43	350	352.5
100/112B14	K085.4.047	160	299
132B14	KC51.4.041	200	320.5

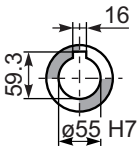




● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



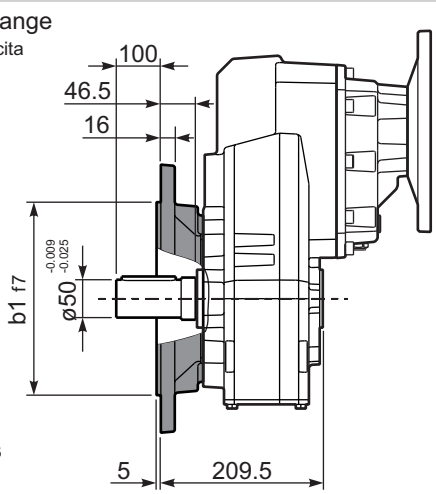
Standard
Hollow shaft

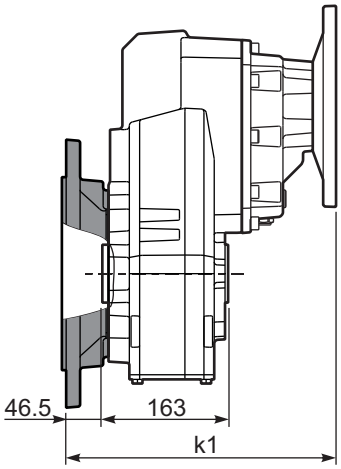


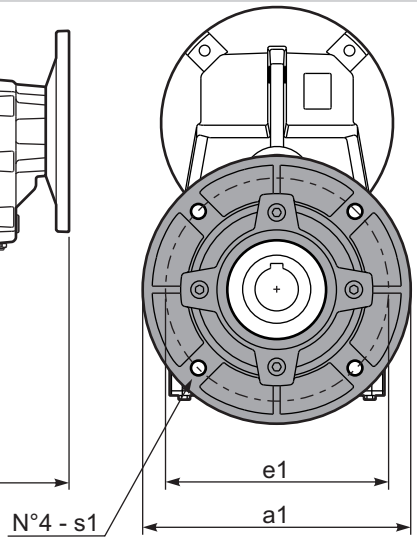
On request
A richiesta

PFC82...-F... Output flange
Flangia uscita

M. flanges	k1
100/112B5	345.5
132B5	367
160/180B5	399
100/112B14	345.5
132B14	367



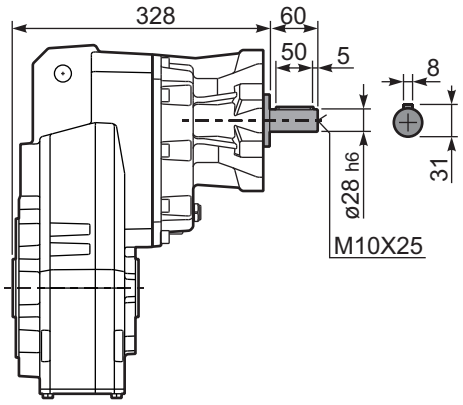




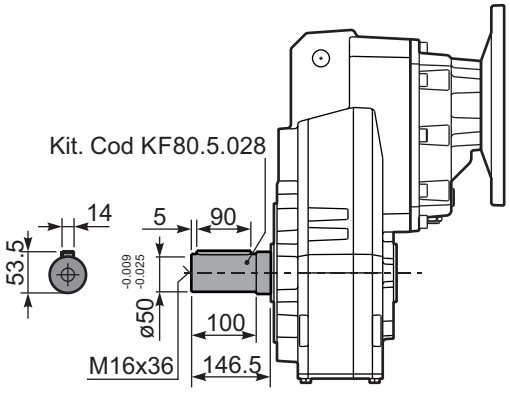
Available output flanges
Flange di uscita

a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012

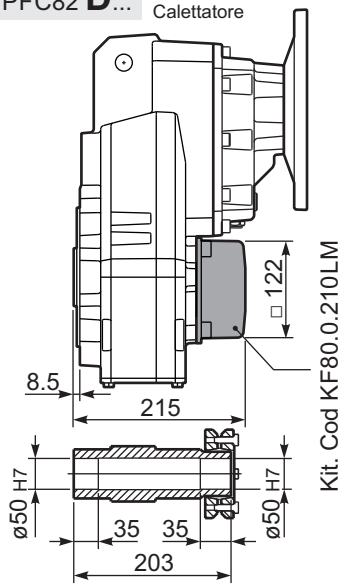
RFC82C... Input Shaft
Albero in entrata



PFC82 A... Single output shaft
Albero uscita semplice



PFC82 D... Shrink disk
Calettatore



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
28.8	**48.55**	7.5	2257	0.9	**6.7**	**2100**	B									201315		01
24.3	**57.64**	5.5	1980	1.1	**5.7**	**2100**	B									201313		02
21.3	**65.64**	5.5	2255	0.9	**5.0**	**2100**	B									161315		03
20.0	**70.04**	4	1760	1.2	**4.7**	**2100**	B									201311		04
18.0	**77.93**	4	1958	1.1	**4.2**	**2100**	B									161313		05
16.4	**85.36**	4	2145	1.0	**3.8**	**2100**	B									131315	**standard ø50**	06
14.8	**94.70**	4	2380	0.9	**3.5**	**2100**	B									161311		07
13.8	**101.35**	3	1917	1.1	**3.2**	**2100**	B									131313		08
11.4	**123.15**	3	2330	0.9	**2.7**	**2100**	B									131311	ø55	09
9.3	**150.73**	2.2	2100	1.0	**2.2**	**2100**	B									111311	On request	10
7.8	**179.39**	1.5	1722	1.2	**1.8**	**2100**	B									81313		11
6.4	**217.98**	1.5	2093	1.0	**1.5**	**2100**	B									81311		12
5.7	**247.03**	1.1	1732	1.1	**1.2**	**1950**	B									61313		13
4.7	**300.17**	1.1	2105	1.0	**1.1**	**2100**	B									61311		14

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **FC83** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **FC83** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **FC83** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **FC83** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **FC83** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
5.80 LT	3.90 LT	3.90 LT	3.90 LT	6.80 LT	4.90 LT

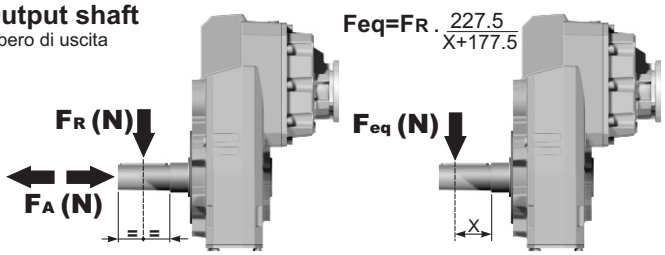
ENI Blasia 460

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

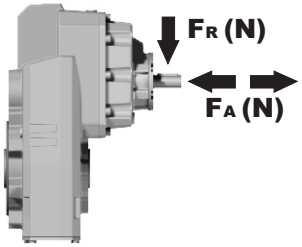
$F_{eq} = F_R \cdot \frac{227.5}{X+177.5}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	920	4600	**140**	1120	5600	**70**	1400	7000
250	1000	5000	**120**	1140	5700	**40**	1800	9000
200	1060	5300	**85**	1300	6500	**15**	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

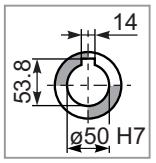
tab. 2

PFC83C... Basic gearbox
Riduttore base

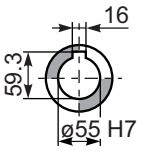
Gearbox weight / peso riduttore: **68.5 kg**

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	292.5
80/90B5	K023.4.042	200	294.5
100/112B5	K023.4.043	250	303.5
132B5	KC50.4.043	300	321.5
80B14	K085.4.046	120	294.5
90B14	K085.4.045	140	294.5
100/112B14	K085.4.047	160	303.5
132B14	KC50.4.041	200	321.5

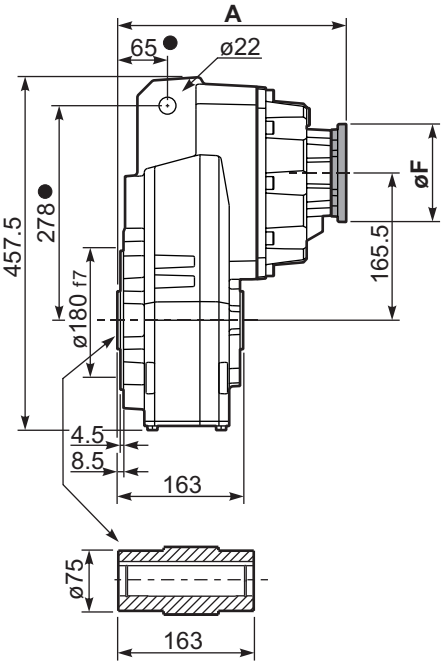
● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

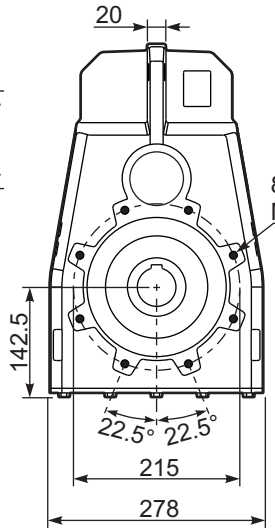


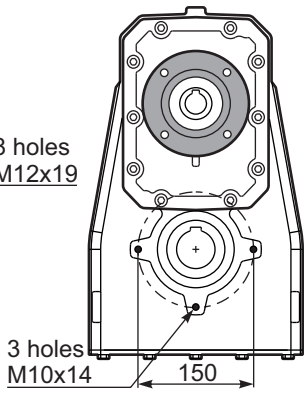
Standard
Hollow shaft



On request
A richiesta

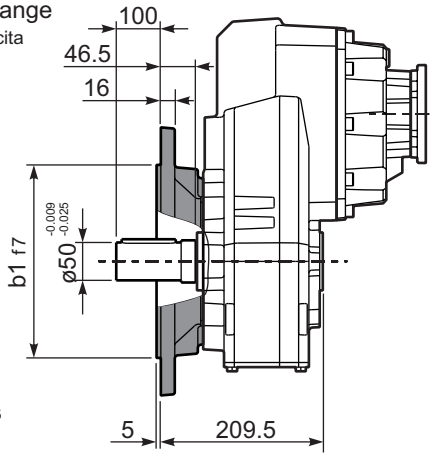


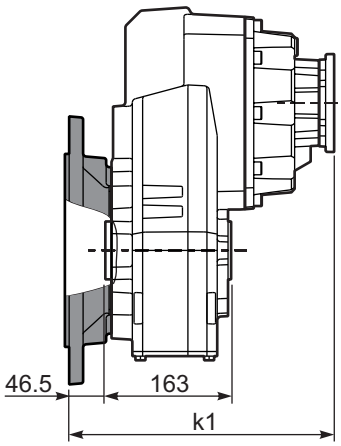


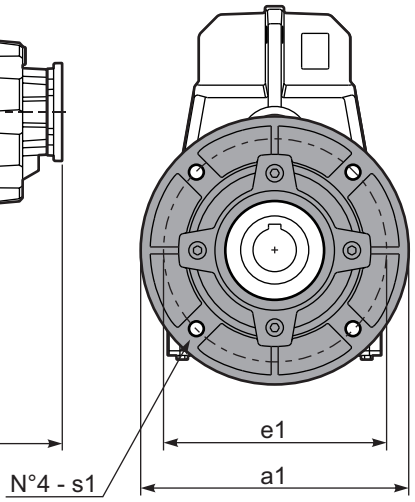


PFC83...-F... Output flange
Flangia uscita

M. flanges	k1
71B5	339
80/90B5	341
100/112B5	350
132B5	368
80B14	341
90B14	341
100/112B14	350
132B14	368



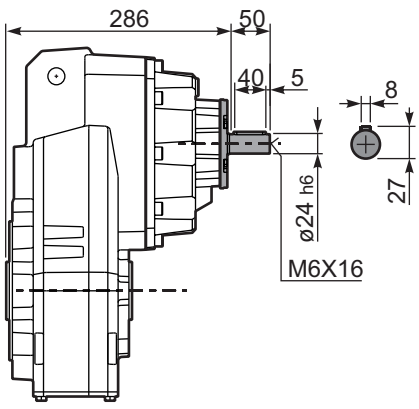




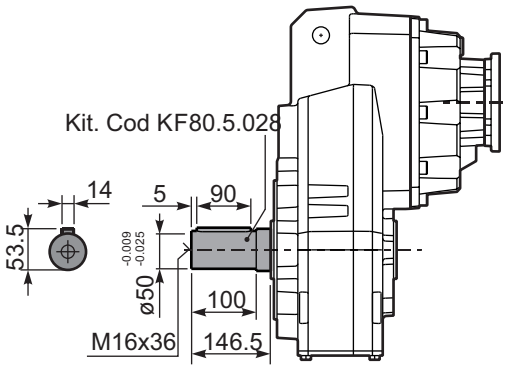
Available output flanges
Flange di uscita

a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012

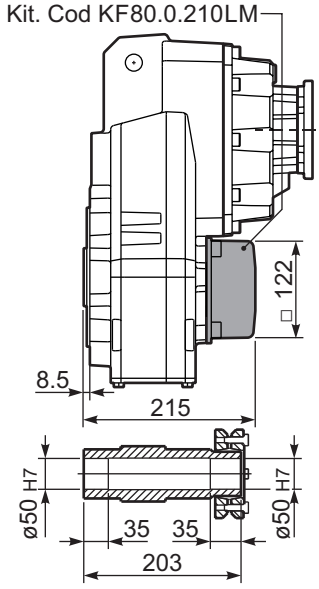
RFC83C... Input Shaft
Albero in entrata



PFC83A... Single output shaft
Albero uscita semplice



PFC83D... Shrink disk
Calettatore



6

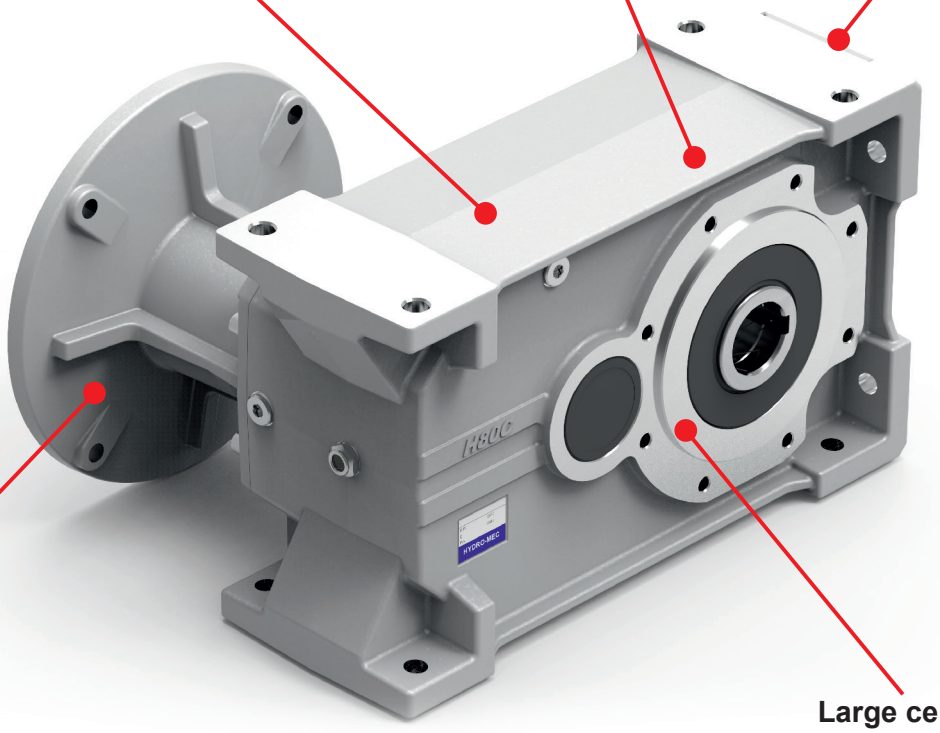
Cast iron parallel shaft gearboxes

A modular and compact product

Gears
Hardened and ground gears

Housing
Robust cast iron housing

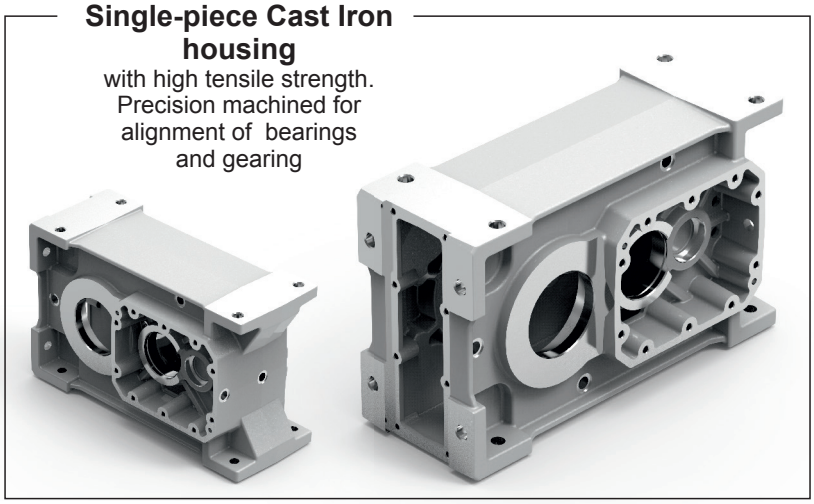
Removable inspection cover
Allows periodic inspection of gearing during routine maintenance

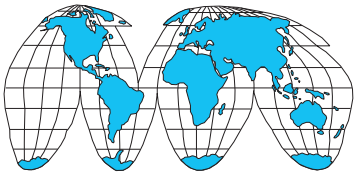


Flange
Fully modular to IEC and Compact integrated motor. NEMA C flange

Large center distance

Single-piece Cast Iron housing
with high tensile strength. Precision machined for alignment of bearings and gearing

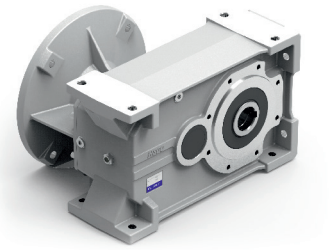




World wide sales network.

Specific type datasheet on page...

1 Stage

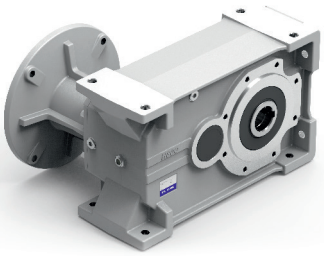


Types / Tipi / Tipen / Types / Tipos

On page / A pagina /Auf Seite / À la page / En la página

7-5	7-11	7-17
H61C 380Nm	**H71C** 670Nm	**H81C** 1175Nm

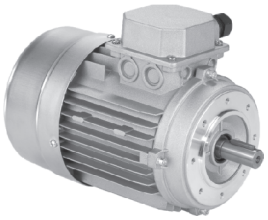
2 and 3 Stage



Types / Tipi / Tipen / Types / Tipos

On page / A pagina / Auf Seite / À la page / En la página

7-7	7-9	7-13	7-15	7-19	7-21
H62C 675Nm	**H63C** 675Nm	**H72C** 900Nm	**H73C** 900Nm	**H82C** 2100Nm	**H83C** 2100Nm



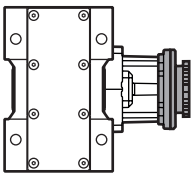
Types / Tipi / Tipen / Types / Tipos

On page / A pagina / Auf Seite / À la page / En la página

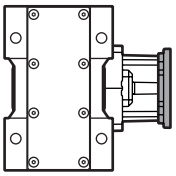
M-1									
56A 56B	**63A 63B**	**71A 71B**	**80A 80B**	**90S 90L**	**100LA 100LB**	**112M**	**132S 132M**	**160M 160L**	**180M 180L**

Type - Tipo - Typ Type - Tipo	**Size** - Grandezza - Grösse Taille - Tamaño	**Mounting** - Montaggio Montage - Fixation Tipo de montaje	**Rapporto** - Ratio Untersetzung Reduction - Relacion	**Output shaft** Albero uscita Abtriebswelle Arbre de sortie Eje en salida
M	**H62C**	**C**	**12.39**	**-E**

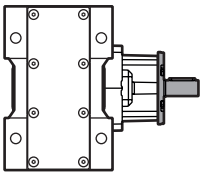
Parallel shaft helical
Riduttori ad assi paralleli



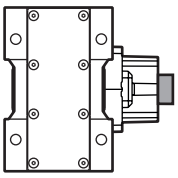
With IEC motor
M



With motor flange
P



With male input shaft
R



Modular base
B
↓
Not available for:
H61C, H71C, H81C, H82C

1 Stage Riduzione Stufe Trains Etapa

2 Stages Riduzioni Stufen Trains Etapas

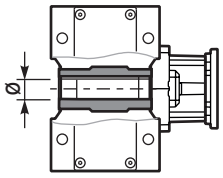
3 Stages Riduzioni Stufen Trains Etapas

Cast Iron/Ghisa/Grauguss/Fonte/Fundicion

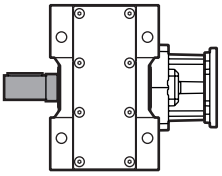
H61C
H71C
H81C

H62C
H72C
H82C

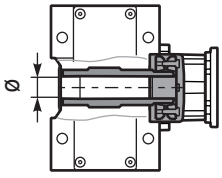
H63C
H73C
H83C



Hollow output shaft
C



Single output shaft
A



Shrink Disk
D
Only on request for Q.ty
A richiesta per quantità

See technical data table

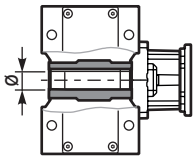
Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

C



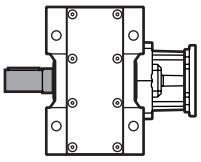
STANDARD
Only on request for Q.ty
A richiesta per quantità

H61C H62C H63C
-E ➡ **ø35**
-F ⇨ ø40

H71C H72C H73C
-F ➡ **ø40**
-G ⇨ ø45

H81C H82C H83C
-H ➡ **ø50**
-I ⇨ ø55

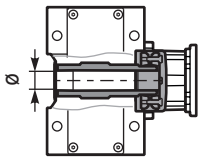
A



Single output shaft

-N H61/2/3C⇨ø35
-O H71/2/3C⇨ø40
-K H81/2/3C⇨ø50

D



Shrink disk

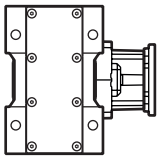
-T H62/3C ⇨ø35
-U H72/3C ⇨ø40
-V H82/3C ⇨ø50

Dossier according to 94/9/EG 8. b ii stored
TÜV NORD 0032

On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

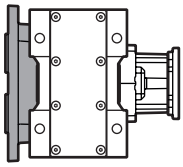
Type - Tipo - Typ
Types - Tipo

-N



-N

Senza flangia
Without flange

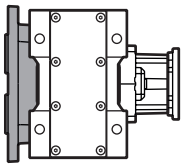


-F

Whit output flange
con flangia uscita

Output flange
Flangia uscita
Ausgangsflansch
Bride de sortie
Brida en salida

N



N Senza flangia
Without flange

H61C H62C H63C

4 ➡ **ø250**

H71C H72C H73C

4 ➡ **ø250**
5 ⇨ ø300

H81C H82C H83C

5 ➡ **ø300**
6 ⇨ ø350
7 ⇨ ø400

Motor size - Grandezza motore
Motor Grösse
Grandeur moteur - Tamaño motor

-C

Flange
Flangia

B5

-A=56 (ø120)
-B=63 (ø140)
-C=71 (ø160)
-D=80 (ø200)
-E=90 (ø200)
-F=100÷112 (ø250)
-G=132 (ø300)
-H=160 (ø350)
-I=180 (ø350)

B14

-O=56 (ø80)
-P=63 (ø90)
-Q=71 (ø105)
-R=80 (ø120)
-T=90 (ø140)
-U=100÷112 (ø160)
-V=132 (ø200)

Type R
Tipo R

H63C H73C

-2 ⇨ ø19

H62C H72C H83C

-3 ⇨ ø24

H82C

-4 ⇨ ø28

Without flange
Senza flangia

-M ⇨ With coupling

H63C H73C

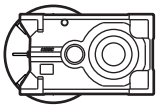
-1 ⇨ ø14 (71B5)
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)

H62C H72C H83C

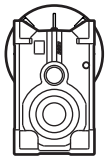
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)
-4 ⇨ ø28 (100B5)

Mounting position
Posizione montaggio
Einbaulage
Position de montage
Position de montaje

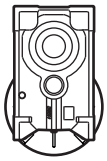
B3



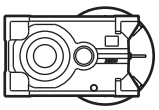
B3
STANDARD



B6

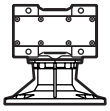


B7

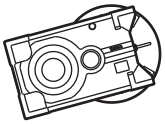


B8

V5



V6



V8

Input bore
Foro entrata
Eingangshohlwelle
Trou d'entree
Eje hueco de entrada

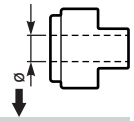
C

-

Nothing indication:
standard bore

Nessuna indicazione:
foro standard

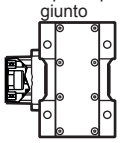
COUPLING



A = 9mm
B = 11mm
C = 14mm
D = 19mm
E = 24mm
F = 28mm

0

Ready for input coupling
Predisposto per giunto



Terminal box position
Posizione morsettiera
Klemmkastenlage
Position boîte à bornes
Posición caja de bornes

B

A

B
STANDARD

C

D

7

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

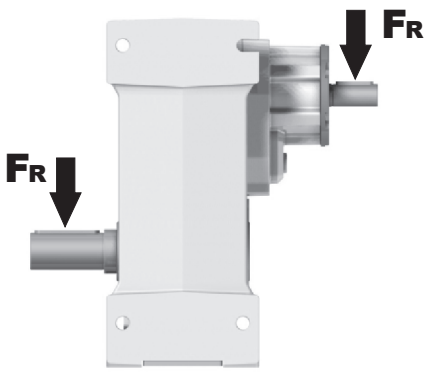
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$
Linear movement / traslazione / linearbewegung / translation / translacion	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

	$\mathbf{M}\ [Nm] = \frac{\mathbf{9550} \cdot \mathbf{P}[KW]}{\mathbf{n}\ [rpm]}$
	$\mathbf{M}\ [lb\ in] = \frac{\mathbf{63030} \cdot \mathbf{P}[HP]}{\mathbf{n}\ [rpm]}$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida



$F_R\ [N] = \frac{M\ [Nm] \cdot 2000}{d\ [mm]} \cdot f_K$	$F_R\ [N] = \frac{M\ [lb\ in] \cdot 8.9}{d\ [in]} \cdot f_K$

M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo
f_K	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión **1.15** Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje **1.25** Catena / Chain sprochets / Antriebskette / Chaîne / Cadena **1.75** Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal **2.50** Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana

— If your application requires higher radial loads, contact our technical office. Higher load may be possible.
— Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
— Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
— Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
— En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

B Output speed / Velocità in uscita / Abtriebsdrehzahl / Vitesse de sortie / Velocidad de salida

Nominal power / Potenza nominale / Max. mögliche Leistung / Poissance nominale / Potencia nominal

Gear size / Grandezza riduttore / Getriebegröße / Taille réducteur / Tamaño reductor

Motor power / Potenza motore / Motorleistung / Puissance moteur / Potencia motor

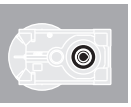
A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

Flange code / Codice flangia / Flanschtype / Code bride / Código bridas

Input speed / Velocità in entrata / Eintriebsdrehzahl / Vitesse en entrée / Velocidad de entrada

H62C Cube gear 675Nm

Rating - Cast Iron
PARALLEL SHAFT GEARBOXES



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
213	**6.57**	7.5	312	1.2	8.8	380	B									3018		01
185	**7.56**	7.5	358	1.1	7.9	390	B									3016		02
159	**8.82**	7.5	419	1.0	7.1	410	B									3014		03
113	**12.39**	7.5	588	1.0	7.2	580	B									2018		04

C Ratio / Rapporto / Untersetzung / Rapport de réduction / Relación

Transmitted torque / Momento torcente trasmesso / Mögliche Drehmomente / Couple de sortie / Par transmitido

Service factor / Fattore di servizio / Betriebsfaktor / Facteur de service / Factor de servicio

Output shaft diam. / Diam. albero uscita / Durchmesser abtriebswelle / Diametre arbre lent / Diametro eje de salida

Notes / Note / Anmerkungen / Note / Notas

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. 3 h	10 h	24 h
Continuous or intermittent appl. with start / hour ≤ 10 / Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour > 10 / Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D Motor flange available / Flange disponibili / Erhältliche Motorflansche / Brides disponibles / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Reduzierhülsen / Montage avec douille de réduction / Montaje con casquillo de reducción

C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur / Posición agujeros brida / base motor

B) Available without reduction bushes / Disponibile anche senza boccola / Auch ohne Reduzierbuchse verfügbar / Disponible aussi sans douille de réduction / Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -G	Available B5 motor flanges 132	B14 motor flanges - - - -	B14 motor flanges - - - -		Output Shaft	Ratios code
507	**2.76**	9	166	1.6	**14.4**	**265**					2980	**standard**	01
395	**3.54**	9	213	1.3	**11.6**	**275**					2485	**ø35**	02
277	**5.06**	9	304	1.0	**8.6**	**290**			**not available**		1891		03
241	**5.81**	7.5	281	1.2	**8.5**	**330**					1693	ø40	04
206	**6.79**	7.5	329	1.2	**8.4**	**380**					1495	On request	05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing**
Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

EN Unit **H61C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **H61C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **H61C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

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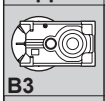
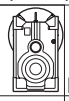
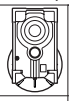
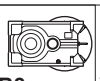
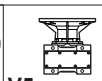
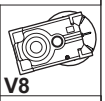
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **H61C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

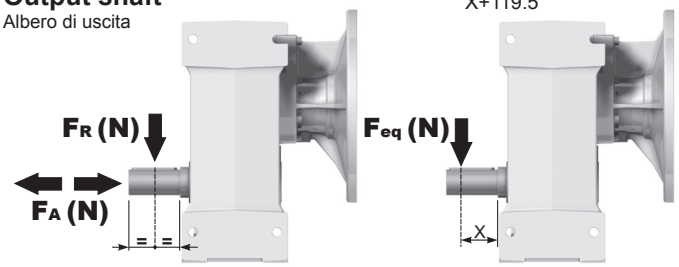
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	 **B6**	 **B7**	 **B8**	 **V5**	**V6**	 **V8**
2.25 LT	3.20 LT	3.00 LT	2.25 LT	4.35 LT	2.35 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{149.5}{X+119.5}$$



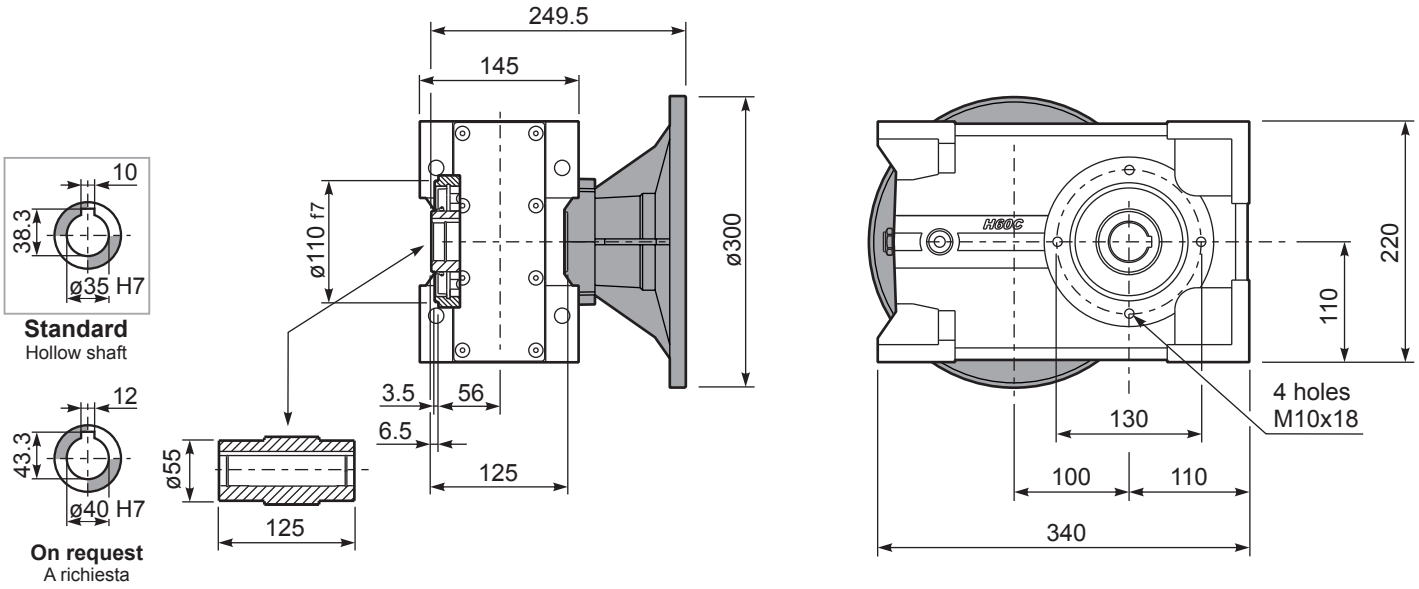
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	600	3000	**140**	720	3600	**70**	940	4700
250	640	3200	**120**	740	3700	**40**	1220	6100
200	690	3460	**85**	860	4300	**15**	1300	6500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

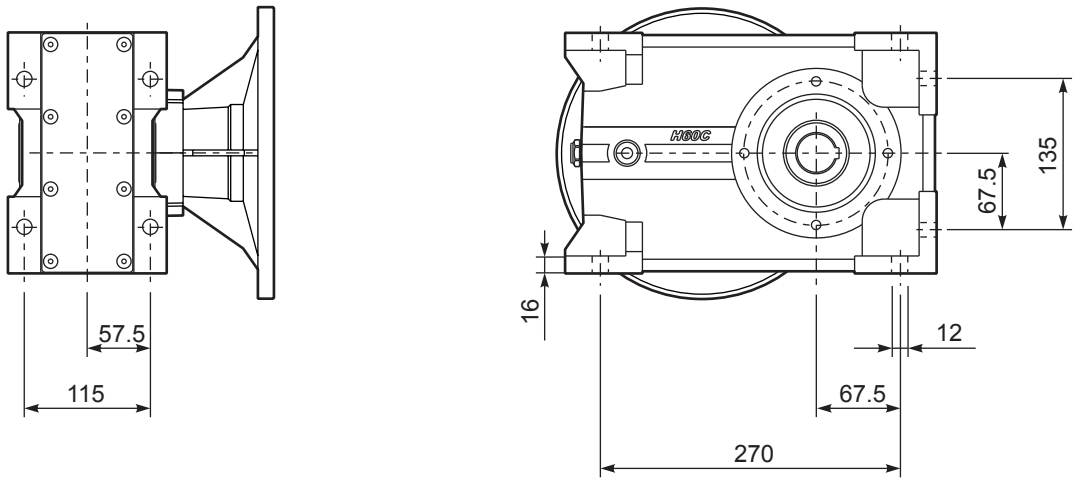
tab. 2

PH61C... Basic gearbox
Riduttore base

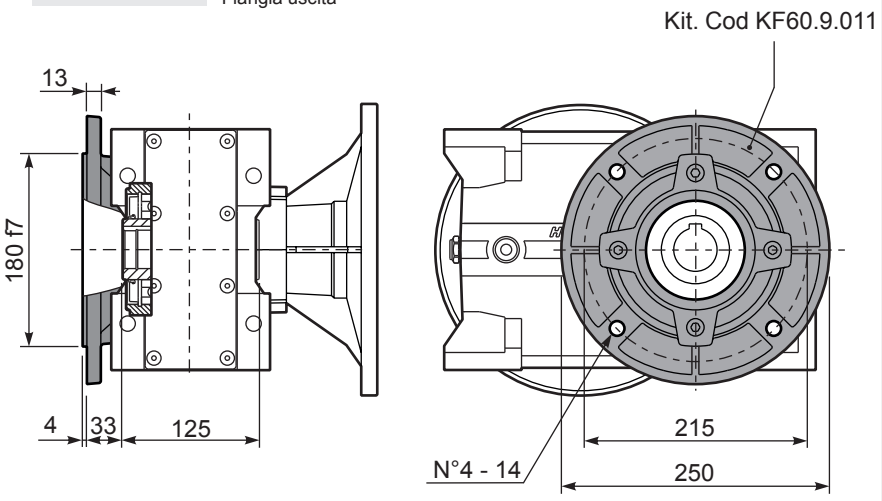
Gearbox weight peso riduttore	40.0 kg



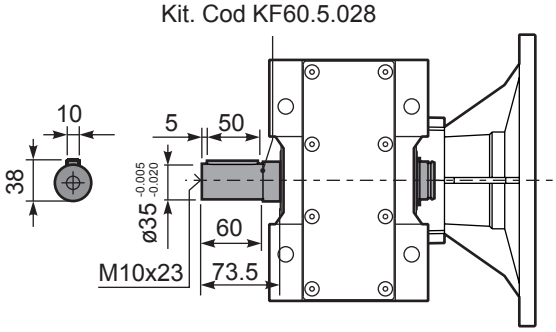
PH61C...-N Feet
Piedini



PH61C...-F Output flange
Flangia uscita



PH61C A... Single output shaft
Albero uscita semplice



7

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
213	**6.57**	7.5	312	1.2	8.8	380	B									3018		01
185	**7.56**	7.5	358	1.1	7.9	390	B									3016		02
159	**8.82**	7.5	419	1.0	7.1	410	B									3014		03
113	**12.39**	7.5	588	1.0	7.2	580	B									2018		04
98	**14.24**	5.5	499	1.2	6.4	600	B									2016		05
84	**16.75**	5.5	587	1.1	6.1	665	B									1618		06
73	**19.25**	5.5	675	1.0	5.4	675	B									1616	**standard ø35**	07
64	**21.78**	4	558	1.2	4.7	675	B									1318		08
56	**25.04**	4	642	1.1	4.1	675	B									1316		09
47.9	**29.23**	4	750	0.9	3.5	675	B									1314	ø40 On request	10
45.7	**30.65**	3	592	1.1	3.4	675	B									1116		11
39.1	**35.78**	3	691	1.0	2.9	675	B									1114		12
36.3	**38.55**	2.2	548	1.1	2.3	580	B									818		13
31.6	**44.32**	2.2	630	1.1	2.3	665	B									816		14
27.1	**51.74**	2.2	735	0.9	2.0	675	B									814		15
22.9	**61.03**	1.1	437	1.1	1.2	480	B									616		16
19.6	**71.25**	1.1	510	1.1	1.2	560	B									614		17

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

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See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
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Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

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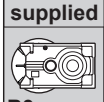
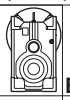
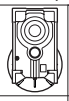
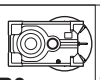
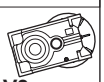
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	 **B6**	 **B7**	 **B8**	**V5**	**V6**	 **V8**
2.25 LT	3.20 LT	3.00 LT	2.25 LT	4.35 LT	2.35 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

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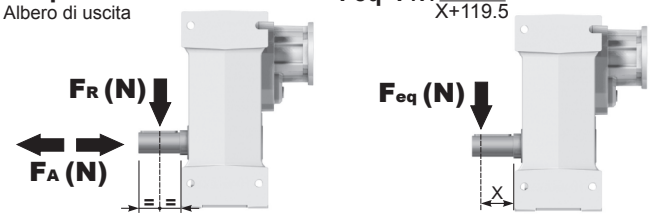
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

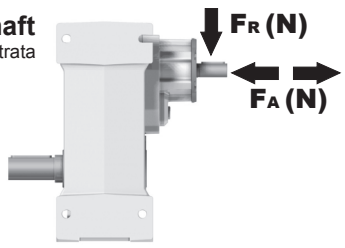
$F_{eq} = F_R \cdot \frac{149.5}{X+119.5}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	600	3000	**140**	720	3600	**70**	940	4700
250	640	3200	**120**	740	3700	**40**	1220	6100
200	690	3460	**85**	860	4300	**15**	1300	6500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



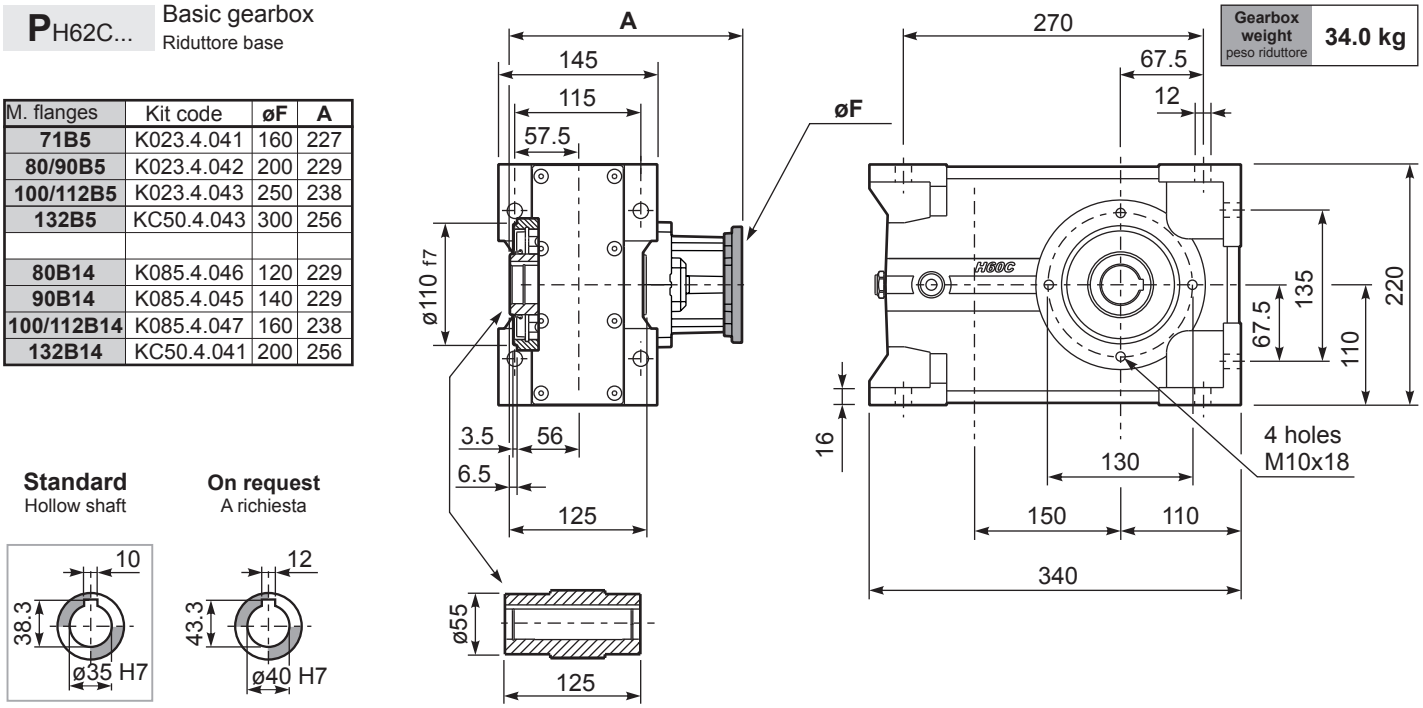
n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

PH62C... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	227
80/90B5	K023.4.042	200	229
100/112B5	K023.4.043	250	238
132B5	KC50.4.043	300	256
80B14	K085.4.046	120	229
90B14	K085.4.045	140	229
100/112B14	K085.4.047	160	238
132B14	KC50.4.041	200	256

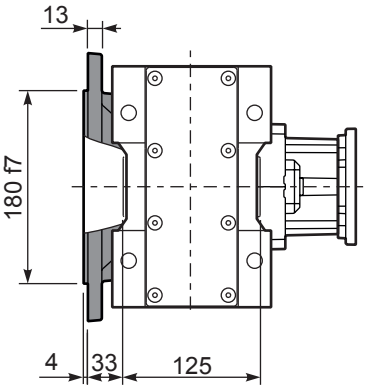
Gearbox weight peso riduttore **34.0 kg**



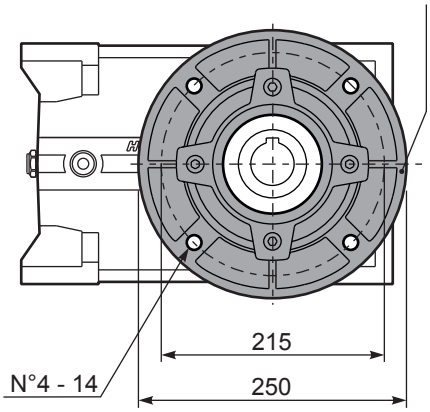
Standard
Hollow shaft

On request
A richiesta

PH62C...-F Output flange
Flangia uscita

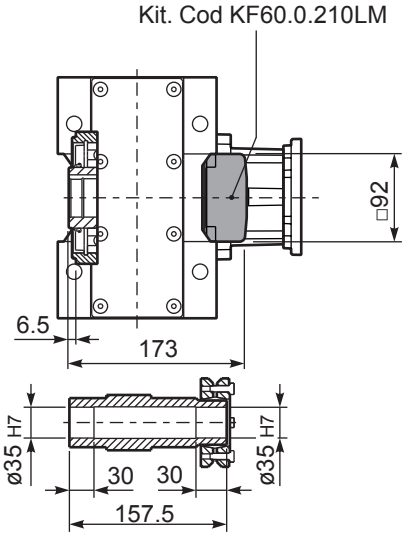


Kit. Cod KF60.9.011

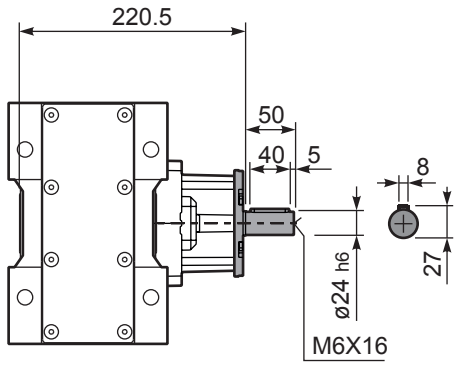


PH62C D... Shrink disk
Calettatore

Kit. Cod KF60.0.210LM

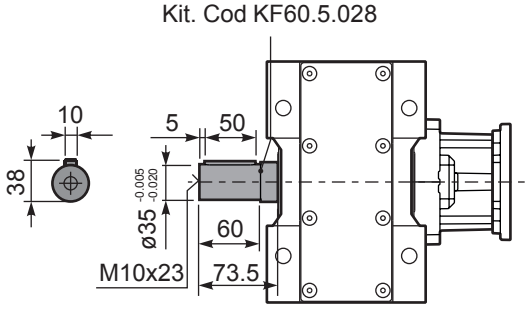


RH62C... Input Shaft
Albero in entrata



PH62C A... Single output shaft
Albero uscita semplice

Kit. Cod KF60.5.028



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
22.6	**61.89**	1.5	594	1.1	**1.7**	675	B				C	C		191318		01
19.7	**71.16**	1.5	683	1.0	**1.5**	675	B				C	C		191316		02
17.0	**82.48**	1.5	792	0.9	**1.3**	675	B				C	C		171316		03
14.5	**96.29**	1.1	675	1.0	**1.1**	675	B				C	C		171314		04
13.9	**100.51**	1.1	705	1.0	**1.0**	675	B				C	C		131318		05
12.1	**115.56**	0.75	556	1.2	**0.91**	675	B				C	C		131316		06
11.1	**125.96**	0.75	606	1.1	**0.82**	665	B				C	C		190816		07
10.4	**134.91**	0.75	649	1.0	**0.78**	675	B				C	C		131314	**standard ø35**	08
9.5	**147.05**	0.75	707	1.0	**0.72**	675	B				C	C		190814		09
8.2	**170.44**	0.55	605	1.1	**0.62**	675	B				C	C		170814	ø40	10
7.6	**184.15**	0.55	653	1.0	**0.57**	675	B				C	C		101314	On request	11
6.8	**205.87**	0.55	730	0.9	**0.51**	675	B				C	C		91316		12
5.8	**240.34**	0.37	570	1.2	**0.44**	675	B				C	C		91314		13
5.0	**279.22**	0.37	662	1.0	**0.37**	665	B				C	C		100816		14
4.3	**325.97**	0.37	773	0.9	**0.32**	675	B				C	C		100814		15
3.8	**364.41**	0.25	583	1.1	**0.28**	665	B				C	C		90816		16
3.3	**425.43**	0.25	681	1.0	**0.25**	675	B				C	C		90814		17
2.9	**481.19**	0.18	589	1.1	**0.22**	665	B				C	C		70816		18
2.5	**561.76**	0.18	687	1.0	**0.19**	675	B				C	C		70814		19

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

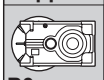
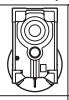
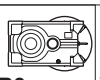
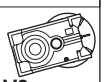
EN Unit **H63C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **H63C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **H63C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **H63C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **H63C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

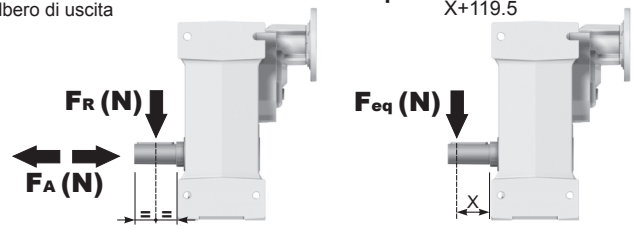
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	**B6**	 **B7**	 **B8**	**V5**	**V6**	 **V8**
2.35 LT	3.85 LT	3.15 LT	2.35 LT	4.55 LT	2.50 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

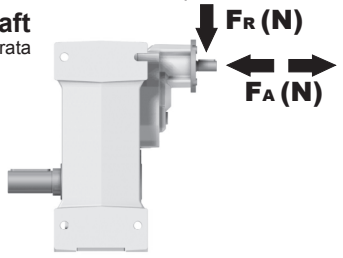
$$Feq = FR \cdot \frac{149.5}{X+119.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	600	3000	**140**	720	3600	**70**	940	4700
250	640	3200	**120**	740	3700	**40**	1220	6100
200	690	3460	**85**	860	4300	**15**	1300	6500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



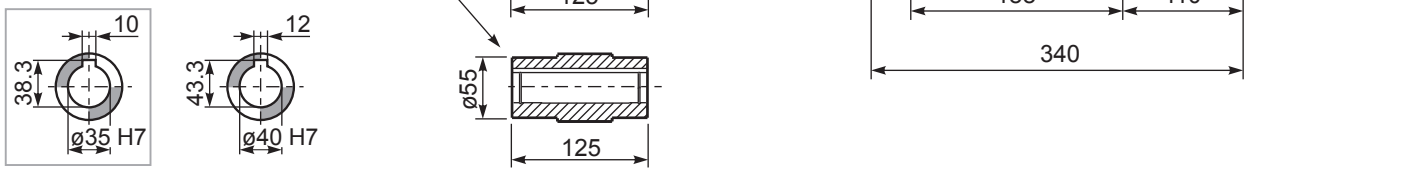
n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

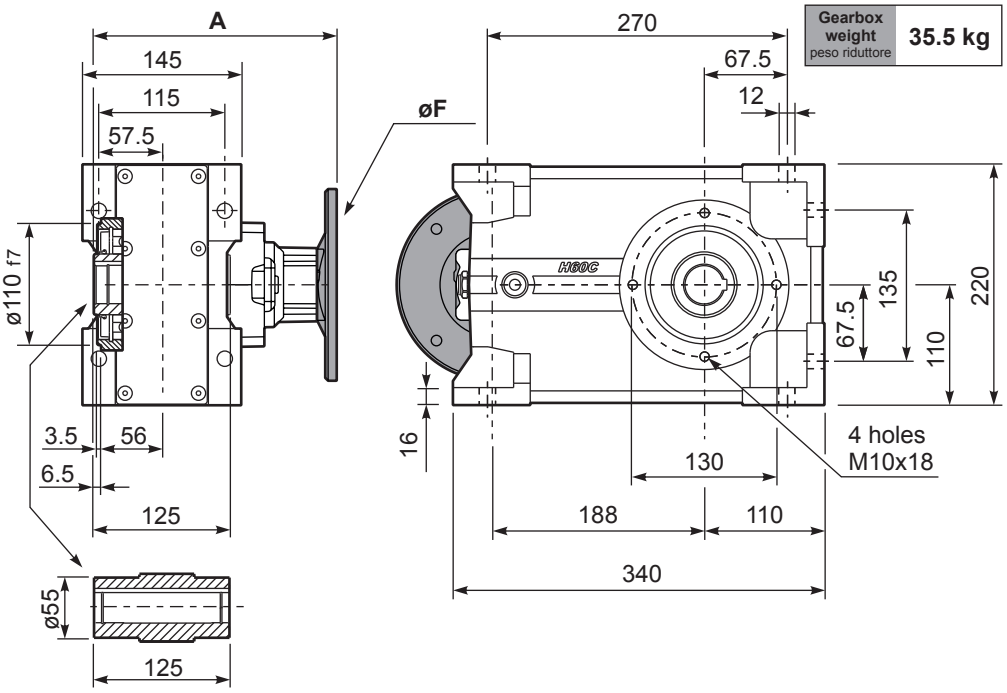
tab. 2

PH63C... Basic gearbox
Riduttore base

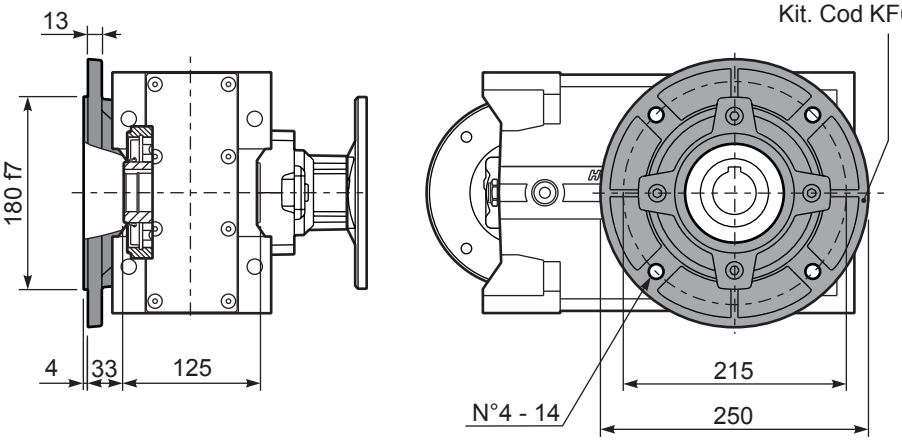
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	239
71B5	K063.4.042	160	237
80/90B5	K063.4.043	200	239
71B14	K063.4.047	105	237
80B14	K063.4.046	120	239
90B14	K063.4.041	140	239

Gearbox weight peso riduttore **35.5 kg**

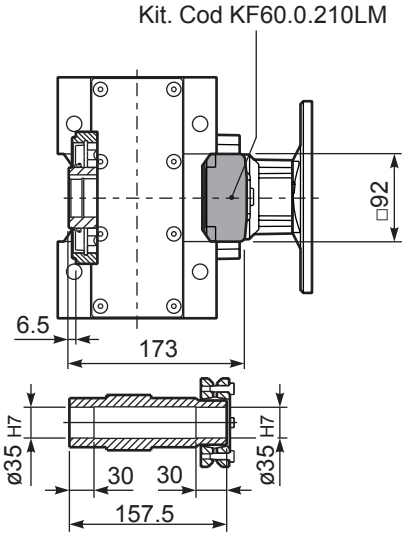




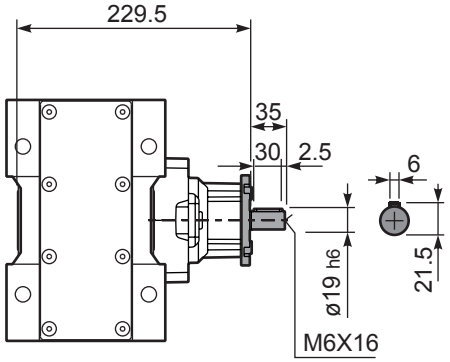
PH63C...-F Output flange
Flangia uscita



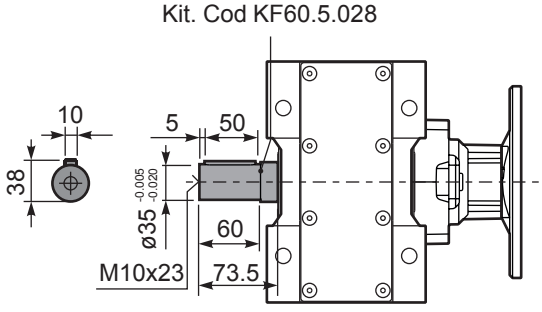
PH63C D... Shrink disk
Calettatore



RH63C... Input Shaft
Albero in entrata



PH63C A... Single output shaft
Albero uscita semplice



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -G 132	B14 motor flanges - - - - / - - - -		Output Shaft ø	Ratios code
227	**6.17**	9	371	1.2	10.9	450		**not available**	18111	**standard**	01
198	**7.06**	9	425	1.4	12.7	600			16113	**ø40**	02
170	**8.21**	9	494	1.4	12.2	670			14115	ø45 On request	03

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili — B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione — B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione — C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **H71C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H71C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H71C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H71C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H71C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
3.20 LT	4.65 LT	4.00 LT	3.20 LT	6.00 LT	3.10 LT	Ask
AGIP Blasia 460						

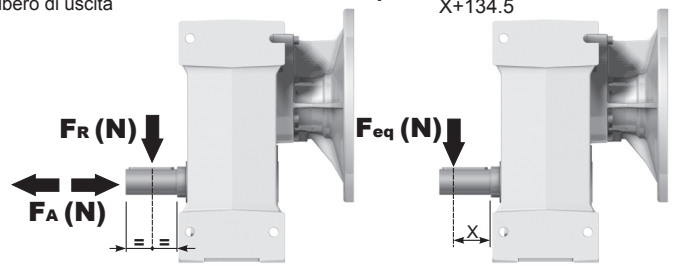
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = F_R \cdot \frac{174.5}{X+134.5}$$



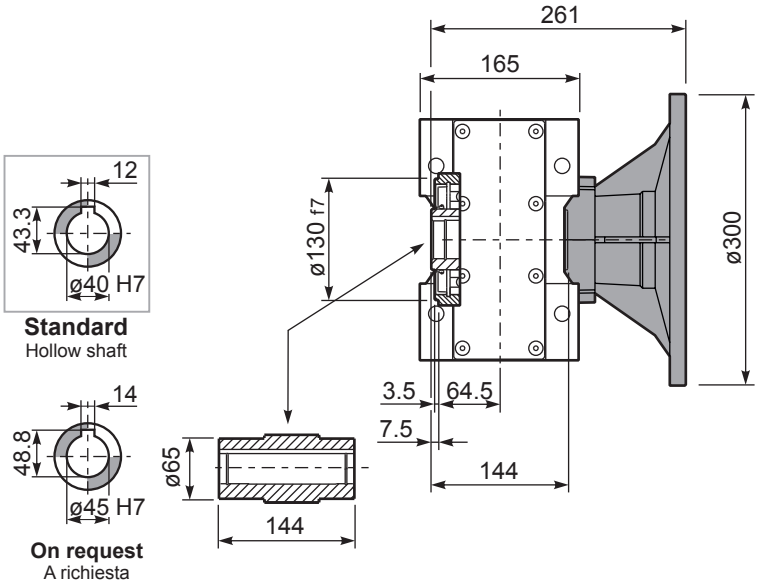
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	740	3700	**140**	860	4300	**70**	1020	5100
250	800	4000	**120**	900	4500	**40**	1300	6500
200	830	4150	**85**	970	4850	**15**	1700	8500

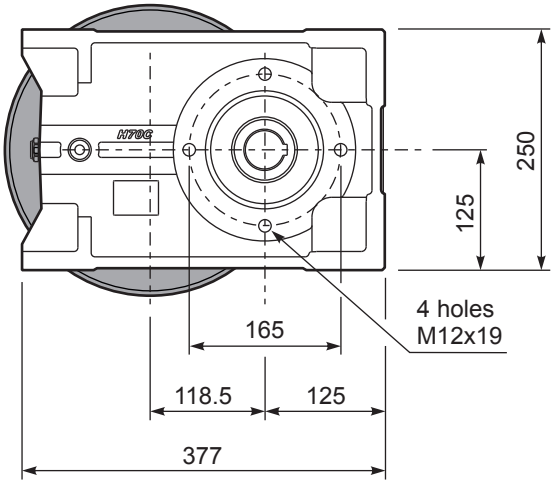
On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

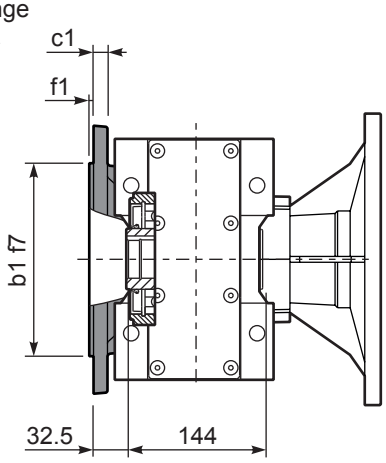
PH71C... Basic gearbox
Riduttore base

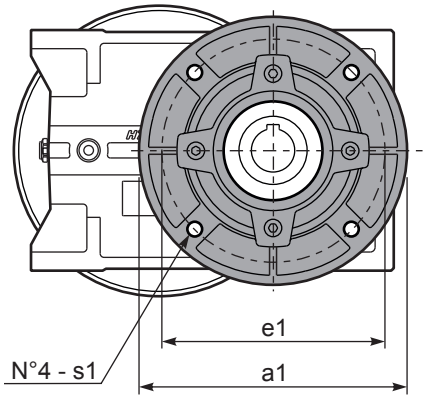
Gearbox weight peso riduttore	51.0 kg





PH71C...-F Output flange
Flangia uscita

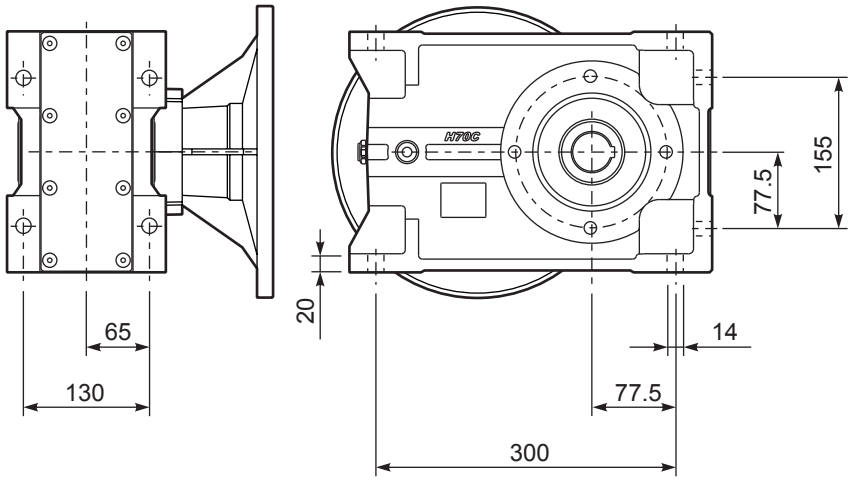




Available output flanges
Flange di uscita

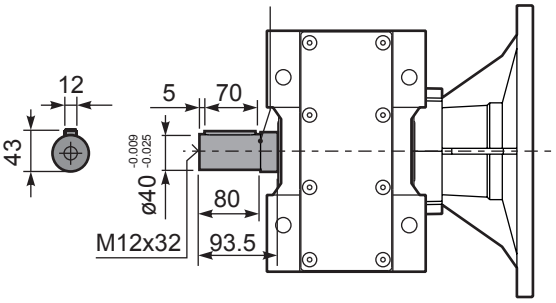
a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012

PH71C...-N Feet
Piedini



PH71C A... Single output shaft
Albero uscita semplice

Kit. Cod KF70.5.028



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
175	**8.02**	9	473	1.1	**9.9**	**520**	B									3018		01
152	**9.18**	9	541	1.1	**9.8**	**590**	B									3016		02
131	**10.68**	9	630	1.1	**9.7**	**680**	B									3014		03
93	**15.11**	7.5	717	1.1	**7.8**	**775**	B									2018		04
81	**17.30**	7.5	821	1.1	**7.8**	**885**	B									2016		05
70	**20.13**	7.5	955	0.9	**6.8**	**900**	B									2014		06
60	**23.39**	5.5	820	1.1	**5.9**	**900**	B									1616	**standard ø40**	07
51	**27.21**	5.5	954	0.9	**5.1**	**900**	B									1614		08
46.0	**30.42**	4	780	1.2	**4.5**	**900**	B									1316	ø45 On request	09
39.6	**35.38**	4	907	1.0	**3.9**	**900**	B									1314		10
37.6	**37.24**	3	719	1.2	**3.7**	**895**	B									1116		11
32.3	**43.31**	3	836	1.1	**3.2**	**900**	B									1114		12
29.8	**47.02**	2.2	668	1.1	**2.3**	**705**	B									818		13
26.0	**53.85**	2.2	765	1.1	**2.3**	**810**	B									816		14
22.4	**62.63**	2.2	890	1.0	**2.2**	**900**	B									814		15
18.9	**74.16**	1.1	531	1.1	**1.2**	**585**	B									616		16
16.2	**86.25**	1.1	617	1.1	**1.2**	**680**	B									614		17

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **H72C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H72C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H72C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H72C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H72C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
3.20 LT	4.65 LT	4.00 LT	3.20 LT	6.20 LT	3.10 LT	Ask

AGIP Blasia 460

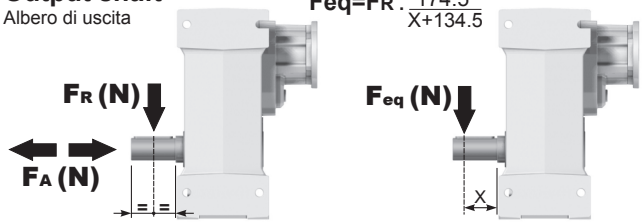
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

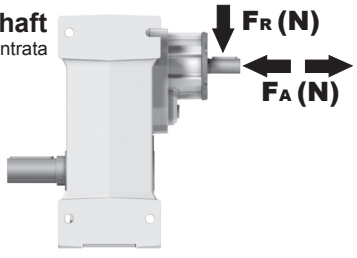
$$Feq = FR \cdot \frac{174.5}{X+134.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	740	3700	**140**	860	4300	**70**	1020	5100
250	800	4000	**120**	900	4500	**40**	1300	6500
200	830	4150	**85**	970	4850	**15**	1700	8500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

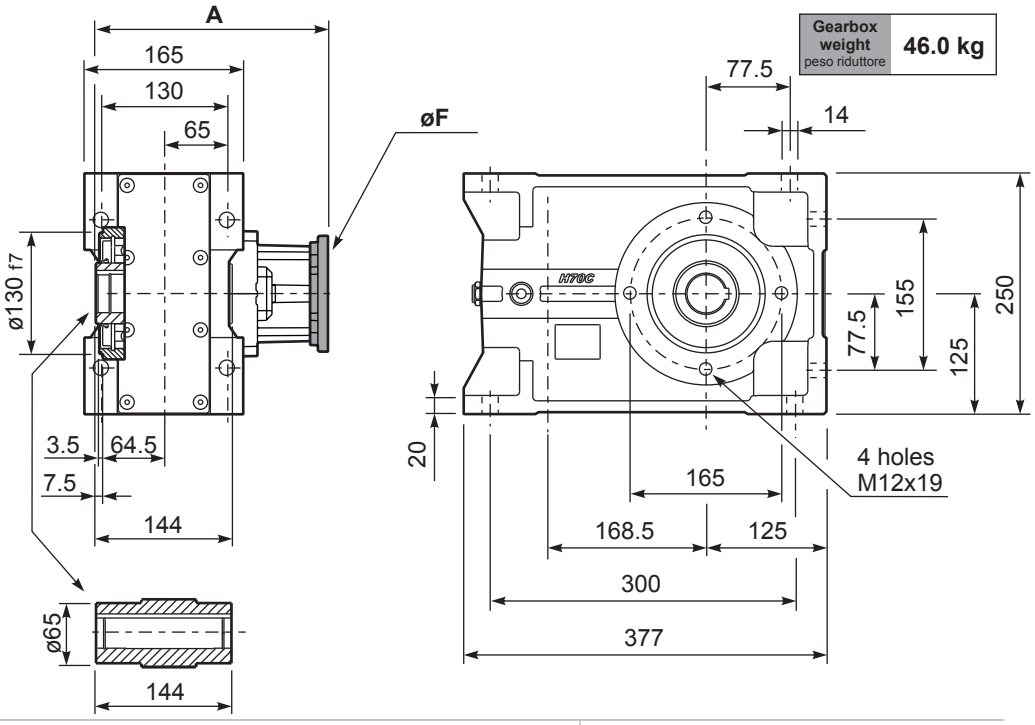


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

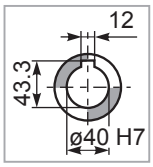
PH72C... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	238.5
80/90B5	K023.4.042	200	240.5
100/112B5	K023.4.043	250	249.5
132B5	KC50.4.043	300	267.5
80B14	K085.4.046	120	240.5
90B14	K085.4.045	140	240.5
100/112B14	K085.4.047	160	249.5
132B14	KC50.4.041	200	267.5

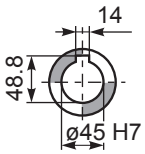


Gearbox weight / peso riduttore: **46.0 kg**

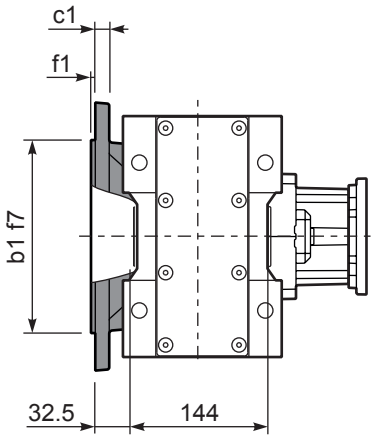
Standard
Hollow shaft

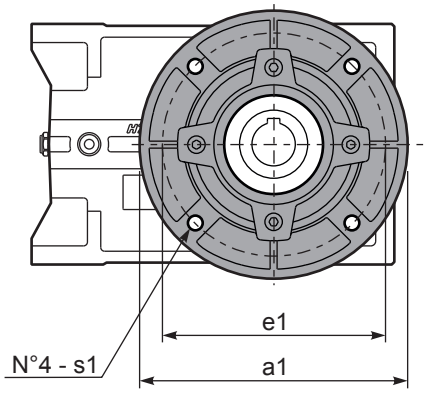


On request
A richiesta



PH72C...-F Output flange
Flangia uscita

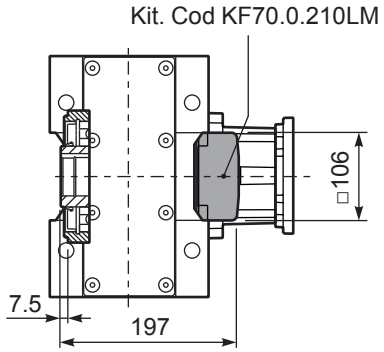


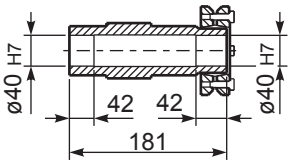


Available output flanges
Flange di uscita

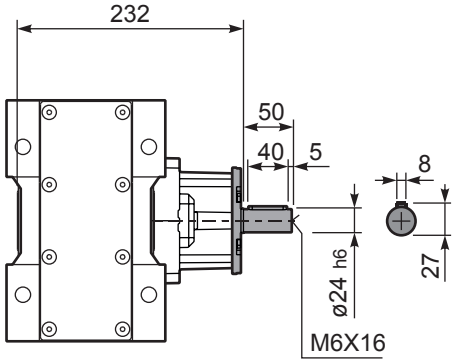
a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012

PH72C D... Shrink disk
Calettatore

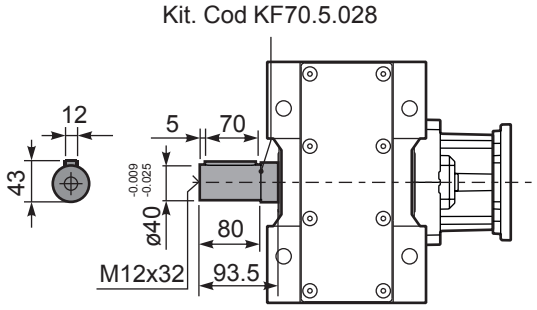




RH72C... Input Shaft
Albero in entrata



PH72C A... Single output shaft
Albero uscita semplice



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
18.5	**75.50**	1.5	725	1.1	**1.7**	**825**	B				C	C		191318		01
16.2	**86.47**	1.5	830	1.1	**1.6**	**900**	B				C	C		191316		02
14.0	**100.22**	1.5	962	0.9	**1.4**	**900**	B				C	C		171316		03
12.0	**116.56**	1.1	817	1.1	**1.2**	**900**	B				C	C		171314		04
10.2	**136.82**	1.1	959	0.9	**1.0**	**900**	B				C	C		151314		05
9.1	**153.05**	0.75	736	1.1	**0.83**	**810**	B				C	C		190816		06
8.6	**163.31**	0.75	785	1.1	**0.86**	**900**	B				C	C		131314	**standard ø40**	07
7.9	**178.01**	0.75	856	1.1	**0.79**	**900**	B				C	C		190814		08
7.3	**191.67**	0.75	922	1.0	**0.73**	**900**	B				C	C		101316	ø45	09
6.8	**206.32**	0.75	992	0.9	**0.68**	**900**	B				C	C		170814	On request	10
6.3	**222.92**	0.55	791	1.1	**0.63**	**900**	B				C	C		101314		11
5.8	**242.18**	0.55	859	1.0	**0.58**	**900**	B				C	C		150814		12
5.6	**250.15**	0.55	888	1.0	**0.56**	**900**	B				C	C		91316		13
4.8	**289.08**	0.55	1026	0.9	**0.49**	**900**	B				C	C		130814		14
4.2	**330.31**	0.37	783	1.1	**0.42**	**890**	B				C	C		71316		15
3.5	**394.59**	0.37	936	1.0	**0.36**	**900**	B				C	C		100814		16
2.7	**514.99**	0.25	824	1.1	**0.27**	**900**	B				C	C		90814		17
2.1	**680.03**	0.18	832	1.1	**0.21**	**900**	B				C	C		70814		18

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **H73C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H73C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H73C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H73C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H73C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

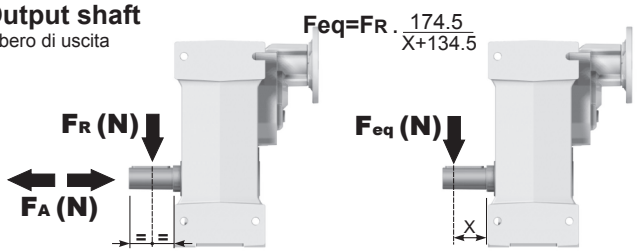
B3	B6	B7	B8	V5	V6	V8
3.30 LT	5.70 LT	4.15 LT	3.30 LT	6.40 LT	3.25 LT	Ask
AGIP Blasia 460						

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{174.5}{X+134.5}$$



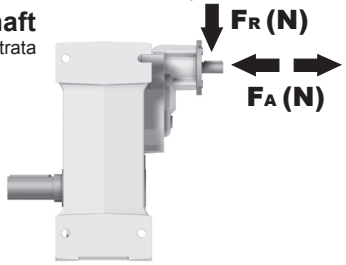
n_2	FA	FR
300	740	3700
250	800	4000
200	830	4150

n_2	FA	FR
140	860	4300
120	900	4500
85	970	4850

n_2	FA	FR
70	1020	5100
40	1300	6500
15	1700	8500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

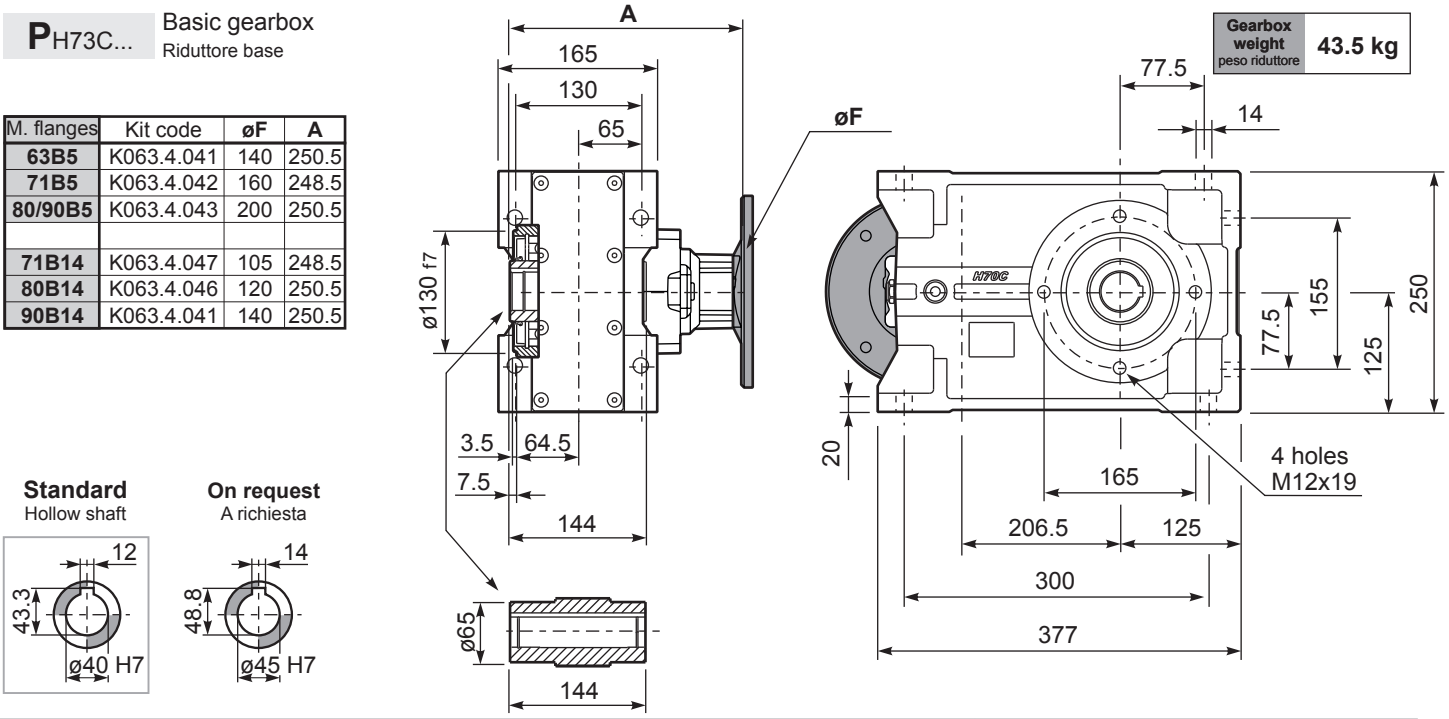


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

PH73C... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	250.5
71B5	K063.4.042	160	248.5
80/90B5	K063.4.043	200	250.5
71B14	K063.4.047	105	248.5
80B14	K063.4.046	120	250.5
90B14	K063.4.041	140	250.5

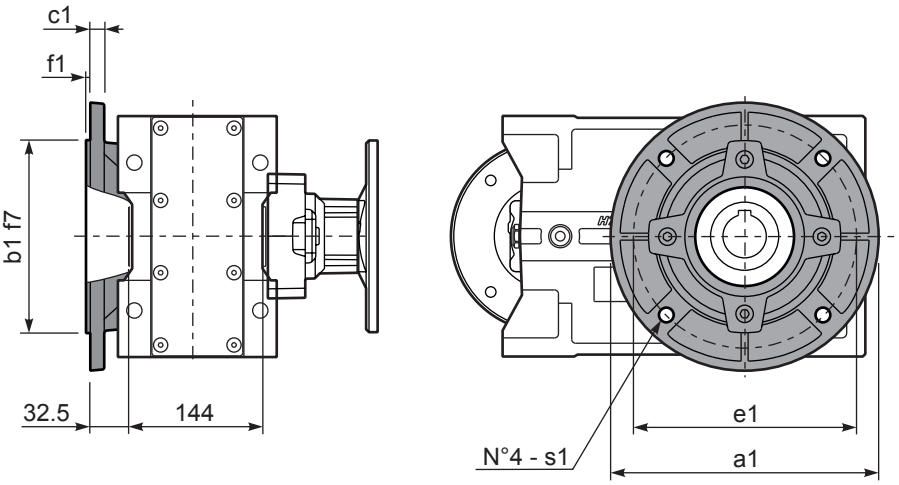


Gearbox weight / peso riduttore: **43.5 kg**

Standard
Hollow shaft

On request
A richiesta

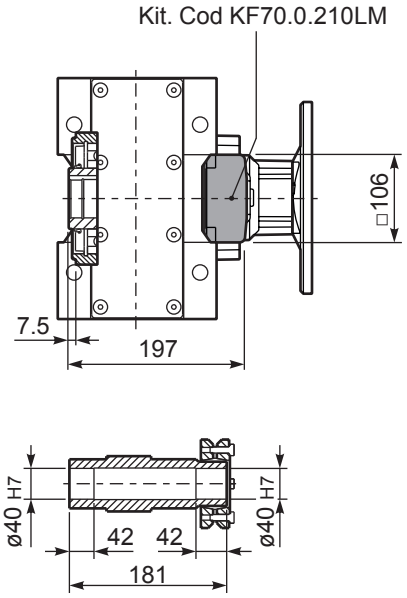
PH73C...-F Output flange
Flangia uscita



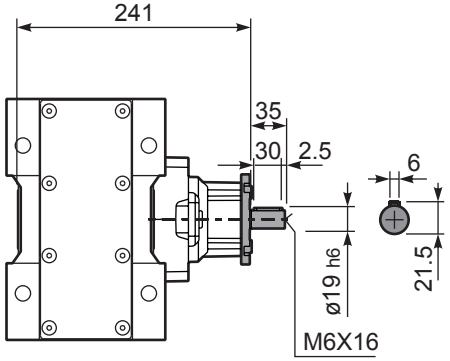
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012

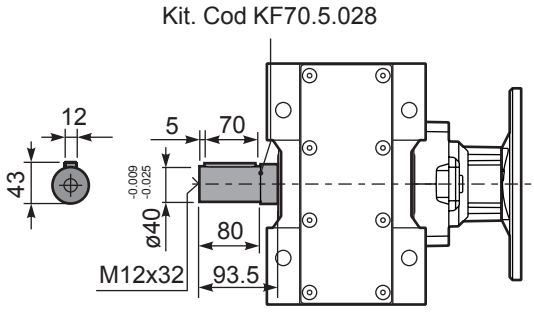
PH73C D... Shrink disk
Calettatore



RH73C... Input Shaft
Albero in entrata



PH73C A... Single output shaft
Albero uscita semplice



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -H 160	Available B5 motor flanges -I 180	B14 motor flanges - - - - - - - -		Output Shaft	Ratios code
528	**2.65**	22	374	1.7	**36.7**	**650**			**not available**	2361	**standard**	01
409	**3.42**	22	483	1.6	**32.8**	**750**				1965	**ø50**	02
304	**4.60**	22	649	1.5	**30.9**	**950**				1569		03
256	**5.46**	22	771	1.3	**27.4**	**1000**				1371	ø55	04
211	**6.64**	22	937	1.3	**26.5**	**1175**				1173	On request	05

The dynamic efficiency is **0.98** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **H81C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H81C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

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Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H81C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H81C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
5.70 LT	7.00 LT	7.90 LT	5.70 LT	10.20 LT	5.60 LT	Ask

AGIP Blasia 460

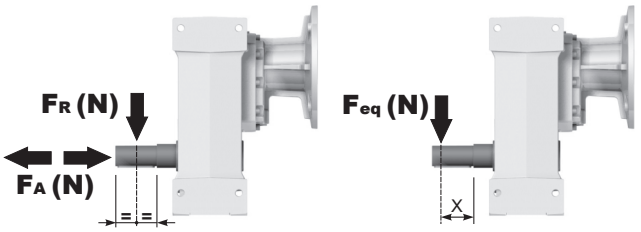
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{227.5}{X+177.5}$$



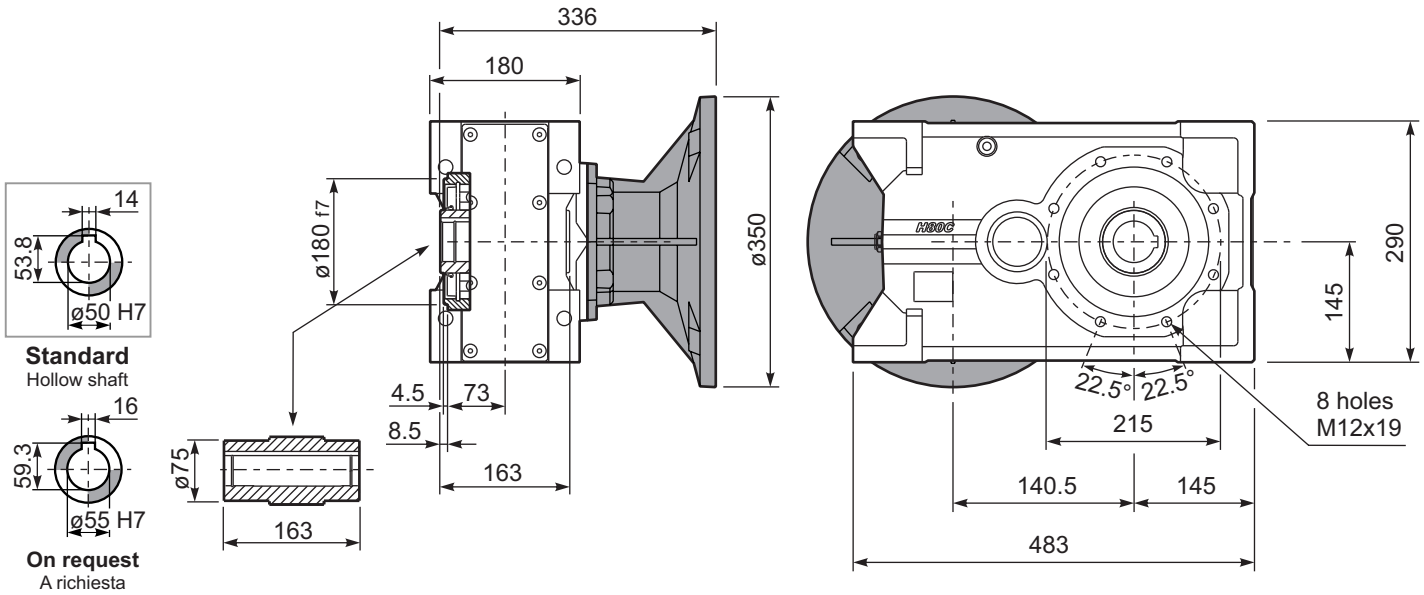
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	920	4600	**140**	1120	5600	**70**	1400	7000
250	1000	5000	**120**	1140	5700	**40**	1800	9000
200	1060	5300	**85**	1300	6500	**15**	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

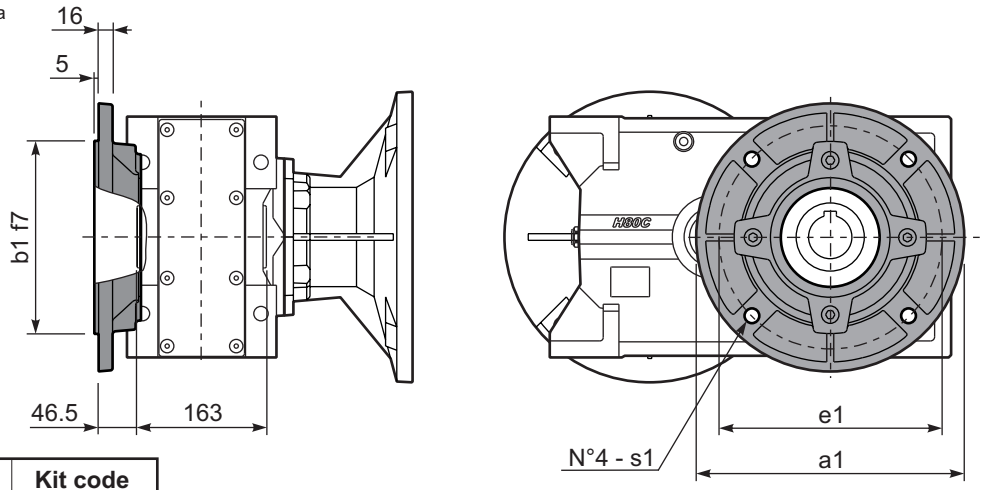
tab. 2

P H81C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	89.0 kg



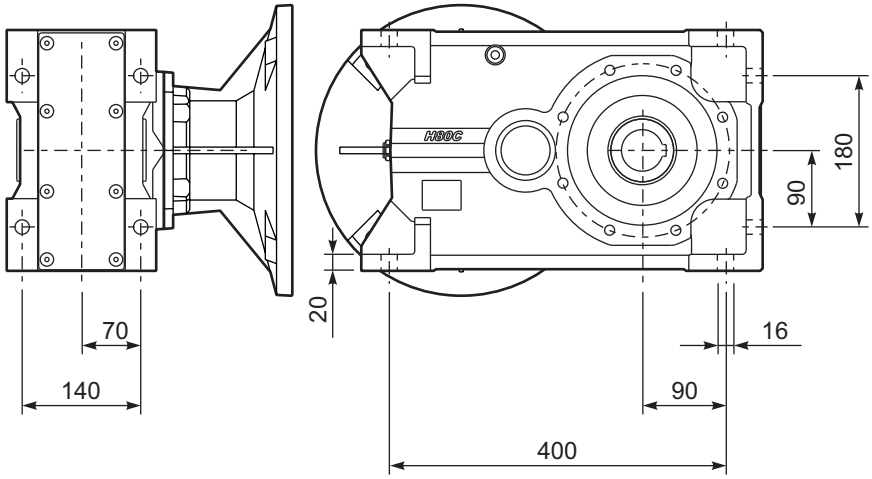
PH81C...-F Output flange
Flangia uscita



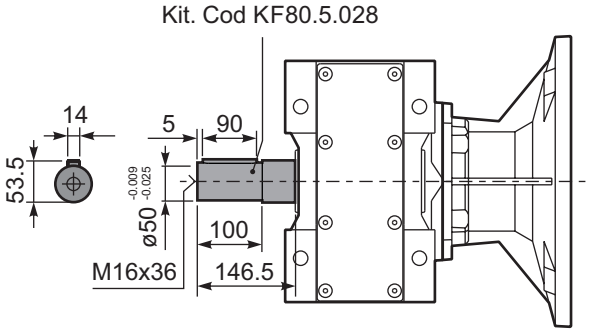
Available output flanges
Flange di uscita

a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012

PH81C...-N Feet
Piedini



PH81C A... Single output shaft
Albero uscita semplice



7

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -F / 100 112	B5 -G / 132	B5 -H / 160	B5 -I / 180	B14 motor flanges - - - - / - - - -		Output Shaft	Ratios code
234	**5.98**	22	827	1.2	**25.5**	**1000**	B					3015		01
197	**7.10**	22	982	1.2	**25.3**	**1175**	B					3013		02
162	**8.63**	22	1193	1.1	**23.9**	**1350**	B					3011		03
124	**11.27**	18.5	1310	1.1	**20.3**	**1500**	B					2015		04
105	**13.38**	18.5	1555	1.1	**19.4**	**1700**	B					2013		05
92	**15.24**	18.5	1771	1.1	**19.0**	**1900**	B					1615		06
86	**16.26**	18.5	1889	1.1	**19.7**	**2100**	B					2011	**standard ø50**	07
77	**18.09**	18.5	2102	1.0	**17.7**	**2100**	B				**not available**	1613		08
71	**19.82**	15	1865	1.1	**15.9**	**2060**	B					1315		09
64	**21.98**	15	2069	1.0	**14.6**	**2100**	B					1611	ø55 On request	10
60	**23.53**	15	2214	0.9	**13.6**	**2100**	B					1313		11
58	**24.25**	11	1677	1.2	**12.2**	**1940**	B					1115		12
48.6	**28.80**	11	1991	1.1	**11.1**	**2100**	B					1113		13
40.0	**34.99**	9	2063	1.0	**9.2**	**2100**	B					1111		14
33.6	**41.64**	7.5	1976	1.0	**7.2**	**1960**	B					813		15
27.7	**50.60**	5.5	1774	1.2	**6.3**	**2100**	B					811		16

The dynamic efficiency is **0.96** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **H82C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H82C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H82C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H82C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H82C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

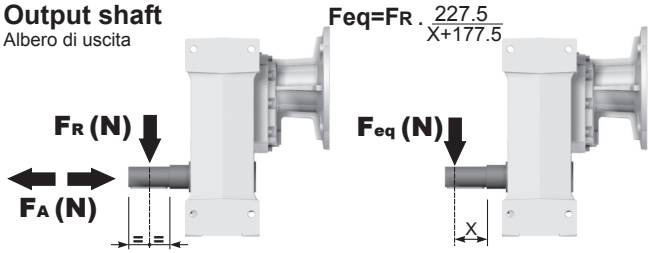
B3	B6	B7	B8	V5	V6	V8
5.60 LT	6.80 LT	7.80 LT	5.60 LT	10.00 LT	5.50 LT	Ask
AGIP Blasia 460						

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

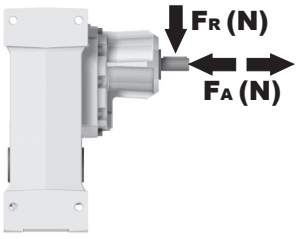
$$Feq = FR \cdot \frac{227.5}{X+177.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	920	4600	**140**	1120	5600	**70**	1400	7000
250	1000	5000	**120**	1140	5700	**40**	1800	9000
200	1060	5300	**85**	1300	6500	**15**	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



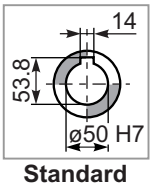
n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2

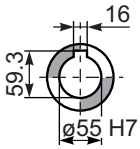
PH82C... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
100/112B5	K023.4.043	250	299
132B5	KC51.4.043	300	320.5
160/180B5	KC86.4.0.43	350	352.5
100/112B14	K085.4.047	160	299
132B14	KC51.4.041	200	320.5

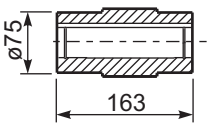
Gearbox weight / peso riduttore: 86.0 kg

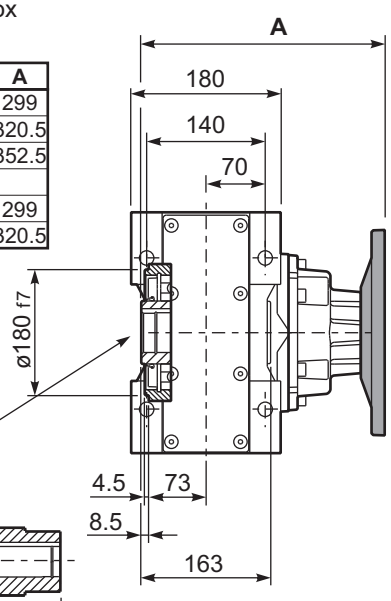


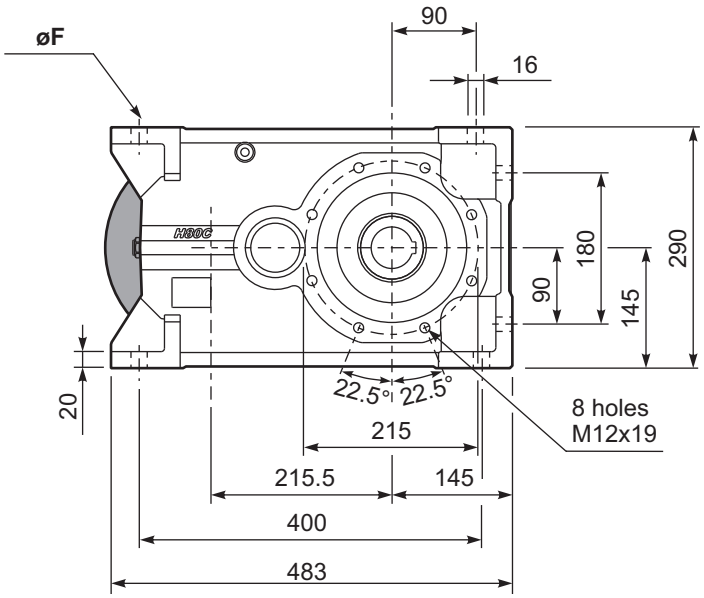
Standard
Hollow shaft



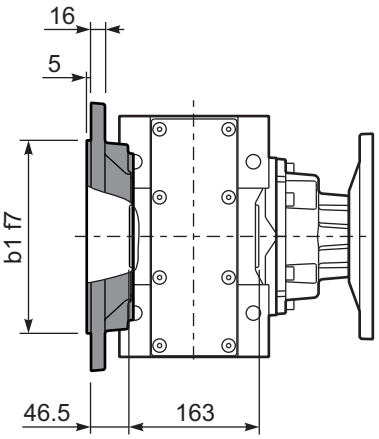
On request
A richiesta

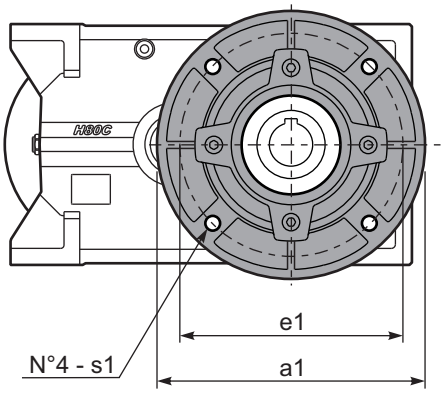






PH82C...-F Output flange
Flangia uscita

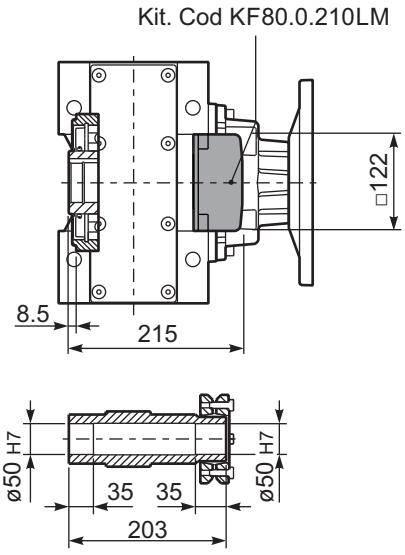




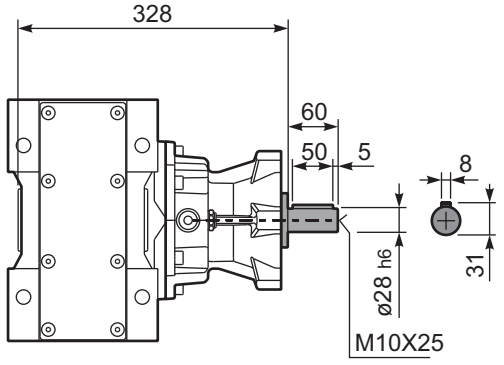
Available output flanges
Flange di uscita

a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012

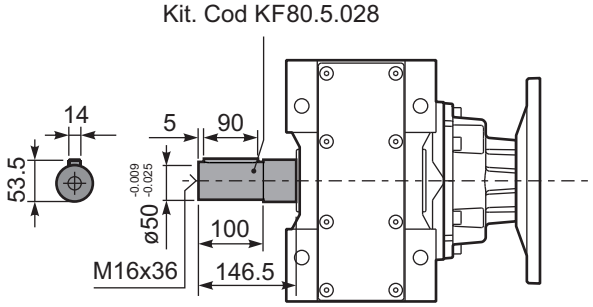
PH82C D... Shrink disk
Calettatore



RH82C... Input Shaft
Albero in entrata



PH82C A... Single output shaft
Albero uscita semplice



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
28.8	**48.55**	7.5	2257	0.9	**6.7**	**2100**	B									201315		01
24.3	**57.64**	5.5	1980	1.1	**5.7**	**2100**	B									201313		02
21.3	**65.64**	5.5	2255	0.9	**5.0**	**2100**	B									161315		03
20.0	**70.04**	4	1760	1.2	**4.7**	**2100**	B									201311		04
18.0	**77.93**	4	1958	1.1	**4.2**	**2100**	B									161313		05
16.4	**85.36**	4	2145	1.0	**3.8**	**2100**	B									131315	**standard ø50**	06
14.8	**94.70**	4	2380	0.9	**3.5**	**2100**	B									161311		07
13.8	**101.35**	3	1917	1.1	**3.2**	**2100**	B									131313		08
11.4	**123.15**	3	2330	0.9	**2.7**	**2100**	B									131311	ø55 On request	09
9.3	**150.73**	2.2	2100	1.0	**2.2**	**2100**	B									111311		10
7.8	**179.39**	1.5	1722	1.2	**1.8**	**2100**	B									81313		11
6.4	**217.98**	1.5	2093	1.0	**1.5**	**2100**	B									81311		12
5.7	**247.03**	1.1	1732	1.1	**1.2**	**1950**	B									61313		13
4.7	**300.17**	1.1	2105	1.0	**1.1**	**2100**	B									61311		14

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **H83C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **H83C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **H83C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **H83C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **H83C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

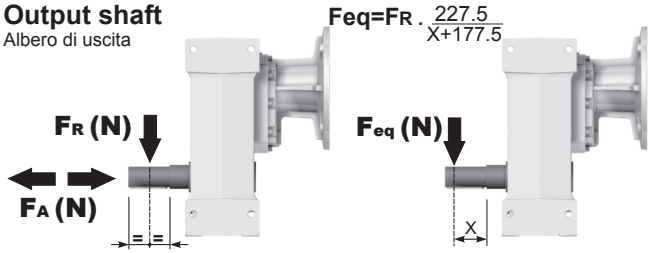
B3	B6	B7	B8	V5	V6	V8
5.80 LT	7.10 LT	8.20 LT	5.80 LT	10.80 LT	6.00 LT	Ask
AGIP Blasia 460						

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

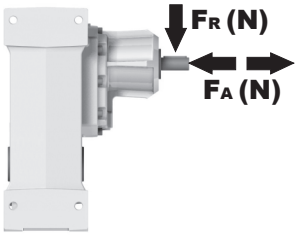
$$Feq = FR \cdot \frac{227.5}{X+177.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	920	4600	**140**	1120	5600	**70**	1400	7000
250	1000	5000	**120**	1140	5700	**40**	1800	9000
200	1060	5300	**85**	1300	6500	**15**	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



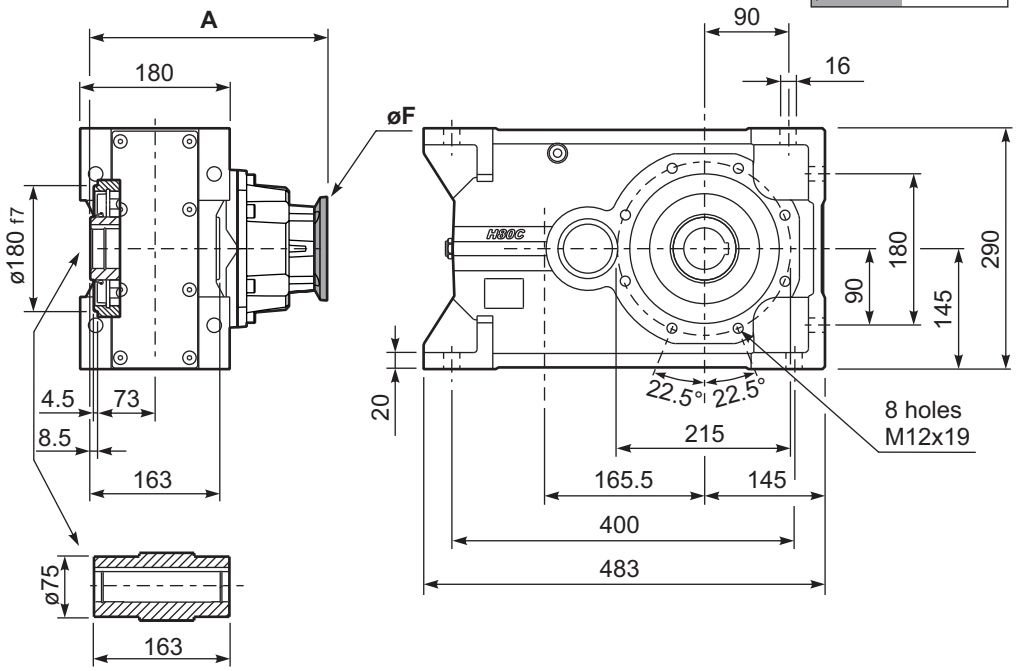
n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

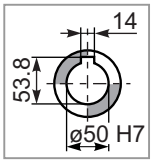
PH83C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore **81.0 kg**

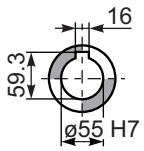
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	292.5
80/90B5	K023.4.042	200	294.5
100/112B5	K023.4.043	250	303.5
132B5	KC50.4.043	300	321.5
80B14	K085.4.046	120	294.5
90B14	K085.4.045	140	294.5
100/112B14	K085.4.047	160	303.5
132B14	KC50.4.041	200	321.5



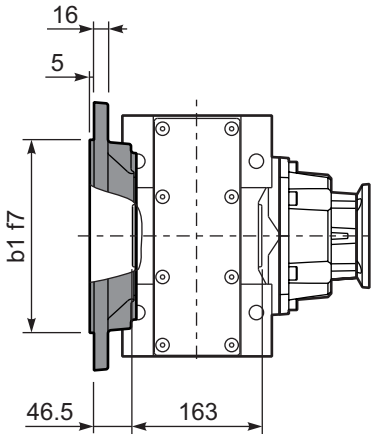
Standard
Hollow shaft

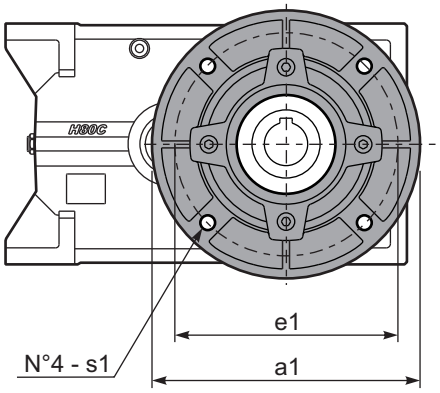


On request
A richiesta



PH83C...-F Output flange
Flangia uscita

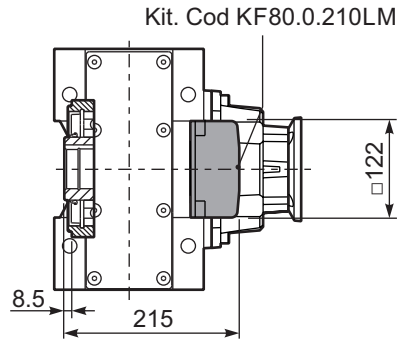


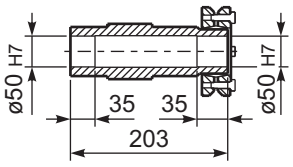


Available output flanges
Flange di uscita

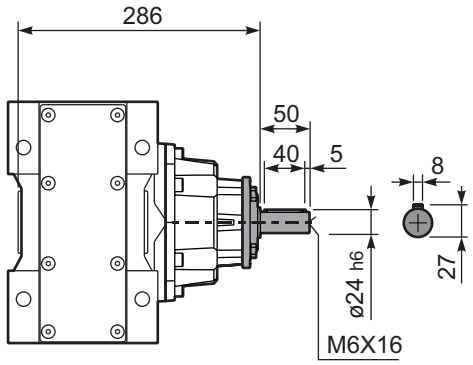
a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012

PH83C D... Shrink disk
Calettatore

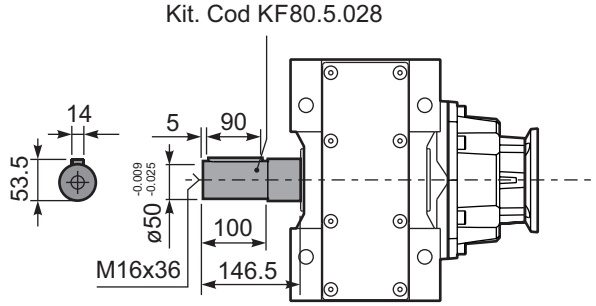




RH83C... Input Shaft
Albero in entrata



PH83C A... Single output shaft
Albero uscita semplice



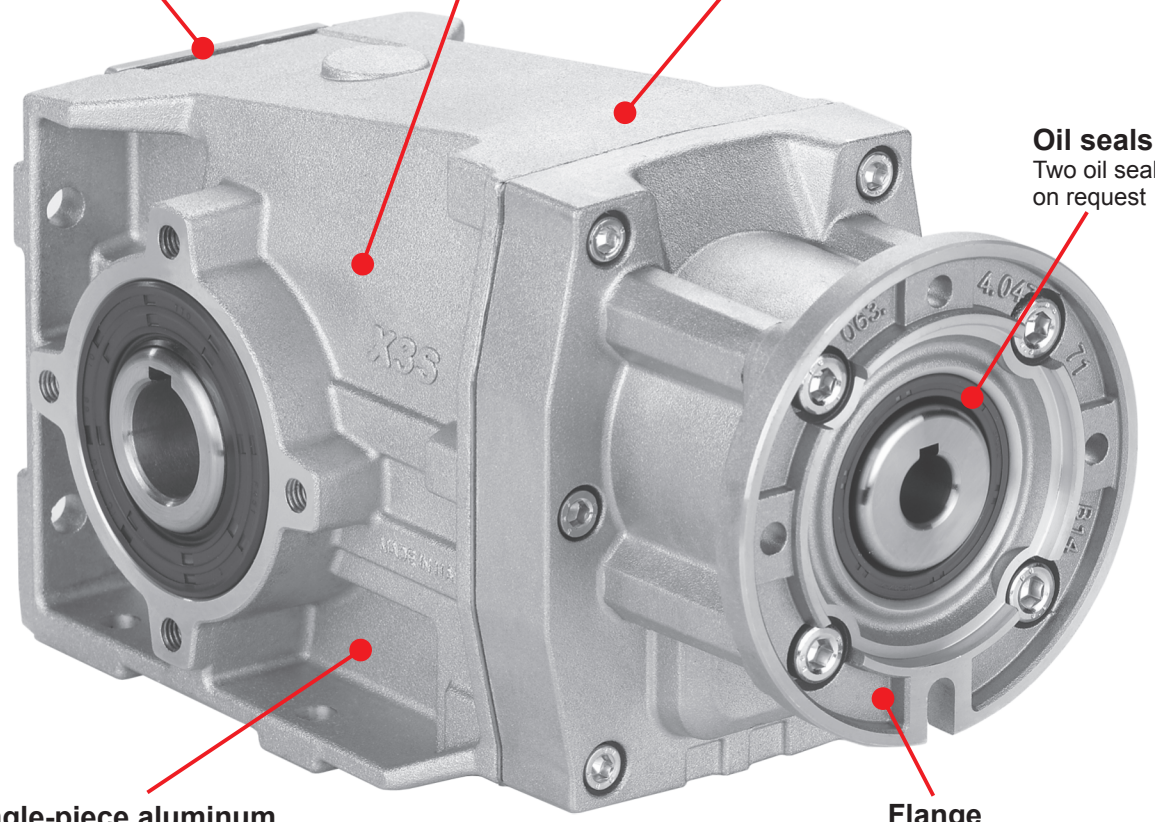
Aluminum and cast iron helical bevel gearboxes

A modular and compact product
Very energy efficent drive

Removable inspection cover
Allows periodic inspection of gearing during routine maintenance

Gears
Hardened and ground gears

Alloy housing
Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint.

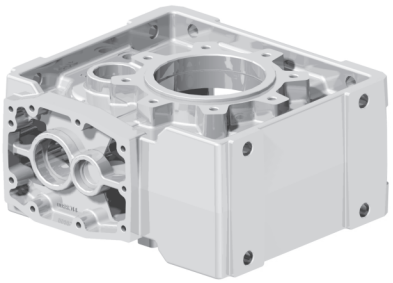


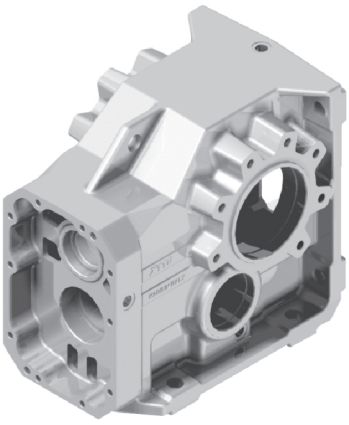
Oil seals
Two oil seals on request

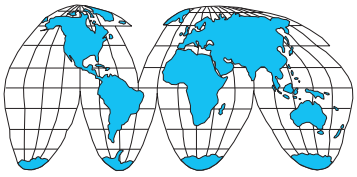
Single-piece aluminum
Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing

Flange
Fully modular to IEC and Compact integrated motor.
NEMA C flange

Cast Iron housing
With high tensile strength. Precision machined for alignment of bearings and gearing



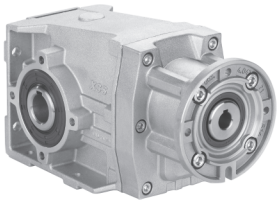




World wide sales network.

Specific type datasheet on page...

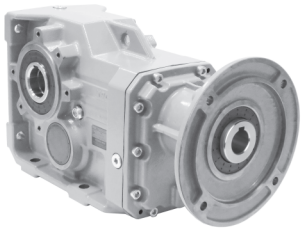
On page / A pagina / Auf Seite / À la page /En la página



Types / Tipi
Typen / Types
Tipos

8-5	8-7	8-9	8-11	8-13	8-15	8-17	8-19	8-21
X22S 50Nm	**X32S** 90Nm	**X33S** 100Nm	**X42A** 150Nm	**X43A** 160Nm	**X52A** 250Nm	**X53A** 250Nm	**X62A** 410Nm	**X63A** 410Nm

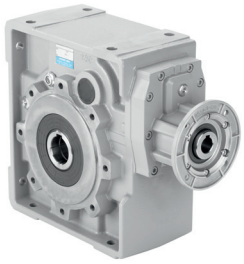
On page / A pagina / Auf Seite / À la page / En la página



Types / Tipi
Typen / Types
Tipos

8-23	8-25	8-27	8-29	8-31	8-33	8-35	8-37	8-39	8-41
X73C 675Nm	**X74C** 675Nm	**X83C** 1000Nm	**X84C** 1000Nm	**X93C** 1600Nm	**X94C** 1650Nm	**X103** 3000Nm	**X104** 3000Nm	**X113** 4500Nm	**X114** 4600Nm

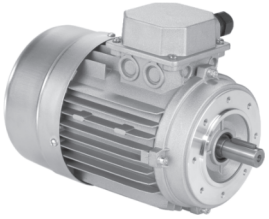
On page / A pagina / Auf Seite / À la page / En la página



Types / Tipi
Typen / Types
Tipos

8-43	8-45	8-47	8-49
113C 675Nm	**114C** 675Nm	**133C** 1000Nm	**134C** 1000Nm

On page / A pagina / Auf Seite / À la page / En la página



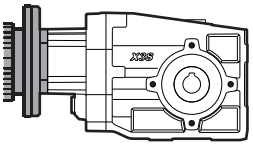
Types / Tipi
Typen / Types
Tipos

M-1									
56A 56B	**63A 63B**	**71A 71B**	**80A 80B**	**90S 90L**	**100LA 100LB**	**112M**	**132S 132M**	**160M 160L**	**180M 180L**

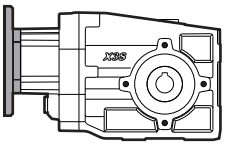
Type - Tipo - Typ
Type - Tipo

M

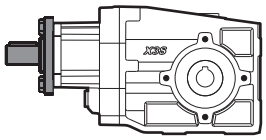
Helical-bevel gear
Riduttori ortogonali



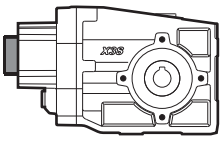
With IEC motor
M



With motor flange
P



With male input shaft
R



Modular base
B

Not available for:
X93C , X103 ,
X104 , X113 ,
X114 .

Size - Grandezza - Grösse
Taille - Tamaño

X22S

2 Stages Riduzioni Stufen Trains Etapas | 3 Stages Riduzioni Stufen Trains Etapas

Aluminum
Alluminio
Aluminium
Aluminium
Aluminio

X22S
X32S
X42A
X52A
X62A

X33S
X43A
X53A
X63A

3 Stages Riduzioni Stufen Trains Etapas | 4 Stages Riduzioni Stufen Trains Etapas

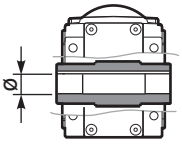
Cast Iron
Ghisa
Grauguss
Fonte
Fundicion

113C
133C
X73C
X83C
X93C
X103
X113

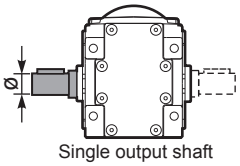
114C
134C
X74C
X84C
X94C
X104
X114

Hub - Mozzo corona
Hohlwelle
Arbre creux
Nucleo corona

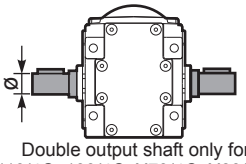
C



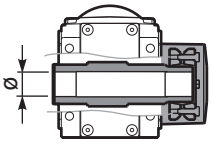
Hollow outpu shaft
C



Single output shaft
A

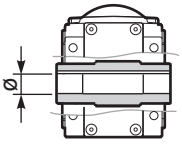


Double output shaft only for 113/4C, 133/4C, X73/4C, X83/4C, X93/4C, X103/4 and X113/4
B



Shrink Disk
(only on the DX side)
D

Only on request for Q.ty
A richiesta per quantità



Stainless steel hub
I

Stainless steel hub
Mozzo in acciaio Inox
Edelstahlhohlwelle
Moyeu en acier Inox
Nucleo corona de acero Inox

Only on request for Q.ty
A richiesta per quantità

Rapporto - Ratio
Untersetzung
Reduction
Relacion

4.83

See technical data table

Vedi tabelle dati tecnici.

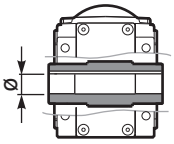
Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

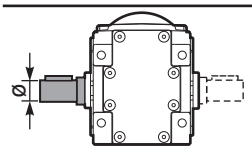
Output shaft - Albero uscita
Ausgangsflansch
Arbre de sortie
Brida en salida

-A



➡ **STANDARD**
Hollow output shaft

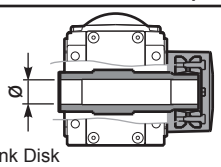
X22S	X73/4C X83/4C
-A ⇨ ø18	-F ➡ **ø40**
-B ➡ **ø20**	-H ⇨ ø45
X32S X33S	113C 114C
-B ➡ **ø20**	-F ➡ **ø40**
-C ⇨ ø25	-G ⇨ ø42
X42A X43A	133C 134C
-C ➡ **ø25**	-F ⇨ ø40
-D ⇨ ø30	-H ➡ **ø45**
X52A X53A	X93C X94C
-D ➡ **ø30**	-H ⇨ ø45
-E ⇨ ø35	-J ➡ **ø50**
X62A X63A	X103 X104
-E ➡ **ø35**	-K ➡ **ø60**
-F ⇨ ø40	X113 X114
	-T ➡ **ø70**



Single and double output shaft

-I	X22S X32/3S	⇨ ø20
-L	X32/3S X42/3A	⇨ ø25
-M	X52/3A	⇨ ø30
-N	X52/3A X62/3A X73/4A*	⇨ ø35
-V	X83/4A 113/4C	⇨ ø40*
-O	113/4C	⇨ ø42*
-P	133/4C	⇨ ø45*
-1	X93/4C	⇨ ø50*
-3	X103/4	⇨ ø60*
-5	X113/4	⇨ ø70*

*** Also available double output shaft**



Shrink Disk

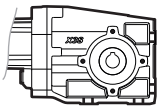
-U	X22S X32/3S	⇨ ø20
-Q	X42/3A	⇨ ø30
-R	X52/3A	⇨ ø35
-S	X62/3A X73/4A X83/4A 113/4C	⇨ ø40
-6	133/4C	⇨ ø45
-7	X93/4C	⇨ ø50
-8	X103/4	⇨ ø65
-9	X113/4	⇨ ø75

TÜV NORD 0032 — Dossier according to 94/9/EG 8. b ii stored

On request we can deliver our products according to the ATEX
A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX
Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern
Sur demande nos produits peuvent se conformer à la réglementation ATEX
A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

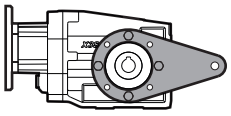
Type - Tipo - Typ
Type - Tipo

BR



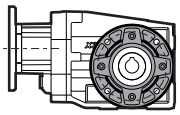
FB

Forma base
Universal



BR

Braccio d reazione
Reaction arm

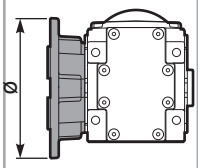


-F

Flangia uscita
output flange

Output flange
Flangia di uscita
Ausgangs Flansch
Bride de sortie
Brida en salida

N



N Senza flangia
Without flange

X22S

0 ⇨ ø110
1 ⇨ ø120

X32S X33S

1 ⇨ ø120
2 ⇨ ø160

X42-3A X52-3A
X62-3A

2 ⇨ ø160
3 ⇨ ø200
4 ⇨ ø250

X73C X74C
X83C X84C

4 ⇨ ø250

113C 114C
X93C X94C

C ⇨ ø280
L ⇨ ø280

133C 134C

C ⇨ ø320

X103 X104

6 ⇨ ø350

X113 X114

7 ⇨ ø450

Motor size - Grandezza motore
Motor Grösse
Grandeur moteur - Tamaño motor

-O

Flange
Flangia

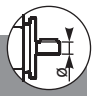
B5

-A=56 (ø120)
-B=63 (ø140)
-C=71 (ø160)
-D=80 (ø200)
-E=90 (ø200)
-F=100÷112 (ø250)
-G=132 (ø300)
-H=160 (ø350)
-I=180 (ø350)
-L=200 (ø400)
CA=225 (ø450)

B14

-O=56 (ø80)
-P=63 (ø90)
-Q=71 (ø105)
-R=80 (ø120)
-T=90 (ø140)
-U=100÷112 (ø160)
-V=132 (ø200)

Type R
Tipo R



X22S X33S X43A

-1 ⇨ ø14

X32S X42A X53A
X63A X74C X84C
114C 134C

-2 ⇨ ø19

X52A X62A
113C 133C
X73C X83C X94C

-3 ⇨ ø24

X93C X104 X114

-4 ⇨ ø28

X103 X113

-6 ⇨ ø42

Without flange
Senza flangia

-M ⇨ With coupling

X22S X33S X43A

-Z ⇨ ø9 (56B5)
-0 ⇨ ø11 (63B5)
-1 ⇨ ø14 (71B5)

X32S X42A X53A
X63A X74C X84C
114C 134C

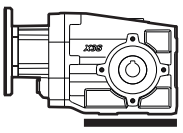
-1 ⇨ ø14 (71B5)
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)

X52A X62A
113C 133C
X73C X83C X94C

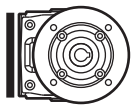
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)
-4 ⇨ ø28 (100B5)

Mounting position
Posizione montaggio
Einbaulage
Position de montage
Posición de montaje

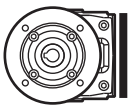
B3



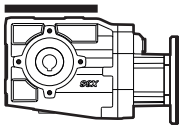
B3
STANDARD



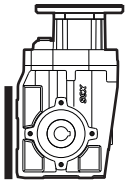
B6



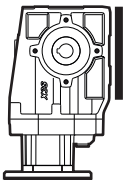
B7



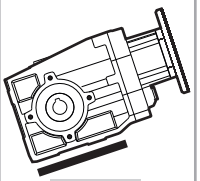
B8



V5



V6



V8

Input bore
Foro entrata
Eingangshohlwelle
Trou d'entree
Eje hueco de entrada

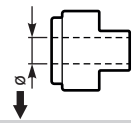
C

-

Nothing indication:
standard bore

Nessuna indicazione:
foro standard

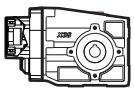
COUPLING



A = 9mm
B = 11mm
C = 14mm
D = 19mm
E = 24mm
F = 28mm

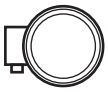
0

Ready for input coupling
Predisposto per giunto



Terminal box position
Posizione morsettiera
Klemmkastenlage
Position boîte à bornes
Posición caja de bornes

B



A

B
STANDARD

C

D

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

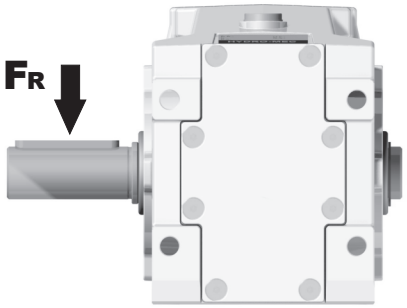
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$
Linear movement / traslazione / linearbewegung / translation / translacion	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

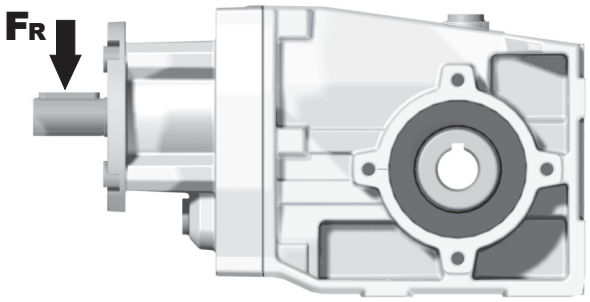
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

	$\mathbf{M}\ [Nm] = \frac{\mathbf{9550} \cdot \mathbf{P}[KW]}{\mathbf{n}\ [rpm]}$
	$\mathbf{M}\ [lb\ in] = \frac{\mathbf{63030} \cdot \mathbf{P}[HP]}{\mathbf{n}\ [rpm]}$

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / CHARGES RADIALES / CARGA RADIAL Y AXIAL

- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée par la transmissions calés sur les entrées et / ou des arbres de sortie
- Cargas radiales, generada por transmisiones externas, aplicadas sobre los ejes de entrada y/o salida





$F_R\ [N] = \frac{M\ [Nm] \cdot 2000}{d\ [mm]} \cdot f_K$	$F_R\ [N] = \frac{M\ [lb\ in] \cdot 8.9}{d\ [in]} \cdot f_K$

M	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion
d	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo
f_k	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión **1.15** Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje **1.25** Catena / Chain sprochets / Antriebskette / Chaîne / Cadena **1.75** Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal **2.50** Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana

— If your application requires higher radial loads, contact our technical office. Higher load may be possible.
— Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
— Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
— Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
— En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

B Output speed / Velocità in uscita / Abtriebsdrehzahl / Vitesse de sortie / Velocidad de salida

Nominal power / Potenza nominale / Max. mögliche Leistung / Poissance nominale / Potencia nominal

Gear size / Grandezza riduttore / Getriebegröße / Taille réducteur / Tamaño reductor

Motor power / Potenza motore / Motorleistung / Puissance moteur / Potencia motor

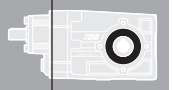
A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

Flange code / Codice flangia / Flanschtype / Code bride / Código bridas

Input speed / Velocità in entrata / Eintriebsdrehzahl / Vitesse en entrée / Velocidad de entrada

X22S Angletech Gear 50Nm

Rating - Aluminum
HELICAL-BEVEL GEARBOXES



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft ø	Ratios code
289.7	**4.83**	0.37	11.7	2.6	**0.95**	**30**			C	C		289		01
189.2	**7.40**	0.37	17.9	1.7	**0.62**	**30**			C	C		287		02
146.2	**9.58**	0.37	23.2	1.7	**0.64**	**40**			C	C		199		03
127.5	**10.98**	0.37	26.6	1.7	**0.63**	**45**			C	C		179		04

C Ratio / Rapporto / Untersetzung / Rapport de réduction / Relación

Transmitted torque / Momento torcente trasmesso / Mögliche Drehmomente / Couple de sortie / Par transmitido

Service factor / Fattore di servizio / Betriebsfaktor / Facteur de service / Factor de servicio

Output shaft diam. / Diam. albero uscita / Durchmesser abtriebswelle / Diametre arbre lent / Diametro eje de salida

Notes / Note / Anmerkungen / Note / Notas

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. 3 h	10 h	24 h
Continuous or intermittent appl. with start / hour ≤ 10 / Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour > 10 / Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

D Motor flange available / Flange disponibili / Erhältliche Motorflansche / Brides disponibles / Bridas disponibles

B) Mounting with reduction ring / Montaggio con boccola di riduzione / Reduzierhülsen / Montage avec douille de réduction / Montaje con casquillo de reducción

C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur / Posición agujeros brida / base motor

B) Available without reduction bushes / Disponibile anche senza boccola / Auch ohne Reduzierbuchse verfügbar / Disponible aussi sans douille de réduction / Disponible tambien sin casquillo

A	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Sélectionner le couple souhaité (comprenant le facteur de service)	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select ouput speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
C	On the same line of selected geared motor, you can find the gear ratio	Sulla riga corrispondente alla motorizzazione prescelta si può rilevare il rapporto di riduzione	Auf der gleichen Linie wie die ausgewählte Motorleistung steht auch die Getriebeuntersetzung	Sur la ligne correspondante à la motorisation pré-choisie on peut relever le rapport de réduction	En la línea correspondiente al motor preseleccionado es posible encontrar la relación de reducción
D	Select motor flange available (if requested)	Scegli la flangia disponibile (se richiesta)	Erhältliche Motorflansche (auf Anfrage)	Choisir la bride disponible (si elle est demandée)	Seleccionar la brida disponible (sobre pedido)

▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft ø	Ratios code
290	**4.83**	0.37	12	2.6	**0.95**	**30**			C	C		289		01
189	**7.40**	0.37	18	1.7	**0.62**	**30**			C	C		287		02
146	**9.58**	0.37	23	1.7	**0.64**	**40**			C	C		199		03
128	**10.98**	0.37	27	1.7	**0.63**	**45**			C	C		179		04
107	**13.07**	0.37	32	1.4	**0.53**	**45**			C	C		159	**standard**	05
95	**14.66**	0.37	35	1.3	**0.47**	**45**			C	C		197	**ø20**	06
89	**15.79**	0.37	38	1.2	**0.44**	**45**			C	C		139		07
83	**16.81**	0.37	41	1.1	**0.41**	**45**			C	C		177		08
70	**20.00**	0.37	48	1.0	**0.37**	**48**			C	C		157	ø18	09
64	**21.93**	0.37	53	0.9	**0.35**	**50**			C	C		109	On request	10
58	**24.18**	0.25	39	1.3	**0.32**	**50**			C	C		137		11
48.2	**29.04**	0.25	47	1.1	**0.26**	**50**			C	C		99		12
41.7	**33.57**	0.18	42	1.2	**0.23**	**50**			C	C		107		13
36.2	**38.67**	0.18	48	1.0	**0.20**	**50**			C	C		79		14
31.5	**44.44**	0.18	55	0.9	**0.17**	**50**			C	C		97		15
23.7	**59.18**	0.12	48	1.0	**0.13**	**50**			C	C		77		16
19.9	**70.24**	0.09	45	1.1	**0.11**	**50**			C	C		67		17

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

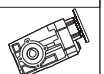
EN Unit **X22S** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X22S** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X22S** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X22S** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X22S** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

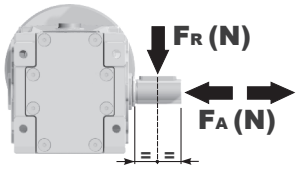
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	 **V8**
0.25 LT	0.25 LT	0.25 LT	0.25 LT	0.43 LT	0.31 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

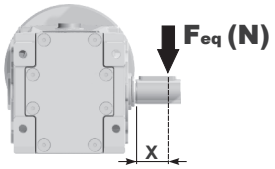
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = F_R \cdot \frac{42}{X+23}$$





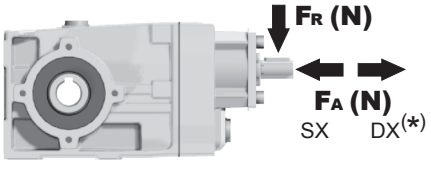
n_2 [min^{-1}]	FA	FR
400	360	1800
250	380	1900
150	420	2100

n_2 [min^{-1}]	FA	FR
100	440	2200
75	440	2200
50	440	2200

n_2 [min^{-1}]	FA	FR
25	440	2200
15	440	2200

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA	FR
1400	140	700
900	160	800
500	190	950

***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

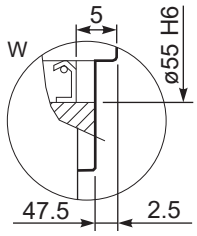
tab. 2

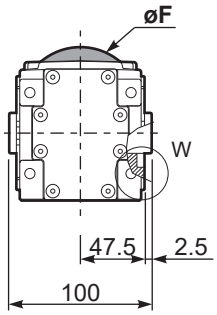
8

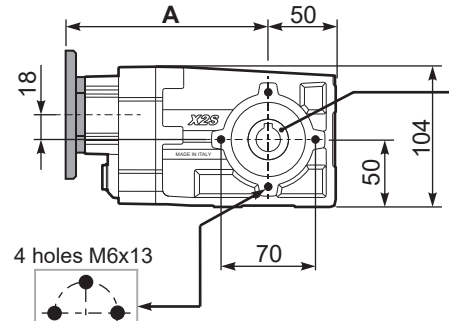
PX22SC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	3.70 kg

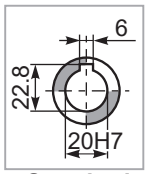
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	154.5
71B5	K050.4.042	160	152
56B14	KC40.4.049	80	152
63B14	K050.4.047	90	154.5
71B14	K050.4.045	105	152



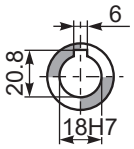




Mounting holes position
Posizione fori di montaggio

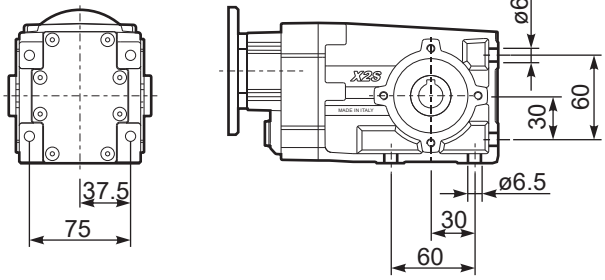


Standard
Hollow shaft

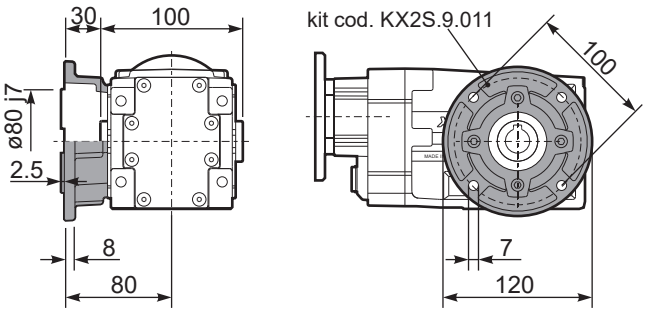


On request
A richiesta

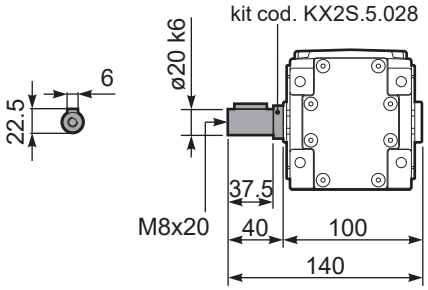
PX22S...FB.. Feet
Piedini



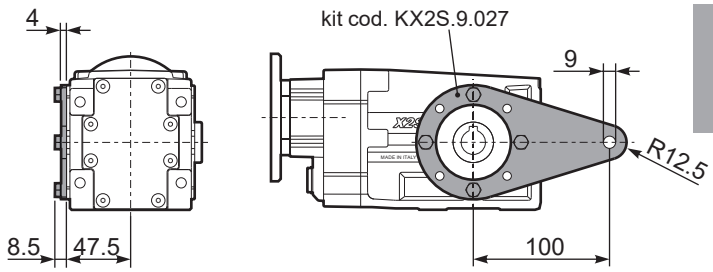
PX22S...-F1.. Output flange
Flangia uscita



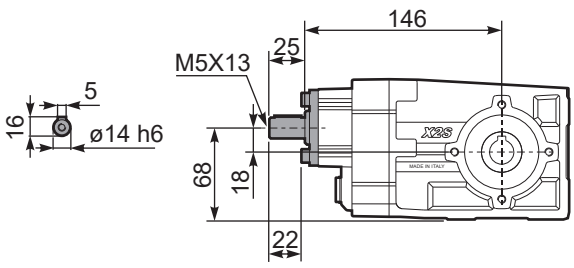
PX22SA.. Single output shaft
Albero semplice in uscita



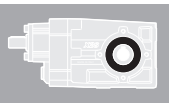
PX22S...BR.. Reaction Arm
Braccio di reazione



RX22S.. Input shaft
Albero in entrata



8



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
191	**7.33**	1.5	72	1.0	**1.5**	**70**	B				C	C		289		01
125	**11.22**	1.1	80	1.1	**1.2**	**85**	B				C	C		287		02
106	**13.26**	1.1	95	0.9	**0.98**	**85**	B				C	C		199		03
91	**15.37**	1.1	110	0.8	**0.89**	**90**	B				C	C		179		04
78	**18.04**	0.75	89	1.0	**0.76**	**90**	B				C	C		159	**standard**	05
69	**20.30**	0.75	100	0.9	**0.68**	**90**	B				C	C		197	**ø20**	06
65	**21.54**	0.75	106	0.9	**0.64**	**90**	B				C	C		139		07
59	**23.53**	0.55	85	1.1	**0.58**	**90**	B				C	C		177		08
51	**27.62**	0.55	100	0.9	**0.50**	**90**	B				C	C		157	ø25	09
47.6	**29.40**	0.55	106	0.8	**0.47**	**90**	B				C	C		109	On request	10
42.5	**32.97**	0.37	80	1.1	**0.42**	**90**	B				C	C		137		11
36.5	**38.37**	0.37	93	1.0	**0.36**	**90**	B				C	C		99		12
31.1	**45.00**	0.25	73	1.2	**0.31**	**90**	B				C	C		107		13
27.6	**50.67**	0.25	83	1.1	**0.27**	**90**	B				C	C		79		14
23.8	**58.73**	0.18	73	1.2	**0.23**	**90**	B				C	C		97		15
18.1	**77.55**	0.18	97	0.9	**0.18**	**90**	B				C	C		77		16

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

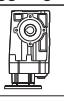
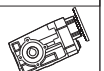
EN Unit **X32S** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X32S** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X32S** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X32S** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X32S** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

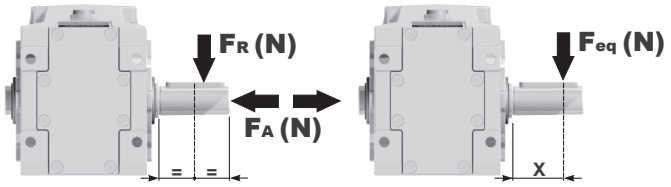
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	 **V6**	 **V8**
0.40 LT	0.60 LT	0.40 LT	0.60 LT	0.85 LT	0.60 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{47.5}{X+28.5}$$



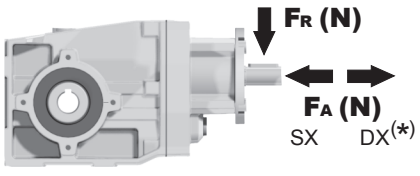
n_2 [min^{-1}]	FA	FR
250	400	2000
150	450	2250
100	500	2500

n_2 [min^{-1}]	FA	FR
75	560	2800
50	560	2800
25	560	2800

n_2 [min^{-1}]	FA	FR
15	560	2800

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA	FR
1400	240	1200
900	280	1400
500	340	1700

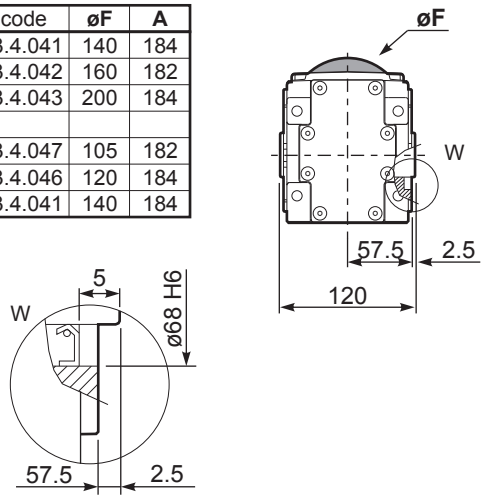
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

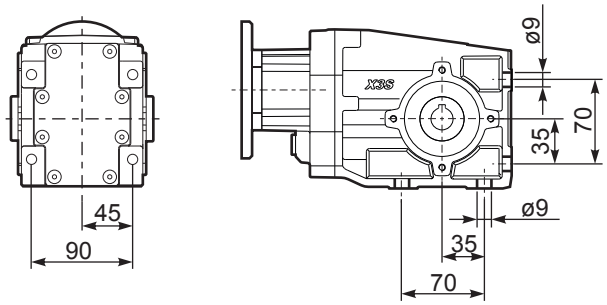
PX32SC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	6.30 kg

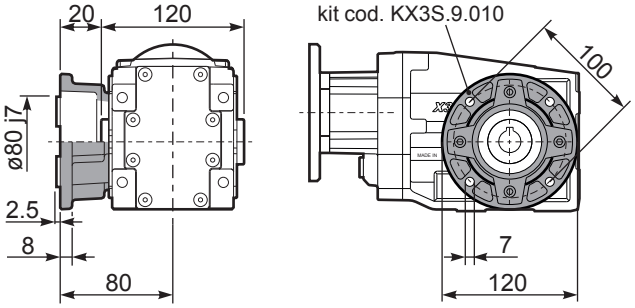
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	184
71B5	K063.4.042	160	182
80/90B5	K063.4.043	200	184
71B14	K063.4.047	105	182
80B14	K063.4.046	120	184
90B14	K063.4.041	140	184



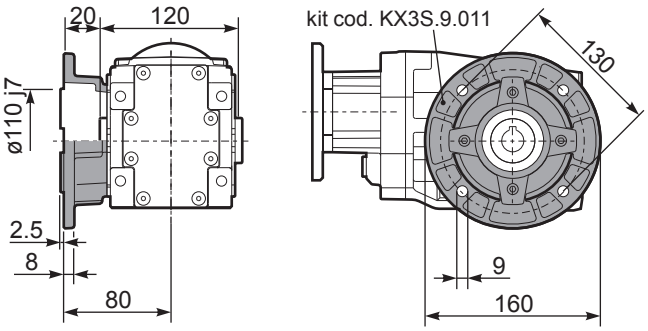
PX32S...FB.. Feet
Piedini



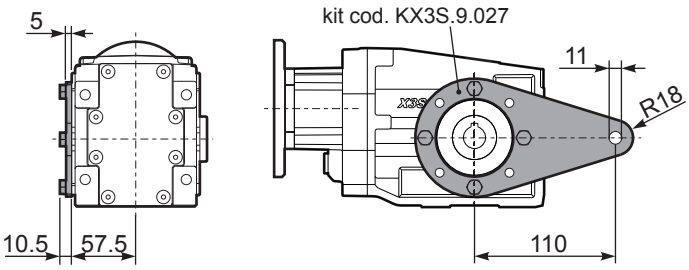
PX32S...-F1.. Output flange
Flangia uscita



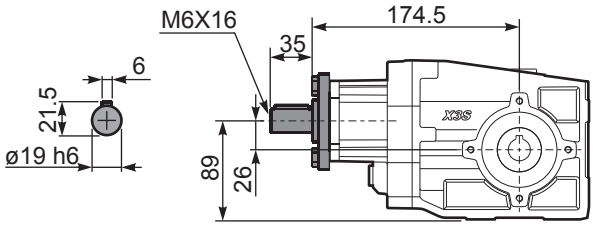
PX32S...-F2.. Output flange
Flangia uscita



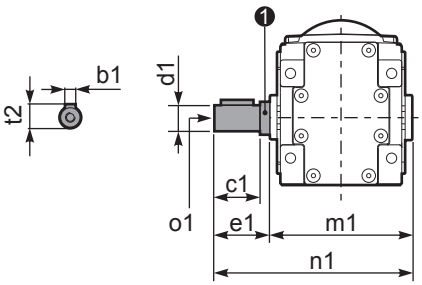
PX32S...BR.. Reaction Arm
Braccio di reazione



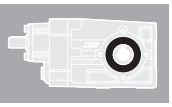
RX32S... Input shaft
Albero in entrata



PX32SA.. Single output shaft
Albero semplice in uscita



d1	b1	c1	e1	m1	n1	t2	o1	❶ kit code
ø20 k6	6	37.5	40	120	160	22.5	M8x20	KX2S.5.028
ø25 $^{-0.005}_{-0.020}$	8	60	63.2	126.8	190	28	M8x20	K063.5.028



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.94** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft ø	Ratios code
38.7	**36.17**	0.37	86	1.2	**0.43**	**100**			C	C		17179		02
31.7	**44.21**	0.37	105	1.0	**0.35**	**100**			C	C		19139		03
27.6	**50.68**	0.25	81	1.2	**0.31**	**100**			C	C		17139		04
25.3	**55.36**	0.25	89	1.1	**0.28**	**100**			C	C		17177		05
23.2	**60.31**	0.25	96	1.0	**0.26**	**100**			C	C		15139		06
21.2	**65.88**	0.25	105	0.9	**0.24**	**100**			C	C		15177		07
19.4	**72.25**	0.18	88	1.1	**0.22**	**100**			C	C		10179	**standard**	08
17.6	**79.64**	0.18	97	1.0	**0.20**	**100**			C	C		13177	**ø20**	09
15.2	**92.31**	0.18	113	0.9	**0.17**	**100**			C	C		15137		10
14.6	**95.65**	0.18	117	0.9	**0.16**	**100**			C	C		9179		11
13.8	**101.23**	0.12	80	1.2	**0.15**	**100**			C	C		10139	ø25	12
11.0	**127.37**	0.12	101	1.0	**0.12**	**100**			C	C		7179	On request	13
9.3	**151.16**	0.09	95	1.0	**0.10**	**100**			C	C		6179		14
7.8	**178.46**	0.09	113	0.9	**0.09**	**100**			C	C		7139		15
6.6	**211.79**	0.06	88	1.1	**0.07**	**100**			C	C		6139		16
6.1	**231.37**	0.06	96	1.0	**0.07**	**100**			C	C		6177		17
5.1	**273.16**	0.06	113	0.9	**0.06**	**100**			C	C		7137		18
4.3	**324.18**	0.06	134	0.7	**0.05**	**100**			C	C		6137		19

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

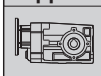
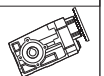
EN Unit **X33S** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X33S** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X33S** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X33S** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X33S** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

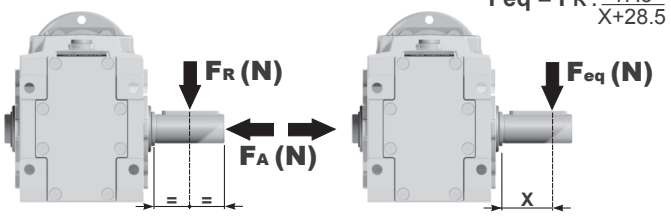
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	**B6**	**B7**	**B8**	**V5**	**V6**	 **V8**
0.70 LT	0.65 LT	0.40 LT	0.65 LT	0.95 LT	0.65 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = F_R \cdot \frac{47.5}{X+28.5}$$



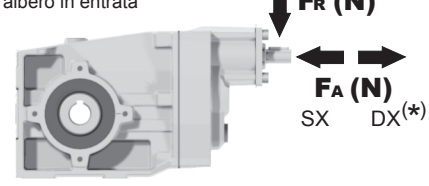
n_2 [min^{-1}]	FA	FR
250	400	2000
150	450	2250
100	500	2500

n_2 [min^{-1}]	FA	FR
75	560	2800
50	560	2800
25	560	2800

n_2 [min^{-1}]	FA	FR
15	560	2800

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA	FR
1400	140	700
900	160	800
500	190	950

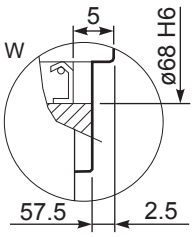
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

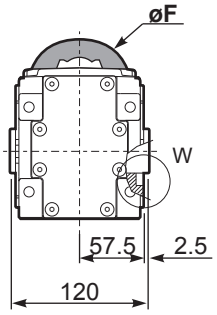
tab. 2

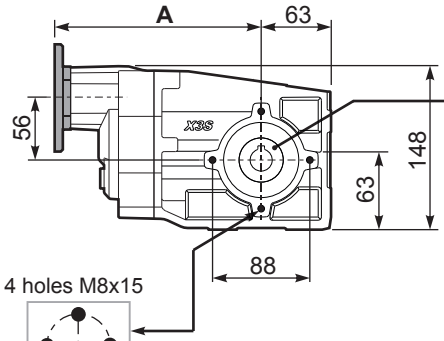
PX33SC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore: **6.55 kg**

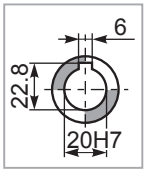
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	189.5
71B5	K050.4.042	160	187
56B14	KC40.4.049	80	187
63B14	K050.4.047	90	189.5
71B14	K050.4.045	105	187



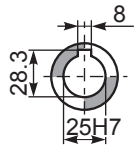




Mounting holes position
Posizione fori di montaggio

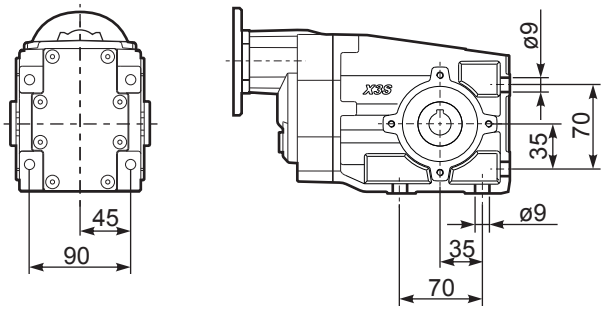


Standard
Hollow shaft

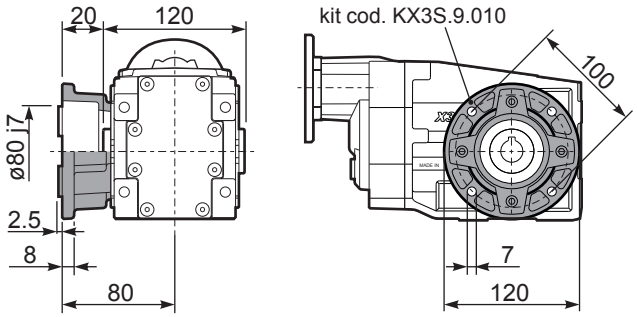


On request
A richiesta

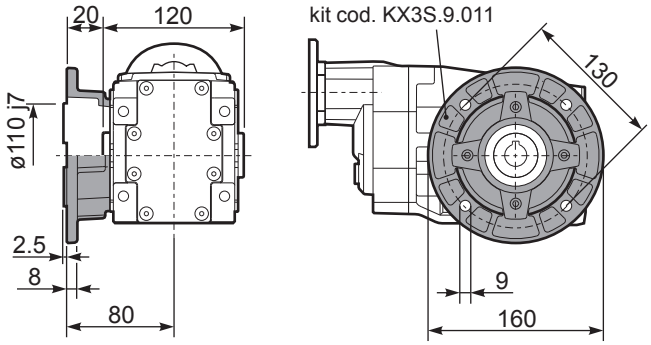
PX33S...FB.. Feet
Piedini



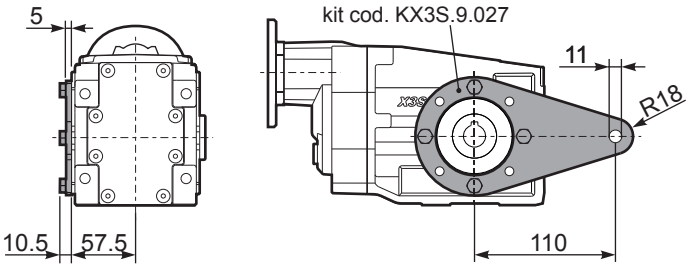
PX33S...-F1.. Output flange
Flangia uscita



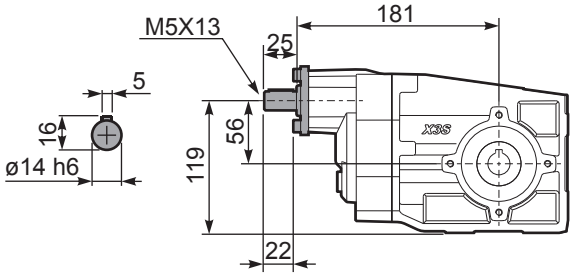
PX33S...-F2.. Output flange
Flangia uscita



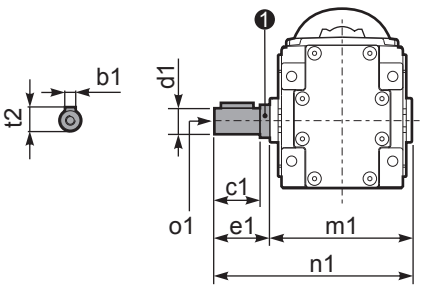
PX33S...BR.. Reaction Arm
Braccio di reazione



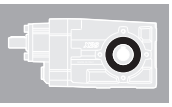
RX33S... Input shaft
Albero in entrata



PX33SA.. Single output shaft
Albero semplice in uscita



d1	b1	c1	e1	m1	n1	t2	o1	❶ kit code
ø20 k6	6	37.5	40	120	160	22.5	M8x20	KX2S.5.028
ø25 $^{-0.005}_{-0.020}$	8	60	63.2	126.8	190	28	M8x20	K063.5.028



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -Q 71	-R 80	-T 90	-U 100 112		Output Shaft	Ratios code
192	**7.29**	2.2	104	0.9	**2.0**	**95**	B					C	C			2811		01
125	**11.20**	2.2	159	0.9	**2.0**	**150**	B					C	C			288		02
106	**13.18**	1.5	129	1.2	**1.7**	**150**	B					C	C			1911		03
92	**15.27**	1.1	109	1.4	**1.5**	**150**	B					C	C			1711		04
78	**17.93**	1.1	128	1.2	**1.3**	**150**	B					C	C			1511		05
69	**20.25**	1.1	145	1.0	**1.1**	**150**	B					C	C			198	**standard**	06
65	**21.40**	1.1	153	1.0	**1.1**	**150**	B					C	C			1311	**ø25**	07
60	**23.47**	0.75	115	1.3	**0.98**	**150**	B					C	C			178		08
51	**27.55**	0.75	135	1.1	**0.83**	**150**	B					C	C			158		09
47.9	**29.21**	0.75	143	1.0	**0.78**	**150**	B					C	C			1011	ø30	10
42.6	**32.88**	0.75	161	0.9	**0.70**	**150**	B					C	C			138	On request	11
36.7	**38.12**	0.55	138	1.1	**0.60**	**150**	B					C	C			911		12
31.2	**44.89**	0.55	163	0.9	**0.51**	**150**	B					C	C			108		13
27.8	**50.34**	0.37	122	1.1	**0.40**	**131**	B					C	C			711		14
23.9	**58.58**	0.37	142	1.1	**0.39**	**150**	B					C	C			98		15
18.1	**77.36**	0.25	126	1.2	**0.30**	**150**	B					C	C			78		16

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

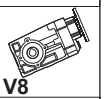
EN Unit **X42A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X42A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X42A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X42A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X42A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

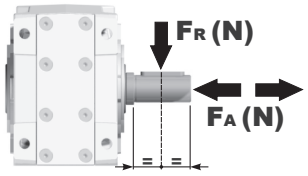
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
0.60 LT	0.75 LT	0.50 LT	0.70 LT	1.10 LT	0.60 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

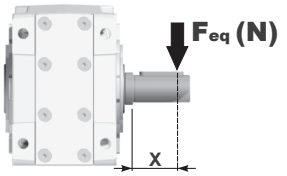
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = F_R \cdot \frac{54}{X+28}$$





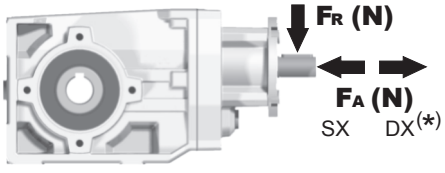
n_2 [min^{-1}]	FA	FR
250	500	2500
150	600	3000
100	700	3500

n_2 [min^{-1}]	FA	FR
75	800	4000
50	960	4800
25	960	4800

n_2 [min^{-1}]	FA	FR
15	960	4800

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA	FR
1400	240	1200
900	280	1400
500	340	1700

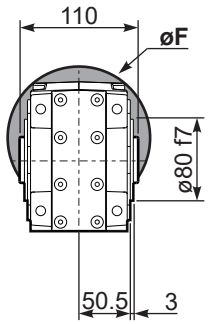
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

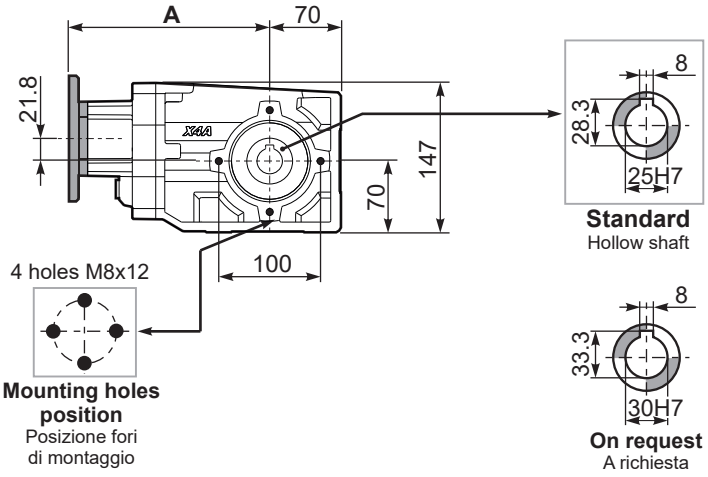
tab. 2

PX42AC... Basic Gearbox
Riduttore base

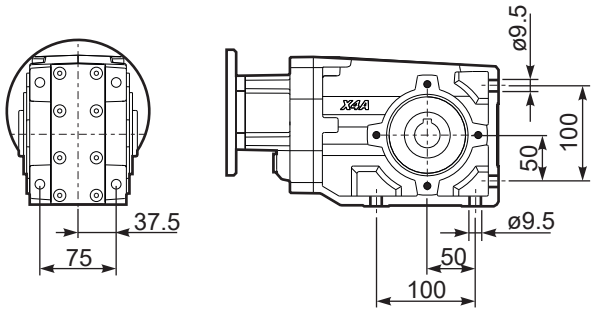
Gearbox weight peso riduttore	7.82 kg

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	199.5
71B5	K063.4.042	160	197.5
80/90B5	K063.4.043	200	199.5
100/112B5	KC40.4.043	250	214.3
71B14	K063.4.047	105	197.5
80B14	K063.4.046	120	199.5
90B14	K063.4.041	140	199.5
100/112B14	KC40.4.041	160	214.5

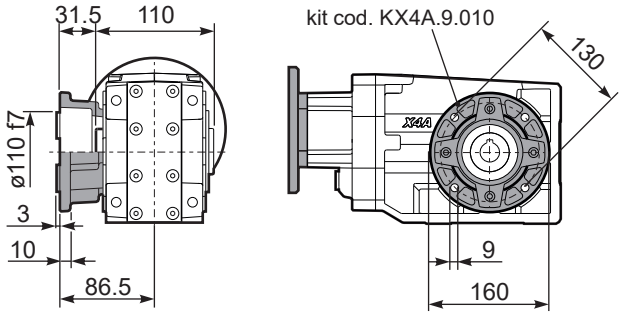




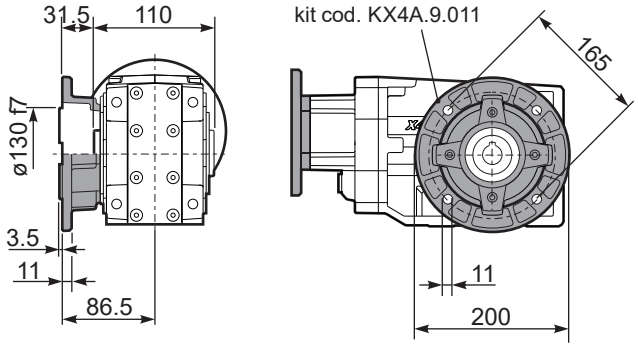
PX42A...FB.. Feet
Piedini



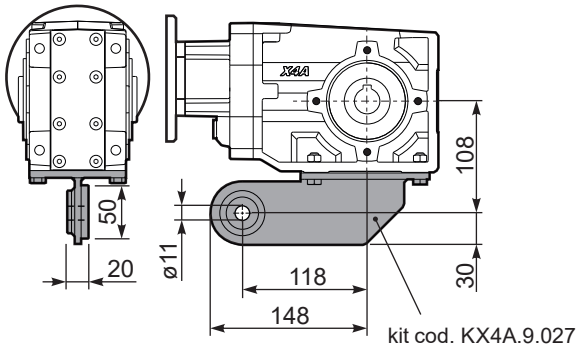
PX42A...-F2.. Output flange
Flangia uscita



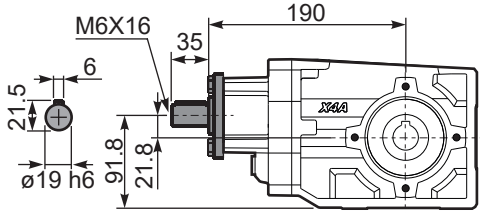
PX42A...-F3.. Output flange
Flangia uscita



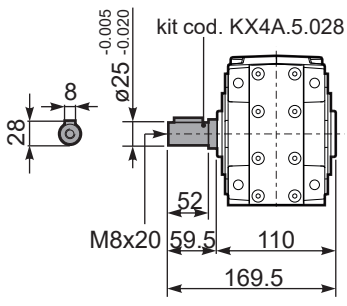
PX42A...BR.. Reaction Arm
Braccio di reazione



RX42A... Input shaft
Albero in entrata



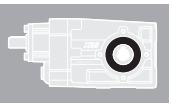
PX42AA.. Single output shaft
Albero semplice in uscita



8

X43A Angletech Gear 160Nm

Rating - Aluminum
HELICAL-BEVEL GEARBOXES



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.94** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft	Ratios code
27.8	**50.35**	0.37	119	1.3	**0.46**	**150**			C	C		171311		01
25.4	**55.22**	0.37	131	1.1	**0.42**	**150**			C	C		17178		02
23.4	**59.92**	0.37	142	1.1	**0.39**	**150**			C	C		151311		03
21.3	**65.72**	0.37	156	1.0	**0.36**	**150**			C	C		15178		04
19.5	**71.78**	0.25	115	1.3	**0.33**	**150**			C	C		101711		05
17.6	**79.44**	0.25	127	1.2	**0.29**	**150**			C	C		13178	**standard ø25**	06
15.2	**92.08**	0.25	147	1.0	**0.25**	**150**			C	C		15138		07
14.7	**95.03**	0.25	152	1.0	**0.25**	**150**			C	C		91711		08
11.1	**126.55**	0.18	155	1.0	**0.20**	**160**			C	C		71711		09
10.5	**133.15**	0.18	163	1.0	**0.19**	**160**			C	C		91311	ø30 On request	10
9.3	**150.18**	0.12	119	1.3	**0.17**	**160**			C	C		61711		11
7.9	**177.30**	0.12	140	1.1	**0.14**	**160**			C	C		71311		12
6.7	**210.42**	0.09	133	1.2	**0.12**	**160**			C	C		61311		13
6.1	**230.79**	0.09	146	1.1	**0.11**	**160**			C	C		6178		14
5.1	**272.47**	0.06	113	1.4	**0.09**	**160**			C	C		7138		15
4.3	**323.37**	0.06	134	1.2	**0.08**	**160**			C	C		6138		16

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing**
Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

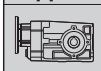
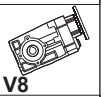
EN Unit **X43A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X43A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X43A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X43A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X43A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

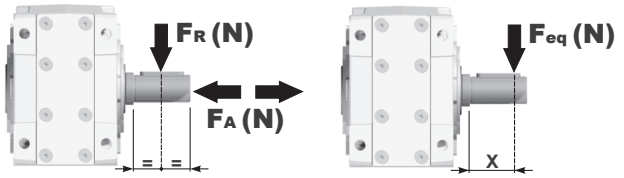
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	**B6**	**B7**	**B8**	**V5**	**V6**	 **V8**
0.80 LT	0.80 LT	0.60 LT	0.80 LT	1.20 LT	0.70 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = F_R \cdot \frac{54}{X+28}$$



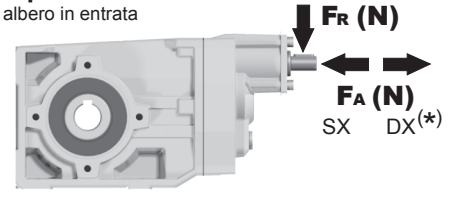
n_2 [min^{-1}]	FA	FR
250	500	2500
150	600	3000
100	700	3500

n_2 [min^{-1}]	FA	FR
75	800	4000
50	960	4800
25	960	4800

n_2 [min^{-1}]	FA	FR
15	960	4800

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	140	700
900	160	800
500	190	950

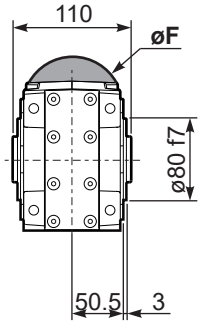
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

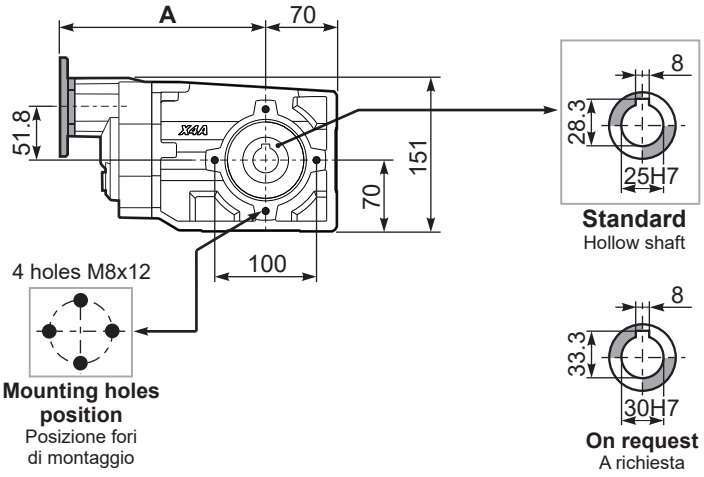
8

PX43AC... Basic Gearbox
Riduttore base

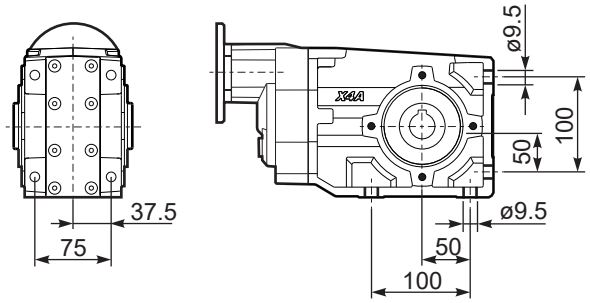
Gearbox weight / peso riduttore: **7.93 kg**

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	205
71B5	K050.4.042	160	202.5
56B14	KC40.4.049	80	202.5
63B14	K050.4.047	90	205
71B14	K050.4.045	105	202.5

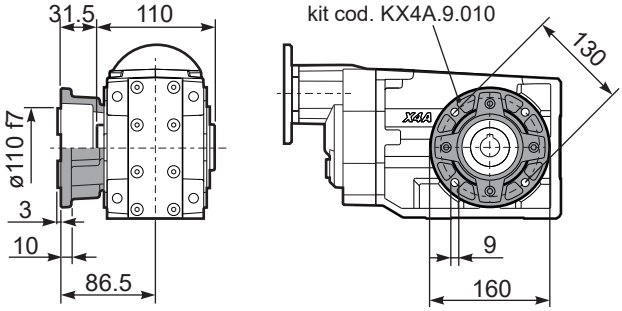




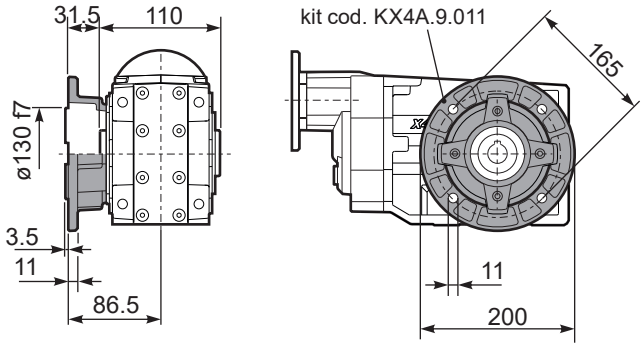
PX43A...FB.. Feet
Piedini



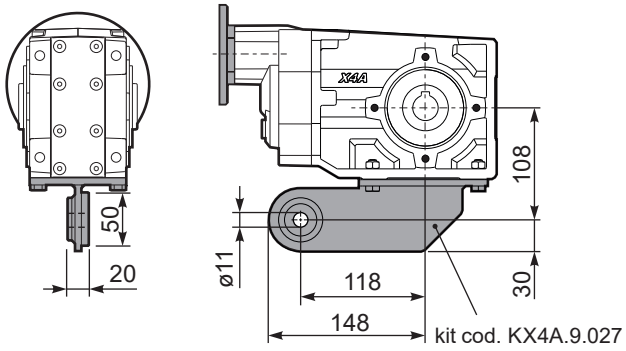
PX43A...-F2.. Output flange
Flangia uscita



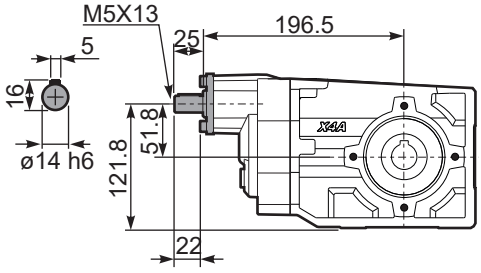
PX43A...-F3.. Output flange
Flangia uscita



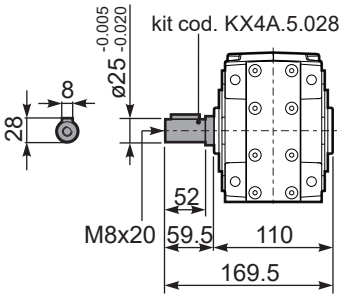
PX43A...BR.. Reaction Arm
Braccio di reazione

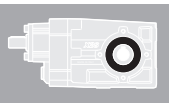


RX43A... Input shaft
Albero in entrata



PX43AA.. Single output shaft
Albero semplice in uscita





▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -R 80	-T 90	-U 100 112		Output Shaft ø	Ratios code
232	**6.03**	3	116	1.2	**3.4**	**135**	B							3011		01
151	**9.26**	3	179	0.9	**2.6**	**155**	B							308		02
123	**11.36**	3	219	1.0	**3.1**	**230**	B							2011		03
91	**15.36**	2.2	218	1.1	**2.5**	**250**	B							1611		04
80	**17.46**	2.2	248	1.0	**2.2**	**250**	B							208	**standard**	05
70	**19.97**	2.2	284	0.9	**1.9**	**250**	B							1311	**ø30**	06
59	**23.60**	1.5	231	1.1	**1.6**	**250**	B							168		07
57	**24.45**	1.5	239	1.0	**1.6**	**250**	B							1111		08
45.6	**30.69**	1.1	220	1.1	**1.2**	**250**	B							138	ø35	09
39.6	**35.35**	1.1	253	1.0	**1.1**	**250**	B							811	On request	10
37.3	**37.57**	1.1	269	0.9	**1.0**	**250**	B							118		11
28.8	**48.68**	0.75	239	1.0	**0.78**	**250**	B							611		12
25.8	**54.33**	0.75	267	0.9	**0.70**	**250**	B							88		13
18.7	**74.81**	0.37	181	1.2	**0.43**	**210**	B							68		14

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

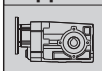
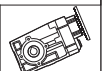
EN Unit **X52A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X52A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X52A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X52A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X52A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

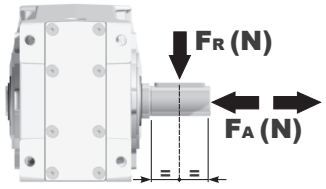
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
0.90 LT	1.50LT	0.75 LT	1.40 LT	1.95 LT	1.15 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

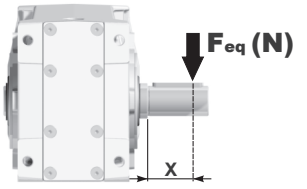
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{61.5}{X+31}$$





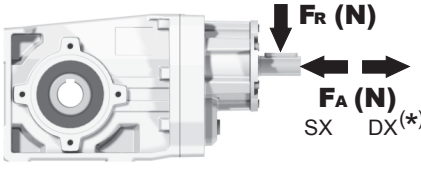
n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	800	4000

n_2 [min^{-1}]	FA	FR
75	820	4100
50	960	4800
25	1350	6750

n_2 [min^{-1}]	FA	FR
15	1660	8300

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA	FR
1400	450	2250
900	500	2500
500	600	3000

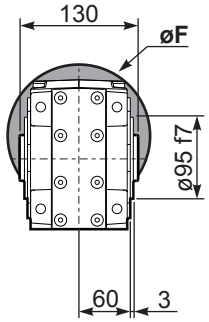
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

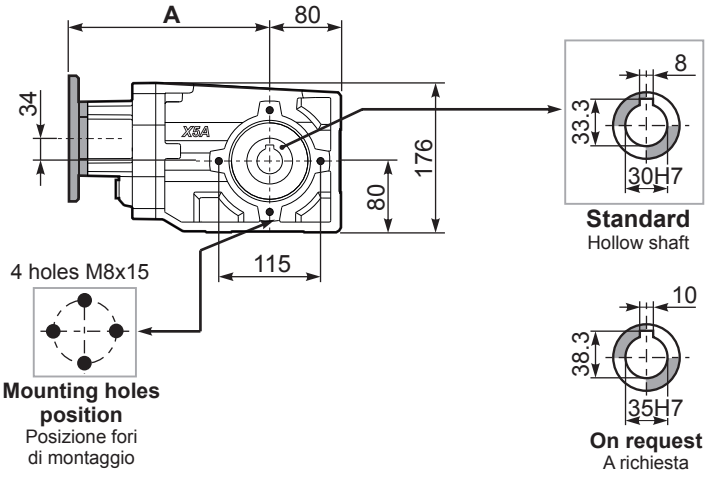
tab. 2

PX52AC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore **12.80 kg**

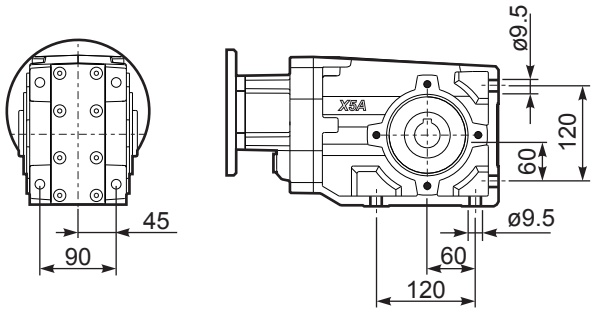
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	234
80/90B5	K023.4.042	200	236
100/112B5	K023.4.043	250	245
80B14	K085.4.046	120	236
90B14	K085.4.045	140	236
100/112B14	K085.4.047	160	245



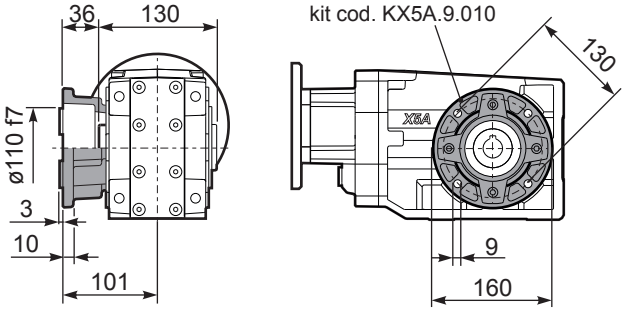


Mounting holes position
Posizione fori di montaggio

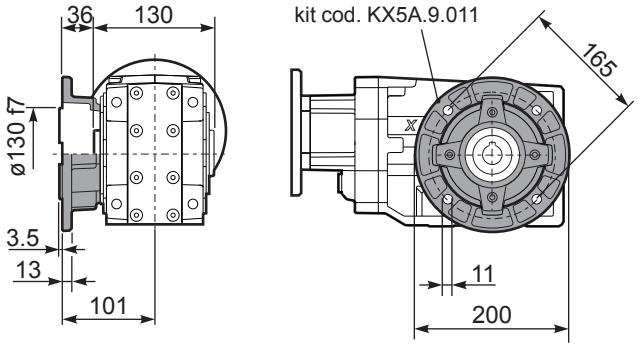
PX52A...**FB**.. Feet
Piedini



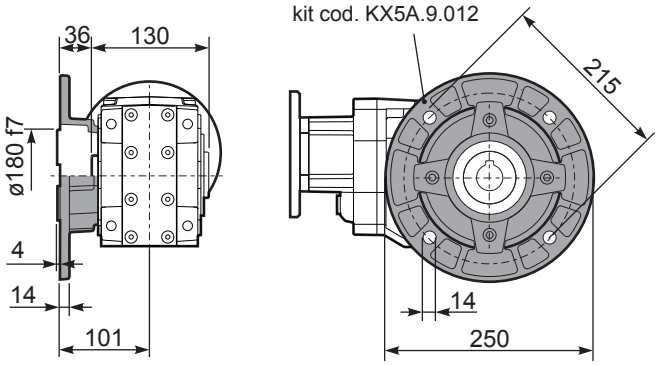
PX52A...**-F2**.. Output flange
Flangia uscita



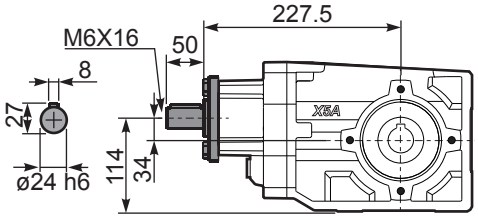
PX52A...**-F3**.. Output flange
Flangia uscita



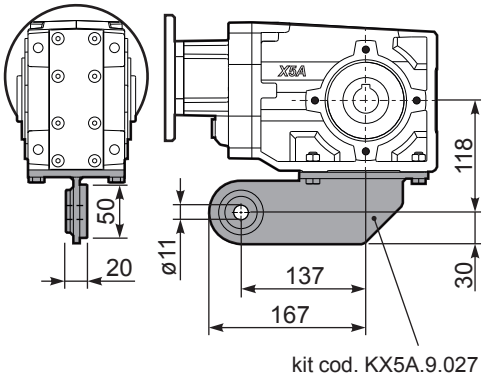
PX52A...**-F4**.. Output flange
Flangia uscita



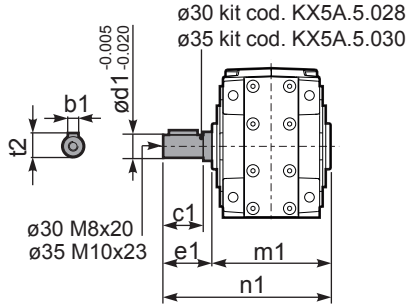
RX52A... Input shaft
Albero in entrata



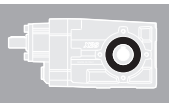
PX52A...**BR**.. Reaction Arm
Braccio di reazione



PX52A**A**.. Single output shaft
Albero semplice in uscita



	b1	c1	d1	e1	m1	n1	t2
ø30	8	60	30	68	134	202	33
ø35	10	60	35	73.5	141	214.5	38



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.94** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft	Ratios code
24.7	**56.76**	0.55	201	1.2	0.69	**250**	B				C	C		191311		01
21.3	**65.79**	0.55	233	1.1	0.59	**250**	B				C	C		171311		02
18.1	**77.23**	0.55	274	0.9	0.50	**250**	B				C	C		151311		03
16.0	**87.23**	0.37	207	1.2	0.45	**250**	B				C	C		19138		04
15.2	**92.18**	0.37	219	1.1	0.42	**250**	B				C	C		131311		05
13.9	**100.47**	0.37	238	1.0	0.39	**250**	B				C	C		19811		06
12.0	**116.45**	0.37	276	0.9	0.33	**250**	B				C	C		17811	**standard**	07
11.1	**125.82**	0.25	201	1.2	0.31	**250**	B				C	C		101311	**ø30**	08
9.9	**141.66**	0.25	227	1.1	0.28	**250**	B				C	C		13138		09
8.6	**163.16**	0.25	261	1.0	0.24	**250**	B				C	C		13811		10
7.8	**178.96**	0.18	219	1.1	0.22	**250**	B				C	C		1788	ø35	11
7.2	**193.36**	0.18	237	1.1	0.20	**250**	B				C	C		10138	On request	12
6.5	**216.84**	0.18	265	0.9	0.18	**250**	B				C	C		71311		13
5.5	**252.36**	0.12	200	1.3	0.15	**250**	B				C	C		9138		14
4.8	**290.67**	0.12	230	1.1	0.13	**250**	B				C	C		9811		15
4.2	**333.23**	0.12	263	0.9	0.12	**250**	B				C	C		7138		16
3.6	**383.82**	0.12	303	0.8	0.10	**250**	B				C	C		7811		17
3.1	**446.70**	0.12*	353	0.7	0.09	**250**	B				C	C		988		18
2.4	**589.85**	0.12*	466	0.5	0.07	**250**	B				C	C		788		19

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

*** Power higher than the maximum one which can be supported by the gearbox. Select according to the torque M_{2R}**
Potenza superiore a quella massima sopportabile dal riduttore. Selezionare in base al momento torcente M_{2R}

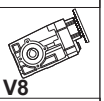
EN Unit **X53A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X53A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X53A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X53A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X53A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

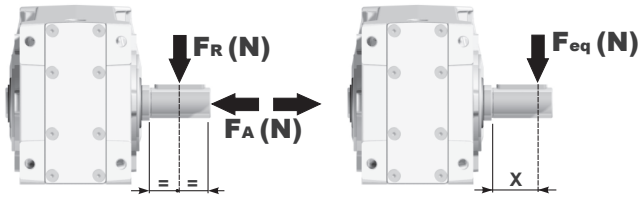
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.30 LT	1.55 LT	0.85 LT	1.45 LT	2.10 LT	1.25 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = F_R \cdot \frac{61.5}{X+31}$$



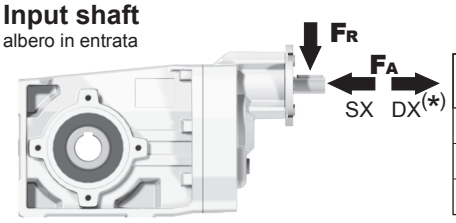
n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	800	4000

n_2 [min^{-1}]	FA	FR
75	820	4100
50	960	4800
25	1350	6750

n_2 [min^{-1}]	FA	FR
15	1660	8300

F_R On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	400	2000
900	440	2200
500	440	2200

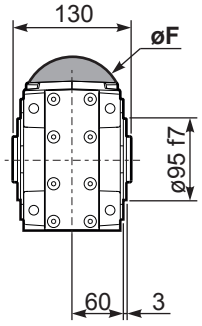
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

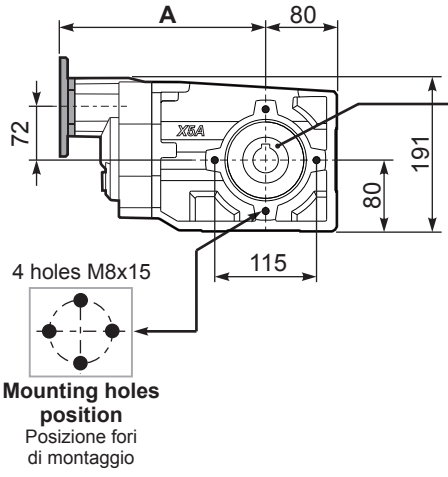
tab. 2

PX53AC... Basic Gearbox
Riduttore base

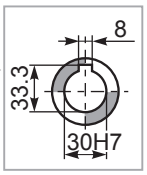
Gearbox weight peso riduttore **12.65 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	246
71B5	K063.4.042	160	244
80/90B5	K063.4.043	200	246
71B14	K063.4.047	105	244
80B14	K063.4.046	120	246
90B14	K063.4.041	140	246

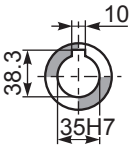




Mounting holes position
Posizione fori di montaggio

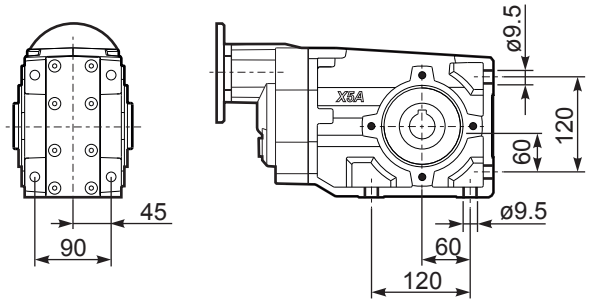


Standard
Hollow shaft

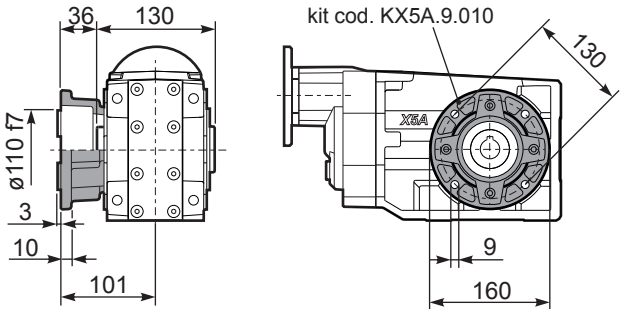


On request
A richiesta

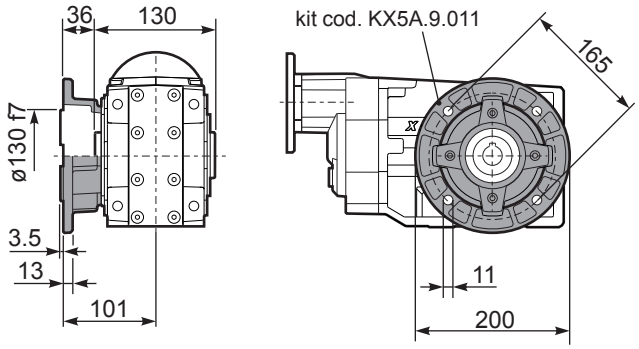
PX53A...FB.. Feet
Piedini



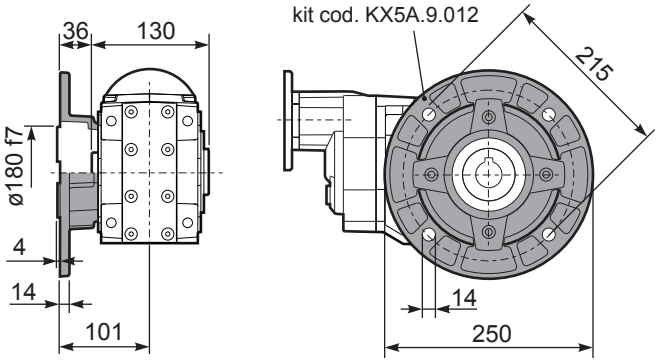
PX53A...-F2.. Output flange
Flangia uscita



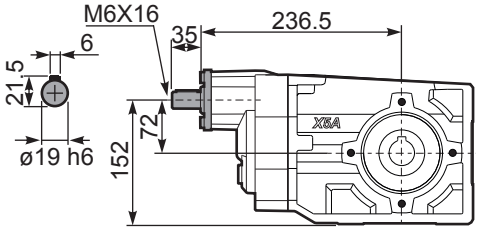
PX53A...-F3.. Output flange
Flangia uscita



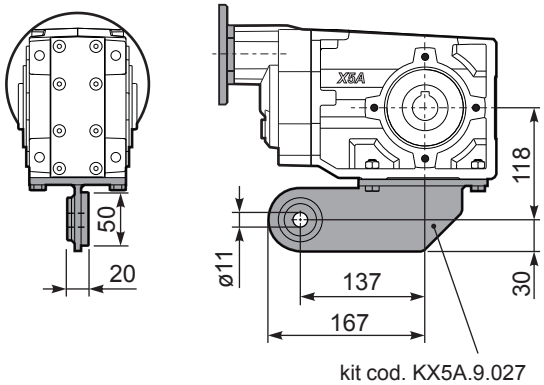
PX53A...-F4.. Output flange
Flangia uscita



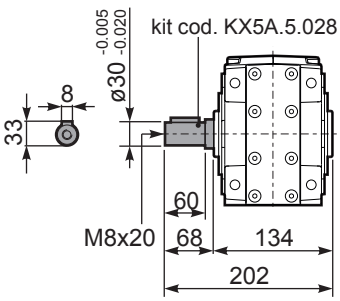
RX53A... Input shaft
Albero in entrata



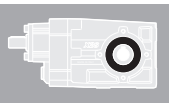
PX53A...BR.. Reaction Arm
Braccio di reazione



PX53AA.. Single output shaft
Albero semplice in uscita



8



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft	Ratios code
232	**6.03**	5.5	211	1.1	**6.1**	**240**	B									3011		01
151	**9.26**	4	238	1.1	**4.5**	**270**	B									308		02
123	**11.36**	4	291	1.2	**4.7**	**350**	B									2011		03
91	**15.36**	4	394	1.0	**3.8**	**385**	B									1611		04
80	**17.46**	4	448	0.9	**3.5**	**400**	B									208	**standard**	05
70	**19.97**	3	386	1.1	**3.1**	**410**	B									1311	**ø35**	06
59	**23.60**	3	456	0.9	**2.7**	**410**	B									168		07
57	**24.45**	3	472	0.9	**2.6**	**410**	B									1111		08
45.6	**30.69**	2.2	436	0.9	**2.0**	**410**	B									138	ø40	09
39.6	**35.35**	1.5	346	1.2	**1.8**	**410**	B									811	On request	10
37.3	**37.57**	1.5	368	1.1	**1.7**	**410**	B									118		11
28.8	**48.68**	1.1	348	1.0	**1.1**	**365**	B									611		12
25.8	**54.33**	1.1	389	1.1	**1.2**	**410**	B									88		13
18.7	**74.81**	0.75	367	1.0	**0.73**	**360**	B									68		14

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

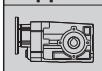
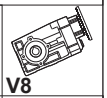
EN Unit **X62A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X62A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X62A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X62A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X62A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

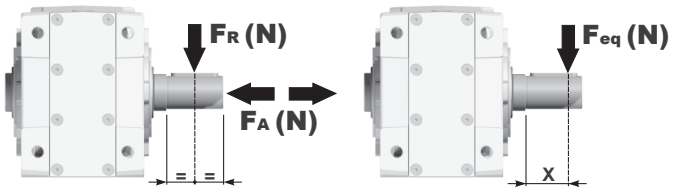
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.25 LT	1.70 LT	0.95 LT	1.60 LT	2.45 LT	1.50 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = F_R \cdot \frac{69}{X+39}$$



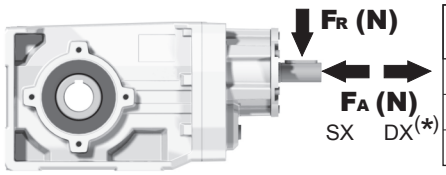
n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	780	3900

n_2 [min^{-1}]	FA	FR
75	890	4450
50	1140	5700
25	1330	6650

n_2 [min^{-1}]	FA	FR
15	1660	8300

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA	FR
1400	450	2250
900	500	2500
500	600	3000

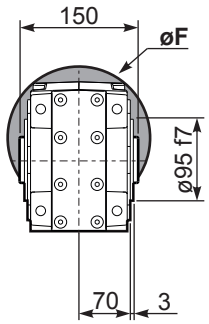
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

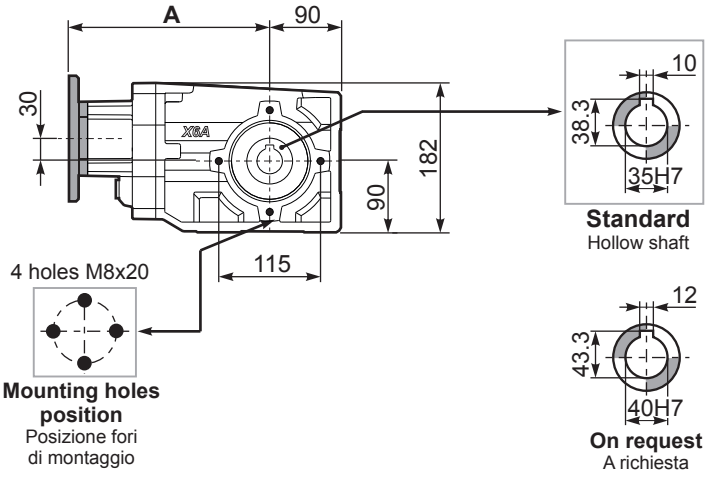
tab. 2

PX62AC... Basic Gearbox
Riduttore base

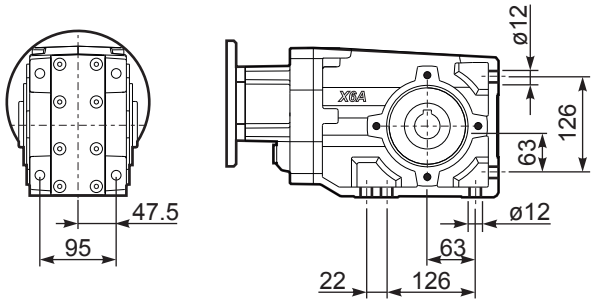
Gearbox weight / peso riduttore: **15.80 kg**

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	253
80/90B5	K023.4.042	200	255
100/112B5	K023.4.043	250	264
132B5	KC50.4.043	300	282
80B14	K085.4.046	120	255
90B14	K085.4.045	140	255
100/112B14	K085.4.047	160	264
132B14	KC50.4.041	200	282

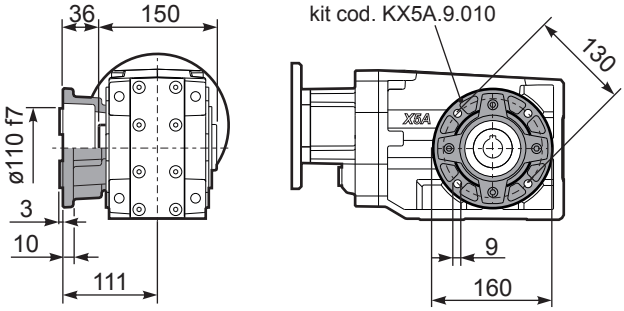




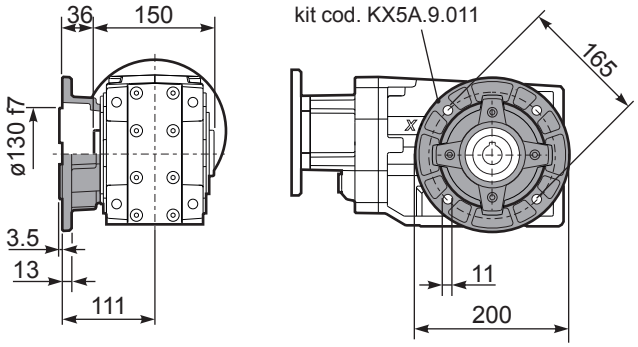
PX62A...FB.. Feet
Piedini



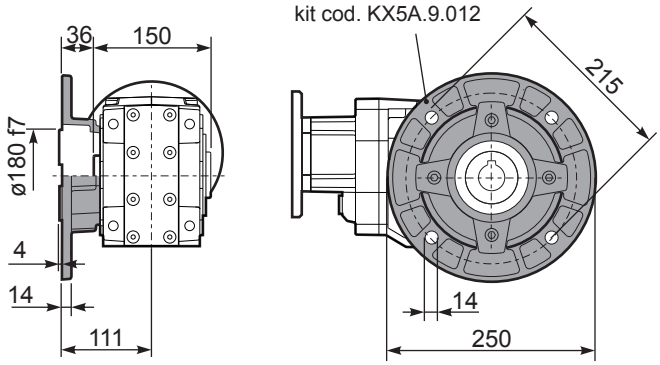
PX62A...-F2.. Output flange
Flangia uscita



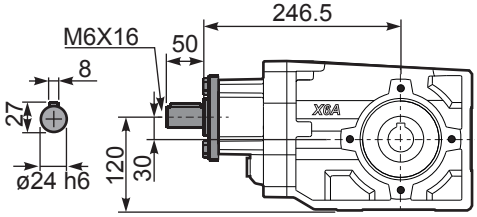
PX62A...-F3.. Output flange
Flangia uscita



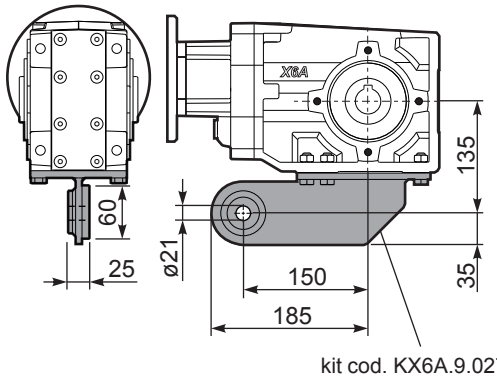
PX62A...-F4.. Output flange
Flangia uscita



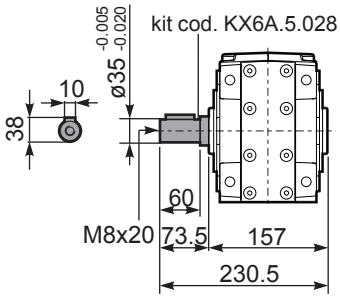
RX62A... Input shaft
Albero in entrata



PX62A...BR.. Reaction Arm
Braccio di reazione



PX62AA.. Single output shaft
Albero semplice in uscita



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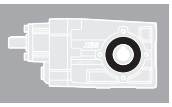


▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.94** for all ratios

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
24.7	**56.76**	1.1	398	1.0	**1.1**	410	B				C	C		191311		01
21.3	**65.79**	0.75	316	1.3	**0.97**	410	B				C	C		171311		02
18.1	**77.23**	0.75	371	1.1	**0.83**	410	B				C	C		151311		03
16.0	**87.23**	0.75	420	1.0	**0.73**	410	B				C	C		19138		04
15.2	**92.18**	0.75	443	0.9	**0.69**	410	B				C	C		131311		05
13.9	**100.47**	0.55	357	1.2	**0.64**	410	B				C	C		19811		06
12.0	**116.45**	0.55	413	1.0	**0.55**	410	B				C	C		17811	**standard ø35**	07
11.1	**125.82**	0.55	446	0.9	**0.51**	410	B				C	C		101311		08
9.9	**141.66**	0.37	336	1.2	**0.45**	410	B				C	C		13138		09
8.6	**163.16**	0.37	387	1.1	**0.39**	410	B				C	C		13811		10
7.8	**178.96**	0.37	424	1.0	**0.36**	410	B				C	C		1788	ø40 On request	11
7.2	**193.36**	0.37	459	0.9	**0.33**	410	B				C	C		10138		12
6.5	**216.84**	0.25	347	1.2	**0.29**	410	B				C	C		71311		13
5.5	**252.36**	0.25	404	1.0	**0.25**	410	B				C	C		9138		14
4.8	**290.67**	0.25	465	0.9	**0.22**	410	B				C	C		9811		15
4.2	**333.23**	0.18	408	1.0	**0.19**	410	B				C	C		7138		16
3.6	**383.82**	0.18	470	0.9	**0.17**	410	B				C	C		7811		17
3.1	**446.70**	0.12	353	1.2	**0.14**	410	B				C	C		988		18
2.4	**589.85**	0.12	466	0.9	**0.11**	410	B				C	C		788		19

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

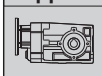
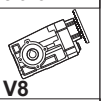
EN Unit **X63A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X63A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X63A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X63A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X63A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

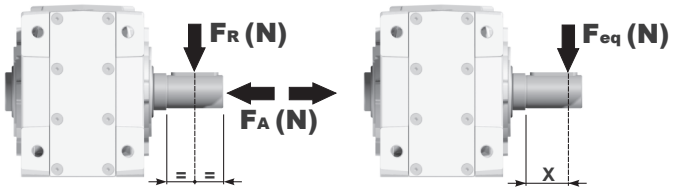
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.80 LT	1.80 LT	1.05 LT	1.70 LT	2.60 LT	1.65 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = F_R \cdot \frac{69}{X+39}$$



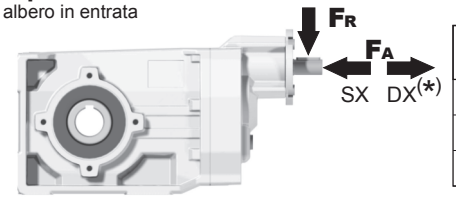
n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	780	3900

n_2 [min^{-1}]	FA	FR
75	890	4450
50	1140	5700
25	1330	6650

n_2 [min^{-1}]	FA	FR
15	1660	8300

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	400	2000
900	440	2200
500	440	2200

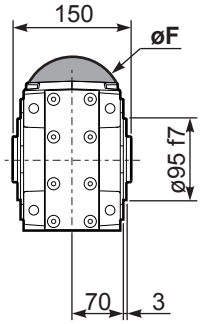
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

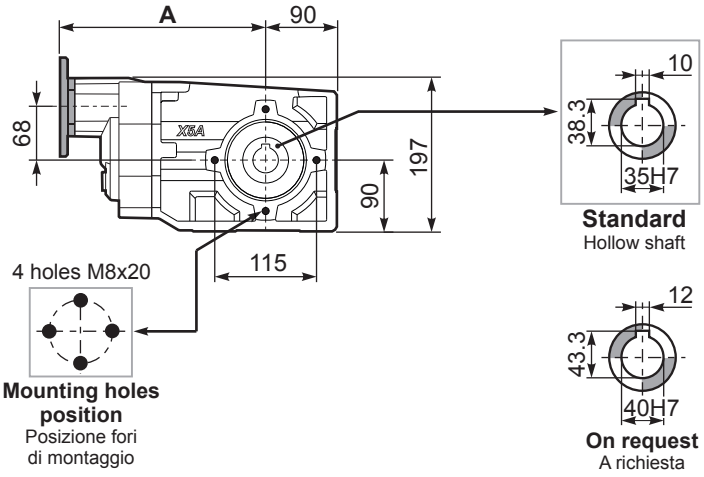
tab. 2

PX63AC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	15.98 kg

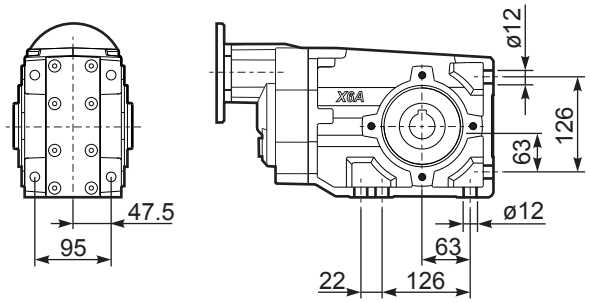
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	265
71B5	K063.4.042	160	263
80/90B5	K063.4.043	200	265
71B14	K063.4.047	105	263
80B14	K063.4.046	120	265
90B14	K063.4.041	140	265



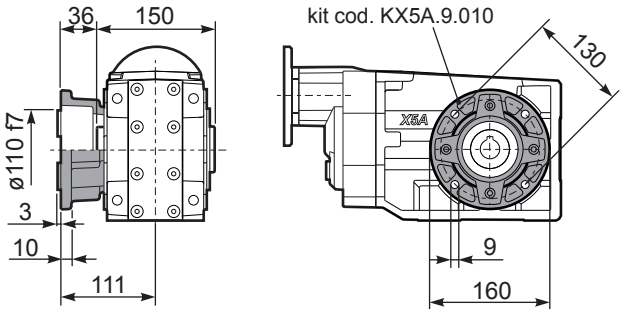


Mounting holes position
Posizione fori di montaggio

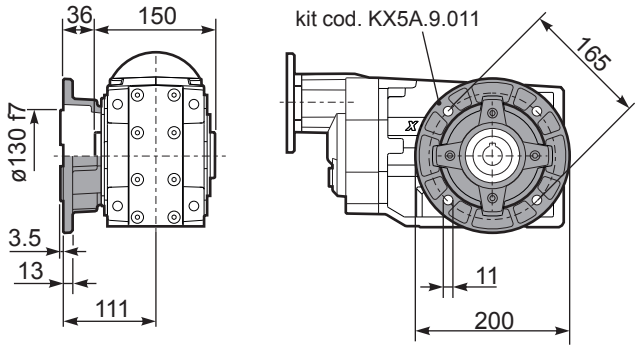
PX63A...FB.. Feet
Piedini



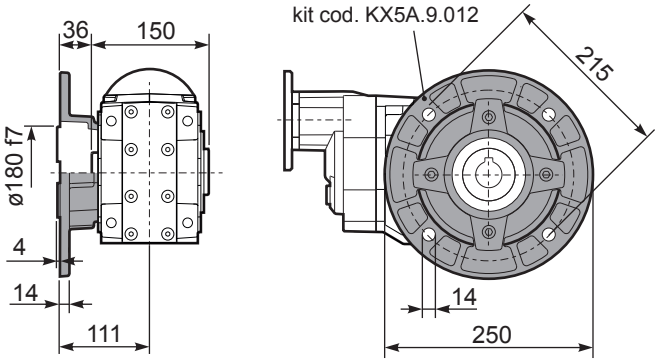
PX63A...-F2.. Output flange
Flangia uscita



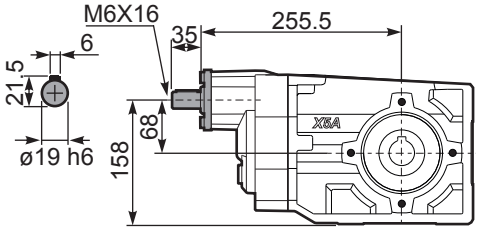
PX63A...-F3.. Output flange
Flangia uscita



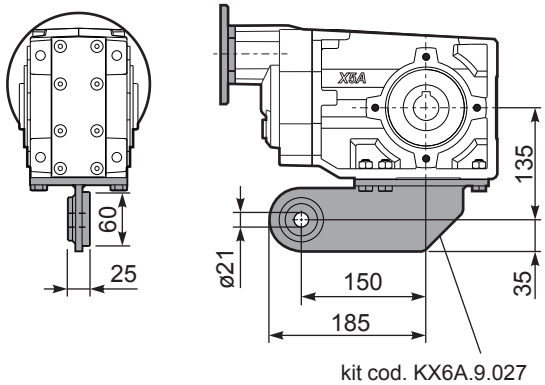
PX63A...-F4.. Output flange
Flangia uscita



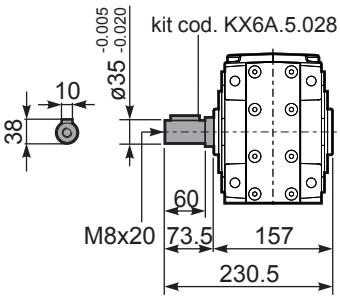
RX63A... Input shaft
Albero in entrata



PX63A...BR.. Reaction Arm
Braccio di reazione



PX63AA.. Single output shaft
Albero semplice in uscita



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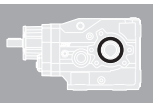


▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
176	**7.94**	7.5	369	1.0	**7.5**	**380**	B									302418		01
153	**9.13**	7.5	425	0.9	**6.7**	**390**	B									302416		02
131	**10.66**	5.5	366	1.1	**6.0**	**410**	B									302414		03
94	**14.97**	5.5	514	1.1	**6.0**	**580**	B									202418		04
81	**17.21**	5.5	591	1.0	**5.4**	**600**	B									202416		05
69	**20.24**	5.5	695	1.0	**5.2**	**675**	B									162418		06
60	**23.27**	4	585	1.2	**4.5**	**675**	B									162416		07
53	**26.31**	4	661	1.0	**4.0**	**675**	B									132418	**standard ø40**	08
46.3	**30.25**	4	760	0.9	**3.5**	**675**	B									132416		09
39.6	**35.32**	3	668	1.0	**3.0**	**675**	B									132414		10
37.8	**37.03**	3	701	1.0	**2.8**	**675**	B									112416		11
32.4	**43.23**	2.2	602	1.1	**2.4**	**675**	B									112414		12
30.1	**46.58**	2.2	649	1.0	**2.3**	**675**	B									82418		13
26.1	**53.55**	2.2	746	0.9	**2.0**	**675**	B									82416		14
22.4	**62.52**	1.5	600	1.1	**1.7**	**675**	B									82414		15
19.0	**73.75**	1.1	517	1.1	**1.2**	**580**	B									62416		16
16.3	**86.09**	1.1	604	1.1	**1.2**	**675**	B									62414		17

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **X73C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X73C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X73C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X73C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X73C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

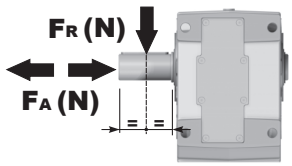
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
2.45 LT	2.55 LT	1.80 LT	1.95 LT	4.05 LT	2.55 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

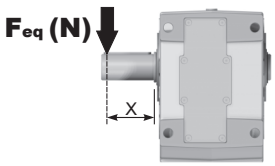
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{178.5}{X+143.5}$$

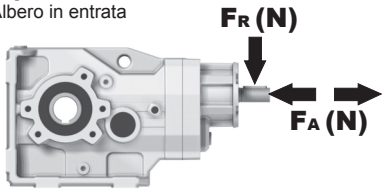




n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1360	6800	**140**	1480	7400	**70**	1720	8600
250	1400	7000	**120**	1520	7600	**40**	1840	9200
200	1440	7200	**85**	1560	7800	**15**	1920	9600

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



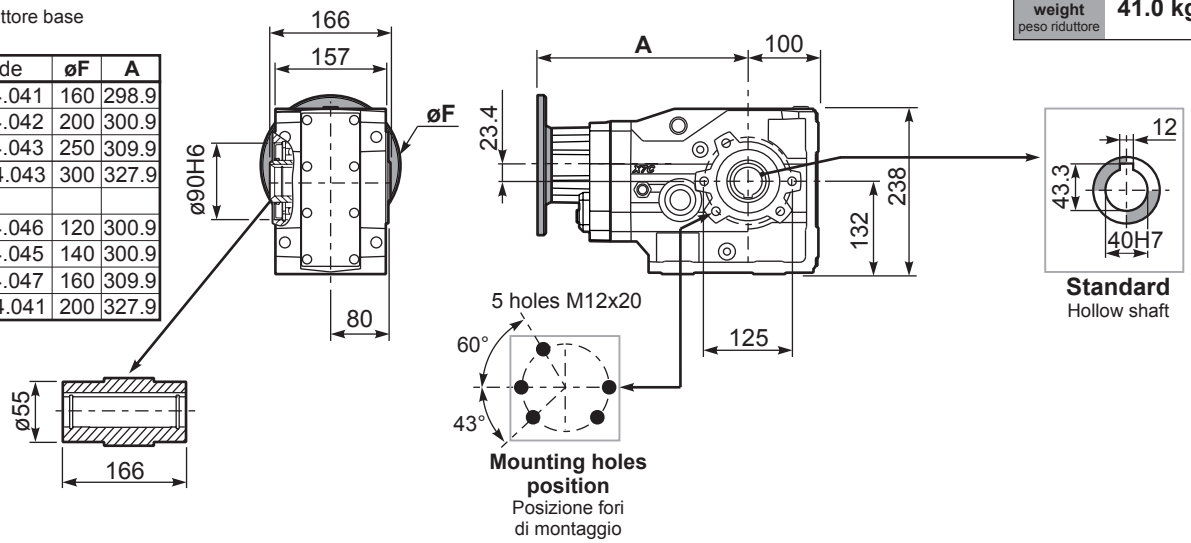
n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

PX73CC... Basic Gearbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	298.9
80/90B5	K023.4.042	200	300.9
100/112B5	K023.4.043	250	309.9
132B5	KC50.4.043	300	327.9
80B14	K085.4.046	120	300.9
90B14	K085.4.045	140	300.9
100/112B14	K085.4.047	160	309.9
132B14	KC50.4.041	200	327.9

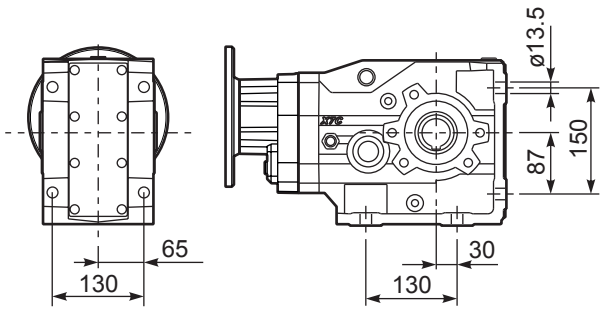
Gearbox weight / peso riduttore: **41.0 kg**



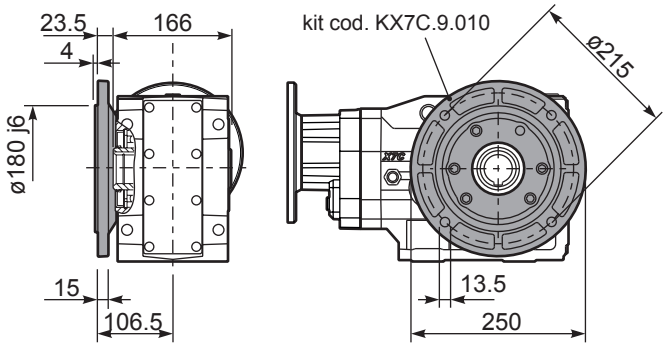
Standard
Hollow shaft

Mounting holes position
Posizione fori di montaggio

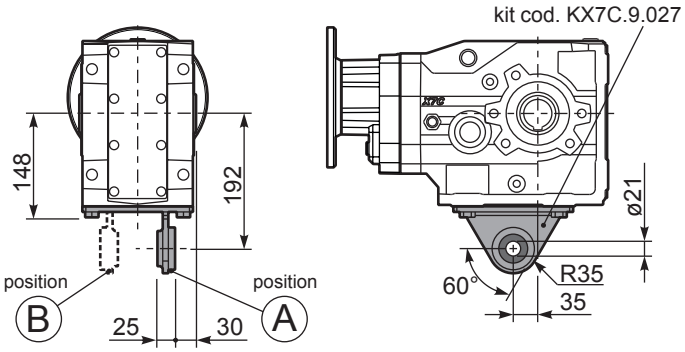
PX73C...FB.. Feet
Piedini



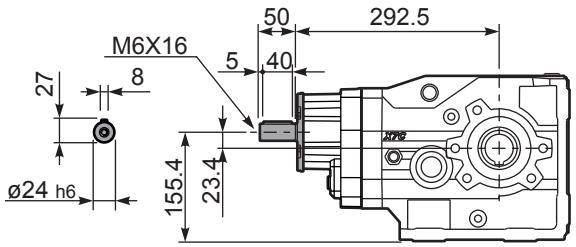
PX73C...-F4.. Output flange
Flangia uscita



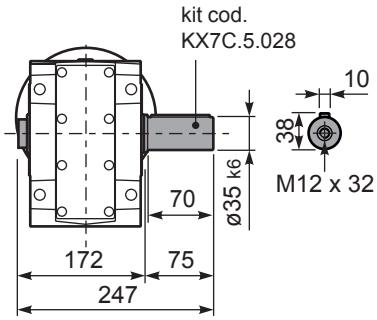
PX73C...BR.. Reaction Arm
Braccio di reazione



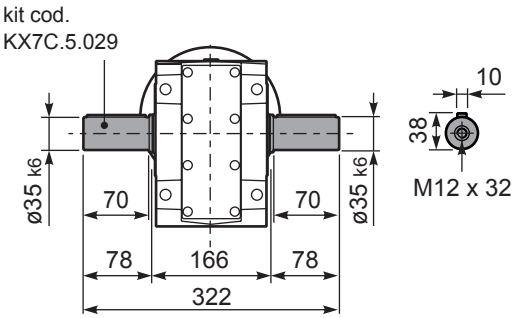
RX73C... Input shaft
Albero in entrata



PX73CA... Single shaft
Albero lento semplice



PX73CB... Double shaft
Albero lento bisp.



8

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
18.7	**74.79**	1.5	704	1.0	**1.4**	675	B				C	C		19132418		01
16.3	**85.99**	1.1	591	1.1	**1.3**	675	B				C	C		19132416		02
14.0	**99.66**	1.1	685	1.0	**1.1**	675	B				C	C		17132416		03
12.0	**116.35**	0.75	548	1.2	**0.92**	675	B				C	C		17132414		04
11.5	**121.45**	0.75	572	1.2	**0.89**	675	B				C	C		13132418		05
10.0	**139.64**	0.75	658	1.0	**0.77**	675	B				C	C		13132416		06
9.2	**152.21**	0.75	717	0.9	**0.71**	675	B				C	C		19082416		07
8.6	**163.02**	0.55	567	1.2	**0.66**	675	B				C	C		13132414		08
7.9	**177.69**	0.55	618	1.1	**0.61**	675	B				C	C		19082414	**standard ø40**	09
6.8	**205.95**	0.55	716	0.9	**0.52**	675	B				C	C		17082414		10
6.3	**222.52**	0.55	774	0.9	**0.48**	675	B				C	C		10132414		11
5.6	**248.76**	0.37	578	1.2	**0.43**	675	B				C	C		9132416		12
4.8	**290.41**	0.37	675	1.0	**0.37**	675	B				C	C		9132414		13
4.1	**337.39**	0.37	784	0.9	**0.32**	675	B				C	C		10082416		14
3.6	**393.88**	0.25	618	1.1	**0.27**	675	B				C	C		10082414		15
3.2	**440.33**	0.25	690	1.0	**0.24**	675	B				C	C		9082416		16
2.7	**514.06**	0.18	616	1.1	**0.21**	675	B				C	C		9082414		17
2.4	**581.44**	0.18	697	1.0	**0.18**	675	B				C	C		7082416		18
2.1	**678.79**	0.12	526	1.3	**0.16**	675	B				C	C		7082414		19

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

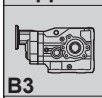
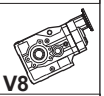
EN Unit **X74C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X74C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X74C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X74C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X74C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

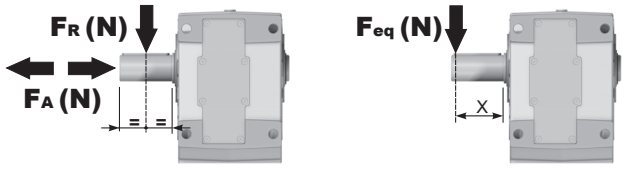
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 B3	B6	B7	B8	V5	V6	 V8
3.55 LT	2.65 LT	1.90 LT	2.05 LT	4.25 LT	2.65 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

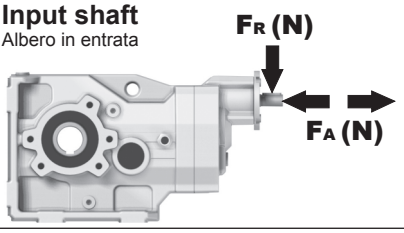
$$Feq = FR \cdot \frac{178.5}{X+143.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1360	6800	**140**	1480	7400	**70**	1720	8600
250	1400	7000	**120**	1520	7600	**40**	1840	9200
200	1440	7200	**85**	1560	7800	**15**	1920	9600

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



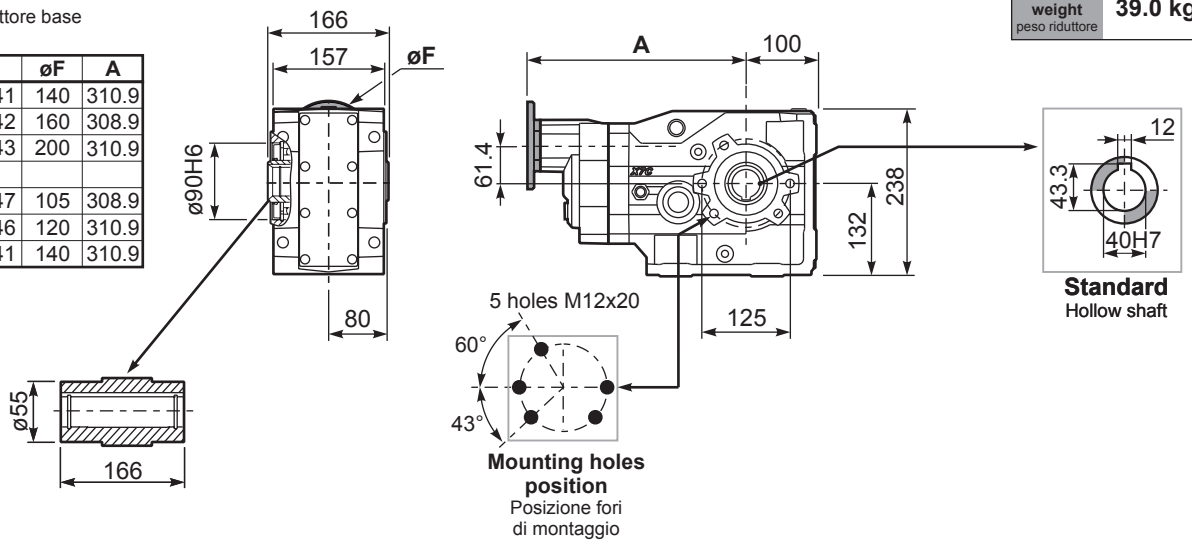
n_1	FA	FR
1400	240	1200
900	280	1400
500	310	1700

tab. 2

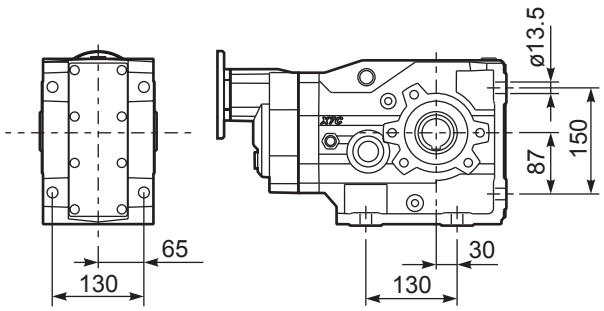
PX74CC... Basic Gearbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	310.9
71B5	K063.4.042	160	308.9
80/90B5	K063.4.043	200	310.9
71B14	K063.4.047	105	308.9
80B14	K063.4.046	120	310.9
90B14	K063.4.041	140	310.9

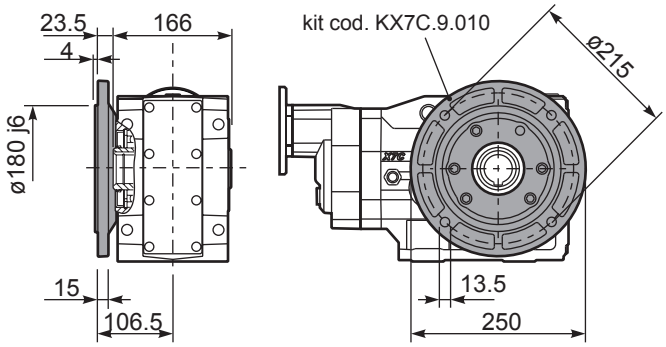
Gearbox weight peso riduttore **39.0 kg**



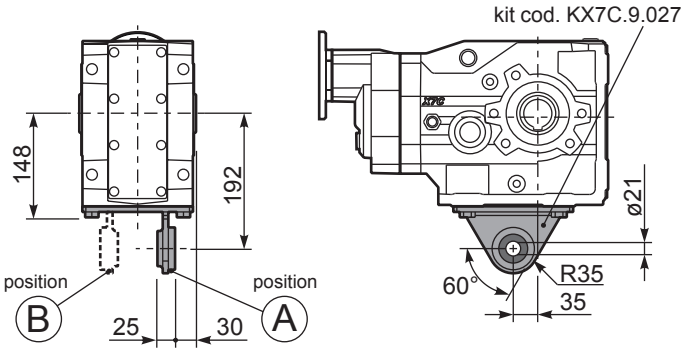
PX74C...FB.. Feet
Piedini



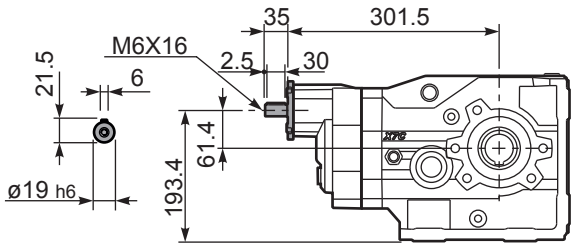
PX74C...-F4.. Output flange
Flangia uscita



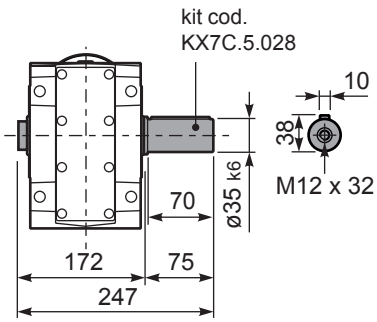
PX74C...BR.. Reaction Arm
Braccio di reazione



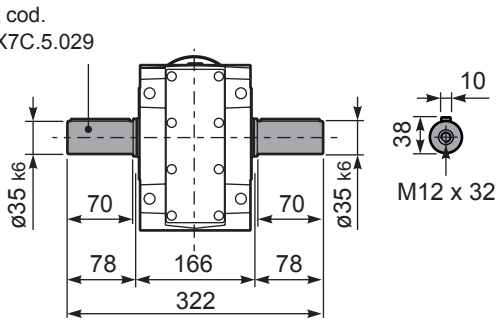
RX74C... Input shaft
Albero in entrata



PX74CA... Single shaft
Albero lento semplice



PX74CB... Double shaft
Albero lento bisp.



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
145	**9.69**	9	560	1.3	12.2	755	B									302418		01
126	**11.09**	9	641	1.1	9.6	680	B									302416		02
108	**12.90**	9	746	1.1	9.6	790	B									302414		03
77	**18.26**	7.5	849	1.1	8.0	935	B									202418		04
67	**20.91**	7.5	972	1.0	7.5	1000	B									202416		05
58	**24.32**	5.5	835	1.2	6.4	1000	B									202414		06
49.5	**28.27**	5.5	971	1.0	5.5	1000	B									162416		07
42.6	**32.88**	4	826	1.2	4.7	1000	B									162414	**standard**	08
38.1	**36.76**	4	924	1.1	4.2	1000	B									132416	**ø40**	09
32.7	**42.76**	3	809	1.2	3.6	1000	B									132414		10
31.1	**45.00**	3	851	1.2	3.5	1000	B									112416		11
26.8	**52.33**	3	990	1.0	3.0	1000	B									112414		12
24.6	**56.82**	2.2	791	1.1	2.3	850	B									82418		13
21.5	**65.07**	2.2	906	1.1	2.3	975	B									82416		14
18.5	**75.68**	2.2	1054	0.9	2.1	1000	B									82414		15
15.6	**89.61**	1.1	628	1.1	1.2	710	B									62416		16
13.4	**104.22**	1.1	731	1.1	1.2	820	B									62414		17

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

EN Unit **X83C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X83C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X83C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X83C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

B3	B6	B7	B8	V5	V6	V8
2.80 LT	3.10 LT	2.00 LT	2.50 LT	4.95 LT	2.80 LT	Ask

AGIP Blasia 460

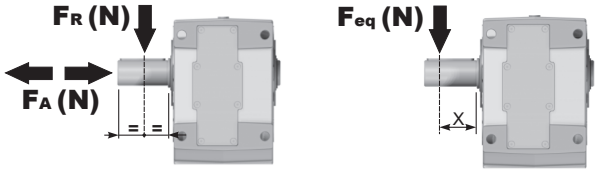
For all details on lubrication and plugs check our website / Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

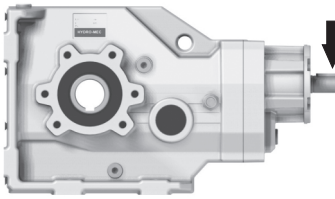
$$Feq = FR \cdot \frac{196.5}{X+156.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1700	8500	**140**	1860	9300	**70**	2160	10800
250	1760	8800	**120**	1900	9500	**40**	2300	11500
200	1800	9000	**85**	1960	9800	**15**	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

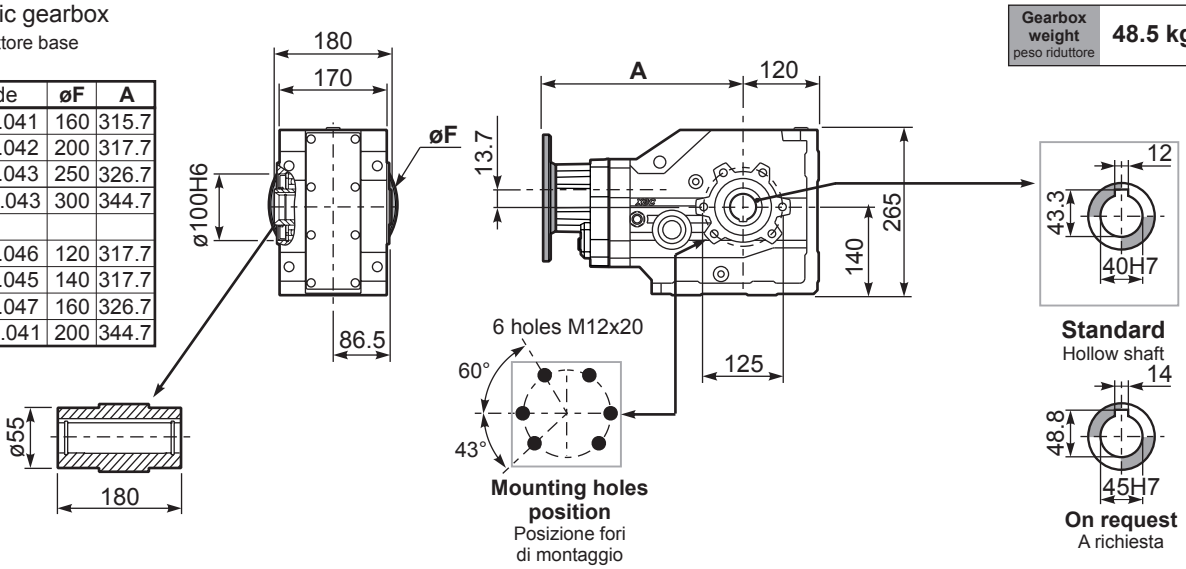
tab. 2

E El reductor tamaño **X83C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

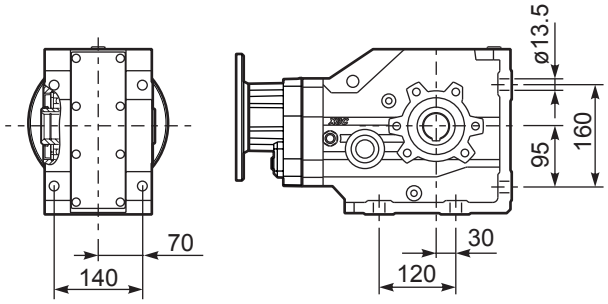
PX83CC... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	315.7
80/90B5	K023.4.042	200	317.7
100/112B5	K023.4.043	250	326.7
132B5	KC50.4.043	300	344.7
80B14	K085.4.046	120	317.7
90B14	K085.4.045	140	317.7
100/112B14	K085.4.047	160	326.7
132B14	KC50.4.041	200	344.7

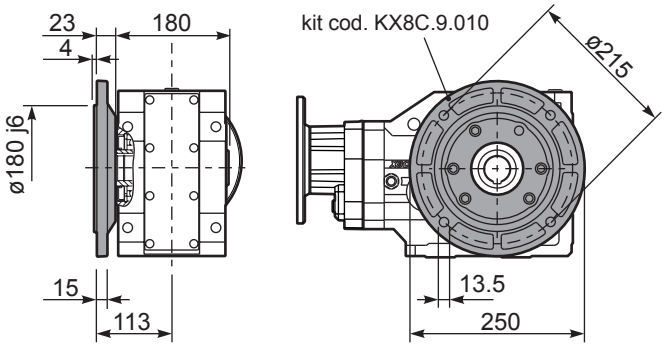
Gearbox weight / peso riduttore: **48.5 kg**



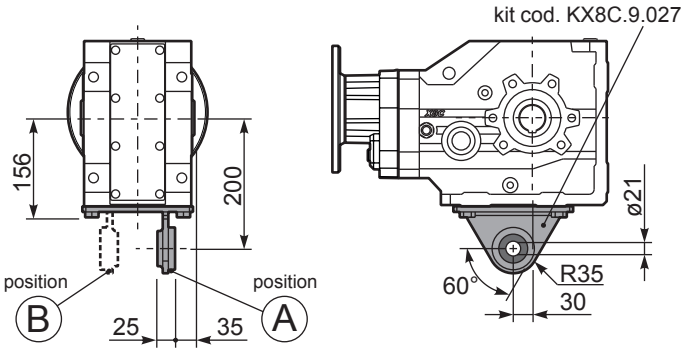
PX83C...FB.. Feet
Piedini



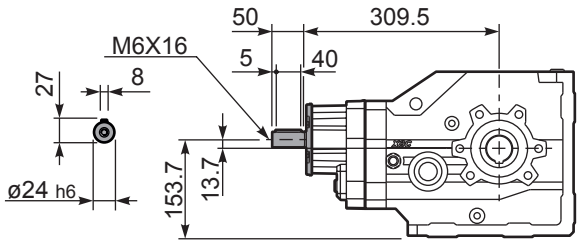
PX83C...-F4.. Output flange
Flangia uscita



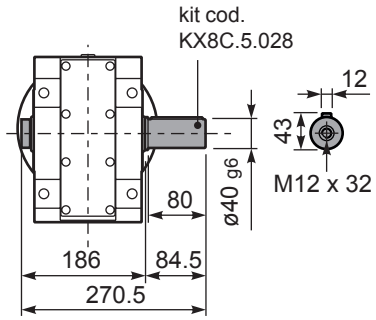
PX83C...BR.. Reaction Arm
Braccio di reazione



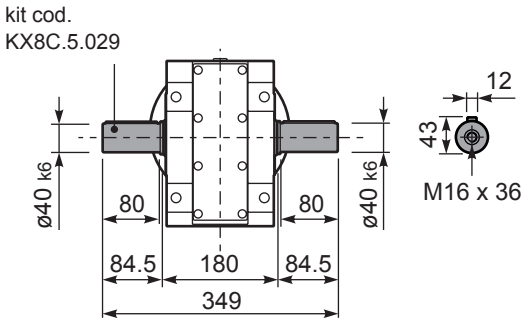
RX83C... Input shaft
Albero in entrata



PX83CA... Single shaft
Albero lento semplice



PX83CB... Double shaft
Albero lento bisp.



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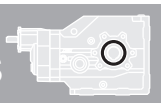


▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
15.3	**91.23**	1.5	858	1.2	**1.7**	**1000**	B				C	C		19132418		01
13.4	**104.48**	1.5	983	1.0	**1.5**	**1000**	B				C	C		19132416		02
11.6	**121.10**	1.5	1139	0.9	**1.3**	**1000**	B				C	C		17132416		03
9.9	**140.84**	1.1	968	1.0	**1.1**	**1000**	B				C	C		17132414		04
8.5	**165.32**	1.1	1136	0.9	**0.96**	**1000**	B				C	C		15132414		05
7.6	**184.94**	0.75	872	1.1	**0.86**	**1000**	B				C	C		19082416		06
7.1	**197.34**	0.75	930	1.1	**0.81**	**1000**	B				C	C		13132414		07
6.5	**215.10**	0.75	1014	1.0	**0.74**	**1000**	B				C	C		19082414		08
6.0	**231.60**	0.55	805	1.2	**0.69**	**1000**	B				C	C		10132416	**standard ø40**	09
5.6	**249.31**	0.55	867	1.2	**0.64**	**1000**	B				C	C		17082414		10
5.2	**269.37**	0.55	937	1.1	**0.59**	**1000**	B				C	C		10132414		11
4.8	**292.64**	0.55	1018	1.0	**0.54**	**1000**	B				C	C		15082414		12
4.6	**302.26**	0.55	1051	1.0	**0.53**	**1000**	B				C	C		9132416		13
4.0	**349.30**	0.37	812	1.2	**0.46**	**1000**	B				C	C		13082414		14
3.5	**399.12**	0.37	928	1.1	**0.40**	**1000**	B				C	C		7132416		15
2.9	**476.80**	0.37	1108	0.9	**0.33**	**1000**	B				C	C		10082414		16
2.2	**622.28**	0.25	976	1.0	**0.26**	**1000**	B				C	C		9082414		17
1.7	**821.70**	0.18	985	1.0	**0.19**	**1000**	B				C	C		7082414		18

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing**
Disponibile a Richiesta senza Bussola di Riduzione

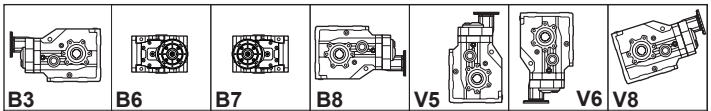
C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

EN Unit **X84C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X84C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X84C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X84C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile.
L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur



B3	B6	B7	B8	V5	V6	V8
4.25 LT	3.20 LT	2.10 LT	2.60 LT	5.20 LT	2.90 LT	Ask

AGIP Blasia 460

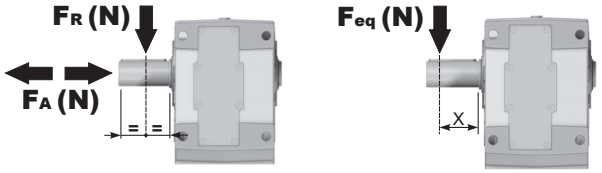
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

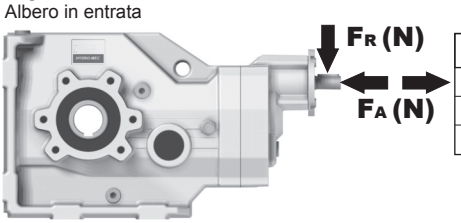
$$Feq = FR \cdot \frac{196.5}{X+156.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1700	8500	**140**	1860	9300	**70**	2160	10800
250	1760	8800	**120**	1900	9500	**40**	2300	11500
200	1800	9000	**85**	1960	9800	**15**	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



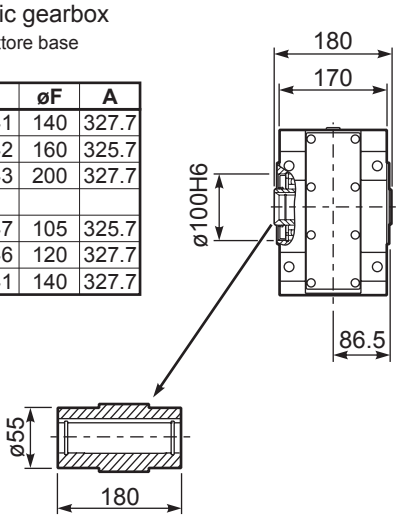
n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

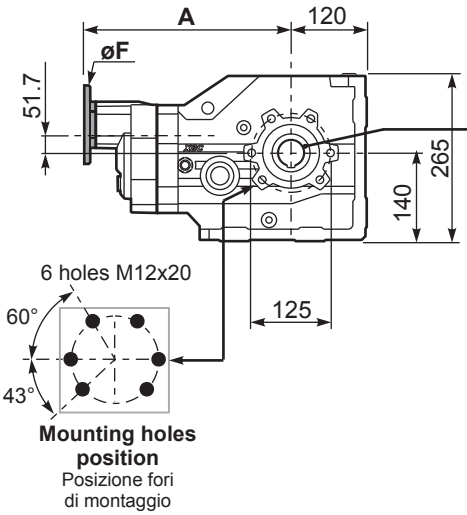
E El reductor tamaño **X84C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

PX84CC... Basic gearbox
Riduttore base

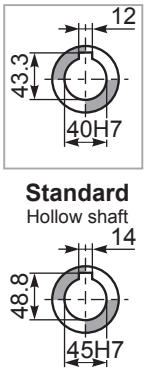
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	327.7
71B5	K063.4.042	160	325.7
80/90B5	K063.4.043	200	327.7
71B14	K063.4.047	105	325.7
80B14	K063.4.046	120	327.7
90B14	K063.4.041	140	327.7



Gearbox weight peso riduttore **46.5 kg**



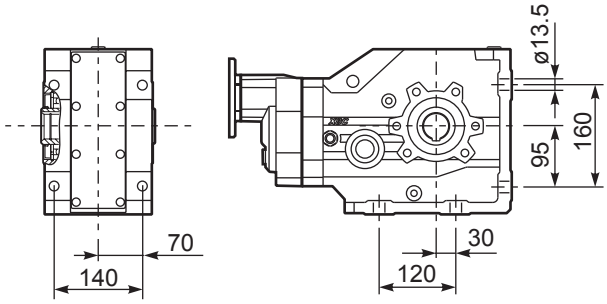
Mounting holes position
Posizione fori di montaggio



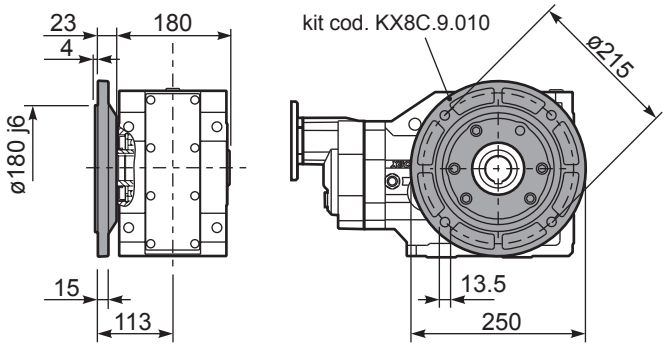
Standard
Hollow shaft

On request
A richiesta

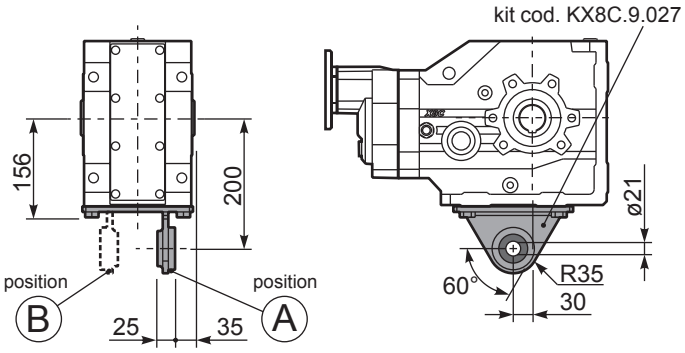
PX84C...FB.. Feet
Piedini



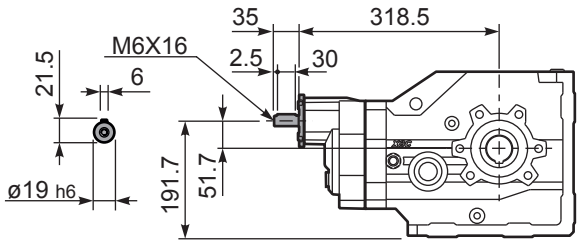
PX84C...-F4.. Output flange
Flangia uscita



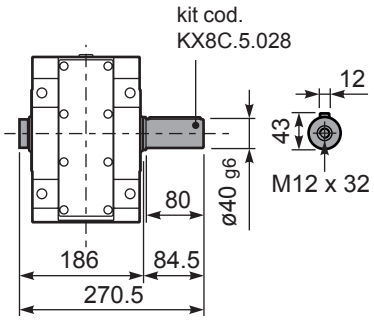
PX84C...BR.. Reaction Arm
Braccio di reazione



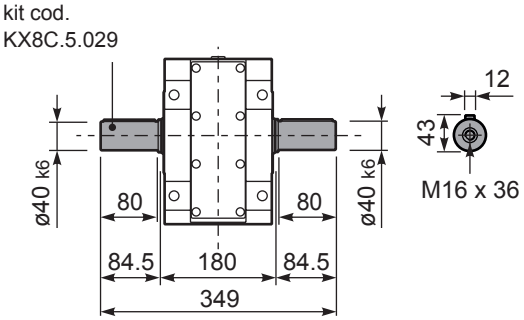
RX84C... Input shaft
Albero in entrata

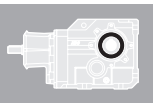


PX84CA... Single shaft
Albero lento semplice



PX84CB... Double shaft
Albero lento bisp.





▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -F / 100 112	B5 -G / 132	B5 -H / 160	B5 -I / 180	B14 motor flanges - - - - / - - - -		Output Shaft ø	Ratios code
236	**5.94**	22	806	1.0	**21.0**	**800**	B					302915		01
196	**7.13**	18.5	812	1.0	**17.9**	**820**	B					302913		02
163	**8.58**	18.5	977	1.0	**17.3**	**950**	B					302911		03
125	**11.20**	15	1033	1.0	**13.9**	**1000**	B					202915		04
104	**13.43**	15	1239	1.1	**15.7**	**1350**	B					202913		05
92	**15.15**	15	1397	1.0	**14.4**	**1400**	B					162915	**standard ø50**	06
87	**16.17**	15	1492	1.0	**14.0**	**1450**	B					202911		07
77	**18.16**	15	1675	0.9	**13.3**	**1550**	B				**not available**	162913		08
71	**19.70**	11	1335	1.2	**12.3**	**1550**	B					132915	ø45	09
64	**21.87**	11	1482	1.1	**11.4**	**1600**	B					162911	On request	10
59	**23.62**	11	1600	1.0	**10.6**	**1600**	B					132913		11
48.4	**28.91**	9	1671	1.0	**8.6**	**1600**	B					112913		12
40.2	**34.81**	7.5	1618	1.0	**7.2**	**1600**	B					112911		13
33.5	**41.81**	5.5	1436	1.1	**6.0**	**1600**	B					82913		14
27.8	**50.34**	5.5	1729	0.9	**5.0**	**1600**	B					82911		15

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

EN Unit **X93C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X93C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X93C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X93C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X93C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

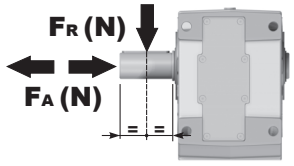
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
4.20 LT	3.60 LT	4.40 LT	5.10 LT	7.10 LT	5.00 LT	Ask
AGIP Blasia 460						

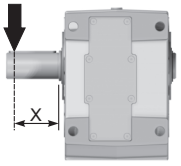
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

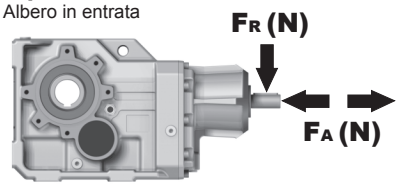
$$Feq = FR \cdot \frac{218}{X+168}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	**140**	2700	13500	**70**	3020	15100
250	2400	12000	**120**	2800	14000	**40**	3200	16000
200	2600	13000	**85**	2900	14500	**15**	3500	17500

Input shaft
Albero in entrata



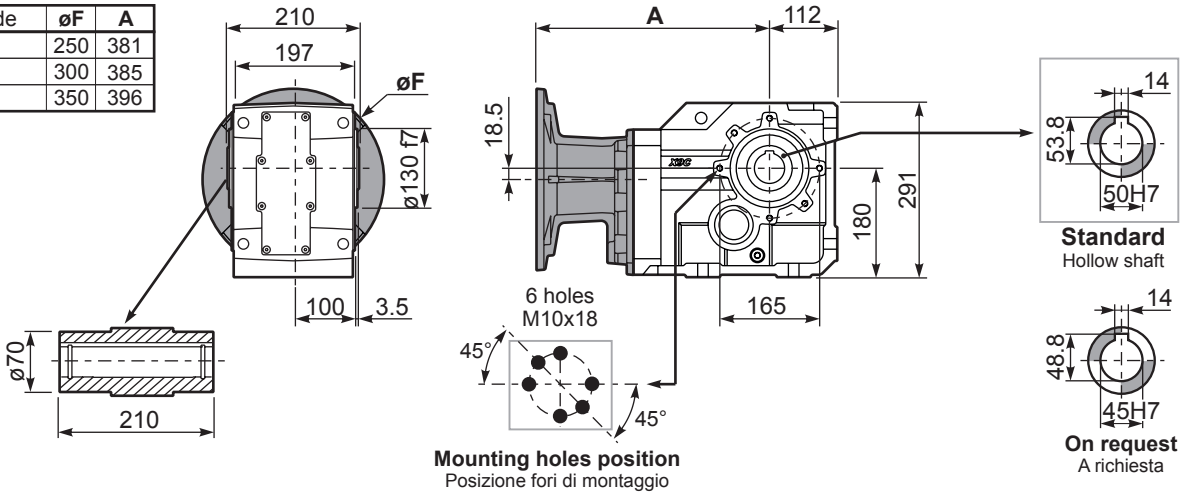
n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2

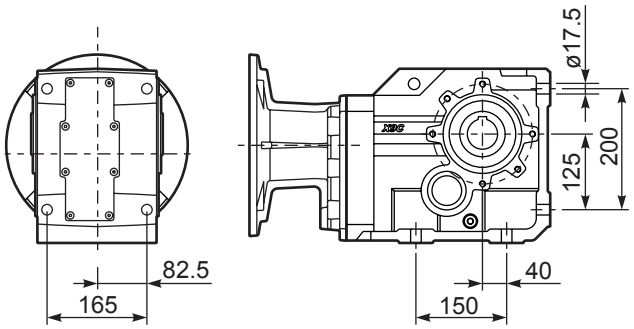
PX93CC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	75.0 kg

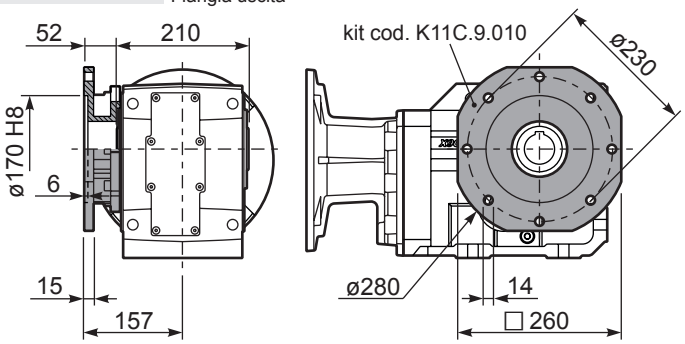
M. flanges	Kit code	øF	A
100/112B5	-	250	381
132B5	-	300	385
160/180B5	-	350	396



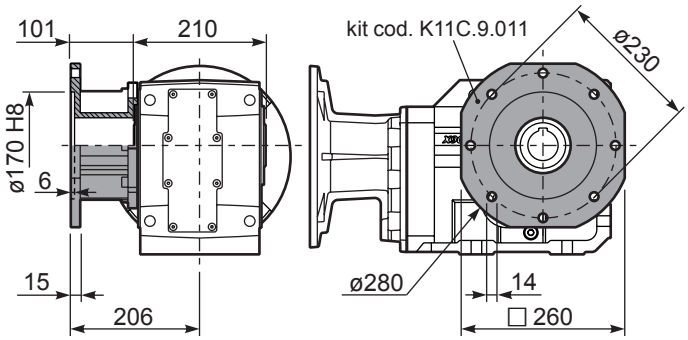
PX93C...FB.. Feet
Piedini



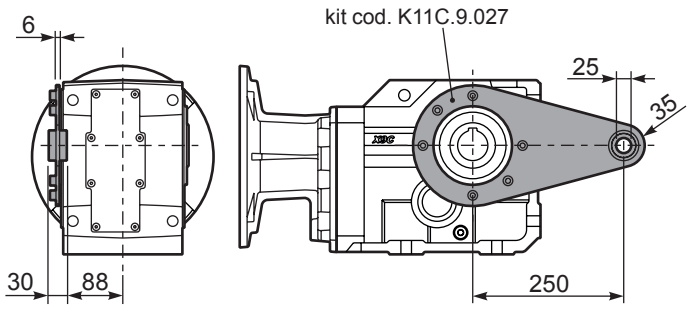
PX93C...-FC.. Output flange
Flangia uscita



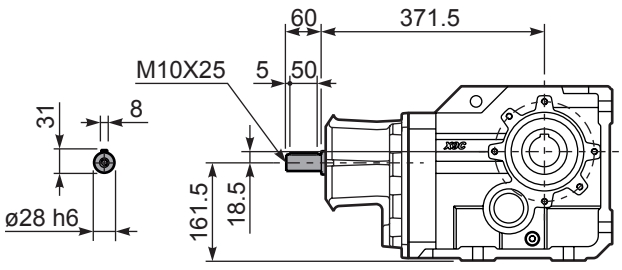
PX93C...-FL.. Output flange
Flangia uscita



PX93C...BR.. Reaction Arm
Braccio di reazione

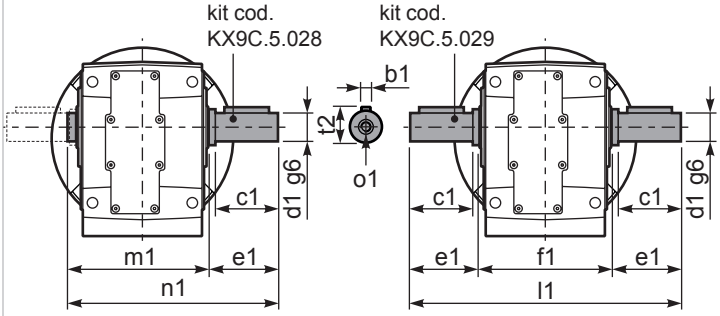


RX93C... Input shaft
Albero in entrata



PX93CA... Single shaft
Albero lento semplice

PX93CB... Double shaft
Albero lento bisp.



	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	14	100	50	105	210	420	218	323	53.5	M16
-	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
45.6	**30.70**	7.5	1399	1.1	**8.3**	**1600**	B									30132913		01
37.9	**36.97**	7.5	1685	0.9	**6.9**	**1600**	B									30132911		02
29.0	**48.26**	5.5	1625	1.0	**5.3**	**1600**	B									20132915		03
24.2	**57.86**	4	1425	1.1	**4.4**	**1600**	B									20132913		04
21.5	**65.24**	4	1607	1.0	**3.9**	**1600**	B									16132915		05
20.1	**69.68**	4	1716	1.0	**3.8**	**1650**	B									20132911	**standard**	06
17.9	**78.23**	3	1450	1.1	**3.4**	**1650**	B									16132913	**ø50**	07
16.5	**84.85**	3	1573	1.0	**3.0**	**1600**	B									13132915		08
14.9	**94.20**	3	1747	0.9	**2.8**	**1650**	B									16132911		09
13.8	**101.74**	3	1886	0.9	**2.6**	**1650**	B									13132913	ø45	10
11.4	**122.51**	2.2	1672	1.0	**2.1**	**1650**	B									13132911	On request	11
9.3	**149.95**	1.5	1411	1.2	**1.8**	**1650**	B									11132911		12
7.8	**180.09**	1.5	1694	1.0	**1.5**	**1650**	B									8132913		13
6.8	**206.81**	1.1	1421	1.1	**1.2**	**1600**	B									6132915		14
6.5	**216.85**	1.1	1490	1.1	**1.2**	**1650**	B									8132911		15
5.6	**247.99**	1.1	1704	1.0	**1.1**	**1650**	B									6132913		16
4.7	**298.61**	0.75	1407	1.2	**0.88**	**1650**	B									6132911		17

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **X94C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X94C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X94C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X94C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X94C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

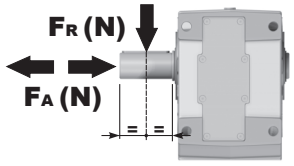
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
4.50 LT	3.80 LT	4.50 LT	5.30 LT	7.60 LT	5.30 LT	Ask
AGIP Blasia 460						

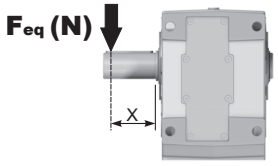
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

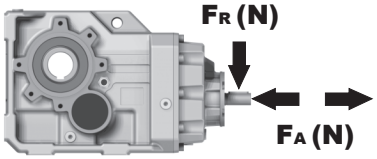
$$Feq = FR \cdot \frac{218}{X+168}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	**140**	2700	13500	**70**	3020	15100
250	2400	12000	**120**	2800	14000	**40**	3200	16000
200	2600	13000	**85**	2900	14500	**15**	3500	17500

Input shaft
Albero in entrata



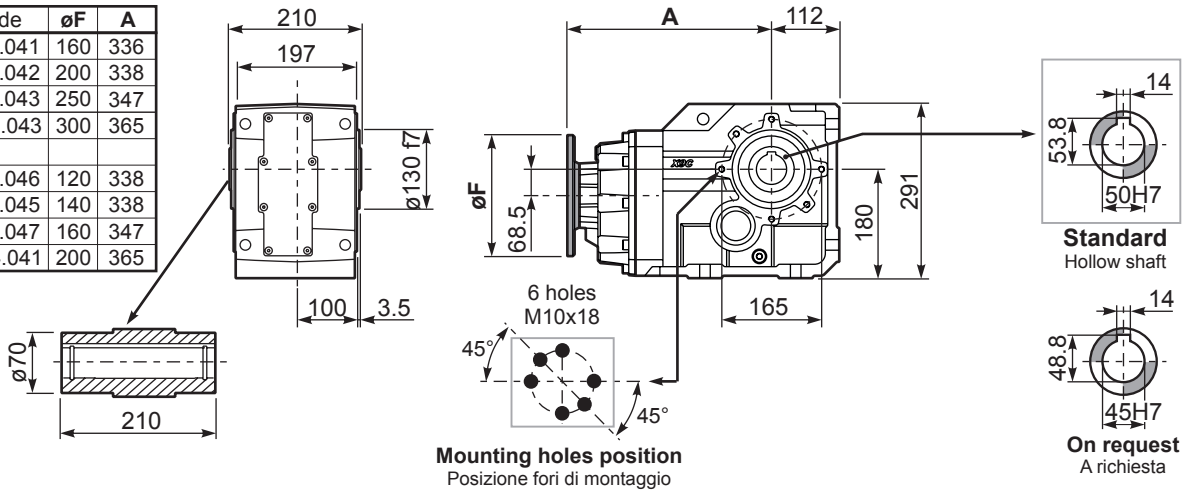
n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

PX94CC... Basic Gearbox
Riduttore base

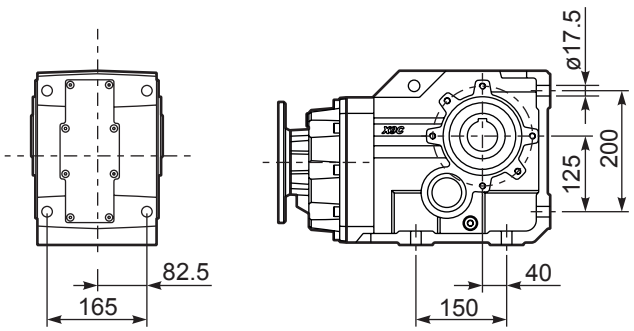
Gearbox weight / peso riduttore: **68.5 kg**

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	336
80/90B5	K023.4.042	200	338
100/112B5	K023.4.043	250	347
132B5	KC50.4.043	300	365
80B14	K085.4.046	120	338
90B14	K085.4.045	140	338
100/112B14	K085.4.047	160	347
132B14	KC50.4.041	200	365

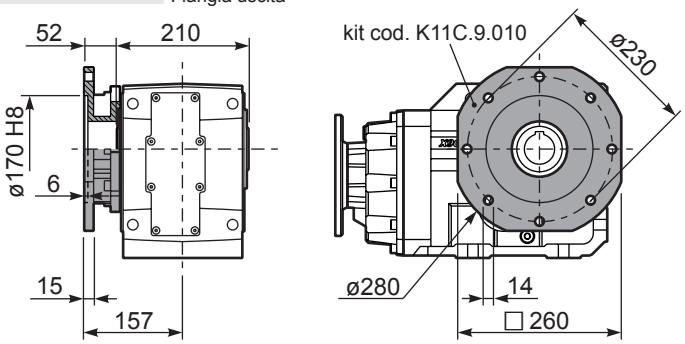


Mounting holes position
Posizione fori di montaggio

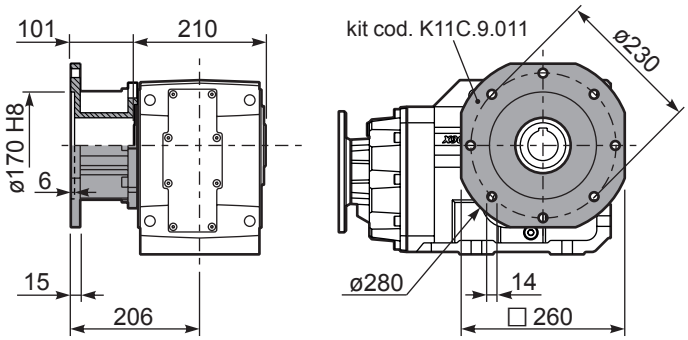
PX94C...FB.. Feet
Piedini



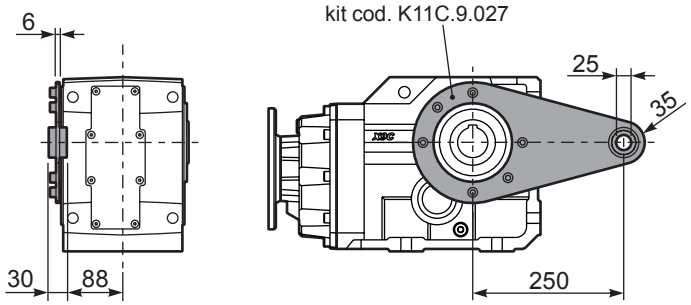
PX94C...-FC.. Output flange
Flangia uscita



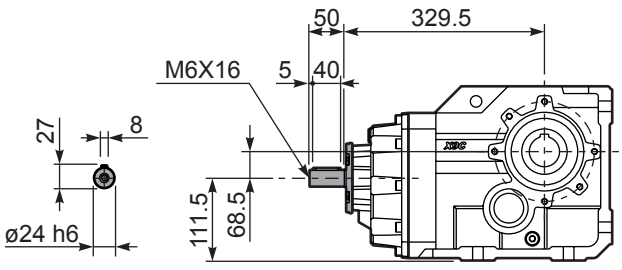
PX94C...-FL.. Output flange
Flangia uscita



PX94C...BR.. Reaction Arm
Braccio di reazione

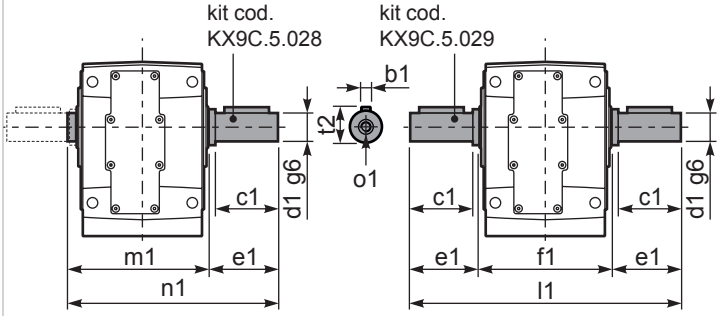


RX94C... Input shaft
Albero in entrata



PX94CA... Single shaft
Albero lento semplice

PX94CB... Double shaft
Albero lento bisp.



	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	14	100	50	105	210	420	218	323	53.5	M16
-	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -G 132	-H 160	-I 180	-L 200	B14 motor flanges - - - -	- - - -	Output Shaft ø	Ratios code
219	**6.39**	30	1180	1.1	**31.7**	**1300**							392914	01
200	**7.00**	30	1292	1.1	**31.2**	**1400**							392913	02
164	**8.55**	30	1578	1.0	**27.4**	**1500**							392911	03
140	**10.01**	22	1357	1.2	**24.9**	**1600**							302914	04
128	**10.97**	22	1486	1.1	**24.2**	**1700**							302913	05
105	**13.39**	22	1815	1.2	**24.5**	**2100**							302911	06
89	**15.71**	22	2130	1.0	**21.8**	**2200**							222914	07
81	**17.21**	22	2333	1.0	**20.8**	**2300**							222913	08
67	**21.02**	18.5	2394	1.0	**17.8**	**2400**					**not available**		222911	**standard ø60** 09
59	**23.73**	18.5	2703	1.0	**17.1**	**2600**							162914	10
54	**25.99**	18.5	2960	0.9	**16.8**	**2800**							162913	11
50	**27.93**	15	2576	1.1	**16.2**	**2900**							142914	12
45.8	**30.59**	15	2822	1.0	**14.8**	**2900**							142913	13
44.1	**31.74**	15	2928	1.0	**14.2**	**2900**							162911	14
37.5	**37.36**	11	2532	1.1	**12.1**	**2900**							142911	15
33.8	**41.37**	11	2804	1.0	**10.9**	**2900**							102914	16
30.9	**45.31**	9	2618	1.1	**10.0**	**2900**							102913	17
25.3	**55.33**	7.5	2573	1.2	**8.5**	**3000**							102911	18

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

B) **Supplied with Reduction Bushing**
Fornito con Bussola di Riduzione

B) Available on Request without reduction bushing
Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

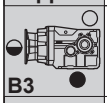
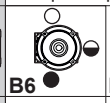
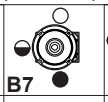
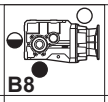
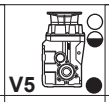
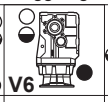
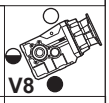
EN Unit **X103** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X103** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X103** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X103** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X103** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes.
Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

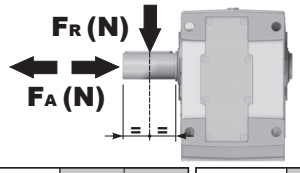
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3** ●	 **B6** ●	 **B7** ●	 **B8**	 **V5** ●	 **V6**	 **V8** ●
11.50 LT	5.50 LT	10.50 LT	7.50 LT	13.50 LT	9.50 LT	Ask
AGIP Blasia 460						

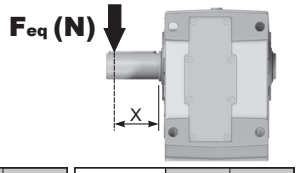
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

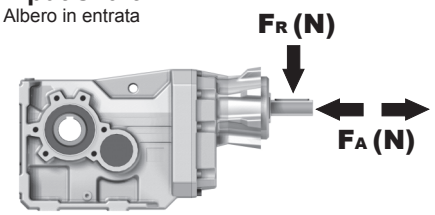
$$Feq = FR \cdot \frac{253}{X+193}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2000	10000	**140**	2800	14000	**70**	3500	17500
250	2500	12500	**120**	3000	15000	**40**	4200	21000
200	2700	13500	**85**	3200	16000	**15**	5400	27000

Input shaft
Albero in entrata



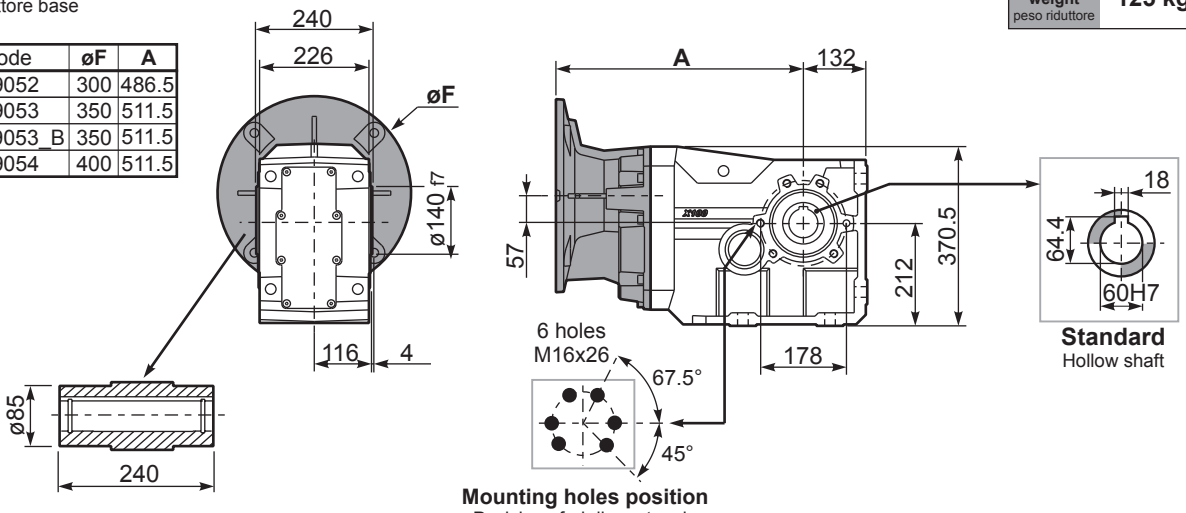
n_1	FA	FR
1400	1120	5600
900	1220	6100
500	1300	6500

tab. 2

PX103C... Basic Gearbox
Riduttore base

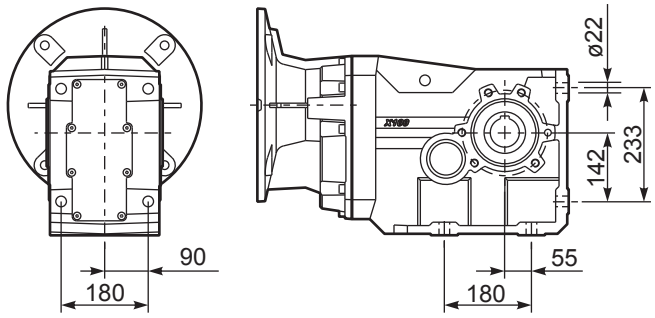
M. flanges	Kit code	øF	A
132B5	KC1109052	300	486.5
160B5	KC1109053	350	511.5
180B5	KC1109053_B	350	511.5
200B5	KC1109054	400	511.5

Gearbox weight peso riduttore: **125 kg**

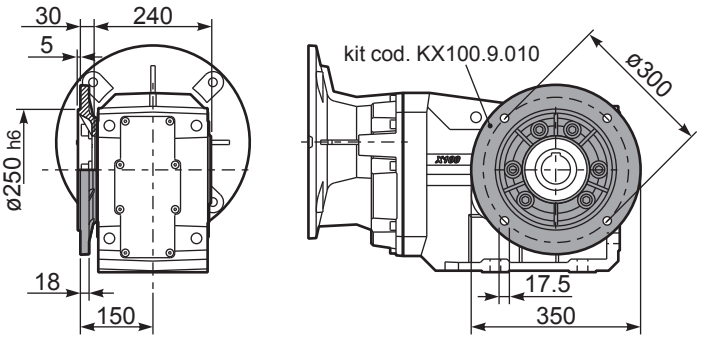


Mounting holes position
Posizione fori di montaggio

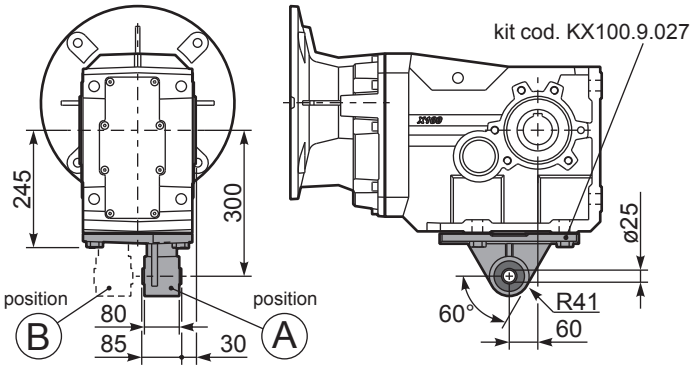
PX103...FB.. Feet
Piedini



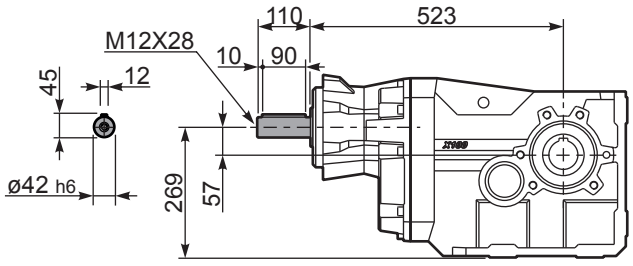
PX103...-F6.. Output flange
Flangia uscita



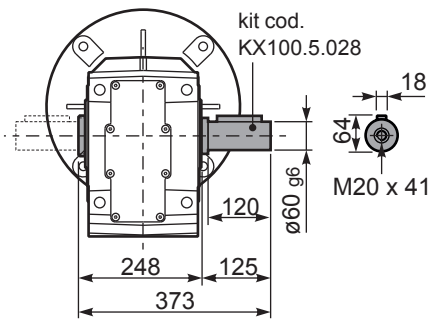
PX103...BR.. Reaction Arm
Braccio di reazione



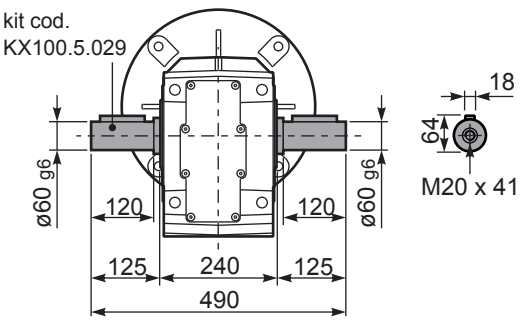
RX103... Input shaft
Albero in entrata



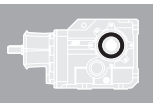
PX103A... Single shaft
Albero lento semplice



PX103B... Double shaft
Albero lento bisp.



8



▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -F	Available B5 motor flanges -G	B14 motor flanges				Output Shaft ø	Ratios code
							100 112	132	-	-	-			
28.8	**48.57**	9	2750	1.1	**9.5**	**2900**	B					30142911		01
20.5	**68.43**	7.5	3118	1.0	**7.0**	**3000**	B					20142914		02
18.7	**74.95**	5.5	2523	1.2	**6.4**	**3000**	B					20142913		03
15.1	**92.53**	5.5	3115	1.0	**5.2**	**3000**	B					16142914		04
13.8	**101.33**	4	2496	1.2	**4.7**	**3000**	B					16142913		05
11.6	**120.33**	4	2963	1.0	**4.0**	**3000**	B					13142914		06
11.3	**123.75**	4	3048	1.0	**3.9**	**3000**	B					16142911		07
10.6	**131.78**	4	3245	0.9	**3.6**	**3000**	B					13142913		08
9.5	**147.28**	3	2731	1.1	**3.2**	**3000**	B					11142914		09
8.7	**161.30**	3	2990	1.0	**3.0**	**3000**	B					11142913		10
7.1	**196.98**	2.2	2689	1.1	**2.4**	**3000**	B					11142911		11
6.6	**212.99**	2.2	2907	1.0	**2.2**	**3000**	B					8142914		12
6.0	**233.26**	2.2	3184	0.9	**2.0**	**3000**	B					8142913		13
4.9	**284.86**	2.2	3889	0.8	**1.7**	**3000**	B					8142911		14

not available — **standard ø60**

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

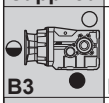
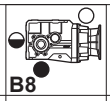
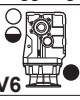
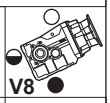
EN Unit **X104** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X104** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X104** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X104** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X104** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

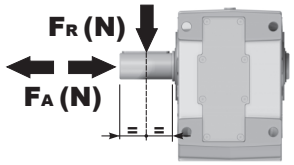
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 B3	B6	B7	 B8	V5	 V6	 V8
12.00 LT	6.00 LT	11.50 LT	8.00 LT	14.50 LT	11.00 LT	Ask
AGIP Blasia 460						

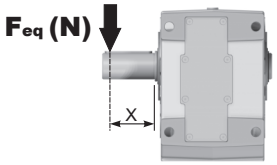
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

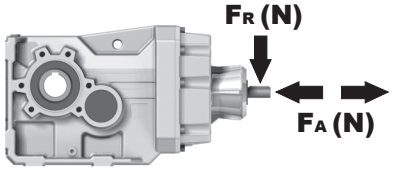
$$Feq = FR \cdot \frac{253}{X+193}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2000	10000	**140**	2800	14000	**70**	3500	17500
250	2500	12500	**120**	3000	15000	**40**	4200	21000
200	2700	13500	**85**	3200	16000	**15**	5400	27000

Input shaft
Albero in entrata



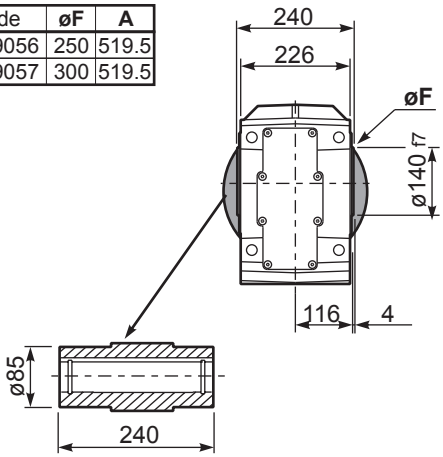
n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

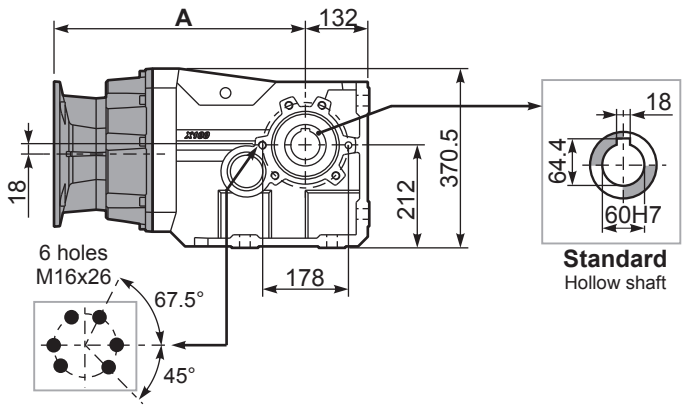
tab. 2

PX104C... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	118 kg

M. flanges	Kit code	øF	A
100/112B5	KC1109056	250	519.5
132B5	KC1109057	300	519.5

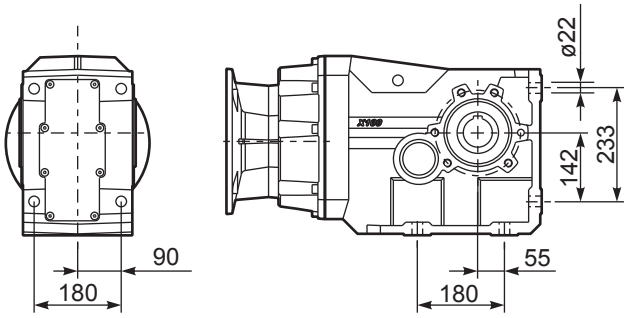




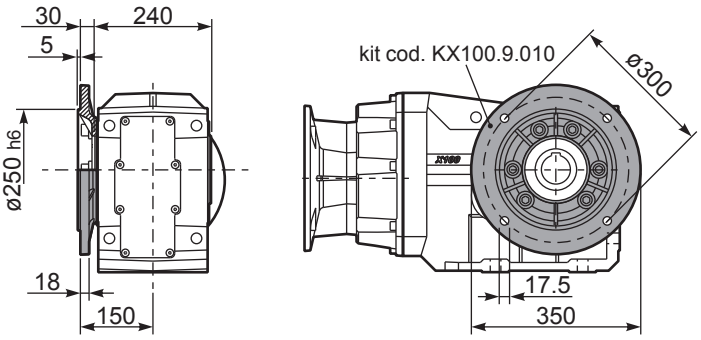
Standard
Hollow shaft

Mounting holes position
Posizione fori di montaggio

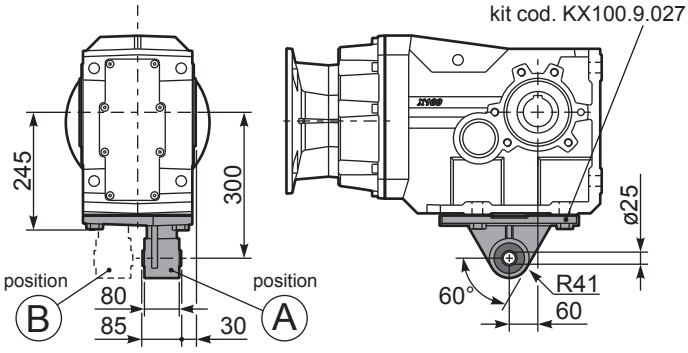
PX104...FB.. Feet
Piedini



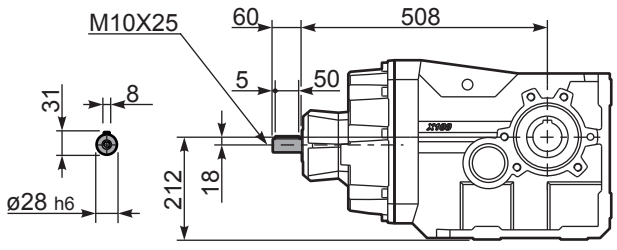
PX104...-F6.. Output flange
Flangia uscita



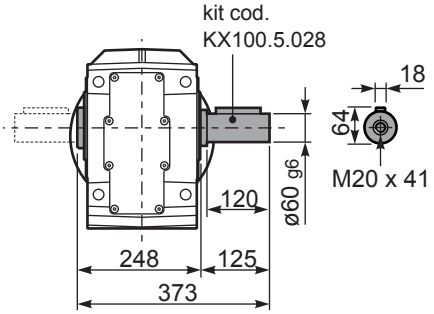
PX104...BR.. Reaction Arm
Braccio di reazione



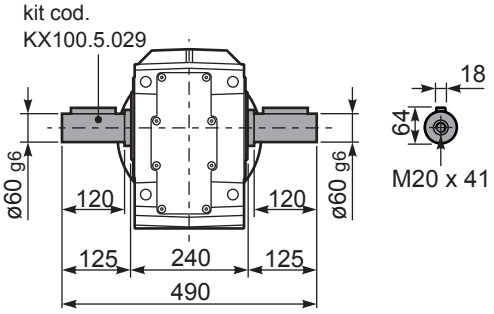
RX104... Input shaft
Albero in entrata

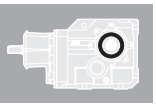


PX104A... Single shaft
Albero lento semplice



PX104B... Double shaft
Albero lento bisp.





▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -G 132	-H 160	-I 180	-L 200	CA 225	B14 motor flanges – –	- -	- -		Output Shaft ø	Ratios code
219	**6.39**	45	1757	1.4	**61.0**	**2500**									392914		01
200	**7.00**	45	1925	1.4	**59.0**	**2650**									392913		02
164	**8.55**	45	2350	1.2	**51.1**	**2800**									392911		03
140	**10.01**	45	2752	1.2	**49.8**	**3200**									302914		04
128	**10.97**	45	3014	1.1	**45.5**	**3200**									302913		05
105	**13.39**	37	3025	1.1	**39.6**	**3400**									302911		06
89	**15.71**	37	3550	1.0	**34.7**	**3500**									222914		07
81	**17.21**	37	3888	1.0	**33.5**	**3700**									222913		08
67	**21.02**	30	3877	1.0	**29.7**	**4000**						**not available**			222911	**standard ø70**	09
59	**23.73**	30	4378	0.9	**26.9**	**4100**									162914		10
54	**25.99**	22	3523	1.2	**25.8**	**4300**									162913		11
50	**27.93**	22	3786	1.1	**24.0**	**4300**									142914		12
45.8	**30.59**	22	4146	1.1	**22.9**	**4500**									142913		13
44.1	**31.74**	22	4302	1.0	**22.1**	**4500**									162911		14
37.5	**37.36**	18.5	4255	1.1	**18.8**	**4500**									142911		15
33.8	**41.37**	18.5	4712	1.0	**17.0**	**4500**									102914		16
30.9	**45.31**	15	4179	1.1	**15.5**	**4500**									102913		17
25.3	**55.33**	11	3750	1.2	**12.7**	**4500**									102911		18

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

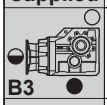
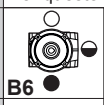
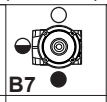
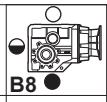
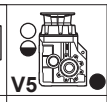
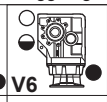
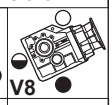
EN Unit **X113** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X113** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X113** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X113** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X113** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

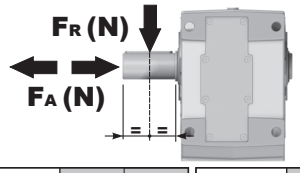
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3** ●	 **B6** ●	 **B7** ●	 **B8** ●	 **V5** ●	 **V6** ●	 **V8** ●
13.50 LT	8.00 LT	15.50 LT	14.50 LT	22.00 LT	13.00 LT	Ask
AGIP Blasia 460						

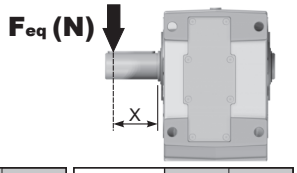
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

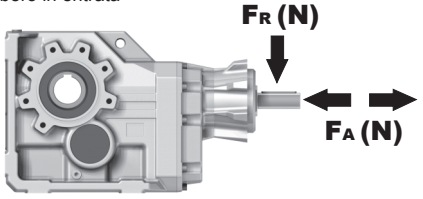
$$Feq = FR \cdot \frac{325.5}{X+255.5}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2100	10500	**140**	3100	15500	**70**	4200	21000
250	2600	13000	**120**	3240	16200	**40**	5600	28000
200	3000	15000	**85**	3600	18000	**15**	8000	40000

Input shaft
Albero in entrata



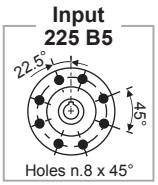
n_1	FA	FR
1400	1120	5600
900	1220	6100
500	1300	6500

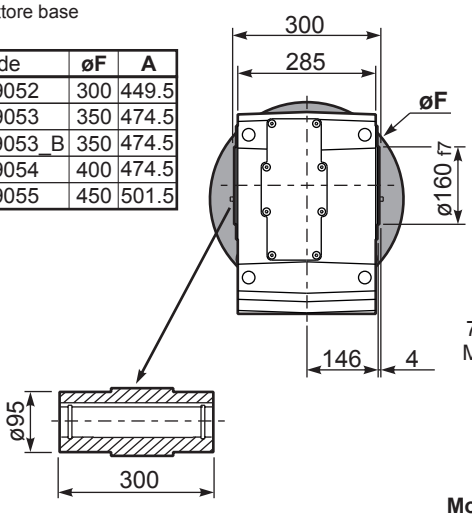
tab. 2

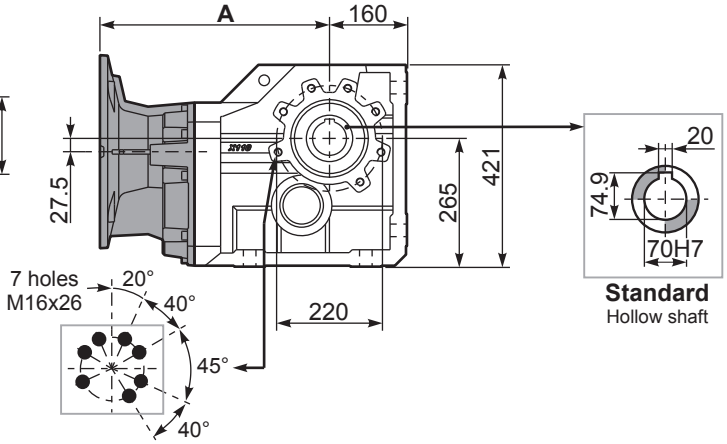
PX113C... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore: **170 kg**

M. flanges	Kit code	øF	A
132B5	KC1109052	300	449.5
160B5	KC1109053	350	474.5
180B5	KC1109053_B	350	474.5
200B5	KC1109054	400	474.5
225B5	KC1109055	450	501.5

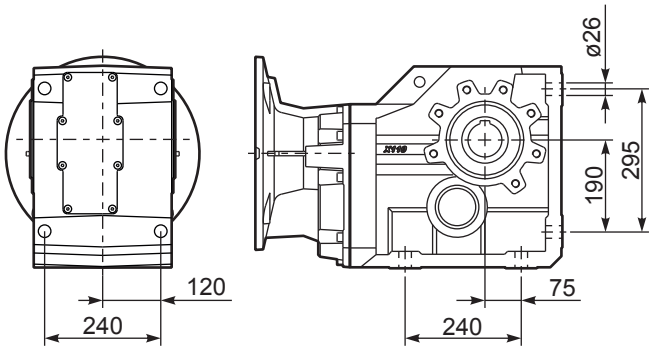




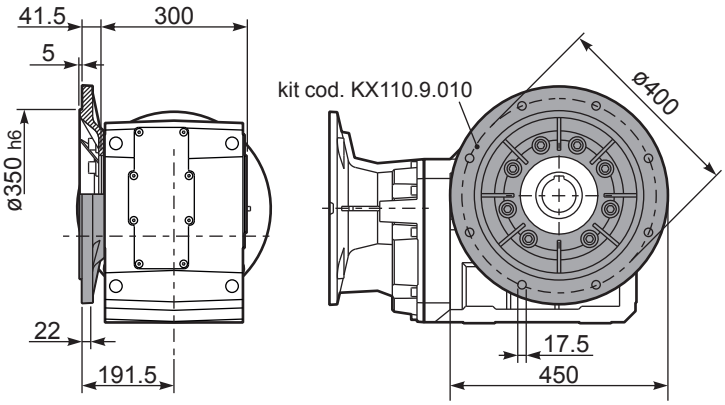


Mounting holes position
Posizione fori di montaggio

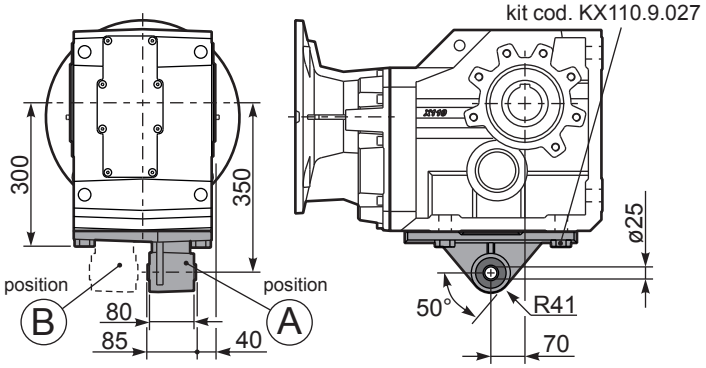
PX113...FB.. Feet
Piedini



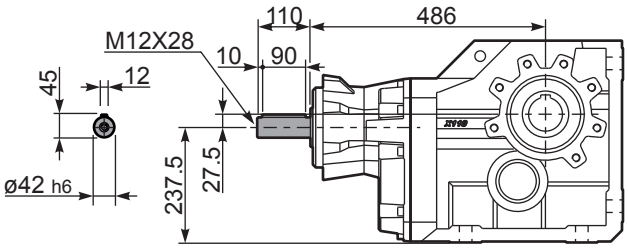
PX113...-F7.. Output flange
Flangia uscita



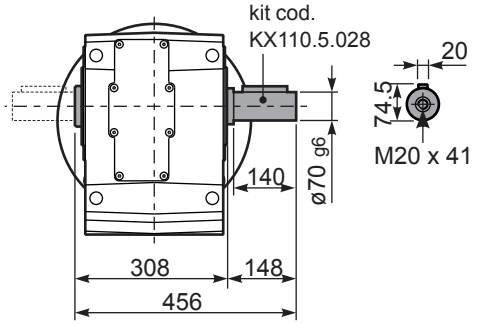
PX113...BR.. Reaction Arm
Braccio di reazione



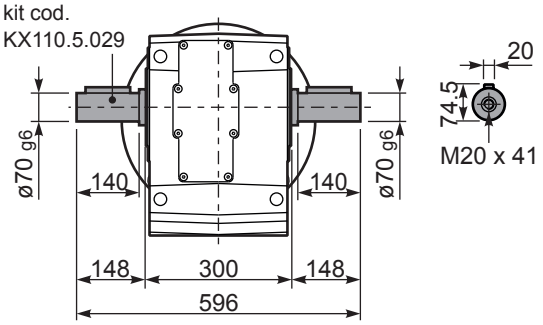
RX113... Input shaft
Albero in entrata



PX113A... Single shaft
Albero lento semplice



PX113B... Double shaft
Albero lento bisp.



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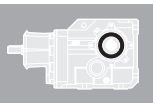


▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -F: 100 112	B5 -G: 132	B5 -H: 160	B14 motor flanges - - -	B14 - - -	B14 - - -		Output Shaft ø	Ratios code
28.8	**48.57**	15	4390	1.0	**14.8**	**4500**	B						30142911		01
20.5	**68.43**	11	4545	1.0	**10.7**	**4600**	B						20142914		02
18.7	**74.95**	11	4977	0.9	**9.8**	**4600**	B						20142913		03
15.1	**92.53**	7.5	4216	1.1	**7.9**	**4600**	B						16142914		04
13.8	**101.33**	7.5	4617	1.0	**7.2**	**4600**	B						16142913		05
11.6	**120.33**	5.5	4051	1.1	**6.1**	**4600**	B						13142914		06
11.3	**123.75**	5.5	4166	1.1	**5.8**	**4500**	B						16142911		07
10.6	**131.78**	5.5	4436	1.0	**5.6**	**4600**	B						13142913		08
9.5	**147.28**	5.5	4958	0.9	**5.0**	**4600**	B						11142914		09
8.7	**161.30**	4	3972	1.2	**4.5**	**4600**	B						11142913		10
7.1	**196.98**	3	3652	1.2	**3.6**	**4500**	B						11142911		11
6.6	**212.99**	3	3949	1.2	**3.4**	**4600**	B						8142914		12
6.0	**233.26**	3	4324	1.1	**3.1**	**4600**	B						8142913		13
4.9	**284.86**	2.2	3889	1.2	**2.5**	**4500**	B						8142911		14

not available — **standard ø70**

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

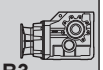
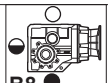
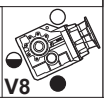
EN Unit **X114** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X114** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X114** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X114** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X114** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

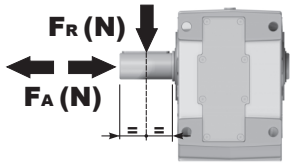
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	**B6** ●	**B7** ●	 **B8** ●	**V5** ●	**V6** ●	 **V8** ●
14.50 LT	8.50 LT	16.50 LT	16.00 LT	23.00 LT	14.50 LT	Ask
AGIP Blasia 460						

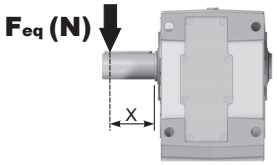
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

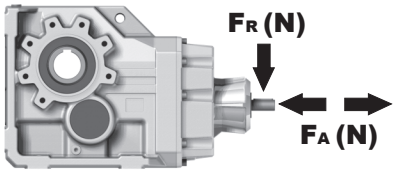
$$Feq = FR \cdot \frac{325.5}{X+255.5}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2100	10500	**140**	3100	15500	**70**	4200	21000
250	2600	13000	**120**	3240	16200	**40**	5600	28000
200	3000	15000	**85**	3600	18000	**15**	8000	40000

Input shaft
Albero in entrata



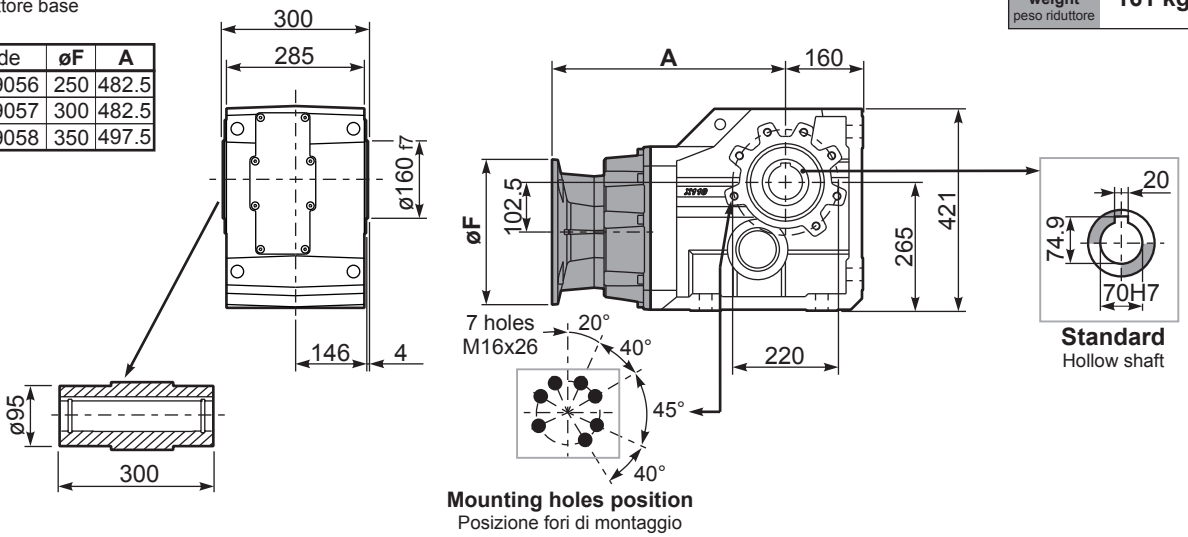
n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2

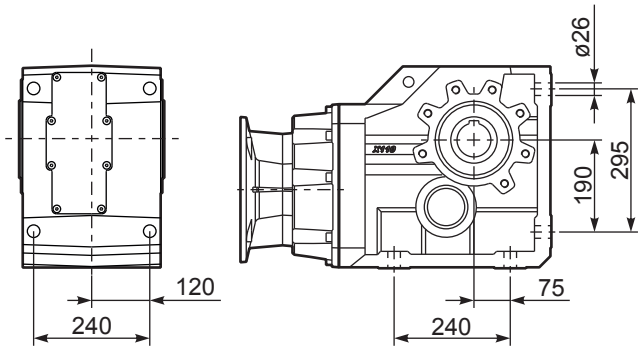
PX114C... Basic Gearbox
Riduttore base

M. flanges	Kit code	øF	A
100/112B5	KC1109056	250	482.5
132B5	KC1109057	300	482.5
160B5	KC1109058	350	497.5

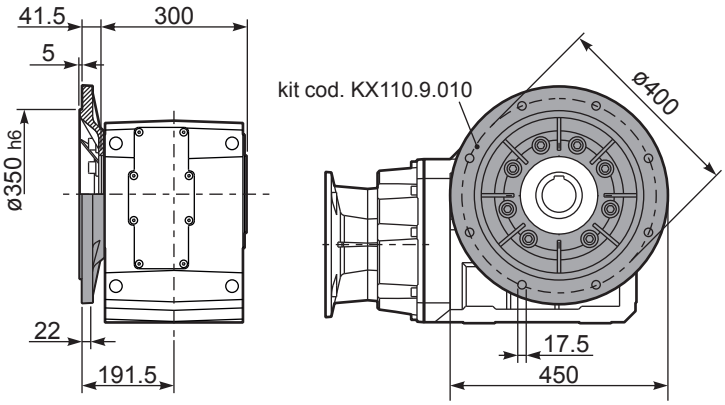
Gearbox weight peso riduttore: **161 kg**



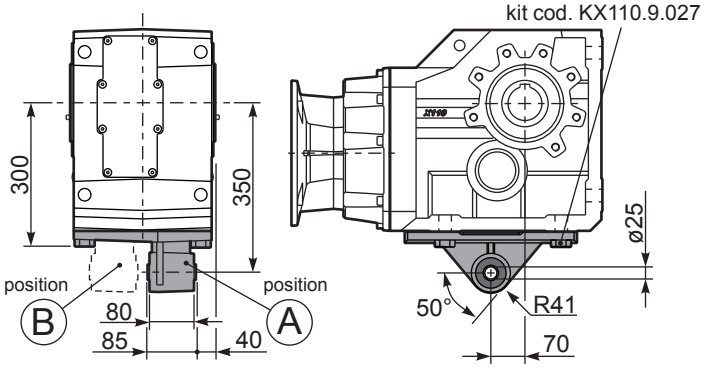
PX114...FB.. Feet
Piedini



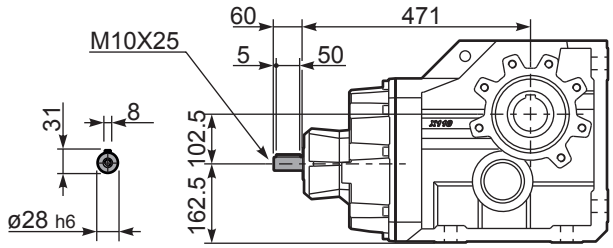
PX114...-F7.. Output flange
Flangia uscita



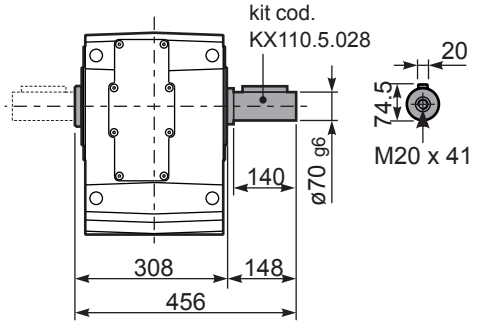
PX114...BR.. Reaction Arm
Braccio di reazione



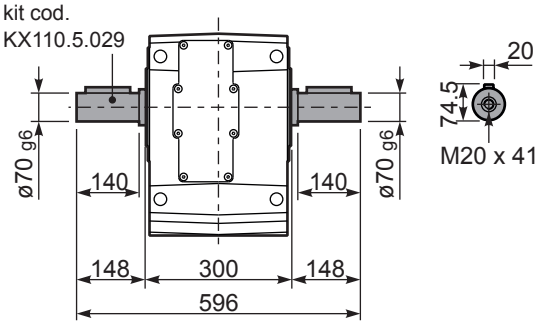
RX114... Input shaft
Albero in entrata



PX114A... Single shaft
Albero lento semplice



PX114B... Double shaft
Albero lento bisp.



8

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
176	**7.94**	7.5	369	1.0	**7.5**	**380**	B									302418		01
153	**9.13**	7.5	425	0.9	**6.7**	**390**	B									302416		02
131	**10.66**	5.5	366	1.1	**6.0**	**410**	B									302414		03
94	**14.97**	5.5	514	1.1	**6.0**	**580**	B									202418		04
81	**17.21**	5.5	591	1.0	**5.4**	**600**	B									202416		05
69	**20.24**	5.5	695	1.0	**5.2**	**675**	B									162418	**standard**	06
60	**23.27**	4	585	1.2	**4.5**	**675**	B									162416	**ø40**	07
53	**26.31**	4	661	1.0	**4.0**	**675**	B									132418		08
46.3	**30.25**	4	760	0.9	**3.5**	**675**	B									132416		09
39.6	**35.32**	3	668	1.0	**3.0**	**675**	B									132414	ø42	10
37.8	**37.03**	3	701	1.0	**2.8**	**675**	B									112416	On request	11
32.4	**43.23**	2.2	602	1.1	**2.4**	**675**	B									112414		12
30.1	**46.58**	2.2	649	1.0	**2.3**	**675**	B									82418		13
26.1	**53.55**	2.2	746	0.9	**2.0**	**675**	B									82416		14
22.4	**62.52**	1.5	600	1.1	**1.7**	**675**	B									82414		15
19.0	**73.75**	1.1	517	1.1	**1.2**	**580**	B									62416		16
16.3	**86.09**	1.1	604	1.1	**1.2**	**675**	B									62414		17

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available / Flange Motore Disponibili

B) **Supplied with Reduction Bushing** / Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** / Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** / Posizione Fori Flangia Motore

EN Unit **113C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **113C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **113C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **113C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

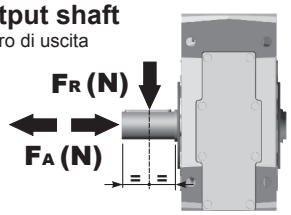
E El reductor tamaño **113C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
4.00 LT	2.60 LT	2.60 LT	2.60 LT	5.15 LT	2.20 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

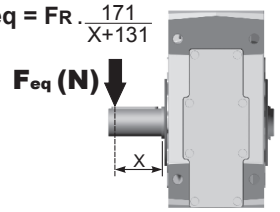
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$F_{eq} = F_R \cdot \frac{171}{X+131}$



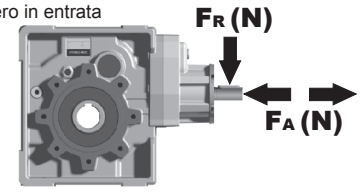
n_2	FA	FR
300	640	3200
250	700	3500
200	740	3700

n_2	FA	FR
140	860	4300
120	900	4500
85	1000	5000

n_2	FA	FR
70	1080	5400
40	1300	6500
15	1840	9200

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



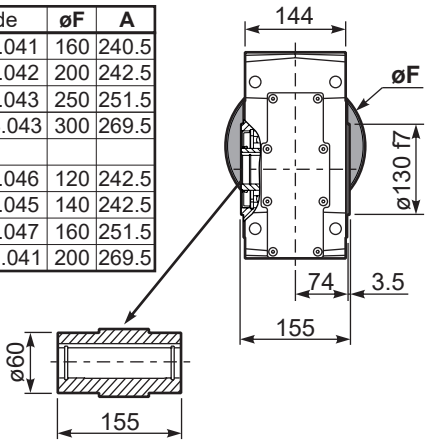
n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

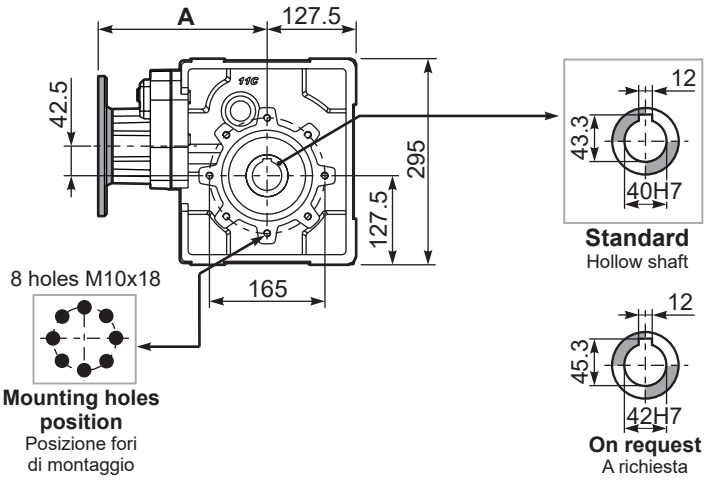
tab. 2

P113CC... Basic Gearbox
Riduttore base

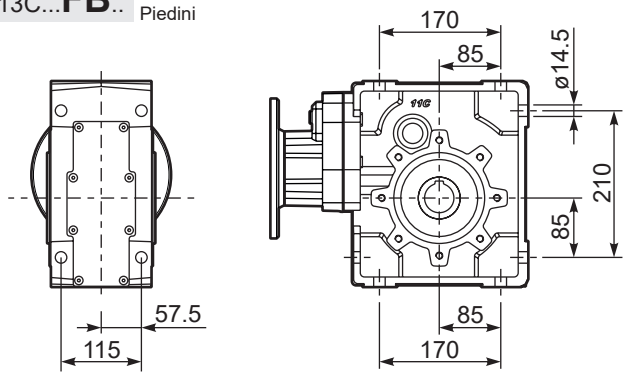
Gearbox weight peso riduttore	38.0 kg

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	240.5
80/90B5	K023.4.042	200	242.5
100/112B5	K023.4.043	250	251.5
132B5	KC50.4.043	300	269.5
80B14	K085.4.046	120	242.5
90B14	K085.4.045	140	242.5
100/112B14	K085.4.047	160	251.5
132B14	KC50.4.041	200	269.5

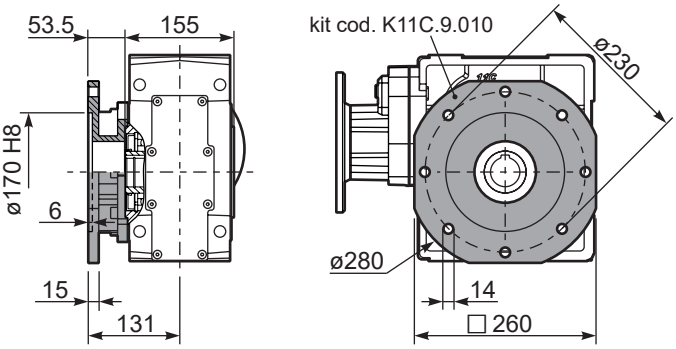




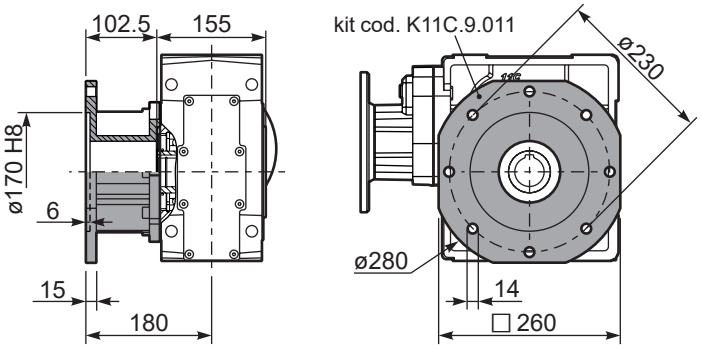
P113C...FB.. Feet
Piedini



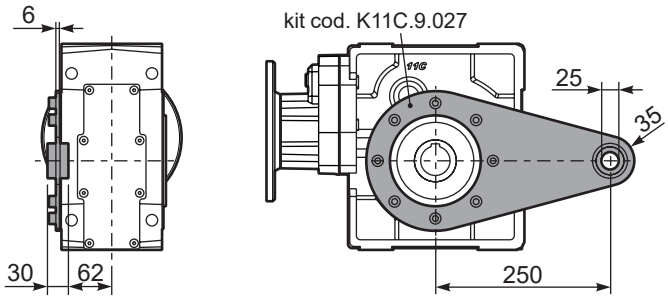
P113C...-FC.. Output flange
Flangia uscita



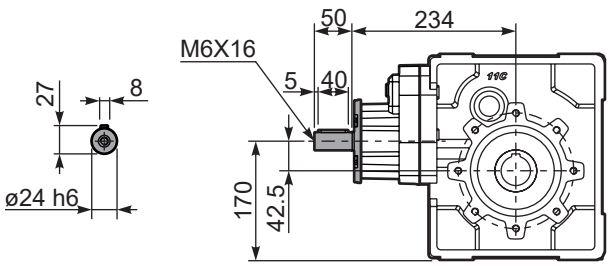
P113C...-FL.. Output flange
Flangia uscita



P113C...BR.. Reaction Arm
Braccio di reazione

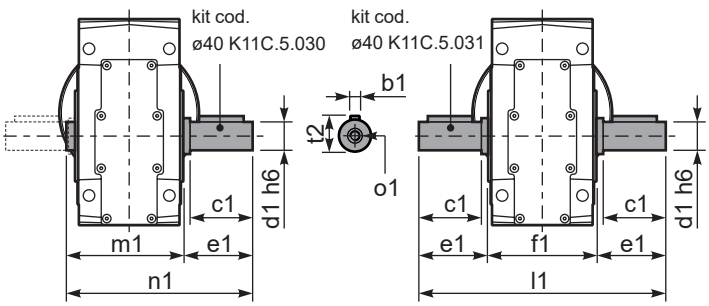


R113C... Input shaft
Albero in entrata



P113CA... Single shaft
Albero lento semplice

P113CB... Double shaft
Albero lento bisp.



	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
ø40 Standard	12	80	40	84.5	155	324	164.5	249	43	M12
On request	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
18.7	**74.79**	1.5	704	1.0	1.4	675	B				C	C		19132418		01
16.3	**85.99**	1.1	591	1.1	1.3	675	B				C	C		19132416		02
14.0	**99.66**	1.1	685	1.0	1.1	675	B				C	C		17132416		03
12.0	**116.35**	0.75	548	1.2	0.92	675	B				C	C		17132414		04
11.5	**121.45**	0.75	572	1.2	0.89	675	B				C	C		13132418		05
10.0	**139.64**	0.75	658	1.0	0.77	675	B				C	C		13132416	**standard**	06
9.2	**152.21**	0.75	717	0.9	0.71	675	B				C	C		19082416	**ø40**	07
8.6	**163.02**	0.55	567	1.2	0.66	675	B				C	C		13132414		08
7.9	**177.69**	0.55	618	1.1	0.61	675	B				C	C		19082414		09
6.8	**205.95**	0.55	716	0.9	0.52	675	B				C	C		17082414	ø42	10
6.3	**222.52**	0.55	774	0.9	0.48	675	B				C	C		10132414	On request	11
5.6	**248.76**	0.37	578	1.2	0.43	675	B				C	C		9132416		12
4.8	**290.41**	0.37	675	1.0	0.37	675	B				C	C		9132414		13
4.1	**337.39**	0.37	784	0.9	0.32	675	B				C	C		10082416		14
3.6	**393.88**	0.25	618	1.1	0.27	675	B				C	C		10082414		15
3.2	**440.33**	0.25	690	1.0	0.24	675	B				C	C		9082416		16
2.7	**514.06**	0.18	616	1.1	0.21	675	B				C	C		9082414		17
2.4	**581.44**	0.18	697	1.0	0.18	675	B				C	C		7082416		18
2.1	**678.79**	0.12	526	1.3	0.16	675	B				C	C		7082414		19

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

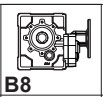
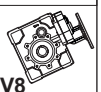
EN Unit **114C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **114C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **114C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **114C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

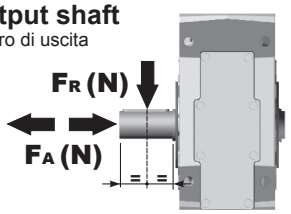
E El reductor tamaño **114C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	 **B8**	**V5**	**V6**	 **V8**
4.10 LT	2.70 LT	2.70 LT	2.70 LT	5.30 LT	2.35 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

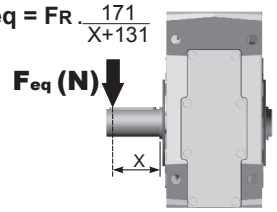
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



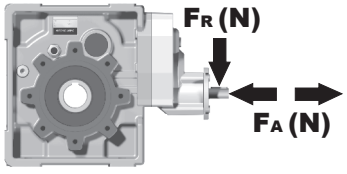
$Feq = FR \cdot \frac{171}{X+131}$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	640	3200	**140**	860	4300	**70**	1080	5400
250	700	3500	**120**	900	4500	**40**	1300	6500
200	740	3700	**85**	1000	5000	**15**	1840	9200

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



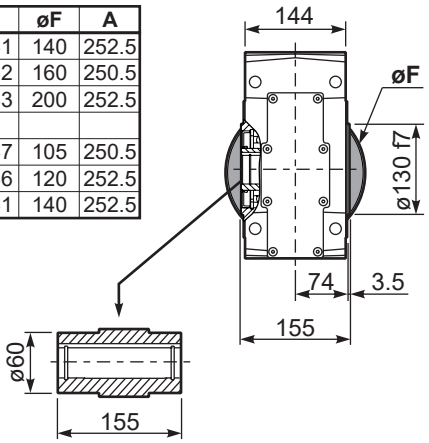
n_1	FA	FR
1400	240	1200
900	280	1400
500	310	1700

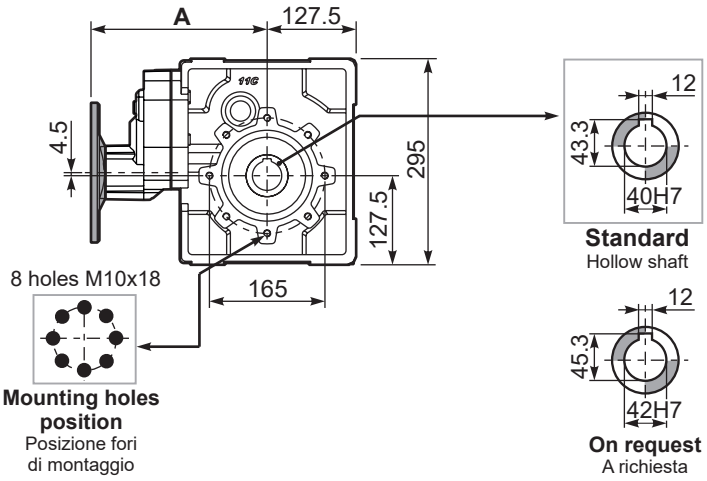
tab. 2

P114CC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	38.0 kg

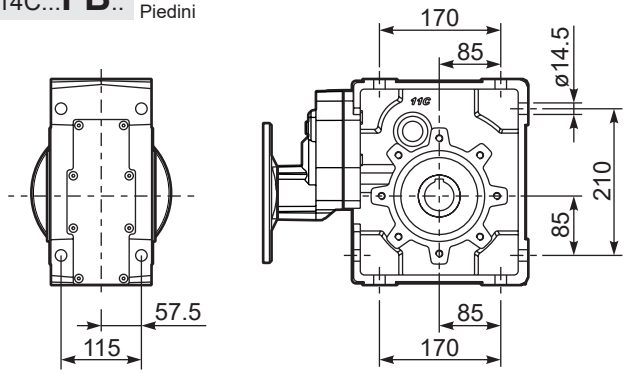
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	252.5
71B5	K063.4.042	160	250.5
80/90B5	K063.4.043	200	252.5
71B14	K063.4.047	105	250.5
80B14	K063.4.046	120	252.5
90B14	K063.4.041	140	252.5



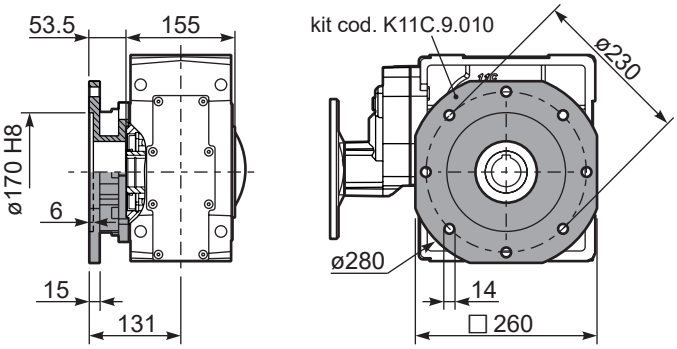


Mounting holes position
Posizione fori di montaggio

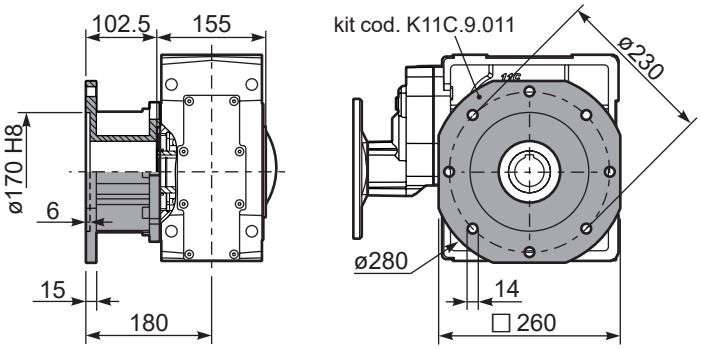
P114C...FB.. Feet
Piedini



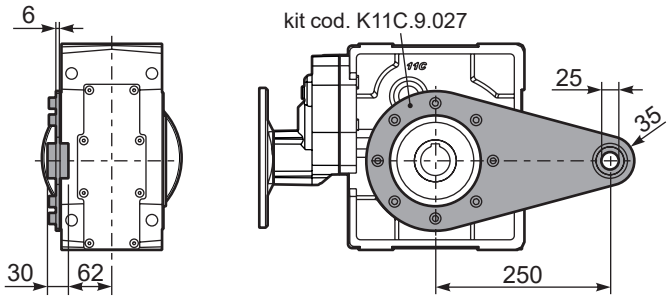
P114C...-FC.. Output flange
Flangia uscita



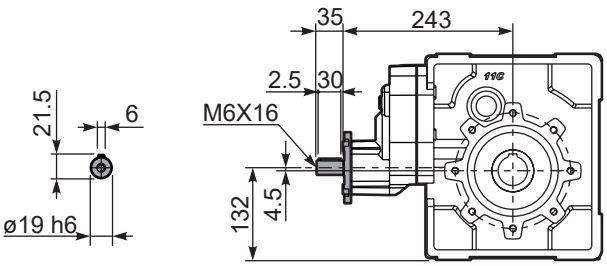
P114C...-FL.. Output flange
Flangia uscita



P114C...BR.. Reaction Arm
Braccio di reazione

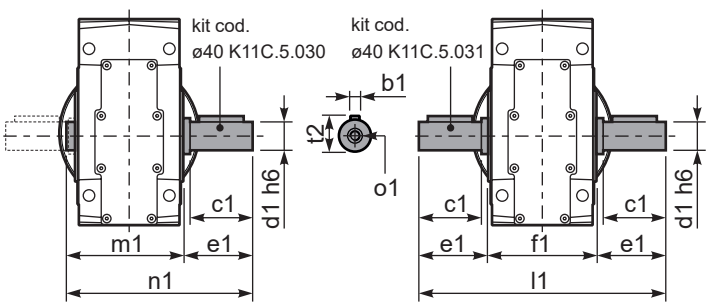


R114C... Input shaft
Albero in entrata



P114CA... Single shaft
Albero lento semplice

P114CB... Double shaft
Albero lento bisp.



	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
ø40 Standard	12	80	40	84.5	155	324	164.5	249	43	M12
On request	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
145	**9.69**	9	560	1.3	**12.2**	**755**	B									302418		01
126	**11.09**	9	641	1.1	**9.6**	**680**	B									302416		02
108	**12.90**	9	746	1.1	**9.6**	**790**	B									302414		03
77	**18.26**	7.5	849	1.1	**8.0**	**935**	B									202418		04
67	**20.91**	7.5	972	1.0	**7.5**	**1000**	B									202416		05
58	**24.32**	5.5	835	1.2	**6.4**	**1000**	B									202414	**standard**	06
49.5	**28.27**	5.5	971	1.0	**5.5**	**1000**	B									162416	**ø45**	07
42.6	**32.88**	4	826	1.2	**4.7**	**1000**	B									162414		08
38.1	**36.76**	4	924	1.1	**4.2**	**1000**	B									132416		09
32.7	**42.76**	3	809	1.2	**3.6**	**1000**	B									132414	ø40	10
31.1	**45.00**	3	851	1.2	**3.5**	**1000**	B									112416	on request	11
26.8	**52.33**	3	990	1.0	**3.0**	**1000**	B									112414		12
24.6	**56.82**	2.2	791	1.1	**2.3**	**850**	B									82418		13
21.5	**65.07**	2.2	906	1.1	**2.3**	**975**	B									82416		14
18.5	**75.68**	2.2	1054	0.9	**2.1**	**1000**	B									82414		15
15.6	**89.61**	1.1	628	1.1	**1.2**	**710**	B									62416		16
13.4	**104.22**	1.1	731	1.1	**1.2**	**820**	B									62414		17

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **133C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **133C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **133C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **133C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

E El reductor tamaño **133C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
6.00 LT	4.30 LT	4.30 LT	3.30 LT	7.40 LT	3.10 LT	Ask

AGIP Blasia 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

F_R (N)

F_A (N)

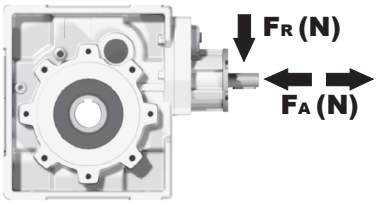
$F_{eq} = F_R \cdot \frac{184.5}{X+144.5}$

F_{eq} (N)

n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	800	4000	**140**	1120	5600	**70**	1400	7000
250	900	4500	**120**	1200	6000	**40**	1700	8500
200	960	4800	**85**	1300	6500	**15**	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



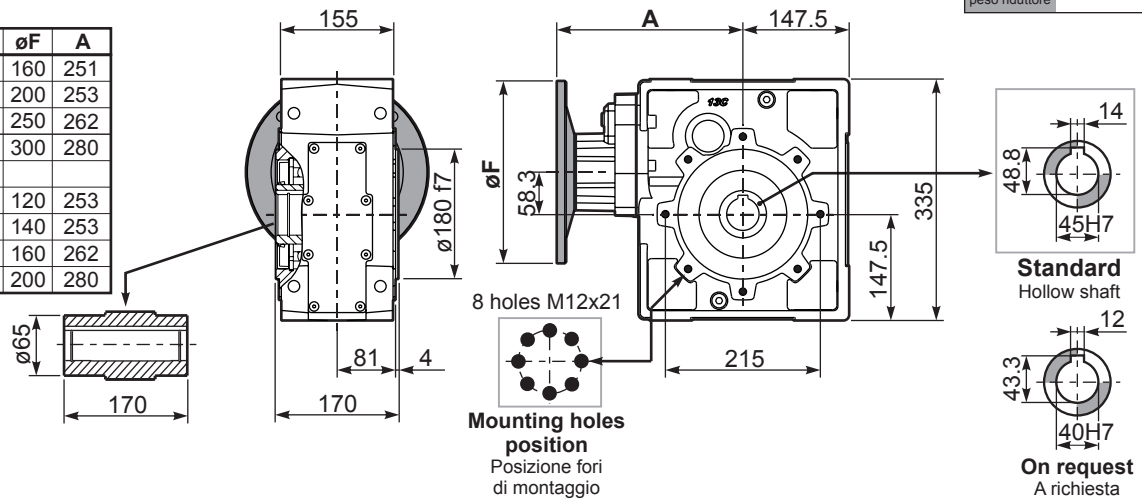
n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

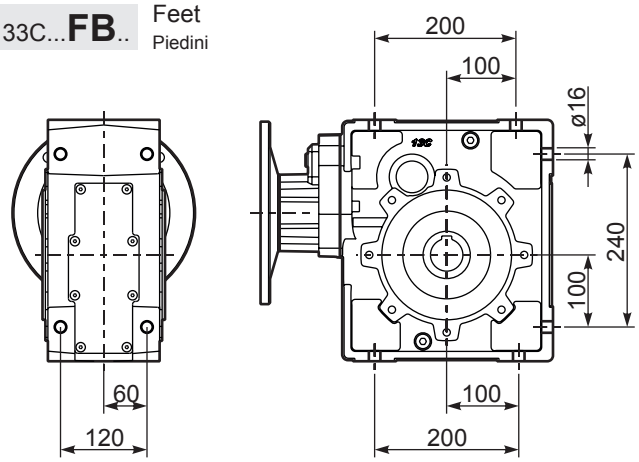
P133CC... Basic gearbox
Riduttore base

Gearbox weight / peso riduttore: **53.5 kg**

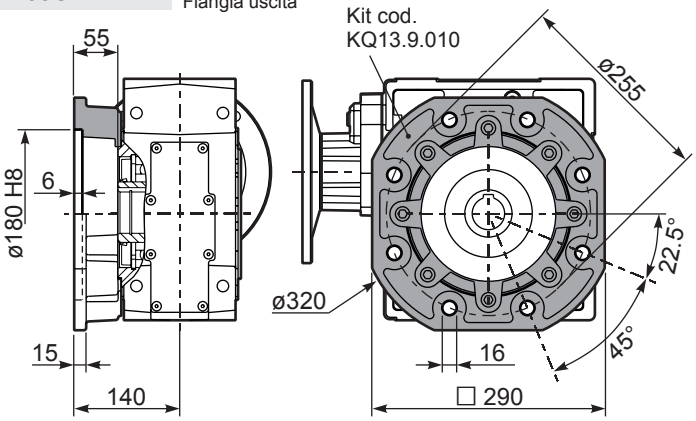
M. flanges	Kit code	øF	A
71B5	K023.4.041	160	251
80/90B5	K023.4.042	200	253
100/112B5	K023.4.043	250	262
132B5	KC50.4.043	300	280
80B14	K085.4.046	120	253
90B14	K085.4.045	140	253
100/112B14	K085.4.047	160	262
132B14	KC50.4.041	200	280



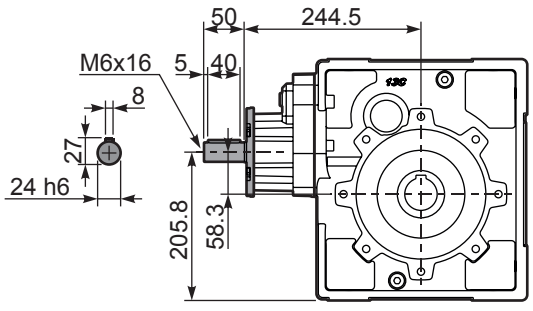
P133C...FB.. Feet
Piedini



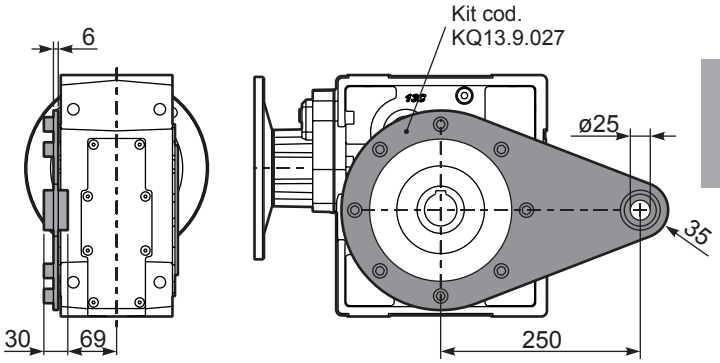
P133C...-FC.. Output flange
Flangia uscita



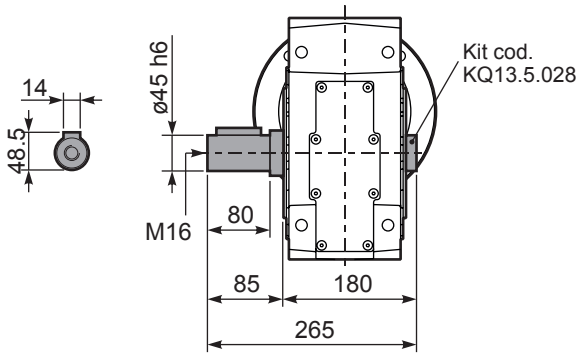
R133C... Input Shaft
Albero in entrata



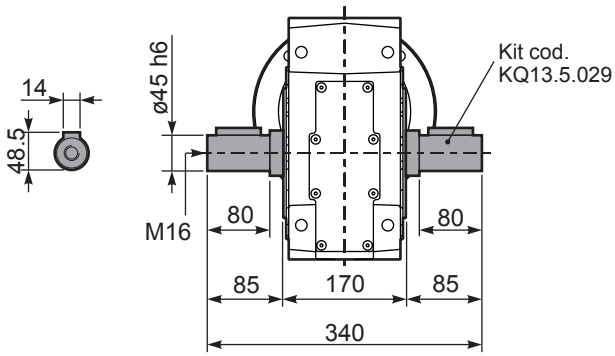
P133C...BR.. Reaction arm
Braccio di reazione



P133CA.. Single output Shaft
Albero lento semplice



P133CB.. Double Input Shaft
Albero lento bisporgente



8

▪ QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min^{-1}

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
15.3	**91.23**	1.5	858	1.2	**1.7**	**1000**	B				C	C		19132418		01
13.4	**104.48**	1.5	983	1.0	**1.5**	**1000**	B				C	C		19132416		02
11.6	**121.10**	1.5	1139	0.9	**1.3**	**1000**	B				C	C		17132416		03
9.9	**140.84**	1.1	968	1.0	**1.1**	**1000**	B				C	C		17132414		04
8.5	**165.32**	1.1	1136	0.9	**0.96**	**1000**	B				C	C		15132414		05
7.6	**184.94**	0.75	872	1.1	**0.86**	**1000**	B				C	C		19082416		06
7.1	**197.34**	0.75	930	1.1	**0.81**	**1000**	B				C	C		13132414	**standard**	07
6.5	**215.10**	0.75	1014	1.0	**0.74**	**1000**	B				C	C		19082414	**ø45**	08
6.0	**231.60**	0.55	805	1.2	**0.69**	**1000**	B				C	C		10132416		09
5.6	**249.31**	0.55	867	1.2	**0.64**	**1000**	B				C	C		17082414		10
5.2	**269.37**	0.55	937	1.1	**0.59**	**1000**	B				C	C		10132414	ø40	11
4.8	**292.64**	0.55	1018	1.0	**0.54**	**1000**	B				C	C		15082414	on request	12
4.6	**302.26**	0.55	1051	1.0	**0.53**	**1000**	B				C	C		9132416		13
4.0	**349.30**	0.37	812	1.2	**0.46**	**1000**	B				C	C		13082414		14
3.5	**399.12**	0.37	928	1.1	**0.40**	**1000**	B				C	C		7132416		15
2.9	**476.80**	0.37	1108	0.9	**0.33**	**1000**	B				C	C		10082414		16
2.2	**622.28**	0.25	976	1.0	**0.26**	**1000**	B				C	C		9082414		17
1.7	**821.70**	0.18	985	1.0	**0.19**	**1000**	B				C	C		7082414		18

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

B) **Supplied with Reduction Bushing** Fornito con Bussola di Riduzione

B) **Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione

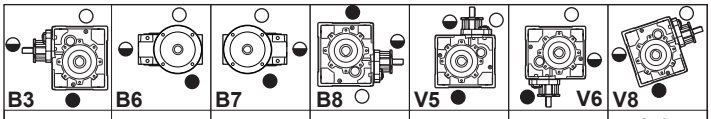
C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **134C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **134C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **134C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **134C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile.
L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur



B3	B6	B7	B8	V5	V6	V8
6.10 LT	4.40 LT	4.40 LT	3.40 LT	7.50 LT	3.20 LT	Ask

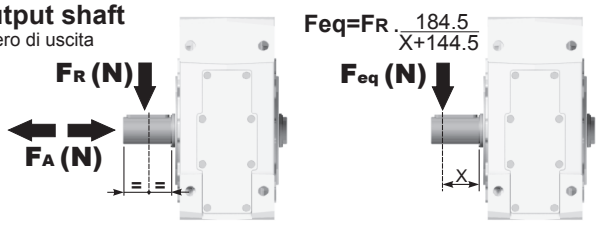
AGIP Blasia 460

For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

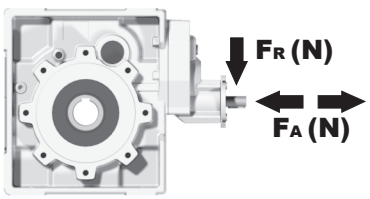
Output shaft
Albero di uscita



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	800	4000	**140**	1120	5600	**70**	1400	7000
250	900	4500	**120**	1200	6000	**40**	1700	8500
200	960	4800	**85**	1300	6500	**15**	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

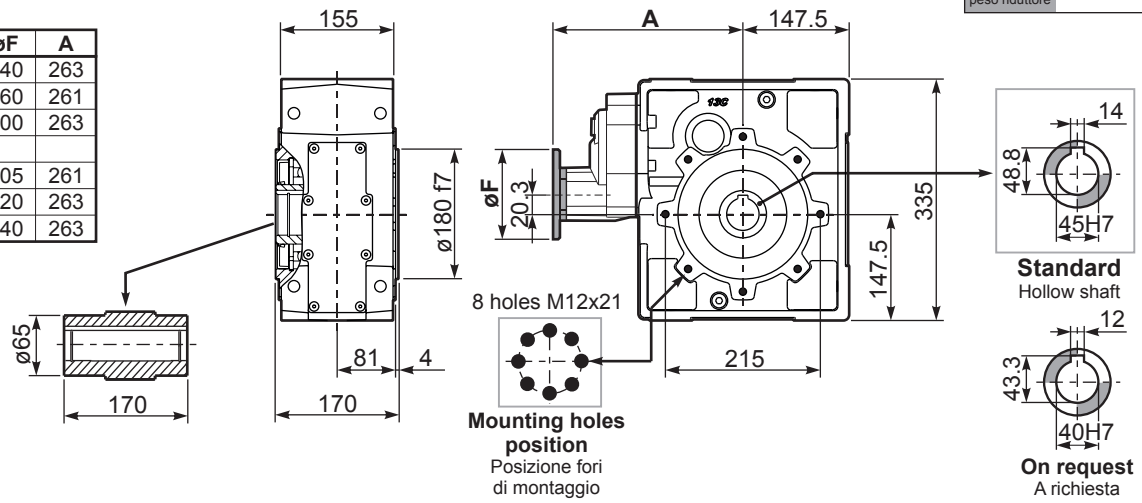
tab. 2

E El reductor tamaño **134C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

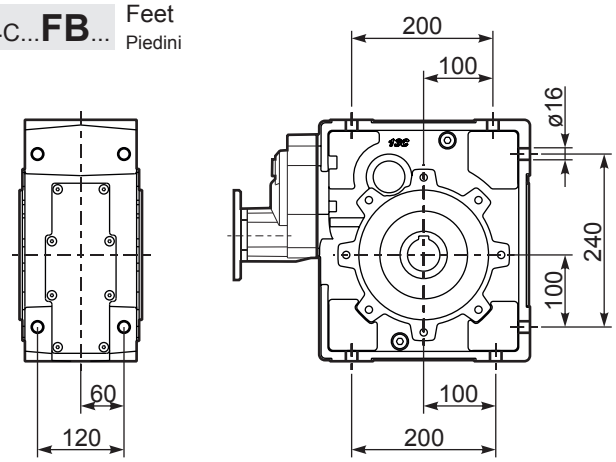
P134CC... Basic gearbox
Riduttore base

Gearbox weight / peso riduttore: **53.5 kg**

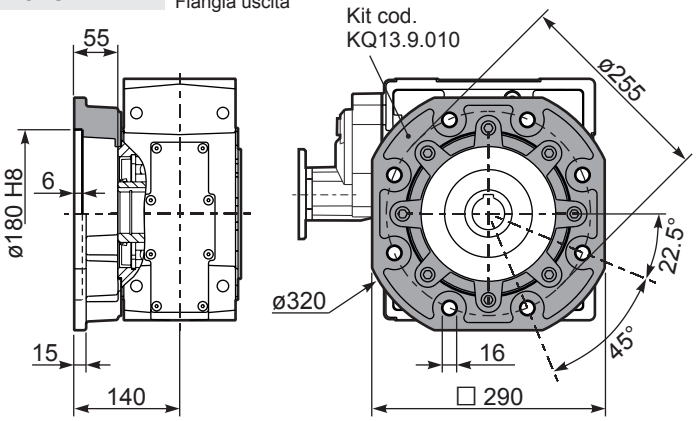
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	263
71B5	K063.4.042	160	261
80/90B5	K063.4.043	200	263
71B14	K063.4.047	105	261
80B14	K063.4.046	120	263
90B14	K063.4.041	140	263



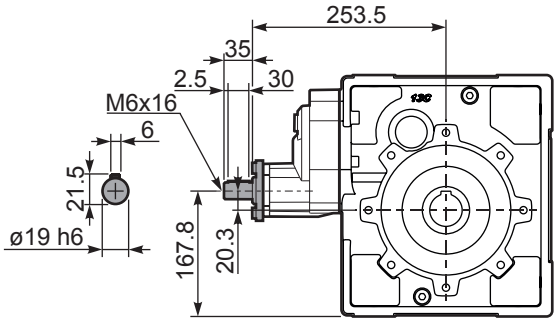
P134C...FB... Feet
Piedini



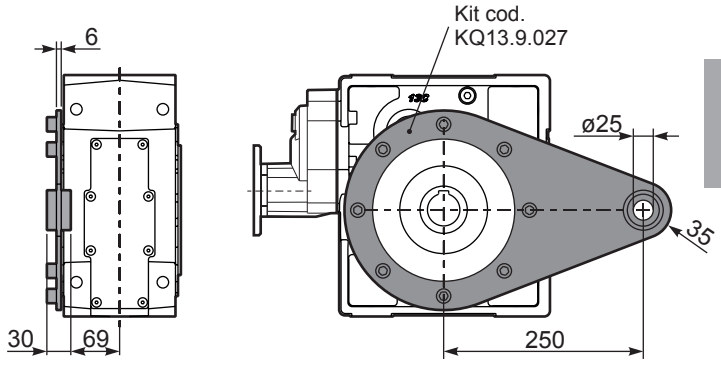
P134C...-FC.. Output flange
Flangia uscita



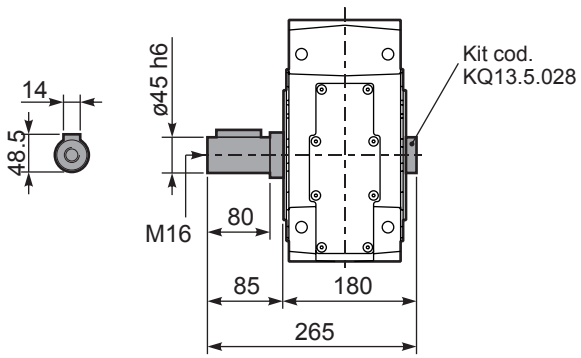
R134C... Input Shaft
Albero in entrata



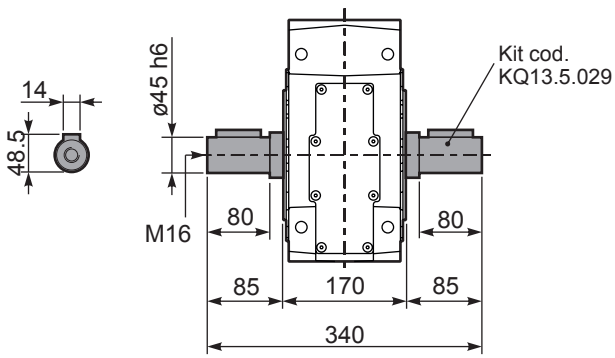
P134C...BR.. Reaction arm
Braccio di reazione



P134CA.. Single output Shaft
Albero lento semplice

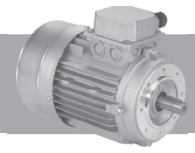


P134CB.. Double Input Shaft
Albero lento bisporgente



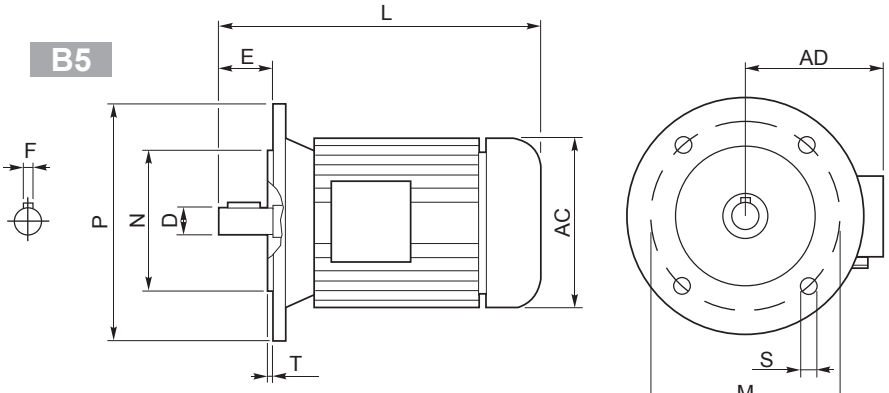
8

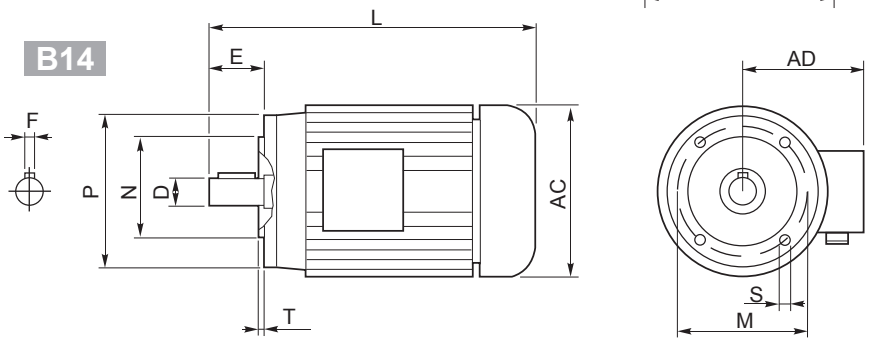
Aluminum IEC motors



1) 230/400V - 50Hz three-phase asynchronous induction motor
2) Class F insulation
3) S1 duty
4) IP 55 protection
5) Not painted
6) Hard plastic sleeve to protect output shaft during the transportation

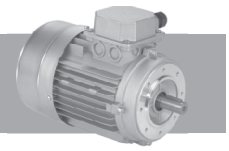
1) 230/400V - 50Hz motore trifase asincrono
2) Isolamento Classe F
3) S1 servizio continuo
4) Protezione IP 55
5) Non verniciato
6) Manicotto di protezione per l'albero motore





Outside dimensions and weight may be different according to manufacturers.
Le dimensioni esterne e il peso sono indicative, possono variare tra i vari costruttori.

	2 poli / poles			4 poli / poles			6 poli / poles			B5-B14						B5					B14					Kg
	kW	Nm	A (400V)	kW	Nm	A (400V)	kW	Nm	A (400V)	D	F	E	L	AC	AD	N	M	P	S	T	N	M	P	S	T	
56 A	**0.09**	0.32	0.38	**0.06**	0.44	0.27	**—**	—	—	9	3	20	199	108	96	80	100	120	7	2.5	50	65	80	M5	2.5	2.7
56 B	**0.12**	0.42	0.46	**0.09**	0.67	0.37	**—**	—	—																	2.9
63 A	**0.18**	0.63	0.60	**0.12**	0.84	0.50	**0.09**	0.99	0.57	11	4	23	208	120	99	95	115	140	9.5	3	60	75	90	M5	2.5	3.8
63 B	**0.25**	0.87	0.76	**0.18**	1.30	0.69	**0.12**	1.32	0.74																	4.2
71 A	**0.37**	1.30	1.00	**0.25**	1.70	0.91	**0.18**	1.90	0.80	14	5	30	-	130	104	110	130	160	9.5	3.5	70	85	105	M6	2.5	5.9
71 B	**0.55**	1.90	1.54	**0.37**	2.52	1.14	**0.25**	2.72	1.10				255	141	107											6.5
80 A	**0.75**	2.60	1.85	**0.55**	3.77	1.51	**0.37**	3.84	1.18	19	6	40	296	159	127	130	165	200	11.5	3.5	80	100	120	M6	3	8.5
80 B	**1.1**	3.90	2.64	**0.75**	5.11	2.57	**0.55**	5.84	1.80																	10
90 S	**1.5**	5.00	3.31	**1.1**	7.45	2.78	**0.75**	7.92	2.32	24	8	50	-	170	135	130	165	200	11.5	3.5	95	115	140	M8	3	12.5
90 L	**2.2**	7.50	4.46	**1.5**	10.2	3.61	**1.1**	11.6	3.45				330													15
100 LA	**3.0**	10.0	6.28	**2.2**	14.8	5.07	**1.5**	15.4	3.88	28	8	60	-	190	148	180	215	250	13	4	110	130	160	M8	3.5	20
100 LB	**—**	—	—	**3.0**	20.1	6.66	**—**	—	—																	22
112 M	**4.0**	13.4	8.10	**4.0**	26.7	8.55	**2.2**	22.6	5.30				381	210	164											35
132 S	**5.5**	18.3	11.2	**5.5**	36.5	11.4	**3.0**	30.2	7.20	38	10	80	455	244	180	230	265	300	14	4	130	165	200	M10	4	41
	7.5	24.9	15.3																							51
132 M	**—**	—	—	**7.5**	49.4	15.0	**4.0**	40.0	9.13				500													51
				9	61.4	18.5																				
160 M	**—**	—	—	**11**	72	21.5	**—**	—	—	42	12	110	613	335	246	250	300	350	18	5	**—**	—	—	—	—	79.2
160 L	**—**	—	—	**15**	98	29	**—**	—	—				657													97.5
180 M	**—**	—	—	**18.5**	121	35.5	**—**	—	—	48	14	110	712	366	266	250	300	350	19	5	**—**	—	—	—	—	170
180 L	**—**	—	—	**22**	144	42	**—**	—	—																	
200 L	**—**	—	—	**30**	196	53	**—**	—	—	55	16	110	780	405	341	300	350	400	19	5	**—**	—	—	—	—	240
225 S	**—**	—	—	**37**	240	69	**—**	—	—	60	18	140	888	463	360	350	400	450	19	5	**—**	—	—	—	—	305
225 M	**—**	—	—	**45**	292	84	**—**	—	—																	310



Protection
Standard IP55
Please specify on purchase orders if you need a higher IP protection class.

Grado di protezione
IP55 Standard
Specificare in sede di ordinazione per IP superiore.

Schutzart
IP55 Standard.
Höheren IP Grad bitte im Auftrag angeben.

Degré de protection
IP55 standard.
Au moment de la commande, spécifiez si vous souhaitez IP supérieur.

Grado de protección
IP55 standard.
Especificar en el pedido cuando necesiten protección IP superior.

Insulation
Standard CI.F
To be specified upon placing the order if different insulation is required.

Isolamento
CI.F Standard
Specificare in sede di ordinazione classe di isolamento diversa.

Isolierung
CI.F Standard.
Davon abweichende Isolierungsklas se im Auftrag angeben.

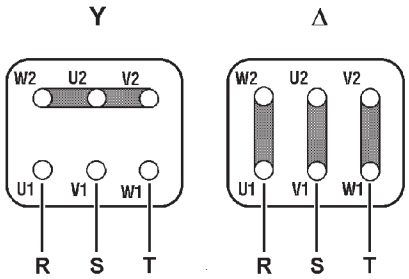
Isolement
CI.F Standard.
Au moment de la commande, spécifiez si vous souhaitez une classe d' isolement différente.

Aislamiento
CI.F standard.
Especificar al efectuar el pedido la clase diferente de aislamiento.

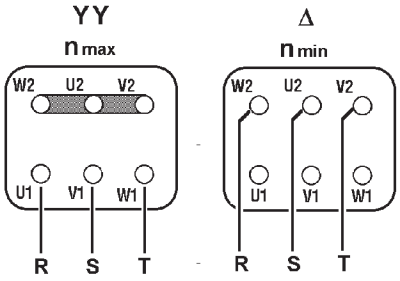
Insulation / Isolamento Isolierung /Aislamiento		E	B	F	H
Max. temp.	C°	120°	130°	155°	175°
	F*	248°	266°	311°	347°

Connections **Collegamenti** **Verbindungselemente** **Branchements** **Conexiones**

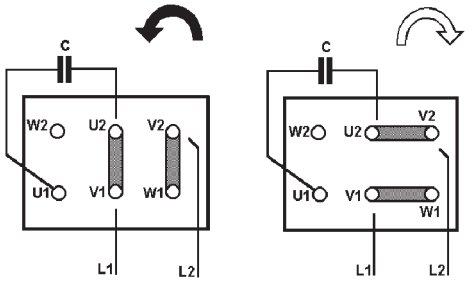
Threephase asyncronous single polarity
Asincrono trifase singola polarità
Asynchronmotor 3-ph eine Drehzahl
Moteur triphasé à une vitesse
Asincrono trifasico de una velocidad



Threephase asyncronous double polarity
Asincrono trifase doppia polarità
Asynchronmotor 3-ph doppelte Drehzahl
Moteur triphasé à deux vitesses
Asincrono trifasico de dos velocidades



Single phase asyncronous
Asincrono monofase
Einphasen-Asynchronmotor
Moteur monophasé
Asincrono monofasico



Quotations:
Unless differently agreed, the validity of all quotations is 2 months. The quotations are provided according the RFQ (request for quotation) which shall contain the complete and detailed specification of the Product, the correctness of which is fully under responsibility of RFQ applicant.

Orders:
Only official orders issued on the Customer's letter-head are accepted. The Order Confirmation (OC) is issued within 2 working days from the order receipt unless the Products configuration issues arise. The OC shall be confirmed in writing within 2 working days from the OC date and in all its parts – the product code and description, quantities and price, other specific information, if any. The OC is considered confirmed by tacit approval in case no written confirmation is provided by the Customer.

Production time:
An average production time for the standard Products is 3-4 weeks and 2-3 weeks for kits from the OC confirmation date and/or payment receipt in case of advanced payment term. For some configurations of the standard Products the production time can be different and shall be advised in the quotation and/or in any case in OC. In the period of Christmas holidays and August holidays the days of company closure are excluded from the abovementioned production term.

Delivery terms:
FCA Sovizzo, Italy (Incoterms 2016)

Packaging:
The products are packed in wooden boxes as a standard packaging. Europallets can be also used on request. The prices and details of the packaging are indicated in the apposite section of the Price List. Payment terms: the payment should be performed in terms indicated in the invoice and by wire transfer. Prices: the prices are indicated in the invoice and intended ex-works, unless differently specified, and do not include any kind of taxes, shipment or other type of costs.

Standard Products orders cancellation:
Modification or cancellation of the orders is accepted only if notified to Hydro-Mec S.p.A. in writing and not later than 3 days from the Order Confirmation and in any case before the production of the ordered Products is launched.

Special execution of customized products:
The Products that are not included in the catalogue or configurations of the products that can not be realized using catalogue, options and accessories brochure and/or online configurator (www.cleangeartech.com) are considered Customized Products.
(a) Hydro-Mec S.p.A. is entitled to examine feasibility of Special Execution of Customized Products and define the minimum quantity, production time and eventually other special sales and production conditions issuing thereafter a Special Execution Quotation that shall be confirmed by the Customer in writing.
(b) Once the Quotation is confirmed, Hydro-Mec S.p.A. shall realize a Special Execution (SE) data sheet with its unique code for each Customized product. The SE data sheet shall be confirmed in full and in writing by The Customer.

(c) The production time of SE is definitely settled by Hydro-Mec S.p.A. and notified to the Customer after the SE data sheet confirmation. As a rule, the production time for SE of Customized products is longer than standard.

(d) The orders of Special Execution of Customized products can not be cancelled unless special written agreement is made before the production of SE is launched.

WARRANTY Conditions:

(a) Warranty period is 12 months form the shipment date.

(b) Warranty period could be extended to 18 months prior written agreement of the parties and in any case excluding wearable parts.

(c) Warranty covers only manufacturing defects. Wearable parts (for example, oil seals or lubricants leakages caused by normal wear) and failures due to the wrong assembling by the Customer are not covered by warranty.

(d) This warranty is also void in any case in which the products have been misused, used in improper environment conditions, configurated beyond design limits indicated in the catalogue (especially service factor, loads and type of motors) or damaged, even accidentally or whenever installation instructions have not been strictly followed and in case of any natural disasters, in case of negligence of the Customer and the end user.

(e) The Customer is fully responsible to assure the compatibility of applications and correct mechanical couplings and electrical connections with the specifications of the Products according to

Hydro-Mec S.p.A. catalogues and technical documentation

(f) The liability of Hydro-Mec S.p.A. is strictly limited to the above-stated obligations and it is therefore clearly agreed that Hydro-Mec S.p.A. take on no responsibility for any damage to persons and/or property deriving from accidents of any nature that may occur during use of the Products, whether the warranty is confirmed or otherwise, also in cases of the choice of the Product configuration being recommended by Hydro-Mec S.p.A.

WARRANTY Procedure:

(a) The Customer shall fill in the COMPLAINT FORM and forward it to Hydro-Mec S.p.A. along with other relevant information.

(b) Hydro-Mec S.p.A. examines the COMPLAINT FORM and confirms or declines the warranty.

(c) Hydro-Mec S.p.A. has the right to ask the Customer to send the misfunctioning product to

Hydro-Mec S.p.A. for further examination. In case the warranty is not confirmed the Product will be shipped back to the Customer at the Customer expense. If the warranty is confirmed, Hydro-Mec S.p.A. shall compensate the shipment costs to the Customer within the limits of the best shipment quotation.

(d) In case the warranty is confirmed the Products shall be substituted at Hydro-Mec S.p.A. expense using ordinary shipment procedure. The express shipment can be used prior the agreement of the parties.

(e) In case the Product can not be substituted Hydro-Mec S.p.A. shall reimburse the value of the Product by issuing of Credit Note or in any other way agreed by the Parties.

1) Definizioni

1.1 Ai fini delle presenti condizioni generali di vendita (di seguito denominate “Condizioni di Vendita”), i seguenti termini avranno il significato di seguito ad essi attribuito:

- “HM”: Hydro-Mec S.p.A.;
- “Cliente”: qualunque società, ente o entità giuridica che acquisti i Prodotti di HM da quest’ultima;
- “Prodotti”: i beni prodotti, assemblati e/o venduti da HM;
- “Ordine/i”: ciascuna proposta di acquisto dei Prodotti inoltrata dal Cliente ad HM esclusivamente tramite e-mail, fax o web;
- “Vendita/e”: ciascun contratto di vendita concluso tra HM e il Cliente a seguito del ricevimento da parte del Cliente dell’accettazione scritta dell’Ordine da parte di HM;

2) Scopi

2.1 Le presenti Condizioni di Vendita si applicano a tutte le Vendite di Prodotti. Nel caso di contrasto tra le condizioni e i termini di cui alle presenti Condizioni di Vendita e le condizioni e i termini pattuiti nella singola Vendita, quest’ultimi prevarranno. HM non sarà vincolata da condizioni generali di acquisto del Cliente (di seguito, “CGA”), neanche nell’ipotesi in cui si faccia loro riferimento o siano contenute negli ordini o in qualsiasi altra documentazione di provenienza del Cliente, senza il preventivo consenso scritto di HM. Le CGA non saranno vincolanti per HM neppure per effetto di tacito consenso.

2.2 HM si riserva il diritto di aggiungere, modificare o eliminare qualsiasi previsione delle presenti Condizioni di Vendita, restando inteso che tali aggiunte, modifiche o cancellazioni si applicheranno a tutte le Vendite concluse a partire dal trentesimo giorno successivo alla notifica al Cliente delle nuove Condizioni di Vendita.

3) Ordini e Vendite

3.1 Il Cliente dovrà inoltrare a HM Ordini specifici contenenti la descrizione dei Prodotti, la quantità richiesta, il prezzo ed i termini richiesti per la consegna.

3.2 La Vendita dovrà ritenersi conclusa: (i) nel momento in cui il Cliente riceva da parte di HM una conferma scritta (tale conferma potrà essere inviata via e-mail, fax o mezzi telematici) conforme ai termini e alle condizioni dell’Ordine (ii) o, nel caso in cui il Cliente riceva da parte di HM una conferma scritta contenente termini difformi da quelli contenuti nell’Ordine, decorsi tre giorni lavorativi dalla data di ricezione della conferma contenente termini difformi senza che nel suddetto periodo pervenga a HM contestazione scritta da parte del Cliente; (iii) o, in assenza di conferma scritta da parte di HM, nel momento in cui i Prodotti saranno consegnati al Cliente.

3.3 Gli Ordini regolarmente accettati da HM non potranno essere annullati dal Cliente senza il consenso scritto di HM.

4) Prezzo dei Prodotti

4.1 I prezzi dei Prodotti saranno quelli indicati nel listino prezzi di HM in vigore al momento dell'inoltro dell'Ordine da parte del Cliente o, qualora il Prodotto non sia inserito nel listino prezzi o il listino prezzi non sia disponibile, quelli indicati nell'Ordine e confermati per iscritto da HM al momento dell'accettazione dell'Ordine. Eccetto quanto diversamente concordato per iscritto tra le parti, i predetti prezzi saranno calcolati franco fabbrica, al netto dell'IVA e degli sconti. Tali prezzi non comprendono i costi di imballaggio, spedizione e trasporto dai locali di HM a quelli del Cliente. Tali costi dovranno essere sostenuti separatamente dal Cliente.

4.2 HM manterrà la proprietà dei Prodotti fino alla completa corresponsione del prezzo degli stessi. Il Cliente dovrà compiere tutti gli adempimenti richiesti dalle leggi locali al fine di rendere valida ed eseguibile nei confronti di tutti i terzi la presente clausola di riserva della proprietà anche operando l'iscrizione in ogni apposito registro, ove localmente richiesto.

5) Termini di consegna

5.1 Eccetto quanto eventualmente diversamente concordato per iscritto tra le parti, HM consegnerà i prodotti franco fabbrica presso i propri stabilimenti, così come questo termine è definito negli INCOTERMS 2010 pubblicati dalla Camera di Commercio internazionale nella loro versione più aggiornata, in vigore al momento della consegna. Se richiesto, HM si occuperà del trasporto dei Prodotti a rischio, costi e spese del Cliente.

5.2 La consegna dovrà avvenire entro il termine indicato nell'Ordine come accettato nella conferma d'ordine. I termini di consegna sono indicativi e non sono termini essenziali ai sensi dell'art. 1457 del Codice Civile e, in ogni caso, non includono i tempi di trasporto.

5.3 Salvo quanto previsto dal precedente art. 5.2, HM non sarà considerata responsabile dei ritardi o della mancata consegna ascrivibili a circostanze che siano fuori dal suo controllo, quali a titolo meramente esemplificativo e senza pretesa di esaustività:

a) dati tecnici inadeguati o imprecisioni o ritardi del Cliente nella trasmissione a HM di informazioni o dati necessari alla spedizione dei Prodotti;

b) difficoltà nell'ottenere rifornimenti delle materie prime;

c) problemi legati alla produzione o alla pianificazione degli ordini;

d) scioperi parziali o totali, mancanza di energia elettrica, calamità naturali, misure imposte dalle autorità pubbliche, difficoltà nel trasporto, cause di forza maggiore, disordini, attacchi terroristici e tutte la altre cause di forza maggiore;

e) ritardi da parte dello spedizioniere.

5.4 Il verificarsi di alcuni degli eventi sopra elencati non darà diritto al Cliente di richiedere il risarcimento degli eventuali danni o indennizzi di alcun genere.

6) Trasporto

6.1 Eccetto quanto eventualmente diversamente concordato per iscritto tra le parti, il trasporto avverrà sempre a spese e rischio del Cliente. Nel caso in cui a HM, ai sensi dell'art. 5.1, venga richiesto di occuparsi del trasporto dei Prodotti, HM sceglierà il mezzo di trasporto che riterrà più appropriato in mancanza di specifiche istruzioni del Cliente.

7) Pagamenti

7.1 Salvo diverso accordo scritto tra le parti, HM emetterà le fatture al momento della consegna dei Prodotti.

7.2 Il mancato pagamento nel tempo concordato darà diritto a HM di chiedere al Cliente il pagamento degli interessi scaduti al tasso stabilito dal Decreto Legislativo n. 231/02.

7.3 Il mancato pagamento o il ritardo nei pagamenti superiore a 30 giorni daranno a HM il diritto di sospendere la consegna dei Prodotti e risolvere ogni singola Vendita sottoscritta. La sospensione della consegna dei Prodotti o la risoluzione delle Vendite non darà il diritto al Cliente di pretendere alcun risarcimento dei danni.

7.4 Ogni reclamo relativo ai Prodotti e/o alla consegna dei medesimi non potrà in alcun caso giustificare la sospensione o il ritardo nel pagamento.

8) Non-conformità

8.1 Qualsiasi difformità dei Prodotti consegnati al Cliente rispetto al tipo ed alla quantità indicata nell'Ordine dovrà essere denunciata per iscritto a HM entro cinque giorni dalla data di consegna. Qualora la denuncia non venga comunicata entro il predetto termine, i Prodotti consegnati verranno considerati come conformi a quelli ordinati dal Cliente.

9) Garanzia

9.1 Salvo diverso accordo scritto tra le parti, HM garantisce che i Prodotti sono esenti da vizi/difetti (con esclusione di quelle parti dei Prodotti che non sono prodotte da HM) per un periodo di 12 mesi decorrente dalla data di consegna dei medesimi al Cliente.

9.2 La garanzia non opererà con riferimento a quei Prodotti i cui difetti sono dovuti a (i) danni causati durante il trasporto; (ii) un uso negligente o improprio degli stessi; (iii) inosservanza delle istruzioni di HM relative al funzionamento, manutenzione ed alla conservazione dei Prodotti; (iv) riparazioni o modifiche apportate dal Cliente o da soggetti terzi senza la previa autorizzazione scritta di HM.

9.3 A condizione che il reclamo del Cliente sia coperto dalla garanzia e notificato nei termini di cui al presente articolo, HM si impegnerà, a sua discrezione, a sostituire o riparare ciascun Prodotto o le parti di questo che presentino vizi o difetti.

9.4 Il Cliente dovrà denunciare per iscritto a HM, la presenza di vizi o difetti entro 8 giorni dalla consegna dei Prodotti se si tratta di vizi o difetti palesi, oppure, entro 8 giorni dalla scoperta in caso di vizi o difetti occulti o non rilevabili da una persona di media diligenza.

9.5 I Prodotti oggetto di denuncia dovranno essere immediatamente inviati presso la fabbrica di HM, o in qualsiasi altro luogo che quest'ultima indicherà di volta in volta, a costi e spese a carico del Cliente salvo diverso accordo tra le parti, al fine di consentire a HM l'espletamento dei necessari controlli. La garanzia non copre danni e/o difetti dei Prodotti derivanti da anomalie causate da, o connesse a, parti assemblate/aggiunte direttamente dal Cliente o dal consumatore finale. Qualora, nell'ambito della presente garanzia, un Prodotto o un componente difettoso venisse sostituito, la proprietà del Prodotto o del componente sostituito sarà ritrasferita dal Cliente a HM.

9.6 In ogni caso il Cliente non potrà far valere i diritti di garanzia verso HM se il prezzo dei Prodotti non sia stato corrisposto alle condizioni e nei termini pattuiti, anche nel caso in cui la mancata corresponsione del prezzo alle condizioni e nei termini pattuiti si riferisca a Prodotti diversi da quelli per i quali il Cliente intende far valere la garanzia.

9.7 HM non riconosce alcuna garanzia circa la conformità dei Prodotti alle norme e ai regolamenti di Paesi che non rientrano o non appartengono all'Unione Europea. Nessun'altra garanzia, espressa o implicita, quale, a titolo esemplificativo, la garanzia di buon funzionamento o di idoneità per uno scopo specifico, è concessa con riferimento ai Prodotti.

9.8 Senza pregiudizio a quanto indicato nel precedente art. 9.3 e salvo il caso di dolo o colpa grave, HM non sarà responsabile per qualsivoglia danno derivante e/connesso ai vizi dei Prodotti. In ogni caso, HM non sarà ritenuto responsabile per danni indiretti o consequenziali di qualsiasi natura quali, a titolo esemplificativo, le perdite derivanti dall'inattività del Cliente o il mancato guadagno.

10) Diritti di Proprietà Intellettuale

10.1 I Diritti di Proprietà Intellettuale sono di totale ed esclusiva proprietà di HM e la loro comunicazione o utilizzo nell'ambito delle presenti Condizioni di Vendita non crea, in relazione ad essi, alcun diritto o pretesa in capo al Cliente. Il Cliente si obbliga a non compiere alcun atto incompatibile con la titolarità dei Diritti di Proprietà Intellettuale.

11) Clausola risolutiva espressa

11.1 HM avrà facoltà di risolvere, ai sensi e per gli effetti dell'art. 1456 del Codice Civile Italiano, in qualsiasi momento mediante comunicazione scritta da inviare al Cliente, la singola Vendita nel caso di inadempimento delle obbligazioni previste dagli articoli: 4 (Prezzo dei Prodotti); 7 (Pagamenti); 10 (Diritti di Proprietà Intellettuale).

12) Mutamento nelle condizioni patrimoniali del Cliente

12.1 HM avrà diritto a sospendere l'adempimento delle obbligazioni derivanti dalla Vendita dei prodotti, in base all'art. 1461 del Codice Civile Italiano, nel caso in cui le condizioni patrimoniali del Cliente divenissero tali da porre in serio pericolo il conseguimento della controprestazione salvo che sia prestata idonea garanzia.

13) Domicilio legale, legge applicabile e giurisdizione

13.1 HM è legalmente domiciliata presso la sua sede principale.

13.2 Le Condizioni di Vendita e ogni singola Vendita saranno regolate e interpretate in conformità alla Legge Italiana.

13.3 Tutte le controversie derivanti da o connesse alle presenti Condizioni di Vendita e/o ad ogni Vendita saranno soggette alla esclusiva giurisdizione del Tribunale di Vicenza.

13.4 Salvo quanto pattuito nel precedente art. 13.3, HM si riserva il diritto, quando promotore di una azione legale in qualità di attore, di promuovere tale azione nel luogo di residenza del Cliente.

NOTES / NOTE / AUFZEICHNUNG / NOTAS

NOTES / NOTE / AUFZEICHNUNG / NOTAS

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Via della Tecnica,19 - 36050 Sovizzo(VI) - Tel.: +39 0444 551911 - Fax: +39 0444 536139 - hydromec@hydromec.com