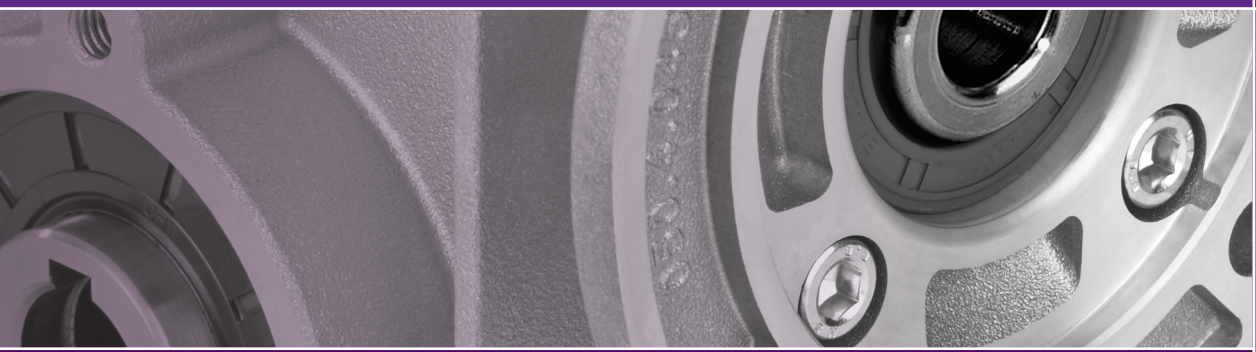


General Catalogue



Gearboxes Made in Italy

DOSSIER ACCORDING TO 94/9/EG 8. B II STORED

0032

HYDROMEC

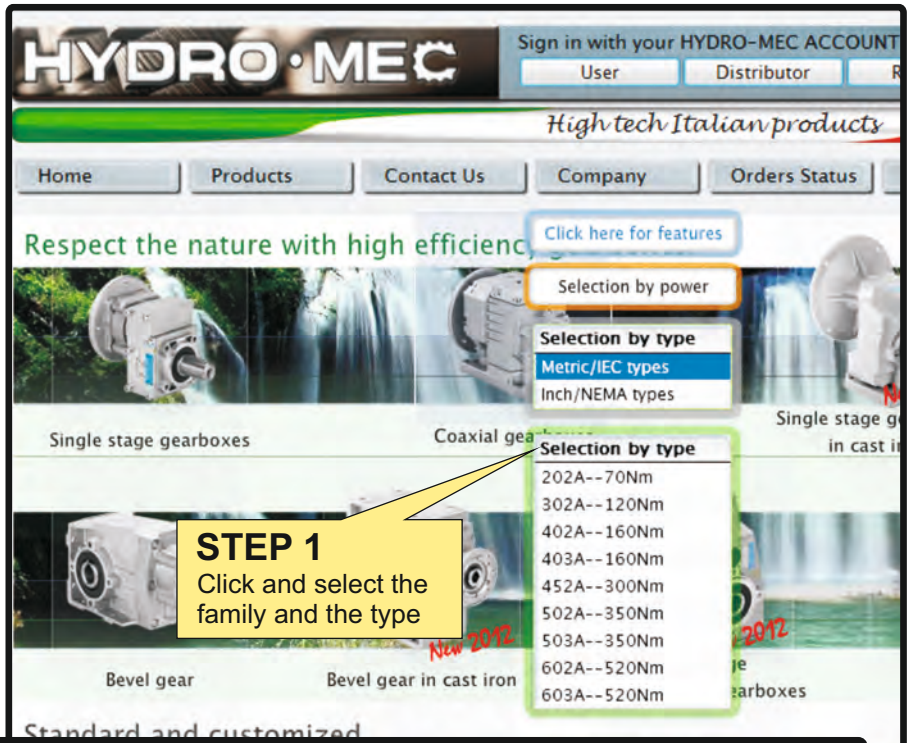


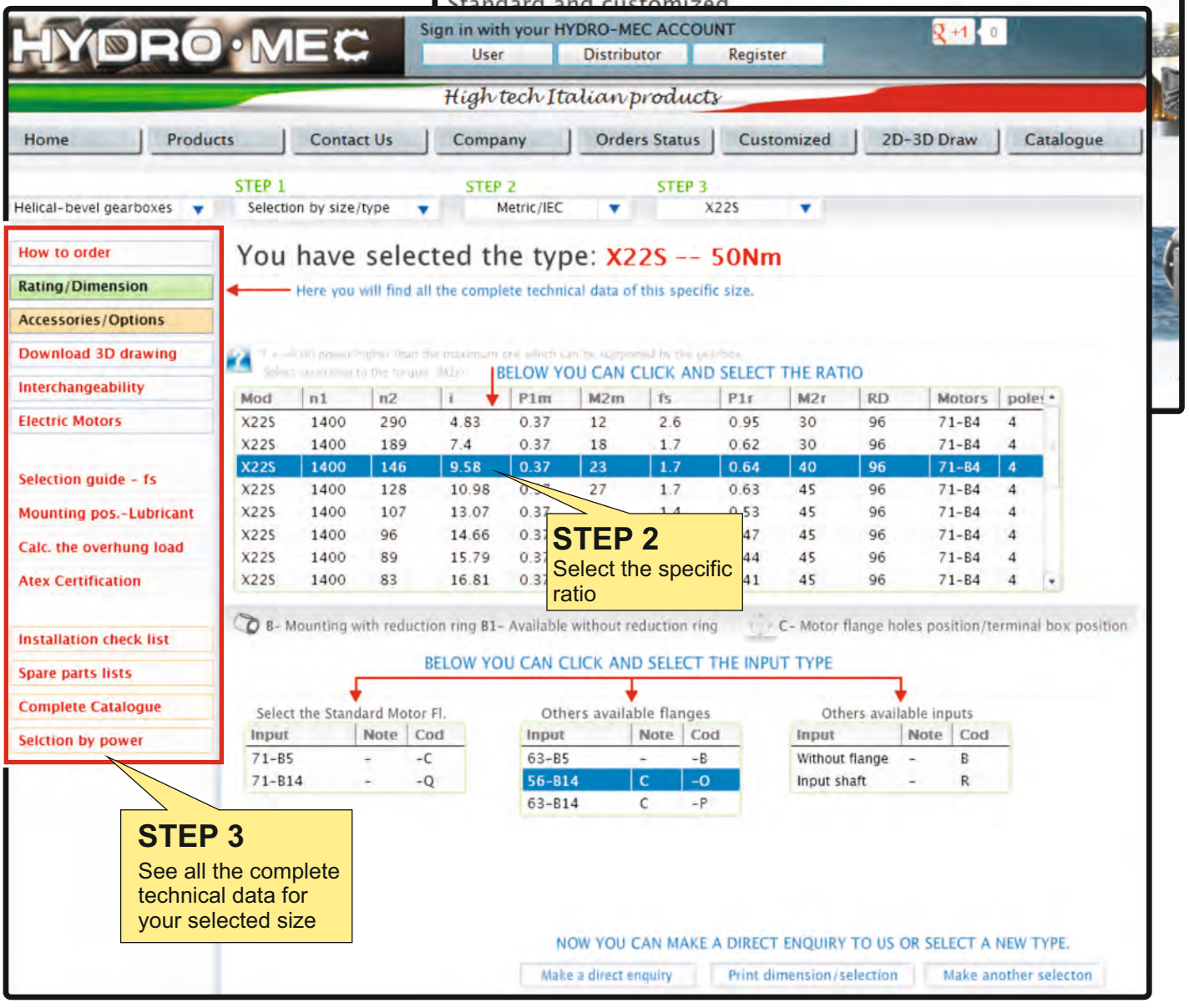
Catalogue code: CT-GEM-A-HM013

IN OUR WEB www.hydromec.com

3 CLICKS SELECTION

Use the best of our webs database to get detailed information like, mounting position, lubrication and many others available for each size, always updated.





IN THIS CATALOGUE



Angletech-Gear

Helical bevel gearboxes
Riduttori a coppia conica

Paragraph **1**



Rightangle-Gear

Worm gearboxes
Riduttori a vite senza fine

Paragraph **2**



Square-Gear

Square worm gearboxes
Riduttori a vite senza fine quadri

Paragraph **3**



Hightech-Gear

S series square worm gearboxes
Riduttori a vite senza fine quadri serie S

Paragraph **4**



One step-Gear

One step gearboxes
Riduttori a uno stadio

Paragraph **5**



Coaxial-Gear

Aluminum gearboxes
Riduttori coassiali in alluminio

Paragraph **6**



Coaxial-Gear

Cast iron gearboxes
Riduttori coassiali in ghisa

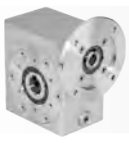
Paragraph **7**



Compact-Gear

Shaft mounted gearboxes
Riduttori ad assi paralleli

Paragraph **8**



Stainlessteel-Gear Worm gearboxes

Full stainless steel worm gearboxes
Vite senza fine completamente in acciaio inox

Paragraph **9**



Stainlessteel-Gear One Step gearboxes

Full stainless steel one step gearboxes
Coassiale ad uno stadio completamente in acciaio inox

Paragraph **10**



Stainlessteel-Gear Coaxial gearboxes

Full stainless steel coaxial gearboxes
Coassiale completamente in acciaio inox

Paragraph **11**



Electric motors

Aluminum and stainles steel electric motors
Motori elettrici in alluminio e acciaio inox

Paragraph **M**

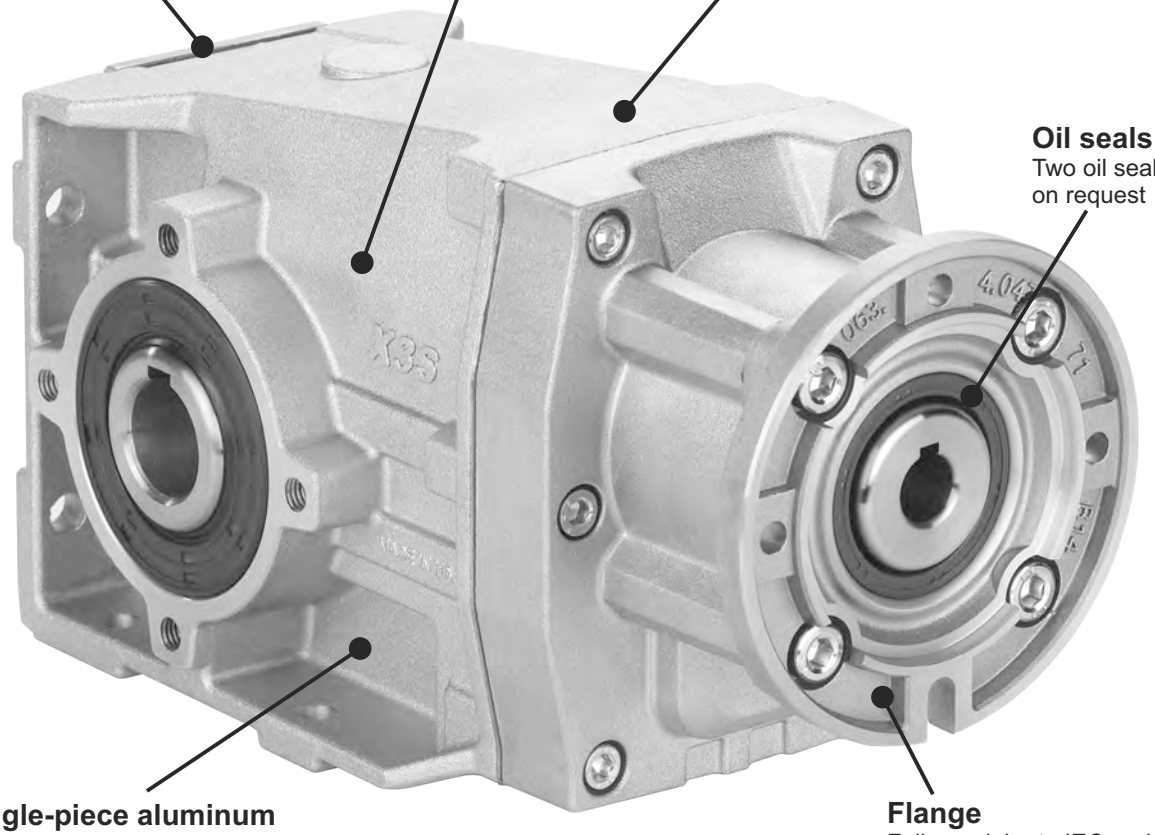
Aluminum and cast iron helical bevel gearbox

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

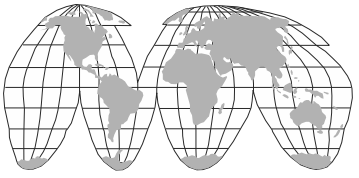
Single-piece aluminum
Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing

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...



Types / Tipi
Typen / 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	1-19	1-21
X22S 50Nm	**X32S** 90Nm	**X33S** 100Nm	**X42A** 150Nm	**X43A** 160Nm	**X52A** 250Nm	**X53A** 250Nm	**X62A** 410Nm	**X63A** 410Nm



Types / Tipi
Typen / Types
Tipos

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

1-23	1-25	1-27	1-29
113C 675Nm	**114C** 675Nm	**133C** 1000Nm	**134C** 1000Nm



Types / Tipi
Typen / Types
Tipos

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

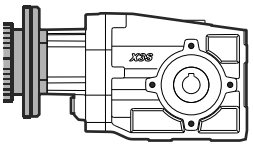
M-1									
56A 56B	**63A 63B**	**71A 71B**	**80A 80B**	**90S 90L**	**100LA 100LB**	**112M**	**132S 132M**	**160M 160L**	**180M 180L**

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

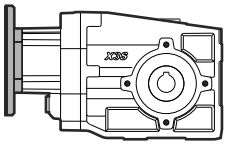
Type - Tipo - Typ Type - Tipo	**Size** - Grandezza - Grösse Taille - Tomaño	**Mounting** - Montaggio Montage - Fixation Tipo de montaje	**Rapporto** - Ratio Untersetzung - Reduction Relacion	**Output shaft** - Albero uscita Ausgangsflansch Arbre de sortie Brida en solida
M	**X22S**	**C**	**4.83**	**A**

Type

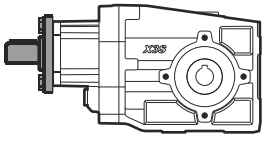
Helical-bevel gear
Riduttori ortogonali



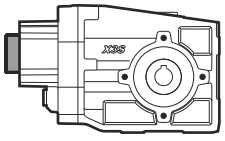
With IEC motor
M



With motor flange
P



With male input shaft
R



Modular base
B

Size

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

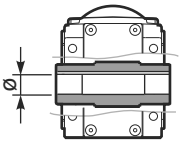
3 Stages Riduzioni Stufen Trains Etapas | 4 Stages Riduzioni Stufen Trains Etapas

Cast Iron
Ghisa
Grauguss
Fonte
Fundicion

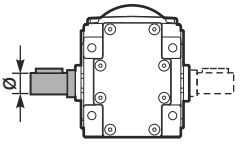
113C
133C

114C
134C

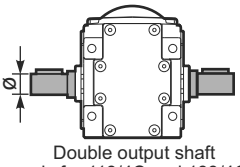
Mounting



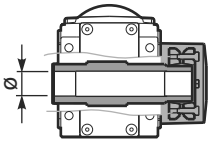
Hollow outpu shaft
C



Single output shaft
A

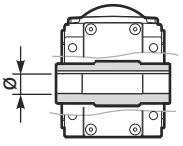


Double output shaft
only for 113/4C and 133/4C
B



Shrink Disk
(only on the DX side)
D

Only on request for Q.ty
A richiesta per quantità
For 113/4C and 133/4C
is not available.



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

See technical data table

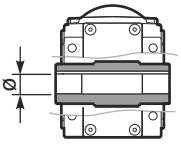
Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

Output shaft



➡ STANDARD
Hollow output shaft

X22S
A ⇨ ø18
B ➡ **ø20**

X32S X33S
B ➡ **ø20**
C ⇨ ø25

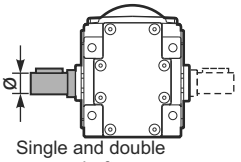
X42A X43A
C ➡ **ø25**
D ⇨ ø30

X52A X53A
D ➡ **ø30**
E ⇨ ø35

X62A X63A
E ➡ **ø35**
F ⇨ ø40

113C 114C
F ⇨ ø40
G ➡ **ø42**

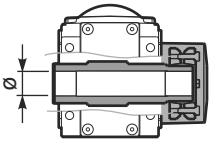
133C 134C
H ➡ **ø45**



Single and double output shaft

I X22S X32/3S ⇨ ø20
L X32/3S X42/3A ⇨ ø25
M X52/3A ⇨ ø30
N X62/3A ⇨ ø35
O 113/4C ⇨ ø42
P 133/4C ⇨ ø45

Double output shaft is available only for 113/4C and 133/4C



Shrink Disk

U X22S X32/3S ⇨ ø20
Q X42/3A ⇨ ø30
R X52/3A ⇨ ø35
S X62/3A ⇨ ø40

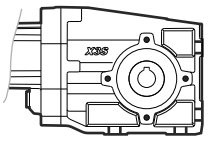
Dossier according to 94/9/EG II, b ii stored
TÜV NORD 0032

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.

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

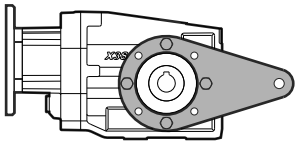
Type - Tipo - Typ
Type - Tipo

BR



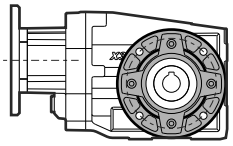
FB

Forma base
Universal



BR

Braccio d reazione
Reaction arm

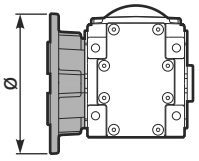


-F

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

113C 114C

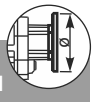
C ⇨ ø280
L ⇨ ø280

133C 134C

C ⇨ ø320

Motor size - Grandezza motore
Motor Grösse
Grandeur moteur - Tamaño motor

-O



Standard motor flange
Flangia motore standard

B5	B14
-A=56 (ø120)	**-O**=56 (ø80)
-B=63 (ø140)	**-P**=63 (ø90)
-C=71 (ø160)	**-Q**=71 (ø105)
-D=80 (ø200)	**-R**=80 (ø120)
-E=90 (ø200)	**-T**=90 (ø140)
-F=100÷112 (ø250)	**-U**=100÷112 (ø160)
-G=132 (ø300)	**-V**=132 (ø200)



Input shaft type R / Tipo R

X22S X33S X43A

-1 ➡ ø14

X32S X42A X53A X63A 114C 134C

-2 ➡ ø19

X52A X62A 113C 133C

-3 ➡ ø24



Input model base bore
Foro entrata standard

X22S X33S X43A

-Z ⇨ ø9 (56B5)
-0 ⇨ ø11 (63B5)
-1 ➡ ø14 (71B5)

X52A X62A 113C 133C

-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)
-4 ➡ ø28 (100B5)

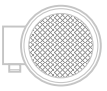
X32S X42A X53A X63A 114C 134C

-1 ⇨ ø14 (71B5)
-2 ⇨ ø19 (80B5)
-3 ➡ ø24 (90B5)

➡ **STANDARD**

Terminal box position
Posizione morsettiera
Klemmkastenlage
Position boîte à bornes
Posición caja de bornes

B



A



B
STANDARD



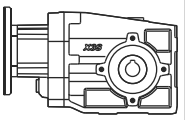
C



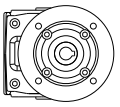
D

Mounting position
Posizione montaggio
Einbaulage
Position de montage
Position de montaje

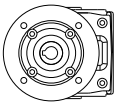
B3



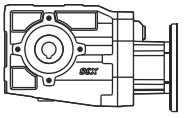
B3
STANDARD



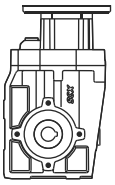
B6



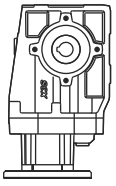
B7



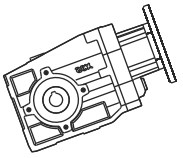
B8



V5



V6



V8

Specify only for vertical positions

Specificare solo per posizione verticale

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

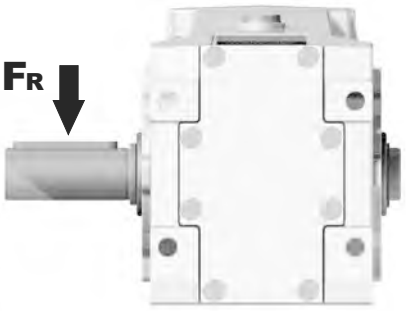
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$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

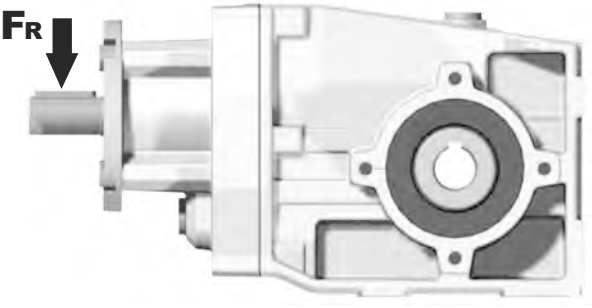
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

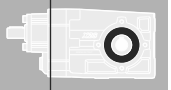
A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

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

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

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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q		Output Shaft Ø	Ratios code
							63	71	56	63	71			
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 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

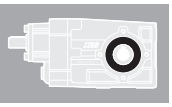


C) Motor flangeholes position/terminal box position / Posizione fori flangia/basetta motore / Bohrungsposition am Motorflansch/-sockel / Position trous bride/barrette à bornes moteur / Posición agujeros brida / base motor



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)



1

▪ 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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q		Output Shaft ø	Ratios code
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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	56	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

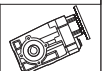
EN Unit **X22S** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

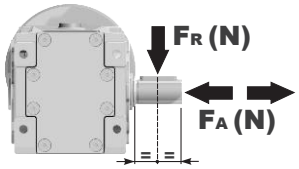
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
0.25 LT	0.25 LT	0.25 LT	0.25 LT	0.43 LT	0.31 LT	0.25 LT
AGIP Telium VSF 320				**SHELL** Omala 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

$$Feq = F_R \cdot \frac{42}{X+23}$$



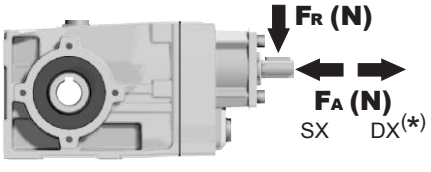
n_2 [min^{-1}]	FA	FR
400	360	1800
250	380	1900
150	420	2100

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

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	FR
1400	140	700
900	160	800
600	190	950

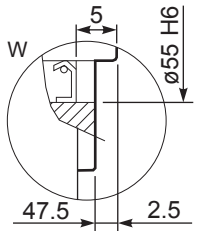
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

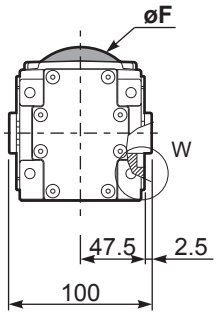
tab. 2

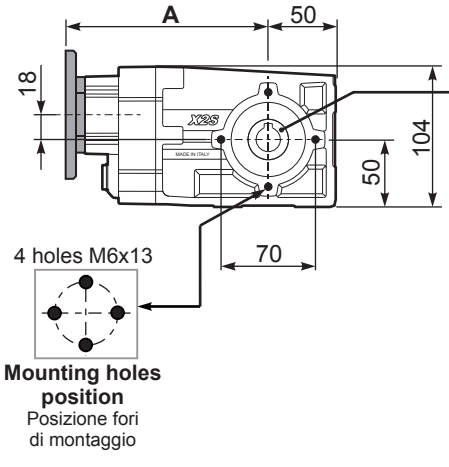
PX22SC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	3.70 kg

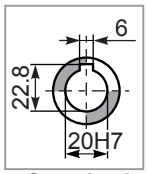
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	152.5
71B5	K050.4.042	160	150.5
56B14	KC40.4.049	80	152
63B14	K050.4.047	90	154.5
71B14	K050.4.045	105	152



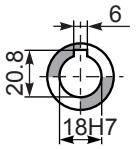




Mounting holes position
Posizione fori di montaggio

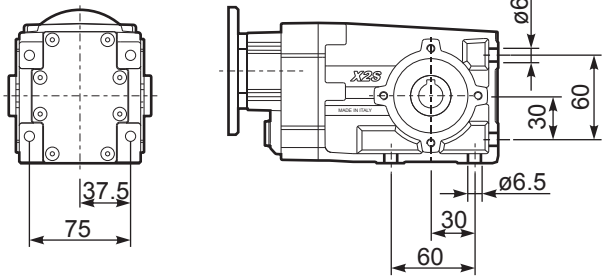


Standard
Hollow shaft

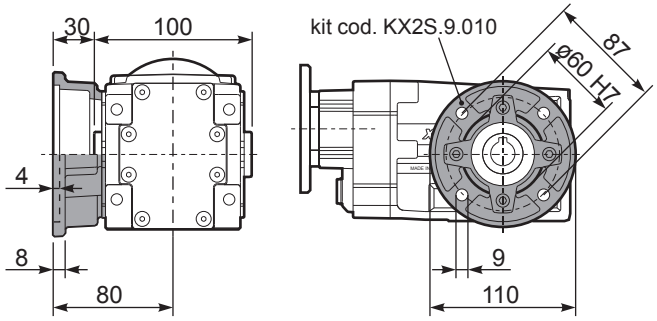


On request
A richiesta

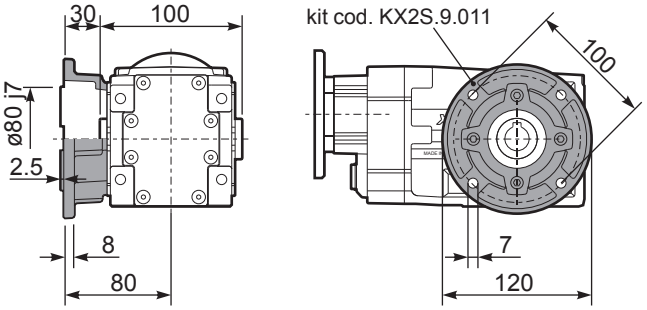
PX22S..-N.. Feet
Piedini



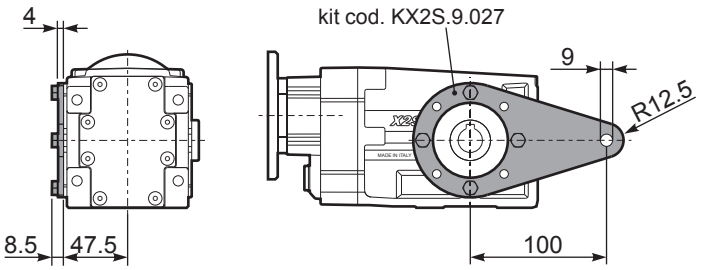
PX22S-F0.. Output flange
Flangia uscita



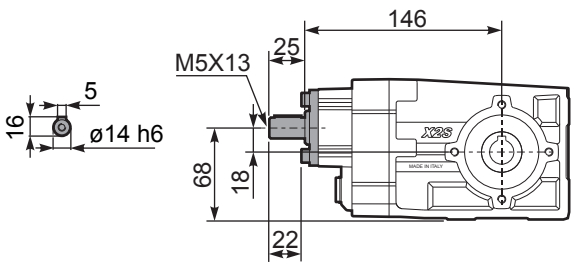
PX22S-F1.. Output flange
Flangia uscita



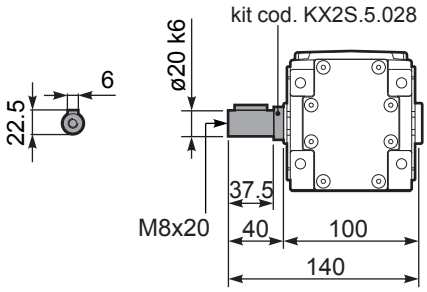
PX22SBR.. Reaction Arm
Braccio di reazione



RX22S.. Input shaft
Albero in entrata

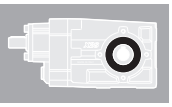


PX22S..A.. Single output shaft
Albero semplice in uscita



X32S Angletech Gear 90Nm

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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft ø	Ratios code
							63	71	80	90	71	80	90			
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

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See table 1 for lubrication and recommended quantity.
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I Il riduttore **X32S** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
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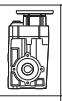
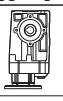
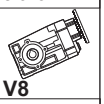
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	 **B6**	 **B7**	 **B8**	 **V5**	 **V6**	 **V8**
0.40 LT	0.60 LT	0.40 LT	0.60 LT	0.85 LT	0.60 LT	0.40 LT
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

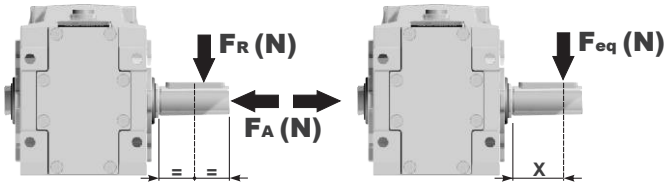
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$Feq = F_R \cdot \frac{47.5}{X+28.5}$$



n_2 [min^{-1}]	FA	FR
250	400	2000
150	450	2250
100	500	2500

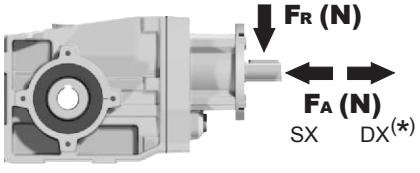
n_2 [min^{-1}]	FA	FR
75	560	2800
50	560	2800
25	560	2800

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



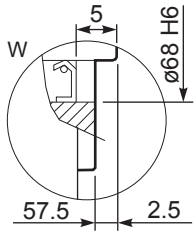
n_1 [min^{-1}]	FA	FR
1400	240	1200
900	280	1400
600	340	1700

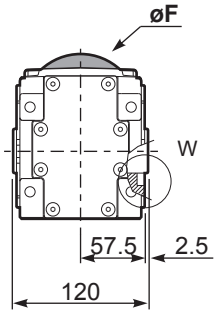
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

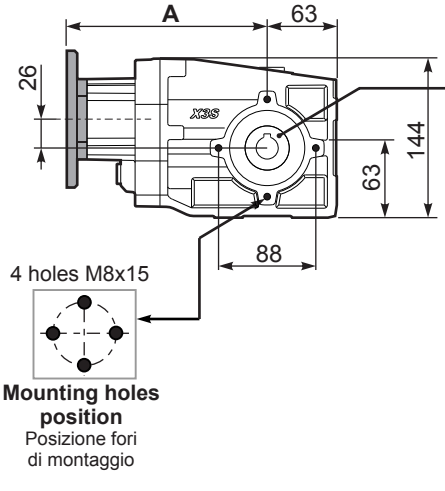
PX32SC... Basic Gearbox
Riduttore base

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	183
90B14	K063.4.041	140	184

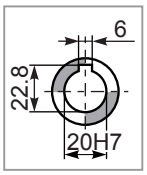




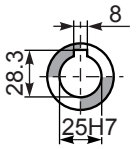
Gearbox weight peso riduttore **6.30 kg**



Mounting holes position
Posizione fori di montaggio

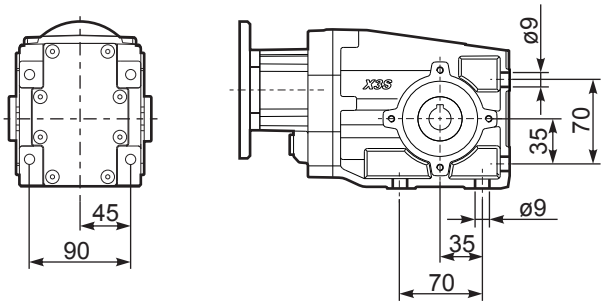


Standard
Hollow shaft

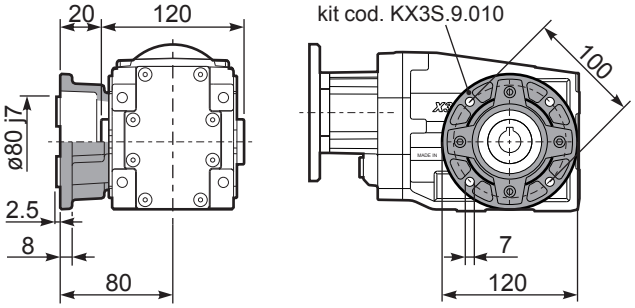


On request
A richiesta

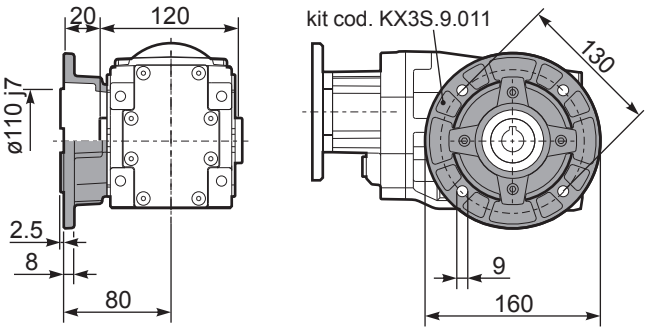
PX32S..-N.. Feet
Piedini



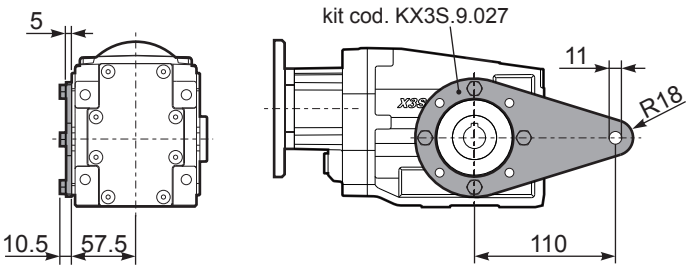
PX32S-F1.. Output flange
Flangia uscita



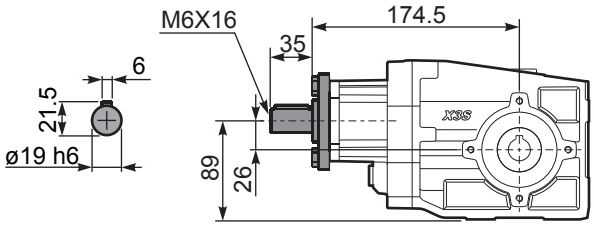
PX32S-F2.. Output flange
Flangia uscita



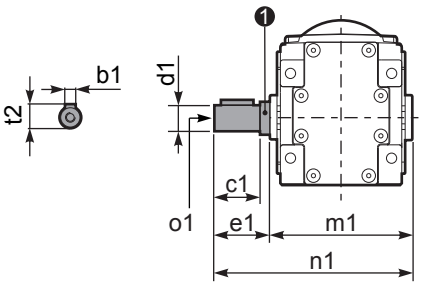
PX32SBR.. Reaction Arm
Braccio di reazione



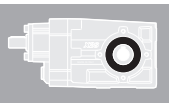
RX32S... Input shaft
Albero in entrata



PX32S..A.. Single output shaft
Albero semplice in uscita



d1	b1	c1	e1	m1	n1	t2	o1	❶ kit code
ø20 -0.005 -0.020	6	37.5	40	120	140	22.5	M8x20	KX2S.5.028
ø25 -0.005 -0.020	8	60	63.2	126.8	190	28	M8x20	K063.5.028



1

▪ 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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q		Output Shaft ø	Ratios code
							63	71	56	63	71			
38.7	**36.17**	0.37	86	1.2	**0.43**	**100**			C	C		17179		01
31.7	**44.21**	0.37	105	1.0	**0.35**	**100**			C	C		19139		02
27.6	**50.68**	0.25	81	1.2	**0.31**	**100**			C	C		17139		03
25.3	**55.36**	0.25	89	1.1	**0.28**	**100**			C	C		17177		04
23.2	**60.31**	0.25	96	1.0	**0.26**	**100**			C	C		15139		05
21.2	**65.88**	0.25	105	0.9	**0.24**	**100**			C	C		15177		06
19.4	**72.25**	0.18	88	1.1	**0.22**	**100**			C	C		10179	**standard**	07
17.6	**79.64**	0.18	97	1.0	**0.20**	**100**			C	C		13177	**ø20**	08
15.2	**92.31**	0.18	113	0.9	**0.17**	**100**			C	C		15137		09
14.6	**95.65**	0.18	117	0.9	**0.16**	**100**			C	C		9179		10
13.8	**101.23**	0.12	80	1.2	**0.15**	**100**			C	C		10139	ø25	11
11.0	**127.37**	0.12	101	1.0	**0.12**	**100**			C	C		7179	On request	12
9.3	**151.16**	0.09	95	1.0	**0.10**	**100**			C	C		6179		13
7.8	**178.46**	0.09	113	0.9	**0.09**	**100**			C	C		7139		14
6.6	**211.79**	0.06	88	1.1	**0.07**	**100**			C	C		6139		15
6.1	**231.37**	0.06	96	1.0	**0.07**	**100**			C	C		6177		16
5.1	**273.16**	0.06	113	0.9	**0.06**	**100**			C	C		7137		17
4.3	**324.18**	0.06	134	0.7	**0.05**	**100**			C	C		6137		18

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

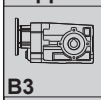
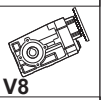
EN Unit **X33S** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

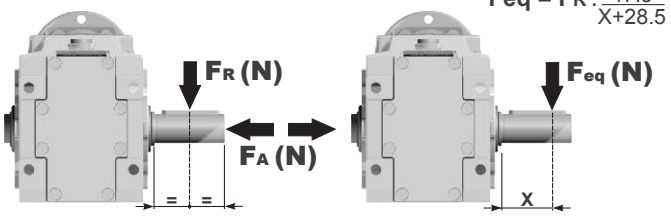
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
0.70 LT	0.65 LT	0.40 LT	0.65 LT	0.95 LT	0.65 LT	0.45 LT
AGIP Telium VSF 320				**SHELL** Omala 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

$$Feq = F_R \cdot \frac{47.5}{X+28.5}$$



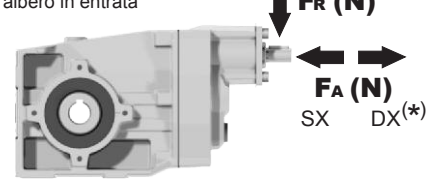
n_2 [min^{-1}]	FA	FR
250	400	2000
150	450	2250
100	500	2500

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
600	190	950

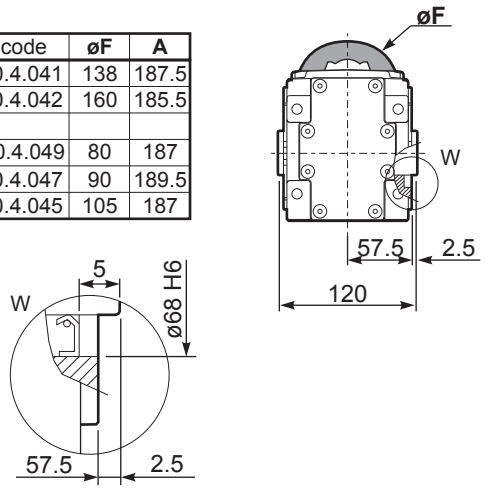
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

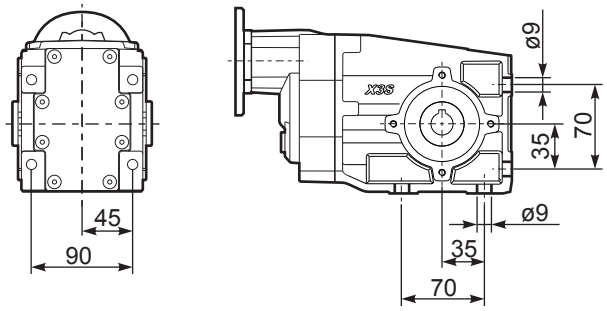
PX33SC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	6.55 kg

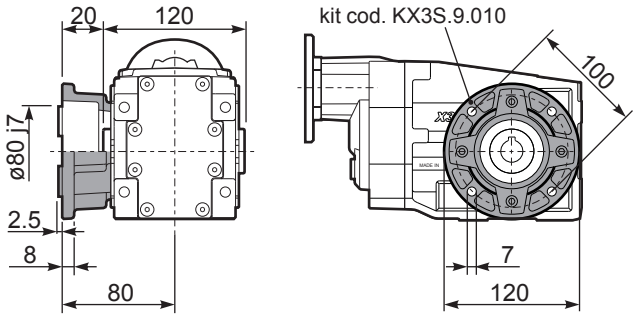
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	187.5
71B5	K050.4.042	160	185.5
56B14	KC40.4.049	80	187
63B14	K050.4.047	90	189.5
71B14	K050.4.045	105	187



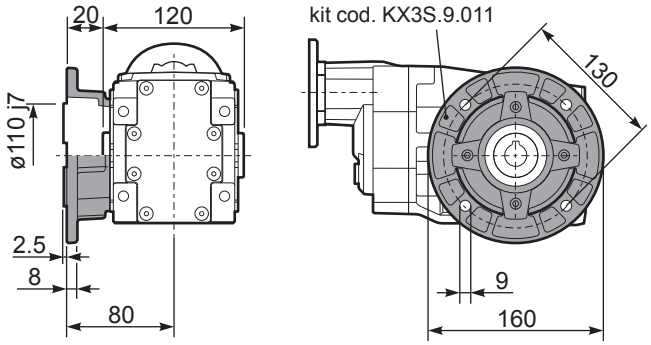
PX33S-N.. Feet
Piedini



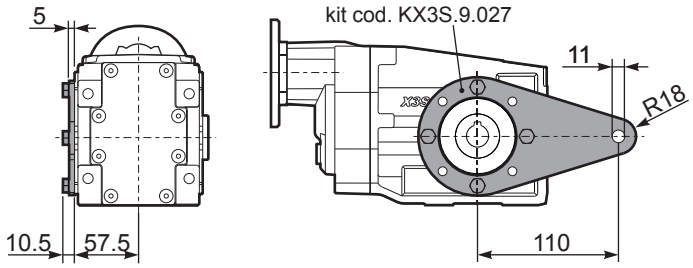
PX33S-F1.. Output flange
Flangia uscita



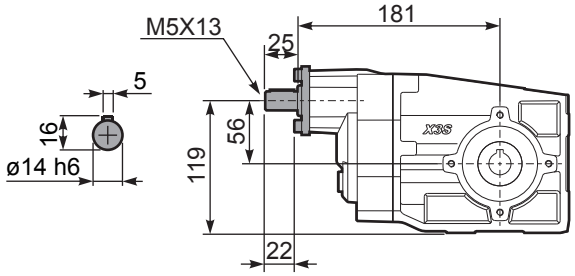
PX33S-F2.. Output flange
Flangia uscita



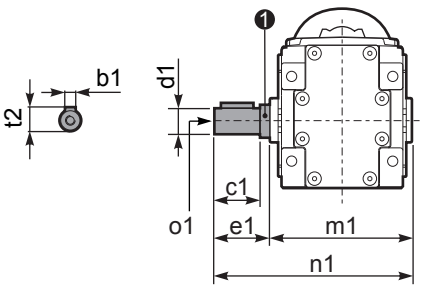
PX33SBR.. Reaction Arm
Braccio di reazione



RX33S... Input shaft
Albero in entrata



PX33S..A.. Single output shaft
Albero semplice in uscita



d1	b1	c1	e1	m1	n1	t2	o1	❶ kit code
ø20 $^{-0.005}_{-0.020}$	6	37.5	40	120	140	22.5	M8x20	KX2S.5.028
ø25 $^{-0.005}_{-0.020}$	8	60	63.2	126.8	190	28	M8x20	K063.5.028

X42A Angletech Gear 150Nm

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	C	D	E	F	Available B14 motor flanges Q	R	T	U		Output Shaft	Ratios code
							63	71	80	90	100 112	71	80	90	100 112			
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

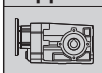
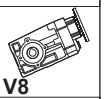
EN Unit **X42A** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

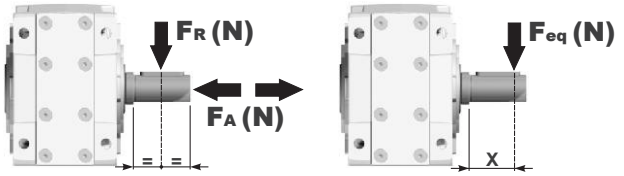
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
0.60 LT	0.75 LT	0.50 LT	0.70 LT	1.10 LT	0.60 LT	0.50 LT
AGIP Telium VSF 320				**SHELL** Omala 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 AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = F_R \cdot \frac{54}{X+28}$$



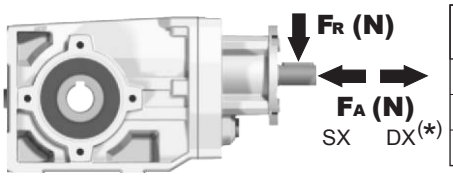
n_2 [min^{-1}]	FA	FR
250	500	2500
150	600	3000
100	700	3500

n_2 [min^{-1}]	FA	FR
75	800	4000
50	960	4800
25	960	4800

n_2 [min^{-1}]	FA	FR
15	960	4800

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	FR
1400	240	1200
900	280	1400
600	340	1700

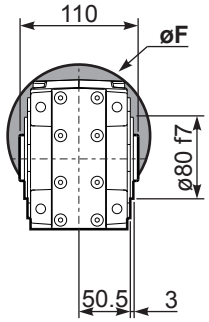
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

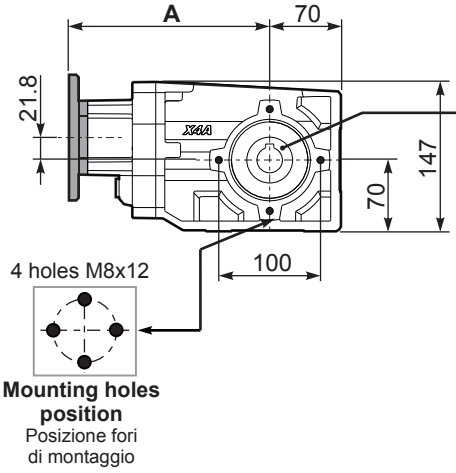
tab. 2

PX42AC... Basic Gearbox
Riduttore base

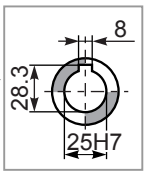
Gearbox weight peso riduttore	7.82 kg

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	235
71B14	K063.4.047	105	197.5
80B14	K063.4.046	120	198.5
90B14	K063.4.041	140	199.5
100/112B14	KC40.4.041	160	215

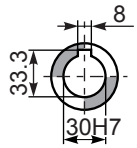




Mounting holes position
Posizione fori di montaggio

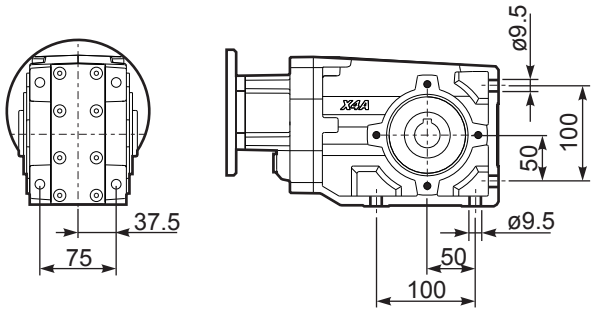


Standard
Hollow shaft

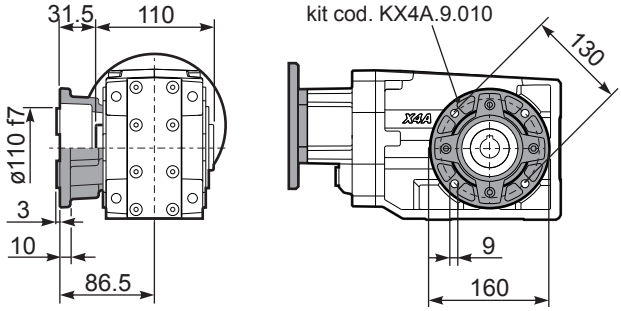


On request
A richiesta

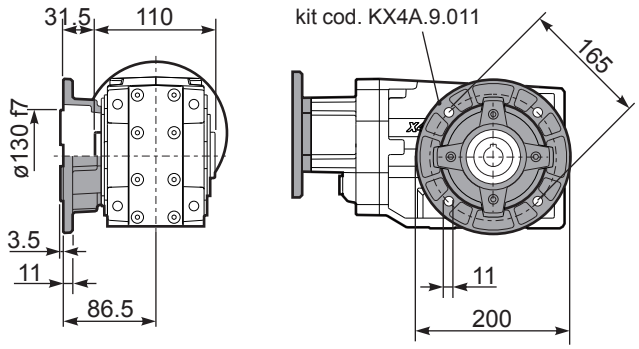
PX42A-N.. Feet
Piedini



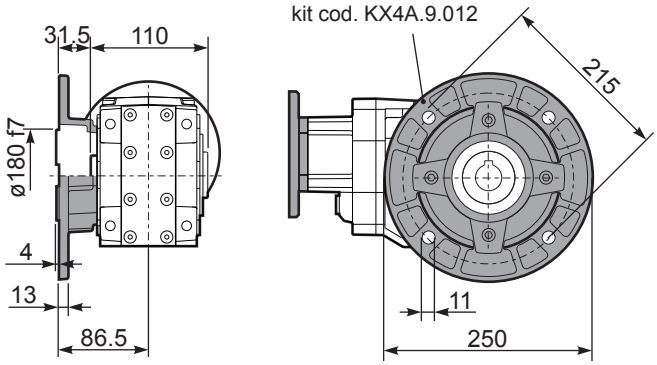
PX42A-F2.. Output flange
Flangia uscita



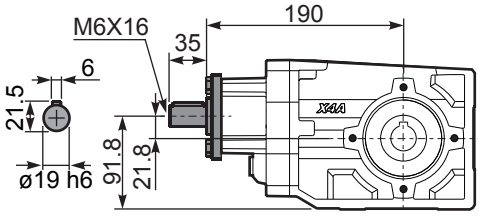
PX42A-F3.. Output flange
Flangia uscita



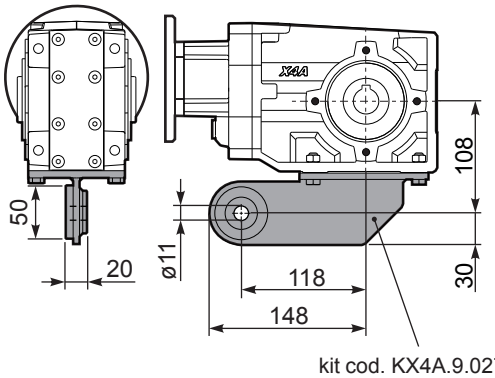
PX42A-F4.. Output flange
Flangia uscita



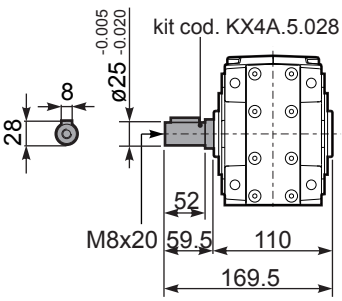
RX42A... Input shaft
Albero in entrata



PX42ABR.. Reaction Arm
Braccio di reazione

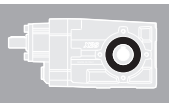


PX42A..A.. Single output shaft
Albero semplice in uscita



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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q		Output Shaft	Ratios code
							63	71	56	63	71			
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

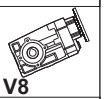
EN Unit **X43A** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

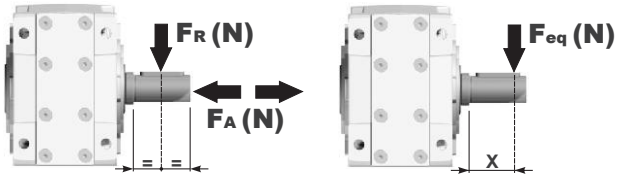
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	 **B6**	 **B7**	 **B8**	 **V5**	 **V6**	 **V8**
0.80 LT	0.80 LT	0.60 LT	0.80 LT	1.20 LT	0.70 LT	0.70 LT
AGIP Telium VSF 320			**SHELL** Omala 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

$$Feq = F_R \cdot \frac{54}{X+28}$$



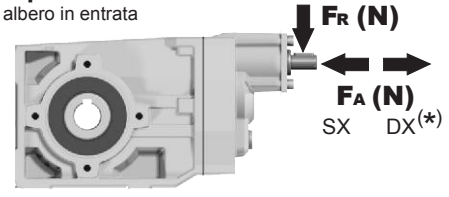
n_2 [min^{-1}]	FA	FR
250	500	2500
150	600	3000
100	700	3500

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



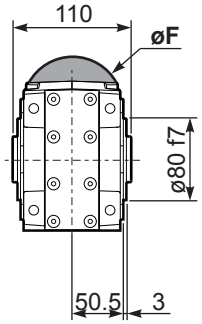
n_1 [min^{-1}]	FA [N]	FR [N]
1400	140	700
900	160	800
600	190	950

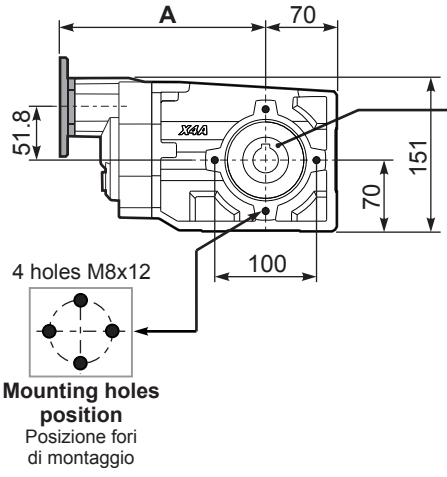
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

PX43AC... Basic Gearbox
Riduttore base

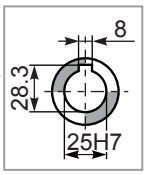
Gearbox weight peso riduttore	7.93 kg

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	203
71B5	K050.4.042	160	201
56B14	KC40.4.049	80	202.5
63B14	K050.4.047	90	205
71B14	K050.4.045	105	202.5

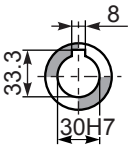




Mounting holes position
Posizione fori di montaggio

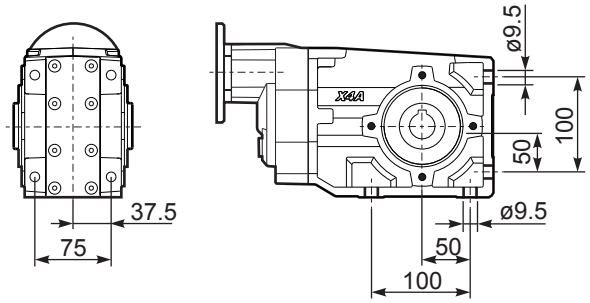


Standard
Hollow shaft

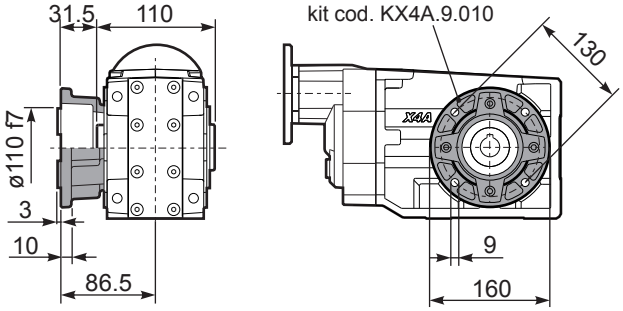


On request
A richiesta

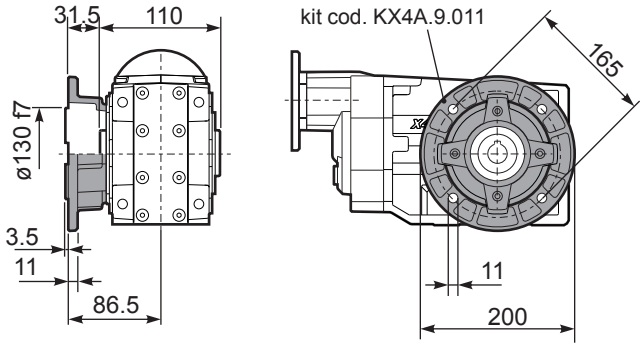
PX43A-N.. Feet
Piedini



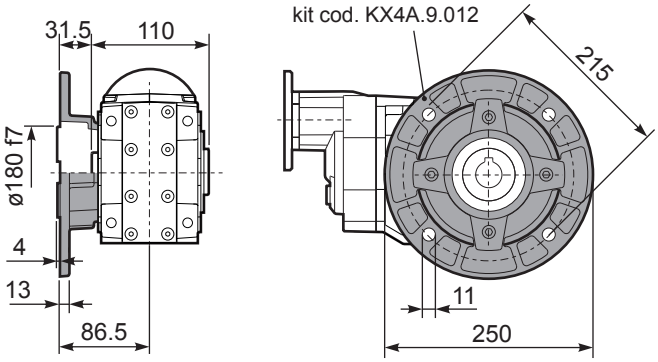
PX43A-F2.. Output flange
Flangia uscita



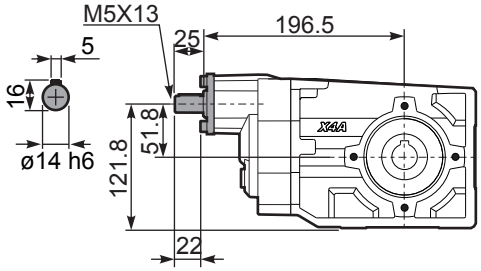
PX43A-F3.. Output flange
Flangia uscita



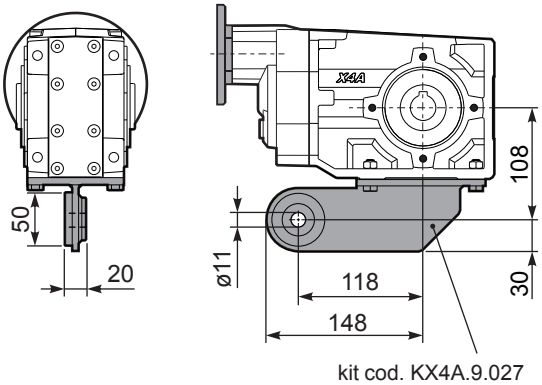
PX43A-F4.. Output flange
Flangia uscita



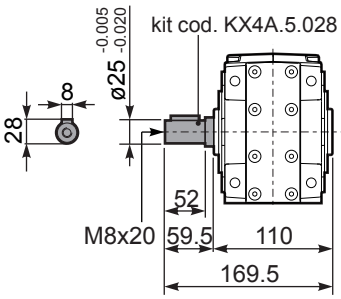
RX43A... Input shaft
Albero in entrata



PX43ABR.. Reaction Arm
Braccio di reazione

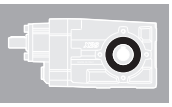


PX43A..A.. Single output shaft
Albero semplice in uscita



X52A Angletech Gear 250Nm

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 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

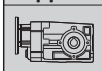
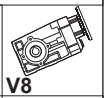
EN Unit **X52A** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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

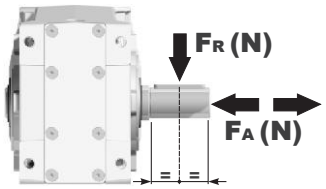
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

$$Feq = F_R \cdot \frac{61.5}{X+31}$$



n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	800	4000

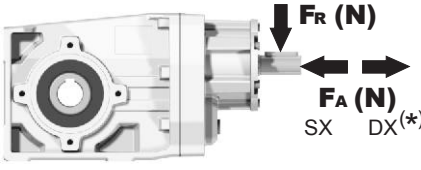
n_2 [min^{-1}]	FA	FR
75	820	4100
50	960	4800
25	1350	6750

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	FR
1400	400	2000
900	440	2200
600	440	2200

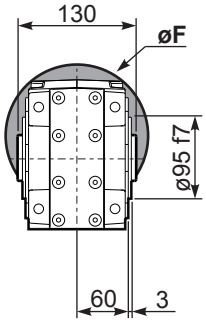
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

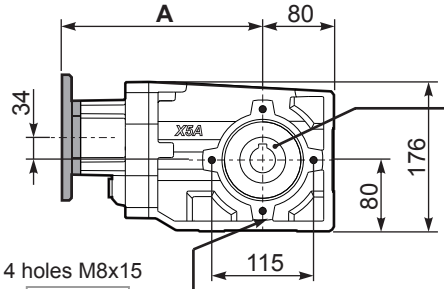
tab. 2

PX52AC... Basic Gearbox
Riduttore base

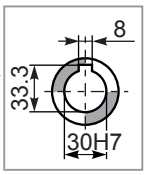
Gearbox weight peso riduttore	12.80 kg

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	234
80/90B5	KC023.4.042	200	236
100/112B5	KC023.4.043	250	242
80B14	KC085.4.046	120	234
90B14	KC085.4.045	140	234
100/112B14	KC085.4.047	160	245

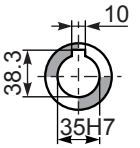




Mounting holes position
Posizione fori di montaggio

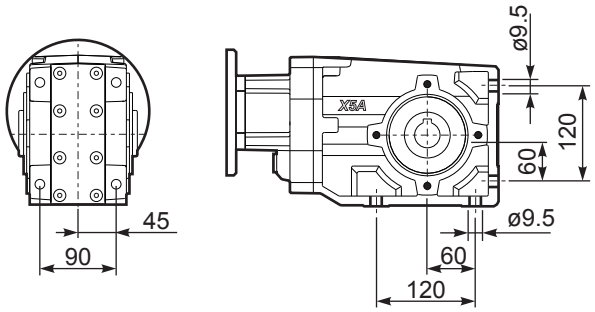


Standard
Hollow shaft

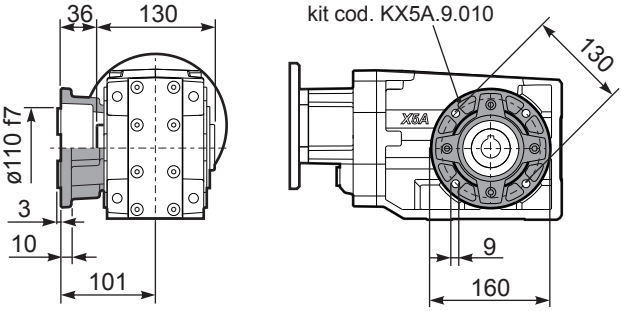


On request
A richiesta

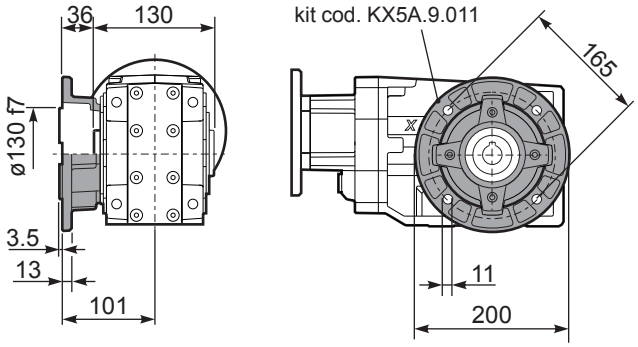
PX52A-N.. Feet
Piedini



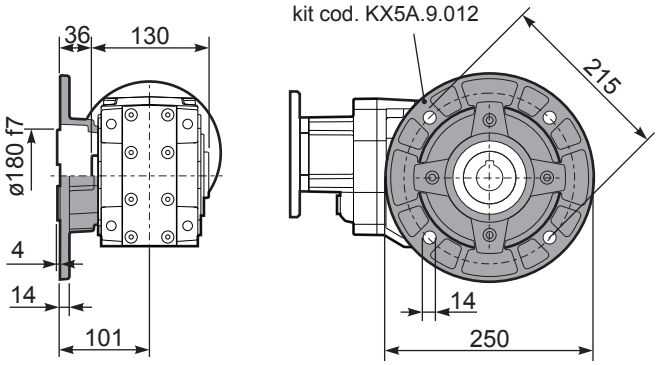
PX52A-F2.. Output flange
Flangia uscita



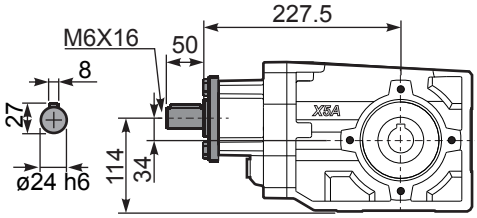
PX52A-F3.. Output flange
Flangia uscita



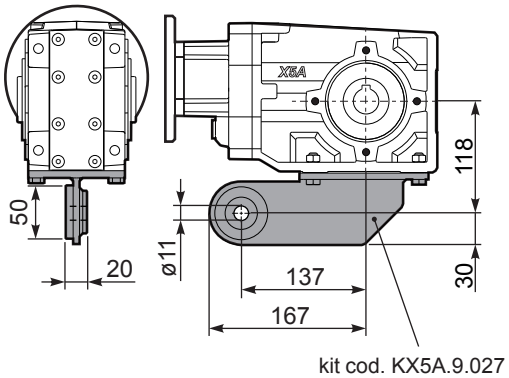
PX52A-F4.. Output flange
Flangia uscita



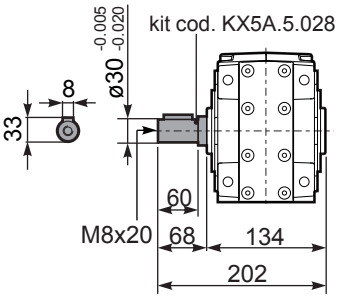
RX52A... Input shaft
Albero in entrata

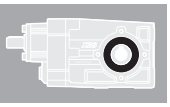


PX52ABR.. Reaction Arm
Braccio di reazione



PX52A..A.. Single output shaft
Albero semplice in uscita





1

▪ 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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft	Ratios code
							63	71	80	90	71	80	90			
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**	0.09	210	1.2	0.12	**250**	B				C	C		7138		16
3.6	**383.82**	0.09	242	1.0	0.10	**250**	B				C	C		7811		17
3.1	**446.70**	0.09	282	0.9	0.09	**250**	B				C	C		988		18
2.4	**589.85**	0.06	244	1.0	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

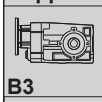
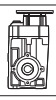
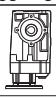
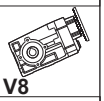
EN Unit **X53A** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

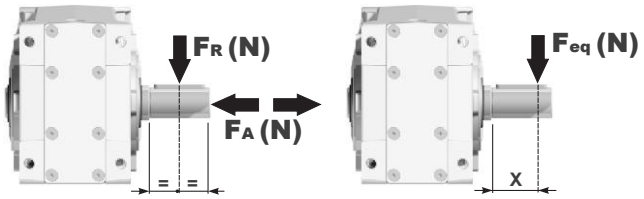
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.30 LT	1.55 LT	0.85 LT	1.45 LT	2.10 LT	1.25 LT	0.95 LT
AGIP Telium VSF 320				**SHELL** Omala 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

$$Feq = F_R \cdot \frac{61.5}{X+31}$$



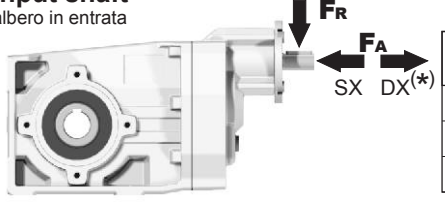
n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	800	4000

n_2 [min^{-1}]	FA	FR
75	820	4100
50	960	4800
25	1350	6750

n_2 [min^{-1}]	FA	FR
15	1660	8300

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
600	440	2200

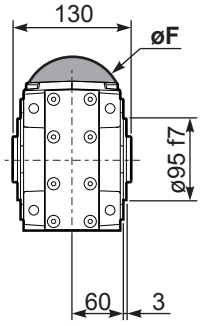
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

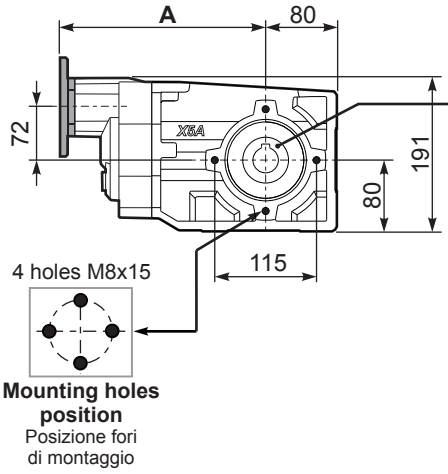
tab. 2

PX53AC... Basic Gearbox
Riduttore base

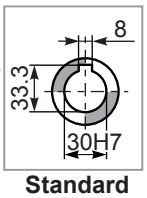
Gearbox weight peso riduttore **12.65 kg**

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	245
90B14	K063.4.041	140	246

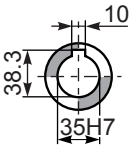




Mounting holes position
Posizione fori di montaggio

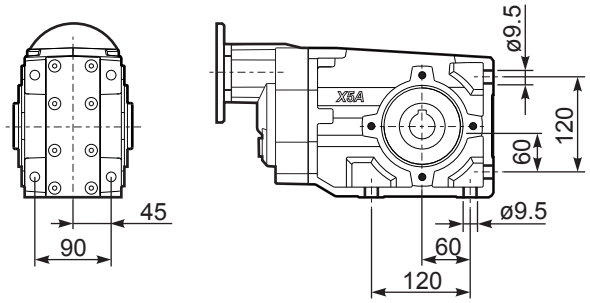


Standard
Hollow shaft

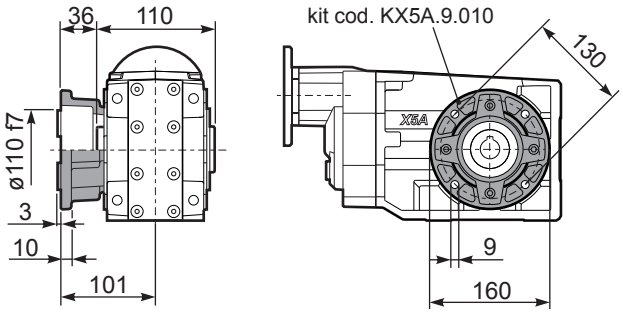


On request
A richiesta

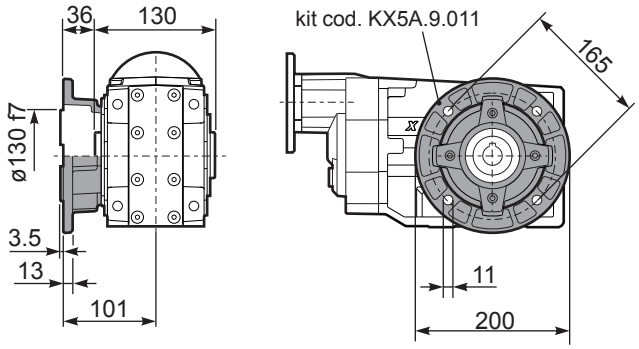
PX53A-**N**.. Feet
Piedini



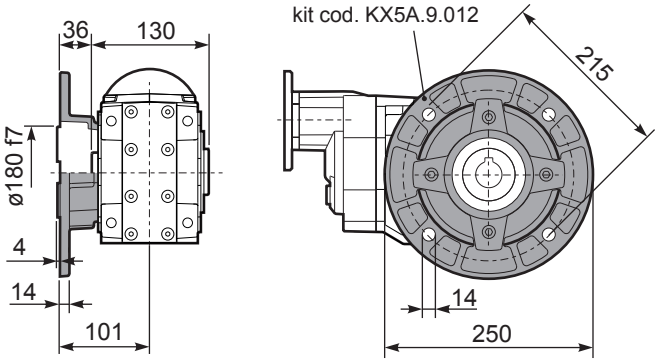
PX53A-**F2**.. Output flange
Flangia uscita



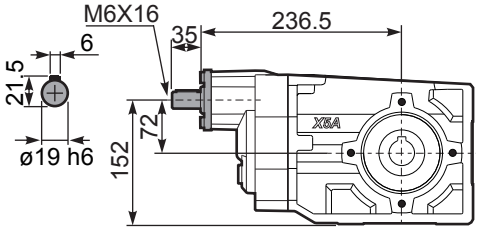
PX53A-**F3**.. Output flange
Flangia uscita



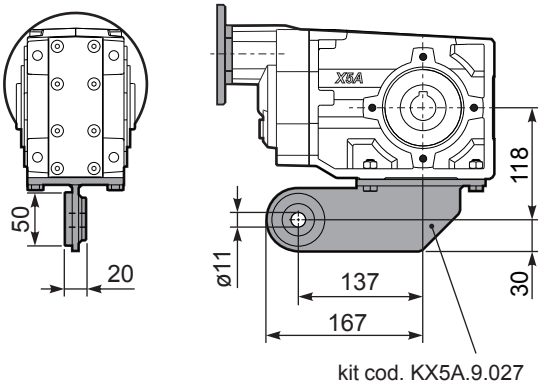
PX53A-**F4**.. Output flange
Flangia uscita



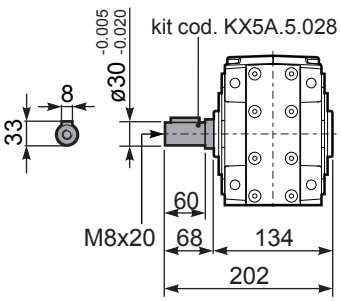
RX53A... Input shaft
Albero in entrata

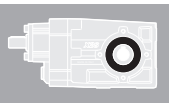


PX53A**BR**.. Reaction Arm
Braccio di reazione



PX53A..**A**.. Single output shaft
Albero semplice in uscita





1

▪ 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

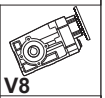
EN Unit **X62A** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

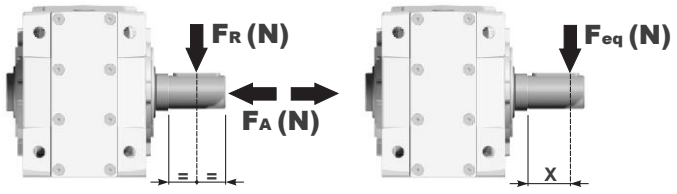
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.25 LT	1.70 LT	0.95 LT	1.60 LT	2.45 LT	1.50 LT	1.10 LT
AGIP Telium VSF 320			**SHELL** Omala 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

$$Feq = FR \cdot \frac{69}{X+39}$$



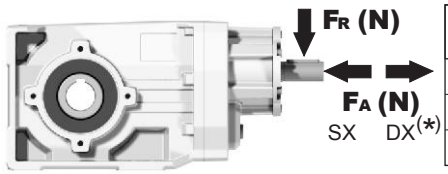
n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	780	3900

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
600	600	3000

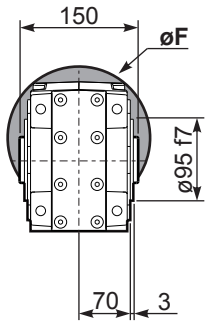
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

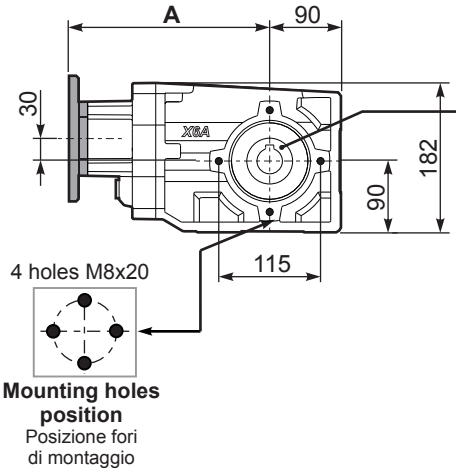
tab. 2

PX62AC... Basic Gearbox
Riduttore base

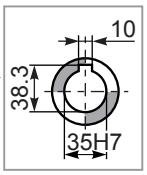
Gearbox weight peso riduttore	15.80 kg

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	253
80/90B5	KC023.4.042	200	255
100/112B5	KC023.4.043	250	261
132B5	KC50.4.043	300	282.5
80B14	KC085.4.046	120	253
90B14	KC085.4.045	140	253
100/112B14	KC085.4.047	160	264
132B14	KC50.4.041	200	282.5

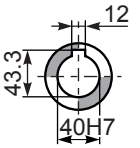




Mounting holes position
Posizione fori di montaggio

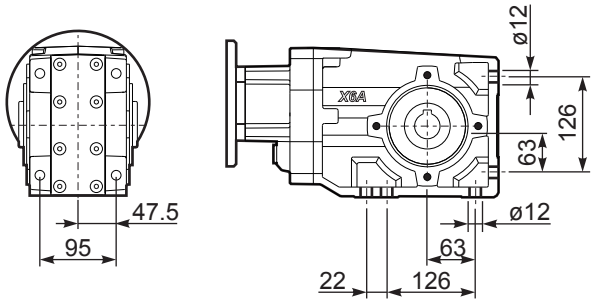


Standard
Hollow shaft

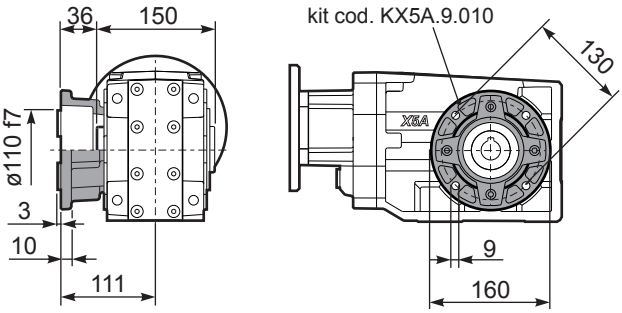


On request
A richiesta

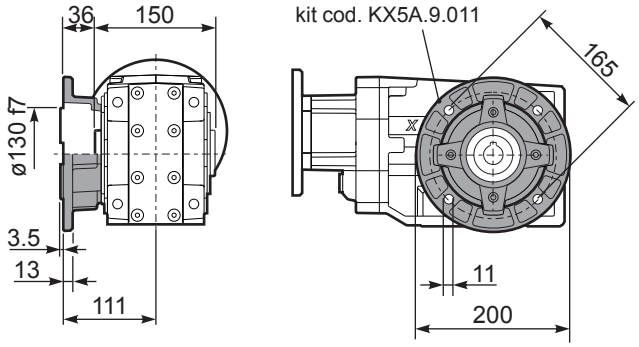
PX62A-N.. Feet
Piedini



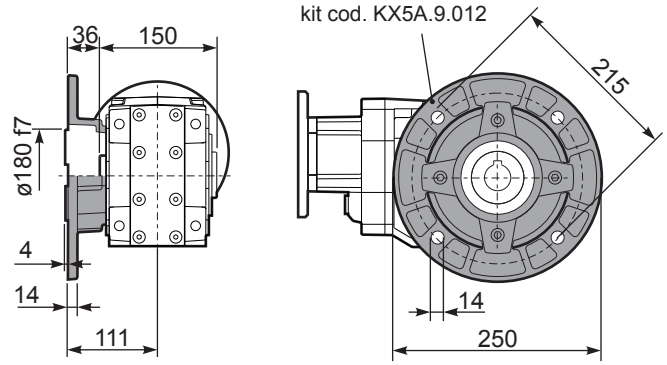
PX62A-F2.. Output flange
Flangia uscita



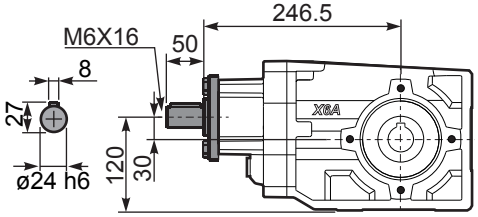
PX62A-F3.. Output flange
Flangia uscita



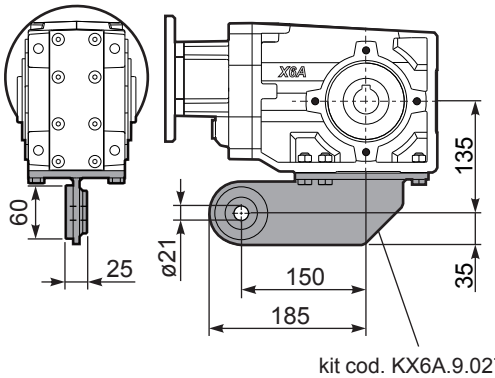
PX62A-F4.. Output flange
Flangia uscita



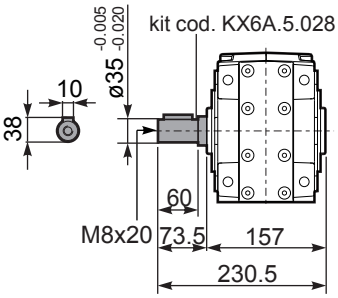
RX62A... Input shaft
Albero in entrata



PX62ABR.. Reaction Arm
Braccio di reazione

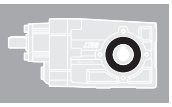


PX62A..A.. Single output shaft
Albero semplice in uscita



X63A Angletech Gear 410Nm

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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft	Ratios code
							63	71	80	90	71	80	90			
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**	0.09	372	1.1	**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

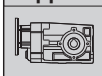
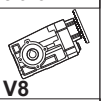
EN Unit **X63A** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

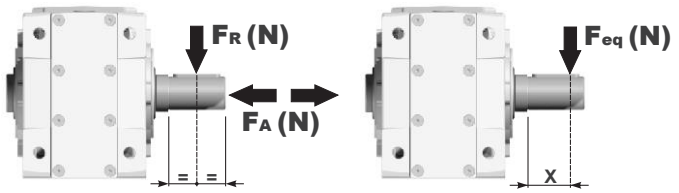
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.80 LT	1.80 LT	1.05 LT	1.70 LT	2.60 LT	1.65 LT	1.30 LT
AGIP Telium VSF 320				**SHELL** Omala 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

$$Feq = F_R \cdot \frac{69}{X+39}$$



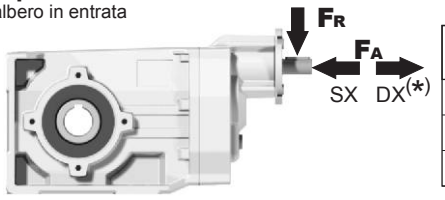
n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	780	3900

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
600	440	2200

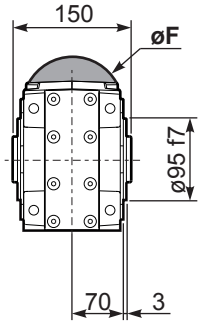
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

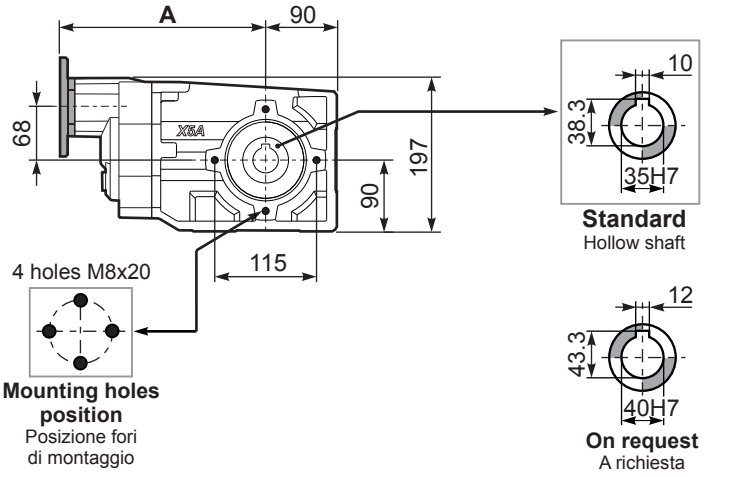
tab. 2

PX63AC... Basic Gearbox
Riduttore base

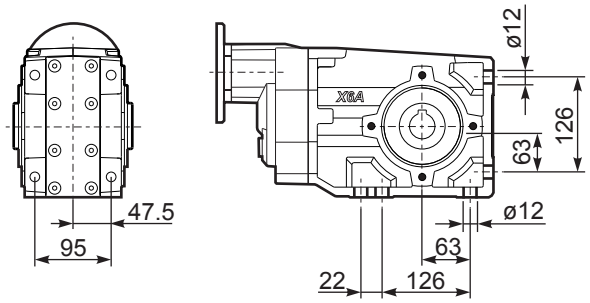
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	265
71B5	K063.4.042	160	263
80/90B5	K063.4.043	200	265
71B14	K063.4.047	105	263
80B14	K063.4.046	120	264
90B14	K063.4.041	140	265

Gearbox weight peso riduttore **15.98 kg**

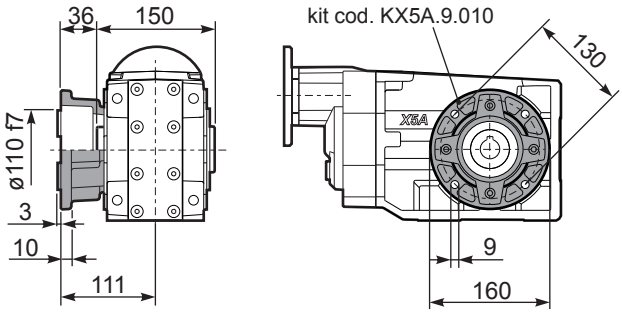




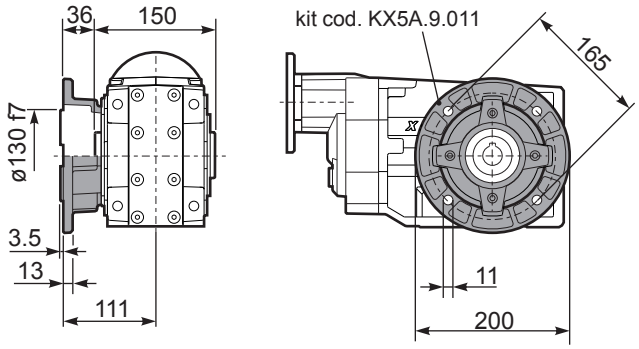
PX63A-N.. Feet
Piedini



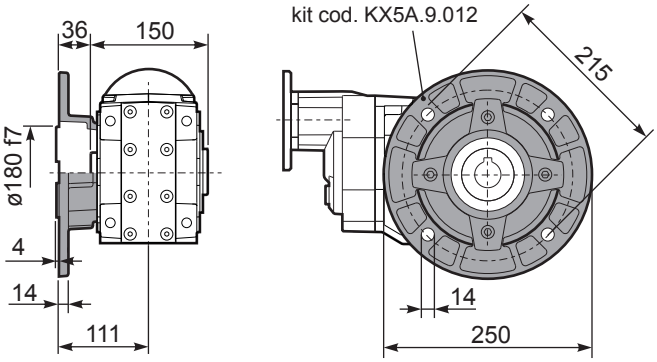
PX63A-F2.. Output flange
Flangia uscita



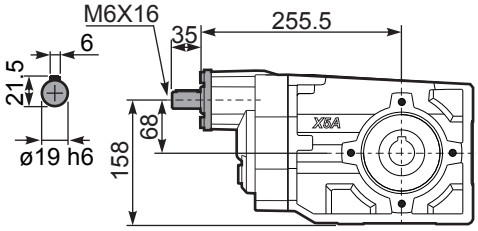
PX63A-F3.. Output flange
Flangia uscita



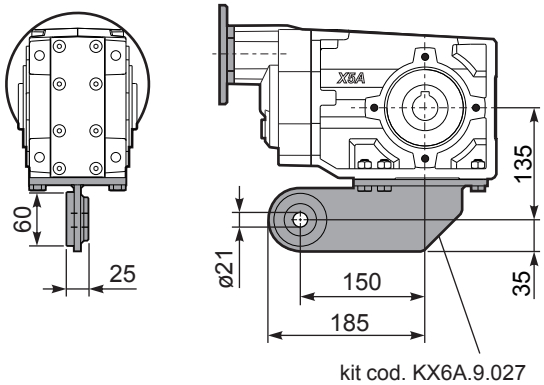
PX63A-F4.. Output flange
Flangia uscita



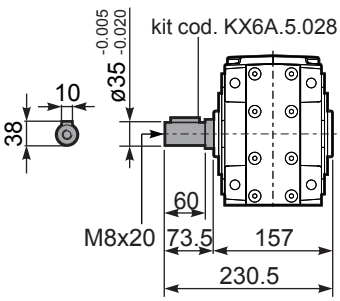
RX63A... Input shaft
Albero in entrata

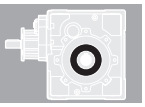


PX63ABR.. Reaction Arm
Braccio di reazione



PX63A..A.. Single output shaft
Albero semplice in uscita





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		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	**ø42**	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	ø40	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 lubrification, 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.

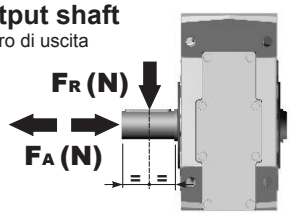
E El reductor tamaño **113C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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		

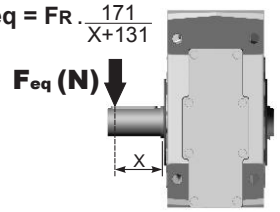
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{171}{X+131}$$



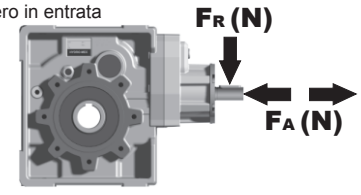
n_2	FA	FR
300	640	3200
250	700	3500
200	740	3700

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



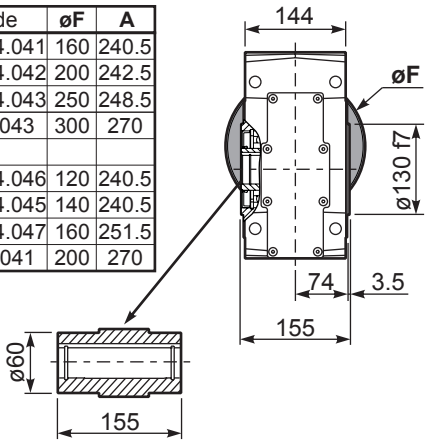
n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

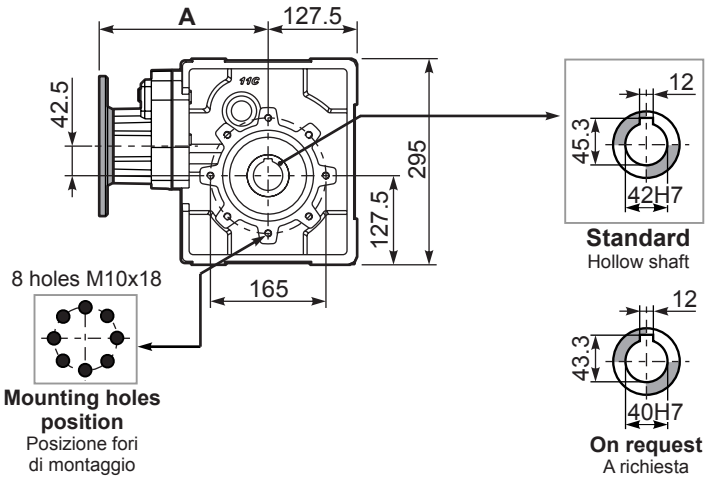
tab. 2

P113CC... Basic Gearbox
Riduttore base

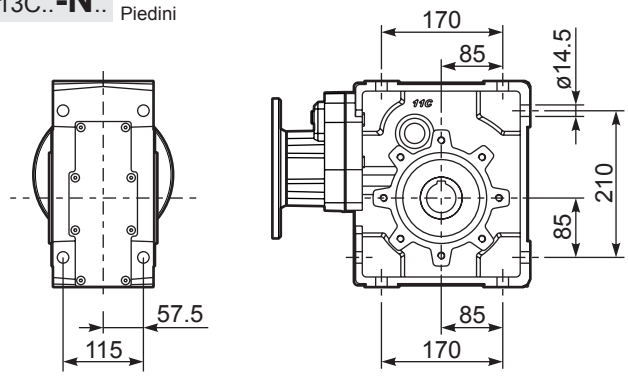
Gearbox weight peso riduttore	38.0 kg

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	240.5
80/90B5	KC023.4.042	200	242.5
100/112B5	KC023.4.043	250	248.5
132B5	KC50.4.043	300	270
80B14	KC085.4.046	120	240.5
90B14	KC085.4.045	140	240.5
100/112B14	KC085.4.047	160	251.5
132B14	KC50.4.041	200	270

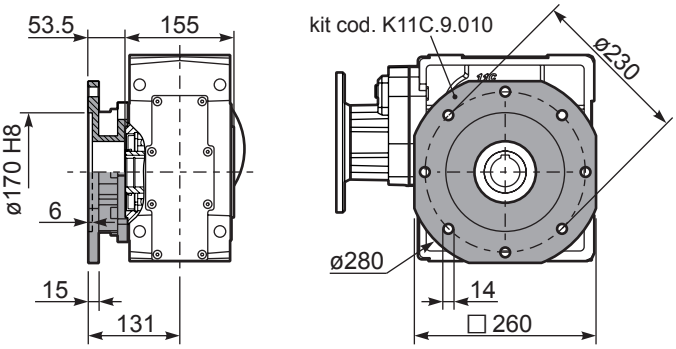




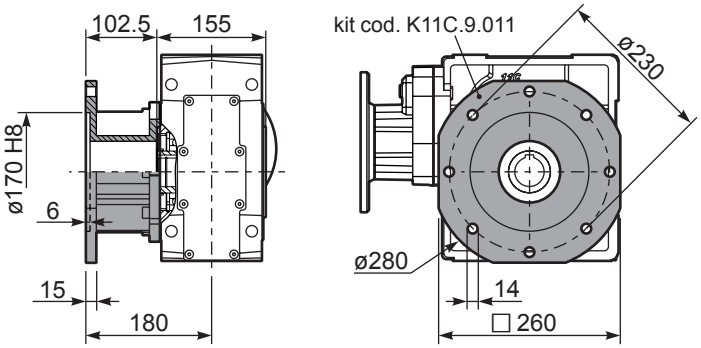
P113C..-N.. Feet
Piedini



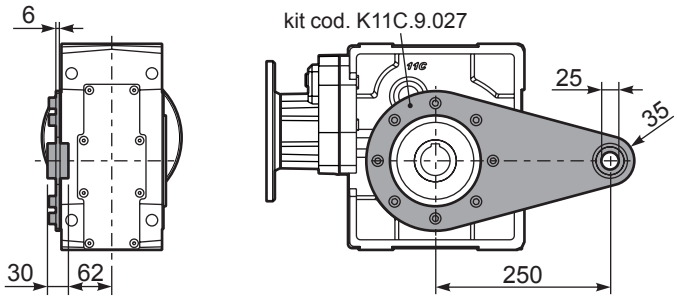
P113C-FC.. Output flange
Flangia uscita



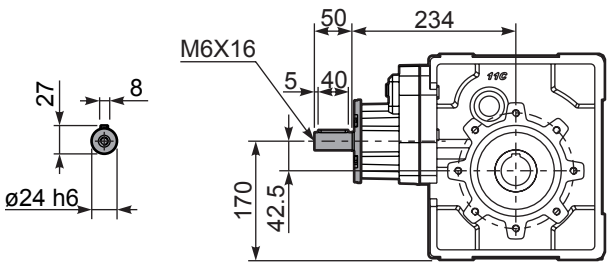
P113C-FL.. Output flange
Flangia uscita



P113CBR.. Reaction Arm
Braccio di reazione

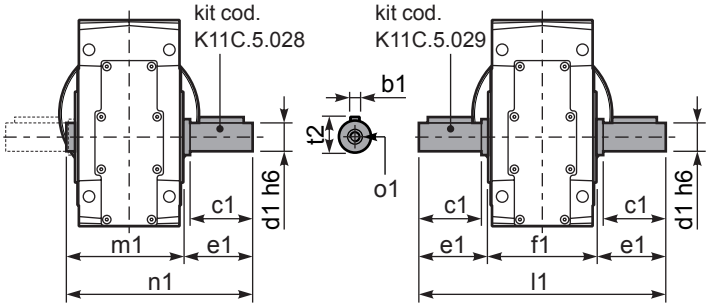


R113C... Input shaft
Albero in entrata



P113C..A.. Single shaft
Albero lento semplice

P113C..B.. Double shaft
Albero lento bisp.



	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	12	80	42	84.5	155	324	164.5	249	45	M16
-	-	-	-	-	-	-	-	-	-	-

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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft ø	Ratios code
							63	71	80	90	71	80	90			
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	**ø42**	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	ø40	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

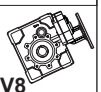
EN Unit **114C** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

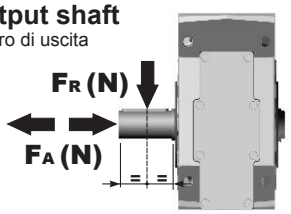
E El reductor tamaño **114C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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		

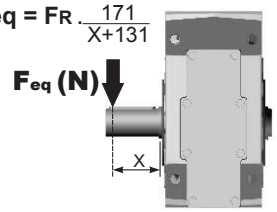
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



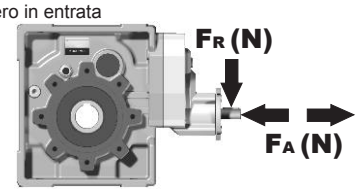
$$Feq = FR \cdot \frac{171}{X+131}$$



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



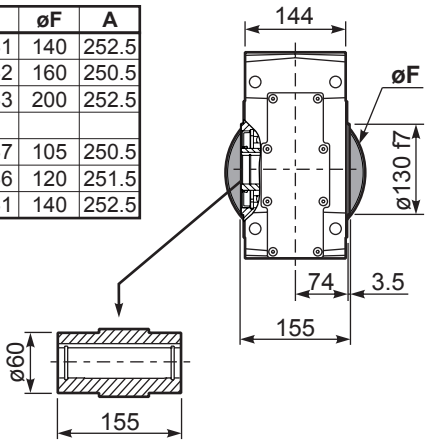
n_1	FA	FR
1400	240	1200
900	280	1400
500	310	1700

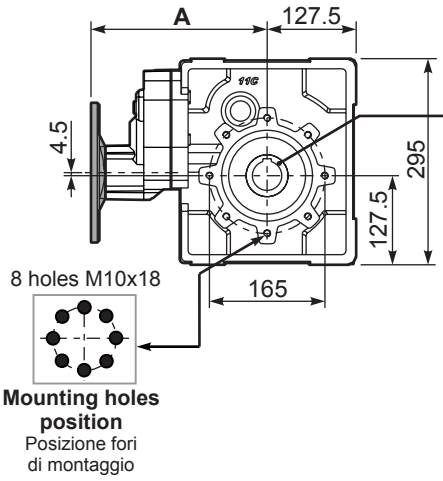
tab. 2

P114CC... Basic Gearbox
Riduttore base

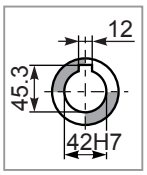
Gearbox weight peso riduttore	38.0 kg

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	251.5
90B14	K063.4.041	140	252.5

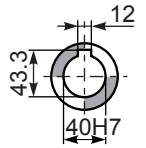




Mounting holes position
Posizione fori di montaggio

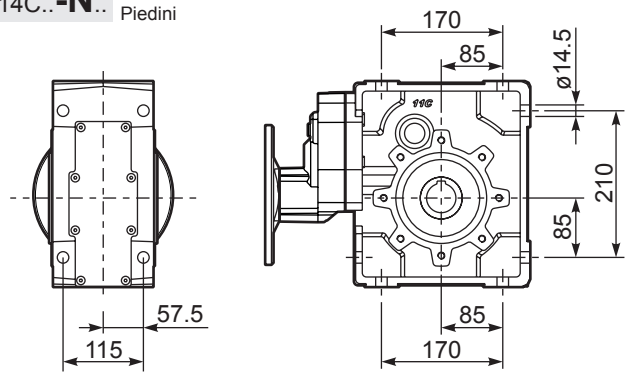


Standard
Hollow shaft

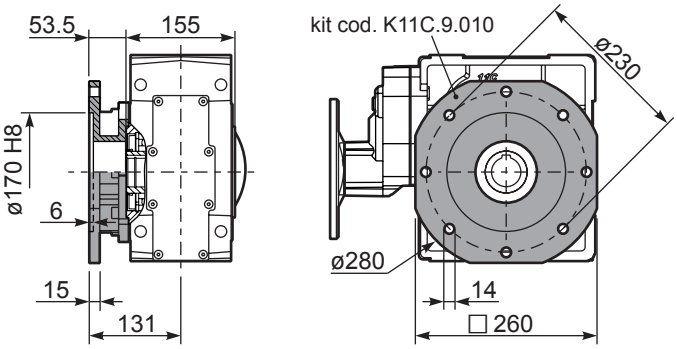


On request
A richiesta

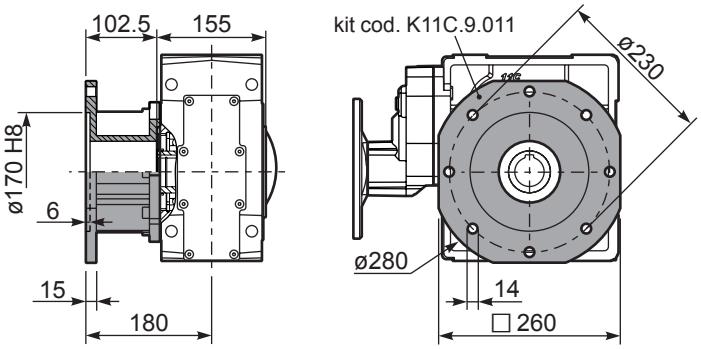
P114C..-N.. Feet
Piedini



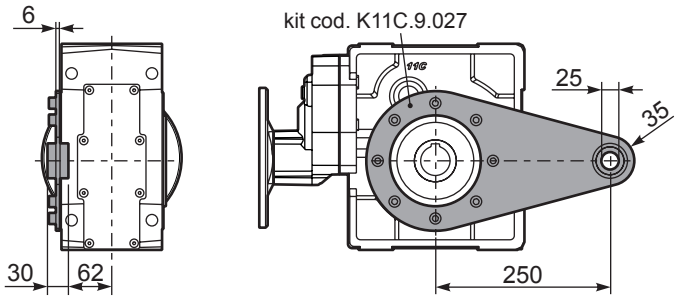
P114C-FC.. Output flange
Flangia uscita



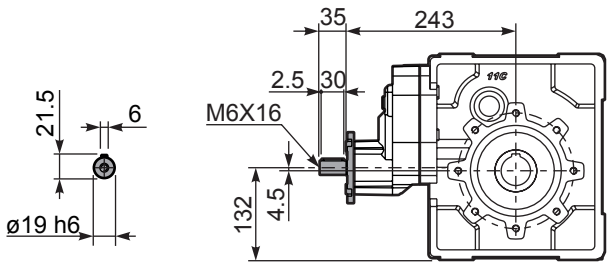
P114C-FL.. Output flange
Flangia uscita



P114CBR.. Reaction Arm
Braccio di reazione

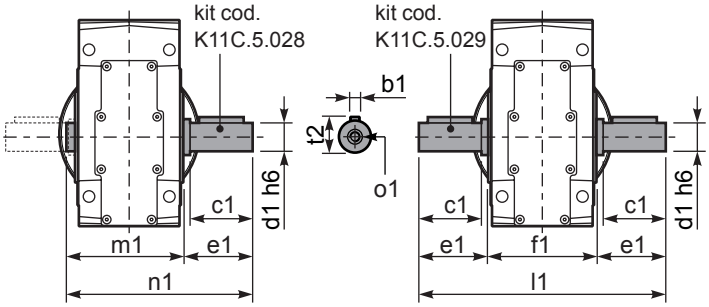


R114C... Input shaft
Albero in entrata

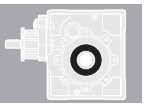


P114C..A.. Single shaft
Albero lento semplice

P114C..B.. Double shaft
Albero lento bisp.



	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	12	80	42	84.5	155	324	164.5	249	45	M16
-	-	-	-	-	-	-	-	-	-	-



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		Output Shaft ø	Ratios code
145	**9.69**	9	560	1.3	**12.2**	**755**	B									302418	**standard ø45**	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		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		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

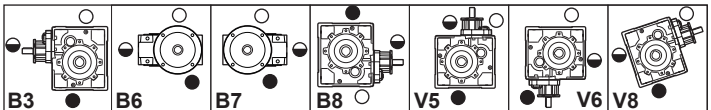
C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **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.



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

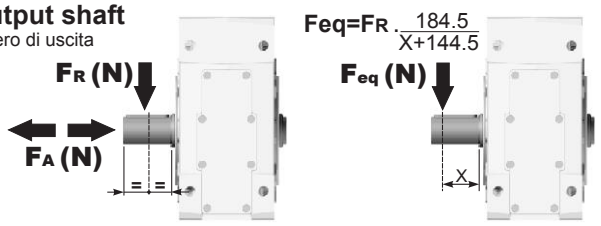
AGIP Blasia 460

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

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

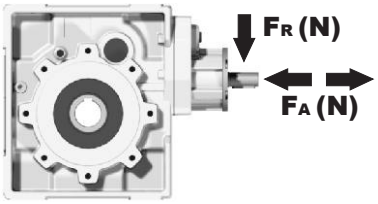
$F_{eq} = F_R \cdot \frac{184.5}{X+144.5}$



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

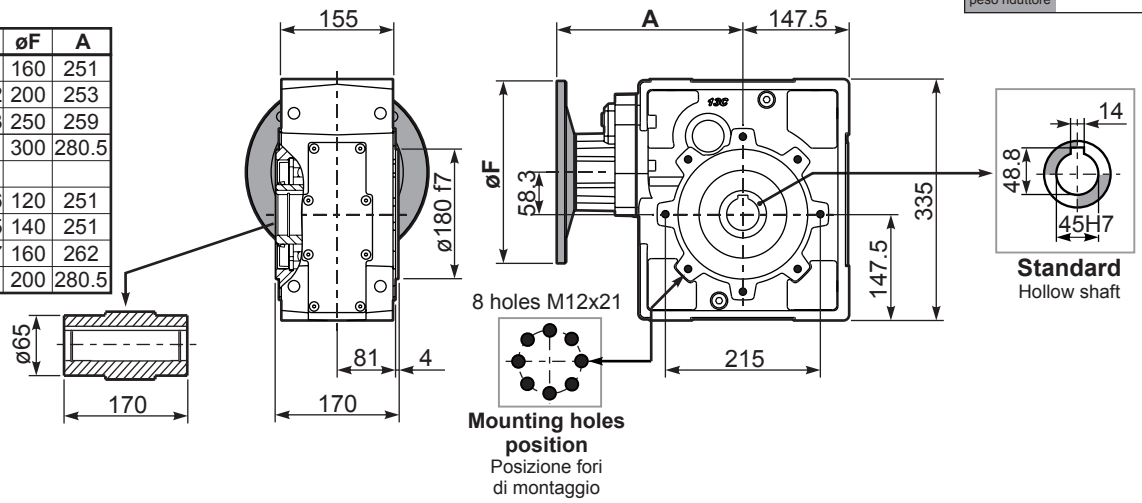
tab. 2

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.

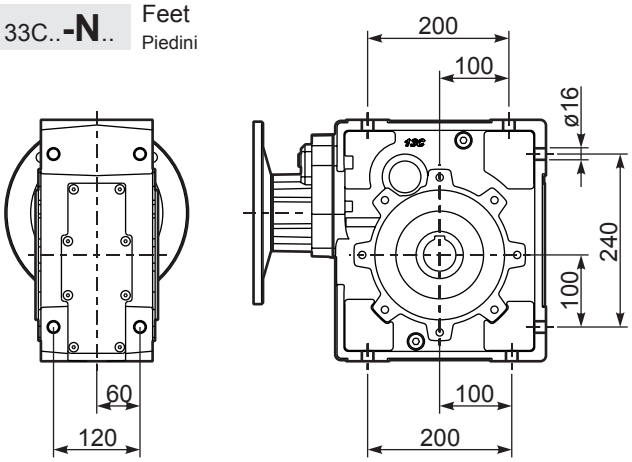
P133CC... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	251
80/90B5	KC023.4.042	200	253
100/112B5	KC023.4.043	250	259
132B5	KC50.4.043	300	280.5
80B14	KC085.4.046	120	251
90B14	KC085.4.045	140	251
100/112B14	KC085.4.047	160	262
132B14	KC50.4.041	200	280.5

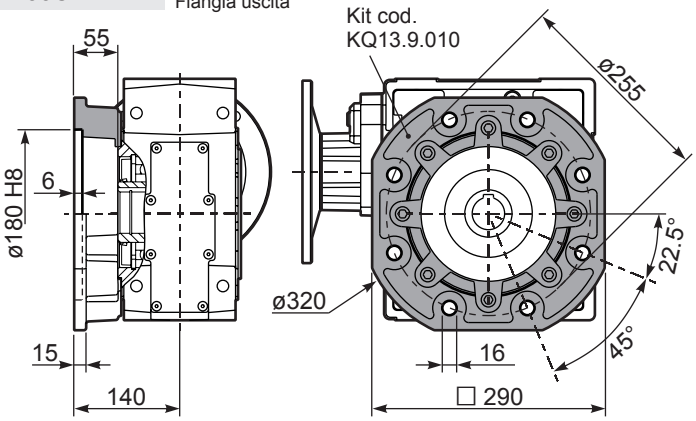
Gearbox weight peso riduttore **53.5 kg**



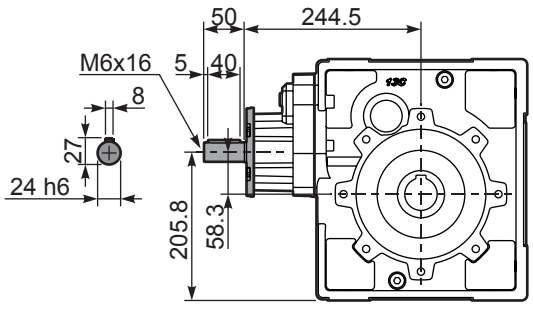
P133C..-N.. Feet
Piedini



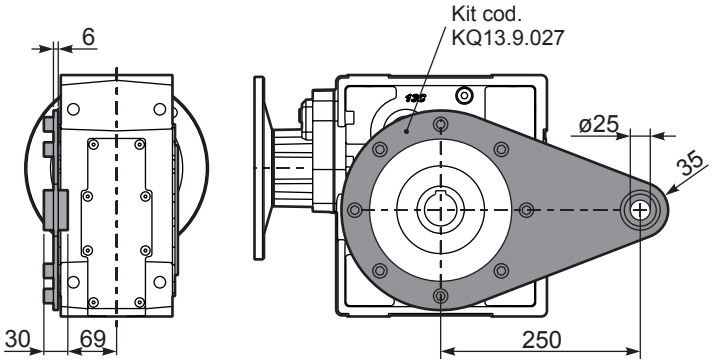
P133C..-FC.. Output flange
Flangia uscita



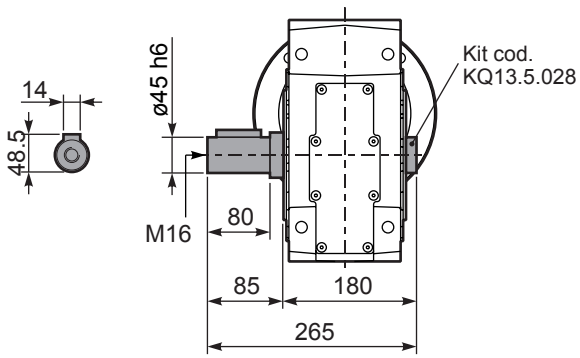
R133C... Input Shaft
Albero in entrata



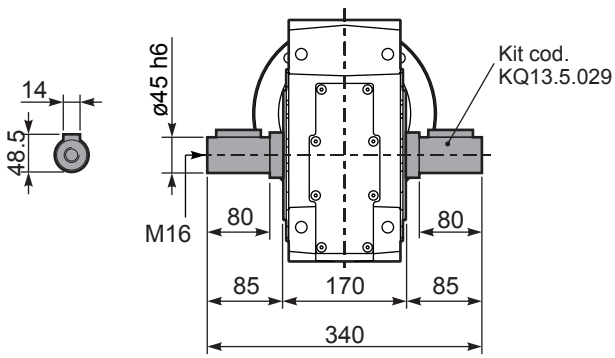
P133CBR.. Reaction arm
Braccio di reazione

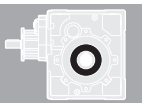


P133C..A.. Single output Shaft
Albero lento semplice



P133C..B.. Double Input Shaft
Albero lento bisporgente





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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft ø	Ratios code
							63	71	80	90	71	80	90			
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		09
5.6	**249.31**	0.55	867	1.2	0.64	1000	B				C	C		17082414	**standard ø45**	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

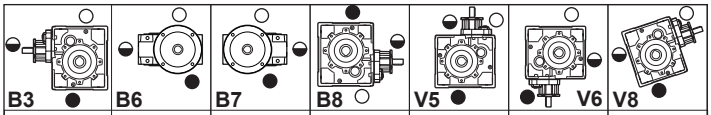
C) **Motor Flange Holes Position**
Posizione Fori Flangia Motore

EN Unit **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

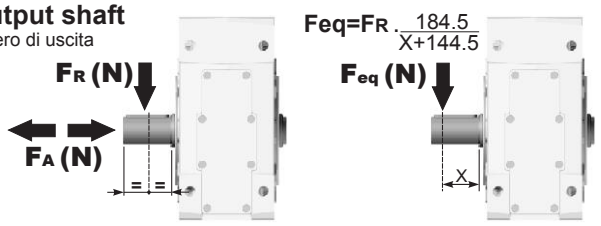
AGIP Blasia 460

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

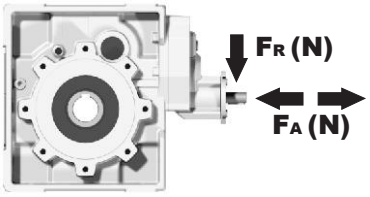
Output shaft
Albero di uscita



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

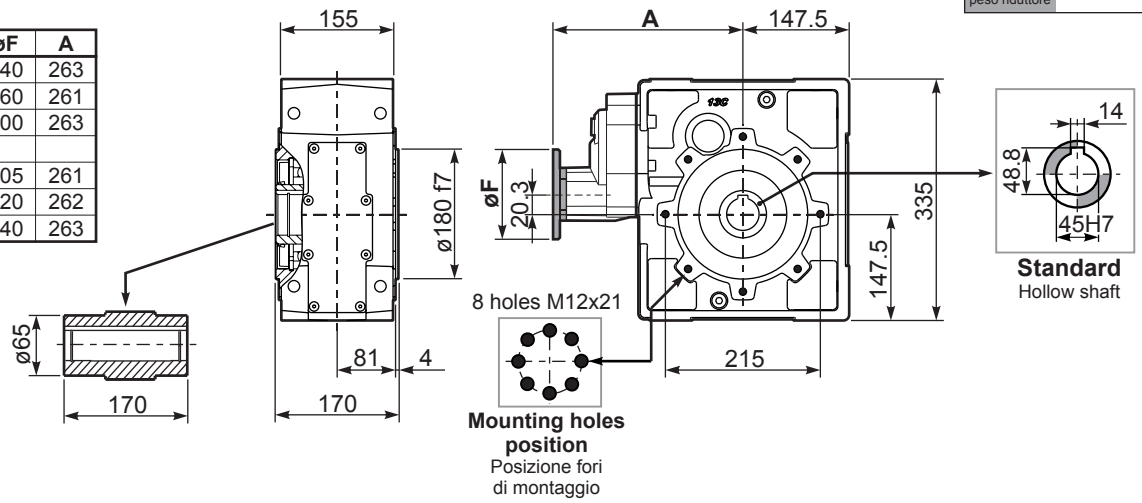
tab. 2

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.

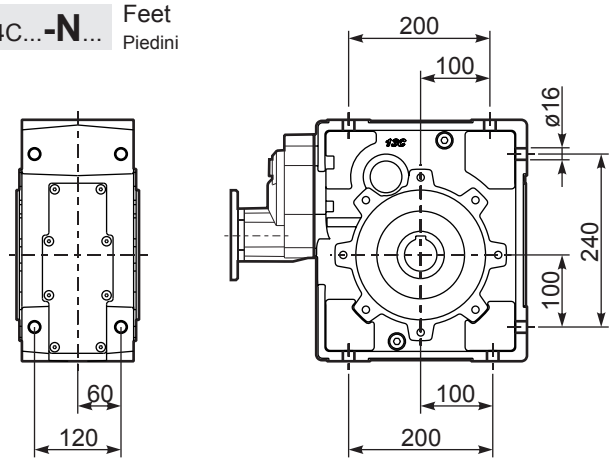
P134CC... Basic gearbox
Riduttore base

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	262
90B14	K063.4.041	140	263

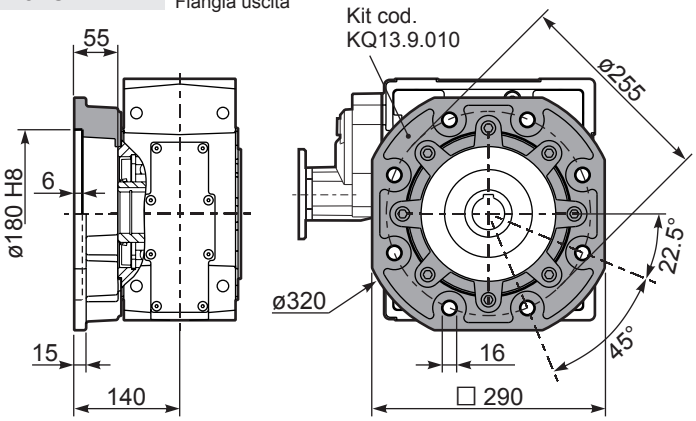
Gearbox weight peso riduttore **53.5 kg**



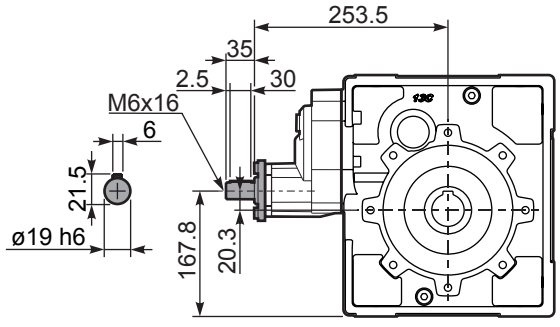
P134C...**-N**... Feet
Piedini



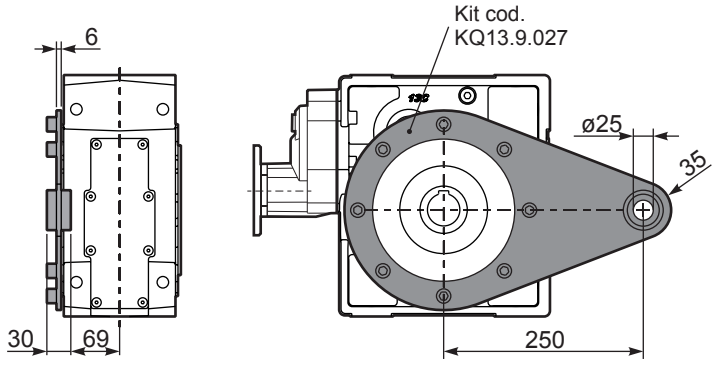
P134C...**-FC**.. Output flange
Flangia uscita



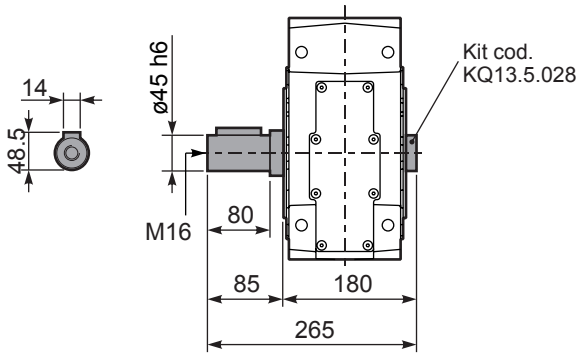
R134C... Input Shaft
Albero in entrata



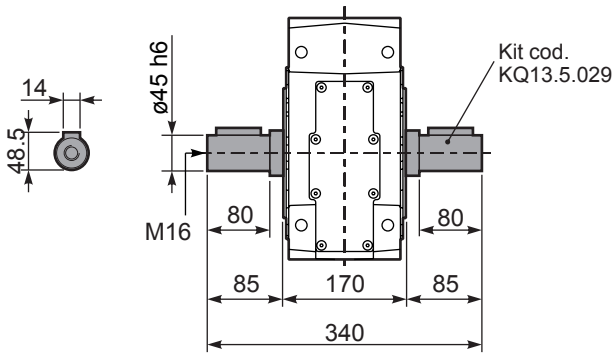
P134C**BR**.. Reaction arm
Braccio di reazione



P134C..**A**.. Single output Shaft
Albero lento semplice



P134C..**B**.. Double Input Shaft
Albero lento bisporgente



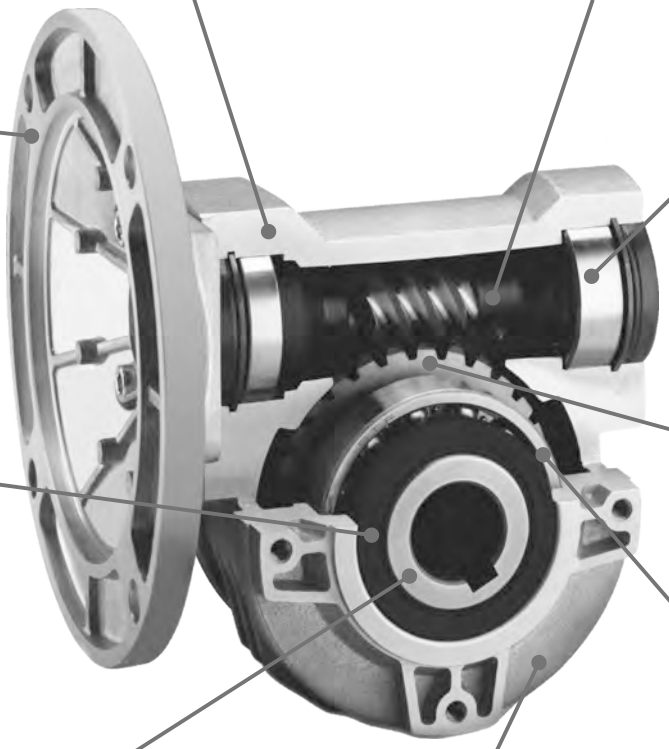
Worm gearboxes type 030 ÷ 110

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.
Is centrifugally cast onto an iron hub for maximum strenght and superior life.

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.

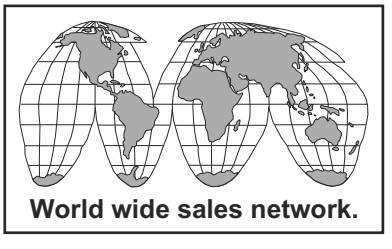
Impregnated and machined bearing caps
With exterior machined surfaces enable a variety of mounting accessories.
Extra-deep thread engagement provided for greater support strength.
Zinc plated hardware.

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

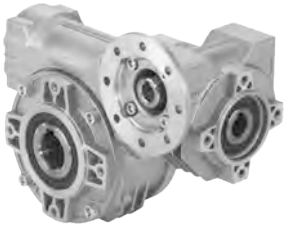
2-5	2-7	2-9	2-11	2-13	2-15	2-17
030 21Nm	**045** 41Nm	**050** 72Nm	**063** 147Nm	**63A** 191Nm	**085** 347Nm	**110** 651Nm



Types / Tipi / Tipen / Types / Tipos

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

2-19	2-21	2-23	2-25	2-27	2-29
P45 55Nm	**P50** 88Nm	**P63** 187Nm	**P6A** 218Nm	**P85** 440Nm	**P10** 803Nm



Types / Tipi / Tipen / Types / Tipos

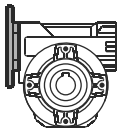
On page / A pagina / Auf Seite / À la page / En la página

2-31	2-33	2-35	2-37	2-39	2-41	2-43	2-45	2-47
303 35Nm	**453** 69Nm	**503** 109Nm	**633** 230Nm	**634** 265Nm	**6A3** 290Nm	**6A4** 304Nm	**854** 518Nm	**115** 978Nm

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Type - Tipo - Typ Type - Tipo	**Size** - Grandezza Grösse - Taille Tomaño	**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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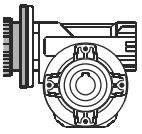
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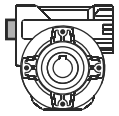
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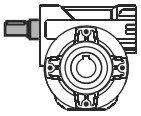
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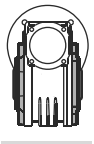
030 045 050 063 63A 085 110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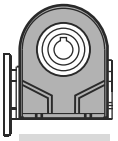
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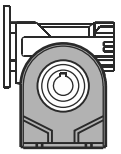
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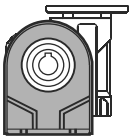
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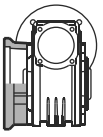
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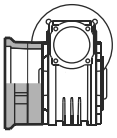
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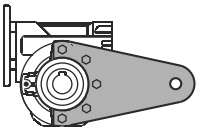
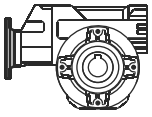
F1 F2 F3 F4


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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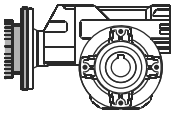
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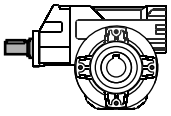
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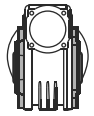
P45 P50 P63 P6A P85 P10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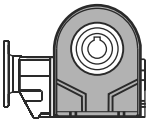
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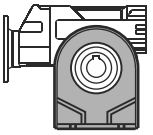
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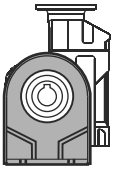
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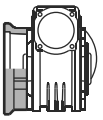
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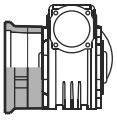
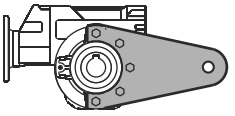
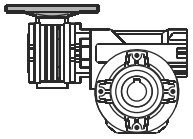

FL

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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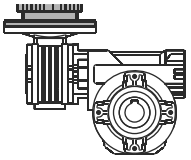
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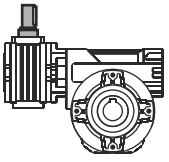
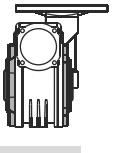

R

303 453 503 633 634 6A3 6A4 854 115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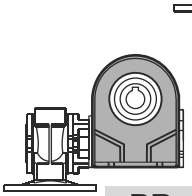
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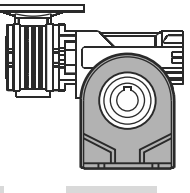
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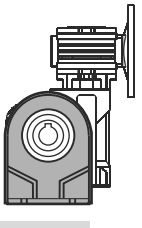
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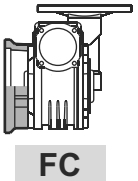
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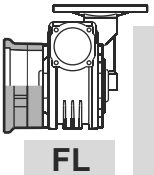
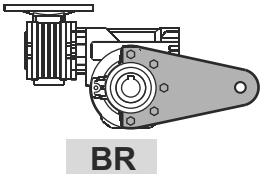

FL

F1 F2 F3 F4


BR

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

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

10

See technical data table

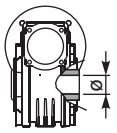
Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir tableau données techniques

Ver tabla datos técnicos

C



C

STANDARD

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

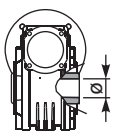
Special series
Serie Speciale

S

045 ⇨ ø19
050 ⇨ ø24

X

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

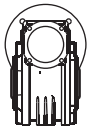


U

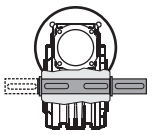
INCH

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

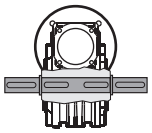
Ø



Ø

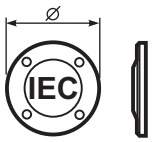


S



D

-Q



-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

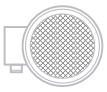
-O=56 (ø80)
-P=63 (ø90)
-Q=71 (ø105)
-R=80 (ø120)
-T=90 (ø140)
-U=100÷112 (ø160)
-V=132 (ø200)

-0=Type R

Reduced Fl.

-1=56B5/ø11
-2=63B5/ø14
-3=71B5/ø19
-4=71B5/ø24
-5=90B5/ø28
-6=100B5/ø38
-7=132B5/ø42
-8=80B14/ø11
-9=100B5/ø24

B

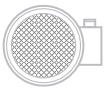


A



B

STANDARD

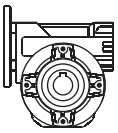


C

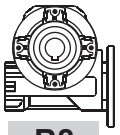


D

B3



B3



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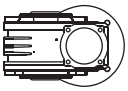
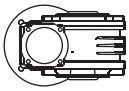
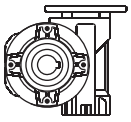


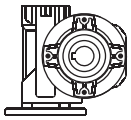
B6



B7

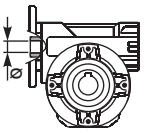


V5



V6

-



-

Nothing indication standard bore

Nessuna indicazione foro 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

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

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

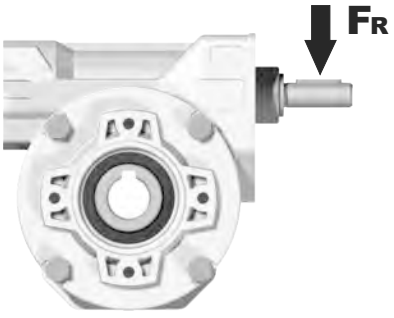
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$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

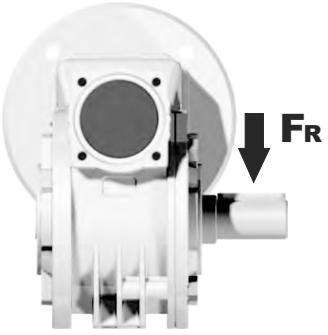
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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





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

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

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	B5 C	Available B14 motor flanges O	B14 P	B14 Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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)

▪ 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**	0.09	16	1.0	0.06	16	B		B-C		48	0.56	08

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 **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.

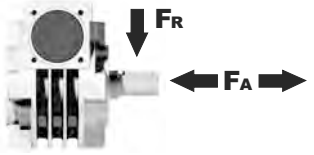
▪ LUBRICATION 030 Oil Quantity 0.03 Lt.

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

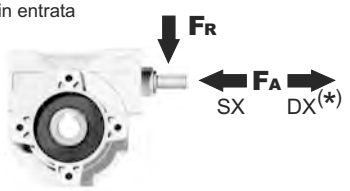
▪ RADIAL AND AXIAL LOADS

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

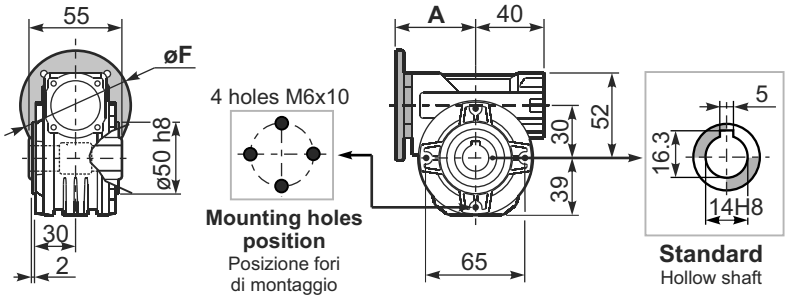
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

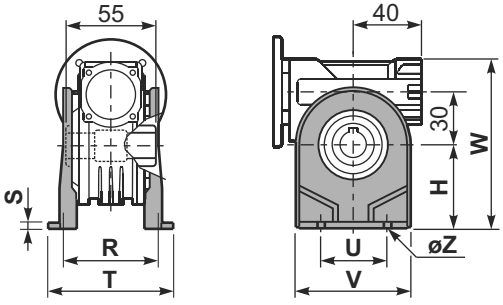
P030**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore	1.05 kg

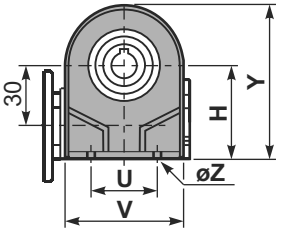
M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



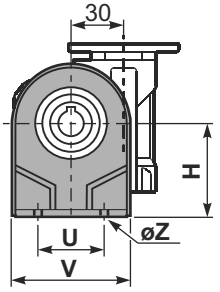
P030**PA**... Feet
Piedini



P030**PB**... Feet
Piedini

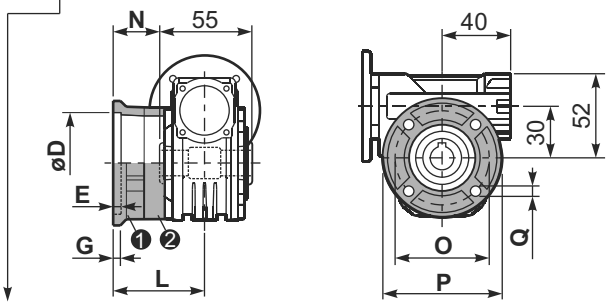


P030**PV**... Feet
Piedini



	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

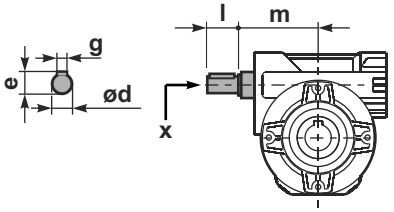
P030**FC**... Output flange
Flangia uscita



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 -

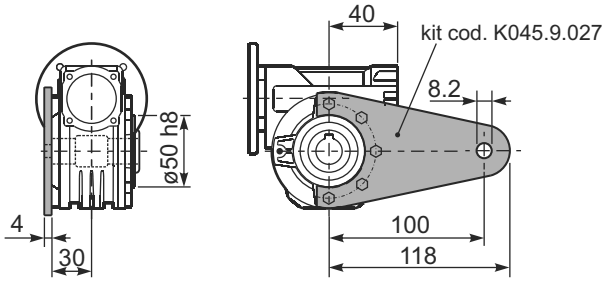
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$40^{+0.15}_{+0.10}$	3.5	5.5	49	21.5	56	80	6.5	❶ KS030.9.012 ❷ -

R030FB... Input shaft
Albero in entrata



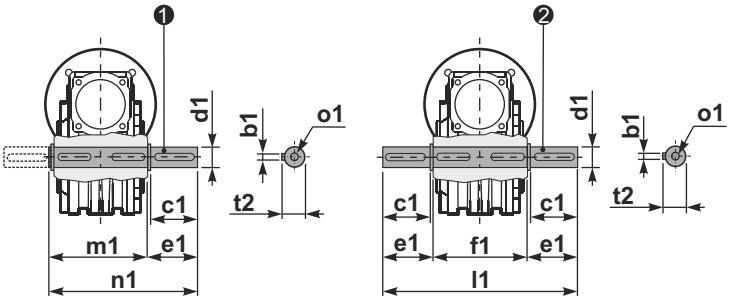
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type **S**	-	-	-	-	-	-	-

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



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

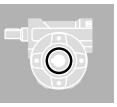
P030.....**D**... Double Shaft
Albero lento bisp.



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**	-	-	-	-	-	-	-	-	-	-



▪ 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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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.

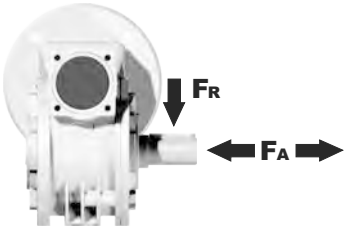
▪ LUBRICATION 045 Oil Quantity 0.09 Lt.

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

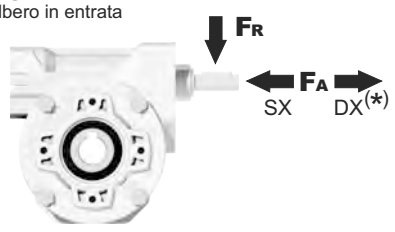
▪ RADIAL AND AXIAL LOADS

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



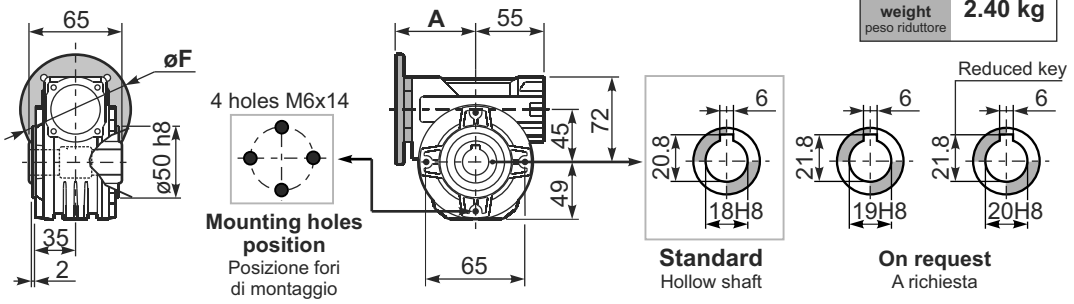
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

***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

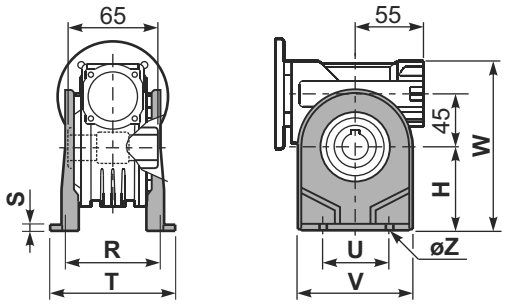
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	72
71B5	K050.4.042	160	70
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5



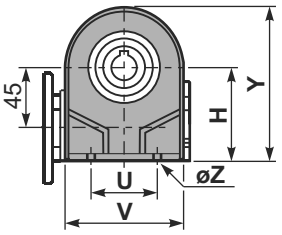
Gearbox weight peso riduttore **2.40 kg**

2

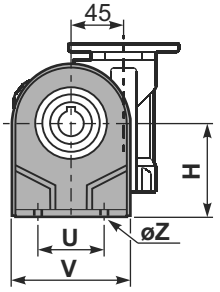
P045**PA**... Feet
Piedini



P045**PB**... Feet
Piedini

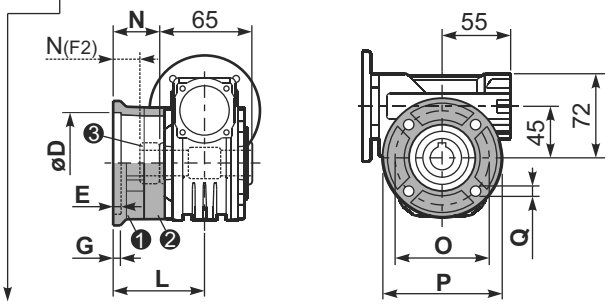


P045**PV**... Feet
Piedini



	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

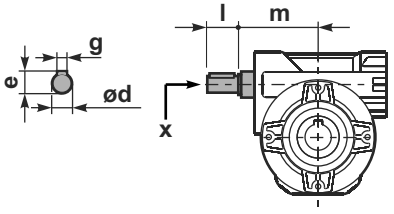
P045**FC**... Output flange
Flangia uscita



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

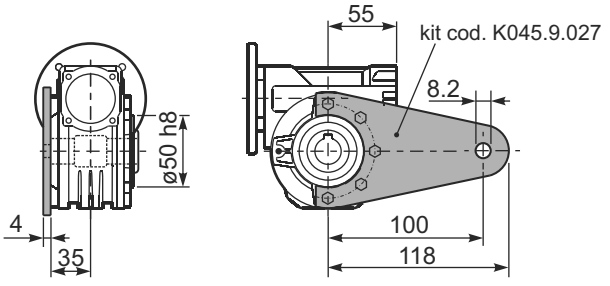
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$95^{+0.20}_{+0.15}$	4	11	73.5	41	115	140	9	❶ KS045.9.013 ❷ -
F2	$60^{+0.15}_{+0.05}$	9	9	60.5	19	87	110	8.5	❶ KS045.9.010 ❸ S045.0.204
F3	$80^{+0.15}_{+0.10}$	3	8	51.5	19	100	120	9	❶ KS045.9.014 ❷ -

R045FB... Input shaft
Albero in entrata



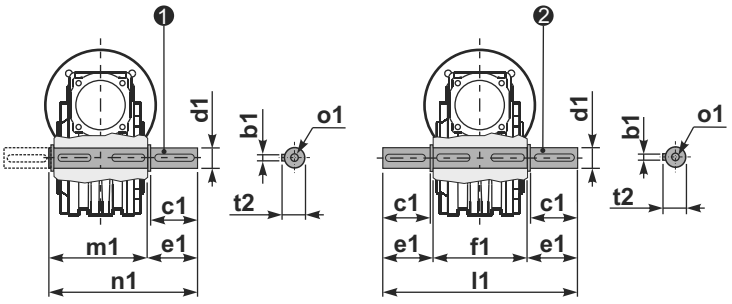
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

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**
kit cod. KS045.5.031 type **S**

	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	65	182	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	C	D	Available B14 motor flanges O	P	Q	R	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	56	63	71	80			
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
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.

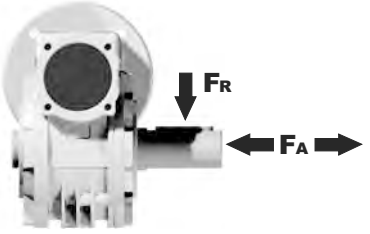
▪ LUBRICATION 050 Oil Quantity 0.14 Lt.

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

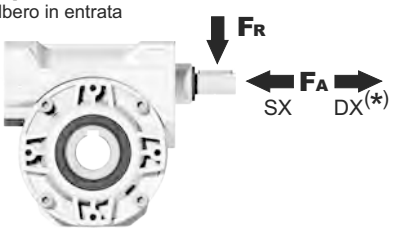
▪ RADIAL AND AXIAL LOADS

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

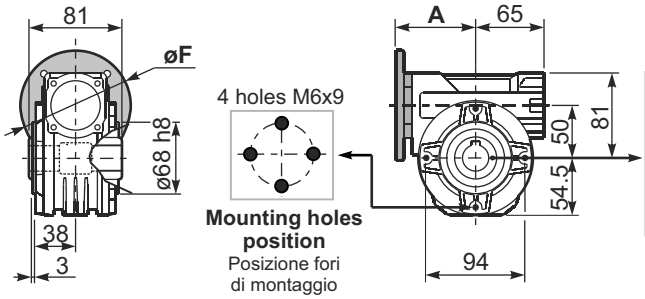
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

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

Gearbox weight peso riduttore	3.00 kg

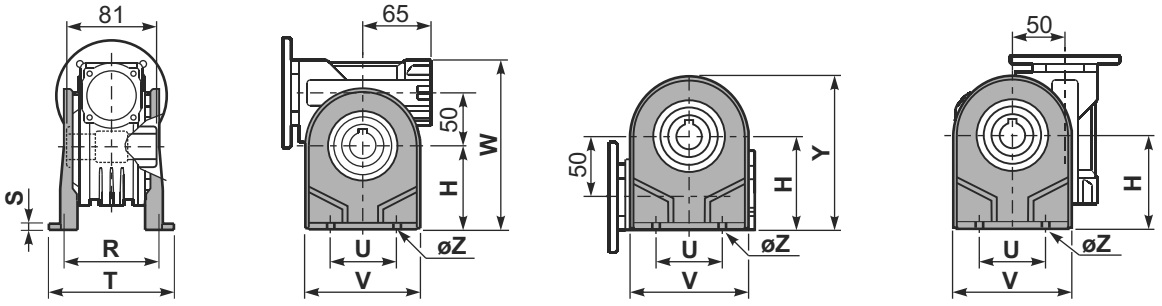
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	76.5
71B5	K050.4.042	160	74.5
80B5	K050.4.043	200	76.5
56B14	KC40.4.049	80	76
63B14	K050.4.047	90	78.5
71B14	K050.4.045	105	76
80B14	K050.4.046	120	76.5



P050**PA**... Feet
Piedini

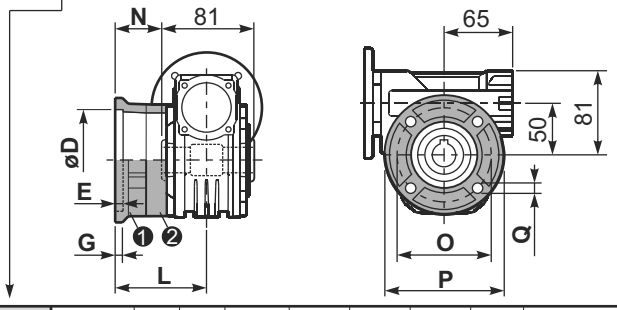
P050**PB**... Feet
Piedini

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

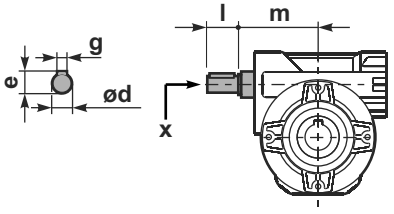
P050**FC**... Output flange
Flangia uscita



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

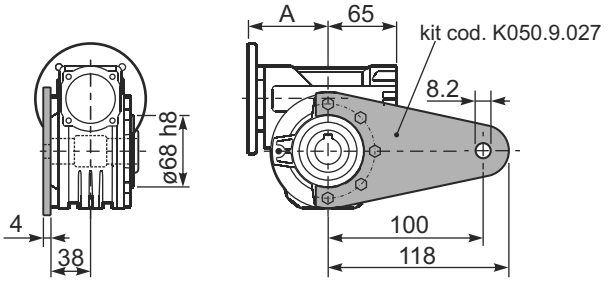
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$110^{+0.20}_{+0.15}$	4	11	83.5	43	130	160	10	❶ KS050.9.012 ❷ -
F2	$70^{+0.20}_{+0.15}$	9	12	76.5	36	90	123	10.5	❶ KS050.9.014 ❷ -
F3	$95^{+0.20}_{+0.15}$	4	10	66.5	26	115	140	10	❶ KS050.9.013 ❷ -

R050FB... Input shaft
Albero in entrata



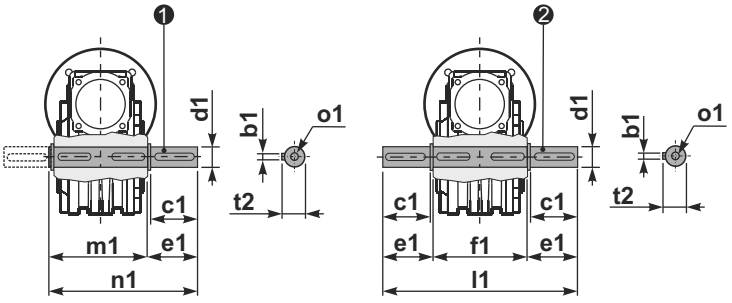
	ød	e	g	l	m	x	kit code
type **B**	16 h6	18	5	30	74.5	M6x16	❶ K050.5.006 PAM71 ❷ K050.5.007 PAM80
type **S**	14 h6	16	5	30	74.5	M5x10	❶ KS050.5.008 PAM71 ❷ KS050.5.009 PAM80

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**
kit cod. KS050.5.031 type **S**

	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	81	218	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	C	D	E	Available B14 motor flanges Q	R	T	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	90	71	80	90			
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
31	**45**	0.55	111	1.2	0.67	135	B	B			B-C	C		66	2.1	08
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.

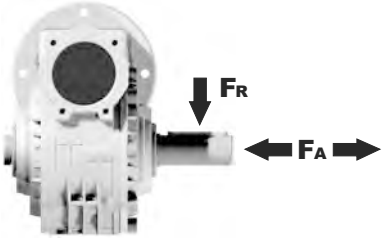
▪ LUBRICATION 063 Oil Quantity 0.40 Lt.

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

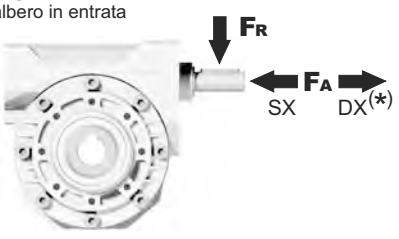
▪ RADIAL AND AXIAL LOADS

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



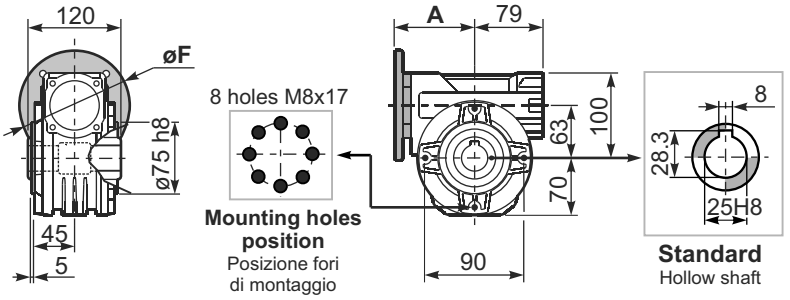
n_1 [min^{-1}]	FA [N]	FR [N]
1400	90	450

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

tab. 2

P063FB... Basic wormbox
Riduttore base

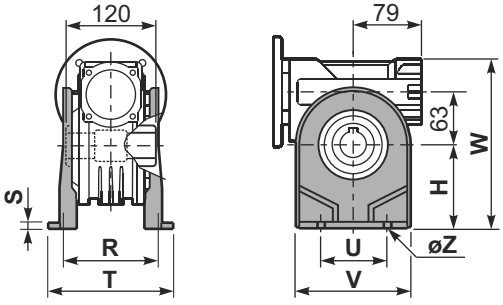
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	99.5
71B5	K063.4.042	160	97.5
80/90B5	K063.4.043	200	99.5
71B14	K063.4.047	105	97.5
80B14	K063.4.046	120	98.5
90B14	K063.4.041	140	99.5



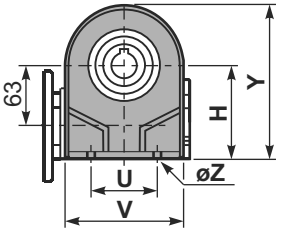
Gearbox weight peso riduttore **6.00 kg**

2

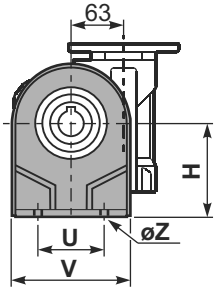
P063PA... Feet
Piedini



P063PB... Feet
Piedini

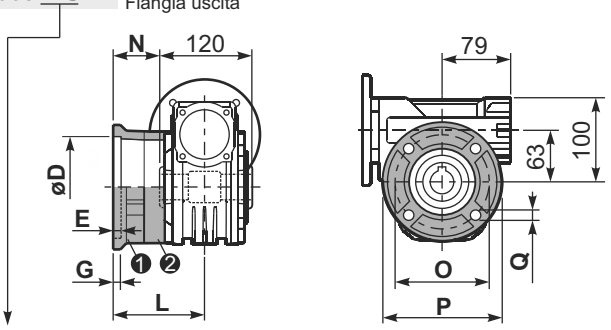


P063PV... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

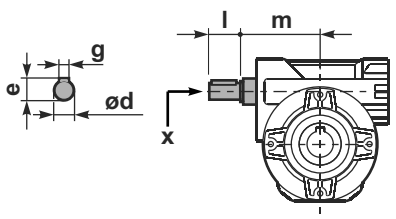
P063FC... Output flange
Flangia uscita



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

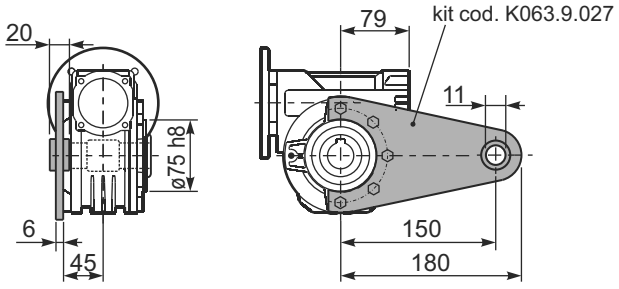
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R063FB... Input shaft
Albero in entrata



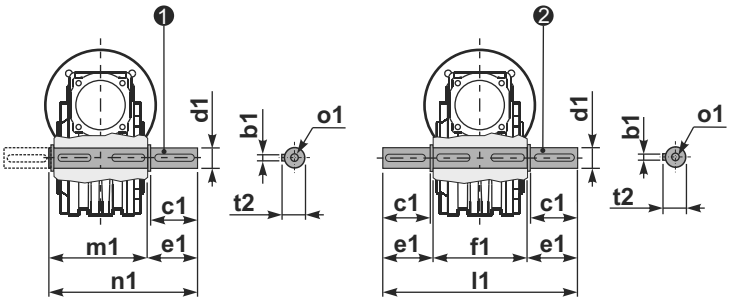
	ød	e	g	l	m	x	kit code
type **B**	18 h6	20.5	6	45	93	M6x16	❶ K063.5.006 PAM80 ❷ K063.5.007 PAM90
type **S**	19 h6	21.5	6	40	93	M8x20	❶ KS063.5.008 PAM80 ❷ KS063.5.009 PAM90

P063BR... 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**	-	-	-	-	-	-	-	-	-	-

▪ 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	C	D	E	Available B14 motor flanges Q	R	T	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	90	71	80	90			
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	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
31	**45**	0.75	152	1.2	0.86	175	B	B			B-C	C		66	2.1	08
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.

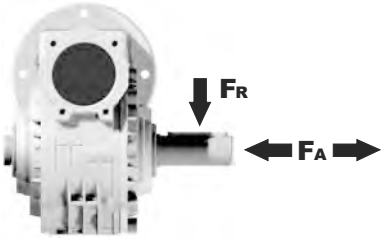
▪ LUBRICATION 63A Oil Quantity 0.40 Lt.

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

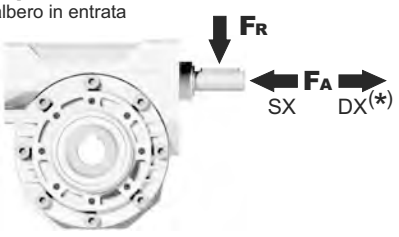
▪ RADIAL AND AXIAL LOADS

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



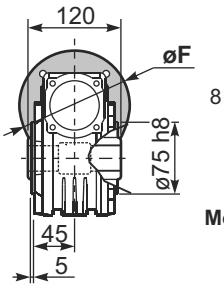
n_1 [min^{-1}]	FA [N]	FR [N]
1400	90	450

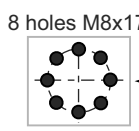
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

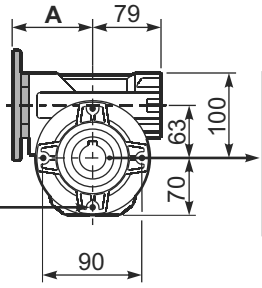
P63A**FB**... Basic wormbox
Riduttore base

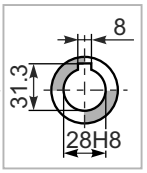
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	99.5
71B5	K063.4.042	160	97.5
80/90B5	K063.4.043	200	99.5
71B14	K063.4.047	105	97.5
80B14	K063.4.046	120	98.5
90B14	K063.4.041	140	99.5



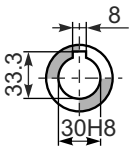


Mounting holes position
Posizione fori di montaggio





Standard
Hollow shaft

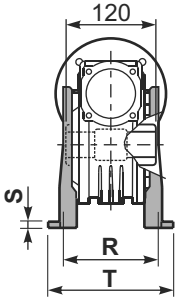


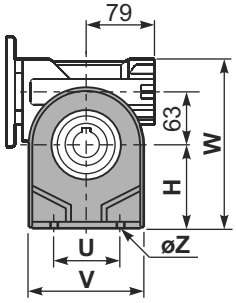
On request
A richiesta

Gearbox weight peso riduttore **6.00 kg**

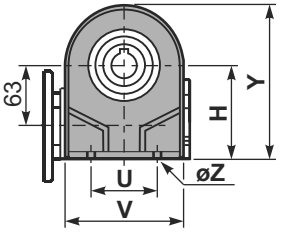
2

P63A**PA**... Feet
Piedini

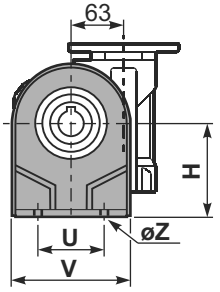




P63A**PB**... Feet
Piedini

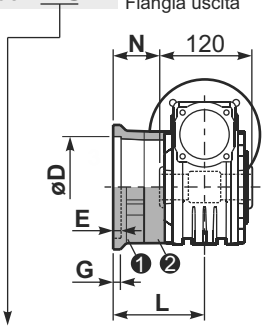


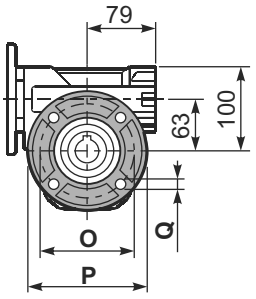
P63A**PV**... Feet
Piedini



	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

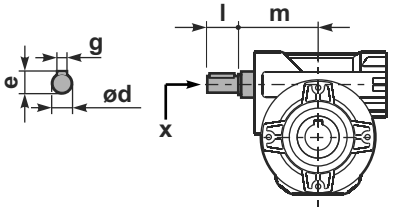




type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$130^{+0.20}_{+0.15}$	7	13	85	25	165	200	13	❶ K070.9.010 ❷ -
FL	$130^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ K070.9.010 ❷ K070.0.200

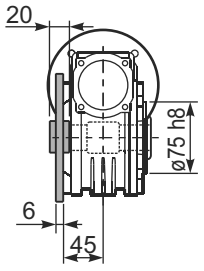
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$130^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	$115^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	$110^{+0.035}_{0}$	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

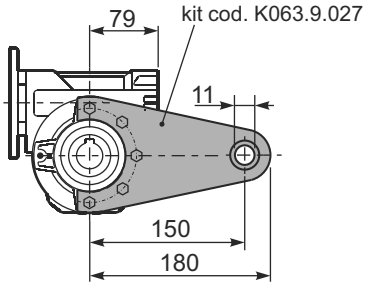
R63AFB... Input shaft
Albero in entrata



	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

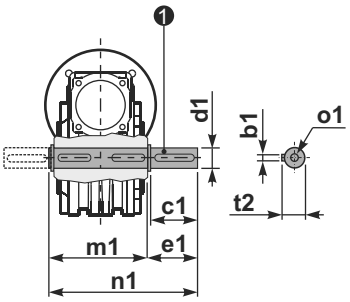
P63A**BR**... Reaction arm
Braccio di reazione

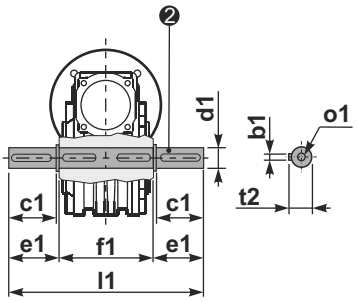




P63A.....**S**... Single Shaft
Albero lento semplice

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**	-	-	-	-	-	-	-	-	-	-

▪ 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.

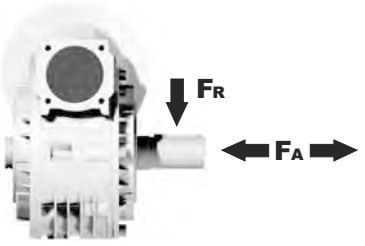
▪ LUBRICATION 085 Oil Quantity 1.20 Lt.

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

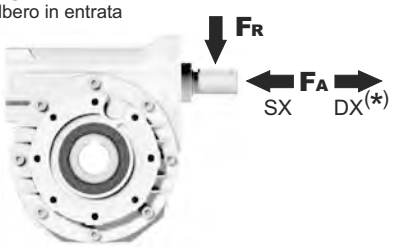
▪ RADIAL AND AXIAL LOADS

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



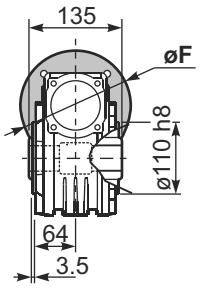
n_1 [min^{-1}]	FA [N]	FR [N]
1400	160	809

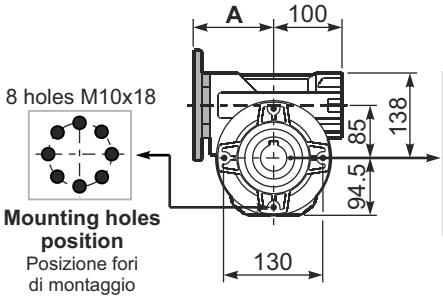
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

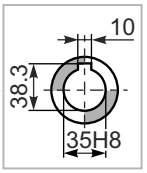
tab. 2

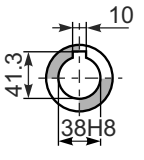
P085**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	116
80/90B5	K023.4.042	200	118
100/112B5	K023.4.043	250	124
80B14	K085.4.046	120	116
90B14	K085.4.045	140	116
100/112B14	K023.4.041	160	116



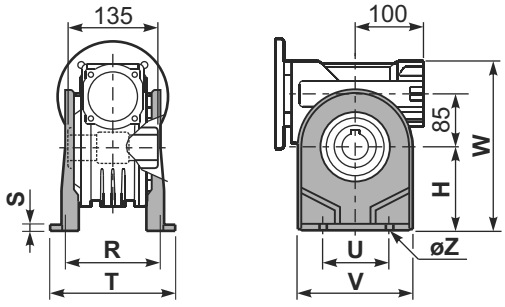




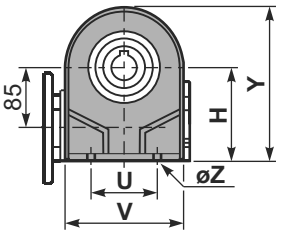


Gearbox weight peso riduttore **11.00 kg**

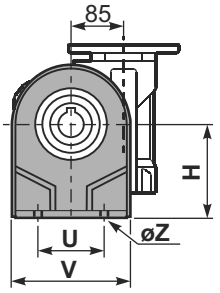
P085**PA**... Feet
Piedini



P085**PB**... Feet
Piedini

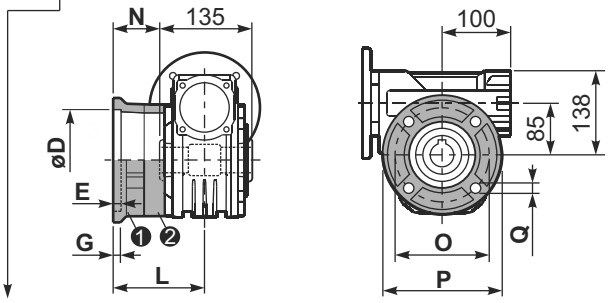


P085**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

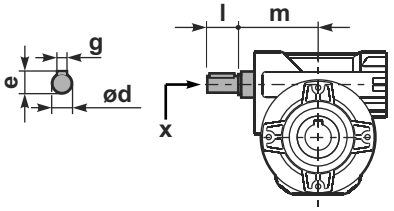
P085**FC**... Output flange
Flangia uscita



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

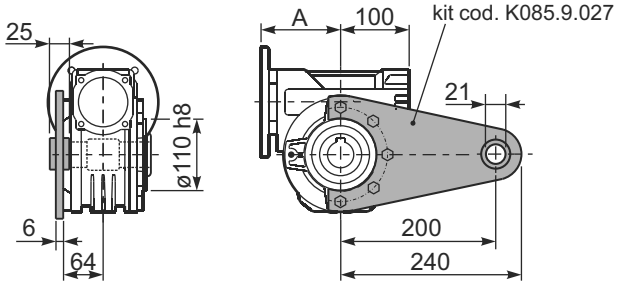
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 H7	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 $^{+0.06}_{+0.00}$	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 H7	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

R085FB... Input shaft
Albero in entrata



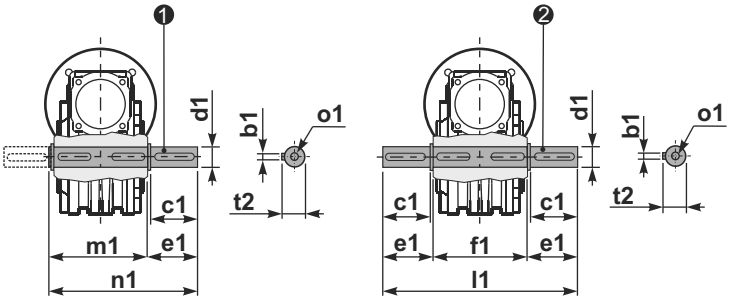
	ød	e	g	l	m	x	kit code
type **B**	25 h6	28	8	50	112	M8x20	❶ K085.5.007 PAM90 ❷ K085.5.008 PAM100
type **S**	24 h6	27	8	50	112	M8x20	❶ KS085.5.009 PAM90 ❷ KS085.5.011 PAM100

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**	-	-	-	-	-	-	-	-	-	-

▪ 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.

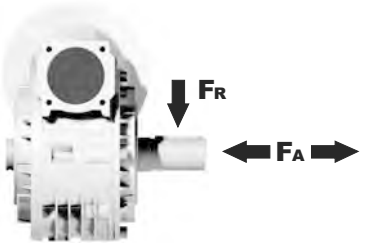
E El reductor tamaño **110** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes.
Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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
2.00 LT	1.50 LT	1.50 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

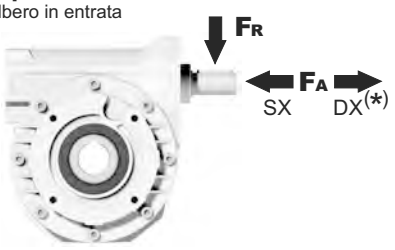
▪ RADIAL AND AXIAL LOADS

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



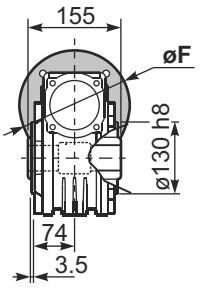
n_1 [min^{-1}]	FA [N]	FR [N]
1400	228	1140

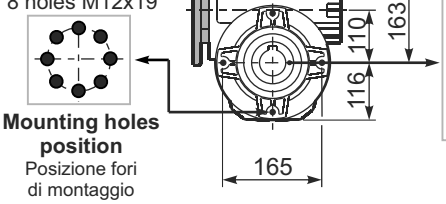
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

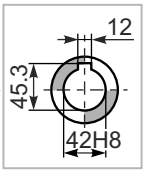
tab. 2

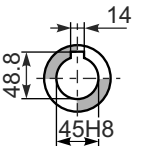
P110**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	135.5
80/90B5	K023.4.042	200	137.5
100/112B5	K023.4.043	250	143.5
132B5	-	300	187
80B14	K085.4.046	120	135.5
90B14	K085.4.045	140	135.5
100/112B14	K023.4.041	160	135.5
132B14	-	200	187



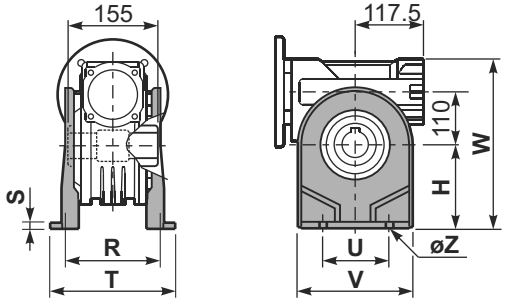




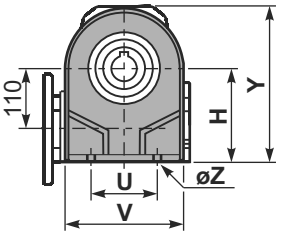


Gearbox weight peso riduttore **35.00 kg**

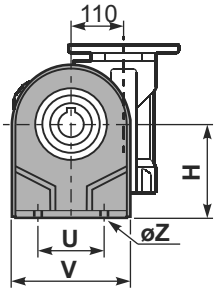
P110**PA**... Feet
Piedini



P110**PB**... Feet
Piedini

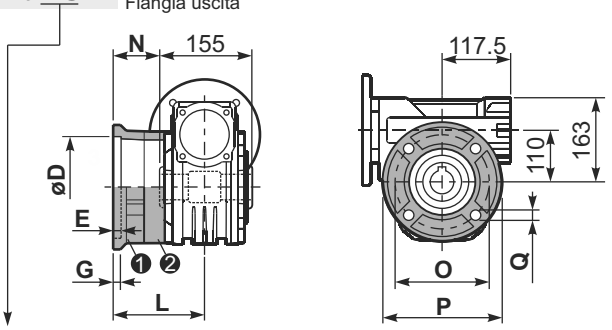


P110**PV**... Feet
Piedini



	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**	172	160	18	190	200	240	288	335	ø14	KS110.9.023

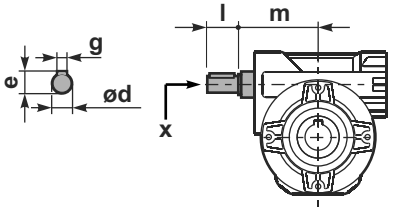
P110**FC**... Output flange
Flangia uscita



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 -

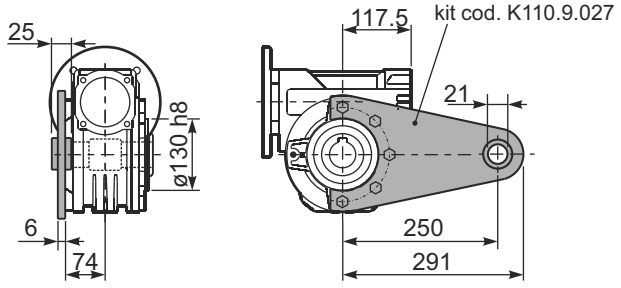
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F2	170 +0.083 +0.043	9.5	15	178	100.5	230	270	13	❶ KS110.9.012 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

R110FB... Input shaft
Albero in entrata



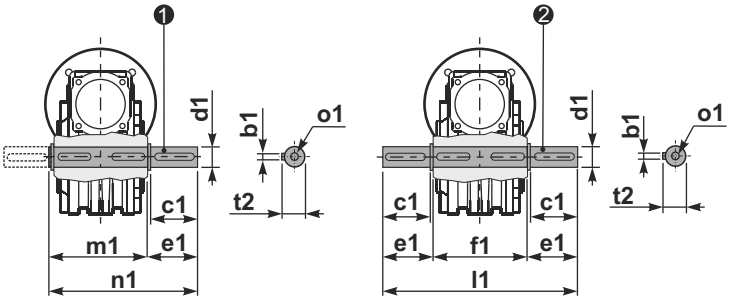
	ød	e	g	l	m	x	kit code
type **B**	25 h6	28	8	50	131.5	M8x20	❶ K085.5.007 PAM90 ❷ K085.5.008 PAM100
type **S**	24 h6	27	8	50	131.5	M8x20	❶ KS085.5.009 PAM90 ❷ KS085.5.011 PAM100

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



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

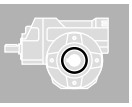
P110.....**D**... Double Shaft
Albero lento bisp.



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**	-	-	-	-	-	-	-	-	-	-



▪ 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).

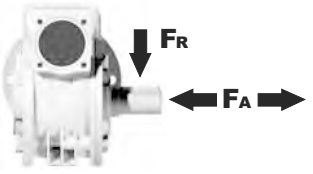


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website **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

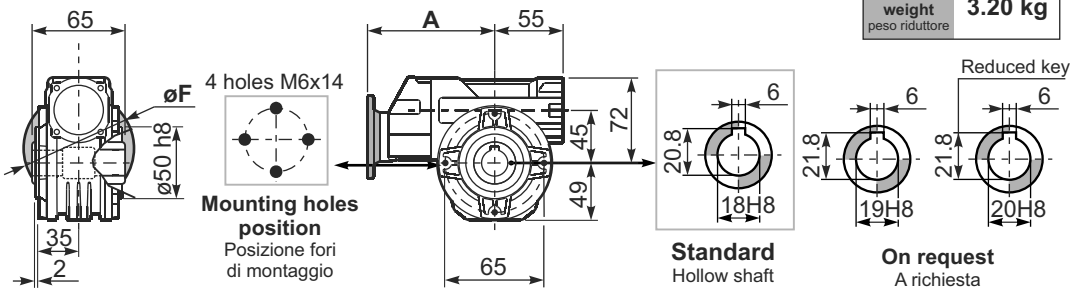
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

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

M. flanges	Kit code	øF	A
56B5	K050.4.046	120	137.5
63B5	K050.4.041	138	137.5
71B5	K050.4.042	160	135.5
63B14	K050.4.047	90	139.5
71B14	K050.4.045	105	137

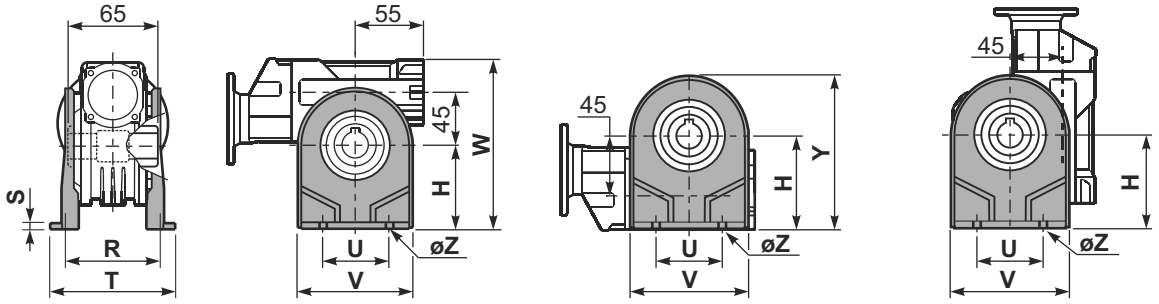
Gearbox weight peso riduttore **3.20 kg**



PP45**PA**... Feet
Piedini

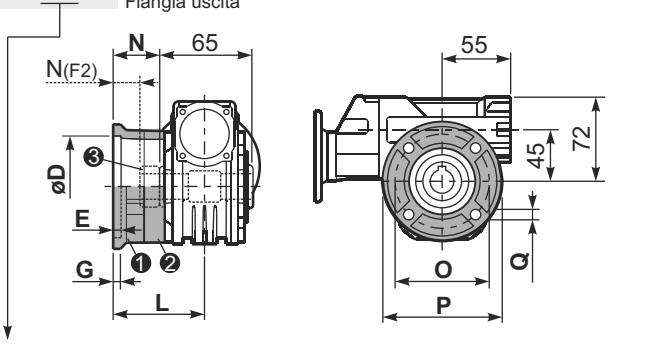
PP45**PB**... Feet
Piedini

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

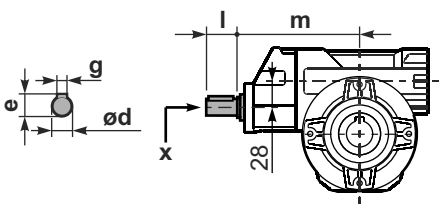
PP45**FC**... Output flange
Flangia uscita



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

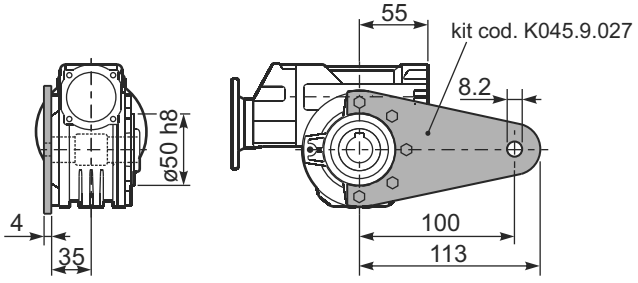
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$95^{+0.20}_{+0.15}$	4	11	73.5	41	115	140	9	❶ KS045.9.013 ❷ -
F2	$60^{+0.15}_{+0.05}$	9	9	60.5	19	87	110	8.5	❶ KS045.9.010 ❸ S045.0.204
F3	$80^{+0.03}_{+0.00}$	3	8	51.5	19	100	120	9	❶ KS045.9.014 ❷ -

RP45FB... Input shaft
Albero in entrata



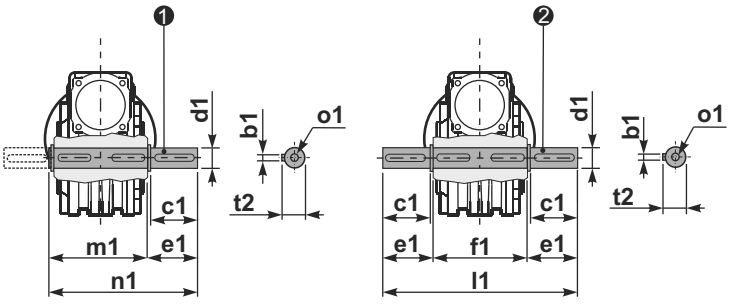
	ød	e	g	l	m	x	
type **B**	14 h6	16	5	25	131	M5x13	C35.5.061
type **S**	-	-	-	-	-	-	

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**
kit cod. KS045.5.031 type **S**

	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	65	182	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 **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).

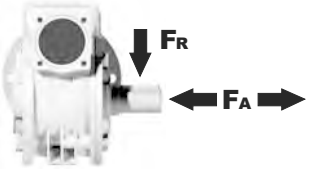


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

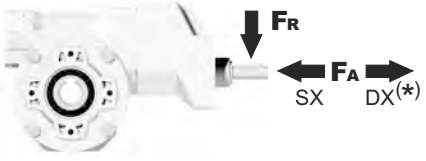
▪ RADIAL AND AXIAL LOADS

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

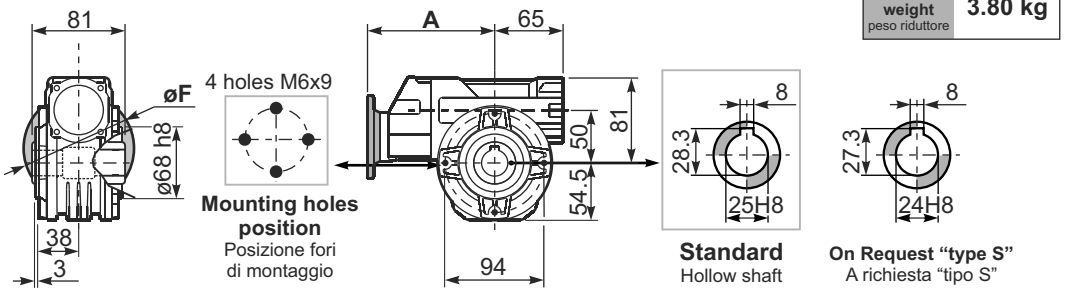
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

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

Gearbox weight peso riduttore: **3.80 kg**

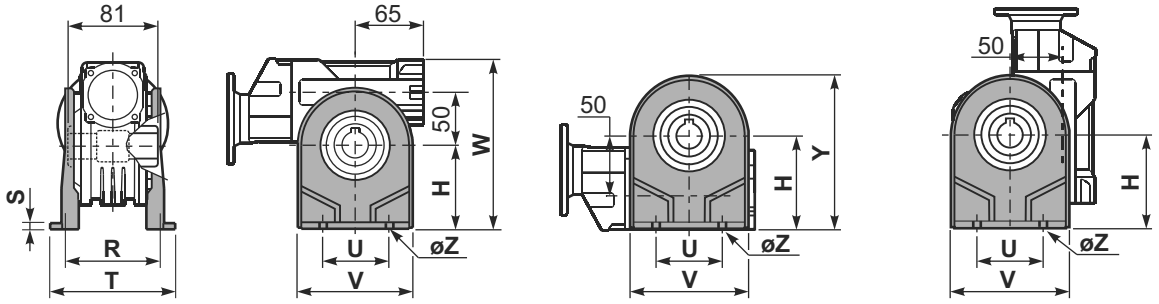
M. flanges	Kit code	øF	A
56B5	K050.4.046	120	142
63B5	K050.4.041	138	142
71B5	K050.4.042	160	140
63B14	K050.4.047	90	144
71B14	K050.4.045	105	141.5



PP50**PA**... Feet
Piedini

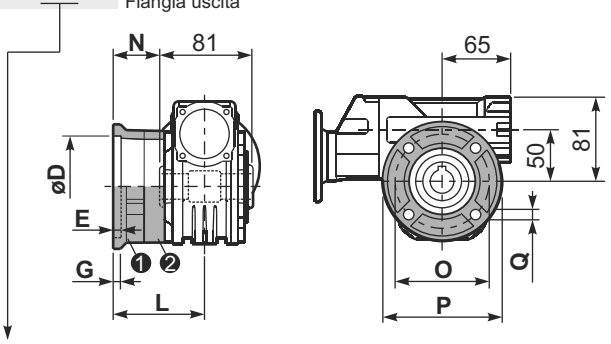
PP50**PB**... Feet
Piedini

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

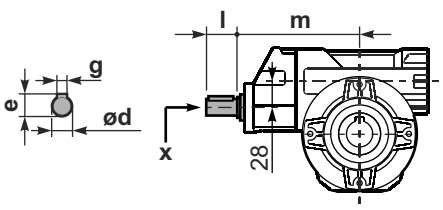
PP50**FC**... Output flange
Flangia uscita



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

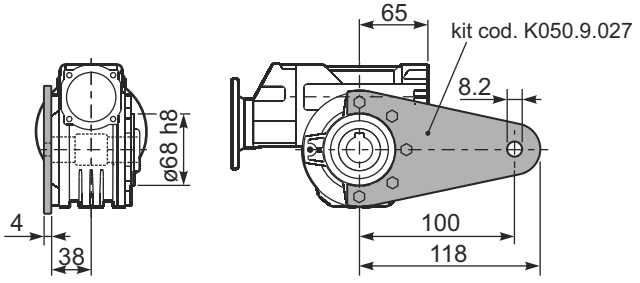
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$110^{+0.20}_{+0.15}$	4	11	83.5	43	130	160	10	❶ KS050.9.012 ❷ -
F2	$70^{+0.20}_{+0.15}$	9	12	76.5	36	90	123	10.5	❶ KS050.9.014 ❷ -
F3	$95^{+0.035}_{0}$	4	10	66.5	26	115	140	10	❶ KS050.9.013 ❷ -

RP50FB... Input shaft
Albero in entrata



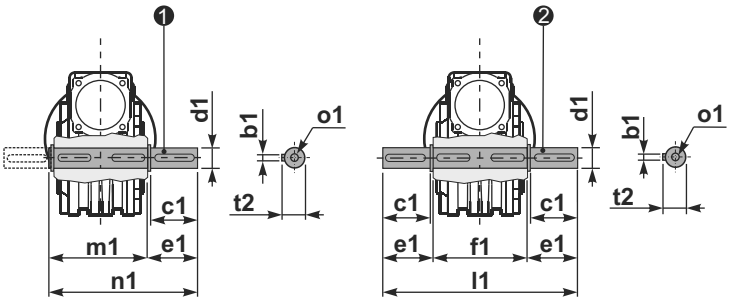
	ød	e	g	l	m	x	
type **B**	14 h6	16	5	25	135.5	M5x13	C35.5.061
type **S**	-	-	-	-	-	-	

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**
kit cod. KS050.5.031 type **S**

	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	81	218	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	C	D	E	Available B14 motor flanges P	Q	R	T	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
								63	71	80	90	63	71	80	90			
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).

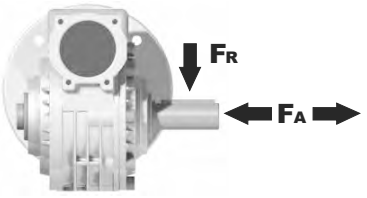


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

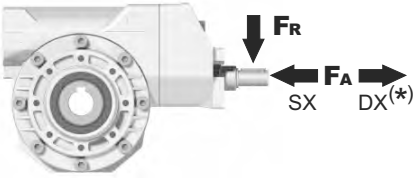
▪ RADIAL AND AXIAL LOADS

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

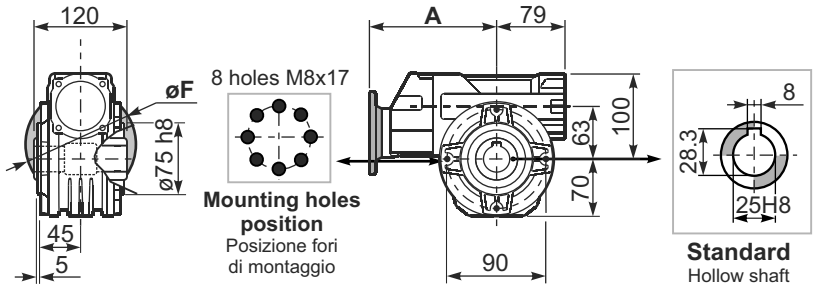
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

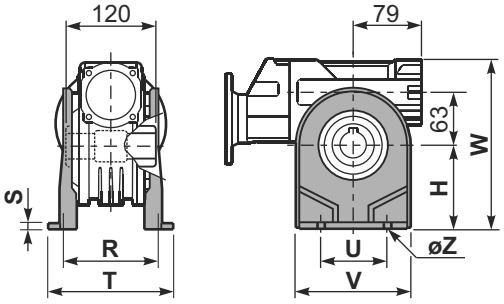
PP63**FB**... Basic wormbox
Riduttore base

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

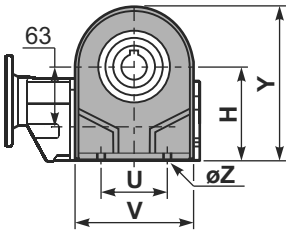
	M.flange	Kit code	øF	A
29.9÷111	71B5	K063.4.042	160	176.5
	80/90B5	K063.4.043	200	178.5
	71B14	K063.4.047	105	176.5
	80B14	K063.4.046	120	177.5
	90B14	K063.4.041	140	178.5
139÷434	63B5	K050.4.041	138	160.5
	71B5	K050.4.042	160	158.5
	63B14	K050.4.047	90	162.5
	71B14	K050.4.045	105	160



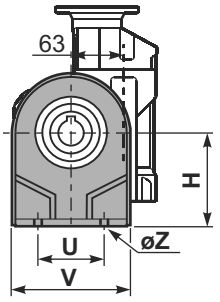
PP63**PA**... Feet
Piedini



PP63**PB**... Feet
Piedini

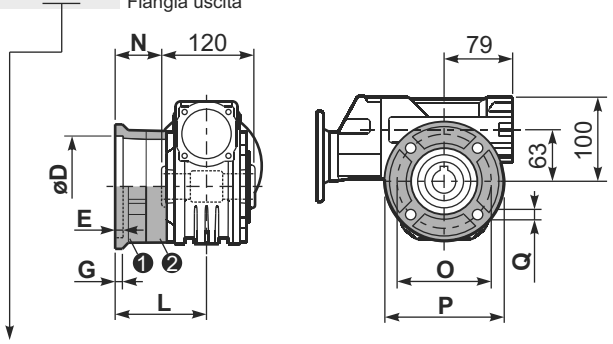


PP63**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

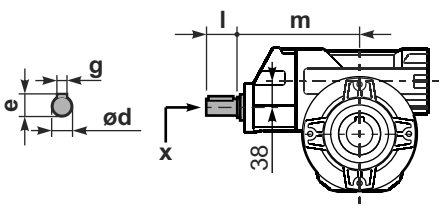
PP63**FC**... Output flange
Flangia uscita



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

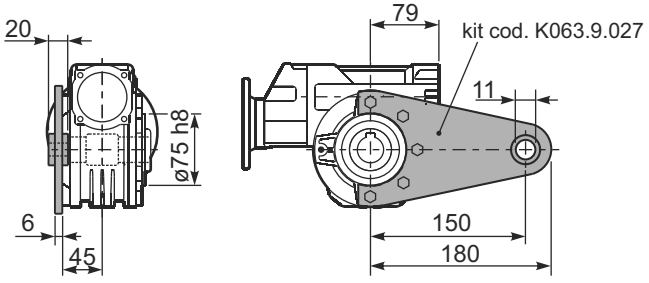
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R P63FB... Input shaft
Albero in entrata



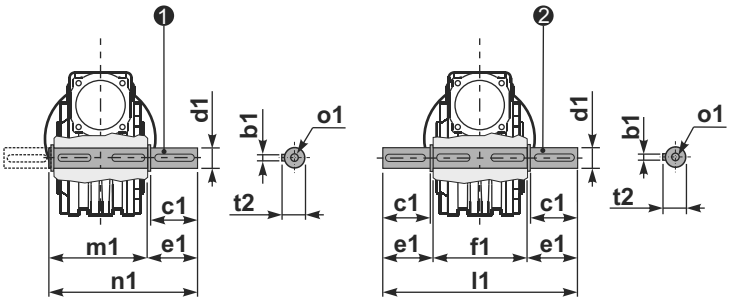
	ød	e	g	l	m	x	
29.9÷111	19 h6	21.5	6	35	169.4	M6x16	C40.5.062
139÷434	14 h6	16	5	25	154.2	M5x13	C35.5.061

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**	-	-	-	-	-	-	-	-	-	-

▪ 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	C	D	E	Available B14 motor flanges P	Q	R	T	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
								63	71	80	90	63	71	80	90			
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.

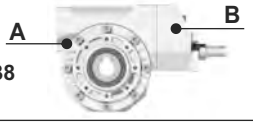
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P6A** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes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

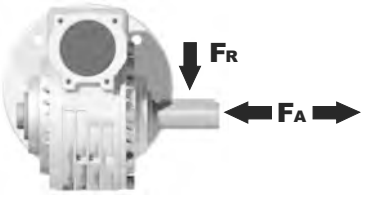


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

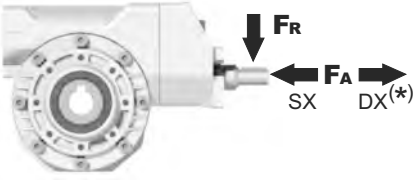
▪ RADIAL AND AXIAL LOADS

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

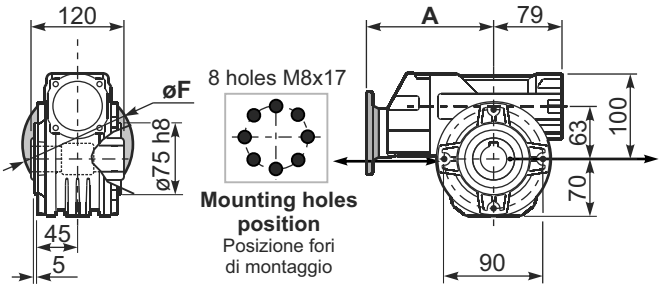
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

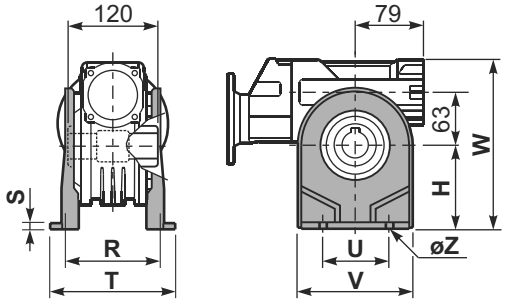
PP6A**FB**... Basic wormbox
Riduttore base

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

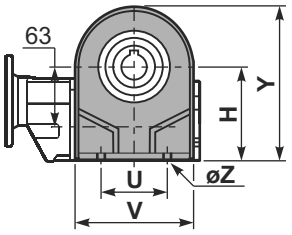
	M.flange	Kit code	øF	A
29.9÷111	**71B5**	K063.4.042	160	176.5
	80/90B5	K063.4.043	200	178.5
	71B14	K063.4.047	105	176.5
	80B14	K063.4.046	120	177.5
	90B14	K063.4.041	140	178.5
139÷434	**63B5**	K050.4.041	138	160.5
	71B5	K050.4.042	160	158.5
	63B14	K050.4.047	90	162.5
	71B14	K050.4.045	105	160



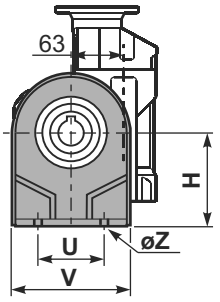
PP6A**PA**... Feet
Piedini



PP6A**PB**... Feet
Piedini

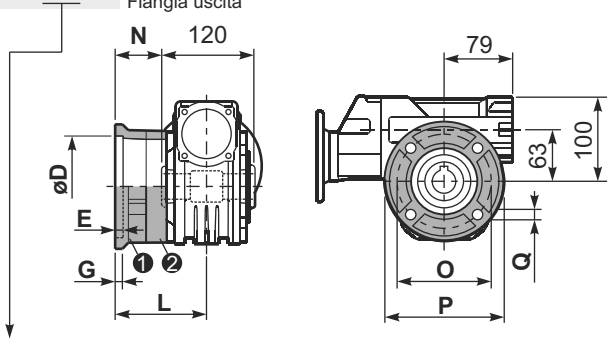


PP6A**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

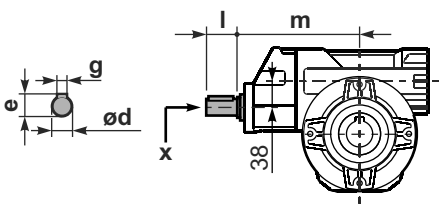
PP6A**FC**... Output flange
Flangia uscita



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

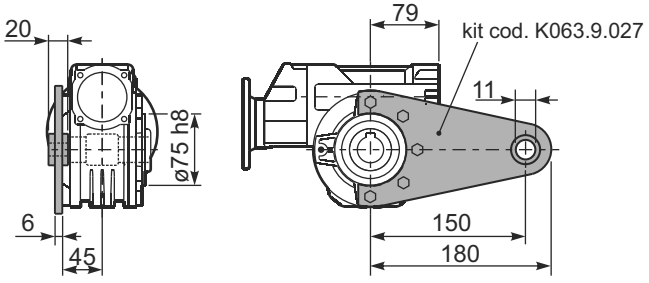
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

R P6AFB... Input shaft
Albero in entrata



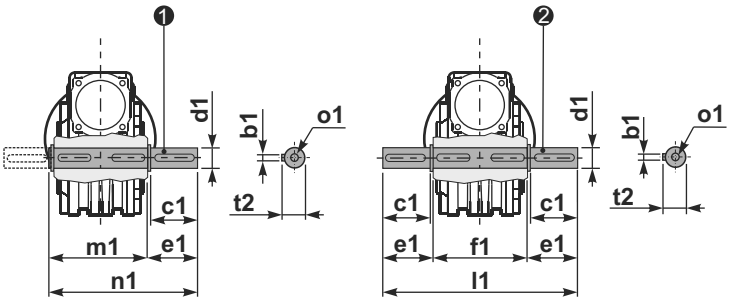
	ød	e	g	l	m	x	
29.9÷111	19 h6	21.5	6	35	169.4	M6x16	C40.5.062
139÷434	14 h6	16	5	25	154.2	M5x13	C35.5.061

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**	-	-	-	-	-	-	-	-	-	-

▪ 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).

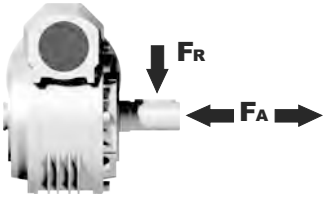


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

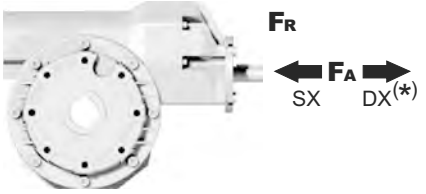
▪ RADIAL AND AXIAL LOADS

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



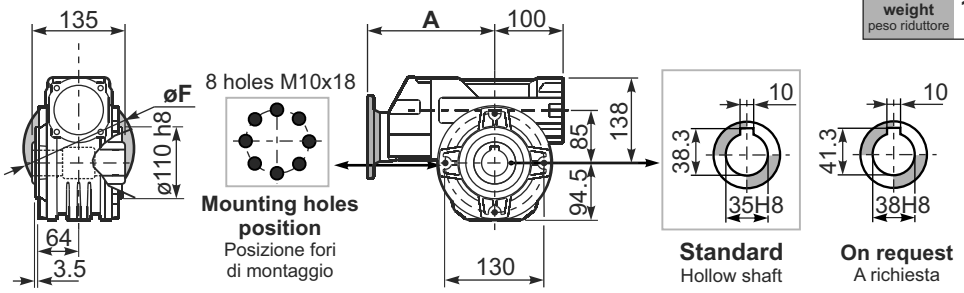
n_1 [min^{-1}]	FA [N]	FR [N]
1400	108	540

***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	194.2
90B14	K063.4.041	140	195.2

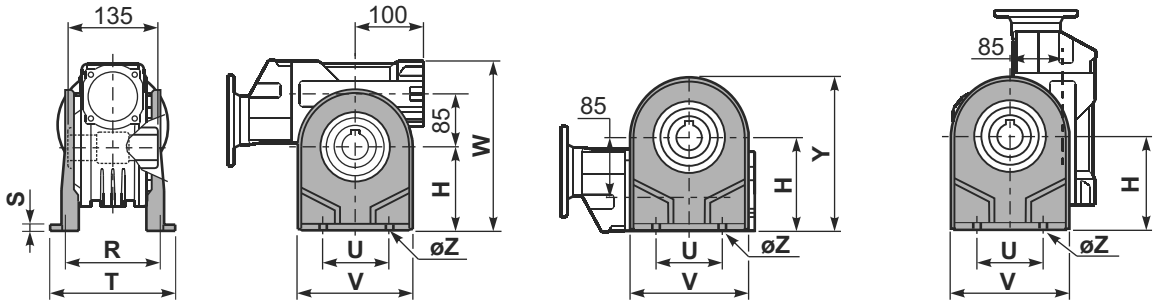


Gearbox weight peso riduttore **19.30 kg**

PP85**PA**... Feet
Piedini

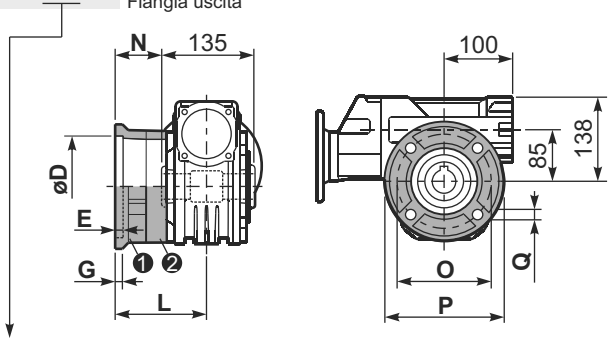
PP85**PB**... Feet
Piedini

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**	-	-	-	-	-	-	-	-	-	-

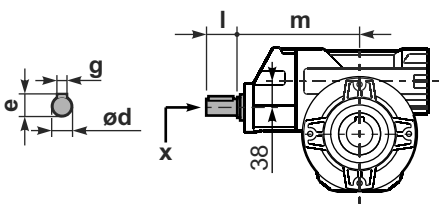
PP85**FC**... Output flange
Flangia uscita



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

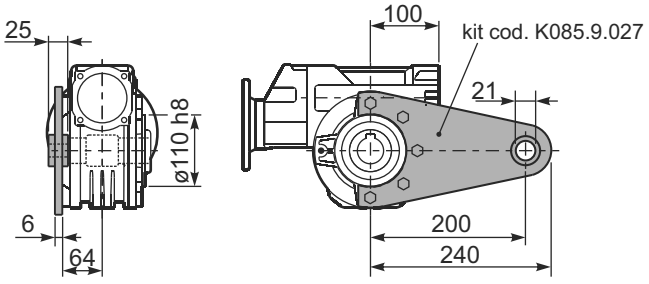
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$130^{+0.04}_{+0.00}$	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	$152^{+0.06}_{+0.00}$	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	$130^{+0.04}_{+0.00}$	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

RP85FB... Input shaft
Albero in entrata



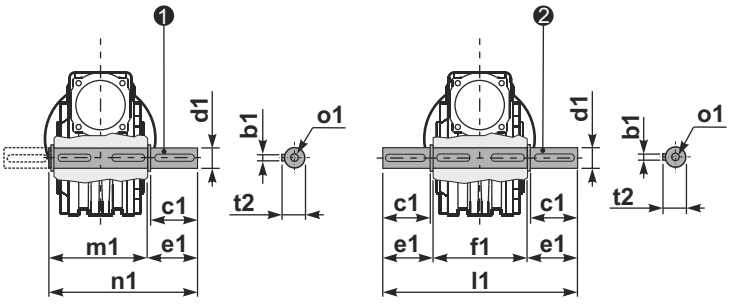
	ød	e	g	l	m	x	
type **B**	19 h6	21.5	6	35	187.5	M6x16	C40.5.062
type **S**	-	-	-	-	-	-	

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**	-	-	-	-	-	-	-	-	-	-

▪ 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	C	D	E	Available B14 motor flanges Q	R	T	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	90	71	80	90			
16.8	**83.2**	1.5	587	1.1	1.7	660					C			69	3.5	01
13.9	**100.5**	1.5	699	0.8	1.3	594					C			68	2.9	02
10.6	**132**	1.1	634	0.9	0.95	550					C			64	2.2	03
8.0	**176**	0.75	666	1.2	0.90	803	B				C			74	4.7	04
6.7	**208**	0.75	766	0.9	0.65	660	B				C			72	4.0	05
5.7	**245**	0.55	634	1.0	0.57	660	B				C			69	3.5	06
4.7	**296**	0.55	755	0.8	0.43	594	B				C			68	2.9	07
4.2	**334**	0.55	865	0.8	0.42	660	B				C			69	3.5	08
3.5	**403**	0.37	692	0.9	0.32	594	B				C			68	2.9	09
2.6	**529**	0.25	577	1.0	0.24	550	B				C			64	2.2	10
2.2	**624**	0.25	628	0.8	0.21	528	B				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

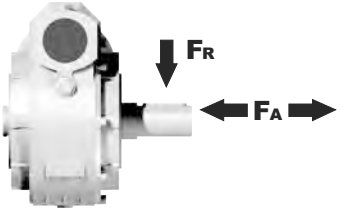
E El reductor tamaño **P10** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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
2.0/0.14LT	1.5/0.14 LT	1.5/0.14 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

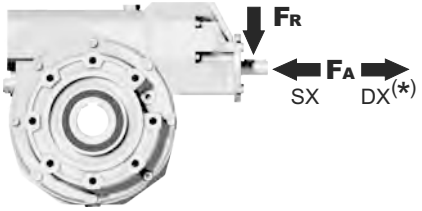
▪ RADIAL AND AXIAL LOADS

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

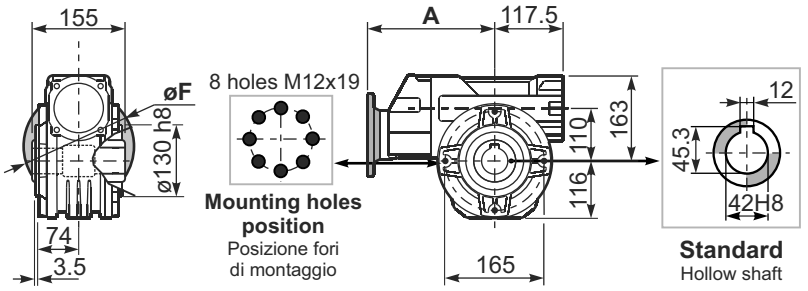
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

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

Gearbox weight peso riduttore: **41.00 kg**

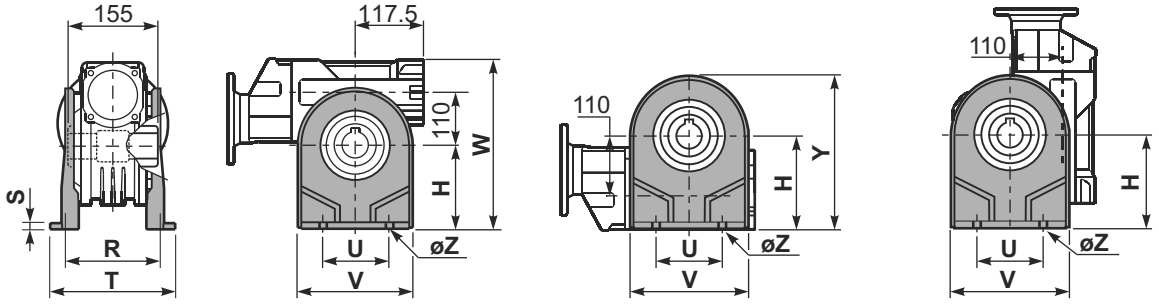
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	214.7
71B5	K063.4.042	160	212.7
80/90B5	K063.4.043	200	214.7
71B14	K063.4.047	105	212.7
80B14	K063.4.046	120	213.7
90B14	K063.4.041	140	214.7



PP10**PA**... Feet
Piedini

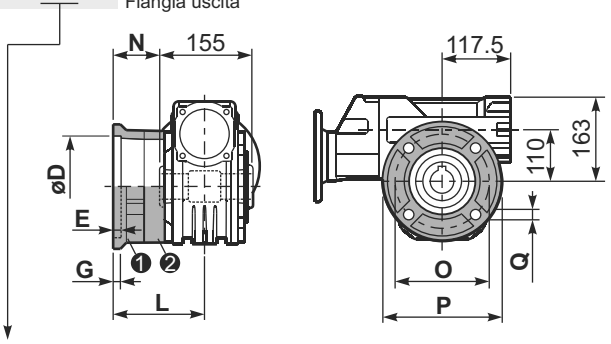
PP10**PB**... Feet
Piedini

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**	172	160	18	190	200	240	288	335	ø14	KS110.9.023

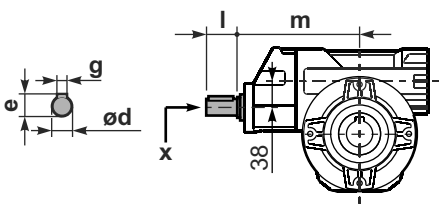
PP10**FC**... Output flange
Flangia uscita



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 -

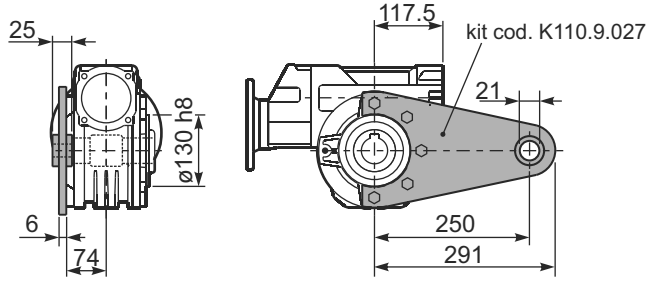
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F2	170 +0.083 +0.043	9.5	15	178	100.5	230	270	13	❶ KS110.9.012 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

RP10FB... Input shaft
Albero in entrata



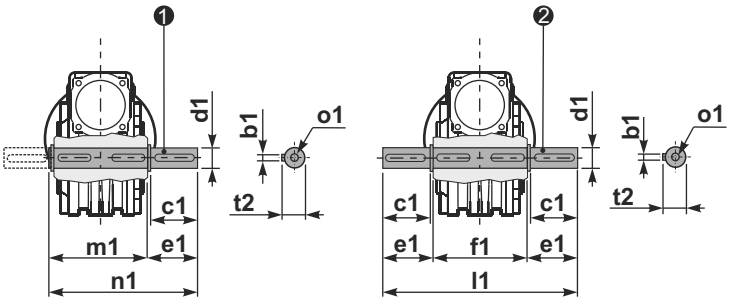
	ød	e	g	l	m	x	
type **B**	19 h6	21.5	6	35	205	M6x16	C40.5.062
type **S**	-	-	-	-	-	-	

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



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

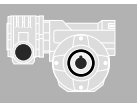
PP10.....**D**... Double Shaft
Albero lento bisp.



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**	-	-	-	-	-	-	-	-	-	-



▪ 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.

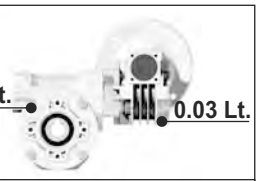
I Il riduttore tipo **303** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.

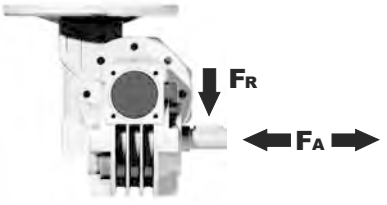


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

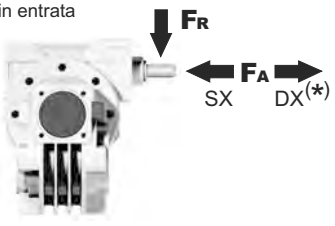
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



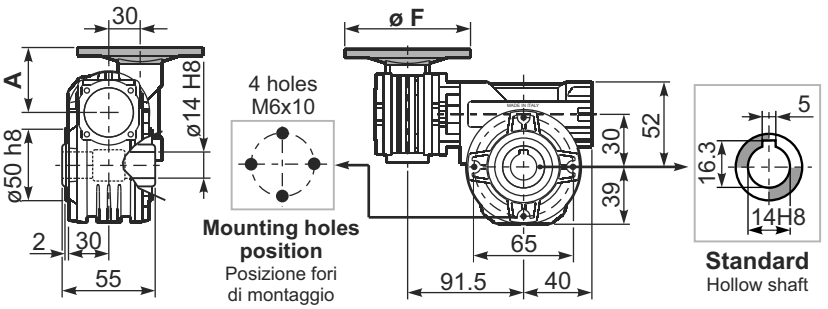
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

***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

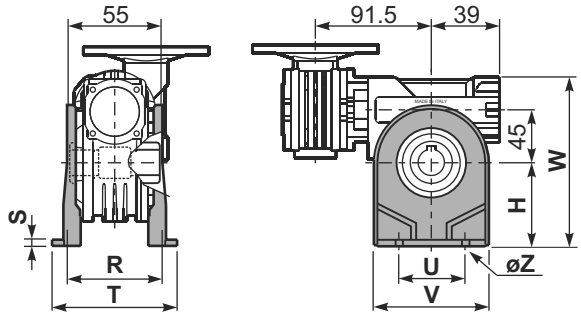
M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



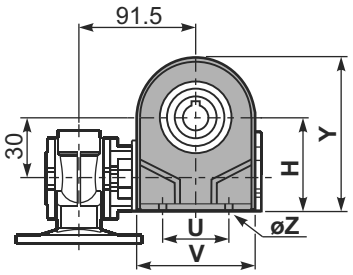
Gearbox weight peso riduttore **2.15 kg**

2

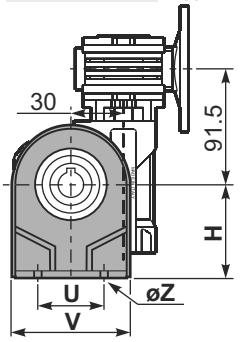
P303**PA**... Feet
Piedini



P303**PB**... Feet
Piedini

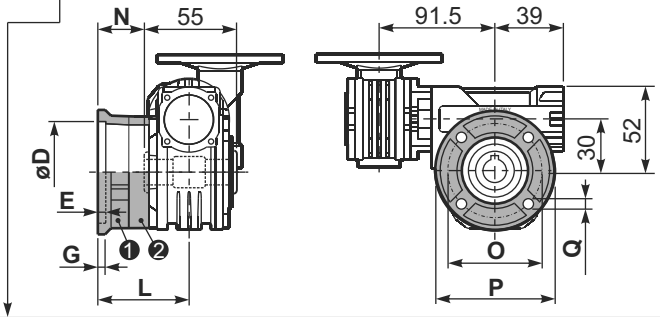


P303**PV**... Feet
Piedini



	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

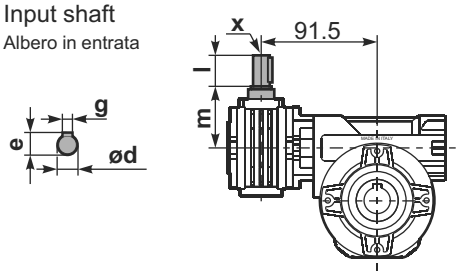
P303**FC**... Output flange
Flangia uscita



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 K030.9.011 ❷ -

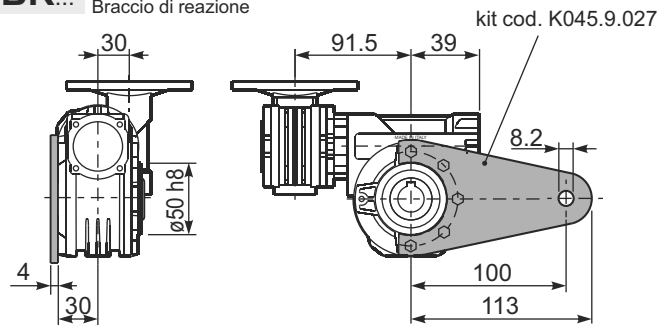
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$40^{+0.15}_{+0.10}$	3.5	5.5	49	21.5	56	80	6.5	❶ KS030.9.012 ❷ -

R303FB... Input shaft
Albero in entrata



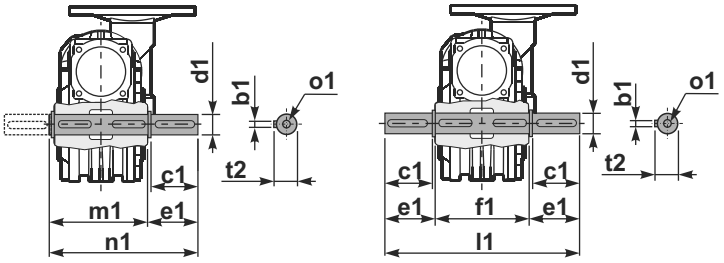
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	K030.5.006 PAM63
type **S**	-	-	-	-	-	-	-

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**	-	-	-	-	-	-	-	-	-	-

▪ 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.

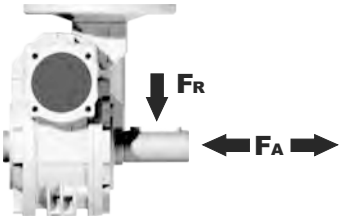


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

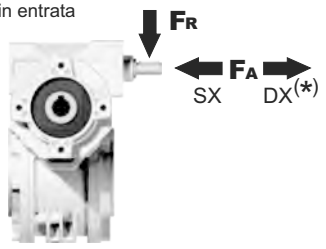
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



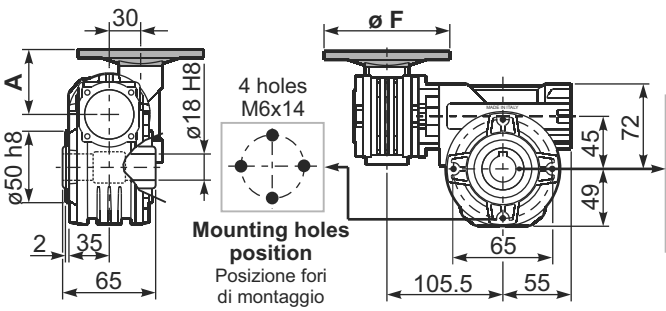
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

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

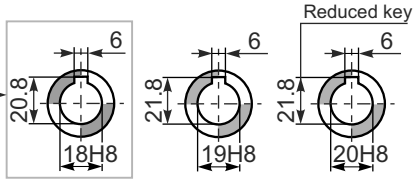
tab. 2

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

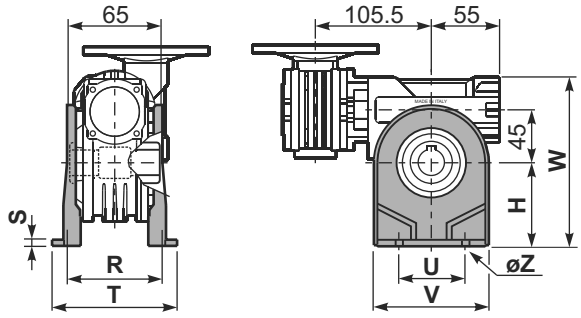


Gearbox weight / peso riduttore: **3.60 kg**

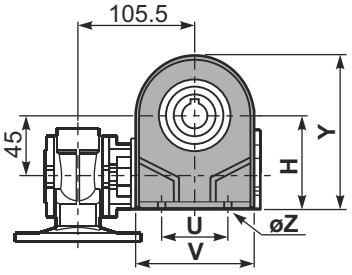


2

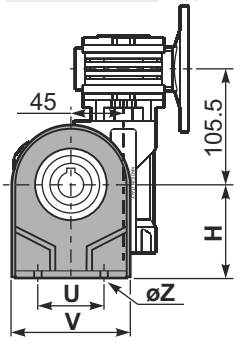
P453**PA**... Feet
Piedini



P453**PB**... Feet
Piedini

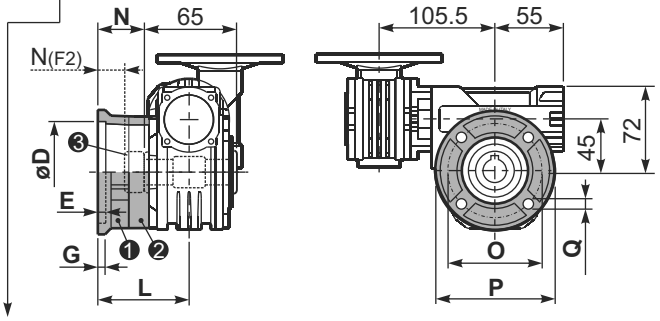


P453**PV**... Feet
Piedini



	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

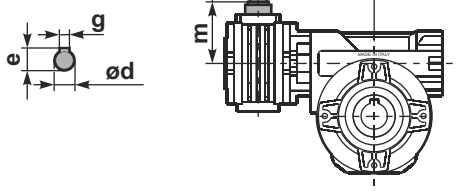
P453**FC**... Output flange
Flangia uscita



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

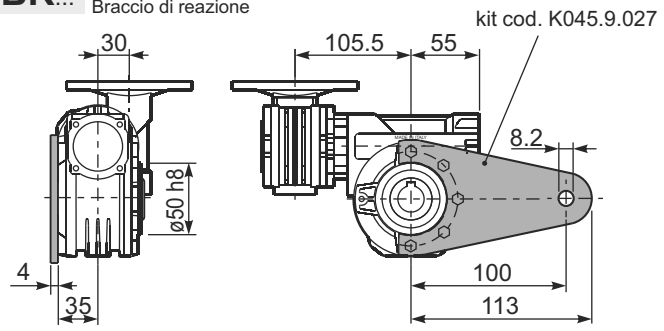
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$95^{+0.20}_{+0.15}$	4	11	73.5	41	115	140	9	❶ KS045.9.013 ❷ -
F2	$60^{+0.15}_{+0.05}$	9	9	60.5	19	87	110	8.5	❶ KS045.9.010 ❸ S045.0.204
F3	$80^{+0.030}_{0}$	3	8	51.5	19	100	120	9	❶ KS045.9.014 ❷ -

R453FB... Input shaft
Albero in entrata



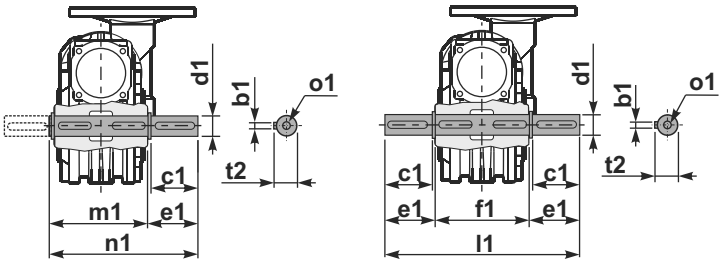
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

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



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

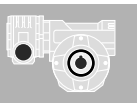
P453.....**D**... Double Shaft
Albero lento bisp.



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

❷ kit cod. K045.5.029 type **B**
kit cod. KS045.5.031 type **S**

	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	65	182	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 **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.

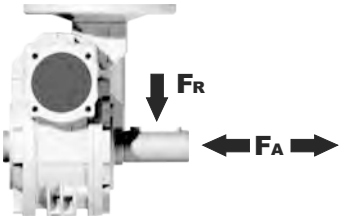


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

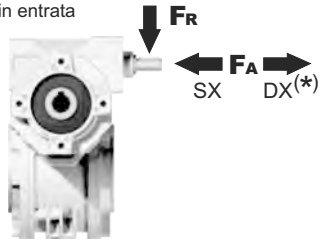
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



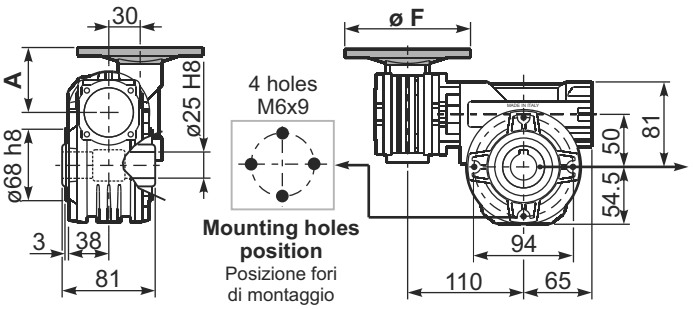
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

***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

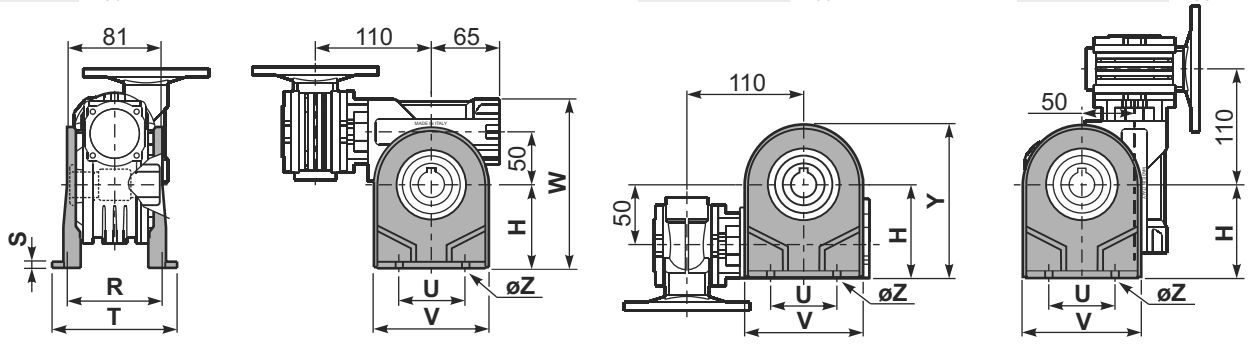


Gearbox weight / peso riduttore: **4.20 kg**

P503**PA**... Feet
Piedini

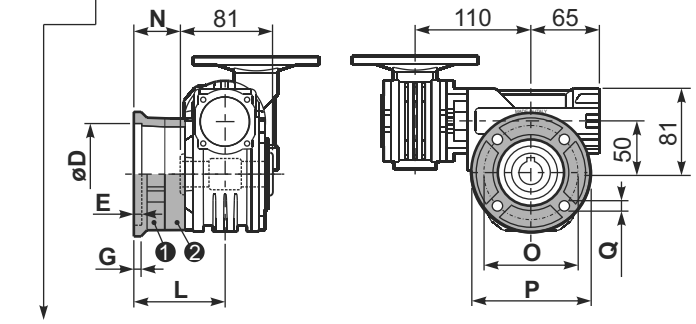
P503**PB**... Feet
Piedini

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

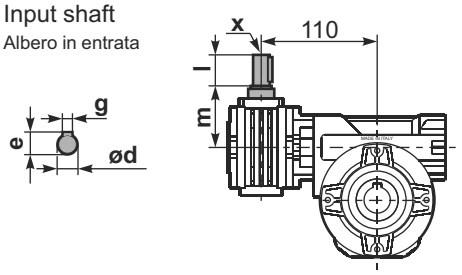
P503**FC**... Output flange
Flangia uscita



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 -

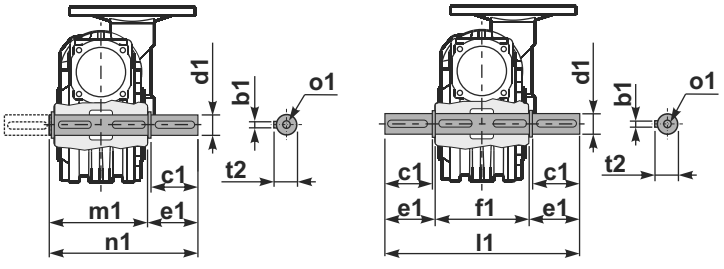
R503FB... Input shaft
Albero in entrata



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

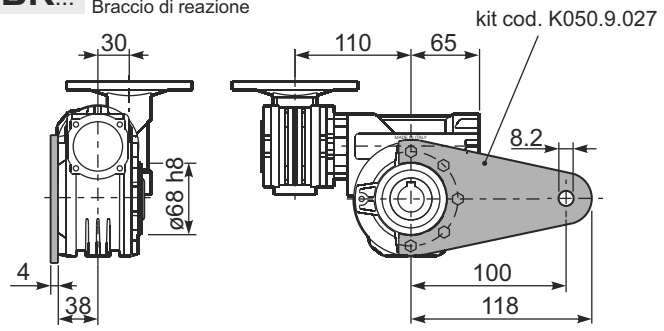
P503.....**D**... Double Shaft
Albero lento bisp.



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

❷ kit cod. K050.5.029 type **B**
kit cod. KS050.5.031 type **S**

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



	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	81	218	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	Available B5 motor flanges B	Available B14 motor flanges O	Available B14 motor flanges P	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							56	63	56	63			
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.

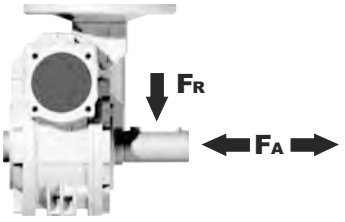


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

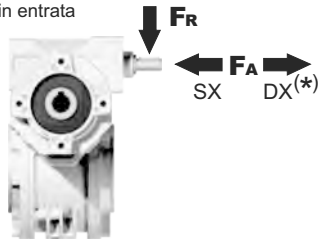
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



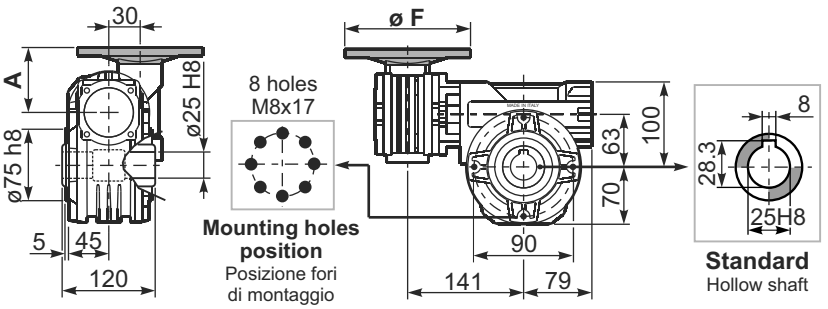
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

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

tab. 2

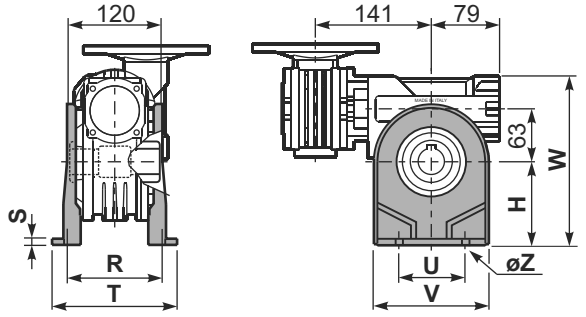
P633**FB**... Basic wormbox
Riduttore base

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

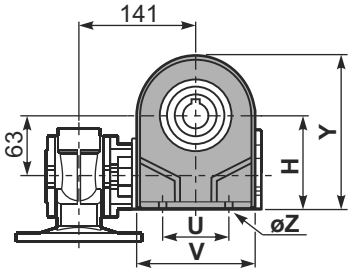


Gearbox weight peso riduttore	7.50 kg

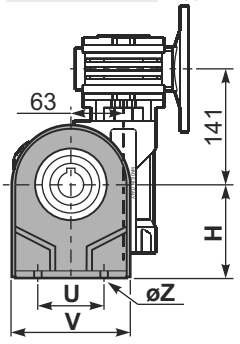
P633**PA**... Feet
Piedini



P633**PB**... Feet
Piedini

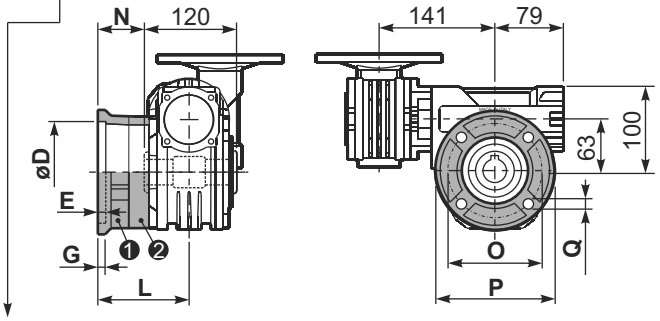


P633**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

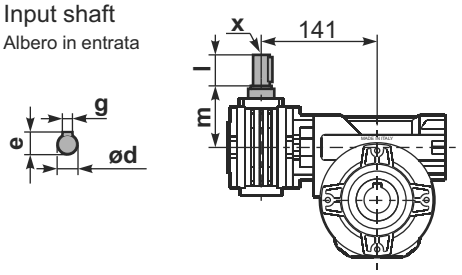
P633**FC**... Output flange
Flangia uscita



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

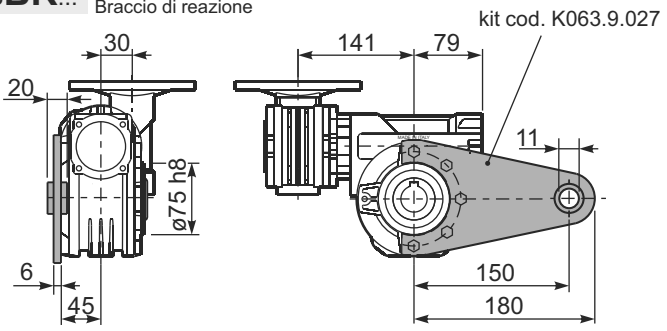
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	102	42	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	82	22	130	160	10	❶ KS063.9.011 ❷ -

R633FB... Input shaft
Albero in entrata



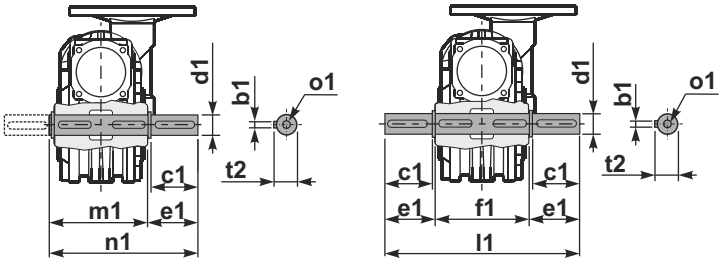
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

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**	-	-	-	-	-	-	-	-	-	-

▪ 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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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.

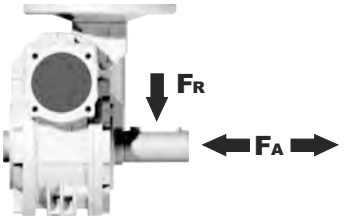


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

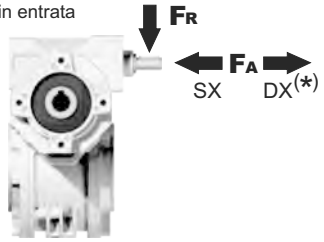
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



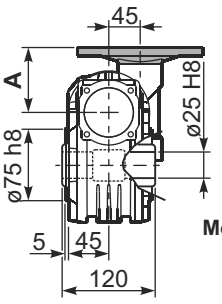
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

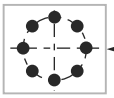
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

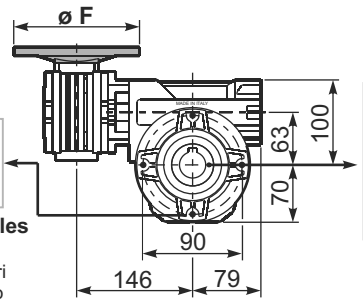
P634**FB**... Basic wormbox
Riduttore base

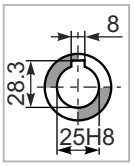
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	72
71B5	K050.4.042	160	70
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5





Mounting holes position
Posizione fori di montaggio

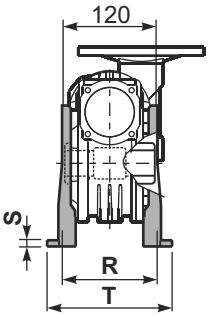


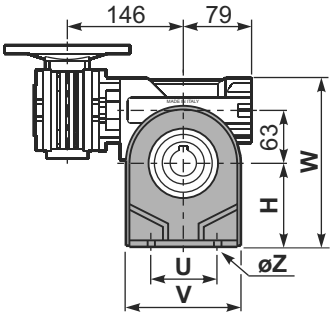


Standard
Hollow shaft

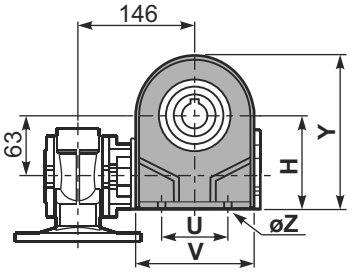
Gearbox weight peso riduttore	8.90 kg

P634**PA**... Feet
Piedini

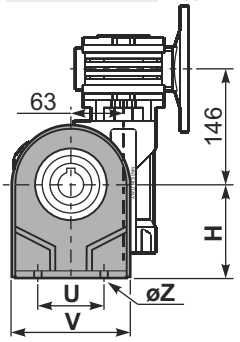




P634**PB**... Feet
Piedini

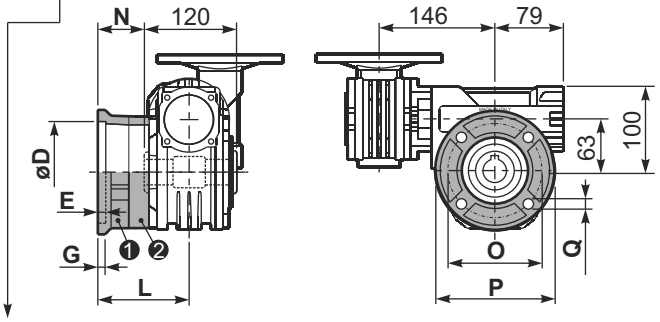


P634**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

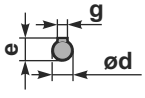
P634**FC**... Output flange
Flangia uscita

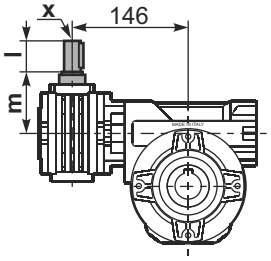


type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 +0.20 +0.15	7	13	86	26	150	175	11	❶ K063.9.010 ❷ -
FL	115 +0.20 +0.15	7	13	116	56	150	175	11	❶ K063.9.010 ❷ K063.0.200

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 -

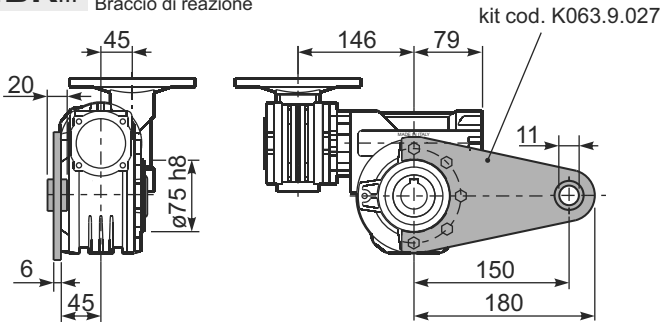
R634FB... Input shaft
Albero in entrata





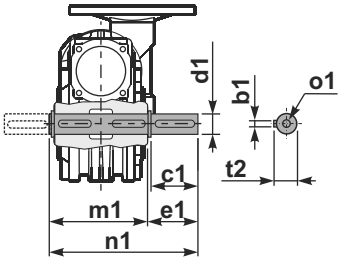
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

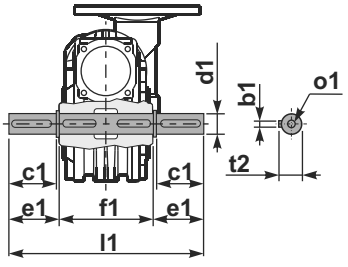
P634**BR**... Reaction arm
Braccio di reazione



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

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

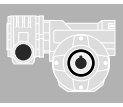




❶ kit cod. K063.5.028 type **B**

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**	-	-	-	-	-	-	-	-	-	-



▪ 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 0.40/0.06 Lt.

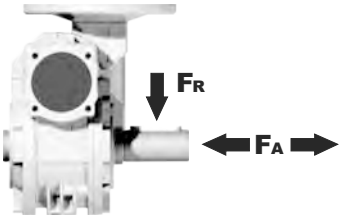


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

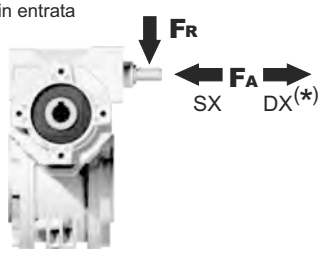
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



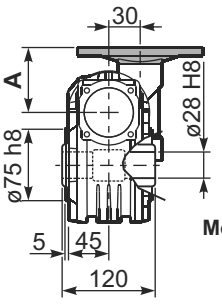
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

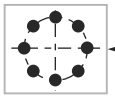
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

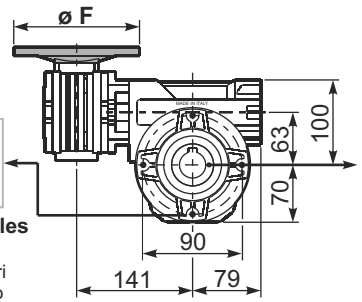
P6A3**FB**... Basic wormbox
Riduttore base

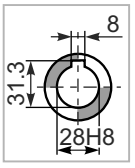
M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



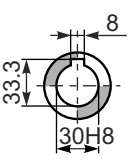


Mounting holes position
Posizione fori di montaggio





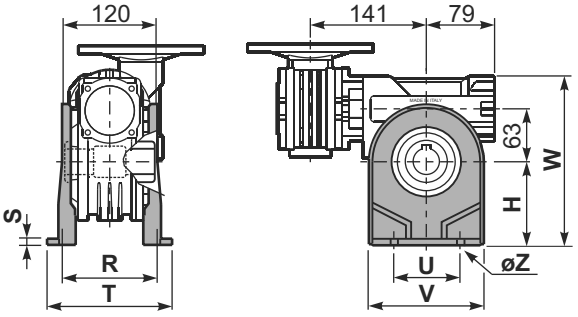
Standard
Hollow shaft



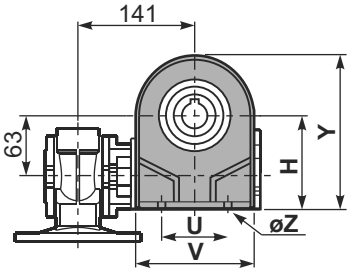
On request
A richiesta

Gearbox weight peso riduttore	8.90 kg

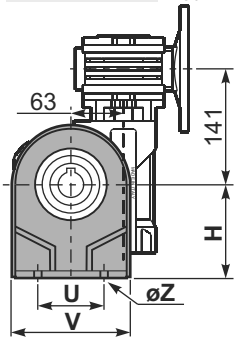
P6A3**PA**... Feet
Piedini



P6A3**PB**... Feet
Piedini

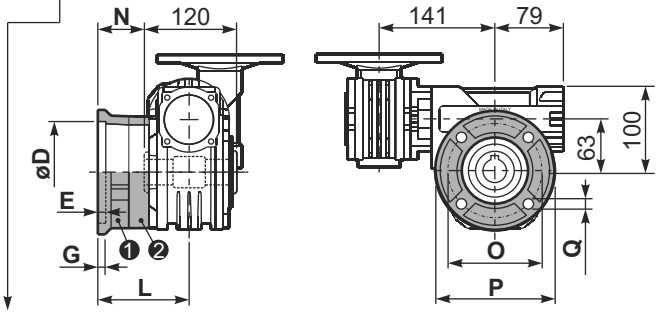


P6A3**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

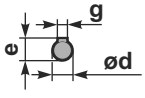
P6A3**FC**... Output flange
Flangia uscita

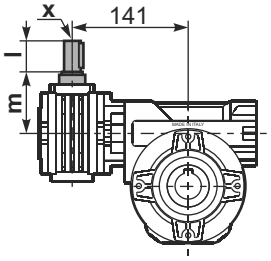


type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$130^{+0.20}_{+0.15}$	7	13	85	25	165	200	13	❶ K070.9.010 ❷ -
FL	$130^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ K070.9.010 ❷ K070.0.200

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 -

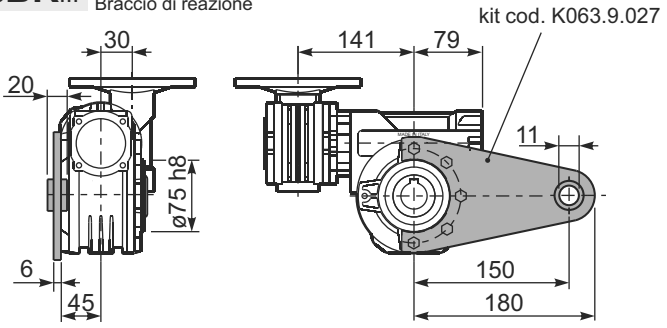
R6A3FB... Input shaft
Albero in entrata





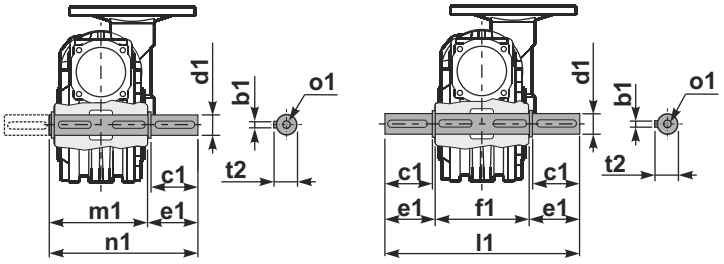
	ød	e	g	l	m	x	kit code
type **B**	9 h6	10.2	3	20	58	-	❶ K030.5.006 PAM63 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

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



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

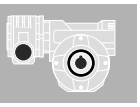
P6A3.....**D**... Double Shaft
Albero lento bisp.



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**	-	-	-	-	-	-	-	-	-	-



▪ 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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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.

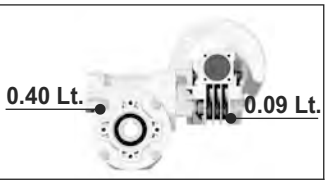
I Il riduttore tipo **6A4** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.

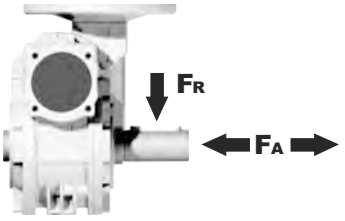


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

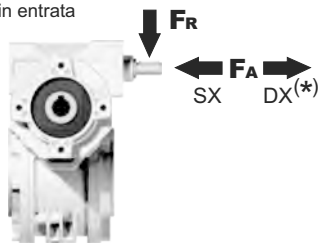
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



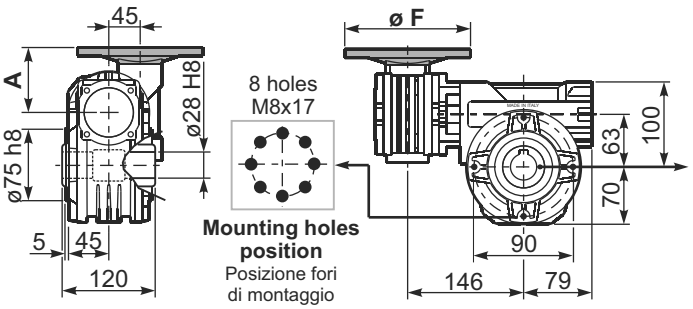
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

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

tab. 2

P6A4**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	72
71B5	K050.4.042	160	70
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5



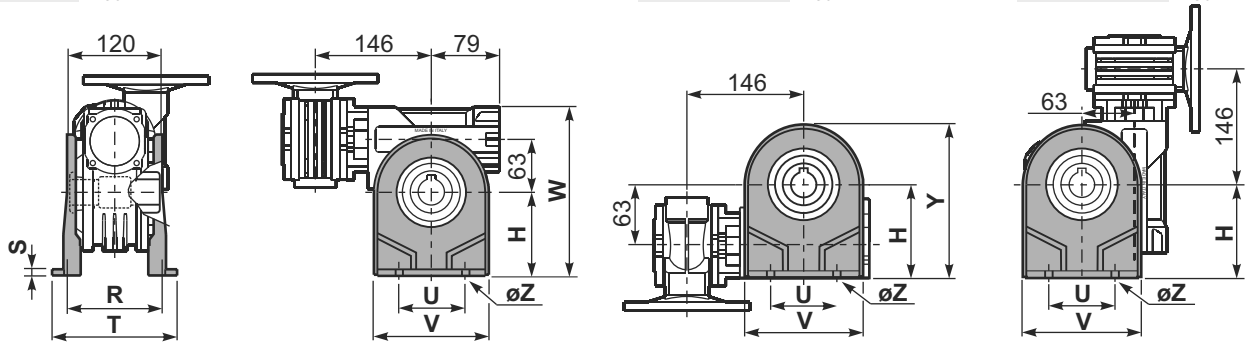
Gearbox weight peso riduttore **8.90 kg**

2

P6A4**PA**... Feet
Piedini

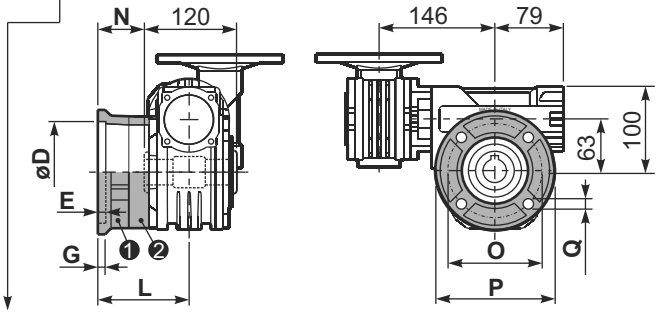
P6A4**PB**... Feet
Piedini

P6A4**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**	-	-	-	-	-	-	-	-	-	-

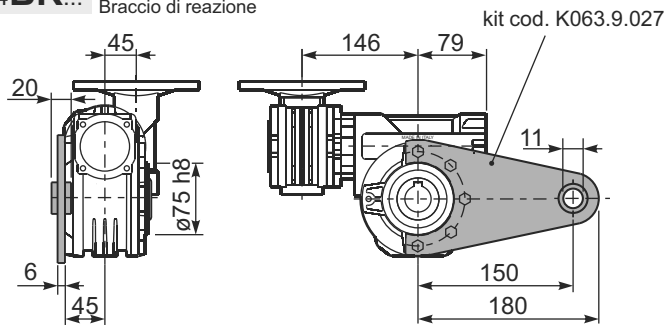
P6A4**FC**... Output flange
Flangia uscita



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

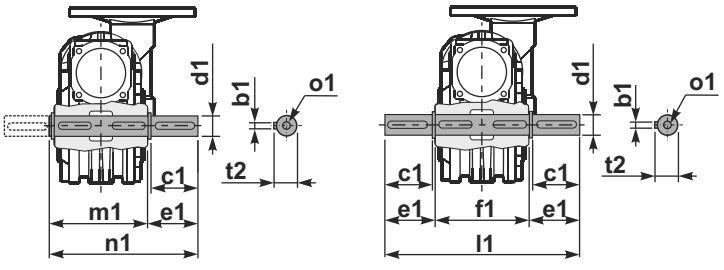
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$130^{+0.20}_{+0.15}$	7	13	111	51	165	200	13	❶ KS070.9.014 ❷ -
F2	$115^{+0.20}_{+0.15}$	7	13	116	56	150	175	11	❶ KS063.9.013 ❷ -
F3	$110^{+0.035}_{0}$	5	13.5	84.5	24.5	130	160	11	❶ KS070.9.011 ❷ -

P6A4**BR**... Reaction arm
Braccio di reazione



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

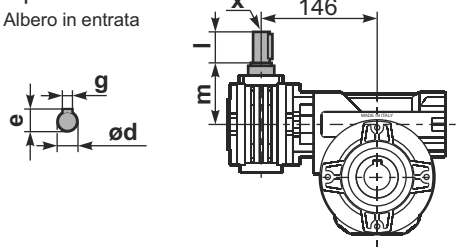
P6A4.....**D**... Double Shaft
Albero lento bisp.



❶ kit cod. K070.5.028 type **B**

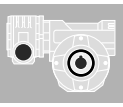
❷ kit cod. K070.5.029 type **B**

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 -

	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**	-	-	-	-	-	-	-	-	-	-



▪ 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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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.

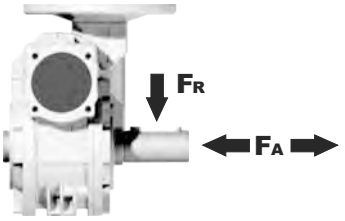


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

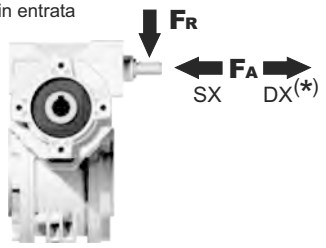
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



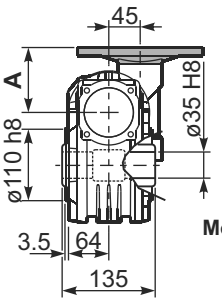
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

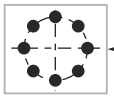
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

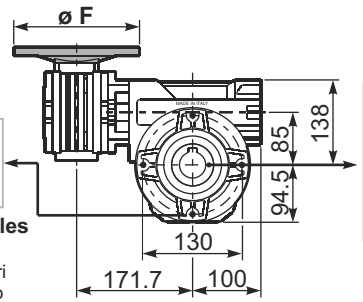
P854**FB**... Basic wormbox
Riduttore base

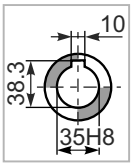
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	72
71B5	K050.4.042	160	70
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5





Mounting holes position
Posizione fori di montaggio



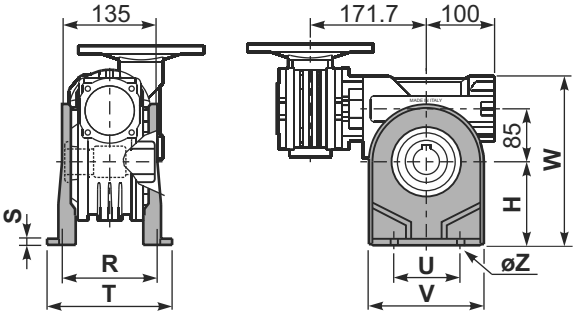


Standard
Hollow shaft

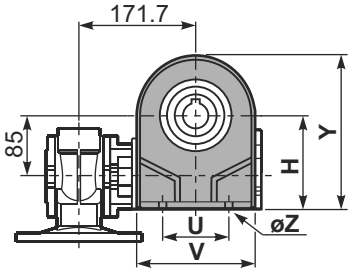
Gearbox weight peso riduttore **19.50 kg**

2

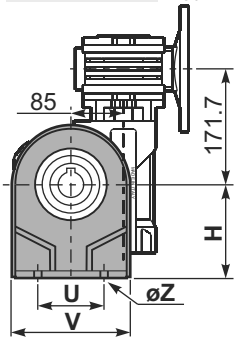
P854**PA**... Feet
Piedini



P854**PB**... Feet
Piedini

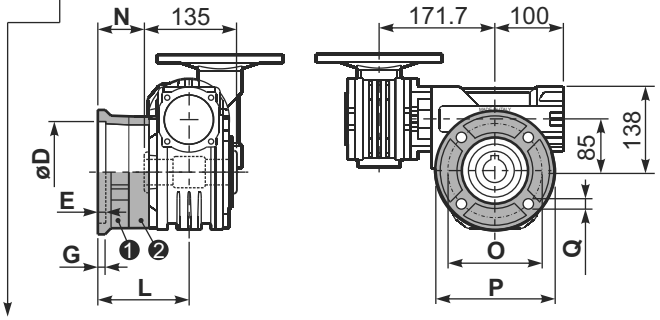


P854**PV**... Feet
Piedini



	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**	-	-	-	-	-	-	-	-	-	-

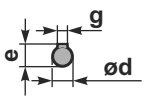
P854**FC**... Output flange
Flangia uscita

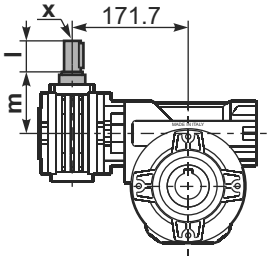


type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$152^{+0.06}_{+0.00}$	5	16	108	40.5	176	205	13	❶ K085.9.010 ❷ -
FL	$152^{+0.06}_{+0.00}$	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

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 -

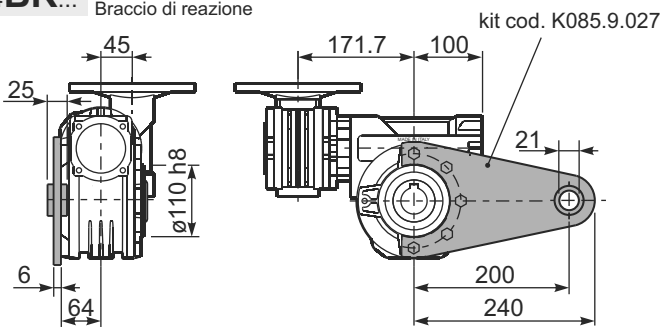
R854FB... Input shaft
Albero in entrata





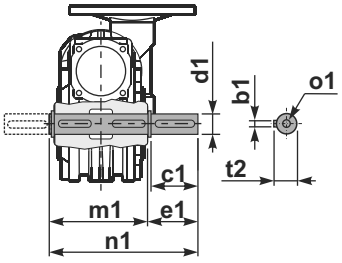
	ød	e	g	l	m	x	kit code
type **B**	11 h6	12.5	4	30	68	-	❶ K045.5.006 PAM71 ❷ -
type **S**	-	-	-	-	-	-	❶ - ❷ -

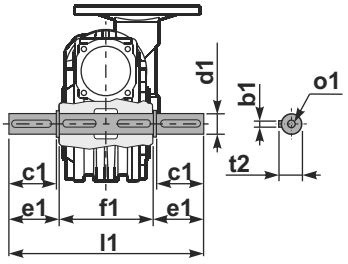
P854**BR**... Reaction arm
Braccio di reazione



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**	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

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

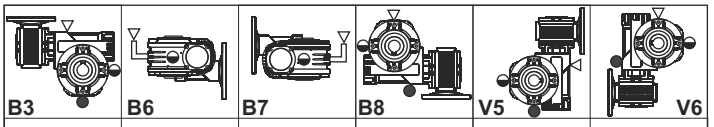
Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges B	C	D	Available B14 motor flanges O	P	Q	R	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	56	63	71	80			
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



B3	B6	B7	B8	V5	V6
2.0/0.14 LT	1.5/0.14 LT	1.5/0.14 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

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.

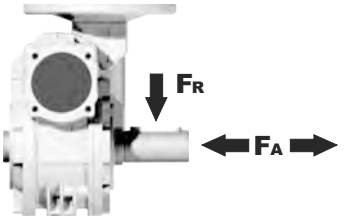
D Das Getriebe der Baugröße **115** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute 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.

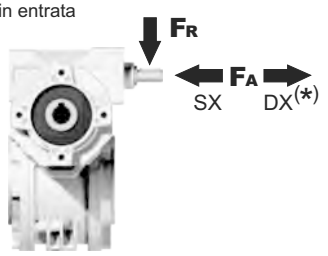
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



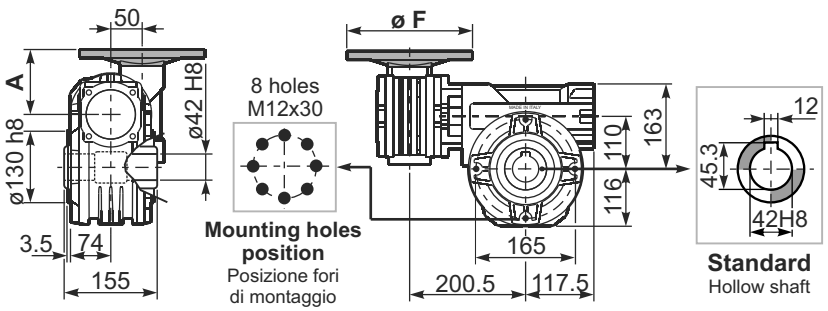
n_1 [min^{-1}]	FA [N]	FR [N]
1400	76	380

***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

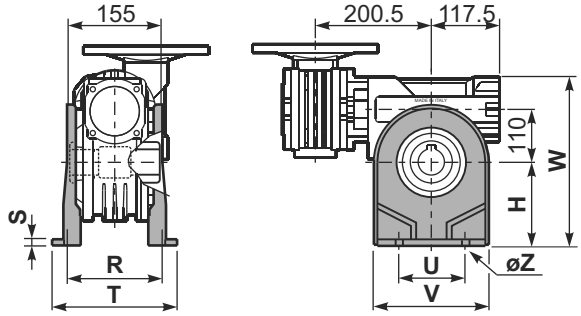
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	76.5
71B5	K050.4.042	160	74.5
80B5	K050.4.043	200	76.5
56B14	KC40.4.049	80	76
63B14	K050.4.047	90	78.5
71B14	K050.4.045	105	76
80B14	K050.4.046	120	76.5



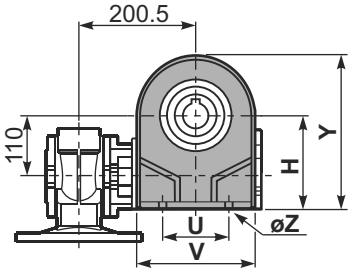
Gearbox weight peso riduttore **38.00 kg**

2

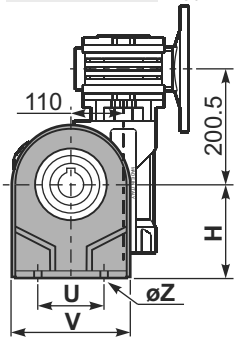
P115**PA**... Feet
Piedini



P115**PB**... Feet
Piedini

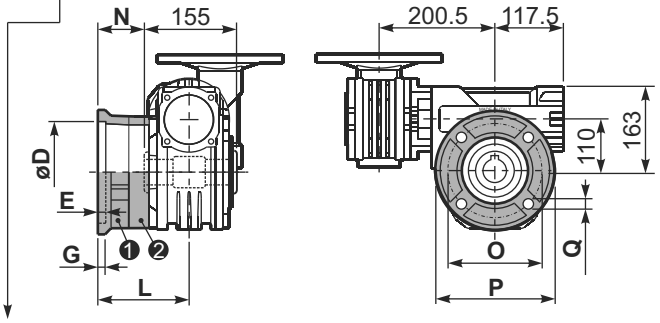


P115**PV**... Feet
Piedini



	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**	172	160	18	190	200	240	288	335	ø14	KS110.9.023

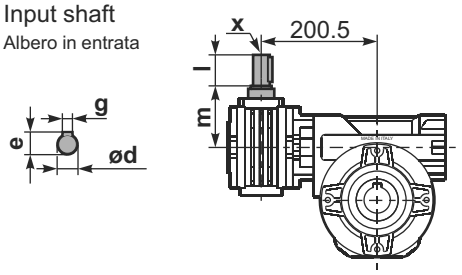
P115**FC**... Output flange
Flangia uscita



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 -

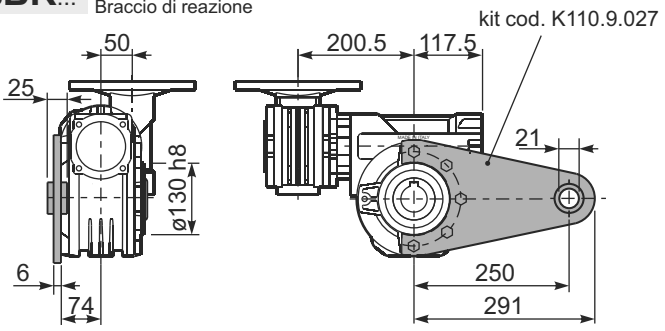
type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F2	170 +0.083 +0.043	9.5	15	178	100.5	230	270	13	❶ KS110.9.012 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

R115FB... Input shaft
Albero in entrata



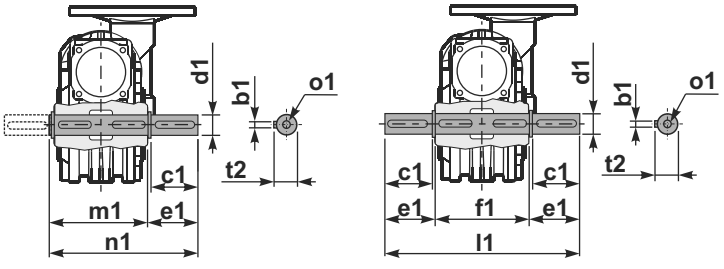
	ød	e	g	l	m	x	kit code
type **B**	16 h6	18	5	30	74.5	M6x16	❶ K050.5.006 PAM71 ❷ K050.5.007 PAM80
type **S**	14 h6	16	5	30	74.5	M5x10	❶ KS050.5.008 PAM71 ❷ KS050.5.009 PAM80

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**	-	-	-	-	-	-	-	-	-	-

Worm gearboxes type Q30 ÷ Q13

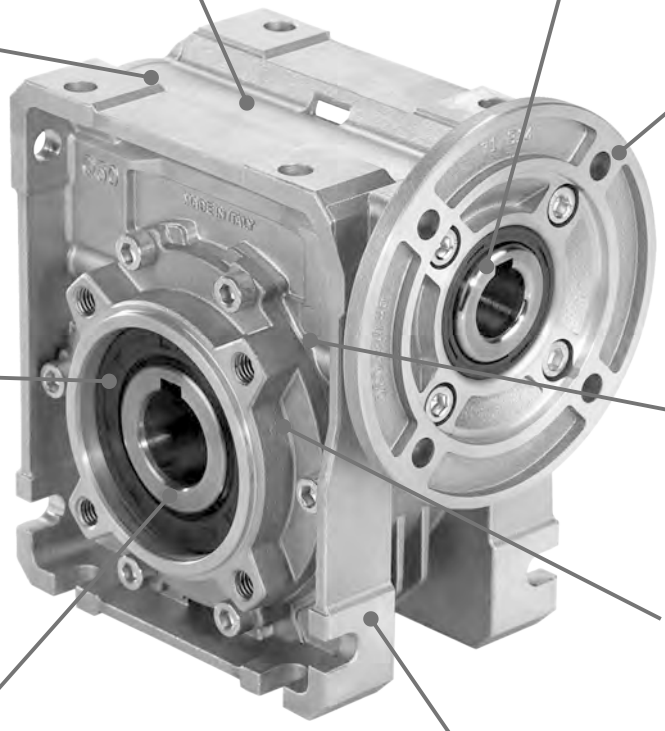
A modular and compact product

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.
Is centrifugally cast onto an iron hub for maximum strenght and superior life.

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.

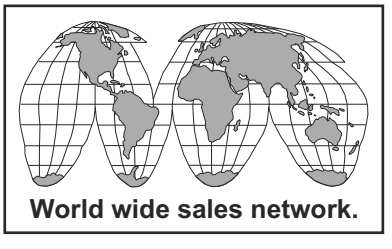
Impregnated and machined bearing caps
With exterior machined surfaces enable a variety of mounting accessories.
Extra-deep thread engagement provided for greater support strength.
Zinc plated hardware.

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

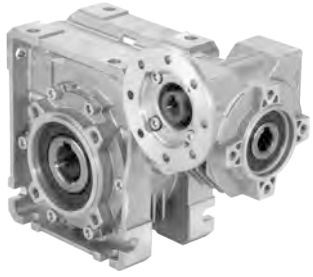
3-5	3-7	3-9	3-11	3-13	3-15	3-17	3-19
Q30 21Nm	**Q45** 41Nm	**Q50** 72Nm	**Q63** 147Nm	**Q75** 270Nm	**Q85** 347Nm	**Q11** 651Nm	**Q13** 1050Nm



Types / Tipi / Tipen / Types / Tipos ⇨

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

3-21	3-23	3-25	3-27	3-29	3-31	3-33
P4Q 55Nm	**P5Q** 88Nm	**P6Q** 187Nm	**P7Q** 310Nm	**P8Q** 440Nm	**P1Q** 803Nm	**Q13+511** 972Nm



Types / Tipi / Tipen / Types / Tipos ⇨

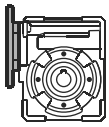
On page / A pagina / Auf Seite / À la page / En la página

3-35	3-37	3-39	3-41	3-43	3-45	3-47
43Q 69Nm	**53Q** 109Nm	**63Q** 230Nm	**64Q** 265Nm	**74Q** 359Nm	**84Q** 518Nm	**15Q** 978Nm

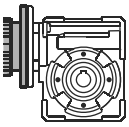
CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

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

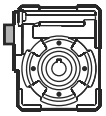
Worm gearboxes
Riduttori a vite senza fine
Schneckengetriebe
Reducteurs a vis sans fin
Reductores de corona sin fin



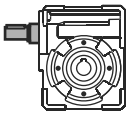
P



M

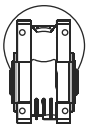


B



R

Q30
Q45
Q50
Q63
Q75
Q85
Q11
Q13



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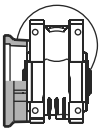

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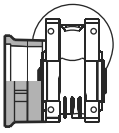
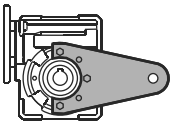


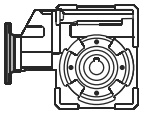
FL

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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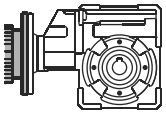

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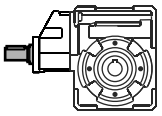
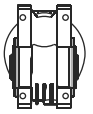
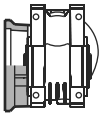


R

P4Q
P5Q
P6Q
P7Q
P8Q
P1Q



FB



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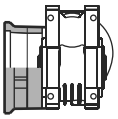
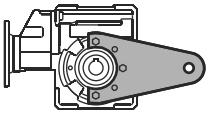


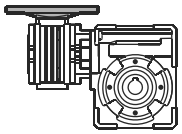
FL

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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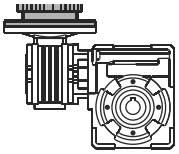

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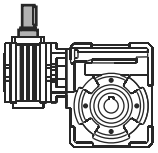
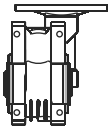
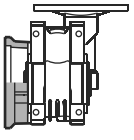


R

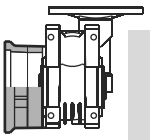
43Q
53Q
63Q
64Q
74Q
84Q
15Q



FB

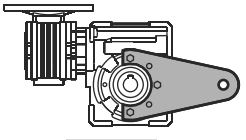


FC



FL

F1
F2
F3
F4



BR

Dossier according to 94/9/EG II, 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

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

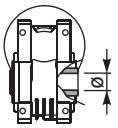
See technical data table

Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir tableau données techniques

Ver tabla datos técnicos



C

STANDARD

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

I

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

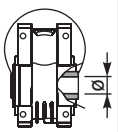
Special series
Serie Speciale

S

Q45 ⇨ ø19
Q50 ⇨ ø24

X

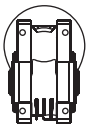
Stainless steel hub
Mozzo in acciaio Inox
Edelstahlhohlwelle
Moyeu en acier Inox
Nucleo corona de acero Inox



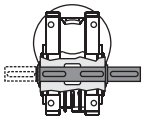
U

INCH

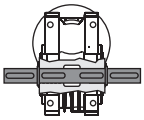
Q45 ⇨ ø0.750"
Q50 ⇨ ø1.000"
Q63 ⇨ ø1.125"
Q85 ⇨ ø1.500"



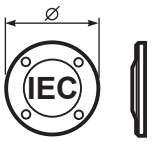
Ø



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)

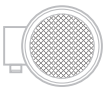
B14

-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

Reduced Fl.

-1=56B5/ø11
-2=63B5/ø14
-3=71B5/ø19
-4=71B5/ø24
-5=90B5/ø28
-6=100B5/ø38
-7=132B5/ø42
-8=80B14/ø11
-9=100B5/ø24

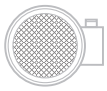


A



B

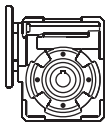
STANDARD



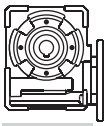
C



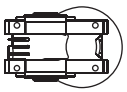
D



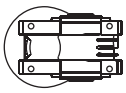
B3



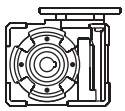
B8



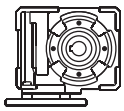
B6



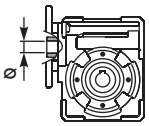
B7



V5



V6



-

Nothing indication standard bore

Nessuna indicazione foro 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

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

3

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

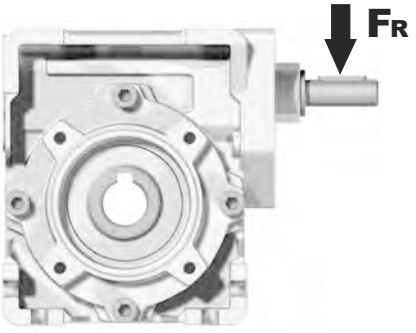
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$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

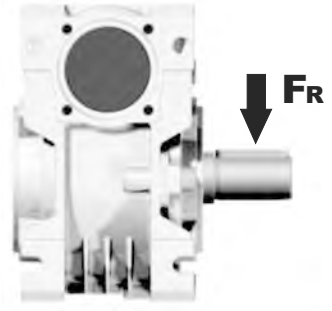
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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





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

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

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	B5 C	Available B14 motor flanges O	B14 P	B14 Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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)

▪ 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**	0.09	16	1.0	**0.06**	**16**	B		B-C		48	0.56	08

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 **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.

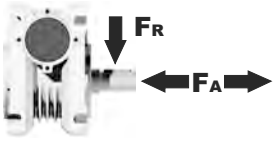
▪ LUBRICATION Q30 Oil Quantity 0.03Lt.

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

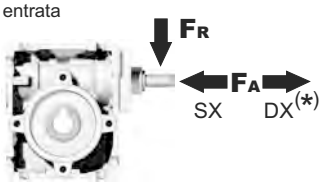
▪ RADIAL AND AXIAL LOADS

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

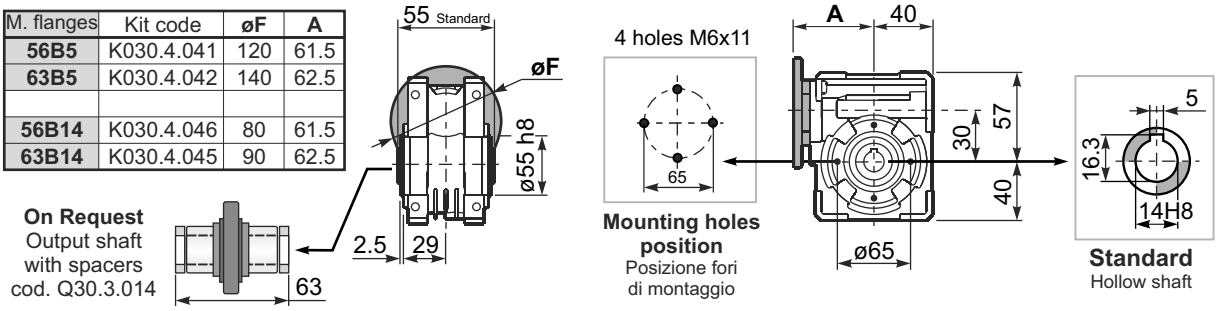
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

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

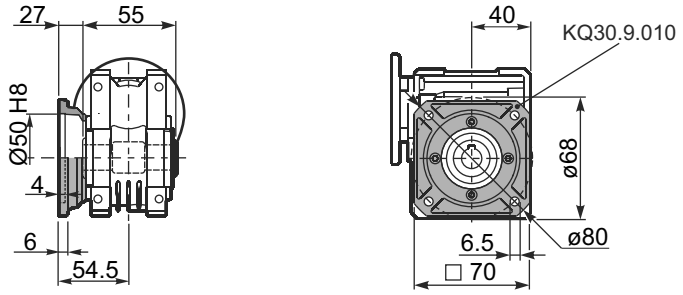
Gearbox weight peso riduttore: **1.15 kg**

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

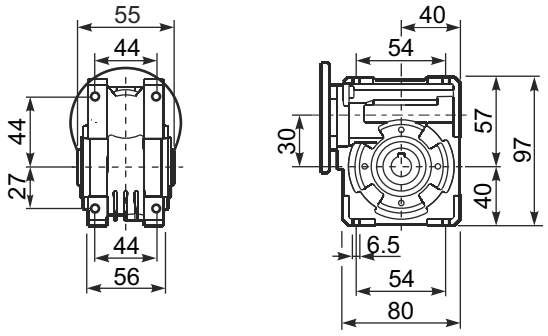


On Request
Output shaft with spacers cod. Q30.3.014

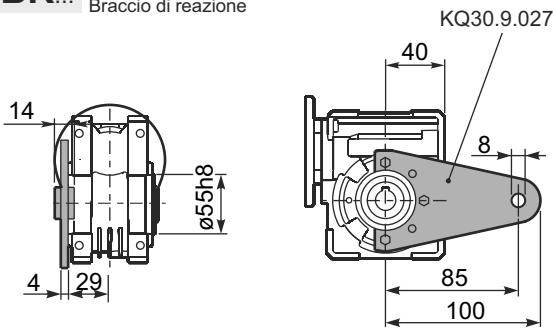
PQ30**FC**... Square flange
Flangia quadrata



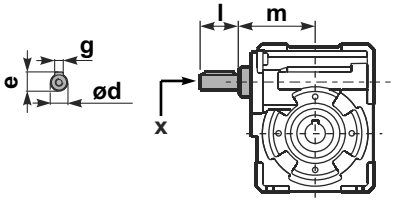
PQ30**FB**... Feet
Piedini



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



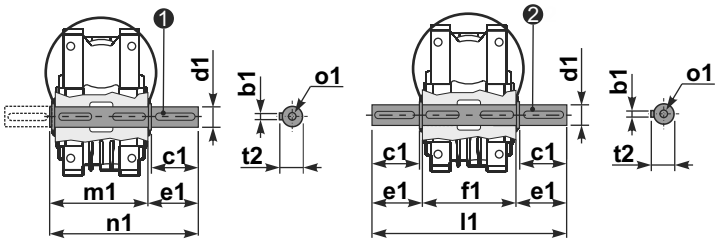
RQ30FB... Input shaft
Albero in entrata



	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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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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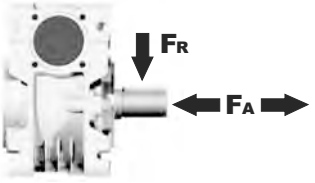
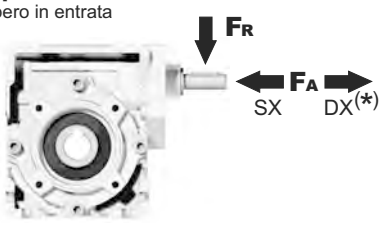
▪ RADIAL AND AXIAL LOADS

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

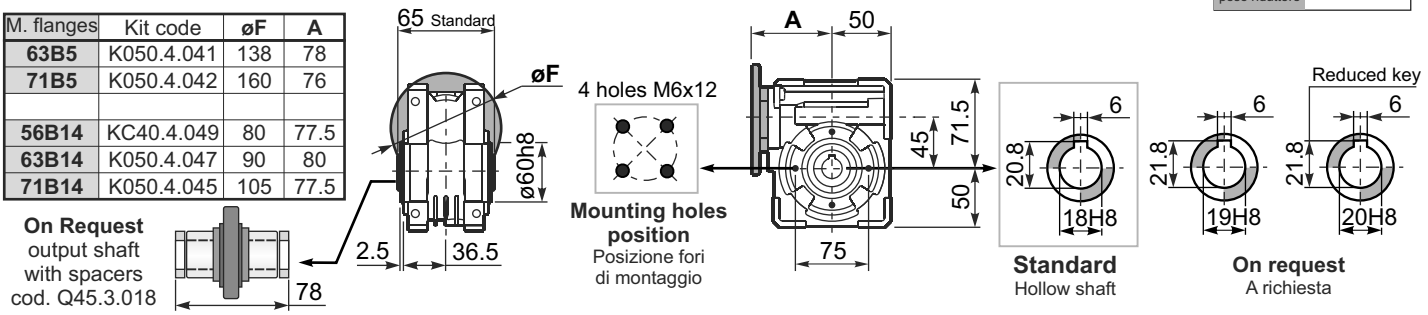
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

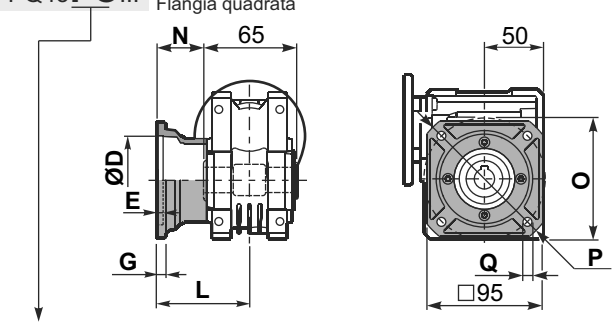
PQ45**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore	2.30 kg

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	78
71B5	K050.4.042	160	76
56B14	KC40.4.049	80	77.5
63B14	K050.4.047	90	80
71B14	K050.4.045	105	77.5

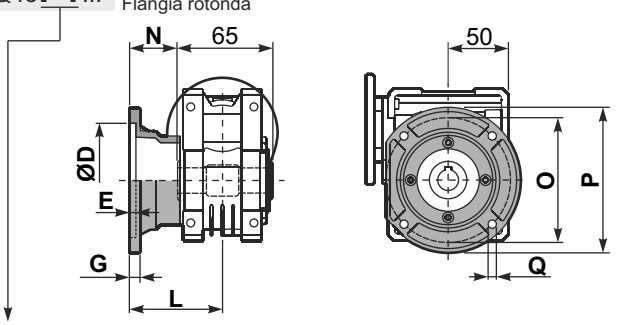


PQ45**FC**... Square flange
Flangia quadrata



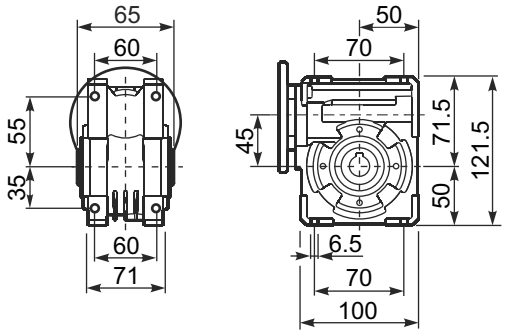
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	60 H8	4	7	67	34.5	75	110	9	KQ45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KQ45.9.011

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

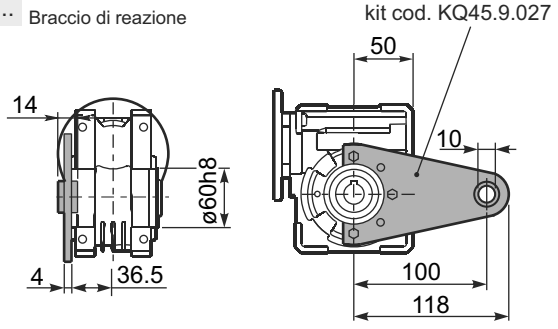


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	95H8	5	9	80	47.5	115	140	9.5	KSQ45.9.012
F2	80H8	5	12	58	25.5	100	120	9	KSQ45.9.013

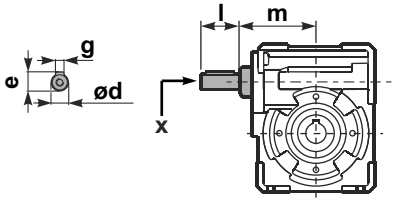
PQ45**FB**... Feet
Piedini



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

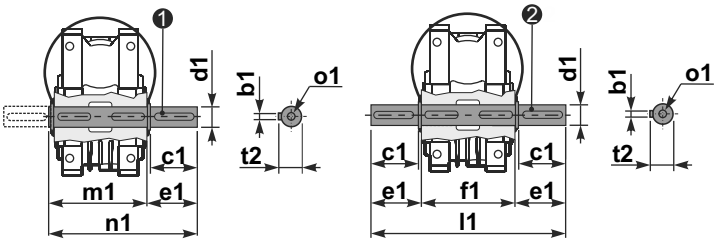


RQ45FB... Input shaft
Albero in entrata



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**
kit cod. KS045.5.031 type **S**

	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 -

	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	65	182	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	C	D	Available B14 motor flanges O	P	Q	R	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	56	63	71	80			
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
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.

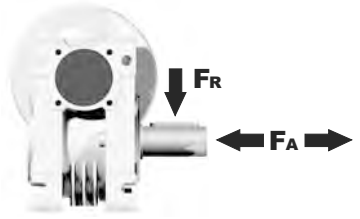
▪ LUBRICATION Q50 Oil Quantity 0.14 Lt.

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

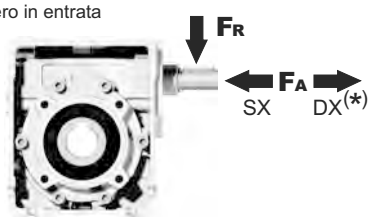
▪ RADIAL AND AXIAL LOADS

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



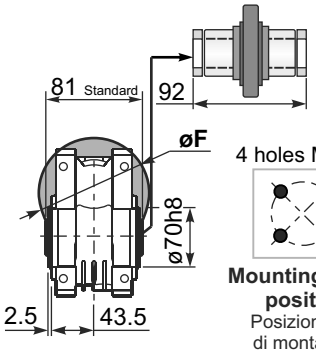
n_1 [min^{-1}]	FA [N]	FR [N]
1400	76	380

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

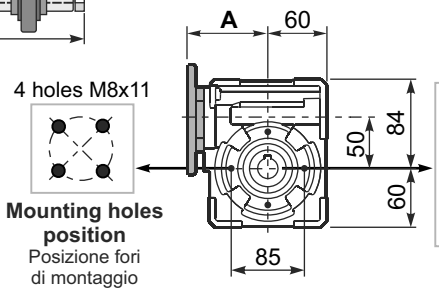
tab. 2

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

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	81.5
71B5	K050.4.042	160	79.5
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

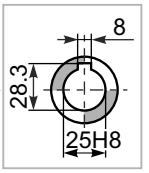


On Request output shaft
with spacers cod. Q50.3.025

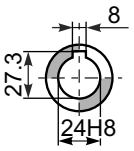


4 holes M8x11

Mounting holes position
Posizione fori di montaggio



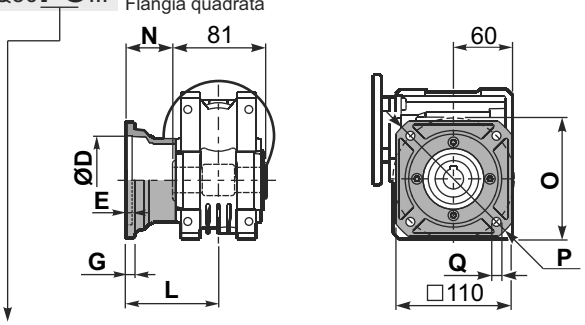
Standard
Hollow shaft



On request "type S"
A richiesta "tipo S"

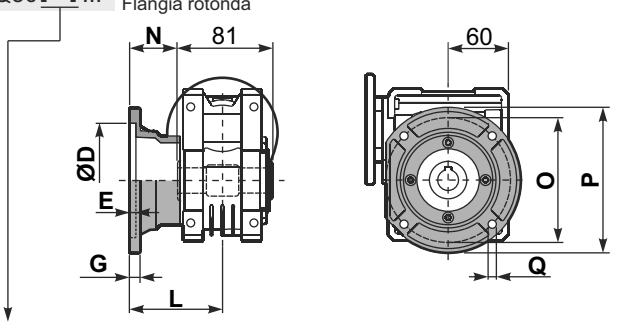
Gearbox weight peso riduttore **3.25 kg**

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



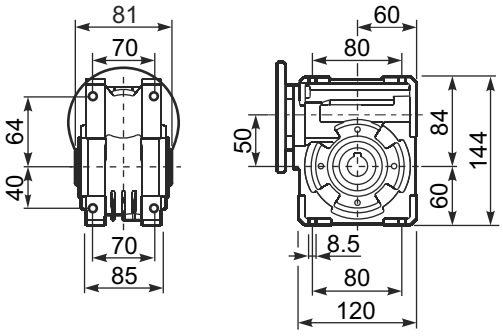
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	70 H8	5	9	90	49.5	85	125	11	KQ50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KQ50.9.011

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

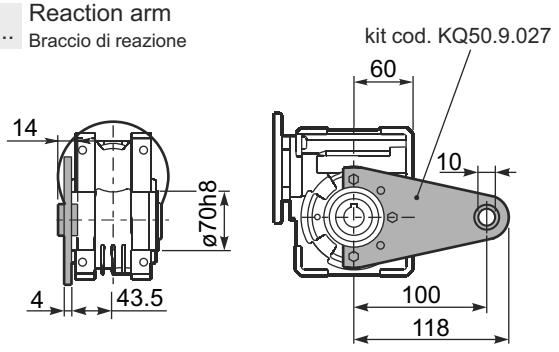


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	110 H8	5	10	89	48.5	130	160	9.5	KSQ50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KSQ50.9.013

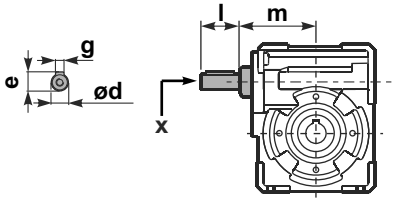
PQ50**FB**... Feet
Piedini



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



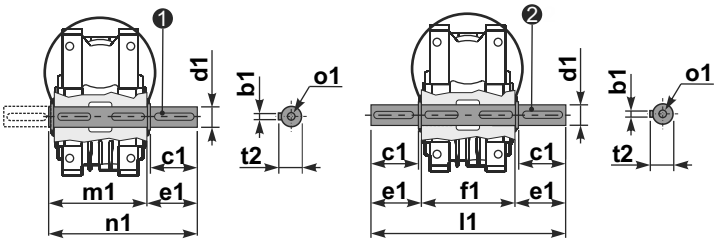
R**Q50FB**... Input shaft
Albero in entrata



	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

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**
kit cod. KS050.5.031 type **S**

	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	81	218	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	C	D	E	Available B14 motor flanges Q	R	T	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	90	71	80	90			
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
31	**45**	0.55	111	1.2	0.67	135	B	B			B-C	C		66	2.1	08
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**
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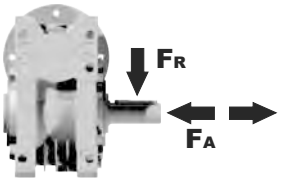
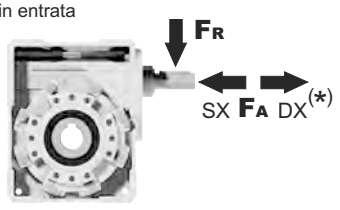
▪ RADIAL AND AXIAL LOADS

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



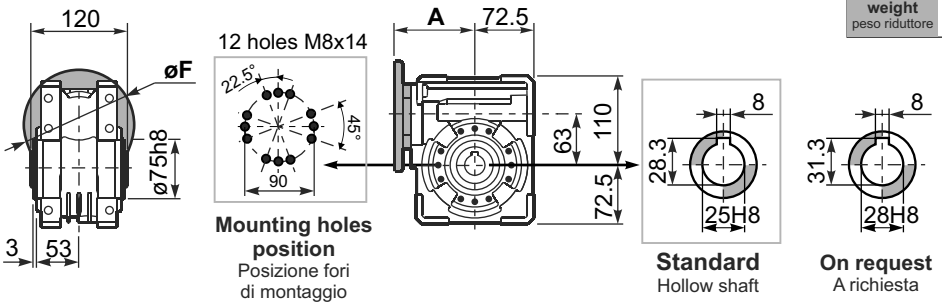
n_1 [min^{-1}]	FA [N]	FR [N]
1400	90	450

***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	98.5
90B14	K063.4.041	140	99.5



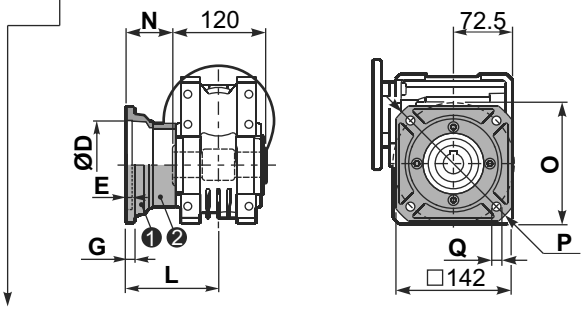
Mounting holes position
Posizione fori di montaggio

Standard
Hollow shaft

On request
A richiesta

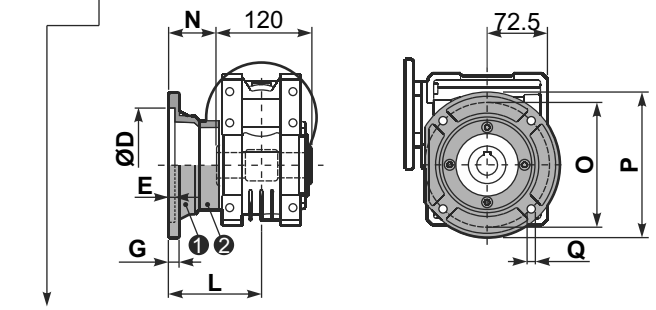
Gearbox weight peso riduttore: **6.00 kg**

PQ63**FC**... Square flange
Flangia quadrata



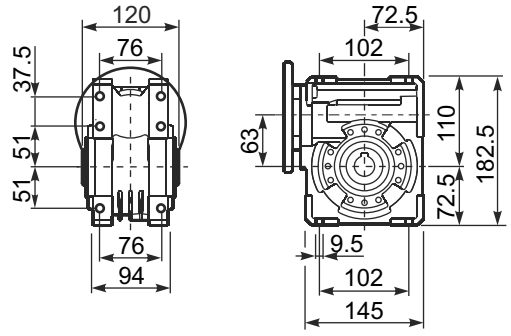
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 $^{+0.20}_{+0.15}$	6	12	86	26	150	180	11	❶ KQ63.9.010 ❷ -
FL	115 $^{+0.20}_{+0.15}$	6	12	116	56	150	180	11	❶ KQ63.9.010 ❷ K063.0.200

PQ63**F1**... Round flange
Flangia rotonda

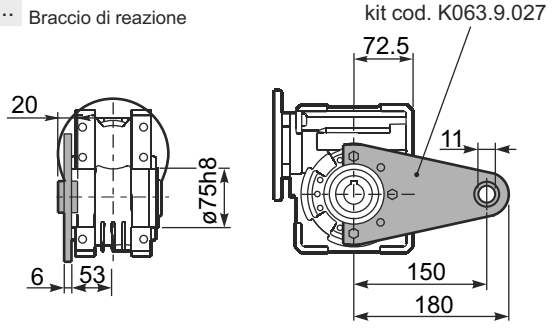


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	110	50	165	200	13	❶ KS070.9.013 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	124	64	150	175	11	❶ KS063.9.013 ❷ -
F3	110 $^{+0.035}_{0}$	5	11	90	30	130	160	10	❶ KS063.9.011 ❷ -

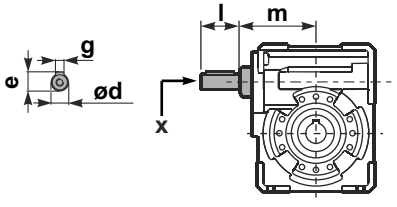
PQ63**FB**... Feet
Piedini



PQ63**BR**... Reaction arm
Braccio di reazione



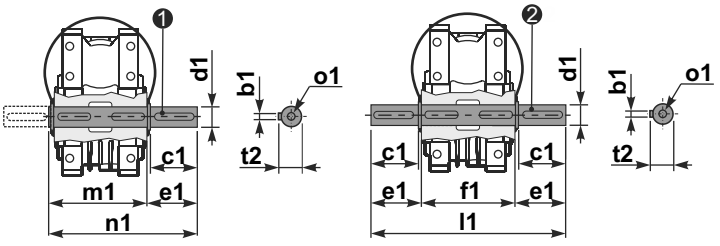
RQ63FB... Input shaft
Albero in entrata



	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	202	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.

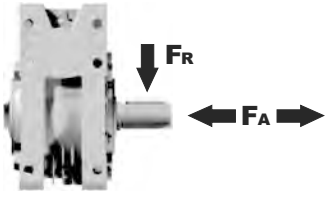
▪ LUBRICATION Q75 Oil Quantity 0.40 Lt.

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

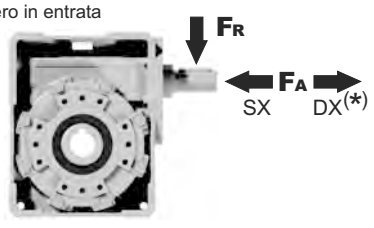
▪ RADIAL AND AXIAL LOADS

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

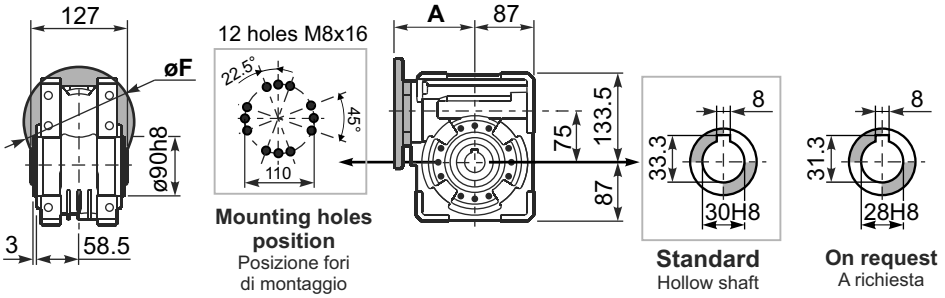
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

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	113.5
80/90B5	K023.4.042	200	115.5
100/112B5	K023.4.043	250	121.5
80B14	K085.4.046	120	113.5
90B14	K085.4.045	140	113.5
100/112B14	K023.4.041	160	113.5

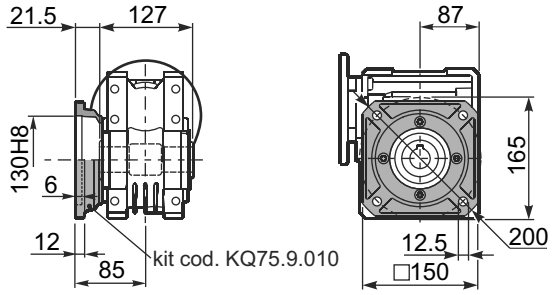


Mounting holes position
Posizione fori di montaggio

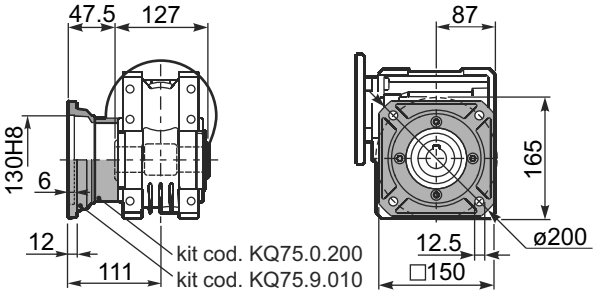
Standard
Hollow shaft

On request
A richiesta

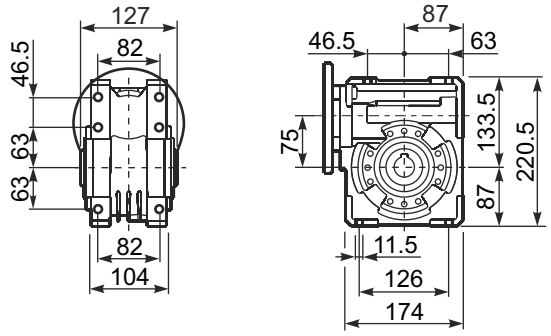
PQ75**FC**... Square flange
Flangia quadrata



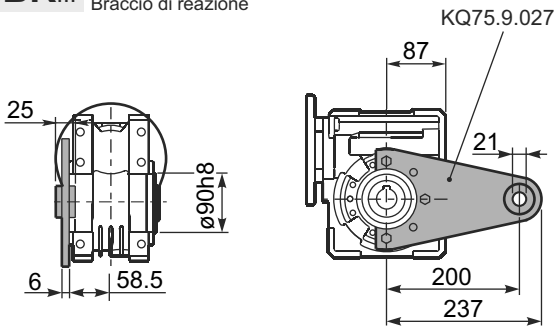
PQ75**FL**... Square flange
Flangia quadrata



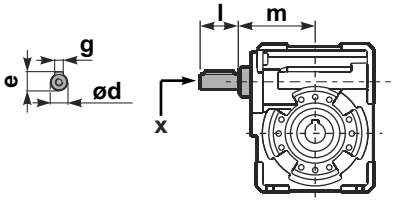
PQ75**FB**... Feet
Piedini



PQ75**BR**... Reaction arm
Braccio di reazione

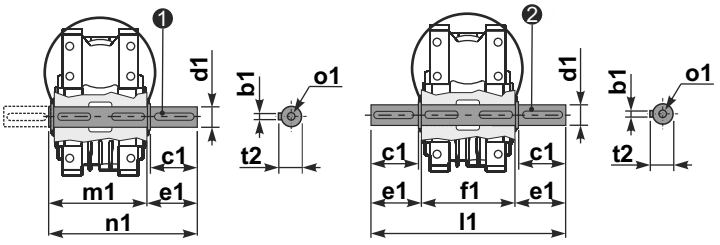


RQ75FB... Input shaft
Albero in entrata



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
kit cod. KQ75.5.027 On request

	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

	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	127	255	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.

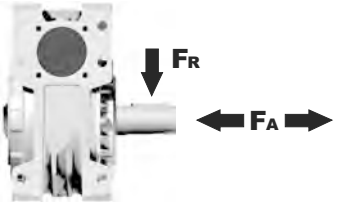
▪ LUBRICATION Q85 Oil Quantity 1.20 Lt.

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

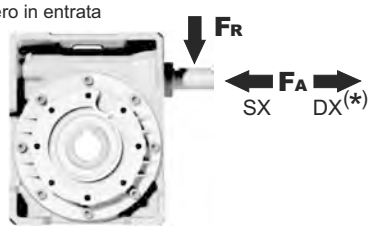
▪ RADIAL AND AXIAL LOADS

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	160	809

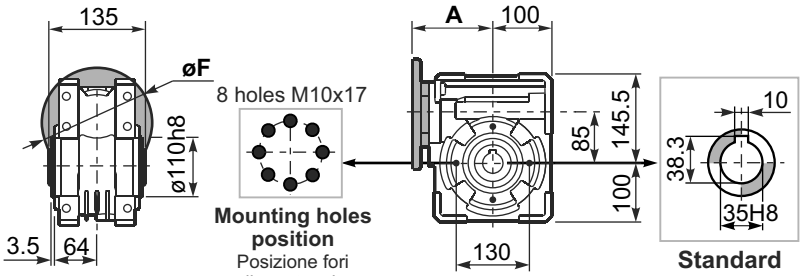
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

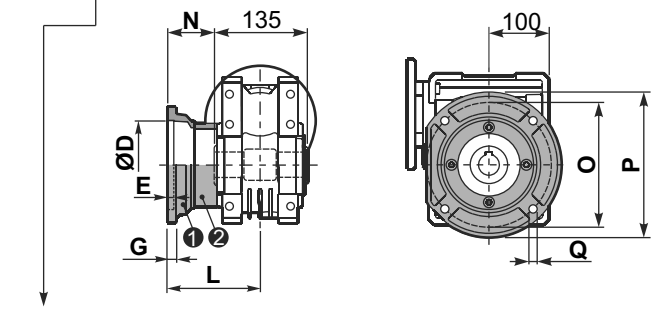
PQ85FB... Basic wormbox
Riduttore base

Gearbox weight / peso riduttore: 18.7 kg

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	116
80/90B5	K023.4.042	200	118
100/112B5	K023.4.043	250	124
80B14	K085.4.046	120	116
90B14	K085.4.045	140	116
100/112B14	K023.4.041	160	116

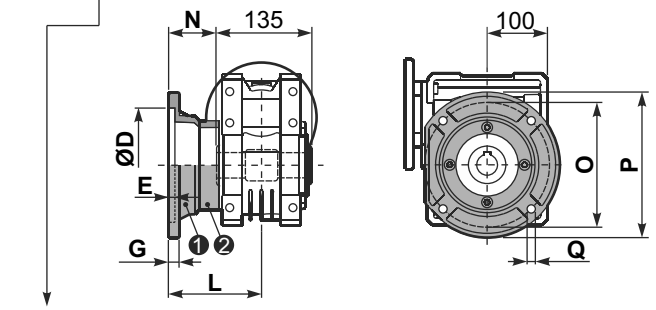


PQ85FC... Output flange
Flangia uscita



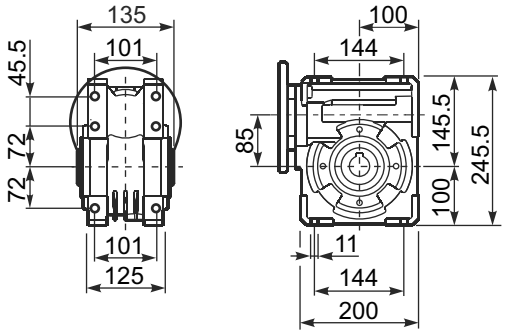
type B	øD	E	G	L	N	O	P	Q	kit code
FC	152 +0.06 +0.00	5	16	108	40.5	176	205	13	❶ K085.9.010 ❷ -
FL	152 +0.06 +0.00	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

PQ85F1... Output flange
Flangia usicta

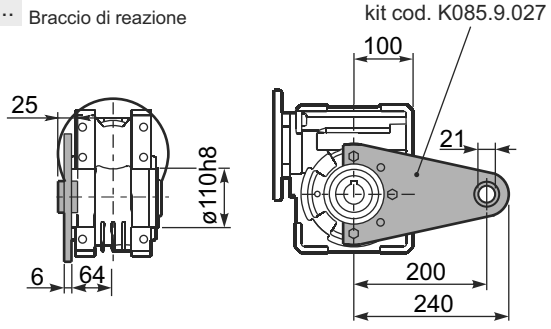


type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 H7	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 +0.06 +0.00	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 H7	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

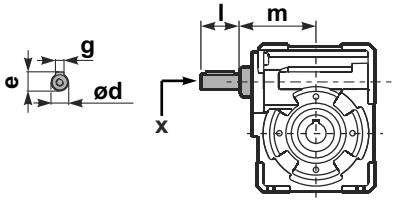
PQ85FB... Feet
Piedini



PQ85BR... Reaction arm
Braccio di reazione

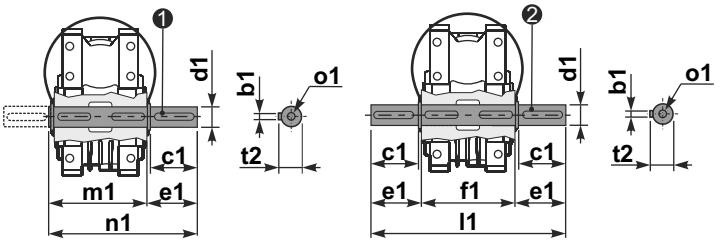


RQ85FB... Input shaft
Albero in entrata



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**

	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

	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

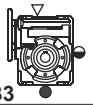
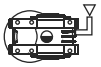
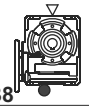
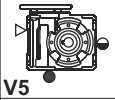
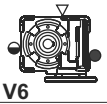
EN Unit **Q11** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fit it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended 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.

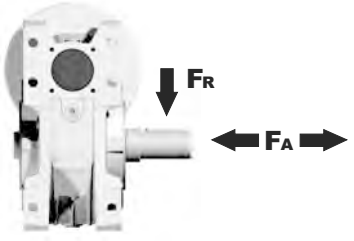
E El reductor tamaño **Q11** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes.
Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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
2.00 LT	1.50 LT	1.50 LT	2.00LT	2.00 LT	2.00LT
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**

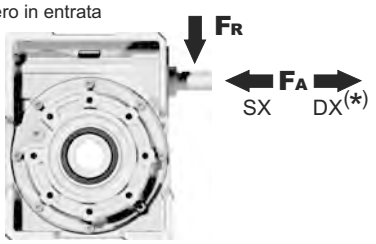
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	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



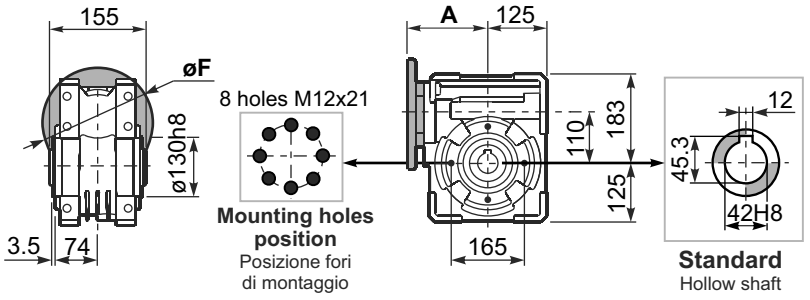
n_1 [min^{-1}]	FA [N]	FR [N]
1400	228	1140

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

tab. 2

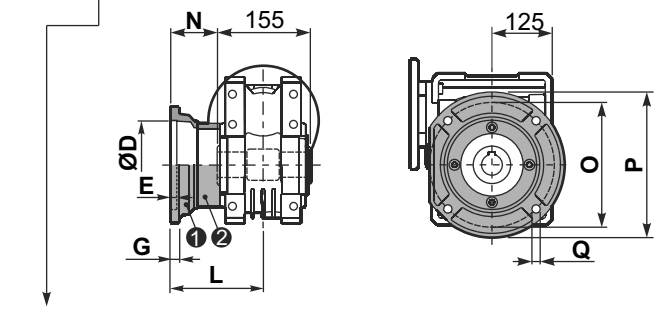
PQ11**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	135.5
80/90B5	K023.4.042	200	137.5
100/112B5	K023.4.043	250	143.5
132B5	-	300	187
80B14	K085.4.046	120	135.5
90B14	K085.4.045	140	135.5
100/112B14	K023.4.041	160	135.5
132B14	-	200	187



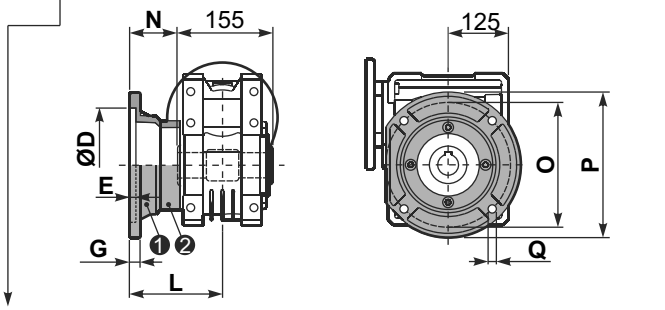
Gearbox weight peso riduttore **35.0 kg**

PQ11**FC**... Output flange
Flangia uscita



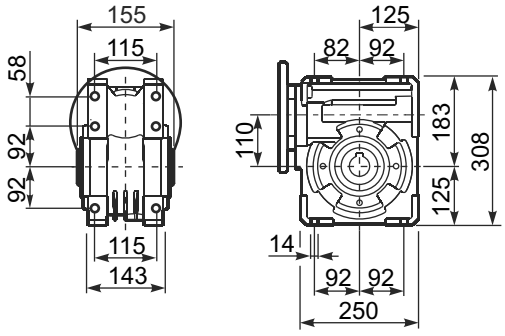
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	170 +0.083 +0.043	11	16.5	131.5	54	230	270	13	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

PQ11**F1**... Output flange
Flangia uscita

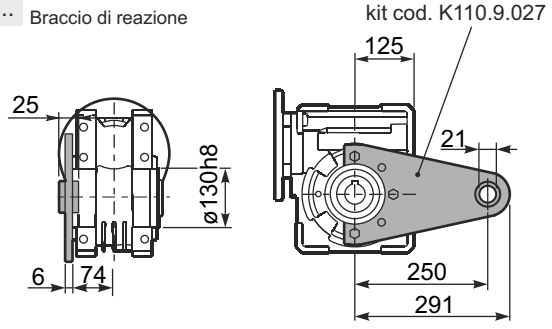


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F2	170 +0.083 +0.043	9.5	15	178	100.5	230	270	13	❶ KS110.9.012 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

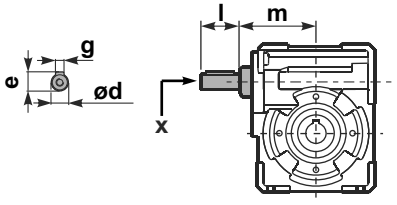
PQ11**FB**... Feet
Piedini



PQ11**BR**... Reaction arm
Braccio di reazione



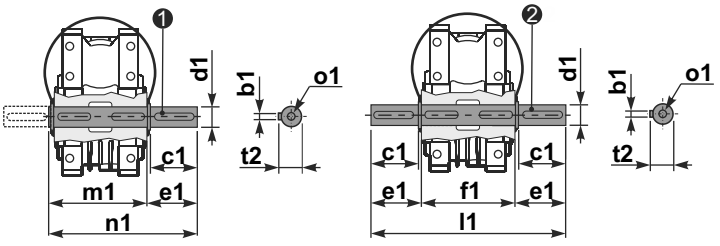
R**Q11FB**... Input shaft
Albero in entrata



	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	F	G	B14 motor flanges not available -	-	-	-	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							90	100 112	132	-	-	-	-			
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

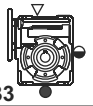
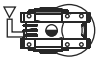
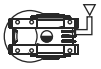
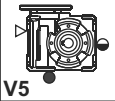
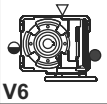
EN Unit **Q13** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended 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.

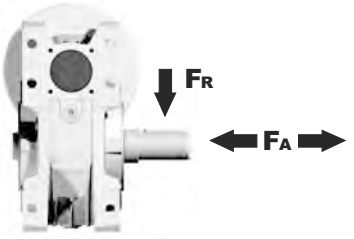
E El reductor tamaño **Q13** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes.
Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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 **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

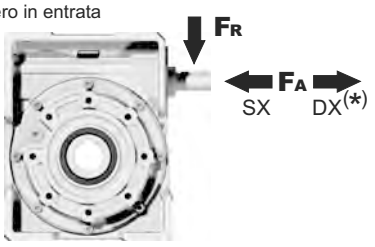
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	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

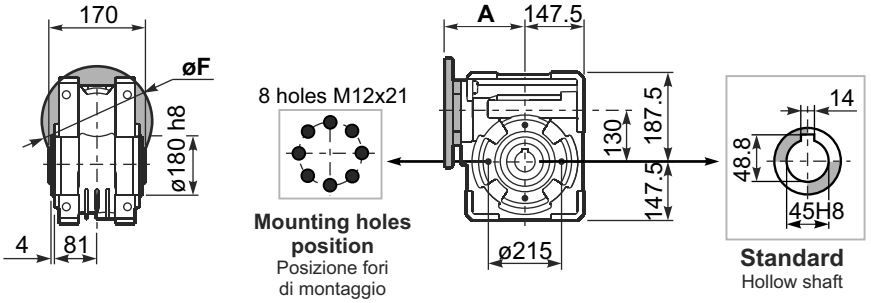
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

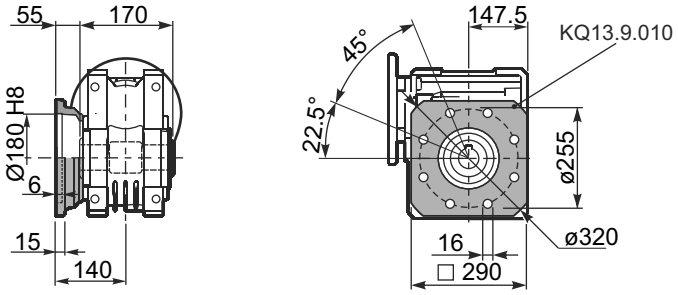
PQ13**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore	48.0 kg

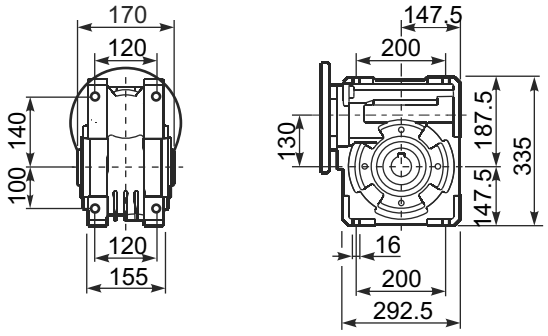
M. flanges	Kit code	øF	A
90B5	KQ13.4.041	200	180
100/112B5	KQ13.4.042	250	180
132B5	KQ13.4.043	300	180



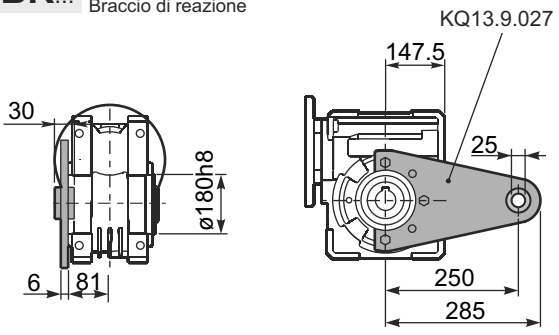
PQ13**FC**... Square flange
Flangia quadrata



PQ13**FB**... Feet
Piedini

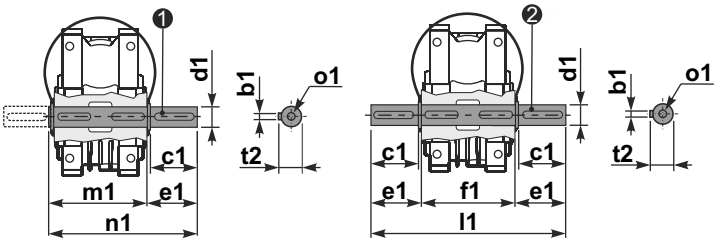


PQ13**BR**... Reaction arm
Braccio di reazione



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 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.

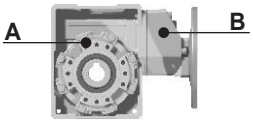
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P4Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes 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).

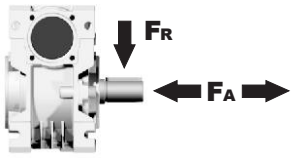


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

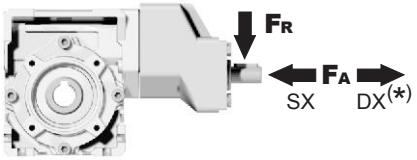
▪ RADIAL AND AXIAL LOADS

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

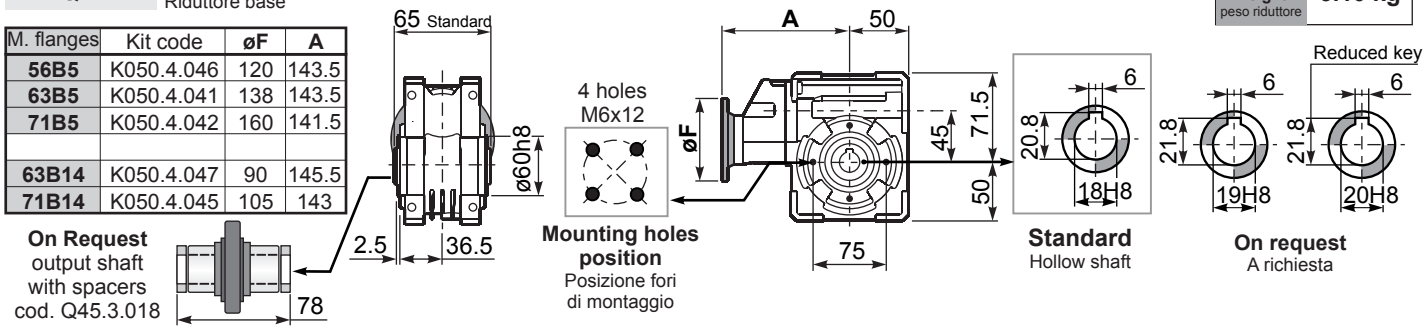
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

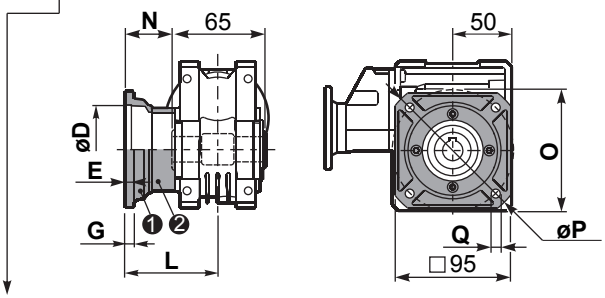
PP4Q**FB**... Basic wormbox
Riduttore base

Gearbox weight / peso riduttore: **3.10 kg**

M. flanges	Kit code	øF	A
56B5	K050.4.046	120	143.5
63B5	K050.4.041	138	143.5
71B5	K050.4.042	160	141.5
63B14	K050.4.047	90	145.5
71B14	K050.4.045	105	143

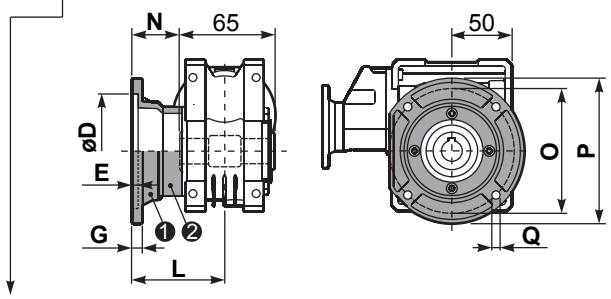


PP4Q**FC**... Square flange
Flangia quadrata



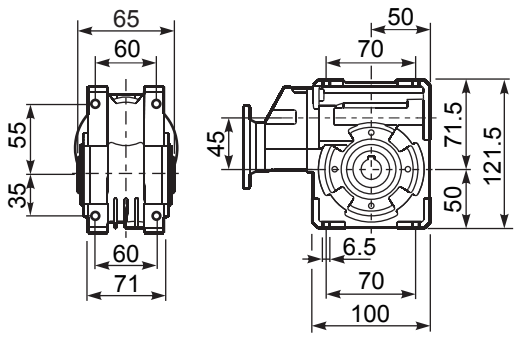
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	60 H8	4	7	67	34.5	75	110	9	KQ45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KQ45.9.011

PP4Q**F1**... Round flange
Flangia rotonda

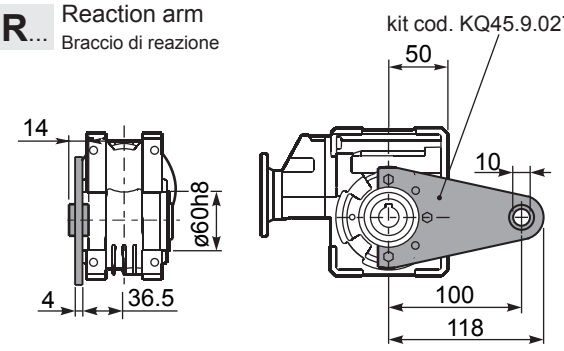


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	95H8	5	9	80	47.5	115	140	9.5	KSQ45.9.012
F2	80H8	5	12	58	25.5	100	120	9	KSQ45.9.013

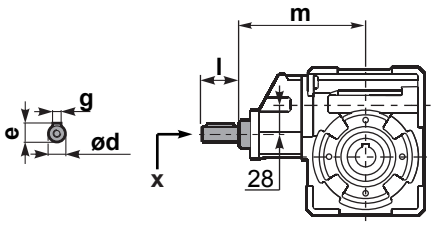
PP4Q**FB**... Feet
Piedini



PP4Q**BR**... Reaction arm
Braccio di reazione



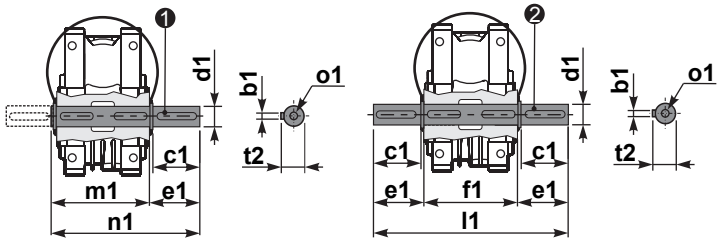
RP4QFB... Input shaft
Albero in entrata



	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**
kit cod. KS045.5.031 type **S**

	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	65	182	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.

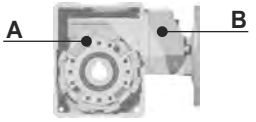
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P5Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes 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).

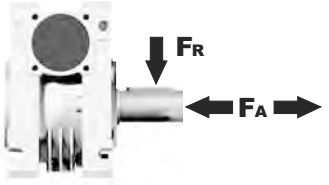


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

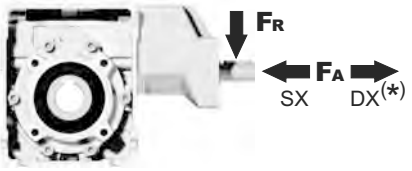
▪ RADIAL AND AXIAL LOADS

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

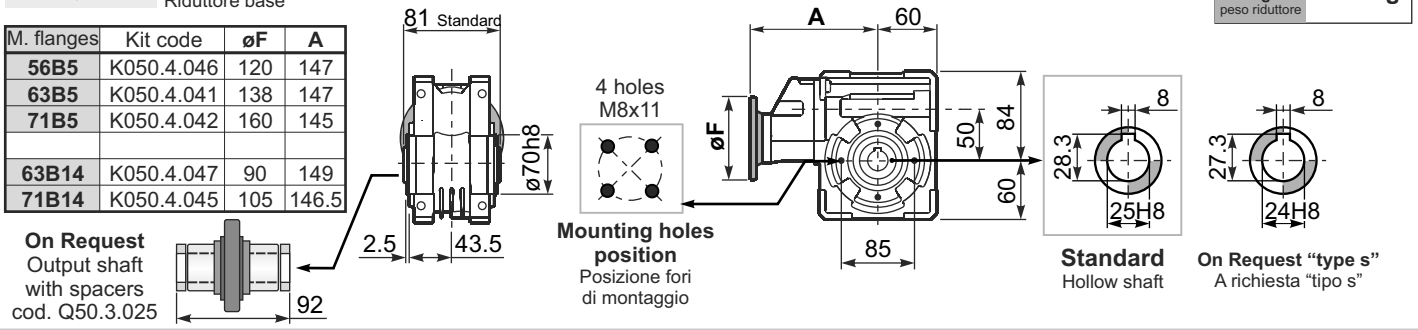
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

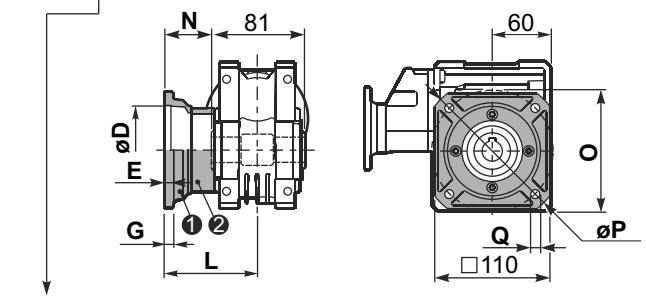
PP5Q**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore: **4.60 kg**

M. flanges	Kit code	øF	A
56B5	K050.4.046	120	147
63B5	K050.4.041	138	147
71B5	K050.4.042	160	145
63B14	K050.4.047	90	149
71B14	K050.4.045	105	146.5

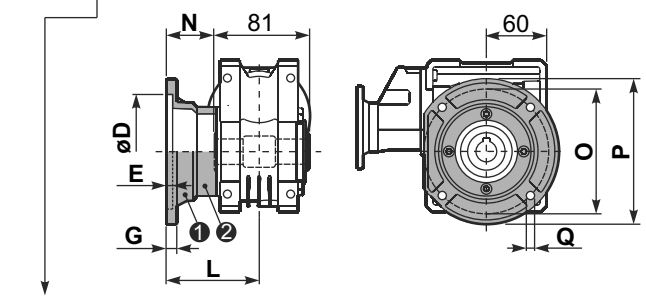


PP5Q**FC**... Square flange
Flangia quadrata



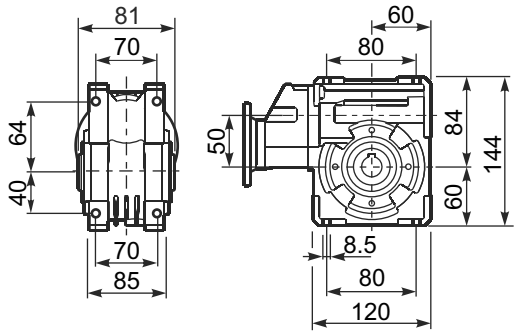
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	70 H8	5	9	90	49.5	85	125	11	KQ50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KQ50.9.011

PP5Q**F1**... Round flange
Flangia rotonda

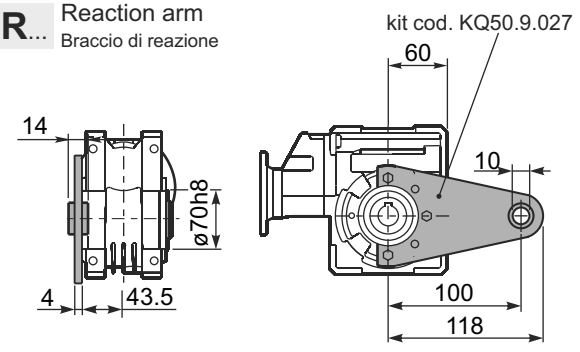


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	110 H8	5	10	89	69.5	130	160	9.5	KSQ50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KSQ50.9.013

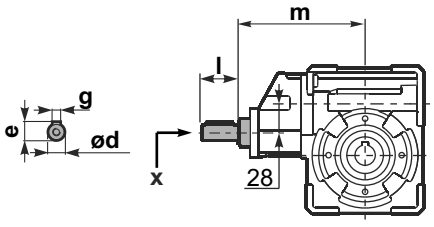
PP5Q**FB**... Feet
Piedini



PP5Q**BR**... Reaction arm
Braccio di reazione



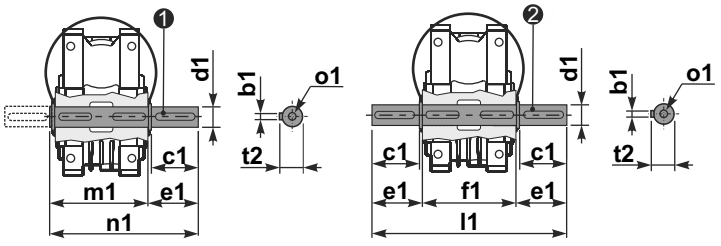
RP5QFB... Input shaft
Albero in entrata



	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**
kit cod. KS050.5.031 type **S**

	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	81	218	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	C	D	E	Available B14 motor flanges P	Q	R	T	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
								63	71	80	90	63	71	80	90			
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.

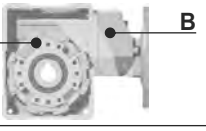
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P6Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes 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).

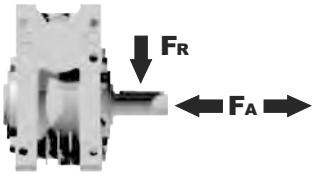


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

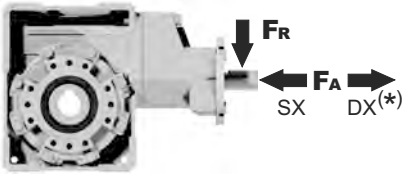
▪ RADIAL AND AXIAL LOADS

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

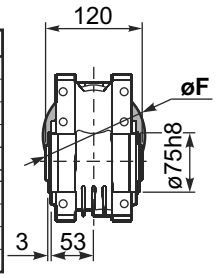
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

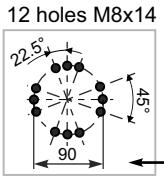
tab. 2

PP6Q**FB**... Basic wormbox
Riduttore base

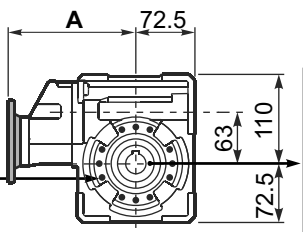
Gearbox weight peso riduttore	29.9÷111	139÷434
	7.05 Kg	6.60 Kg

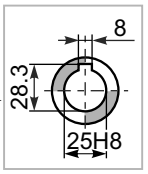
	M.flange	Kit code	øF	A
29.9÷111	71B5	K063.4.042	160	176.5
	80/90B5	K063.4.043	200	178.5
	71B14	K063.4.047	105	176.5
	80B14	K063.4.046	120	177.5
	90B14	K063.4.041	140	178.5
139÷434	63B5	K050.4.041	138	160.5
	71B5	K050.4.042	160	158.5
	63B14	K050.4.047	90	162.5
	71B14	K050.4.045	105	160



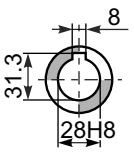


Mounting holes position
Posizione fori di montaggio



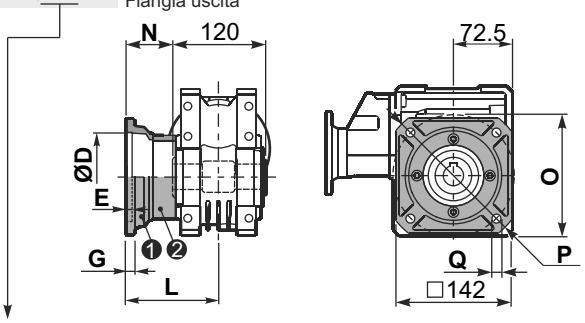


Standard
Hollow shaft



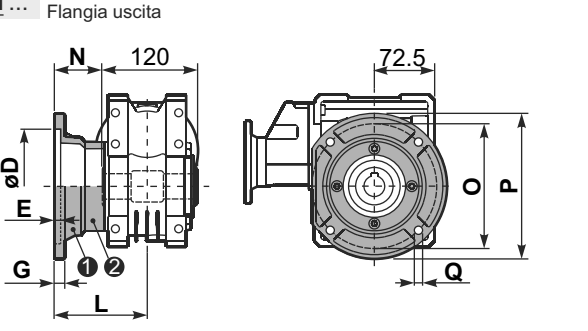
On request
A richiesta

PP6Q**FC**... Output flange
Flangia uscita



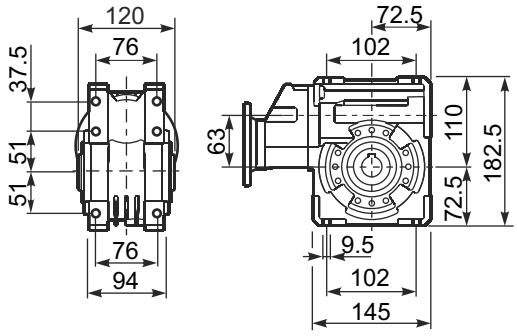
type B	øD	E	G	L	N	O	P	Q	kit code
FC	115 +0.20 +0.15	6	12	86	26	150	180	11	❶ KQ63.9.010 ❷ -
FL	115 +0.20 +0.15	6	12	116	56	150	180	11	❶ KQ63.9.010 ❷ K063.0.200

PP6Q**F1**... Output flange
Flangia uscita

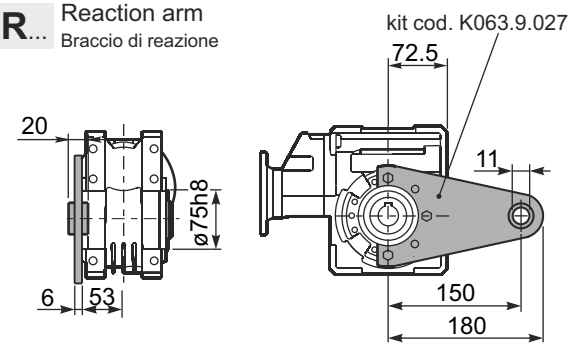


type S	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.20 +0.15	7	13	110	50	165	200	13	❶ KS070.9.013 ❷ -
F2	115 +0.20 +0.15	7	13	124	64	150	175	11	❶ KS063.9.013 ❷ -
F3	110 +0.035 0	5	11	90	30	130	160	10	❶ KS063.9.011 ❷ -

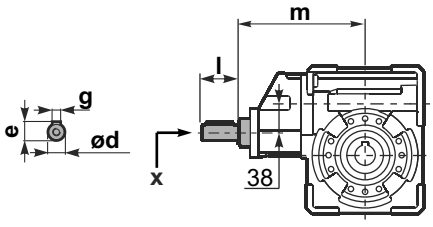
PP6Q**FB**... Feet
Piedini



PP6Q**BR**... Reaction arm
Braccio di reazione

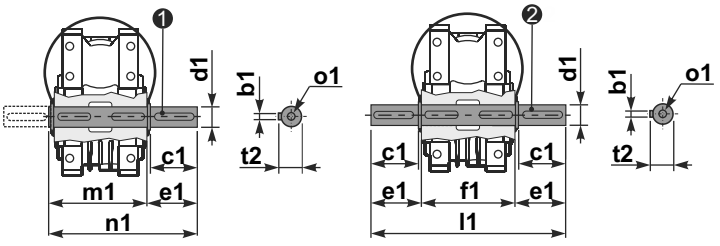


RP6QFB... Input shaft
Albero in entrata



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.

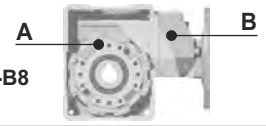
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P7Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes 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).

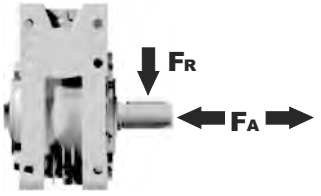


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

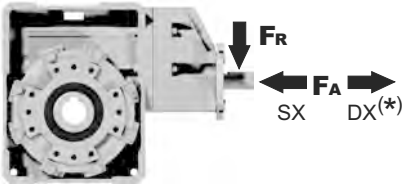
▪ RADIAL AND AXIAL LOADS

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

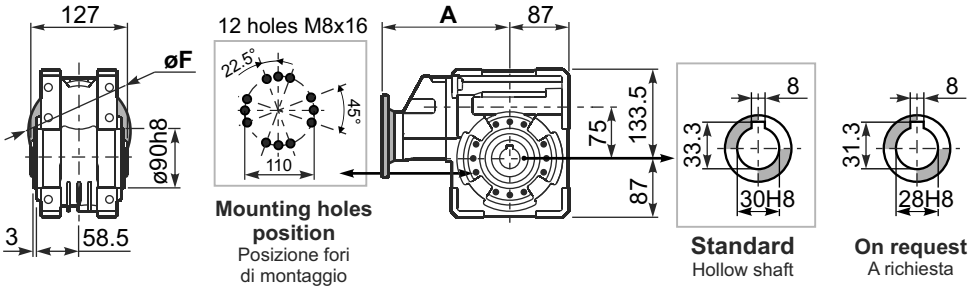
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

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	194.2
90B14	K063.4.041	140	192.7

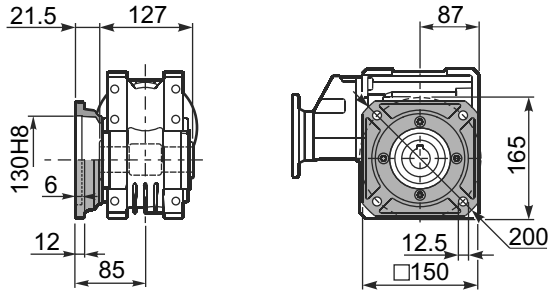


Mounting holes position
Posizione fori di montaggio

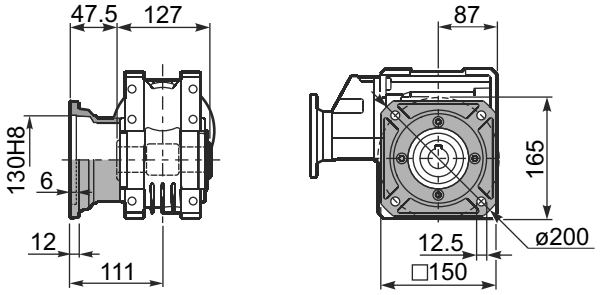
Standard
Hollow shaft

On request
A richiesta

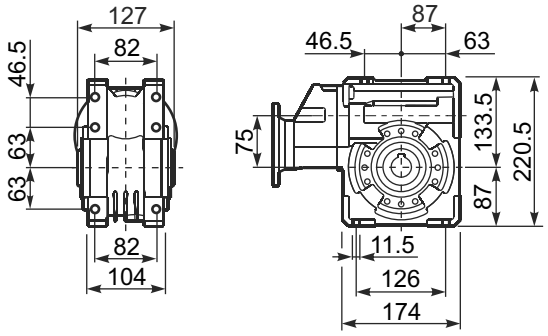
PP7Q**FC**... Square flange
Flangia quadrata



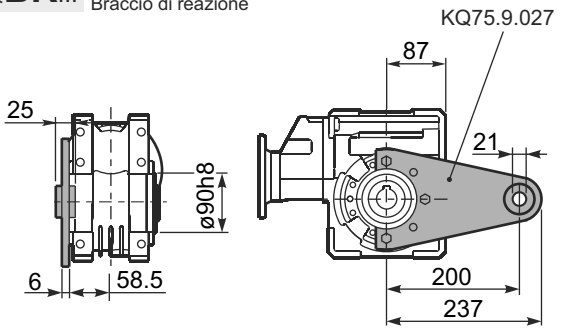
PP7Q**FL**... Square flange
Flangia quadrata



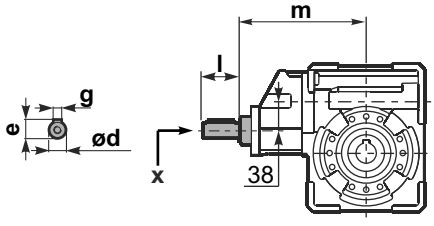
PP7Q**FB**... Feet
Piedini



PP7Q**BR**... Reaction arm
Braccio di reazione

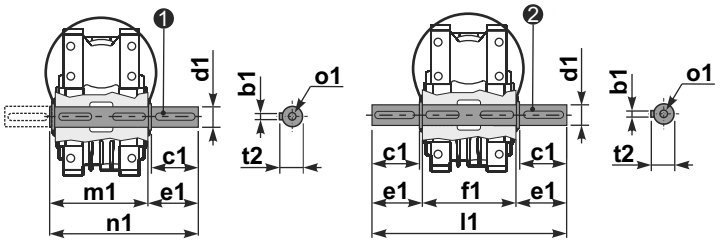


RP7QFB... Input shaft
Albero in entrata



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
kit cod. KQ75.5.027 On request

	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	127	255	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.

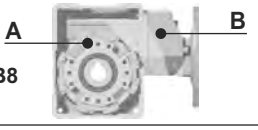
D Für die Lebensdauerschmierung ist das Getriebe der Größe **P8Q** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes 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).

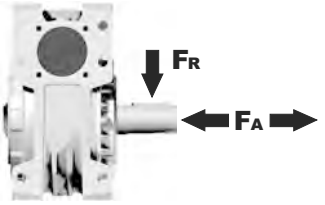


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

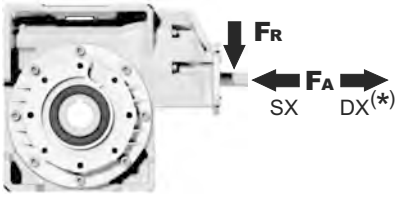
▪ RADIAL AND AXIAL LOADS

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

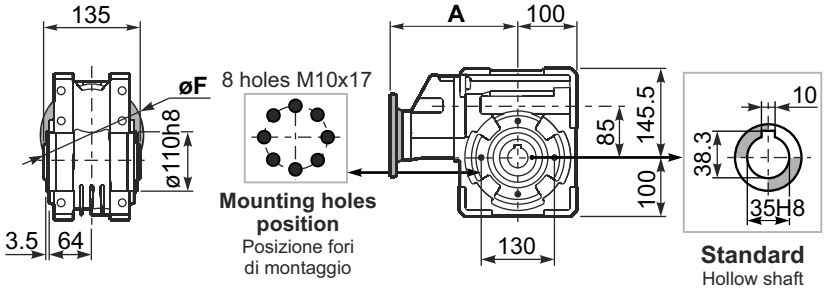
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

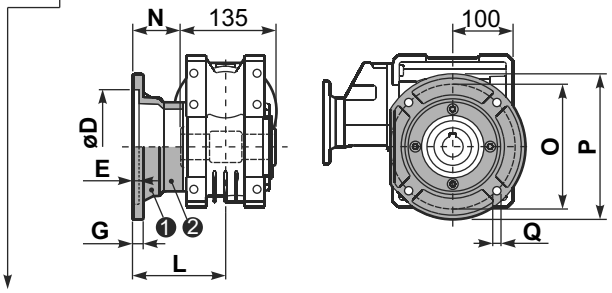
PP8Q**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore: **18.9 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	194.2
90B14	K063.4.041	140	195.2

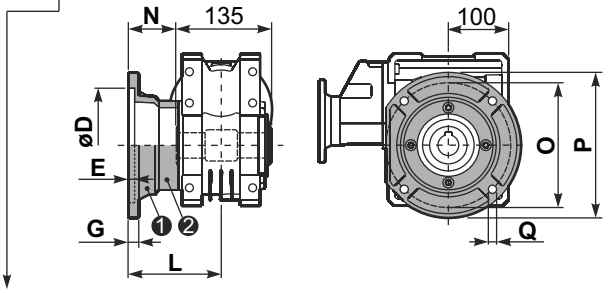


PP8Q**FC**... Output flange
Flangia uscita



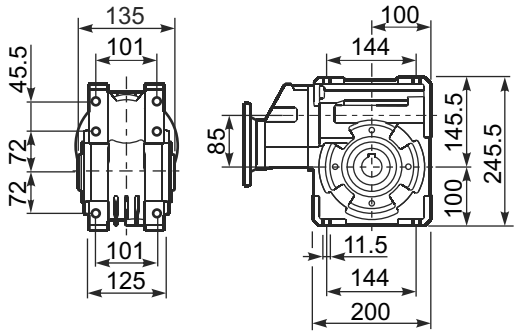
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	152 +0.06 +0.00	5	16	108	40.5	176	205	13	❶ K085.9.010 ❷ -
FL	152 +0.06 +0.00	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

PP8Q**F1**... Output flange
Flangia uscita

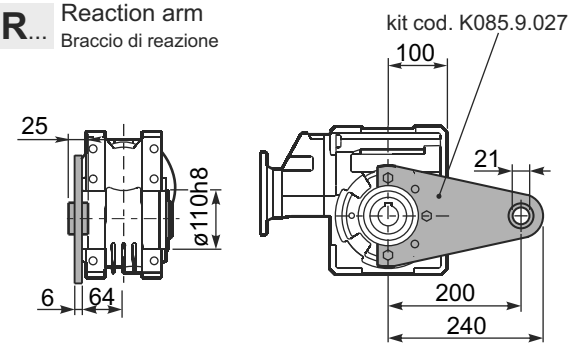


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 +0.04 +0.00	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 +0.06 +0.00	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 +0.04 +0.00	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

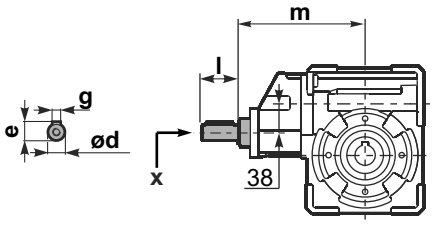
PP8Q**FB**... Feet
Piedini



PP8Q**BR**... Reaction arm
Braccio di reazione



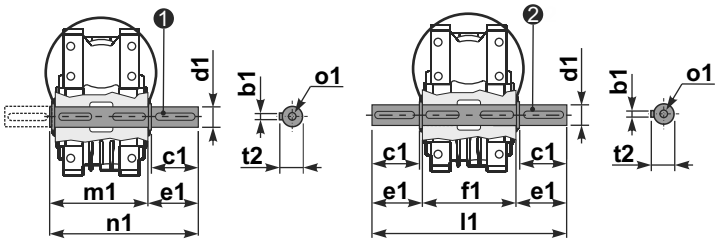
RP8QFB... Input shaft
Albero in entrata



	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	C	D	E	Available B14 motor flanges Q	R	T	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	90	71	80	90			
16.8	**83.2**	1.5	587	1.1	1.7	660					C			69	3.5	01
13.9	**100.5**	1.5	699	0.8	1.3	594					C			68	2.9	02
10.6	**132**	1.1	634	0.9	0.95	550					C			64	2.2	03
8.0	**176**	0.75	666	1.2	0.90	803	B				C			74	4.7	04
6.7	**208**	0.75	766	0.9	0.65	660	B				C			72	4.0	05
5.7	**245**	0.55	634	1.0	0.57	660	B				C			69	3.5	06
4.7	**296**	0.55	755	0.8	0.43	594	B				C			68	2.9	07
4.2	**334**	0.55	865	0.8	0.42	660	B				C			69	3.5	08
3.5	**403**	0.37	692	0.9	0.32	594	B				C			68	2.9	09
2.6	**529**	0.25	577	1.0	0.24	550	B				C			64	2.2	10
2.2	**624**	0.25	628	0.8	0.21	528	B				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

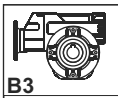
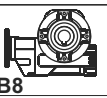
EN Unit **P1Q** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. Primary reduction unit is supplied 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.

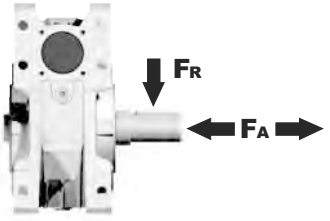
E El reductor tamaño **P1Q** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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
2.0/0.14LT	1.5/0.14 LT	1.5/0.14 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

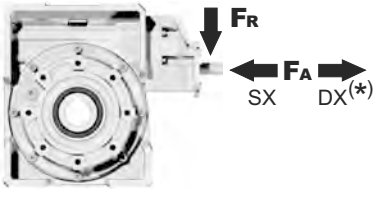
▪ RADIAL AND AXIAL LOADS

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

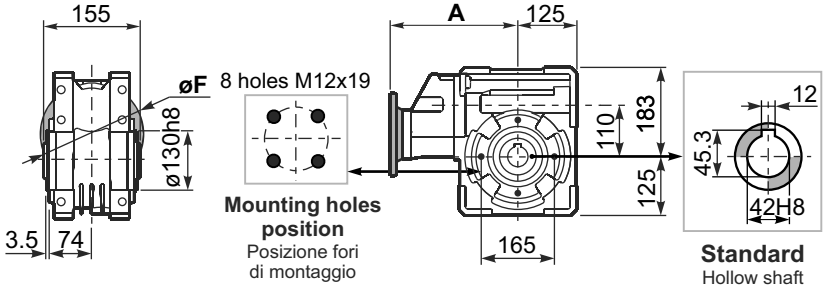
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

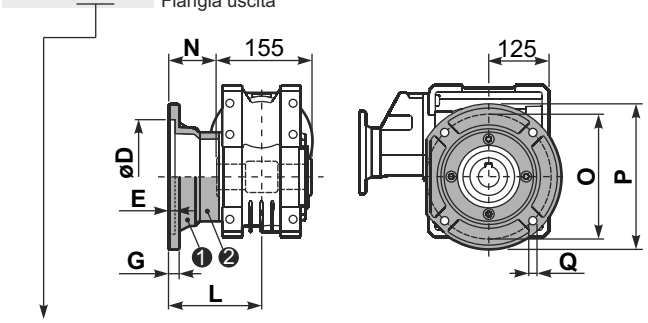
PP1Q**FB**... Basic wormbox
Riduttore base

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	213.7
90B14	K063.4.041	140	214.7

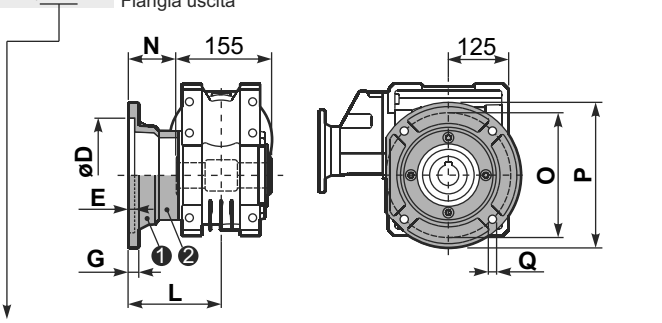


PP1Q**FC**... Output flange
Flangia uscita



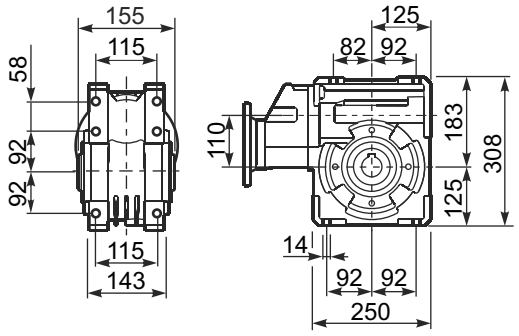
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	$170^{+0.083}_{+0.043}$	11	16.5	131.5	54	230	270	13	❶ K110.9.010 ❷ -
FL	$170^{+0.083}_{+0.043}$	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

PP1Q**F1**... Output flange
Flangia uscita

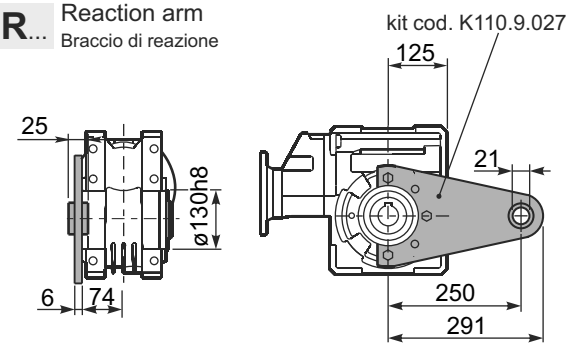


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	$180^{+0.040}_{0}$	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F2	$170^{+0.083}_{+0.043}$	9.5	15	178	100.5	230	270	13	❶ KS110.9.012 ❷ -
F3	$180^{+0.040}_{0}$	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

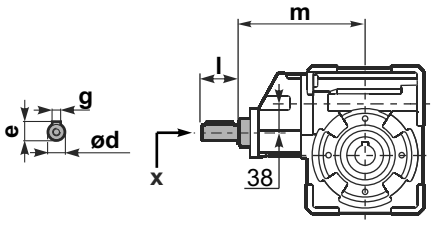
PP1Q**FB**... Feet
Piedini



PP1Q**BR**... Reaction arm
Braccio di reazione



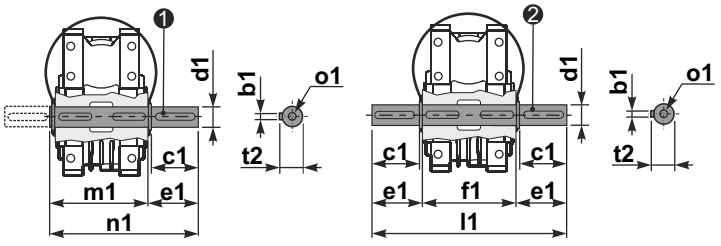
RP1QFB... Input shaft
Albero in entrata



	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 C 71	D 80	E 90	F 100 112	Available B14 motor flanges R 80	T 90	U 100 112	V 132	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
11.4	**123**	1.5	928	1.0	**1.6**	**972**	B								74	4.35	01
8.5	**166**	1.1	919	1.1	**1.2**	**972**	B								74	4.35	02
6.5	**216**	1.1	1197	0.8	**0.89**	**972**	B								74	4.35	03
5.3	**264**	0.75	998	1.0	**0.73**	**972**	B								74	4.35	04
4.4	**316**	0.55	854	1.1	**0.60**	**928**	B								72	3.65	05
3.7	**382**	0.55	1059	0.9	**0.50**	**972**	B								74	4.35	06
3.1	**458**	0.37	832	1.1	**0.41**	**928**	B								72	3.65	07
2.7	**525**	0.37	981	1.0	**0.37**	**972**	B								74	4.35	08
2.2	**630**	0.25	774	1.2	**0.30**	**928**	B								72	3.65	09
1.7	**840**	0.25	960	0.9	**0.22**	**853**	B								67	2.76	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

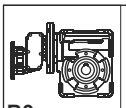
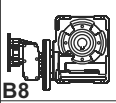
EN Unit **Q13+511** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **Q13+511** 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+511** 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+511** 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.

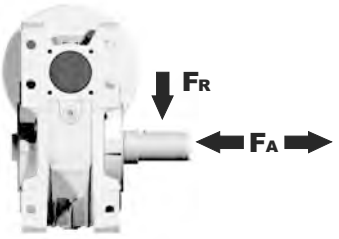
E El reductor tamaño **Q13+511** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes.
Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. 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
4.5/0.14LT	3.5/0.14 LT	3.5/0.14 LT	3.3/0.14 LT	4.5/0.14 LT	3.3/0.14 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

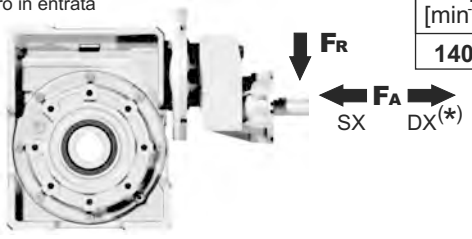
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
75	1380	6900
50	1560	7800
25	2000	10000
15-6	2400	12000

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

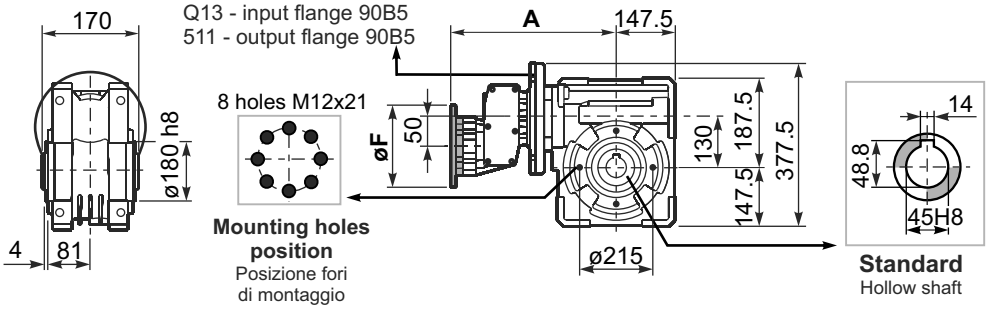
tab. 2

PQ13**FB**... Basic wormbox
Riduttore base

P511-**F**... Output flange
Flangia uscita

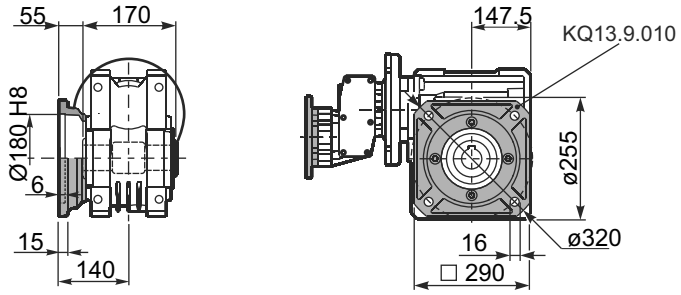
Gearbox weight peso riduttore **53.0 kg**

M. flanges	Kit code	øF	A
71B5	K023.4.041	160	330
80/90B5	K023.4.042	200	332
100/112B5	K023.4.043	250	338
80B14	K085.4.046	120	330
90B14	K085.4.045	140	330
100/112B14	K023.4.041	160	330
132B14	KC50.4.041	200	368.5



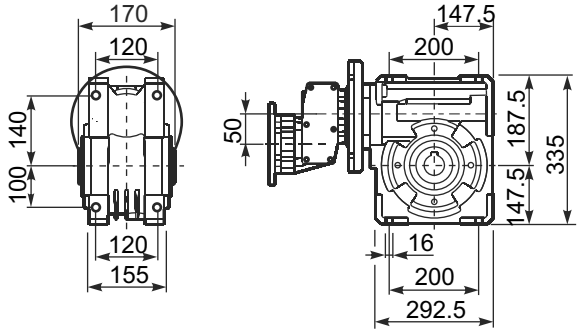
PQ13**FC**... Square flange
Flangia quadrata

P511-**F**... Output flange
Flangia uscita



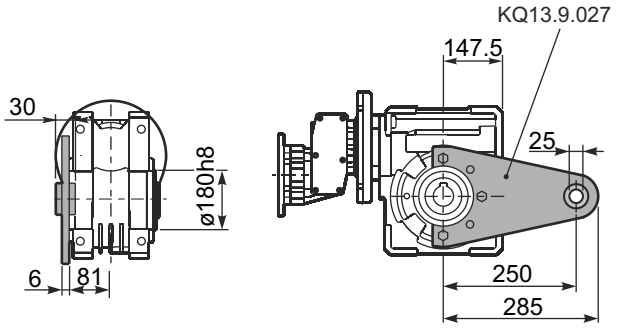
PQ13**FB**... Feet
Piedini

P511-**F**... Output flange
Flangia uscita



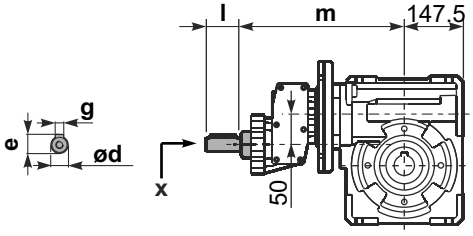
PQ13**BR**... Reaction arm
Braccio di reazione

P511-**F**... Output flange
Flangia uscita



PQ13FB... Basic wormbox
Riduttore base

R511-**F**... Imput shaft
Albero in entrata



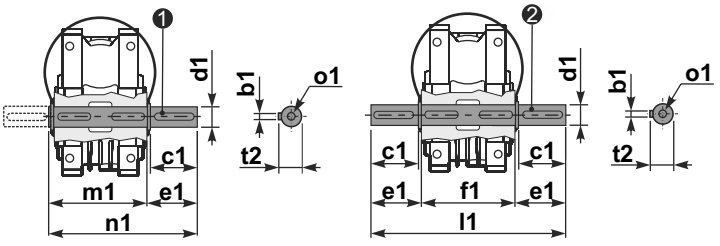
	ød	e	g	l	m	x	
-	ø24 h6	27	8	50	323.5	M6x16	C50.5.062
-	-	-	-	-	-	-	

PQ13.....**S**... Single Shaft
Albero lento semplice

P511-F... Output flange
Flangia uscita

PQ13.....**D**... Double Shaft
Albero lento bisp.

P511-F... Output flange
Flangia uscita



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	$45^{0}_{-0.016}$	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 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 4**3Q** 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.

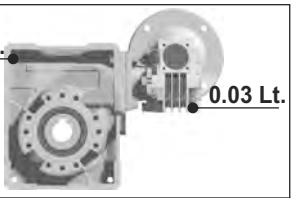
I Il riduttore tipo 4**3Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 4**3Q** 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 4**3Q** 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 4**3Q** 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.

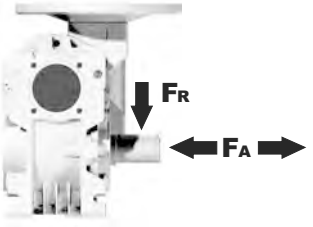


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

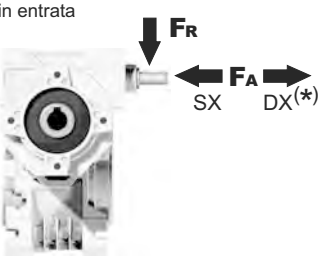
▪ RADIAL AND AXIAL LOADS

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

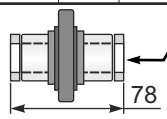
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

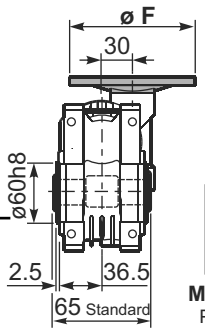
tab. 2

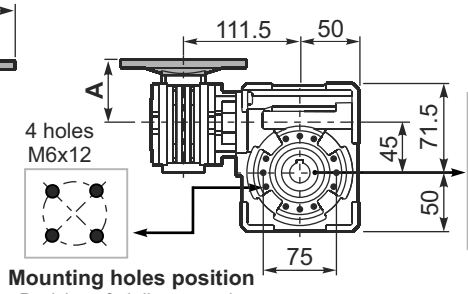
P43Q**FB**... Basic wormbox
Riduttore base

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

On Request
output shaft
with spacers
cod. Q45.3.018

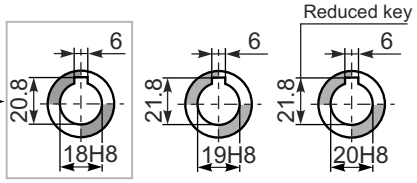






Mounting holes position
Posizione fori di montaggio

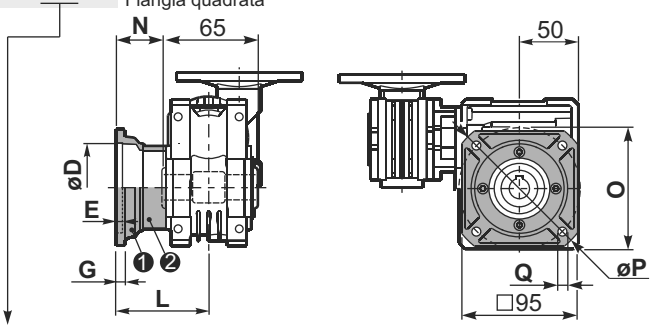
Gearbox weight / peso riduttore	3.60 kg



Standard
Hollow shaft

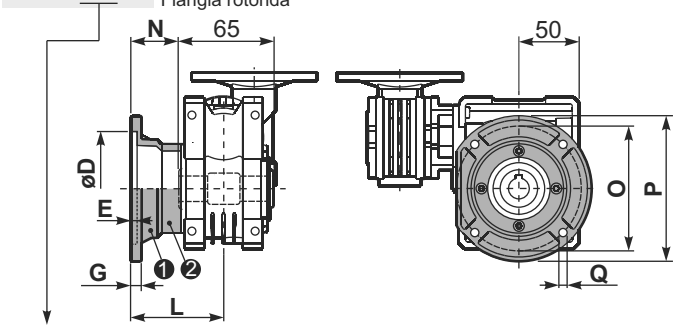
On request
A richiesta

P43Q**FC**... Square flange
Flangia quadrata



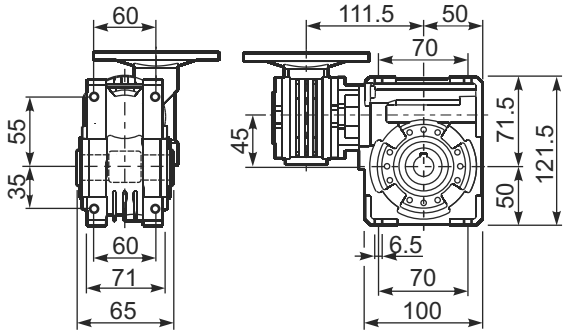
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	60 H8	4	7	67	34.5	75	110	9	KQ45.9.010
FL	60 H8	4	7	97	64.5	75	110	9	KQ45.9.011

P43Q**F1**... Round flange
Flangia rotonda

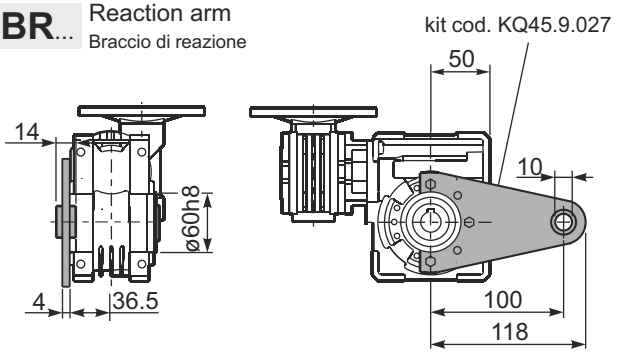


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	95H8	5	9	80	47.5	115	140	9.5	KSQ50.9.012
F2	80H8	5	12	58	25.5	100	120	9	KSQ50.9.013

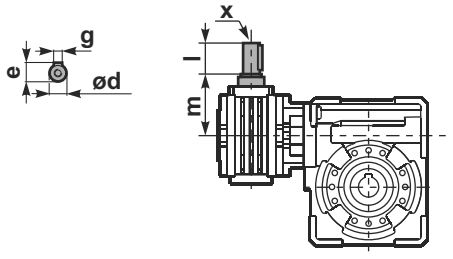
P43Q**FB**... Feet
Piedini



P43Q**BR**... Reaction arm
Braccio di reazione



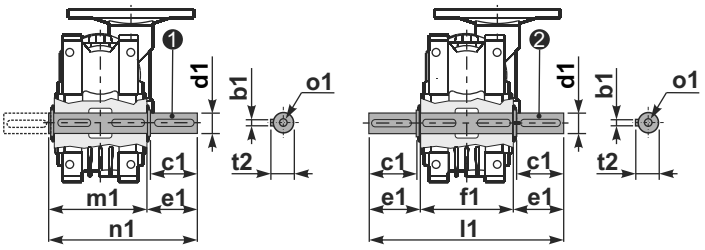
R43QFB... Input shaft
Albero in entrata



	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**
kit cod. KS045.5.031 type **S**

	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	65	182	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.

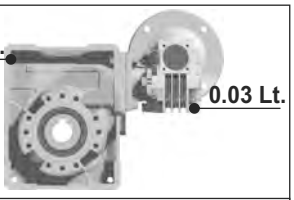
I Il riduttore tipo **53Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.

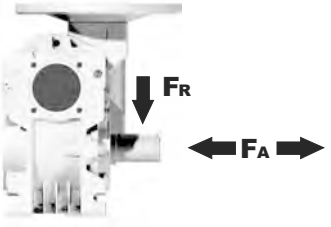


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

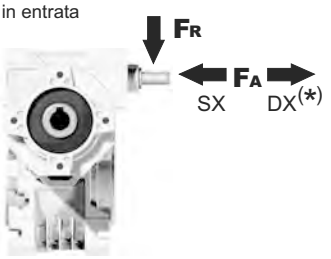
▪ RADIAL AND AXIAL LOADS

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

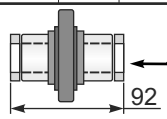
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

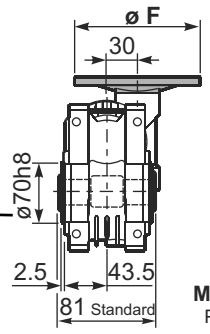
tab. 2

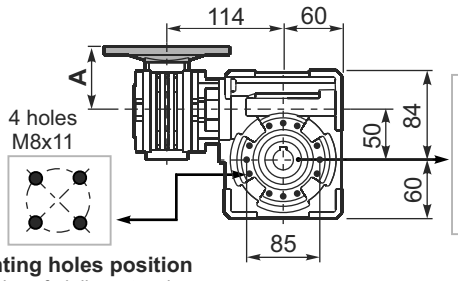
P53Q**FB**... Basic wormbox
Riduttore base

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

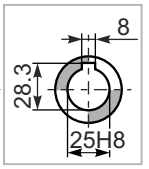
On Request
Output shaft with spacers cod. Q50.3.025



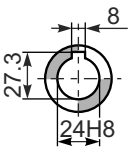




Mounting holes position
Posizione fori di montaggio



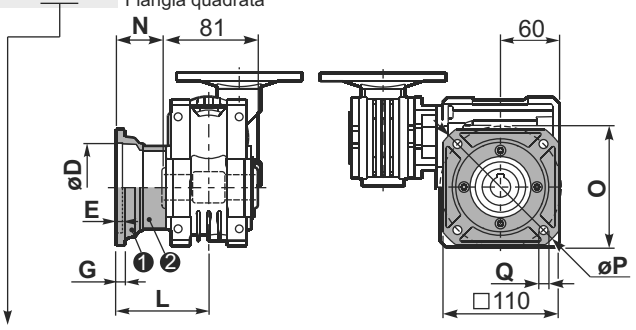
Standard
Hollow shaft



On Request
A richiesta

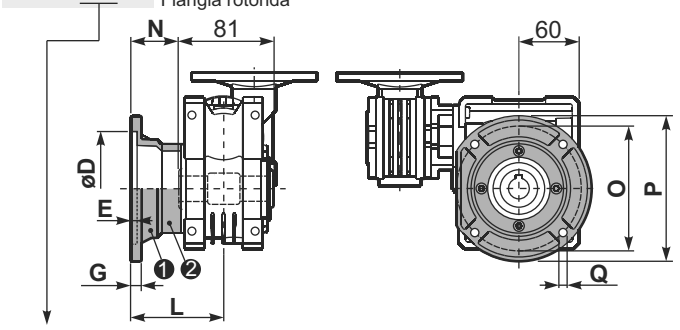
Gearbox weight peso riduttore	4.61 kg

P53Q**FC**... Square flange
Flangia quadrata



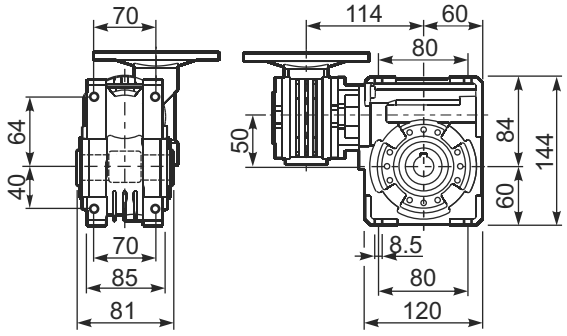
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	70 H8	5	9	90	49.5	85	125	11	KQ50.9.010
FL	70 H8	5	9	120	79.5	85	125	11	KQ50.9.011

P53Q**F1**... Round flange
Flangia rotonda

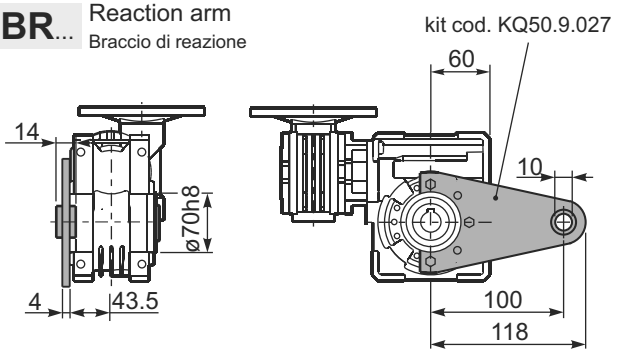


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	110 H8	5	10	89	48.5	130	160	9.5	KSQ50.9.012
F2	95 H8	5	14.5	72	31.5	115	140	11	KSQ50.9.013

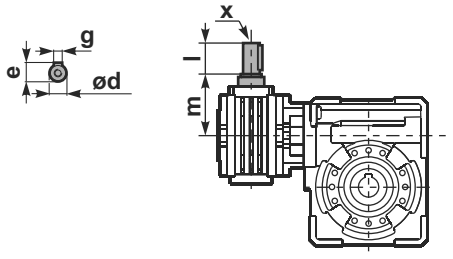
P53Q**FB**... Feet
Piedini



P53Q**BR**... Reaction arm
Braccio di reazione



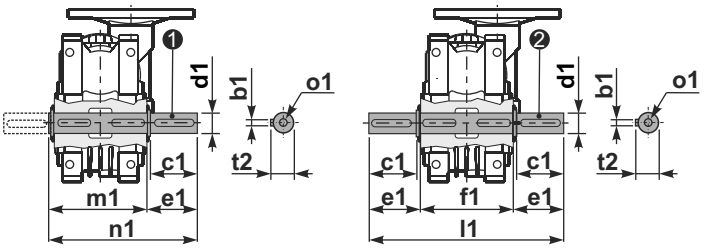
R53QFB... Input shaft
Albero in entrata



	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**
kit cod. KS050.5.031 type **S**

	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	81	218	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.

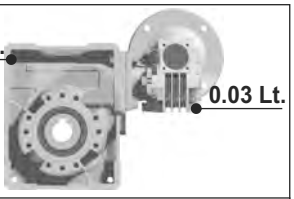
I Il riduttore tipo **63Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.

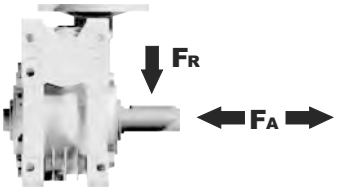


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

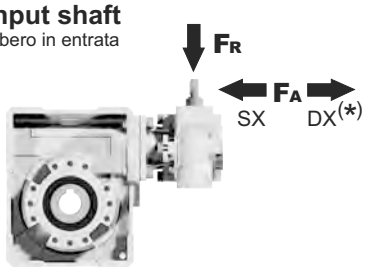
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



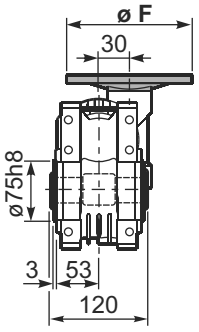
n_1 [min^{-1}]	FA [N]	FR [N]
1400	20	100

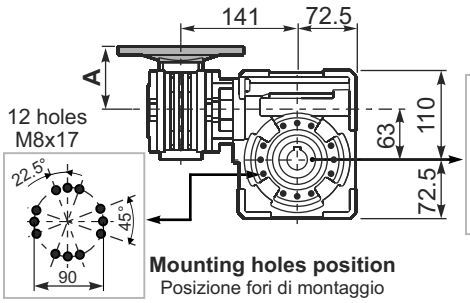
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

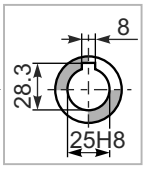
P63Q**FB**... Basic wormbox
Riduttore base

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

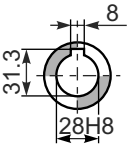




Mounting holes position
Posizione fori di montaggio



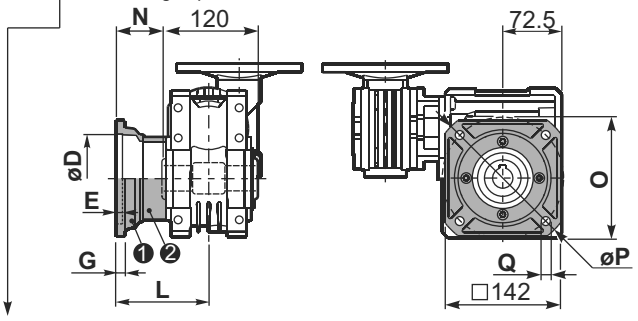
Standard
Hollow shaft



On Request
A richiesta

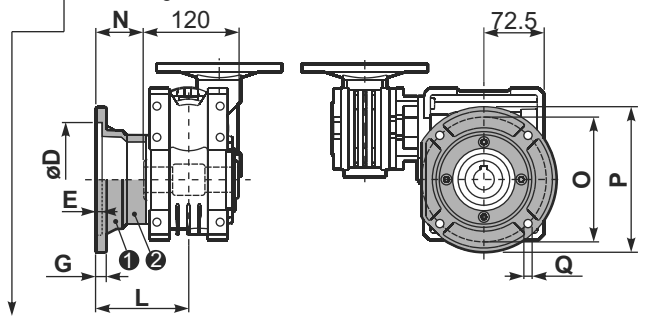
Gearbox weight peso riduttore	7.25 kg

P63Q**FC**... Square flange
Flangia quadrata



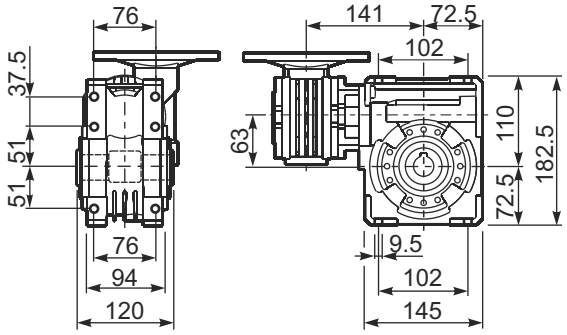
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 $^{+0.20}_{+0.15}$	6	12	86	26	150	180	11	❶ KQ63.9.010 ❷ -
FL	115 $^{+0.20}_{+0.15}$	6	12	116	56	150	180	11	❶ KQ63.9.010 ❷ K063.0.200

P63Q**F1**... Round flange
Flangia rotonda

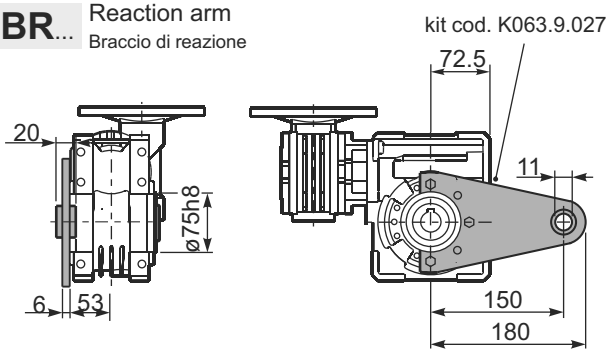


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	110	50	165	200	13	❶ KS070.9.013 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	124	64	150	175	11	❶ KS063.9.013 ❷ -
F3	110 $^{+0.035}_{0}$	5	11	90	30	130	160	10	❶ KS063.9.011 ❷ -

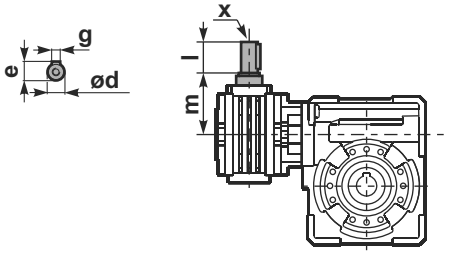
P63Q**FB**... Feet
Piedini



P63Q**BR**... Reaction arm
Braccio di reazione



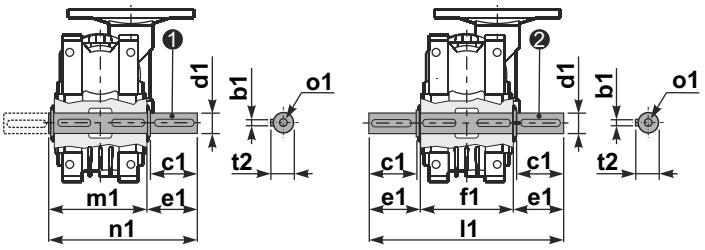
R63QFB... Input shaft
Albero in entrata



	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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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.

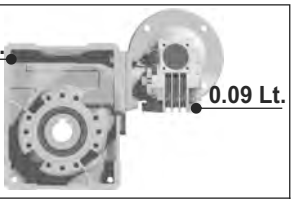
I Il riduttore tipo **64Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.



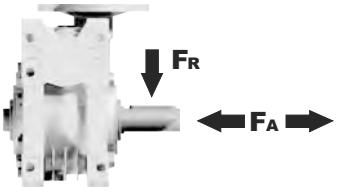
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

tab. 1

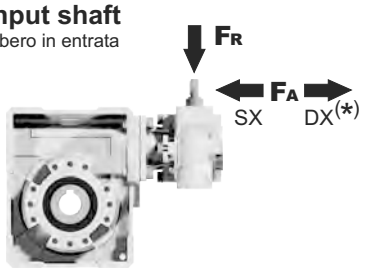
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



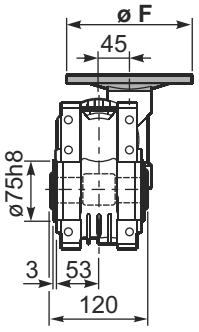
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

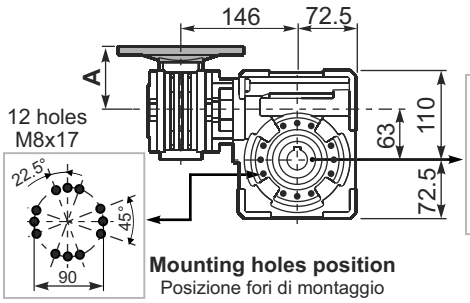
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

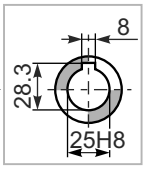
P64Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	72
71B5	K050.4.042	160	70
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

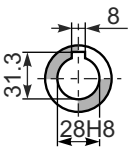




Mounting holes position
Posizione fori di montaggio



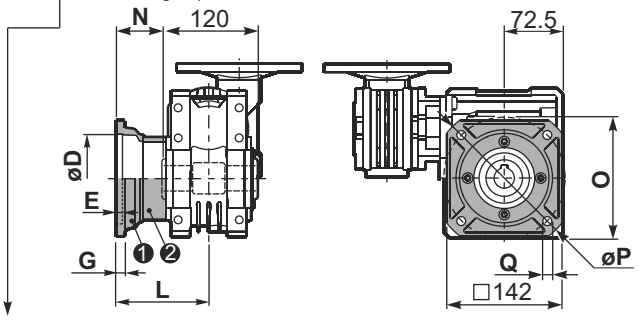
Standard
Hollow shaft



On Request
A richiesta

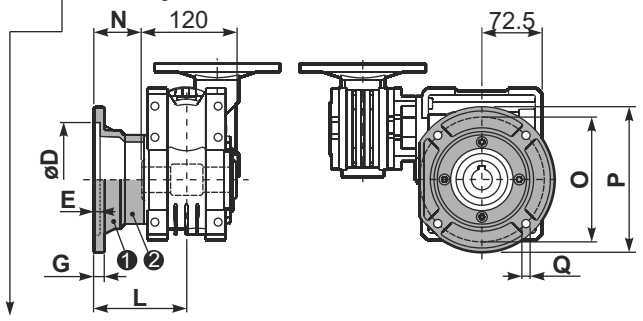
Gearbox weight peso riduttore	7.25 kg

P64Q**FC**... Square flange
Flangia quadrata



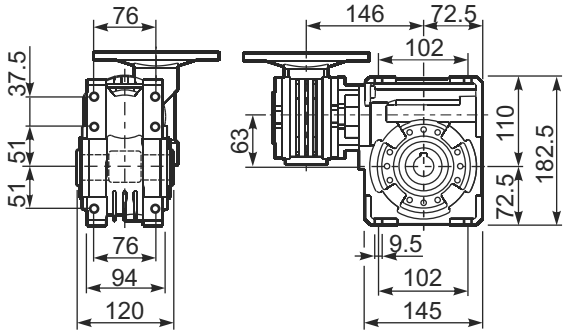
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	115 $^{+0.20}_{+0.15}$	6	12	86	26	150	180	11	❶ KQ63.9.010 ❷ -
FL	115 $^{+0.20}_{+0.15}$	6	12	116	56	150	180	11	❶ KQ63.9.010 ❷ K063.0.200

P64Q**F1**... Round flange
Flangia rotonda

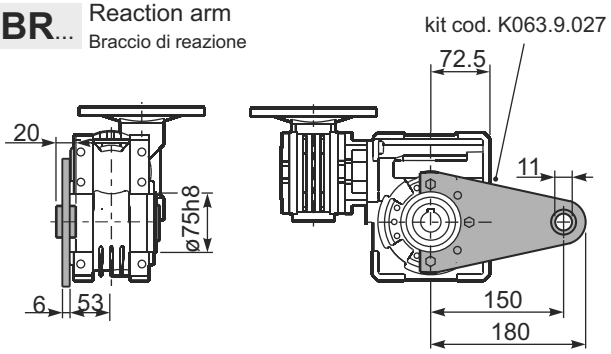


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 $^{+0.20}_{+0.15}$	7	13	110	50	165	200	13	❶ KS070.9.013 ❷ -
F2	115 $^{+0.20}_{+0.15}$	7	13	124	64	150	175	11	❶ KS063.9.013 ❷ -
F3	110 $^{+0.035}_{0}$	5	11	90	30	130	160	10	❶ KS063.9.011 ❷ -

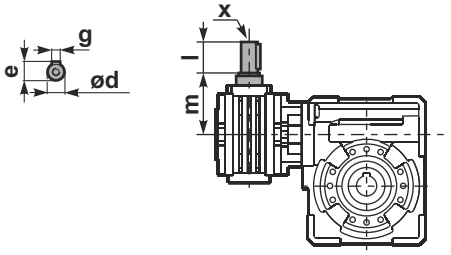
P64Q**FB**... Feet
Piedini



P64Q**BR**... Reaction arm
Braccio di reazione



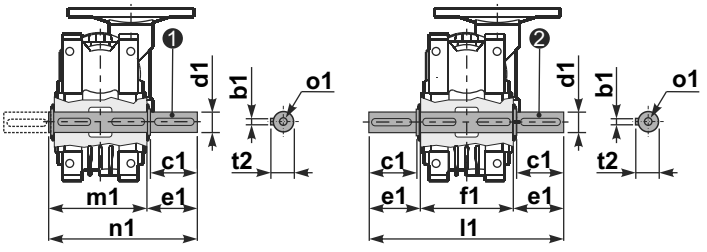
R64QFB... Input shaft
Albero in entrata



	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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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.

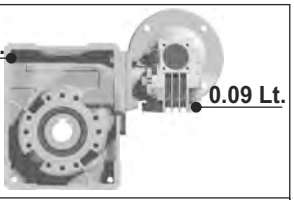
I Il riduttore tipo **74Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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.

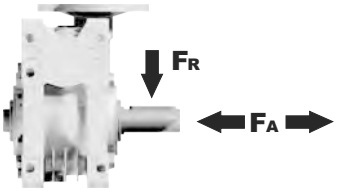


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

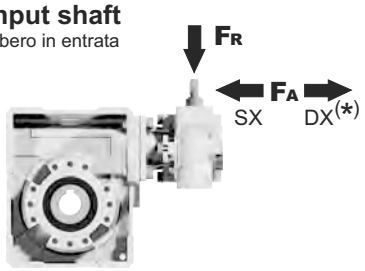
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
25	880	4400
15	1000	5000

Input shaft
albero in entrata



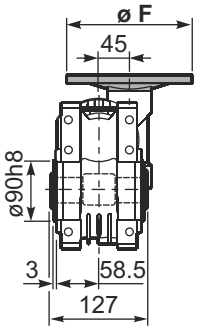
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

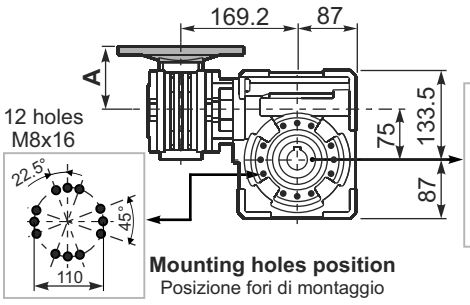
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

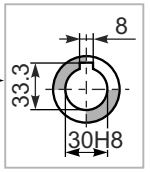
P74Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	72
71B5	K050.4.042	160	70
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

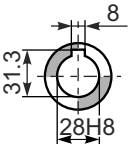




Mounting holes position
Posizione fori di montaggio



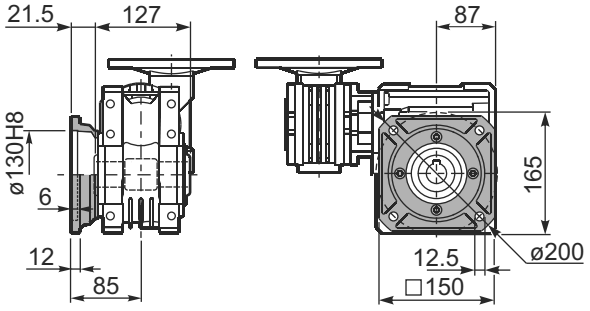
Standard
Hollow shaft



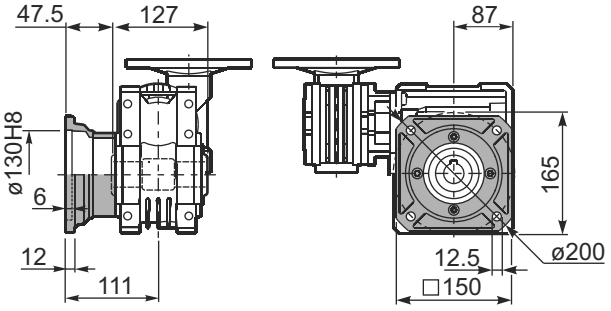
On request
A richiesta

Gearbox weight peso riduttore **11.4 kg**

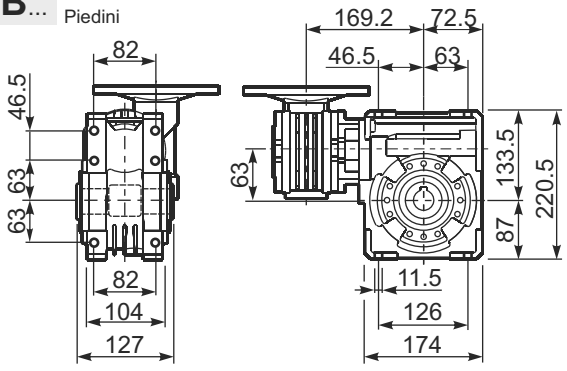
P74Q**FC**... Square flange
Flangia quadrata



P74Q**FL**... Square flange
Flangia quadrata

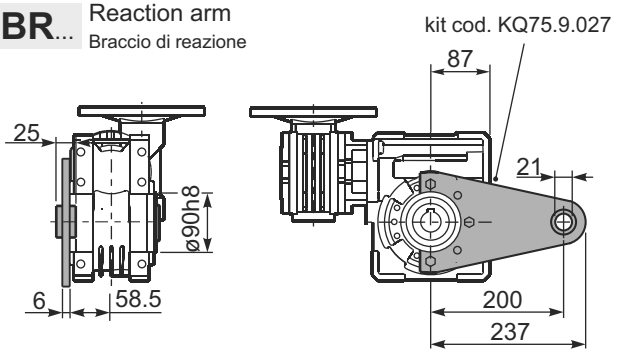


P74Q**FB**... Feet
Piedini

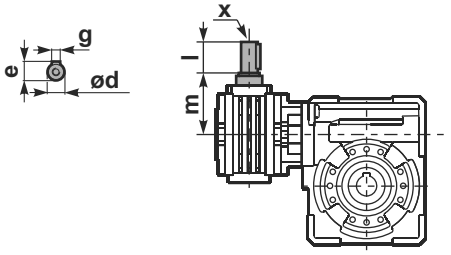


P74Q**BR**... Reaction arm
Braccio di reazione

kit cod. KQ75.9.027



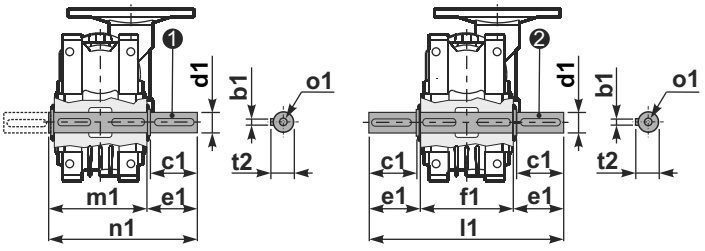
R74QFB... Input shaft
Albero in entrata



	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
kit cod. KQ75.5.027 On request

	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	127	255	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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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

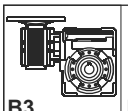
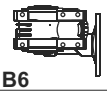
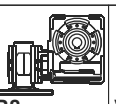
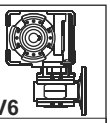
EN Unit **84Q** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

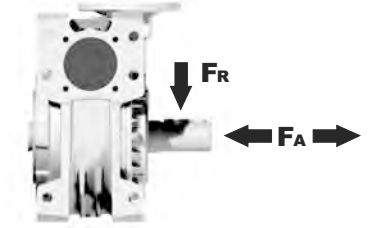
E El reductor tamaño **84Q** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

 B3	 B6	 B7	 B8	 V5	 V6
1.2/0.09LT	1.2/0.09 LT	1.2/0.09 LT	1.2/0.09 LT	1.2/0.09 LT	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

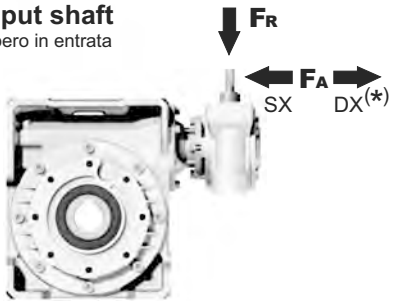
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



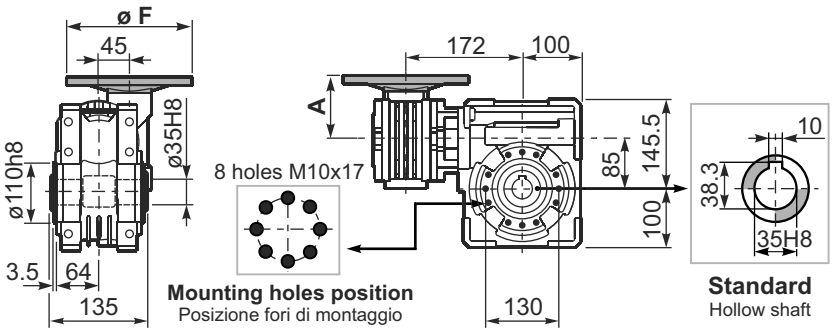
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

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

tab. 2

P84Q**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	72
71B5	K050.4.042	160	70
56B14	KC40.4.049	80	71.5
63B14	K050.4.047	90	74
71B14	K050.4.045	105	71.5

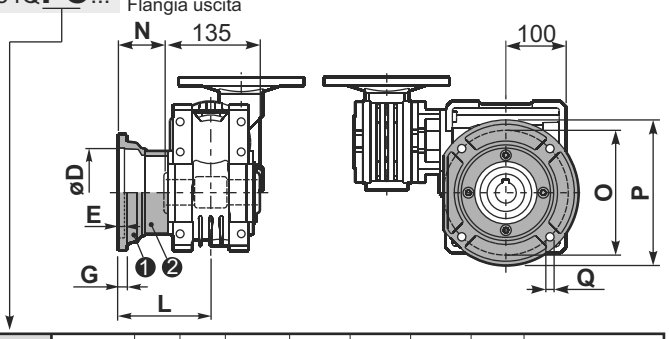


Mounting holes position
Posizione fori di montaggio

Standard
Hollow shaft

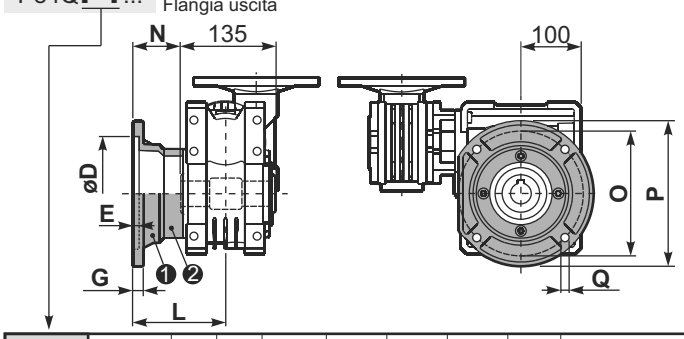
Gearbox weight peso riduttore: **22.8 kg**

P84Q**FC**... Output flange
Flangia uscita



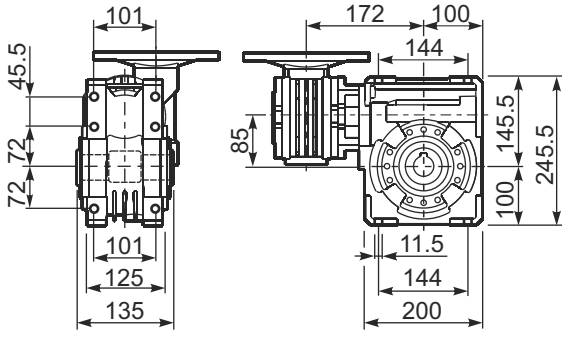
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	152 +0.06 +0.00	5	16	108	40.5	176	205	13	❶ K085.9.010 ❷ -
FL	152 +0.06 +0.00	5	16	148.5	81	176	205	13	❶ K085.9.010 ❷ K085.0.201

P84Q**F1**... Output flange
Flangia uscita

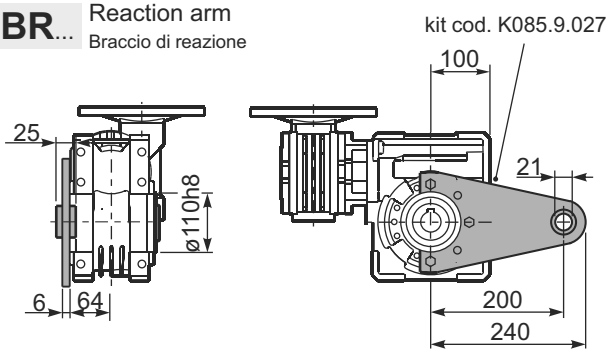


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	130 H7	5	13	117.5	50	165	200	11.5	❶ KS085.9.012 ❷ -
F2	152 +0.06 +0.00	5	15	147.5	80	180	205	12.5	❶ KS085.9.013 ❷ -
F4	130 H7	5	13	106.5	39	165	200	13	❶ KS085.9.015 ❷ -

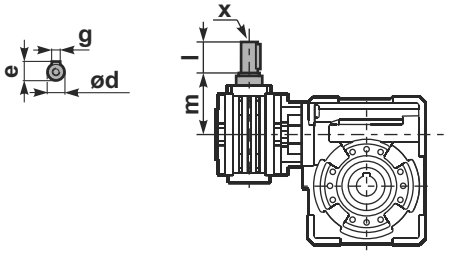
P84Q**FB**... Feet
Piedini



P84Q**BR**... Reaction arm
Braccio di reazione



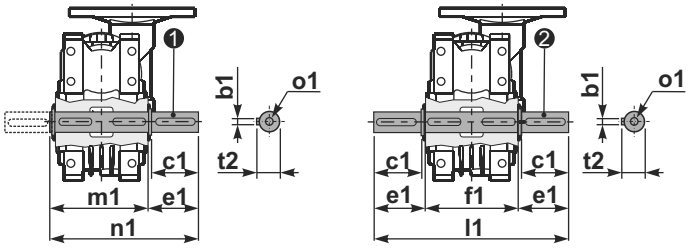
R84QFB... Input shaft
Albero in entrata



	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	C	D	Available B14 motor flanges O	P	Q	R	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	56	63	71	80			
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

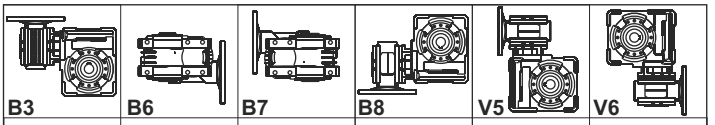
EN Unit **15Q** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a type that are closed.
Gearbox **050** is supplied 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.

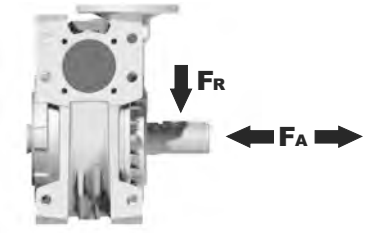


B3	B6	B7	B8	V5	V6
2.0/0.14LT	1.5/0.14 LT	1.5/0.14 LT	2.0/0.14 LT	2.0/0.14 LT	2.0/0.14 LT
AGIP Blasia 460					

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

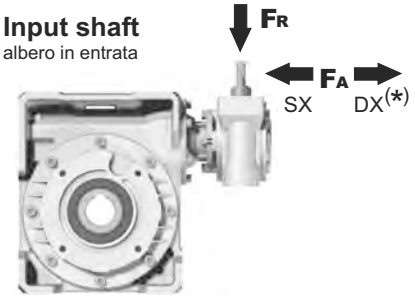
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

Input shaft
albero in entrata



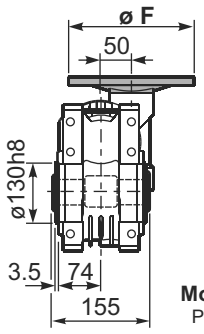
n_1 [min^{-1}]	FA [N]	FR [N]
1400	76	380

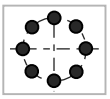
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

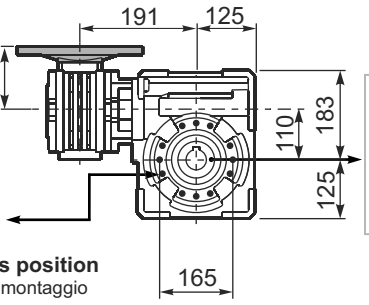
P15Q**FB**... Basic wormbox
Riduttore base

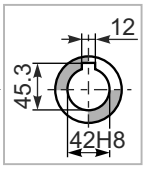
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	76.5
71B5	K050.4.042	160	74.5
80B5	K050.4.043	200	76.5
56B14	KC40.4.049	80	76
63B14	K050.4.047	90	78.5
71B14	K050.4.045	105	76
80B14	K050.4.046	120	76.5





Mounting holes position
Posizione fori di montaggio

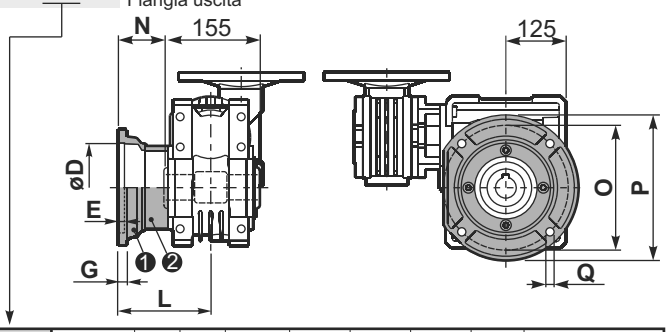




Standard
Hollow shaft

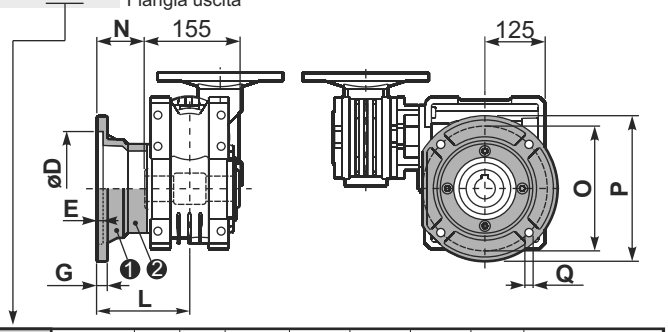
Gearbox weight peso riduttore: **38.8 kg**

P15Q**FC**... Output flange
Flangia uscita



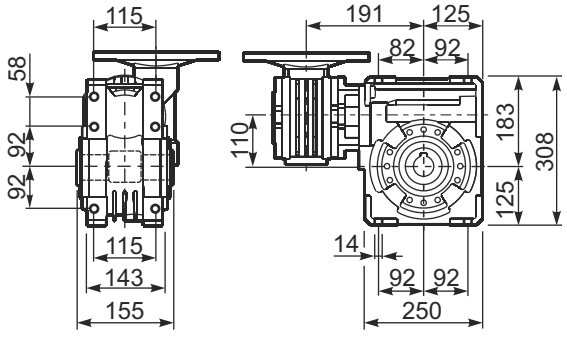
type **B**	øD	E	G	L	N	O	P	Q	kit code
FC	170 +0.083 +0.043	11	16.5	131.5	54	230	270	13	❶ K110.9.010 ❷ -
FL	170 +0.083 +0.043	11	16.5	179.5	102	230	270	13	❶ K110.9.011 ❷ -

P15Q**F1**... Output flange
Flangia uscita

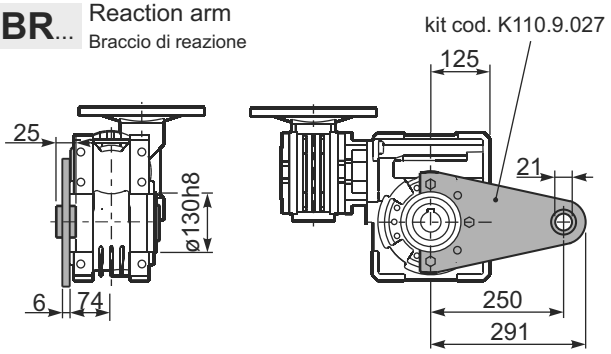


type **S**	øD	E	G	L	N	O	P	Q	kit code
F1	180 +0.040 0	5	18	150	72.5	215	250	15	❶ KS110.9.014 ❷ -
F2	170 +0.083 +0.043	9.5	15	178	100.5	230	270	13	❶ KS110.9.012 ❷ -
F3	180 +0.040 0	5	18	130	52.5	215	250	15	❶ KS110.9.013 ❷ -

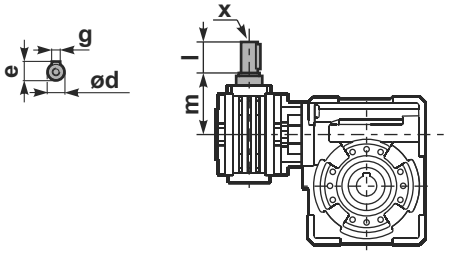
P15Q**FB**... Feet
Piedini



P15Q**BR**... Reaction arm
Braccio di reazione



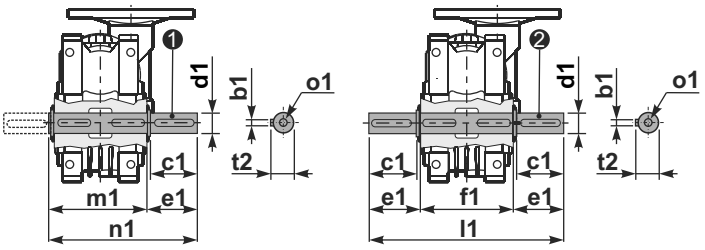
R15QFB... Input shaft
Albero in entrata



	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**	-	-	-	-	-	-	-	-	-	-

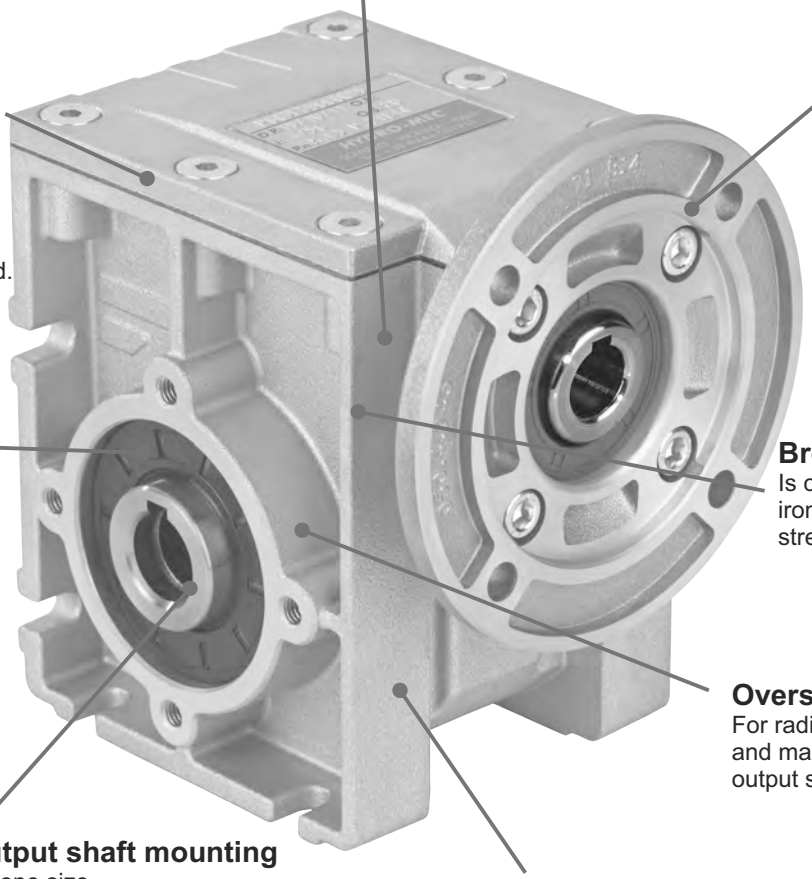
Worm gearboxes type S30 ÷ S63

A modular and compact product

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 Nickel worm gears.
Is centrifugally cast onto an iron hub for maximum strenght and superior life.

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.

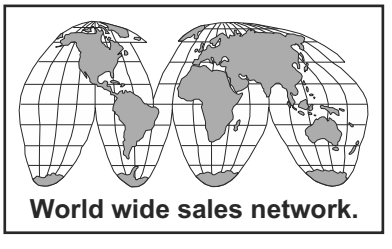
Single-piece aluminum alloy housing
Is vacuum impregnated (MIL-STD 276) for protection and sealing.
No secondary finish required but readily accepts paint.
Combines light weight with high tensile strength.
Precision machined for alignment of bearings and gearing.

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



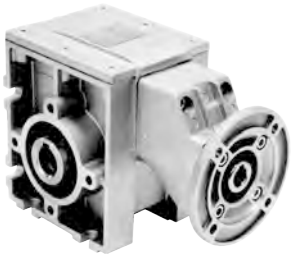
Specific type datasheet on page...



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
S30 21Nm	**S45** 41Nm	**S50** 72Nm	**S63** 147Nm



Types / Tipi / Tipen / Types / Tipos

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

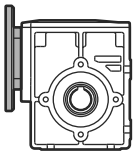
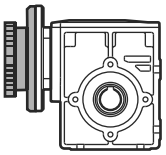
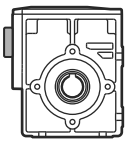
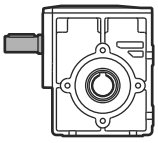
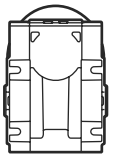
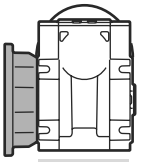
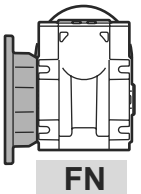
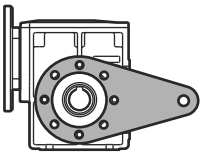
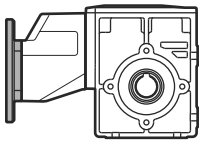
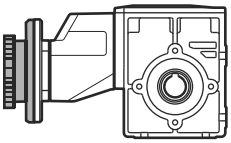
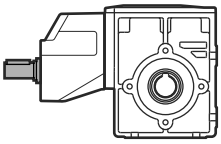
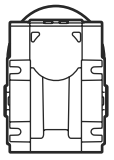
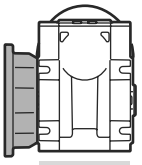
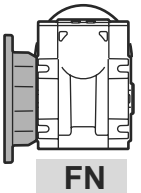
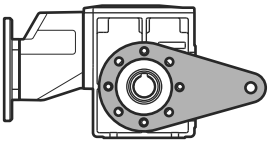
4-13	4-15	4-17
PS4 55Nm	**PS5** 88Nm	**PS6** 187Nm

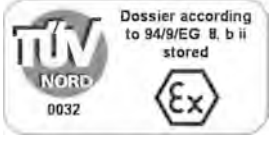


Types / Tipi / Tipen / Types / Tipos

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 Tomaño	**Mounting** - Montaggio - Montage Fixation Fixation - Tipo de montaje
P	**S45**	**FB**
Worm gearboxes Riduttori a vite senza fine Schneckengetriebe Reducteurs a vis sans fin Reductores de corona sin fin  **P**  **M**  **B**  **R**	**S30** **S45** **S50** **S63**	 **FB**  **FM**  **FN**  **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  **P**  **M**  **R**	**PS4** **PS5** **PS6**	 **FB**  **FM**  **FN**  **BR**



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 solida	**Motor size** Grandezza motore Motor Grösse Grandeur moteur Tamaño motor	**Terminal box position** Posizione morsettiera Klemmkastenlage Position boîte a bornes Posición caja de bornes	**Mounting position** Posizione montaggio Einbaulage Position de montage Position de montaje	**Reduced Input bore** Foro entrata ridotto Reduzierte Eingangshohlwelle Trou d'entree de diametre reduit Eje hueco de entrada reducido
10	**C**	**Ø**	**-Q**	**B**	**B3**	**-**

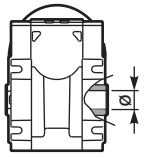
See technical data table

Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir tableau données techniques

Ver tabla datos técnicos



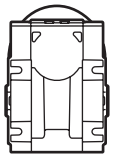
C

STANDARD

S30 ⇨ ø16
S45 ⇨ ø20
S50 ⇨ ø20
S63 ⇨ ø30

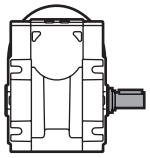
I

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



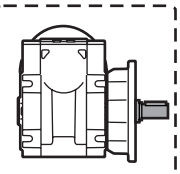
Ø

HOLLOW



S

EXTENDED



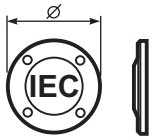
R

With flange and special shaft for high radial loads

Con flange e albero in uscita speciale per alti carichi radiali

Only wih **FM** or **FN**

Solo con **FM** o **FN**



-M

without flange
Senza flangia

B5

-B=63 (ø140)
-C=71 (ø160)
-D=80 (ø200)
-E=90 (ø200)

B14

-O=56 (ø80)
-P=63 (ø90)
-Q=71 (ø105)
-R=80 (ø120)
-T=90 (ø140)

-0=Type R



A



B

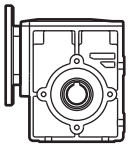
STANDARD



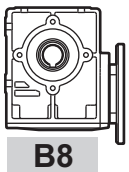
C



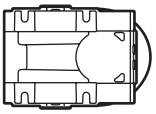
D



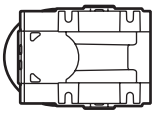
B3



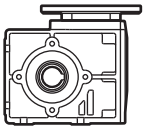
B8



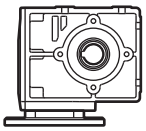
B6



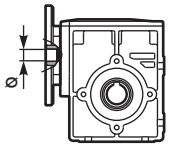
B7



V5



V6



-

Not indication standard bore

Nessuna indicazione foro 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

4

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	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

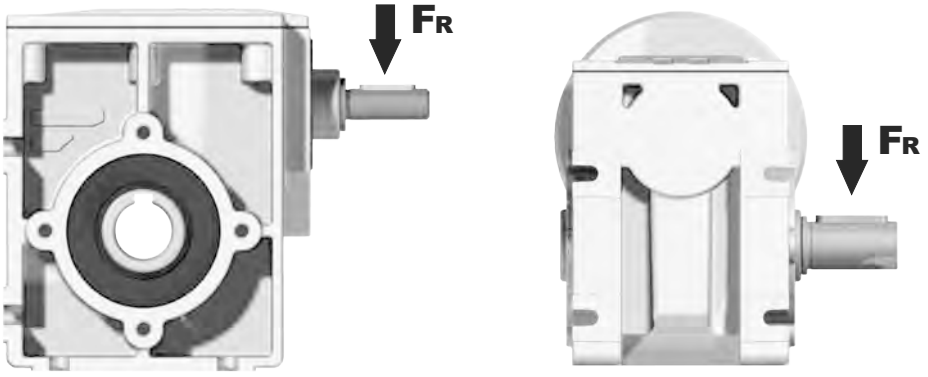
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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



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

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

S45 High tech worm - 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	B5 C	Available B14 motor flanges O	B14 P	B14 Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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

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

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

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

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. <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	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**	0.09	16	1.0	0.06	16	B		B-C		48	0.56	08

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 **S30** 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 **S30** 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 **S30** 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 **S30** 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 **S30** 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.

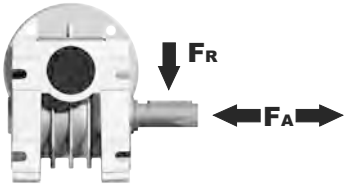
▪ LUBRICATION S30 Oil Quantity 0.055 Lt.

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

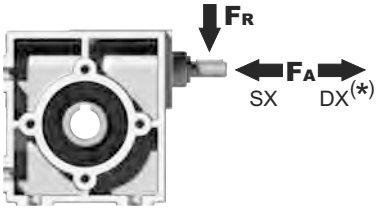
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	700	1600
150	700	1600
100	750	1700
75	800	1750
50	850	1800
25	850	1800
15	850	1800

Input shaft
albero in entrata



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

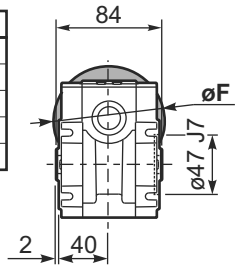
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

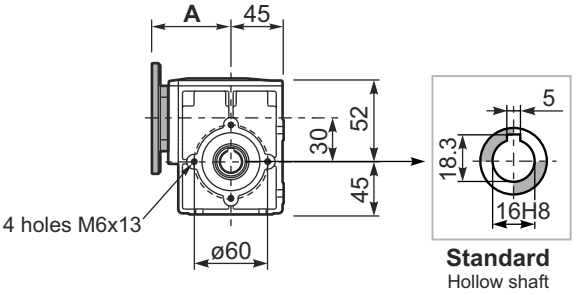
tab. 2

PS30**FB**… Basic wormbox
Riduttore base

Gearbox weight peso riduttore	1.50 kg

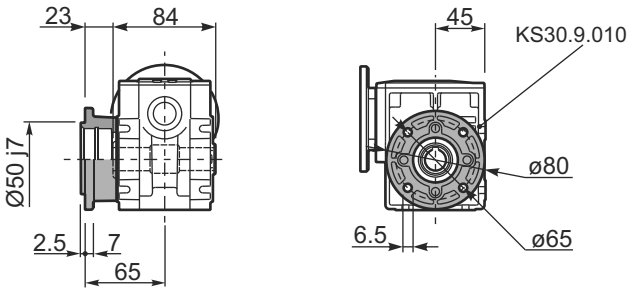
M. flanges	Kit code	øF	A
56B5	K030.4.041	120	61.5
63B5	K030.4.042	140	62.5
56B14	K030.4.046	80	61.5
63B14	K030.4.045	90	62.5



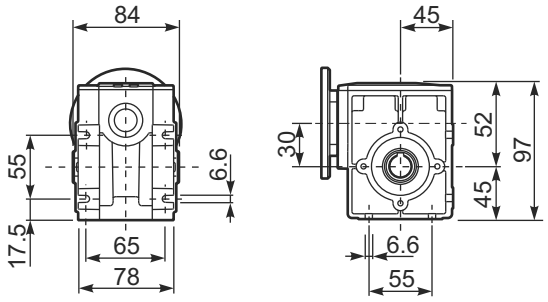


Standard
Hollow shaft

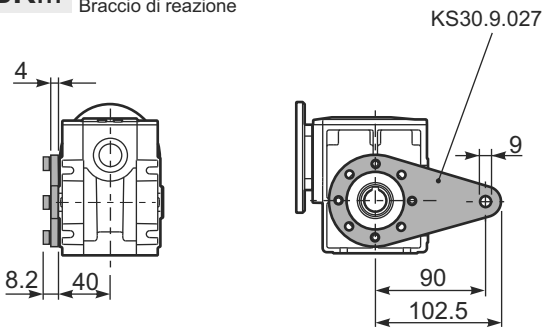
PS30**FM**…C Output flange
Flangia in uscita



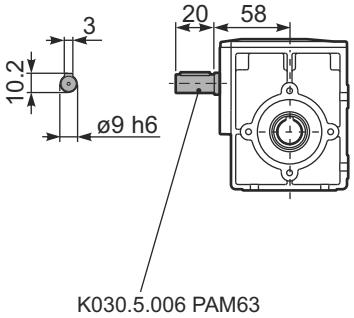
PS30**FB**… Feet
Piedini



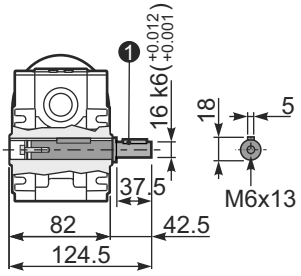
PS30**BR**… Reaction arm
Braccio di reazione



RS30FB... Input shaft
Albero in entrata

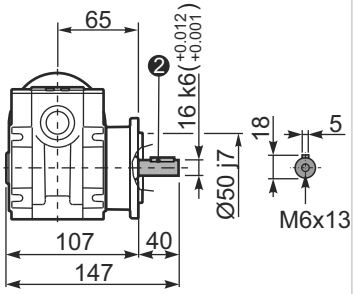


PS30.....**S**… Single Shaft
Albero lento semplice



❶ kit cod. KS30.5.028

PS30**FM..R** Special Shaft
Albero lento



❷ kit cod. KS30.9.012

The flange dimensions are
the same as FM(KS30.9.010)

▪ 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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	56	63	71			
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 **S45** 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 **S45** 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 **S45** 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 **S45** 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 **S45** 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.

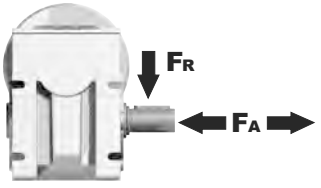
▪ LUBRICATION S45 Oil Quantity 0.20 Lt.

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

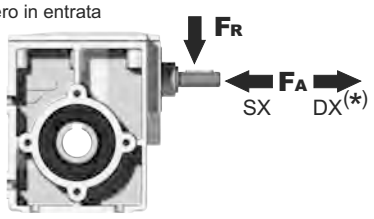
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	1000	1900
150	1150	2200
100	1300	2600
75	1300	2800
50	1350	2900
25	1350	2900
15	1400	3000

Input shaft
albero in entrata



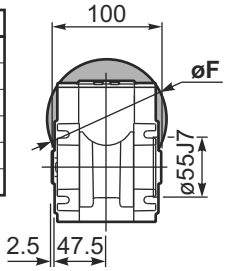
n_1 [min^{-1}]	FA [N]	FR [N]
1400	42	210

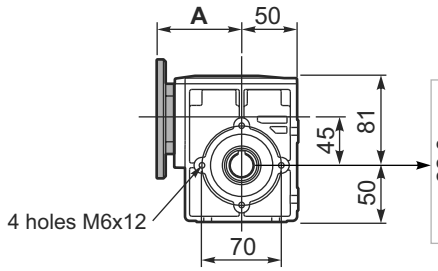
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

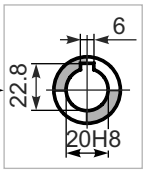
tab. 2

PS45**FB**... Basic wormbox
Riduttore base

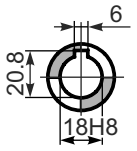
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	76
71B5	K050.4.042	160	74
56B14	KC40.4.049	80	75.5
63B14	K050.4.047	90	78
71B14	K050.4.045	105	75.5







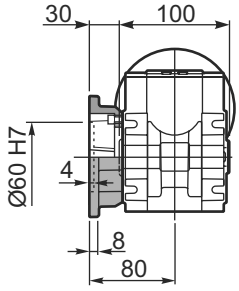
Standard
Hollow shaft

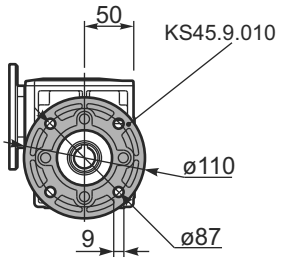


On request
A richiesta

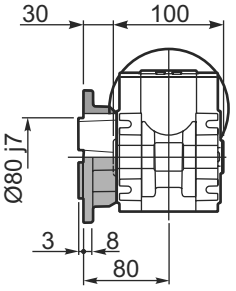
Gearbox weight peso riduttore **2.80 kg**

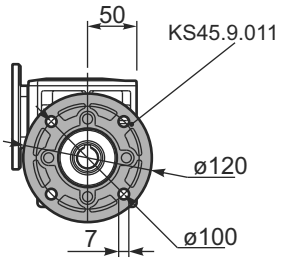
PS45**FM**...C Output flange
Flangia in uscita



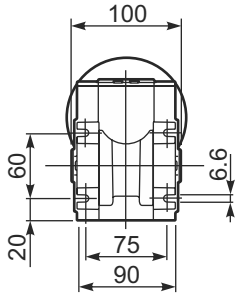


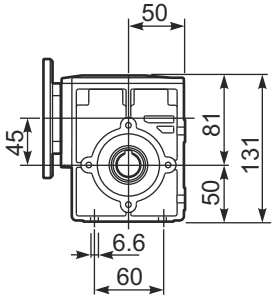
PS45**FN**...C Output flange
Flangia in uscita



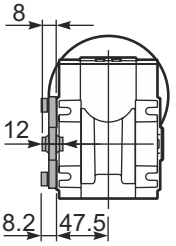


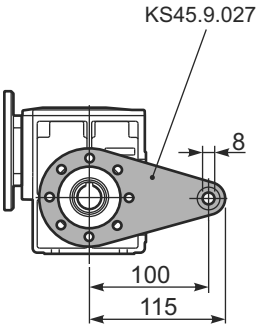
PS45**FB**... Feet
Piedini



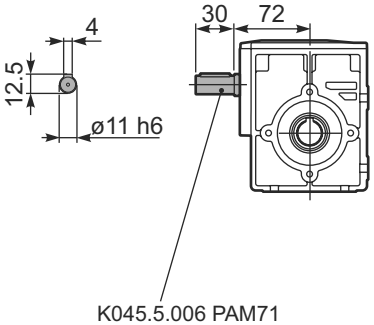


PS45**BR**... Reaction arm
Braccio di reazione

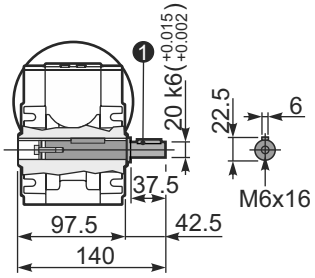




RS45FB... Input shaft
Albero in entrata

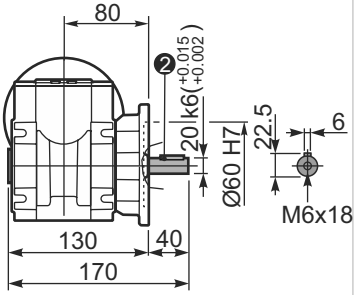


PS45.....**S**... Single Shaft
Albero lento semplice



❶ kit cod. KS45.5.028

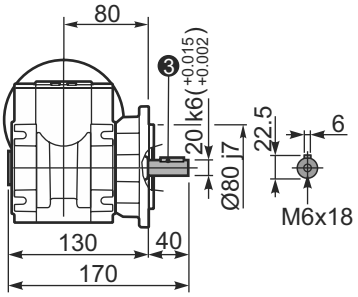
PS45**FM..R** Special Shaft
Albero lento



❷ kit cod. KS45.9.012

The flange dimensions are the same as FM(KS45.9.010)

PS45**FN..R** Special Shaft
Albero lento



❸ kit cod. KS45.9.013

The flange dimensions are the same as FN(KS45.9.011)

▪ 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	C	D	Available B14 motor flanges O	P	Q	R	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	56	63	71	80			
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
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 **S50** 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 **S50** 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 **S50** 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 **S50** 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 **S50** 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.

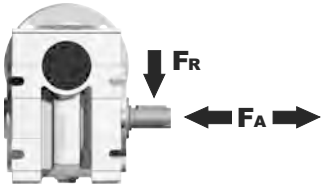
▪ LUBRICATION S50 Oil Quantity 0.25 Lt.

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

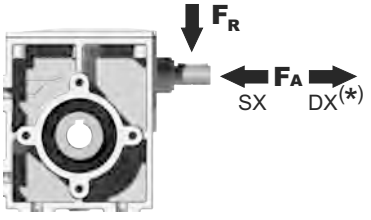
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	1350	2250
150	1500	2500
100	1650	2750
75	1650	2750
50	1700	2900
25	1700	2900
15	1700	3000

Input shaft
albero in entrata



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

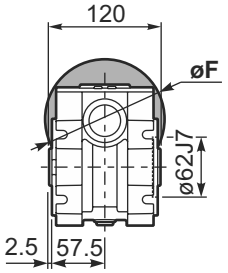
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

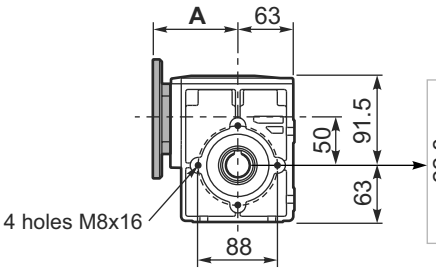
tab. 2

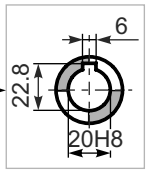
PS50**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore	4.40 kg

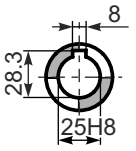
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	80.5
71B5	K050.4.042	160	78.5
80B5	K050.4.043	200	80.5
56B14	KC40.4.049	80	80
63B14	K050.4.047	90	82.5
71B14	K050.4.045	105	80
80B14	K050.4.046	120	80.5





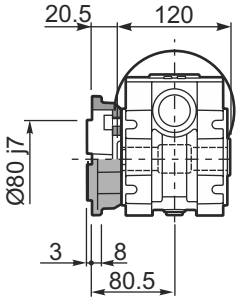


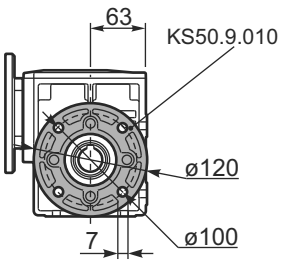
Standard
Hollow shaft



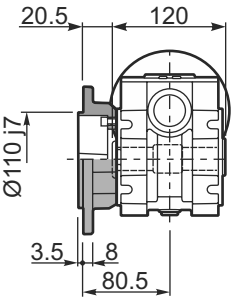
On request
A richiesta

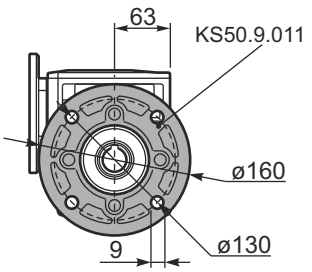
PS50**FM**...C Output flange
Flangia in uscita



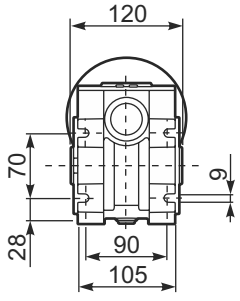


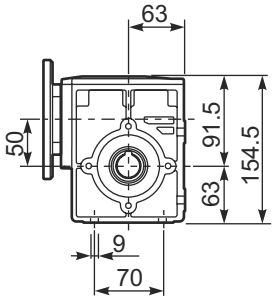
PS50**FN**...C Output flange
Flangia in uscita



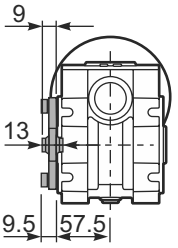


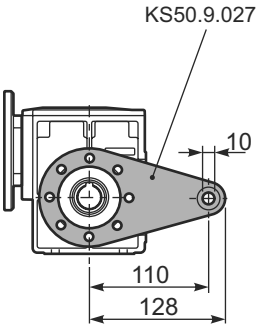
PS50**FB**... Feet
Piedini



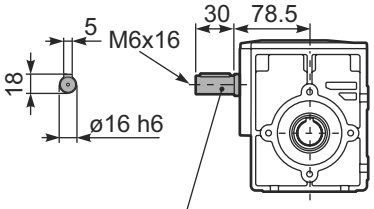


PS50**BR**... Reaction arm
Braccio di reazione



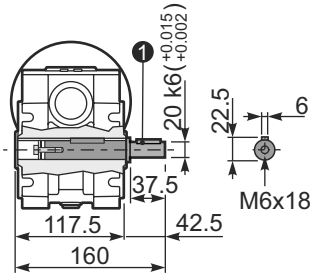


RS50FB... Input shaft
Albero in entrata



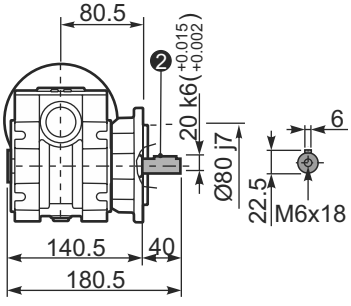
K050.5.006 PAM71
K050.5.007 PAM80

PS50.....**S**... Single Shaft
Albero lento semplice



❶ kit cod. KS50.5.028

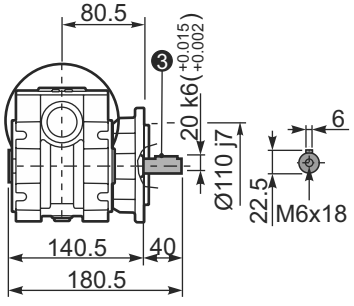
PS50**FM..R** Special Shaft
Albero lento



❷ kit cod. KS50.9.012

The flange dimensions are the same as FM(KS50.9.010)

PS50**FN..R** Special Shaft
Albero lento



❸ kit cod. KS50.9.013

The flange dimensions are the same as FN(KS50.9.011)

▪ 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	C	D	E	Available B14 motor flanges Q	R	T	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							63	71	80	90	71	80	90			
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
31	**45**	0.55	111	1.2	0.67	135	B	B			B-C	C		66	2.1	08
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 **S63** 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 **S63** 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 **S63** 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 **S63** 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 **S63** 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.

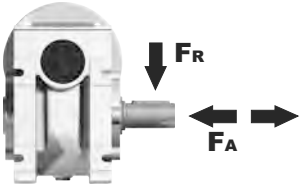
▪ LUBRICATION S63 Oil Quantity 0.50 Lt.

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

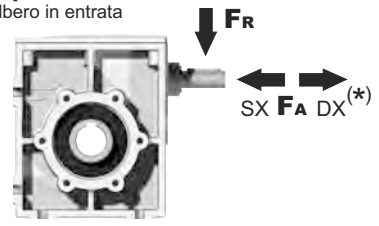
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	2000	3250
150	2300	4100
100	2850	4600
75	3400	5500
50	3600	6000
25	3600	6000
15	3600	6200

Input shaft
albero in entrata



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

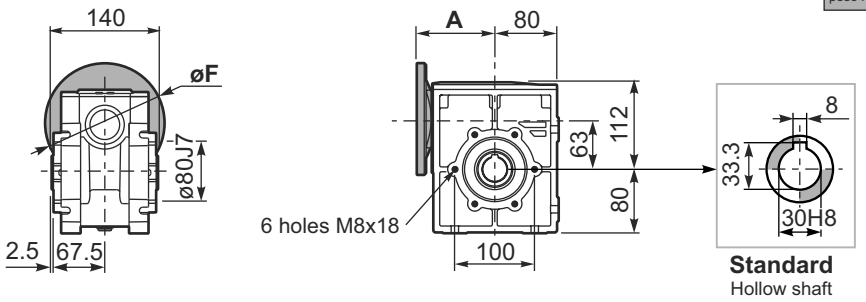
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

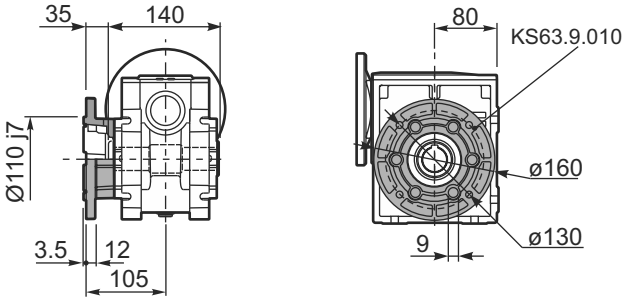
PS63**FB**... Basic wormbox
Riduttore base

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	98.5
90B14	K063.4.041	140	99.5

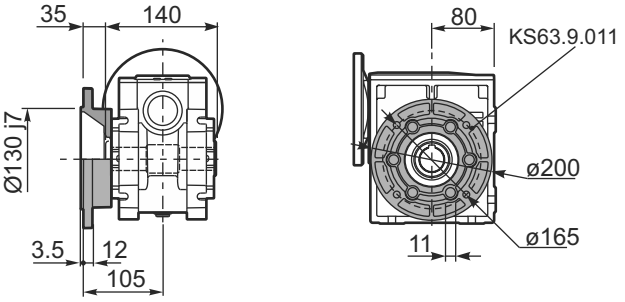
Gearbox weight peso riduttore **7.50 kg**



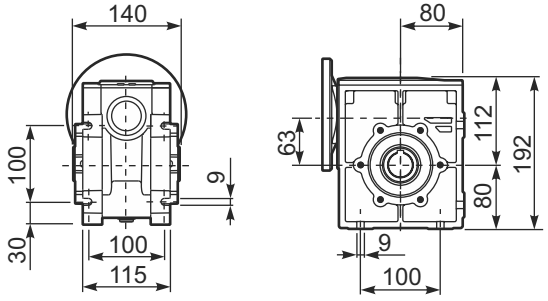
PS63**FM**..C Output flange
Flangia in uscita



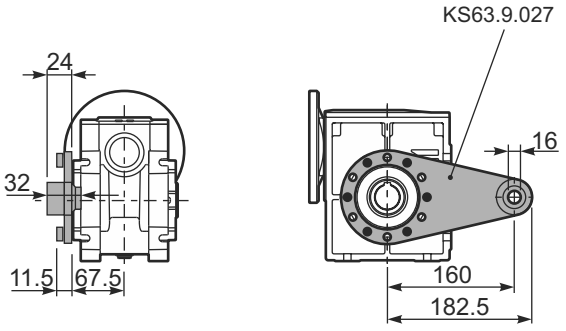
PS63**FN**..C Output flange
Flangia in uscita



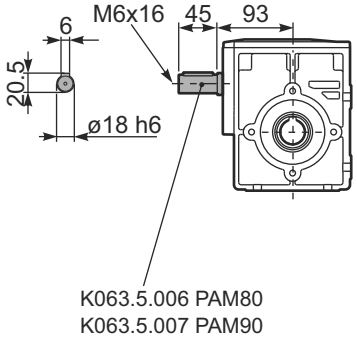
PS63**FB**... Feet
Piedini



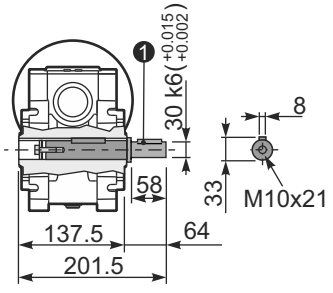
PS63**BR**... Reaction arm
Braccio di reazione



RS63FB... Input shaft
Albero in entrata

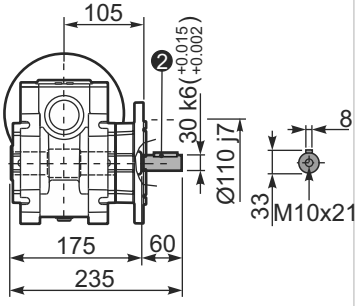


PS63.....**S**... Single Shaft
Albero lento semplice



❶ kit cod. KS63.5.028

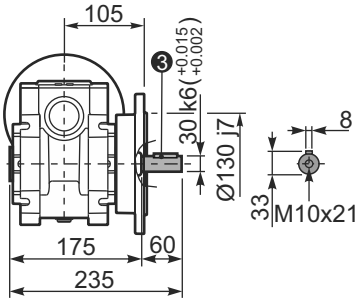
PS63**FM..R** Special Shaft
Albero lento



❷ kit cod. KS63.9.012

The flange dimensions are the same as FM(KS63.9.010)

PS63**FN..R** Special Shaft
Albero lento



❸ kit cod. KS63.9.013

The flange dimensions are the same as FN(KS63.9.011)

▪ 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 **PS4** 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 **PS4** 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.

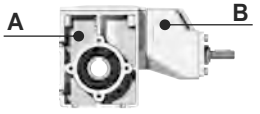
D Für die Lebensdauerschmierung ist das Getriebe der Größe **PS4** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **PS4** 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 **PS4** 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 PS5 Oil

Common lubrication 0.25 l (A + B) except V5 mounting position which is 0.4 l (A + B).

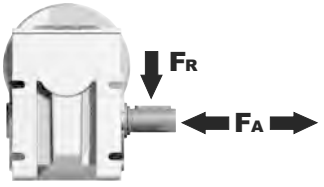


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

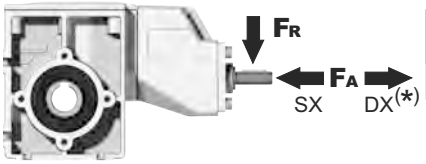
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	1000	1900
150	1150	2200
100	1300	2600
75	1300	2800
50	1350	2900
25	1350	2900
15	1400	3000

Input shaft
albero in entrata



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

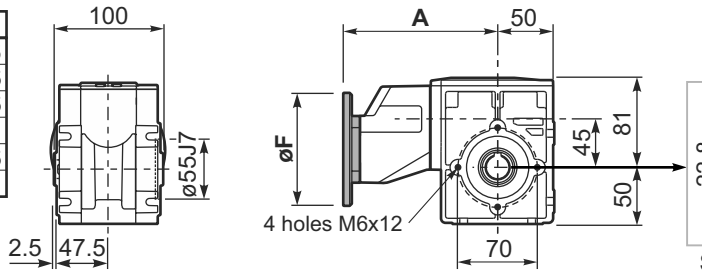
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PPS4**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K050.4.046	120	141.5
63B5	K050.4.041	138	141.5
71B5	K050.4.042	160	139.5
63B14	K050.4.047	90	143.5
71B14	K050.4.045	105	141

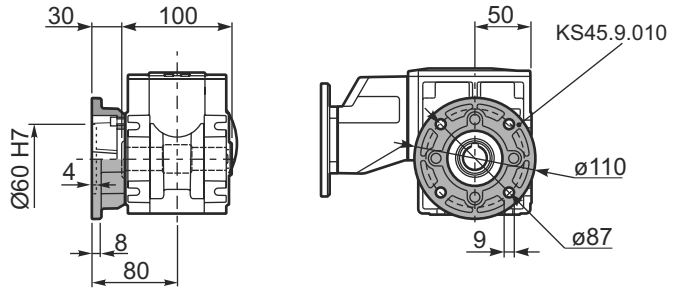
Gearbox weight / peso riduttore: **3.80 kg**



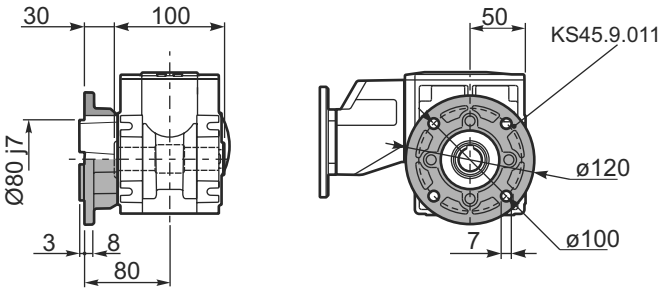
Standard
Hollow shaft

On request
A richiesta

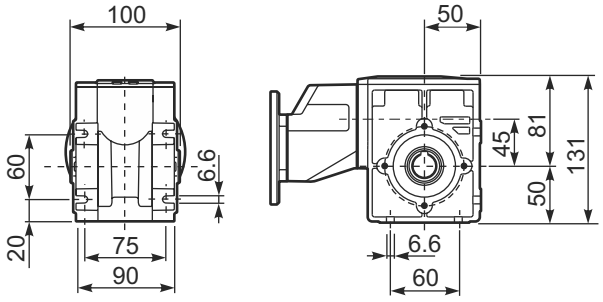
PPS4**FM**...C Output flange
Flangia in uscita



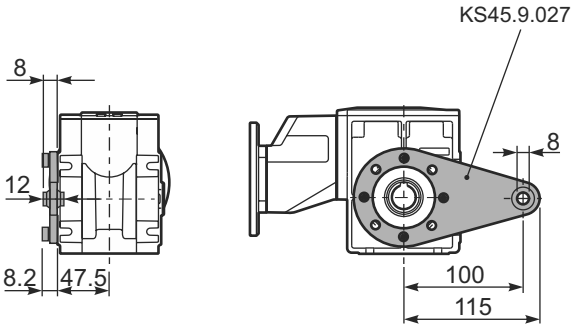
PPS4**FN**...C Output flange
Flangia in uscita



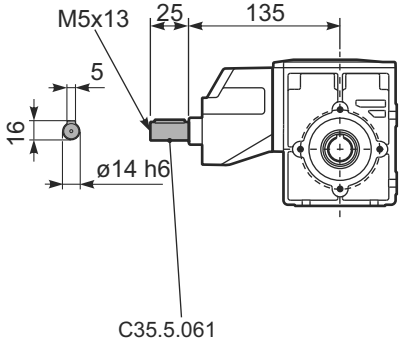
PPS4**FB**... Feet
Piedini



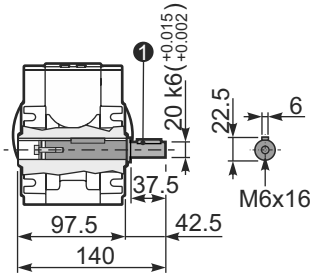
PPS4**BR**... Reaction arm
Braccio di reazione



RPS4FB... Input shaft
Albero in entrata

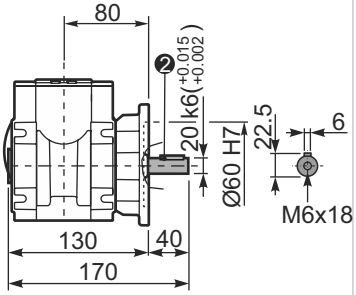


PPS4.....**S**... Single Shaft
Albero lento semplice



❶ kit cod. KS45.5.028

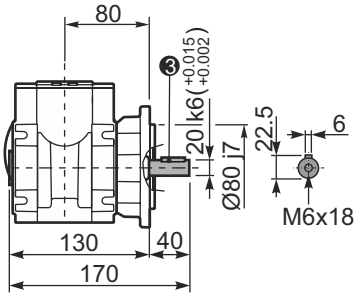
PPS4**FM..R** Special Shaft
Albero lento



❷ kit cod. KS45.9.012

The flange dimensions are the same as FM(KS45.9.010)

PPS4**FN..R** Special Shaft
Albero lento



❸ kit cod. KS45.9.013

The flange dimensions are the same as FN(KS45.9.011)

▪ 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 **PS5** 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 **PS5** 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.

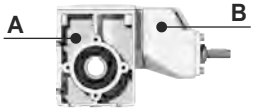
D Für die Lebensdauerschmierung ist das Getriebe der Größe **PS5** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **PS5** 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 **PS5** 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 PS5 Oil

Common lubrication 0.32 l (A + B) except V5 mounting position which is 0.52 l (A + B).

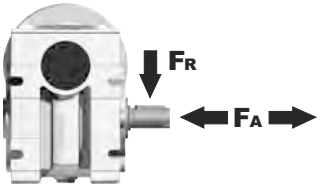


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

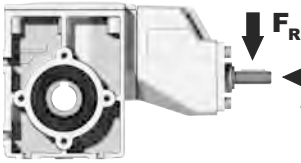
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	1350	2250
150	1500	2500
100	1650	2750
75	1650	2750
50	1700	2900
25	1700	2900
15	1700	3000

Input shaft
albero in entrata



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

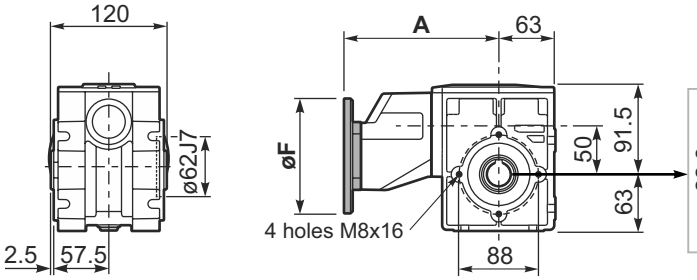
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PPS5**FB**... Basic wormbox
Riduttore base

M. flanges	Kit code	øF	A
56B5	K050.4.046	120	146
63B5	K050.4.041	138	146
71B5	K050.4.042	160	144
63B14	K050.4.047	90	148
71B14	K050.4.045	105	145.5

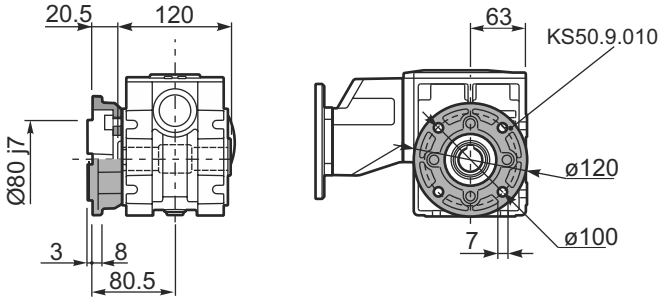
Gearbox weight peso riduttore **5.40 Lt.**



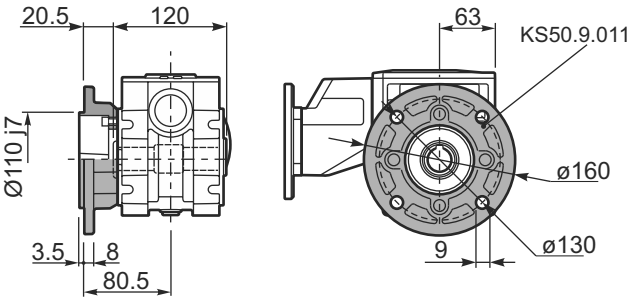
Standard Hollow shaft

On request A richiesta

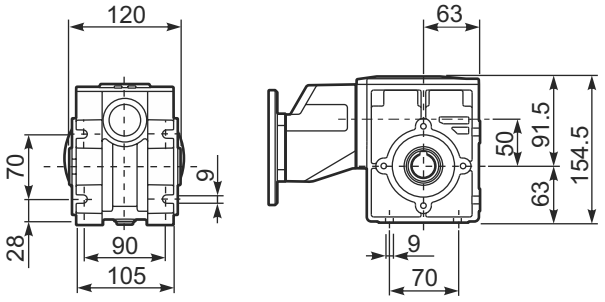
PPS5**FM**...C Output flange
Flangia in uscita



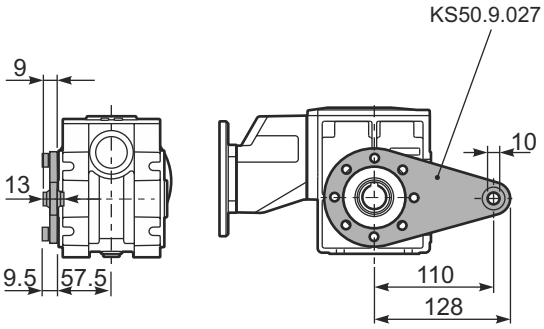
PPS5**FN**...C Output flange
Flangia in uscita



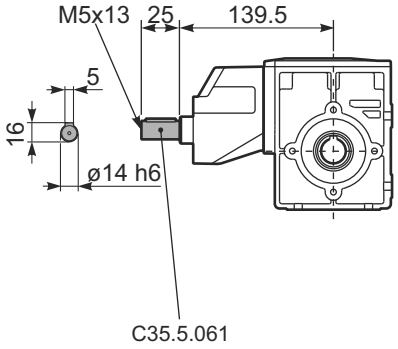
PPS5**FB**... Feet
Piedini



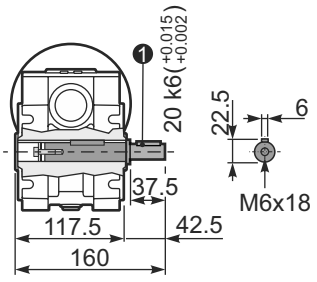
PPS5**BR**... Reaction arm
Braccio di reazione



RPS5FB... Input shaft
Albero in entrata

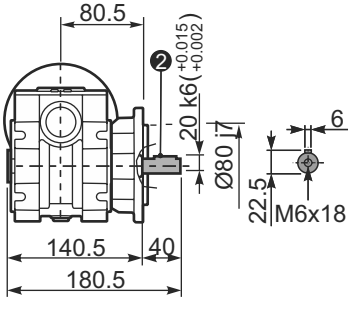


PPS5.....**S**... Single Shaft
Albero lento semplice



❶ kit cod. KS50.5.028

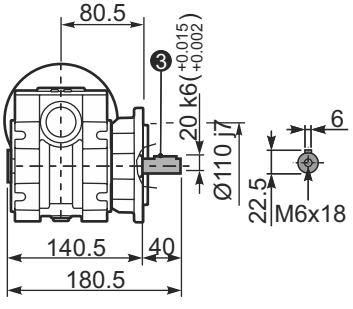
PPS5**FM..R** Special Shaft
Albero lento



❷ kit cod. KS50.9.012

The flange dimensions are the same as FM(KS50.9.010)

PPS5**FN..R** Special Shaft
Albero lento



❸ kit cod. KS50.9.013

The flange dimensions are the same as FN(KS50.9.011)

▪ 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 **PS6** 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 **PS6** 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.

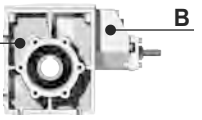
D Für die Lebensdauerschmierung ist das Getriebe der Größe **PS6** mit synthetischem Öl befüllt.
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **PS6** 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 **PS6** 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 (0.50 l) B (0.08 l) , for B6-B7-B8 common lubrication 0.70 l (A + B).

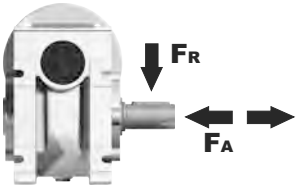


AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

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

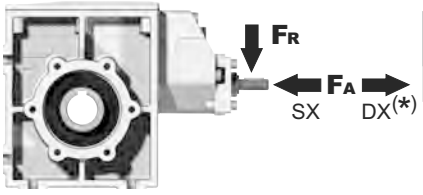
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	2000	3250
150	2300	4100
100	2850	4600
75	3400	5500
50	3600	6000
25	3600	6000
15	3600	6200

Input shaft
albero in entrata



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

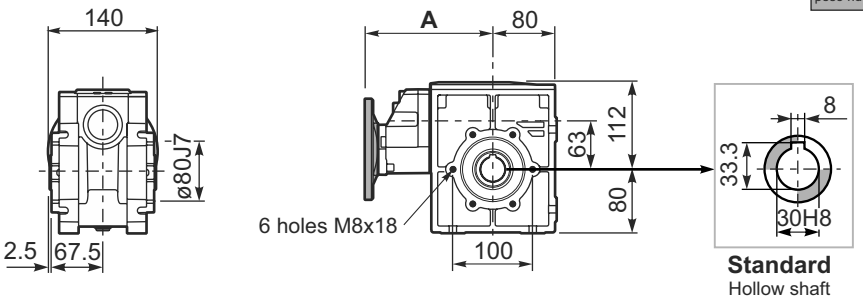
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

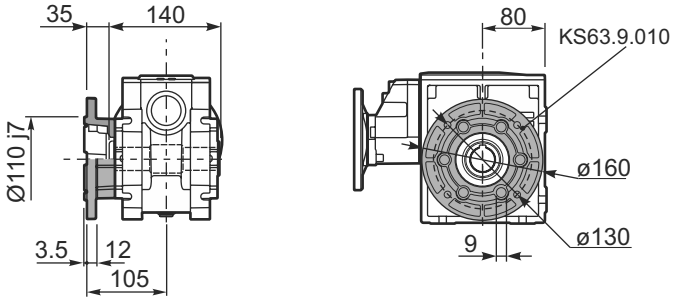
PPS6**FB**... Basic wormbox
Riduttore base

Gearbox weight peso riduttore	29.9÷111 9.60 Kg	139÷434 9.10 Kg

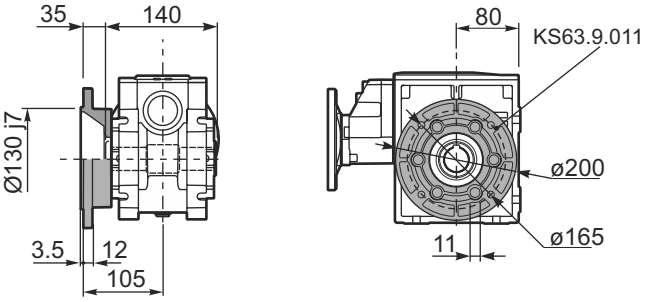
	M.flange	Kit code	øF	A
29.9÷111	71B5	K063.4.042	160	176.5
	80/90B5	K063.4.043	200	178.5
	71B14	K063.4.047	105	176.5
	80B14	K063.4.046	120	177.5
	90B14	K063.4.041	140	178.5
139÷434	63B5	K050.4.041	138	160.5
	71B5	K050.4.042	160	158.5
	63B14	K050.4.047	90	162.5
	71B14	K050.4.045	105	160



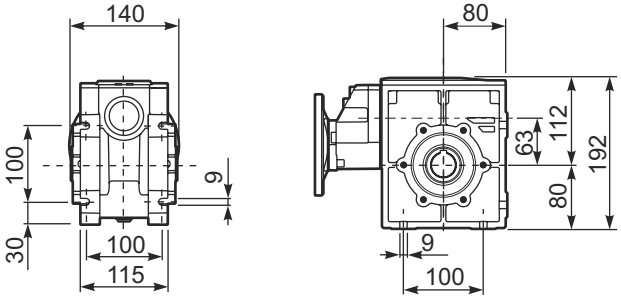
PPS6**FM**... Output flange
Flangia in uscita



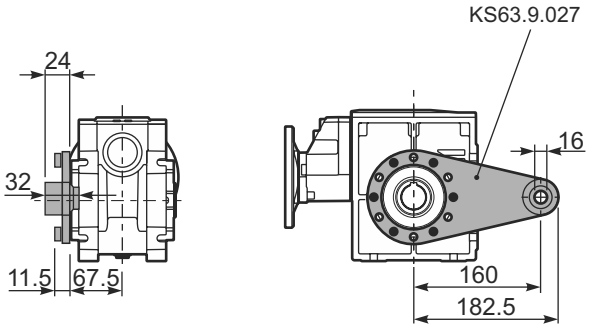
PPS6**FN**... Output flange
Flangia in uscita



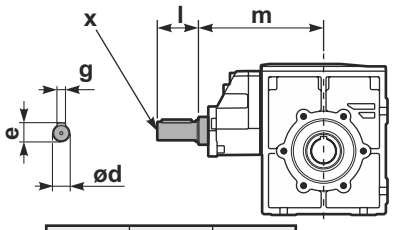
PPS6**FB**... Feet
Piedini



PPS6**BR**... Reaction arm
Braccio di reazione

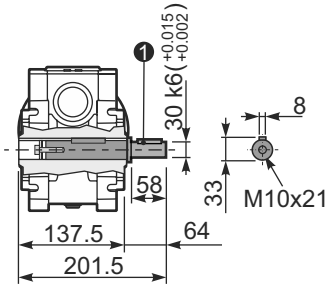


RPS6FB... Input shaft
Albero in entrata



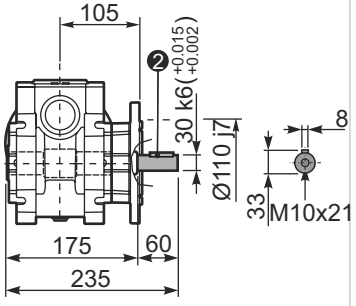
	29.9÷111	139÷434
ød	19 h6	14 h6
e	21.5	16
g	6	5
l	35	25
m	169.4	154.2
x	M6x16	M5x13
	C40.5.062	C35.5.061

PPS6.....**S**... Single Shaft
Albero lento semplice



❶ kit cod. KS63.5.028

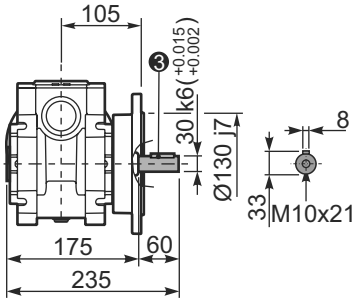
PPS6**FM..R** Special Shaft
Albero lento



❷ kit cod. KS63.9.012

The flange dimensions are the same as FM(KS63.9.010)

PPS6**FN..R** Special Shaft
Albero lento



❸ kit cod. KS63.9.013

The flange dimensions are the same as FN(KS63.9.011)

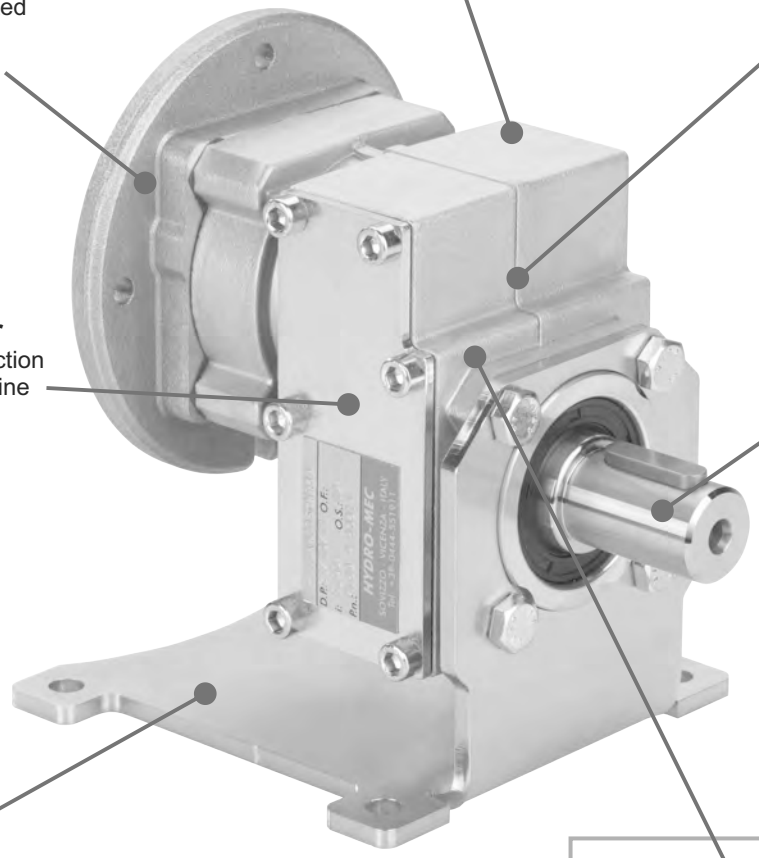
Aluminum one step gearboxes

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

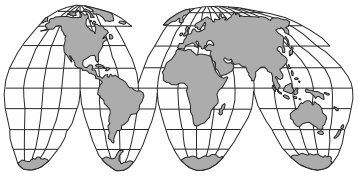
Output shaft
With well proportioned bearings

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

5-5	5-7	5-9	5-11
211A 20Nm	**311A** 30Nm	**411A** 38Nm	**511A** 110Nm

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



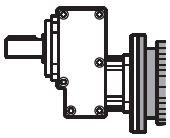
Types / Tipi
Tipen / Types
Tipos

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

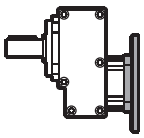
CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Type - Tipo - Typ Type - Tipo	**Size** - Grandezza - Grösse Taille - Tomaño	**Mounting** - Montaggio Montage - Fixation Tipo de montaje
P	**311A**	**-F**

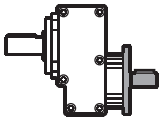
Aluminum one step gear
Riduttori in alluminio a uno stadio



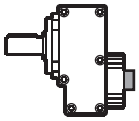
With IEC motor
M



With motor flange
P



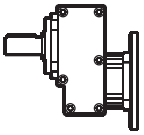
With male input shaft
R



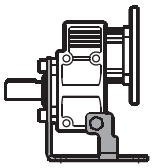
Modular Base
B

1 Stages
Riduzioni
Stufen
Trains
Etapas

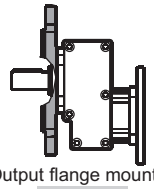
211A
311A
411A
511A



Without flange / feet
-N

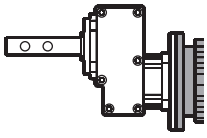


Mounted feet
H1



Output flange mounted
-F

Special output shaft
Albero uscita speciale



Only on request for Q.ty
A richiesta per quantità

5

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.

Ratio - Rapporto Untersetzung Reduction Relaciòn

2.84

See technical data table

Vedi tabelle dati tecnici.

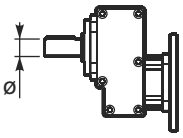
Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

Output shaft
Albero uscita
Abtriebswelle
Arbre de sortie
Eje en salida

S



➡ **STANDARD**

211A
S ➡ **ø14**

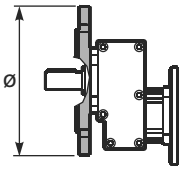
311A
S ➡ **ø14**
C ⇨ ø19
E ⇨ ø24

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

311A
1 ⇨ ø120
2 ⇨ ø140
3 ➡ **ø160**
4 ⇨ ø200

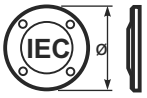
411A
1 ⇨ ø120
2 ⇨ ø140
3 ⇨ ø160
4 ➡ **ø200**

511A
1 ⇨ ø120
2 ⇨ ø140
3 ⇨ ø160
4 ⇨ ø200
5 ➡ **ø250**

Motor size - Grandezza motore
Motor Grösse
Grandeur moteur - Tamaño motor

-C

Standard Flange
Flangia Standard



B5	B14
-A=56 (ø120)	**-O**=56 (ø80)
-B=63 (ø140)	**-P**=63 (ø90)
-C=71 (ø160)	**-Q**=71 (ø105)
-D=80 (ø200)	**-R**=80 (ø120)
-E=90 (ø200)	**-T**=90 (ø140)
-F=100÷112 (ø250)	**-U**=100÷112 (ø160)
-G=132 (ø300)	**-V**=132 (ø200)

Type R / Tipo R



211A 311A
-1 ➡ ø14

511A
-3 ➡ ø24

411A
-2 ➡ ø19

Without flange / Senza flangia



211A 311A
-Z ⇨ ø9 (56B5)
-0 ⇨ ø11 (63B5)
-1 ➡ ø14 (71B5)

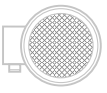
411A
-1 ⇨ ø14 (71B5)
-2 ⇨ ø19 (80B5)
-3 ➡ ø24 (90B5)

511A
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)
-4 ➡ ø28 (100B5)

➡ **STANDARD**

Terminal box position
Posizione morsettiera
Klemmkastenlage
Position boîte à bornes
Posición caja de bornes

B



A



B
STANDARD



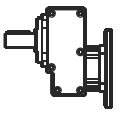
C



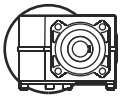
D

Mounting position
Posizione montaggio
Einbaulage
Position de montage
Position de montaje

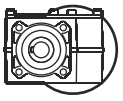
B3



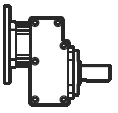
B3
STANDARD



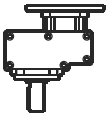
B6



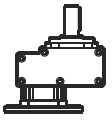
B7



B8



V5



V6

Specify only for vertical positions

Specificare solo per posizione verticale

5

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	$\mathbf{P}\ [KW] = \frac{\mathbf{F}\ [N] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$

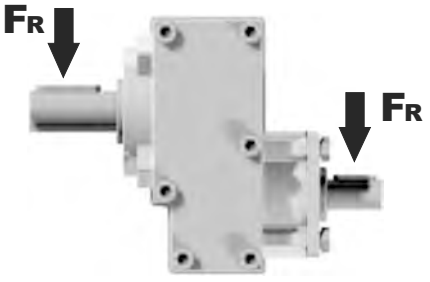
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

5

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

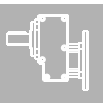
A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q		Output Shaft	Ratios code
							63	71	56	63	71			
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
	≤ 10 Moderate / Moderato	1	1.25	1.5
	≤ 10 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
	> 10 Moderato / Moderato	1.25	1.5	1.75
	> 10 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	C	D	E	Available B14 motor flanges O	P	Q	R		Output Shaft ø	Ratios code
							63	71	80	90	56	63	71	80			
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 lubrification, 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.

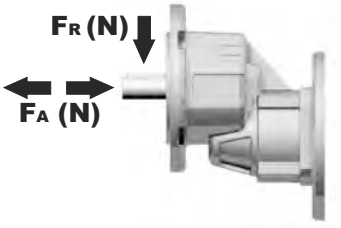
▪ LUBRICATION 211A Oil Quantity 0.05 Lt.

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

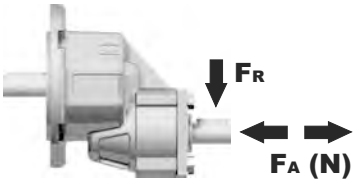
▪ RADIAL AND AXIAL LOADS

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



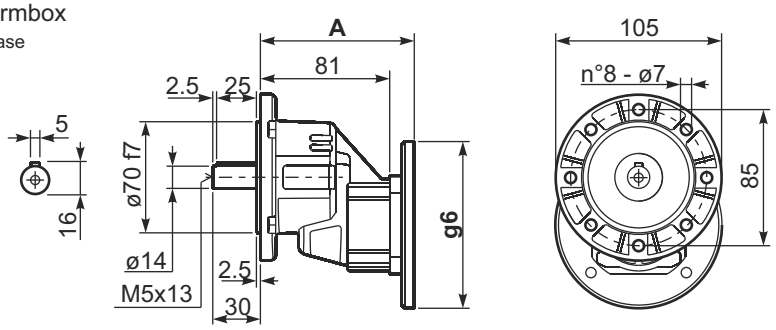
n_2	FA	FR
1400	168	840
900	192	960

***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

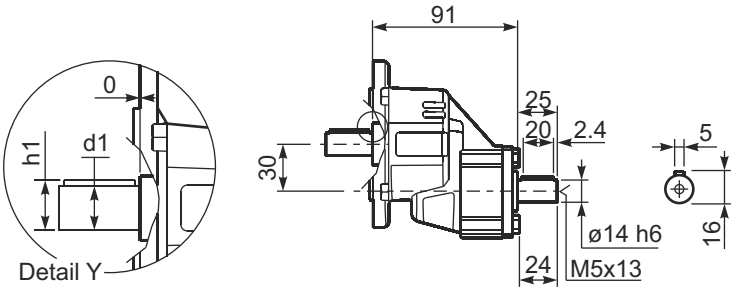
Gearbox weight peso riduttore	1.40 kg



B5 Motor Flanges	A	g6	kit code
63 B5	97.5	138	K050.4.041
71 B5	95.5	160	K050.4.042

B14 Motor Flanges	A	g6	kit code
56 B14	97	80	KC40.4.049
63 B14	99	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

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 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		01
493	**2.84**	0.37	7	3.3	**1.2**	**23**			C	C		1954	**standard ø14**	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 lubrification, 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.

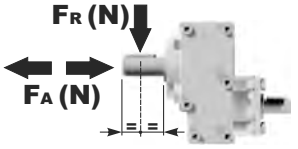
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

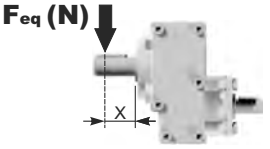
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{38.5}{X+18.5}$$



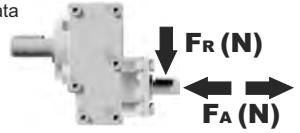


n_2	FA	FR
700	120	640
600	140	700

n_2	FA	FR
400	160	800
300	175	880

n_2	FA	FR
200	200	1020
140	225	1120

Input shaft
Albero in entrata

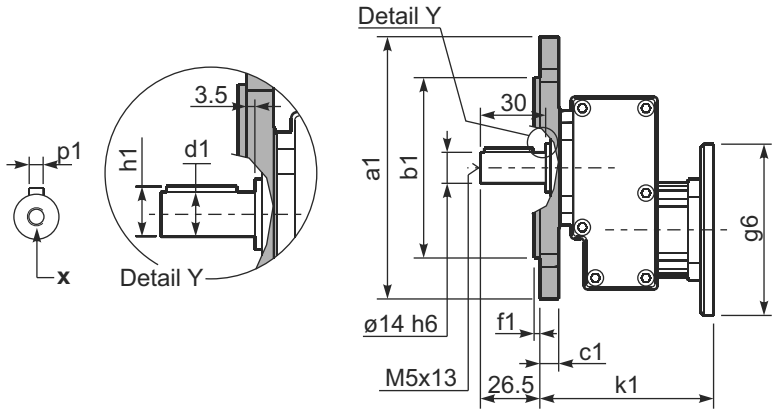


n_1	FA	FR
1400	180	860
900	200	980

tab. 2

Gearbox weight peso riduttore	2.50 kg

P311-F... Output flange
flange di uscita



***Available output shaft** / Albero di uscita

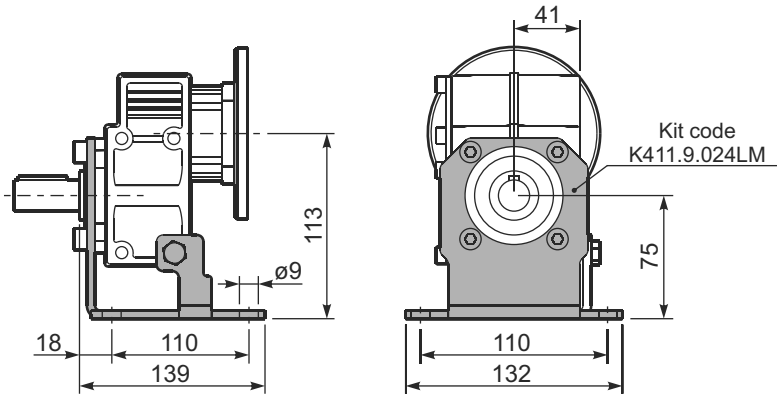
	Shaft - d1	p1	h1	x
Standard	ø 14x30	5	16	M5x13
On request A richiesta	ø 19x40 ø 24x40	6 8	21.5 27	M6x16 M6x16

Available output flanges / flange di uscita

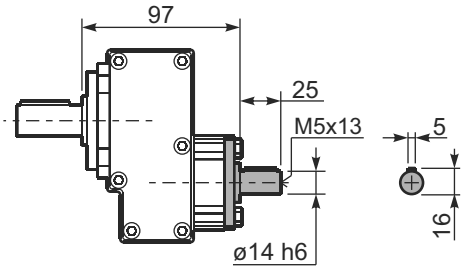
a1 ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

*Holes position
posizione fori

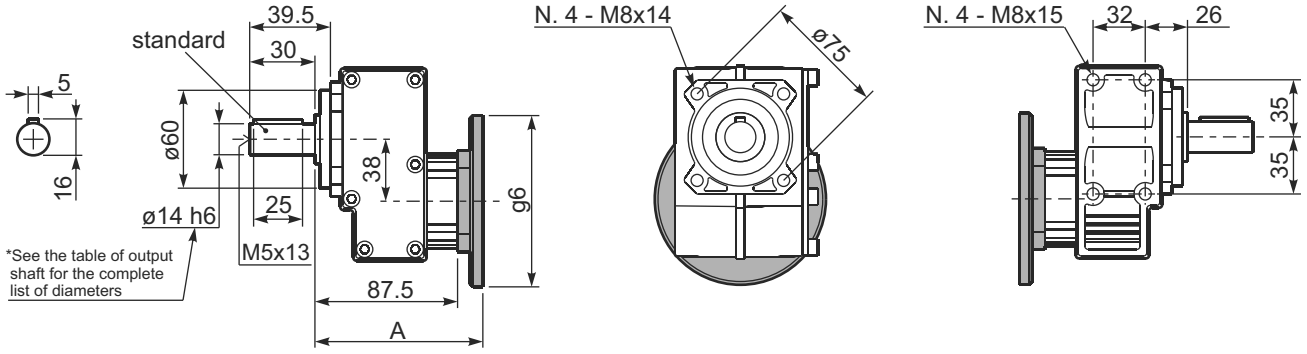
P311-H1... With feet
Con piedini



R311-N... Input Shaft
Albero in entrata



P311-N... Basic gearbox
Riduttore base



B14 Motor Flanges	A	g6	k1	kit code
56 B14	107.5	80	111	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	103.5	138	107	K050.4.041
71 B5	101.5	160	105	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	**standard ø19**	01
493	**2.84**	1.5	28	1.2	**1.8**	**35**	B				C	C		1954		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 lubrification, 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 0.20 Lt.

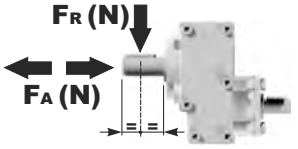
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

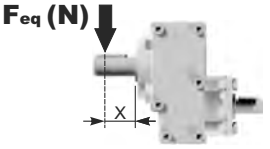
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

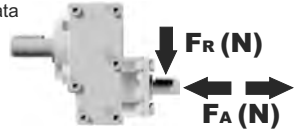
$$Feq = FR \cdot \frac{40}{X+20}$$





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

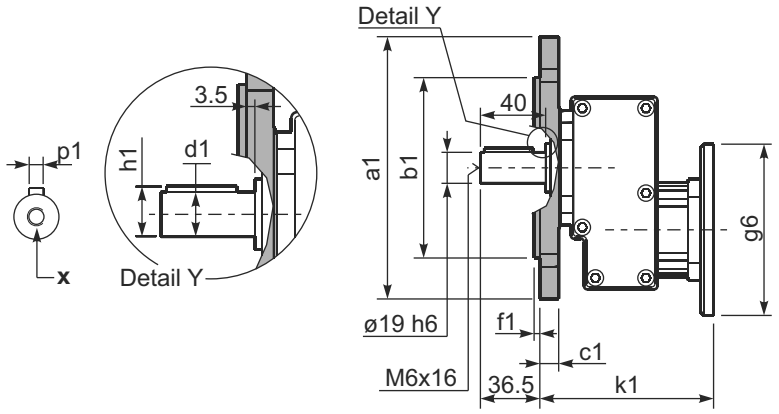


n_1	FA	FR
1400	240	1200
900	280	1400

tab. 2

Gearbox weight / peso riduttore: 3.20 kg

P411-F... Output flange
flange di uscita



***Available output shaft** / Albero di uscita

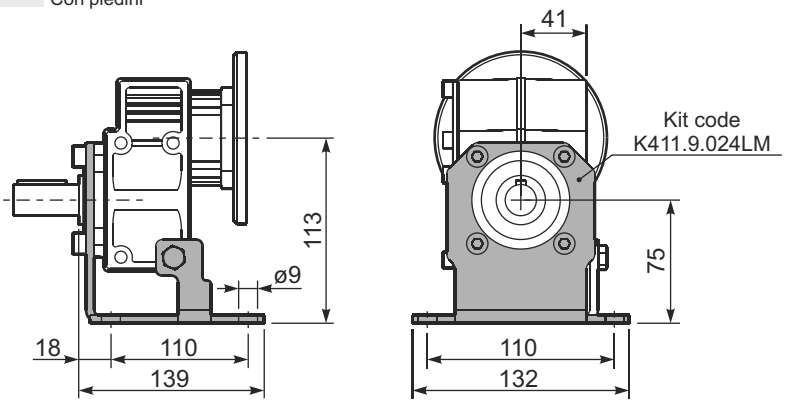
	Shaft - d1	p1	h1	x
Standard	ø 19x40	6	21.5	M6x16
On request A richiesta	ø 14x30 ø 24x40	5 8	16 27	M5x13 M6x16

Available output flanges / flange di uscita

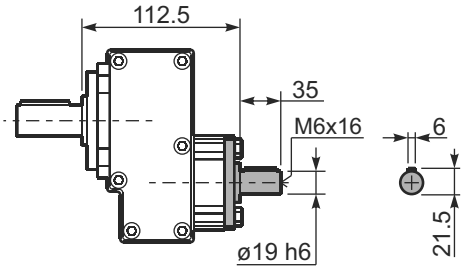
a1 ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

*Holes position
posizione fori

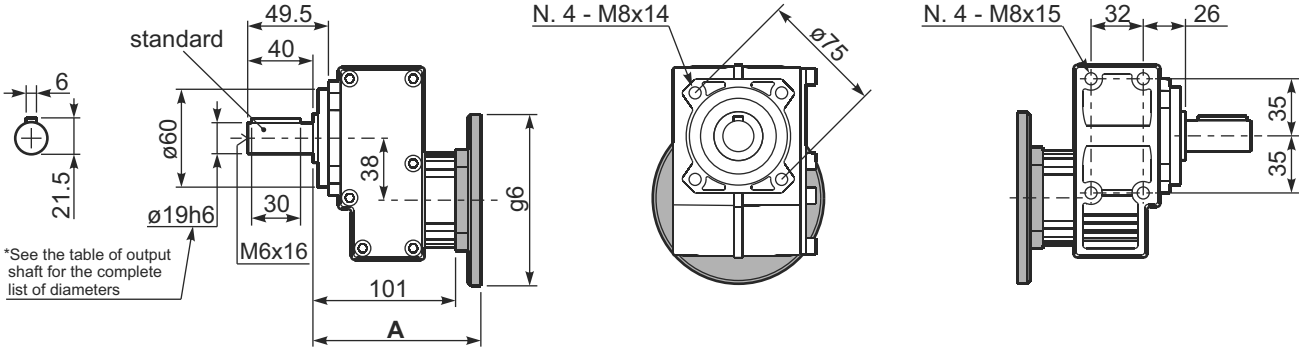
P411-H1... With feet
Con piedini



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	120.5	120	124	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	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	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

standard ø28

On request ø19 ø24

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 lubrification, 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

F_R (N)
F_A (N)

$F_{eq} = F_R \cdot \frac{52.5}{X+22.5}$

F_{eq} (N)

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

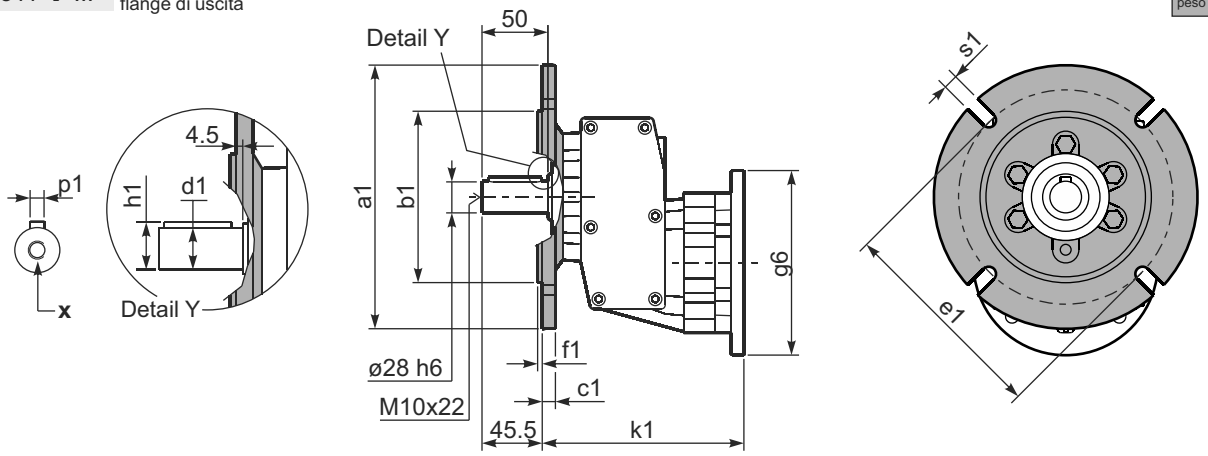
F_R (N)
F_A (N)

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



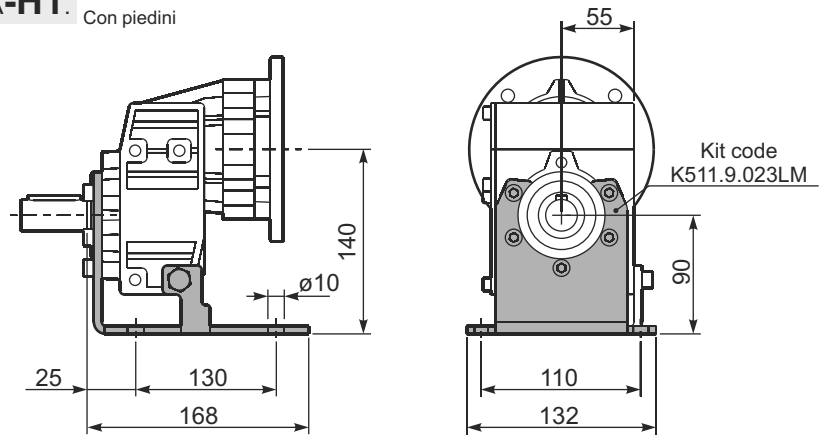
***Available output shaft** / Albero di uscita

	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

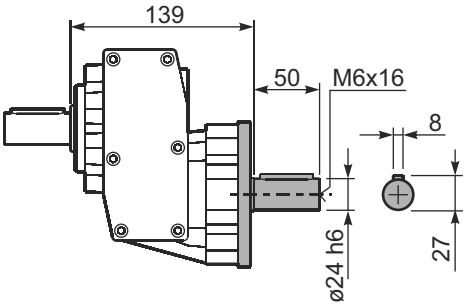
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	9	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3	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

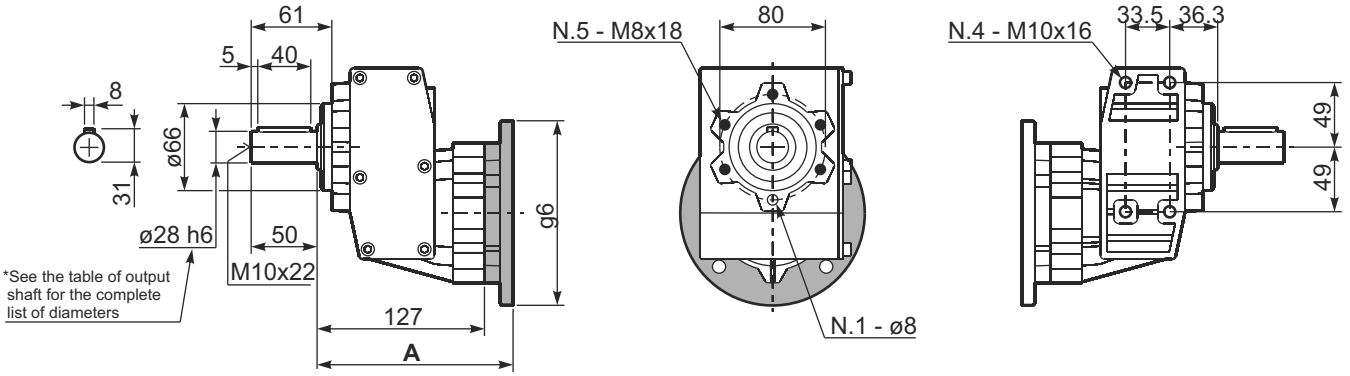
P511A-H1. With feet / Con piedini



R511A-N... Input Shaft / Albero in entrata



P511-N... Basic gearbox / Riduttore base



B5 Motor Flanges	A	g6	k1	kit code
71 B5	145	160	149.5	KC023.4.041
80/90 B5	147	200	151.5	KC023.4.042
100/112 B5	153	250	157.5	KC023.4.043
132 B5	175	300	188	KC50.4.043

B14 Motor Flanges	A	g6	k1	kit code
80 B14	145	120	149.5	KC085.4.046
90 B14	145	140	149.5	KC085.4.045
100/112 B14	145	160	149.5	KC085.4.047
132 B14	175	200	188	KC50.4.041

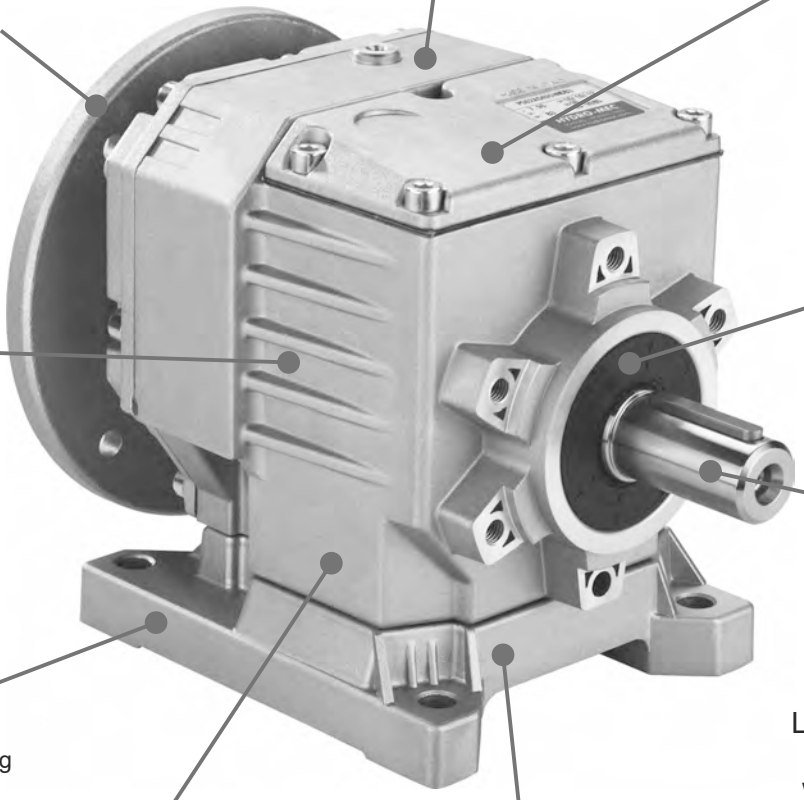
Aluminum in line gearboxes

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

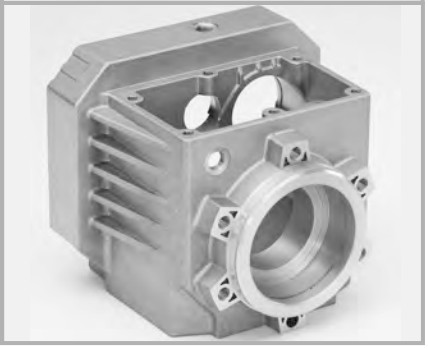


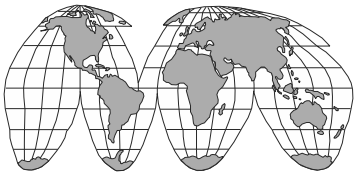
Single-piece aluminum alloy housing
Combines light weight with high tensile strength.
Precision machined for alignment of bearings and gearing











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

6-5	6-7	6-9	6-11	6-13	6-15	6-17	6-19	6-21
202A 70Nm	**302A** 120Nm	**402A** 160Nm	**403A** 160Nm	**452A** 300Nm	**502A** 350Nm	**503A** 350Nm	**602A** 520Nm	**603A** 520Nm



Types / Tipi
Tipen / Types
Tipos

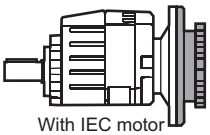
On page / A pagina / Auf Seite / À la page / En la página

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

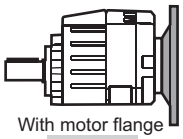
CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Type - Tipo - Typ Type - Tipo	**Size** - Grandezza - Grösse Taille - Tomaño	**Mounting** - Montaggio Montage - Fixation Tipo de montaje
P	**402A**	**-F**

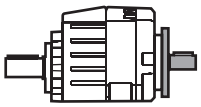
Aluminum coaxial gear boxes
Riduttori coassiali in alluminio



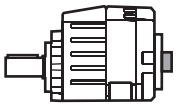
With IEC motor
M



With motor flange
P



With male input shaft
R



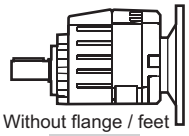
Modular base
B

2 Stages
Riduzioni
Stufen
Trains
Etapas

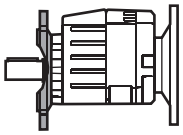
202A
302A
402A
452A
502A
602A

3 Stages
Riduzioni
Stufen
Trains
Etapas

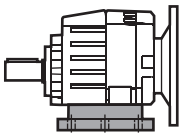
403A
503A
603A



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

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.

Ratio - Rapporto Untersetzung Reduction Relaciòn

7.33

See technical data table

Vedi tabelle dati tecnici

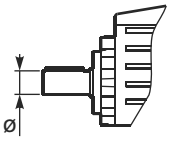
Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

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
G ⇨ ø28

402A 403A

S ⇨ ø14
B ⇨ ø16
C ⇨ ø19
D ⇨ ø20
E ⇨ ø24
V ➡ **ø25**

452A 502A 503A

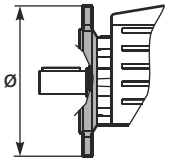
E ⇨ ø24
V ⇨ ø25
G ⇨ ø28
H ➡ **ø30**
I ⇨ ø35

602A 603A

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

402A 403A

1 ⇨ ø120
2 ➡ **ø140**
3 ⇨ ø160
4 ⇨ ø200
5 ⇨ ø250

452A 502A 503A

3 ⇨ ø160
4 ➡ **ø200**
5 ⇨ ø250

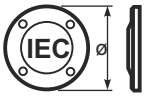
602A 603A

3 ⇨ ø160
4 ⇨ ø200
5 ➡ **ø250**

Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor

-C

Standard Flange Flangia Standard



B5	B14
-A=56 (ø120)	**-O**=56 (ø80)
-B=63 (ø140)	**-P**=63 (ø90)
-C=71 (ø160)	**-Q**=71 (ø105)
-D=80 (ø200)	**-R**=80 (ø120)
-E=90 (ø200)	**-T**=90 (ø140)
-F=100÷112 (ø250)	**-U**=100÷112 (ø160)
-G=132 (ø300)	**-V**=132 (ø200)

Type R / Tipo R



202A 403A	302A 402A 503A 603A
-1 ➡ ø14	**-2** ➡ ø19
452A 502A 602A	
-3 ➡ ø24	

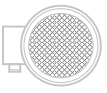
Without flange / Senza flangia



202A 403A	302A 402A 503A 603A
-Z ⇨ ø9 (56B5)	**-1** ⇨ ø14 (71B5)
-0 ⇨ ø11 (63B5)	**-2** ⇨ ø19 (80B5)
-1 ➡ ø14 (71B5)	**-3** ➡ ø24 (90B5)
452A 502A 602A	
-2 ⇨ ø19 (80B5)	
-3 ⇨ ø24 (90B5)	
-4 ➡ ø28 (100B5)	➡ **STANDARD**

Terminal box position Posizione morsettiera Klemmkastenlage Position boîte à bornes Posición caja de bornes

B



A



B **STANDARD**



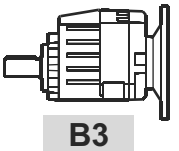
C



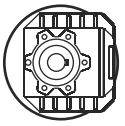
D

Mounting position Posizione montaggio Einbaulage Position de montage Position de montaje

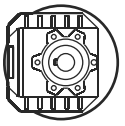
B3



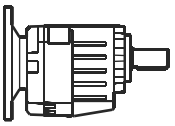
B3 **STANDARD**



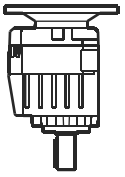
B6



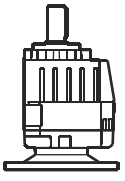
B7



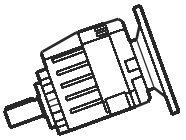
B8



V5



V6



V8

Specify only for vertical positions

Specificare solo per posizione verticale

6

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

402A 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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q		Output Shaft	Ratios code
							63	71*	56	63	71			
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**	22	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**	35	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	46	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	73	1.0	**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

6

EN Unit **202A** is supplied with synthetic oil for lifetime lubrification, 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.

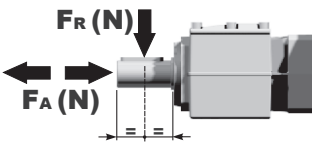
AGIP Telium VSF 320	**SHELL** Omala S4 WE 320

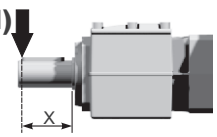
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{35.7}{X+20.7}$$



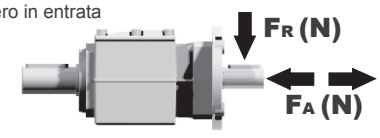


n_2	FA	FR
300	140	700
250	151	756
200	185	924

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

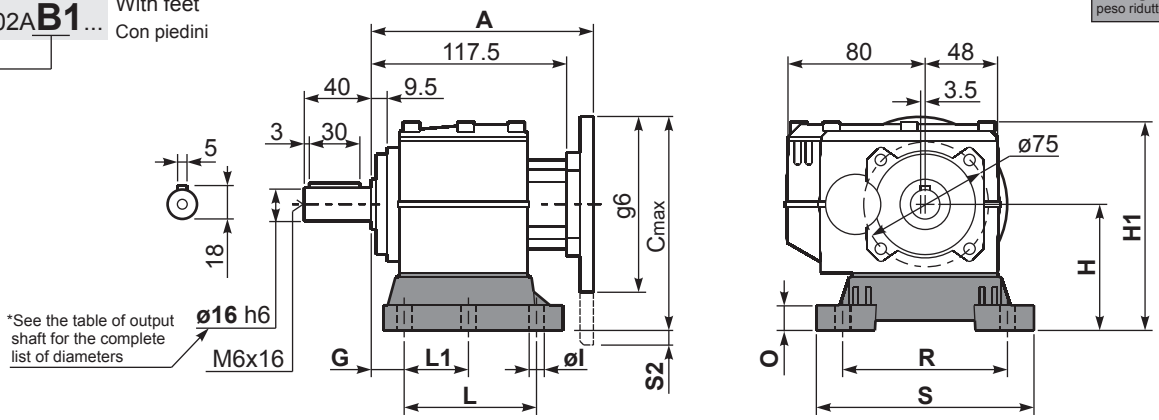


n_1	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

Gearbox weight peso riduttore	With flange **3.3 kg**
	With feet **3.7 Kg**

P202A**B1**... With feet
Con piedini



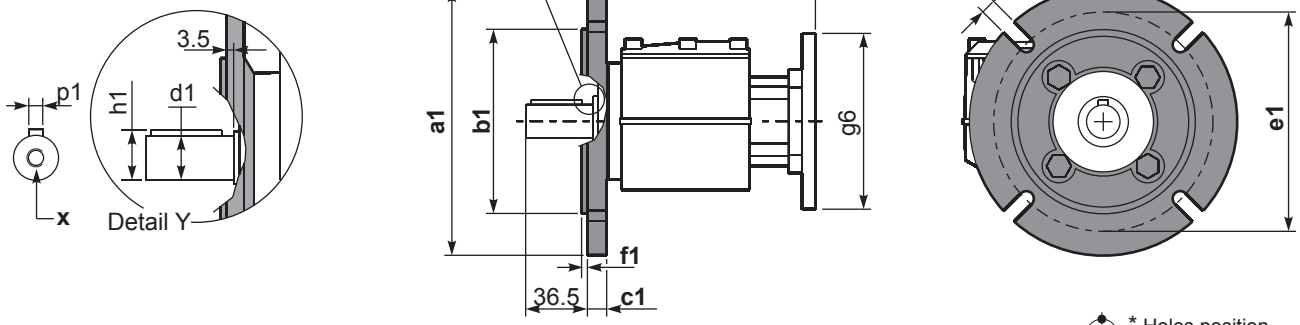
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	125	15	9	-	-	KC30.9.022
B2	212/3	18	100	130	107.5	60	155	145	5	11	-	-	KC30.9.023LM
S1	17-32	18	75	110	110	50	130	115.5	15	9	-	63B5	KC30.9.024
L3	03	12.5	65	91	60	-	105	149	5	9	11.5 71B5	-	KC30.9.026LM
L4	04	13	80	105	76	-	132	165	5	9	-	-	KC30.9.027LM

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

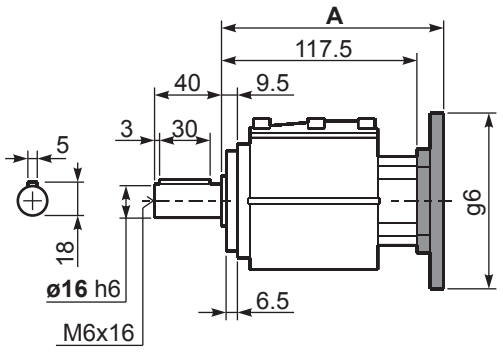
***Available output shaft** / Albero di uscita

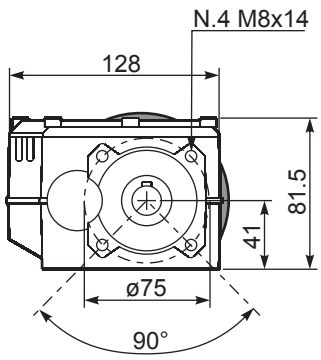
	Shaft - d1	p1	h1	x
Standard	ø 16x40	5	18	M6x16
On request A richiesta	ø 14x30	5	16	M6x16
	ø 20x40	6	22.5	M8x19
	ø 25x50	8	28	M8x19

Available output flanges / flange di uscita

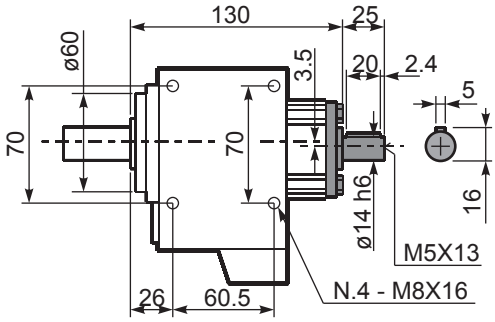
a1 ø	b1	c1	e1	f1	s1	kit code	
120	80	11.5	100	3	9*	KC30.9.010	With flange and feet only on request. Ask for compatibility
140	95	11.5	115	3	9	KC30.9.011	
160	110	11.5	130	3.5	9	KC30.9.012	
200	130	11.5	165	3.5	11	KC30.9.013	

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	133.2	170	140	136.7	K050.4.041
71 B5	131.2	180	160	134.7	K050.4.042

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
56 B14	132.7	139	80	136.2	KC40.4.049
63 B14	135.2	146	90	138.7	K050.4.047
71 B14	132.7	152.5	105	136.2	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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft ø	Ratios code
							63	71*	80*	90*	71	80	90			
407	**3.44**	1.5	34	1.0	**1.5**	**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	54	1.0	**1.4**	**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	94	1.2	**1.3**	**114**	B				C	C		1912	ø14	09
93	**15.10**	1.1	109	1.0	**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	ø20	12
66	**21.15**	0.75	104	1.1	**0.82**	**114**	B				C	C		1312	ø24	13
64	**21.84**	0.75	107	1.1	**0.83**	**119**	B				C	C		1015	ø25	14
53	**26.31**	0.55	95	1.1	**0.62**	**107**	B				C	C		1310	ø28	15
48.5	**28.88**	0.55	104	1.1	**0.60**	**114**	B				C	C		1012	On request	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	114	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 lubrification, 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

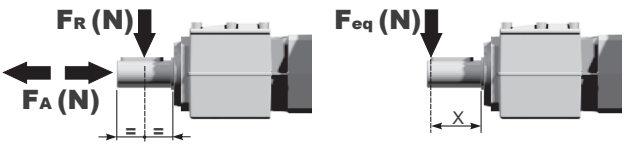
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

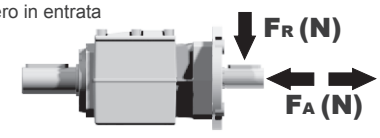
Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{35.7}{X+20.7}$$



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

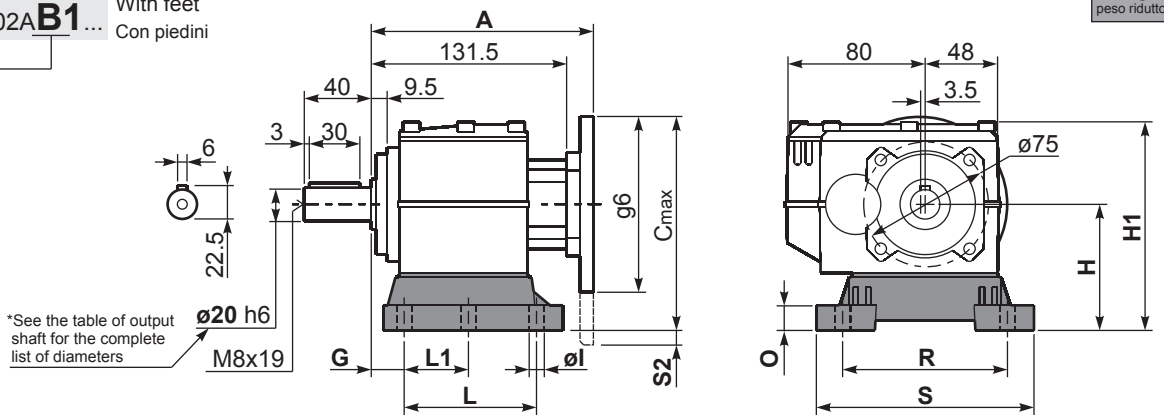


n_1	FA	FR
1400	226	1130
900	264	1320
500	322	1610

tab. 2

Gearbox weight peso riduttore	With flange **3.5 kg**
	With feet **4.0 Kg**

P302A**B1**... With feet
Con piedini



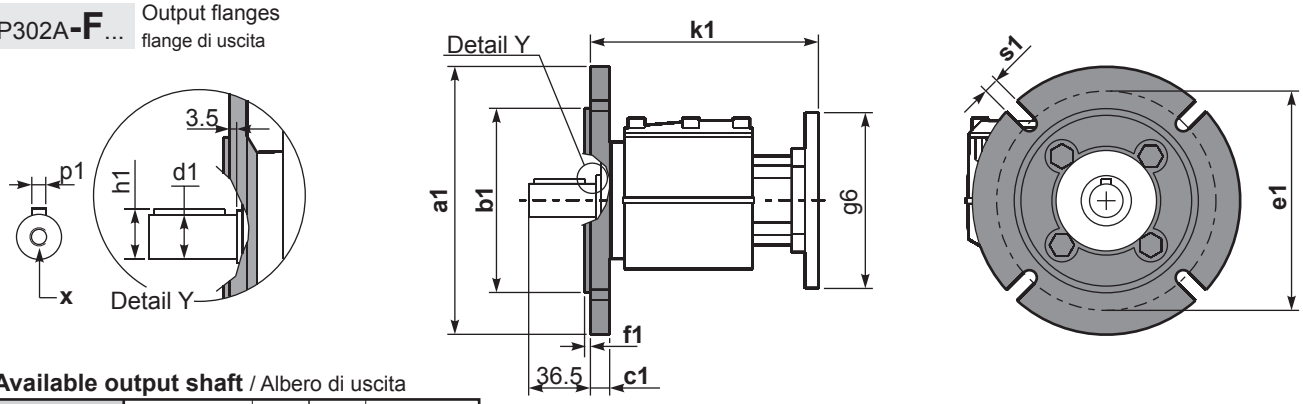
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	125	15	9	15 80/90B5	-	KC30.9.022
B2	212/3	18	100	130	107.5	60	155	145	5	11	3.5 80/90B5	-	KC30.9.023LM
S1	17-32	18	75	110	110	50	130	115.5	15	9	5 71B5	71B5	KC30.9.024
S2	27	25	90	110	130	-	130	135	5	9	-	71B5	KC30.9.025LM
L3	03	12.5	65	91	60	-	105	149	5	9	31.5 80/90B5	-	KC30.9.026LM
L4	04	13	80	105	76	-	132	165	5	9	16.5 80/90B5	-	KC30.9.027LM

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

P302A-**F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

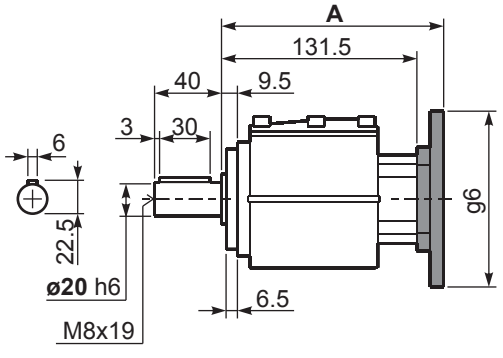
	Shaft - d1	p1	h1	x
Standard	ø 20x40	6	22.5	M8x19
On request A richiesta	ø 14x30	5	16	M6x16
	ø 16x40	5	18	M6x16
	ø 19x40	6	21.5	M6x16
	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x50	8	31	M8x19

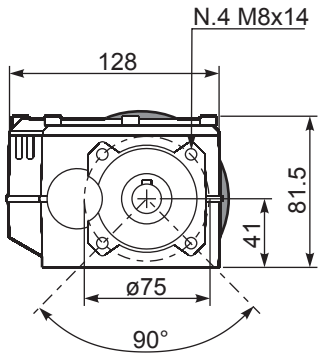
* Holes position
Posizione fori

Available output flanges / flange di uscita

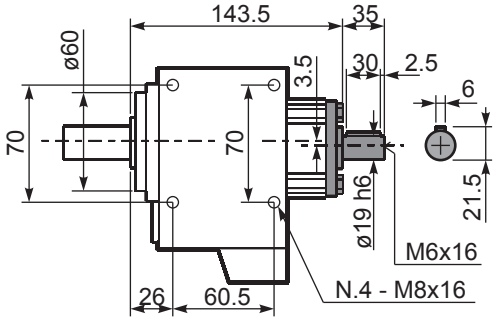
a1 ø	b1	c1	e1	f1	s1	kit code	
120	80	11.5	100	3	9*	KC30.9.010	With flange and feet only on request. Ask for compatibility
140	95	11.5	115	3	9	KC30.9.011	
160	110	11.5	130	3.5	9	KC30.9.012	
200	130	11.5	165	3.5	11	KC30.9.013	

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	152.2	180	160	155.7	K063.4.042
80/90 B5	151.2	200	200	154.7	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	150.7	160	120	154.2	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	C	D	E	F	Available B14 motor flanges Q	R	T	U		Output Shaft	Ratios code
							63	71	80*	90*	100* 112	71	80	90	100 112			
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
177	**7.89**	2.2	114	1.1	2.3	120	B					C	C			1918		06
139	**10.06**	2.2	145	1.0	2.3	150	B					C	C			1913		08
120	**11.66**	1.5	114	1.5	2.3	174	B					C	C			1713	**standard ø25**	09
106	**13.26**	1.5	130	1.2	1.8	160	B					C	C			1912		10
102	**13.68**	1.5	134	1.1	1.6	144	B					C	C			1513		25
91	**15.37**	1.5	151	1.1	1.6	160	B					C	C			1712	ø14	11
86	**16.20**	1.5	159	0.9	1.3	138	B					C	C			1910	ø16	12
78	**18.04**	1.5	177	0.9	1.4	160	B					C	C			1512	ø19	23
74	**18.80**	1.1	135	1.0	1.1	138	B					C	C			1710	ø20	24
65	**21.54**	1.1	155	1.0	1.1	160	B					C	C			1312	ø24	14
63	**22.29**	1.1	161	1.0	1.1	167	B					C	C			1013	On request	15
53	**26.30**	0.75	129	1.1	0.80	138	B					C	C			1310		16
47.6	**29.40**	0.75	144	1.1	0.83	160	B					C	C			1012		17
39	**35.91**	0.55	129	1.1	0.59	138	B					C	C			1010		18
36.5	**38.37**	0.55	138	1.2	0.64	160	B					C	C			912		19
29.9	**46.86**	0.55	169	0.8	0.45	138	B					C	C			910		20
27.6	**50.67**	0.37	123	1.1	0.40	132	B					C	C			712		21
22.6	**61.88**	0.37	150	0.9	0.34	138	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

6

EN Unit **402A** is supplied with synthetic oil for lifetime lubrification, 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 **402A** 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 **402A** 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 **402A** 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.

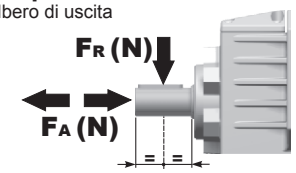
E El reductor tamaño **402A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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	0.30 LT	0.40 LT	0.40 LT	0.40 LT	0.50 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

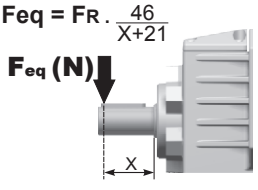
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

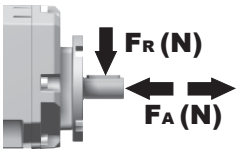


$F_{eq} = F_R \cdot \frac{46}{X+21}$



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

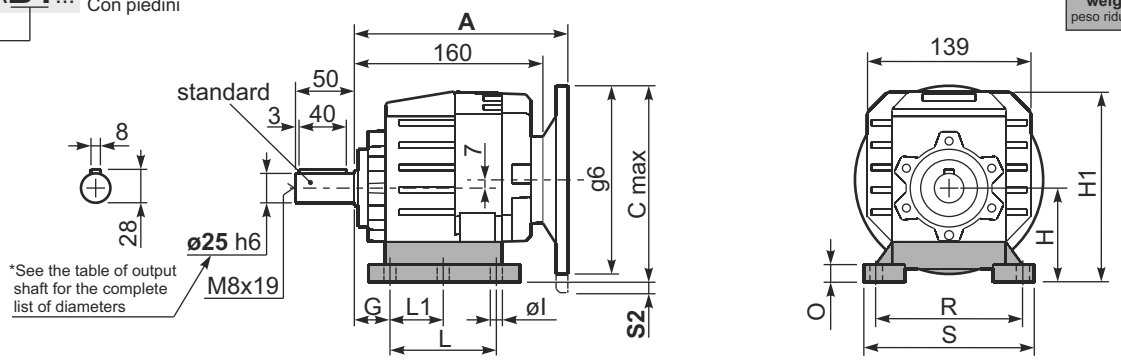


n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

P402A**B1**... With feet
Con piedini

Gearbox weight peso riduttore	With flange **5.7 kg**
	With feet **5.9 Kg**



Feet / piedini

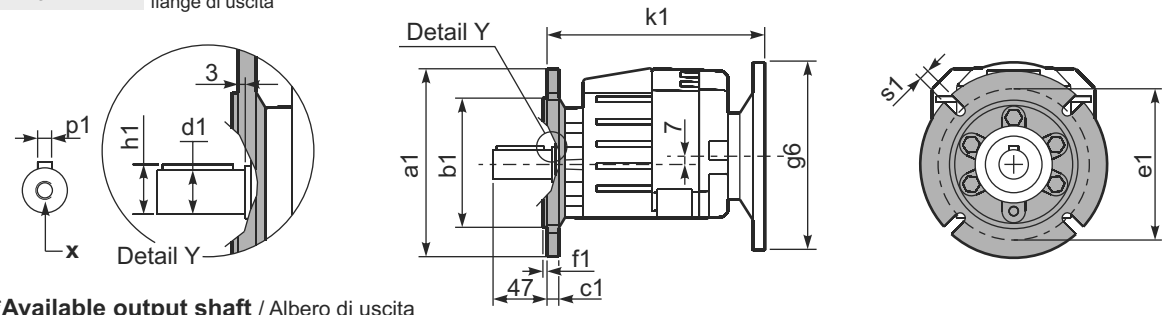
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167	15	-	8 80/90B5 33 100/112B5	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182	17	11	18 100/112B5	-	KC40.9.025
S1	17	18	75	110	90÷110	50	145	155	15	9	18 80/90B5 43 100/112B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172	20	9	3 80/90B5 28 100/112B5	-	KC40.9.024
H2	022-223	25	100	110	115	-	145	182	20	9	18 100/112B5	-	KC40.9.026
M1	42/3	25	80	110÷120	85	-	145	162	15	9	13 80/90B5 38 100/112B5	-	KC40.9.023
L4	04	13	80	105	76	-	132	162	5	10	13 80/90B5 38 100/112B5	-	KC35.9.023LM
L5	05	16	100	125	90	-	150	182	6	12	18 100/112B5	-	KC40.9.027LM

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

P402A**-F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

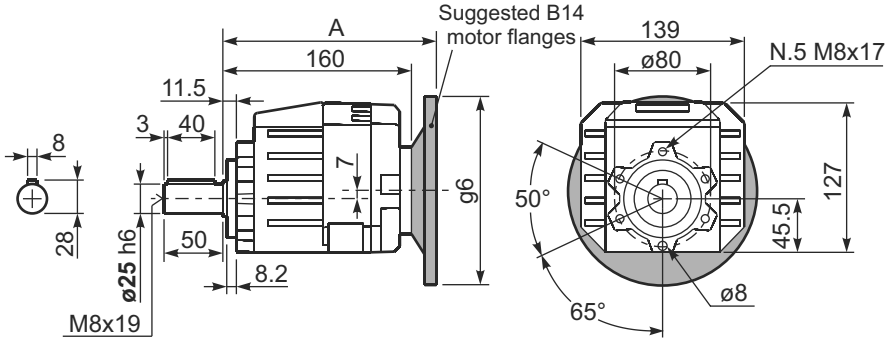
	Shaft - d1	p1	h1	x
Standard	ø 25x50	8	28	M8x19
On request A richiesta	ø 14x40	5	16	M5x13
	ø 16x40	5	18	M6x16
	ø 19x40	6	21.5	M6x16
	ø 20x40	6	22.5	M8x19
	ø 24x50	8	27	M8x19

Available output flanges / flange di uscita

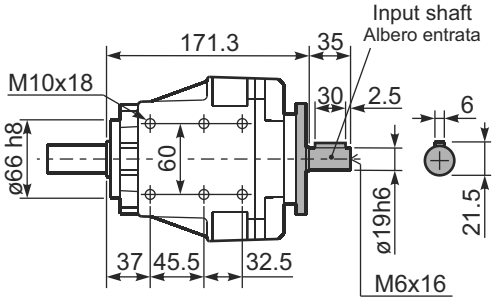
a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	9	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3	9	KC40.9.012
200	130	11	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014

With flange and feet only on request. Ask for compatibility

P402A**-N**... Basic gearbox
Riduttore base



R402A**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
63 B5	180.5	177	140	183.5	K063.4.041
71 B5	178.5	187	160	181.5	K063.4.042
80/90 B5	180.5	207	200	183.5	K063.4.043
100/112 B5	196.5	232	250	199.5	KC40.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B14	178.5	159.5	105	181.5	K063.4.047
80 B14	179.5	167	120	182.5	K063.4.046
90 B14	180.5	177	140	183.5	K063.4.041
100/112 B14	196.5	187	160	199.5	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	90	1.9	**0.72**	**175**			C	C		171713		02
32.0	**43.69**	0.37	103	1.5	**0.54**	**149**			C	C		191712		03
27.6	**50.64**	0.37	119	1.3	**0.50**	**160**			C	C		171712		04
26.2	**53.36**	0.37	125	1.1	**0.41**	**138**			C	C		191710		05
22.9	**61.22**	0.37	144	1.1	**0.41**	**160**			C	C		191312	**standard ø25**	06
22.6	**61.90**	0.37	146	0.9	**0.35**	**138**			C	C		171710		07
19.7	**70.95**	0.37	167	1.0	**0.36**	**160**			C	C		131712		08
19.1	**73.43**	0.37	172	1.0	**0.38**	**175**			C	C		101713	ø14	09
18.8	**74.77**	0.25	118	1.2	**0.29**	**138**			C	C		191310	ø16	10
16.1	**86.66**	0.25	138	1.0	**0.25**	**138**			C	C		131710	ø19	11
14.5	**96.85**	0.25	154	1.0	**0.26**	**160**			C	C		101712	ø20	12
13.6	**102.89**	0.25	163	1.1	**0.28**	**180**			C	C		101313	ø24	13
11.1	**126.40**	0.25	200	0.8	**0.20**	**160**			C	C		91712	On request	17
10.3	**135.69**	0.25	215	0.7	**0.19**	**160**			C	C		101312		15
8.5	**165.70**	0.12	126	1.1	**0.13**	**138**			C	C		101310		16
7.9	**177.09**	0.12	135	1.2	**0.14**	**160**			C	C		91312		18
6.5	**216.30**	0.12	164	0.8	**0.10**	**138**			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 **403A** is supplied with synthetic oil for lifetime lubrification, 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 **403A** 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 **403A** 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 **403A** 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.

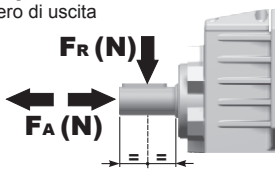
E El reductor tamaño **403A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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

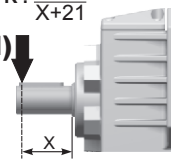
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

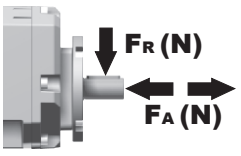


$$Feq = FR \cdot \frac{46}{X+21}$$



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

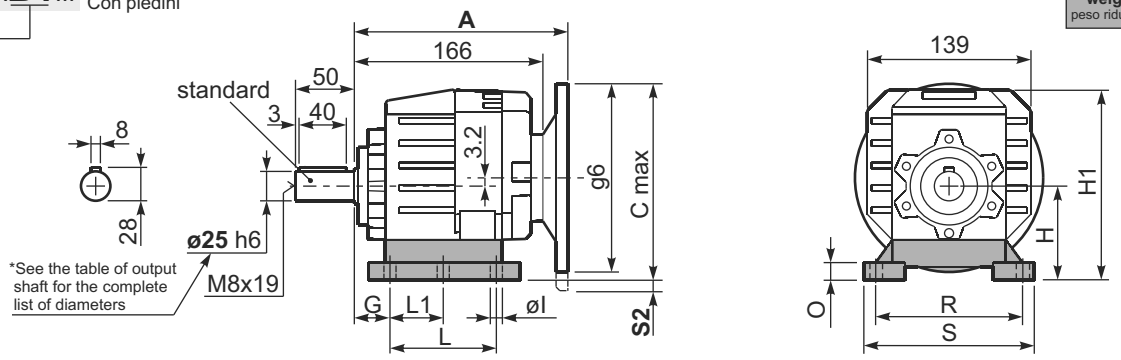


n_1	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

P403A**B1**... With feet
Con piedini

Gearbox weight peso riduttore	With flange **6.1 kg**
	With feet **6.3 Kg**



Feet / piedini

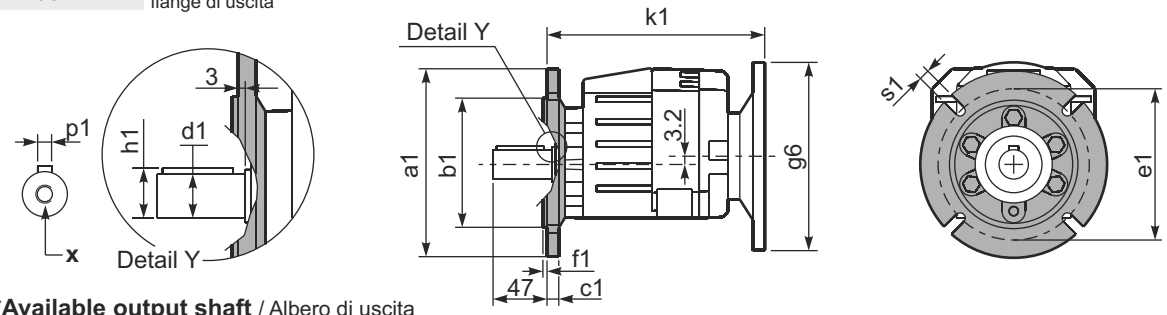
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167	15	-	-	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182	17	11	-	-	KC40.9.025
S1	17	18	75	110	90÷110	50	145	155	15	9	2 80/90B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172	20	9	-	-	KC40.9.024
H2	022-223	25	100	110	115	-	145	182	20	9	-	-	KC40.9.026
M1	42/3	25	80	110÷120	85	-	145	162	15	9	-	-	KC40.9.023
L4	04	13	80	105	76	-	132	162	5	10	-	-	KC35.9.023LM
L5	05	16	100	125	90	-	150	182	6	12	-	-	KC40.9.027LM

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

P403A**-F**... Output flanges
flange di uscita



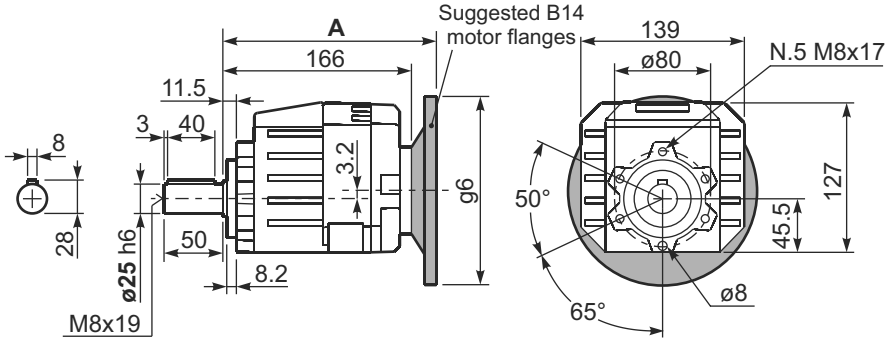
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 25x50	8	28	M8x19
On request A richiesta	ø 14x40	5	16	M5x13
	ø 16x40	5	18	M6x16
	ø 19x40	6	21.5	M6x16
	ø 20x40	6	22.5	M8x19
	ø 24x50	8	27	M8x19

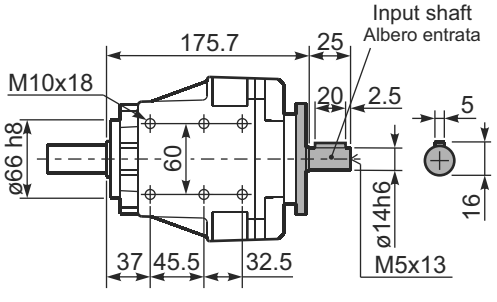
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	
120	80	10	100	3	9	KC40.9.010	With flange and feet only on request. Ask for compatibility
140	95	10	115	3	9	KC40.9.011	
160	110	10	130	3	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	

P403A**-N**... Basic gearbox
Riduttore base



R403A**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
63 B5	182.5	173.2	140	185.5	K050.4.041
71 B5	180.5	183.2	160	183.5	K050.4.042

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
56 B14	186.5	143.2	80	189.5	KC40.4.049
63 B14	181.5	148.2	90	184.5	K050.4.047
71 B14	182	155.7	105	185	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	Ratios code
388	**3.61**	4	95	1.6	6.3	150	B									3018		01
331	**4.23**	4	111	1.5	6.1	170	B									3016		02
279	**5.01**	4	131	1.5	6.1	200	B									3014		03
231	**6.07**	4	159	1.6	6.3	250	B									3012		04
206	**6.81**	4	178	1.6	6.2	277	B									2018		05
176	**7.96**	4	209	1.4	5.8	300	B									2016	**standard ø30**	06
148	**9.45**	4	248	1.2	4.9	304	B									2014		07
122	**11.43**	4	299	1.0	4.0	300	B									2012		08
99	**14.21**	3	279	0.9	2.8	265	B									2010	ø24	09
84	**16.62**	3	327	0.9	2.8	304	B									1314	ø25	10
70	**20.10**	2.2	290	1.0	2.3	300	B									1312	ø28	11
56	**24.98**	1.85	303	0.9	1.6	265	B									1310	ø35	12
47.6	**29.41**	1.5	289	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	292	1.0	1.1	290	B									614		15
31.7	**44.22**	1.1	319	0.8	0.92	265	B									810		16
28.6	**49.00**	0.75	241	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

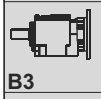
EN Unit **452A** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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

F_{eq} (N)

F_R (N)

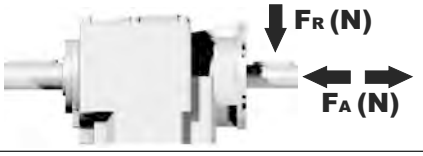
F_A (N)

$Feq = F_R \cdot \frac{51}{X+21}$



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

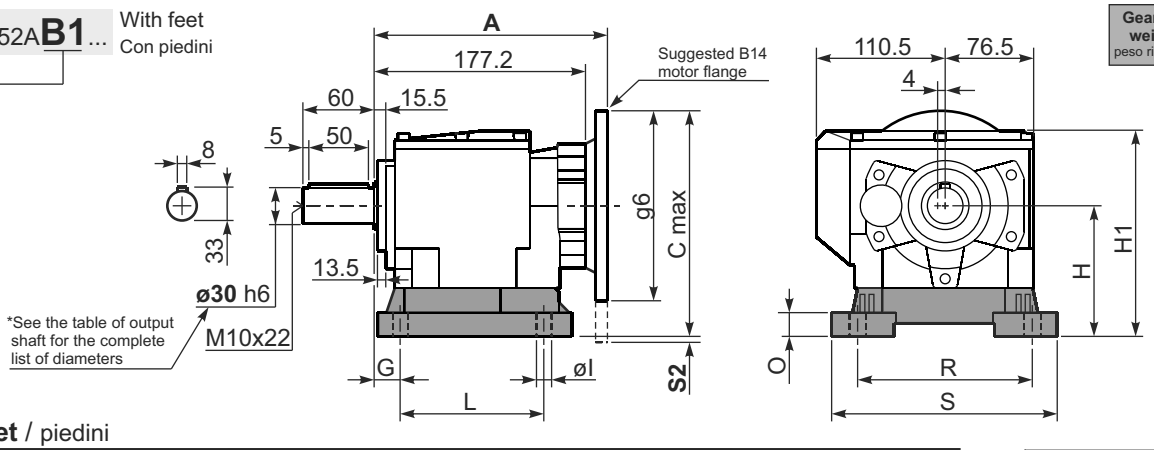
Input shaft / Albero in entrata



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

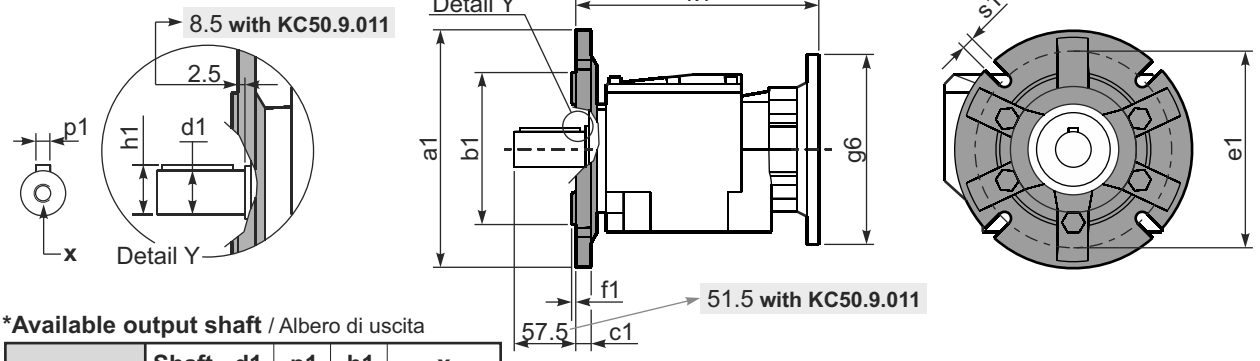
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	162	20	11	15 100/112B5 40 132B5	-	KC50.9.024
B4	30/35	20	130	180	149.5	216	182	18	14	20 132B5	-	KC60.9.024
S4	47-57	30	115	135	165	170	167	24	13.5	-	80/90B5	KC50.9.022
H3	023-233	30	130	135	135	185	231.5	25	14	20 132B5	-	KC50.9.025
M2	52/3	30	110	135÷150	100	190	162	18	11	15 100/112B5 40 132B5	-	KC50.9.023
L6	06	19	125	160	106	205	177	8	14	25 132B5	-	KC50.9.026LM
E2	2202/3	13	100	135	192	164	152	6	14	-	71B5	KC50.9.027LM
P4	142	35	142	130	145	160	194	8	14	8 132B5	-	KC50.9.028LM

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



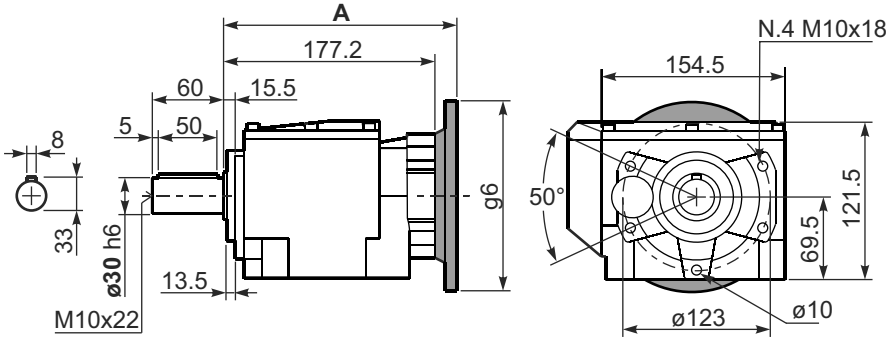
***Available output shaft** / Albero di uscita

	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

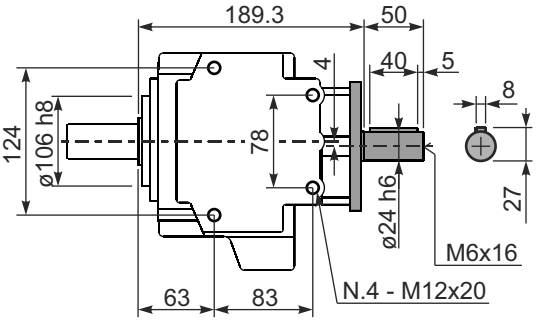
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	
160	110	14	130	3.5	9	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	

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	KC023.4.041	204.2
80/90 B5	197.7	242	200	200.2	KC023.4.042	206.2
100/112 B5	203.7	267	250	206.2	KC023.4.043	212.2
132 B5	225.2	292	300	227.7	KC50.4.043	233.7

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
80 B14	195.7	202	120	198.2	KC085.4.046	204.2
90 B14	195.7	212	140	198.2	KC085.4.045	204.2
100/112 B14	206.7	222	160	209.2	KC085.4.047	215.2
132 B14	225.2	242	200	227.7	KC50.4.041	233.7



▪ 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	Ratios code
388	**3.61**	5.5	130	1.2	6.3	150	B									3018		01
331	**4.23**	5.5	152	1.1	6.1	170	B									3016		02
279	**5.01**	5.5	180	1.1	6.1	200	B									3014		03
231	**6.07**	5.5	219	1.1	6.3	250	B									3012		04
206	**6.81**	5.5	245	1.2	6.7	300	B									2018		05
176	**7.96**	5.5	287	1.2	6.3	330	B									2016		07
148	**9.45**	5.5	340	1.0	5.7	354	B									2014	**standard ø30**	08
122	**11.43**	4	299	1.1	4.4	326	B									2012		09
99	**14.21**	3	279	0.9	2.7	250	B									2010		10
84	**16.62**	3	327	1.1	3.3	354	B									1314	ø24	11
70	**20.10**	2.2	290	1.1	2.5	326	B									1312	ø25	12
57	**24.61**	2.2	354	0.9	2.0	326	B									1112	ø28	20
56	**24.98**	1.5	245	1.0	1.5	250	B									1310	ø35	13
47.6	**29.41**	1.5	289	1.2	1.8	354	B									814	On request	14
39.3	**35.58**	1.5	349	0.9	1.4	326	B									812		15
34.6	**40.50**	1.1	292	1.0	1.1	295	B									614		16
31.7	**44.23**	1.1	319	0.8	0.86	250	B									810		17
28.6	**49.00**	1.1	353	0.9	1.0	326	B									612		18
23.0	**60.90**	0.75	299	0.8	0.63	250	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 **502A** is supplied with synthetic oil for lifetime lubrification, 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 **502A** 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 **502A** 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 **502A** 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 **502A** 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**
0.45 LT	0.55 LT	1.00 LT	1.10 LT	1.10 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

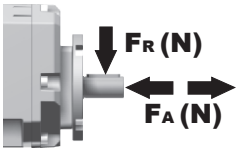
Output shaft
Albero di uscita

$F_{eq} = F_R \cdot \frac{54}{X+24}$



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

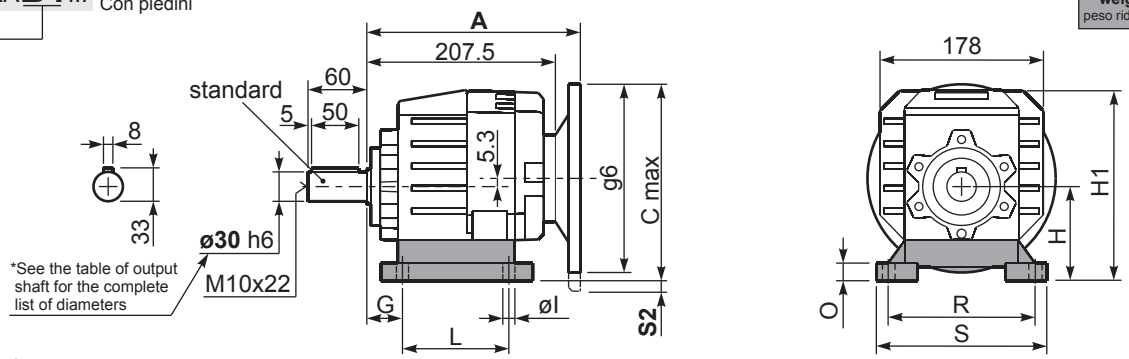


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P502A**B1**... With feet
Con piedini

Gearbox weight peso riduttore: With flange **11.7 kg**, With feet **11.9 Kg**



Feet / piedini

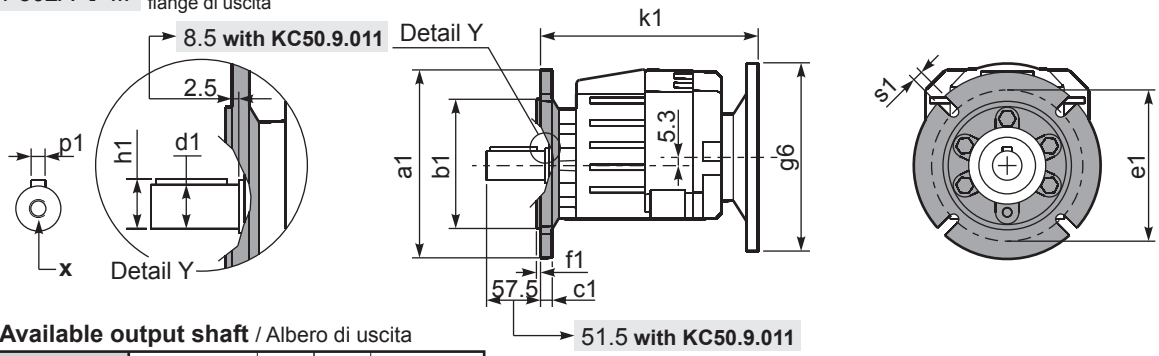
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	211.5	20	11	10 100/112B5 35 132B5	-	KC50.9.024
B4	30/35	20	130	180	149.5	216	231.5	18	14	15 132B5	-	KC60.9.024
S4	47-57	30	115	135	165	170	216.5	24	13.5	5 100/112B5 30 132B5	-	KC50.9.022
H3	023-233	30	130	135	135	185	231.5	25	14	15 132B5	-	KC50.9.025
M2	52/3	30	110	135÷150	100	190	226.5	18	11	10 100/112B5 35 132B5	-	KC50.9.023
L6	06	19	125	160	106	205	201.5	8	14	20 132B5	-	KC50.9.026LM
E2	2202/3	13	100	135	192	164	201.5	6	14	20 100/112B5 45 132B5	-	KC50.9.027LM
P4	142	35	142	130	145	160	243.5	8	14	3 132B5	-	KC50.9.028LM

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

P502A-**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

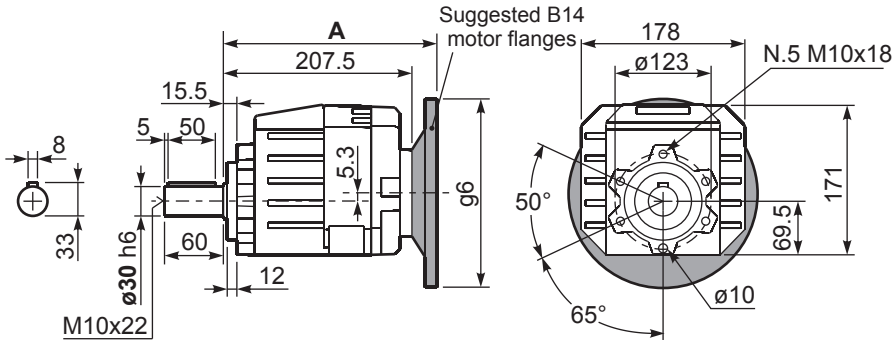
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

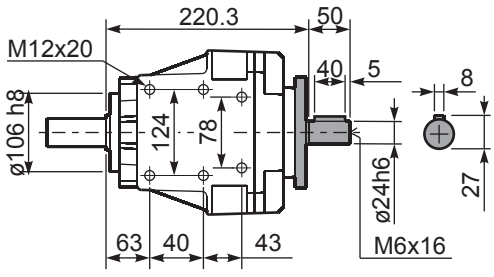


With flange and feet only on request. Ask for compatibility

P502A-**N**... Basic gearbox
Riduttore base



R502A-**N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
71 B5	226	227.3	160	228.5	KC023.4.041	234.5
80/90 B5	228	247.3	200	230.5	KC023.4.042	236.5
100/112 B5	234	272.3	250	236.5	KC023.4.043	242.5
132 B5	257	297.3	300	264	KC50.4.043	265.5

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
80 B14	226	207.3	120	228.5	KC085.4.046	234.5
90 B14	226	217.3	140	228.5	KC085.4.045	234.5
100/112 B14	240.7	227.3	160	243.2	KC085.4.047	249.2
132 B14	257	247	200	264	KC50.4.041	265.5

▪ 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 B	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft ø	Ratios code
							63	71	80	90	71	80	90			
35.2	**39.79**	1.1	278	1.3	**1.5**	373	B				C	C		191316		01
29.6	**47.22**	1.1	330	1.1	**1.2**	354	B				C	C		191314		02
25.6	**54.73**	1.1	382	0.9	**1.0**	354	B				C	C		171314		03
21.1	**66.22**	0.75	315	1.0	**0.78**	326	B				C	C		171312		04
18.3	**76.69**	0.75	365	1.0	**0.73**	354	B				C	C		131314		05
16.7	**83.59**	0.55	292	1.2	**0.67**	354	B				C	C		190814	**standard ø30**	06
15.1	**92.78**	0.55	324	1.0	**0.55**	326	B				C	C		131312		07
13.4	**104.67**	0.55	365	1.0	**0.53**	354	B				C	C		101314		08
11.9	**117.22**	0.37	275	1.2	**0.44**	326	B				C	C		170812	ø24	09
11.1	**126.65**	0.37	297	1.1	**0.41**	326	B				C	C		101312	ø25	10
10.2	**136.62**	0.37	321	1.1	**0.41**	354	B				C	C		91314	ø28	11
8.5	**165.29**	0.25	262	1.2	**0.31**	326	B				C	C		91312	ø35	12
7.8	**180.40**	0.25	286	1.2	**0.31**	354	B				C	C		71314	On request	13
6.4	**218.26**	0.25	346	0.9	**0.24**	326	B				C	C		71312		14
5.8	**241.82**	0.25	384	0.9	**0.23**	354	B				C	C		90814		15
4.8	**292.57**	0.18	334	1.0	**0.18**	326	B				C	C		90812		16
4.4	**319.32**	0.18	365	1.0	**0.17**	354	B				C	C		70814		17
3.6	**386.33**	0.18	441	0.7	**0.13**	326	B				C	C		70812		18
2.9	**480.16**	0.18	548	0.5	**0.08**	250	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 **503A** is supplied with synthetic oil for lifetime lubrification, 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 **503A** 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 **503A** 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 **503A** 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.

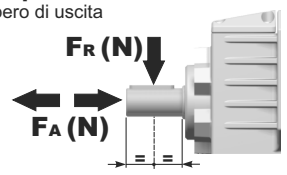
E El reductor tamaño **503A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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**
0.75 LT	0.75 LT	1.05 LT	1.15 LT	1.20 LT	1.20 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

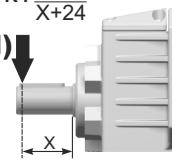
For all details on lubrication and plugs check our website Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web **tab. 1**

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

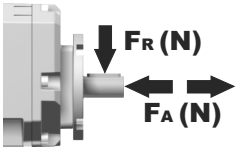


$$Feq = FR \cdot \frac{54}{X+24}$$



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

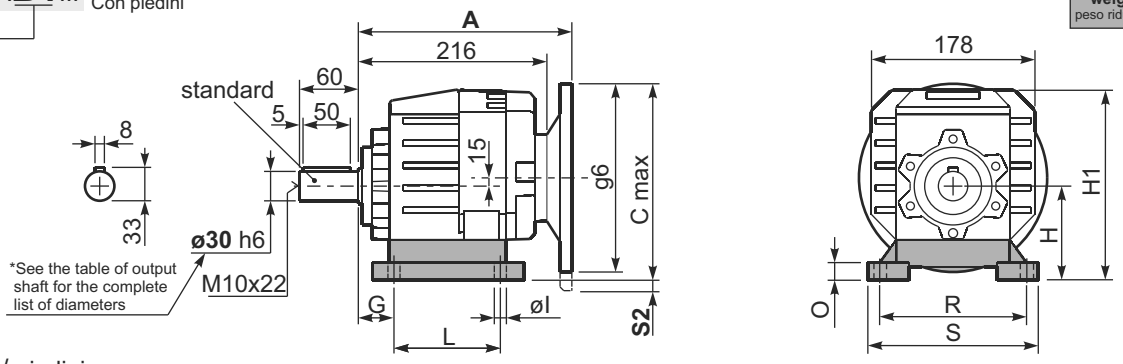


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P503A**B1**... With feet
Con piedini

Gearbox weight peso riduttore: With flange **11.9 kg** / With feet **12.1 Kg**



Feet / piedini

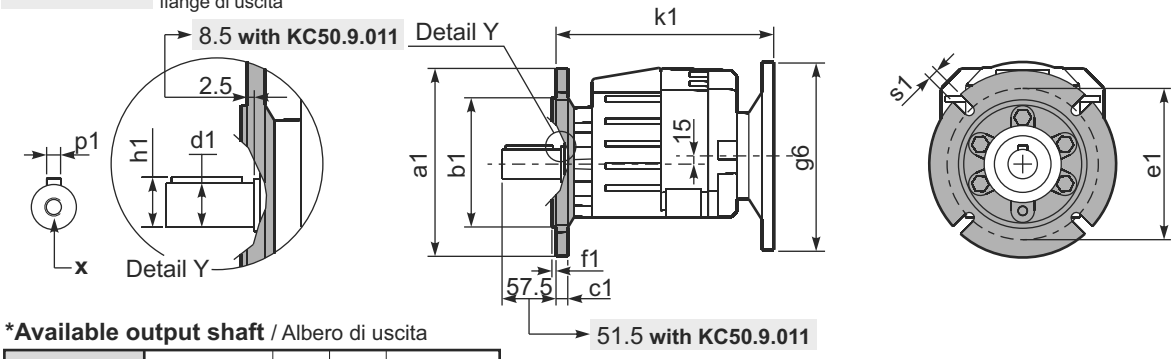
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	211.5	20	11	-	-	KC50.9.024
B4	30/35	20	130	180	149.5	216	231.5	18	14	-	-	KC60.9.024
S4	47-57	30	115	135	165	170	216.5	24	13.5	-	-	KC50.9.022
H3	023-233	30	130	135	135	185	231.5	25	14	-	-	KC50.9.025
M2	52/3	30	110	135÷150	100	190	226.5	18	11	-	-	KC50.9.023
L6	06	19	125	160	106	205	201.5	8	14	-	-	KC50.9.026LM
E2	2202/3	13	100	135	192	164	201.5	6	14	-	-	KC50.9.027LM
P4	142	35	142	130	145	160	243.5	8	14	-	-	KC50.9.028LM

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

P503A**-F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

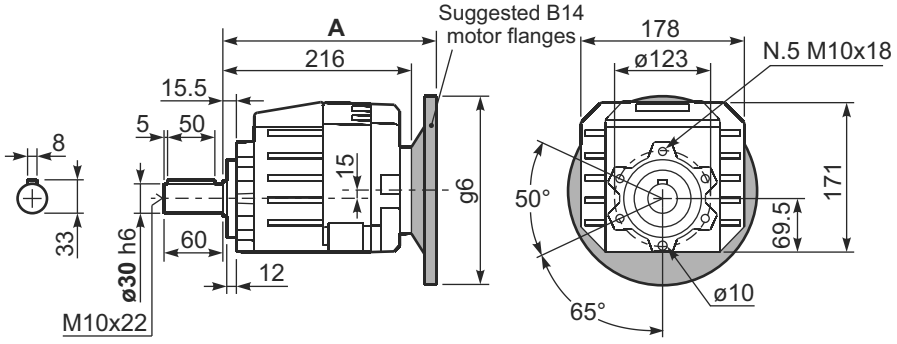
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x60	8	31	M8x19
	ø 35x60	10	38	M10x22

Available output flanges / flange di uscita

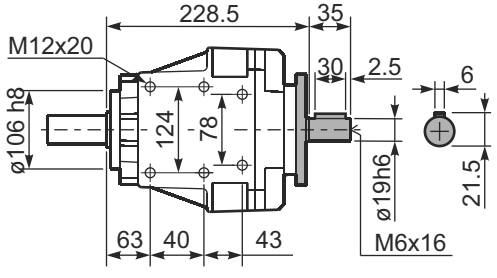
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P503A**-N**... Basic gearbox
Riduttore base



R503A**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
63 B5	236.5	227	140	239	K063.4.041	245
71 B5	234.5	237	160	237	K063.4.042	243
80/90 B5	236.5	257	200	239	K063.4.043	245

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
71 B14	234.5	209.5	105	237	K063.4.047	243
80 B14	235.5	217	120	238	K063.4.046	244
90 B14	236.5	227	140	239	K063.4.041	245



▪ 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
388	**3.61**	7.5	171	1.1	**7.6**	**180**	B									3018		01
331	**4.23**	7.5	200	1.1	**8.0**	**220**	B									3016		02
279	**5.01**	7.5	238	1.1	**7.9**	**260**	B									3014		03
231	**6.07**	7.5	288	1.0	**7.6**	**300**	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	**6.5**	**400**	B									2014	**standard ø35**	08
122	**11.43**	5.5	401	1.0	**5.5**	**415**	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	11
70	**20.10**	4	515	1.0	**4.0**	**520**	B									1312	ø30	12
57	**24.61**	3	475	1.1	**3.2**	**520**	B									1112	ø38	20
47.6	**29.41**	2.2	418	1.1	**2.3**	**450**	B									814	ø40	14
39.3	**35.58**	1.85	431	1.2	**2.2**	**520**	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**	**400**	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**	**400**	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 **602A** is supplied with synthetic oil for lifetime lubrification, 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 **602A** 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 **602A** 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 **602A** 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 **602A** 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.

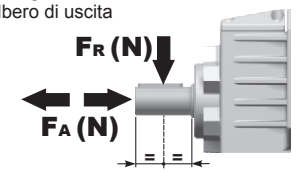
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	 **B6**	 **B7**	 **B8**	 **V5**	 **V6**	 **V8**
0.55 LT	0.85 LT	1.10 LT	1.20 LT	1.20 LT	1.25 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

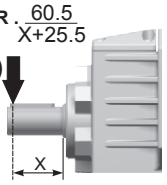
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{60.5}{X+25.5}$$



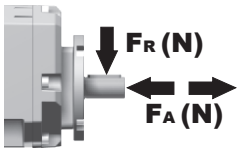


n_2	FA	FR
300	560	2800
250	600	3000
200	640	3200

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

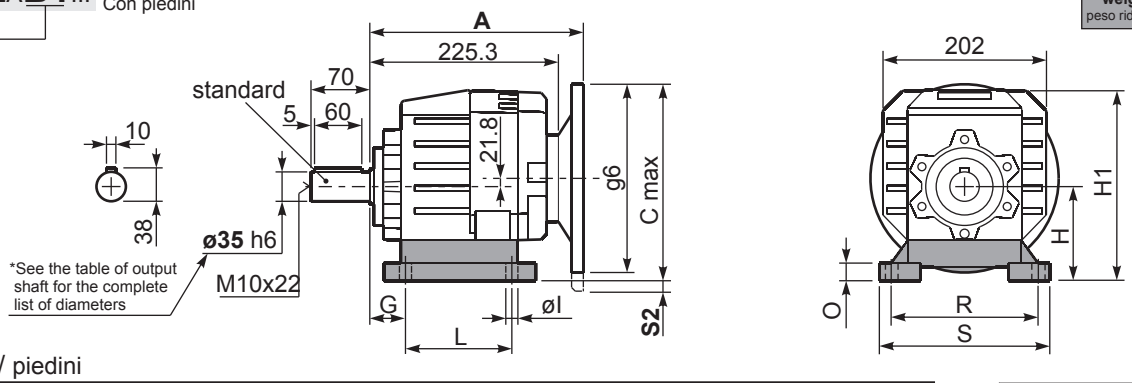


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

P602A**B1**... With feet
Con piedini

Gearbox weight peso riduttore	
With flange	**14.1 kg**
With feet	**14.5 kg**



Feet / piedini

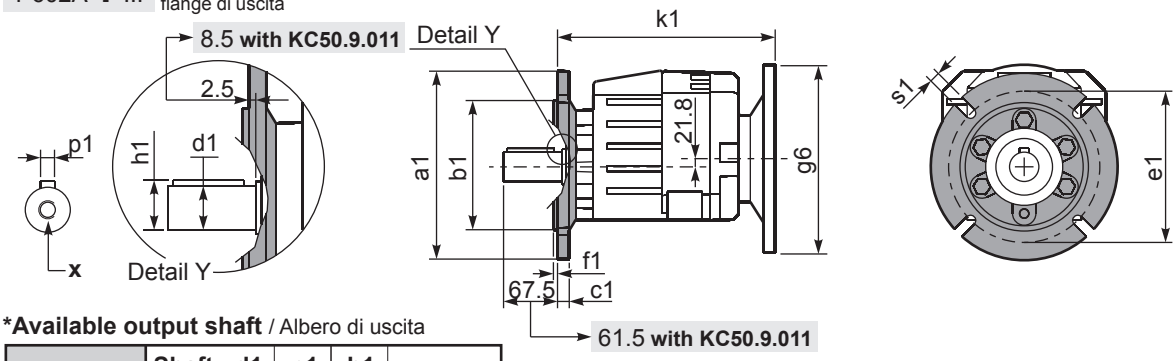
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B4	412/3	20	130	180	149.5	216	233	18	14	-	-	KC60.9.024
S4	47-57	30	115	135	165	170	218	24	13.5	13 132B5	-	KC50.9.022
M3	62/3	35	120	170÷185	110	230	223	20	14	8 132B5	-	KC60.9.023
S7	77	35	140	170	205	204	243	8	14	-	-	KC60.9.029LM
H4	024-243	35	155	170	150	225	258	30	14	-	-	KC60.9.025
L6	06	19	125	160	106	205	228	8	14	3 132B5	-	KC50.9.026LM
E3	2302/3	19.5	125	170	240	205	228	8	14	-	100/112B5	KC60.9.026LM
P6	162	40	162	160	205	200	265	8	14	-	-	KC60.9.027LM
B5	352/3	23.5	115	170	130	205	218	8	14	13 132B5	-	KC60.9.021LM

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

P602A**-F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

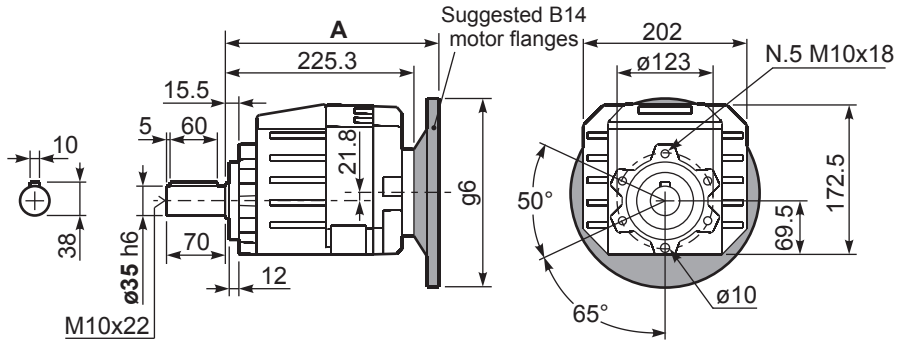
	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 28x60	8	31	M8x20
	ø 30x60	8	33	M10x22
	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M12x28

Available output flanges / flange di uscita

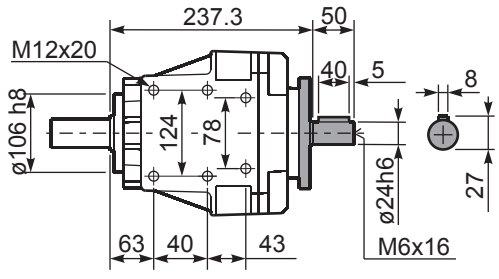
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P602A**-N**... Basic gearbox
Riduttore base



R602A**-N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	**k1** with KC50.9.011
71 B5	243.8	263.8	160	246.3	KC023.4.041	252.3
80/90 B5	245.8	283.8	200	248.3	KC023.4.042	254.3
100/112 B5	251.8	308.8	250	254.3	KC023.4.043	260.3
132 B5	274	333.8	300	282	KC50.4.043	282.5

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	**k1** with KC50.9.011
80 B14	243.8	243.8	120	246.3	KC085.4.046	252.3
90 B14	243.8	253.8	140	246.3	KC085.4.045	252.3
100/112 B14	258.5	263.8	160	261	KC085.4.047	267
132 B14	274	283.8	200	282	KC50.4.041	282.5



▪ 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 B	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft	Ratios code
							63	71	80	90	71	80	90			
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	0.9	**1.4**	**520**	B				C	C		191312		08
21.1	**66.22**	1.1	464	1.1	**1.2**	**520**	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	**0.87**	**520**	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	**0.69**	**520**	B				C	C		170812	ø30	16
11.1	**126.65**	0.55	449	1.2	**0.64**	**520**	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	**0.49**	**520**	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	**0.36**	**520**	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**	**520**	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

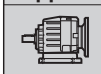
EN Unit **603A** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **603A** 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 **603A** 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 **603A** 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.

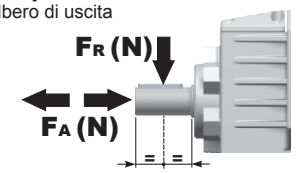
E El reductor tamaño **603A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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**
0.75 LT	0.90 LT	1.15 LT	1.25 LT	1.30 LT	1.35 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

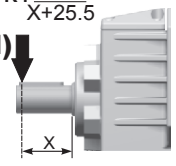
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{60.5}{X+25.5}$$

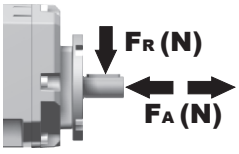


n_2	FA	FR
300	560	2800
250	600	3000
200	640	3200

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

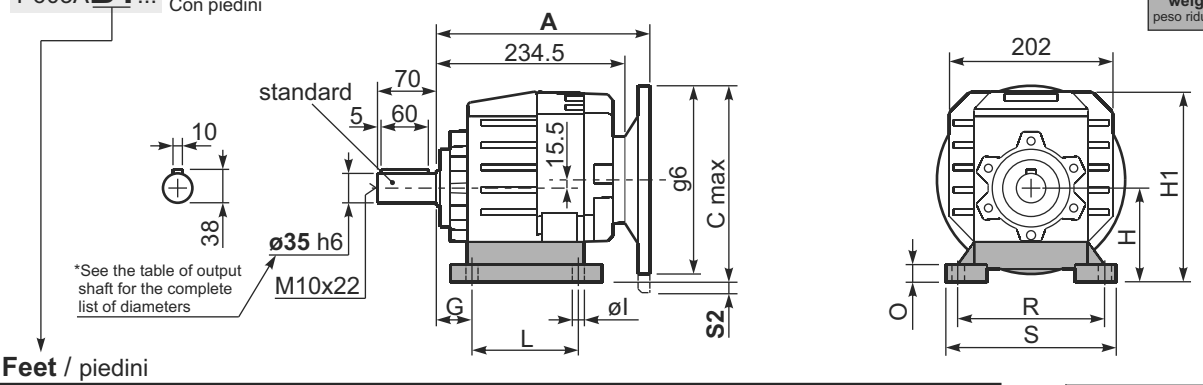


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P603A**B1**... With feet
Con piedini

Gearbox weight peso riduttore	With flange **14.3 kg**
	With feet **14.7 Kg**



Feet / piedini

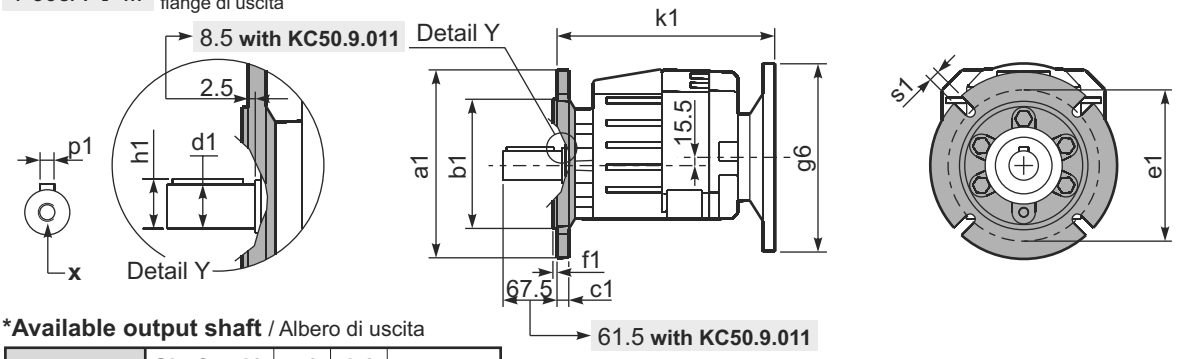
Feet Code	Market reference	G	H	R	L	S	H1	O	øI	S2 only with motor flange	B5 max. Flange	kit code
B4	412/3	20	130	180	149.5	216	233	18	14	-	-	KC60.9.024
S4	47-57	30	115	135	165	170	218	24	13.5	-	-	KC50.9.022
M3	62/3	35	120	170÷185	110	230	223	20	14	-	-	KC60.9.023
S7	77	35	140	170	205	204	243	8	14	-	-	KC60.9.029LM
H4	024-243	35	155	170	150	225	258	30	14	-	-	KC60.9.025
L6	06	19	125	160	106	205	228	8	14	-	-	KC50.9.026LM
E3	2302/3	19.5	125	170	240	205	228	8	14	-	-	KC60.9.026LM
P6	162	40	162	160	205	200	265	8	14	-	-	KC60.9.027LM
B5	352/3	23.5	115	170	130	205	218	8	14	-	-	KC60.9.021LM

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

P603A-**F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

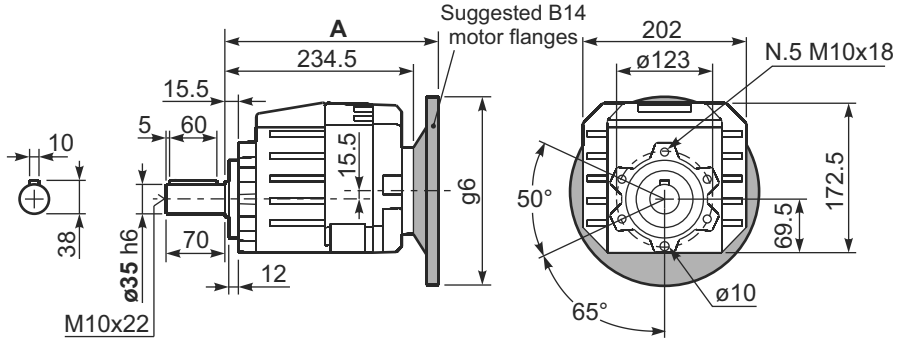
	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 28x60	8	31	M8x20
	ø 30x60	8	33	M10x22
	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M12x28

Available output flanges / flange di uscita

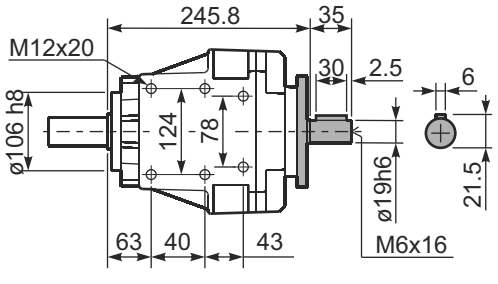
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P603A-**N**... Basic gearbox
Riduttore base



R603A-**N**... Input Shaft
Albero in entrata



B5 Motor Flanges	A	C_{max}	g6	k1	kit code	**k1** with KC50.9.011
63 B5	255	247.5	140	257.5	K063.4.041	263.5
71 B5	253	257.5	160	255.5	K063.4.042	261.5
80/90 B5	255	277.5	200	257.5	K063.4.043	263.5

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	**k1** with KC50.9.011
71 B14	253	230	105	255.5	K063.4.047	261.5
80 B14	254	237.5	120	256.5	K063.4.046	262.5
90 B14	255	247.5	140	257.5	K063.4.041	263.5

Cast iron 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

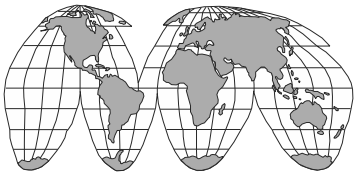


Gears
Hardened and ground gears.

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



Types / Tipi
Tipen / Types
Tipos

7-5	7-11	7-17	7-23	7-29
501C 225Nm	**701C** 380Nm	**801C** 670Nm	**851C** 700Nm	**901C** 1175Nm

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

2 and 3 Stages



Types / Tipi
Tipen / Types
Tipos

7-7	7-9	7-13	7-15	7-19	7-21	7-25	7-27	7-31	7-33
502C 320Nm	**503C** 320Nm	**702C** 675Nm	**703C** 675Nm	**802C** 900Nm	**803C** 900Nm	**852C** 1600Nm	**853C** 1800Nm	**902C** 2100Nm	**903C** 2100Nm

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

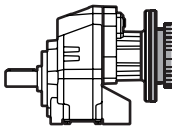


Types / Tipi
Tipen / Types
Tipos

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

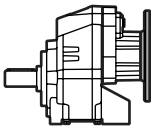
Type - Tipo - Typ Type - Tipo	**Size** - Grandezza - Grösse Taille - Tomaño	**Mounting** - Montaggio Montage - Fixation Tipo de montaje
P	**702C**	**-F**

Cast iron coaxial gear boxes
Riduttori coassiali in Ghisa



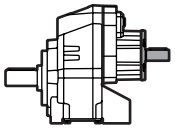
With IEC motor

M



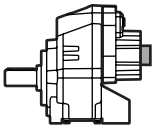
With motor flange

P



With male input shaft

R



Modular base

B

1 Stage
Riduzione
Stufe
Trains
Etapa

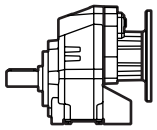
501C
701C
801C
851C
901C

2 Stages
Riduzioni
Stufen
Trains
Etapas

502C
702C
802C
852C
902C

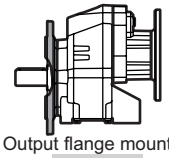
3 Stages
Riduzioni
Stufen
Trains
Etapas

503C
703C
803C
853C
903C



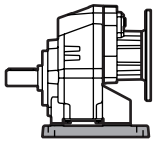
Without flange / feet

-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

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.

Ratio - Rapporto Untersetzung Reduction Relaciòn

6.57

See technical data table

Vedi tabelle dati tecnici.

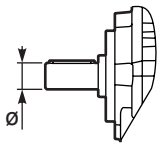
Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

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

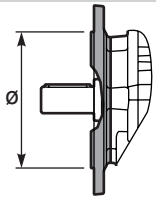
P ➡ **ø50**
J ⇨ ø60

901C 902C 903C

P ⇨ ø50
J ➡ **ø60**

Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida

4



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

6 ⇨ ø300
7 ➡ **ø350**

➡ **STANDARD**

Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor

-F

Standard Flange Flangia Standard



B5	B14
-A=56 (ø120)	**-O**=56 (ø80)
-B=63 (ø140)	**-P**=63 (ø90)
-C=71 (ø160)	**-Q**=71 (ø105)
-D=80 (ø200)	**-R**=80 (ø120)
-E=90 (ø200)	**-T**=90 (ø140)
-F=100÷112 (ø250)	**-U**=100÷112 (ø160)
-G=132 (ø300)	**-V**=132 (ø200)
-H=160 (ø350)	
-I=180 (ø350)	

Type R / Tipo R



503C

-1 ➡ ø14

502C 703C 803C

-2 ➡ ø19

702C 802C 853C 903C

-3 ➡ ø24

852C 902C

-4 ➡ ø28

Without flange / Senza flangia



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)

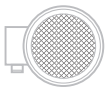
501C

-4 ➡ ø28 (100B5)

➡ **STANDARD**

Terminal box position Posizione morsettiera Klemmkastenlage Position boîte à bornes Posición caja de bornes

B

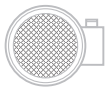


A



B

STANDARD



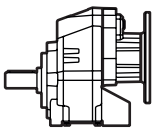
C



D

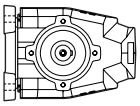
Mounting position Posizione montaggio Einbaulage Position de montage Position de montaje

B3

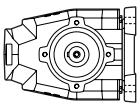


B3

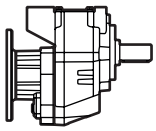
STANDARD



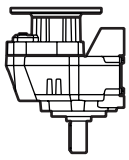
B6



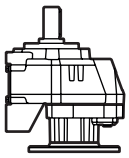
B7



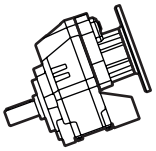
B8



V5



V6



V8

7

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

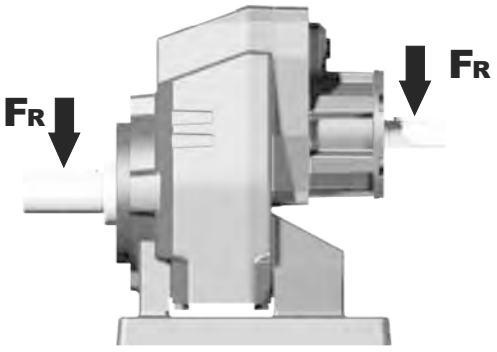
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$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



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

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 ø	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	B5 E: 90	B5 F: 100 112	Available B14 motor flanges R: 80	B14 T: 90	B14 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	ø35	04
178	**7.85**	4	205	1.1	4.3	225	B	B		B	B		13102	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

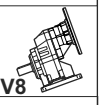
EN Unit **501C** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

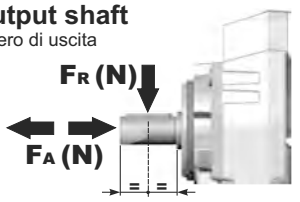
E El reductor tamaño **501C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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

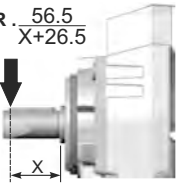
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{56.5}{X+26.5}$$



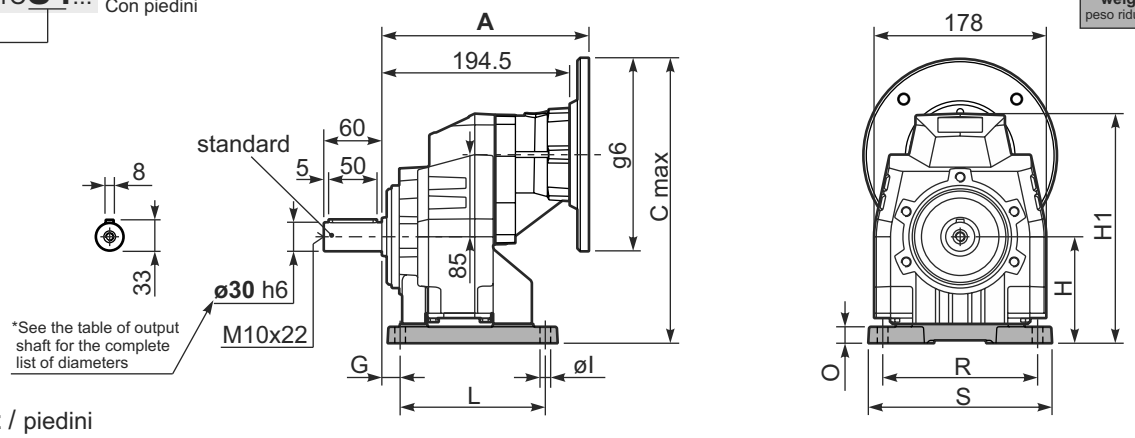
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	500	2500	**140**	640	3200	**70**	820	4100
250	540	2700	**120**	680	3400	**40**	1020	5100
200	580	2900	**85**	760	3800	**15**	1100	5500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

P501C**S4**... With feet
Con piedini

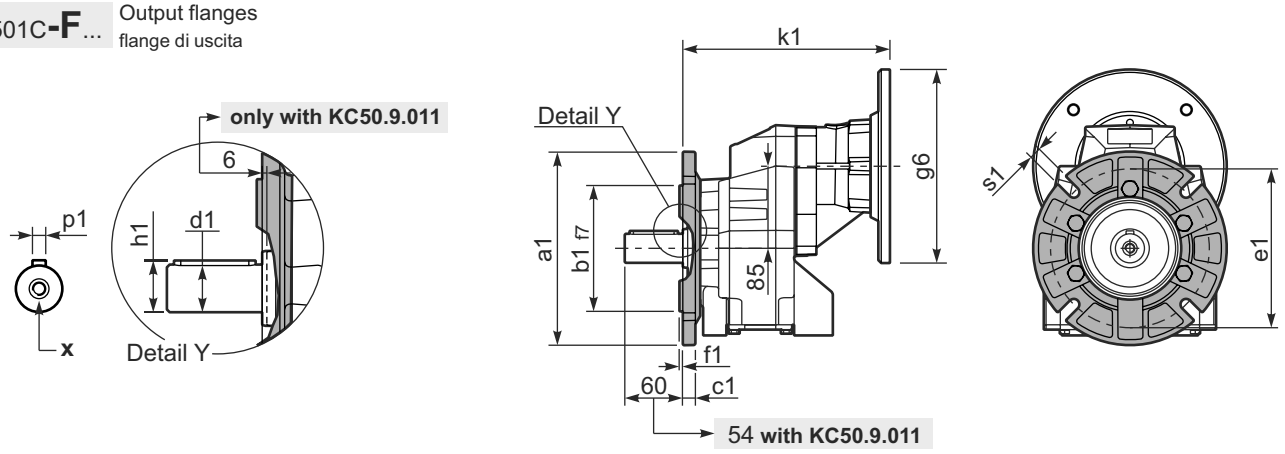
Gearbox weight peso riduttore	With flange **20.0 kg**
	With feet **22.0 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øI	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	237	17	11	-	C50C.9.022
S4	47	30	115	135	165	170	242	22	13.5	-	C50C.9.024
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P501C**-F**... Output flanges
flange di uscita



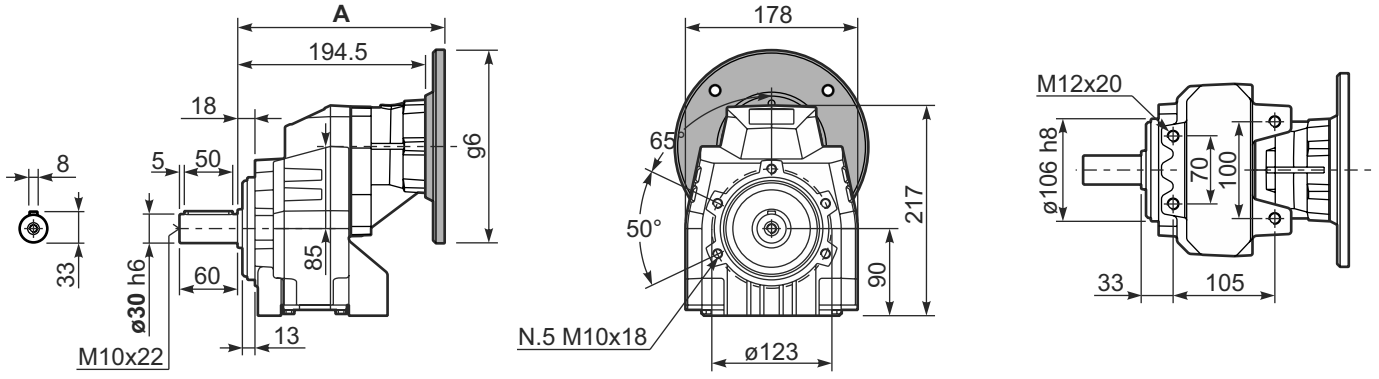
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 35x70 -	10 -	38 -	M10x22 -

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	
160	110	14	130	3.5	9	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	KC023.4.042	221
100/112 B5	221	325	250	221	KC023.4.043	227

B14 Motor Flanges	A	C_{max}	g6	k1	kit code	k1 with KC50.9.011
80 B14	213	260	120	213	KC085.4.046	219
90 B14	213	270	140	213	KC085.4.045	219
100/112 B14	224	280	160	224	KC085.4.047	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	C	D	E	F	Available B14 motor flanges Q	R	T	U		Output Shaft	Ratios code
							63	71	80	90	100 112	71	80	90	100 112			
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	**standard ø30**	07
63	**22.30**	2.2	317	1.0	**2.2**	**320**	B					C	C			1913		08
57	**24.70**	2.2	351	0.9	**2.0**	**320**	B					C	C			1518		09
54	**25.85**	2.2	367	0.9	**1.9**	**320**	B					C	C			1713	ø35 On request	10
47.5	**29.49**	1.5	289	1.1	**1.7**	**320**	B					C	C			1318		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 lubrification, 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.

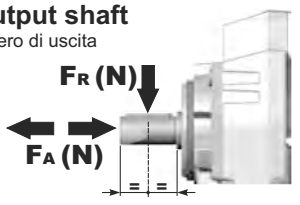
E El reductor tamaño **502C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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

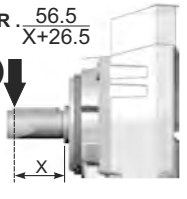
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$F_{eq} = F_R \cdot \frac{56.5}{X+26.5}$



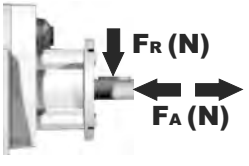
n_2	FA	FR
300	500	2500
250	540	2700
200	580	2900

n_2	FA	FR
140	640	3200
120	680	3400
85	760	3800

n_2	FA	FR
70	820	4100
40	1020	5100
15	1100	5500

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

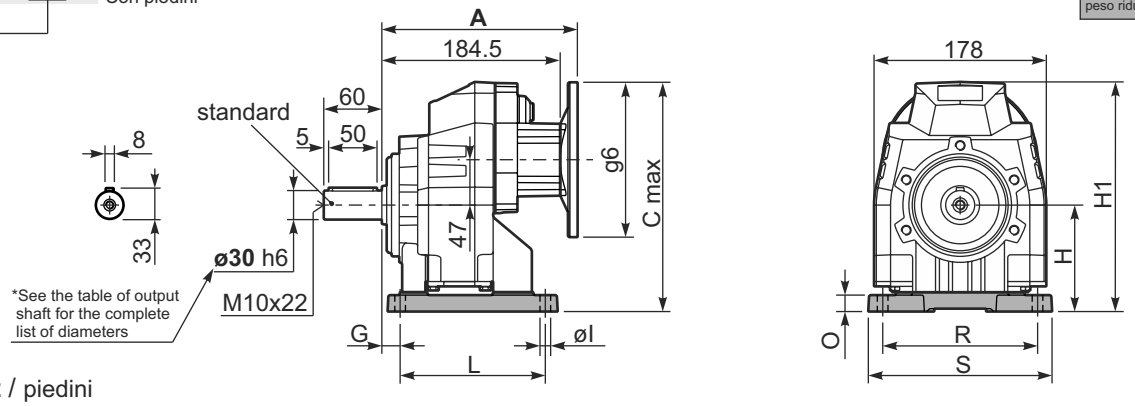


n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

P502C**S4**... With feet
Con piedini

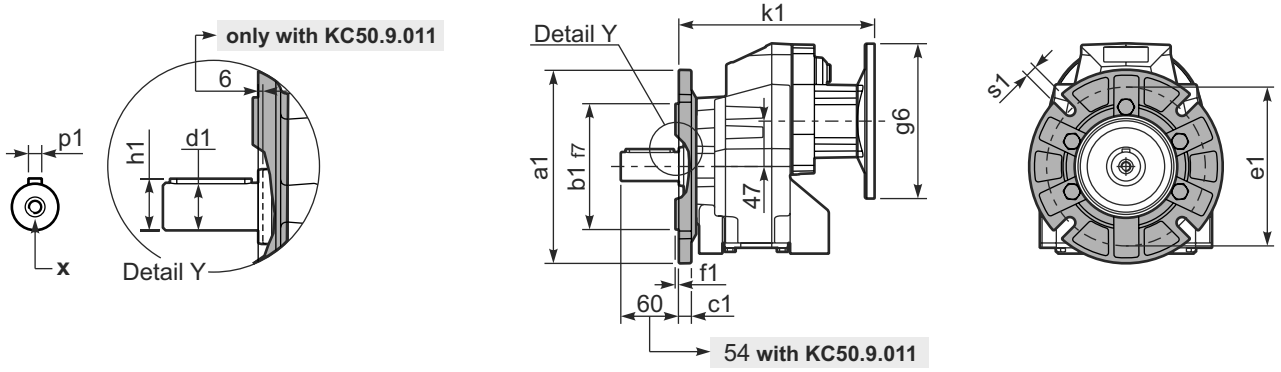
Gearbox weight peso riduttore	With flange **15.0 kg**
	With feet **17.0 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	237	17	11	-	C50C.9.022
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

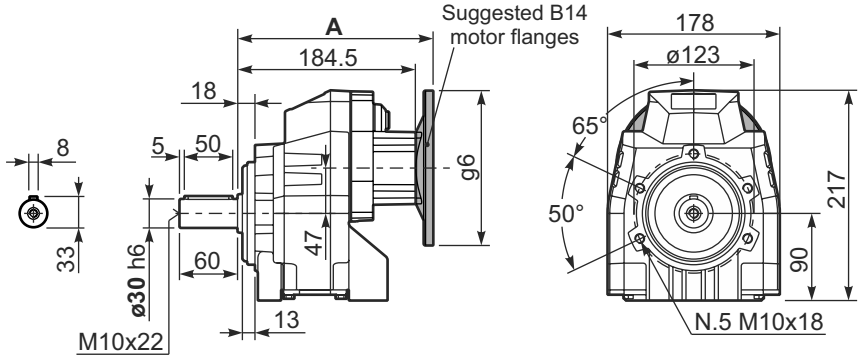
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 35x70 -	10 -	38 -	M10x22 -

Available output flanges / flange di uscita

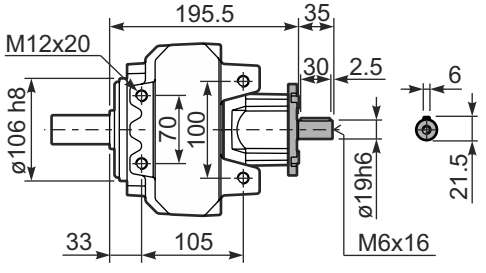
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

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	220.5	287	250	220.5	KC40.4.043

k1 with KC50.9.011
211
209
211
226.5

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
71 B14	203	214.5	105	203	K063.4.047
80 B14	204	222	120	204	K063.4.046
90 B14	205	232	140	205	K063.4.041
100/112 B14	220.5	242	160	220.5	KC40.4.041

k1 with KC50.9.011
209
210
211
226.5

▪ 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 B	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q		Output Shaft ø	Ratios code
							63	71	56	63	71			
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	**standard**	05
10.1	**138.59**	0.37	329	1.0	**0.36**	320			C	C		101318	**ø30**	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	ø35	08
7.6	**183.48**	0.25	294	1.1	**0.27**	320			C	C		91318	On request	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

EN Unit **503C** is supplied with synthetic oil for lifetime lubrification, 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.

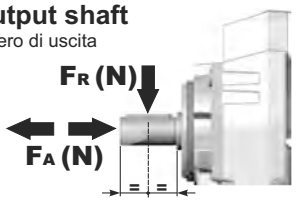
E El reductor tamaño **503C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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

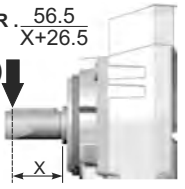
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



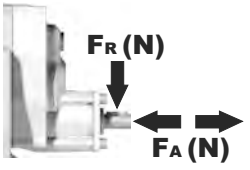
$F_{eq} = F_R \cdot \frac{56.5}{X+26.5}$



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

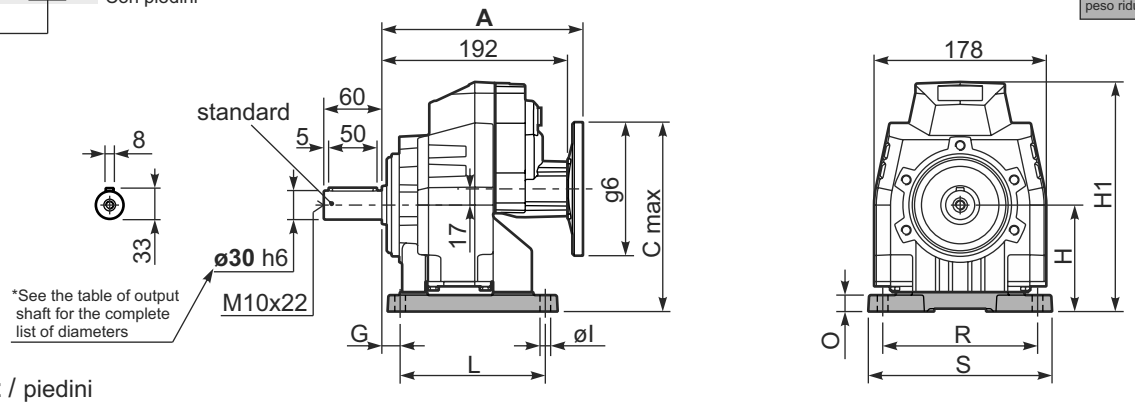


n_1	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

P503C**S4**... With feet
Con piedini

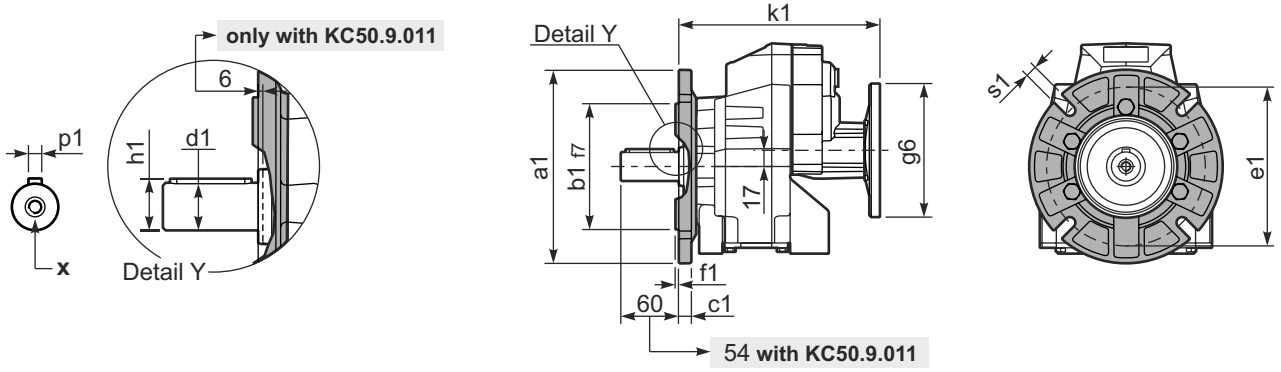
Gearbox weight peso riduttore	With flange **15.0 kg**
	With feet **17.0 Kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	237	17	11	-	C50C.9.022
S4	47	30	115	135	165	170	242	22	13.5	-	C50C.9.024
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P503C**-F**... Output flanges
flange di uscita



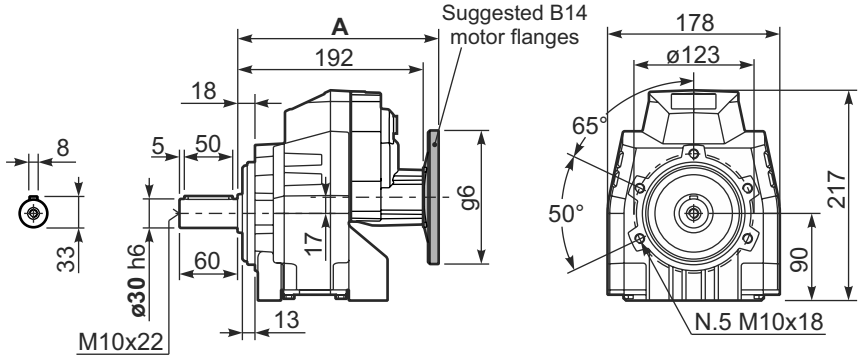
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 35x70 -	10 -	38 -	M10x22 -

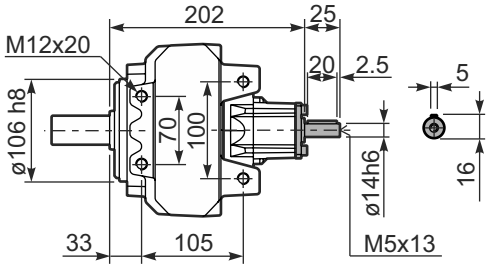
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code	
160	110	14	130	3.5	9	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	

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	208.5	202	140	208.5	K050.4.041
71 B5	206.5	212	160	206.5	K050.4.042

k1 with KC50.9.011
214.5
212.5

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]
507	**2.76**	9	166	1.6	14.4	265
395	**3.54**	9	213	1.3	11.6	275
277	**5.06**	9	304	1.0	8.6	290
241	**5.81**	7.5	281	1.2	8.5	330
206	**6.79**	7.5	329	1.2	8.4	380

Available B5 **motor flanges**: G 132

B14 **motor flanges**: - - - - / - - - -

not available

	Output Shaft	Ratios code
2980	**standard**	01
2485	**ø35**	02
1891		03
1693	ø38	04
1495	ø40	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 **701C** is supplied with synthetic oil for lifetime lubrification, 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.

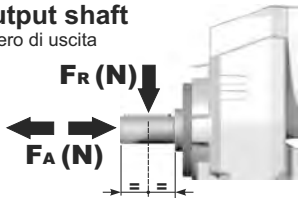
E El reductor tamaño **701C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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		

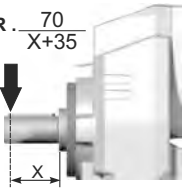
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{70}{X+35}$$



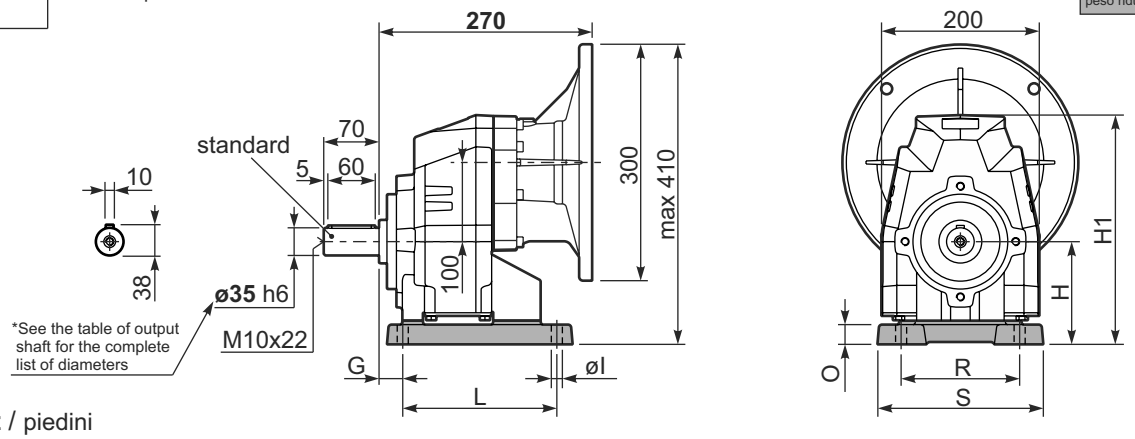
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	680	3400	**140**	960	4800	**70**	1300	6500
250	760	3800	**120**	1040	5200	**40**	1460	7300
200	900	4500	**85**	1120	5600	**15**	1800	9000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

P701C**S6**... With feet
Con piedini

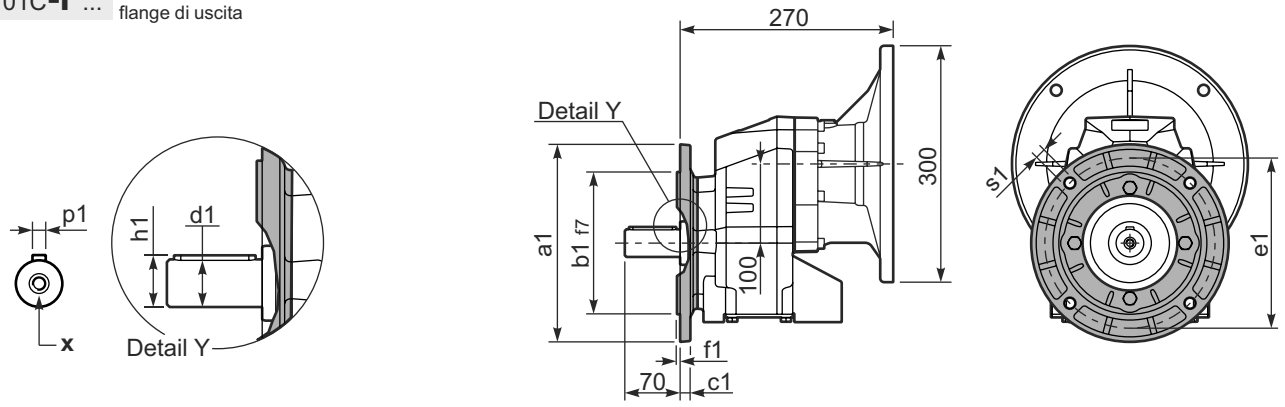
Gearbox weight peso riduttore	With flange **36.0 kg**
	With feet **39.5 kg**



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



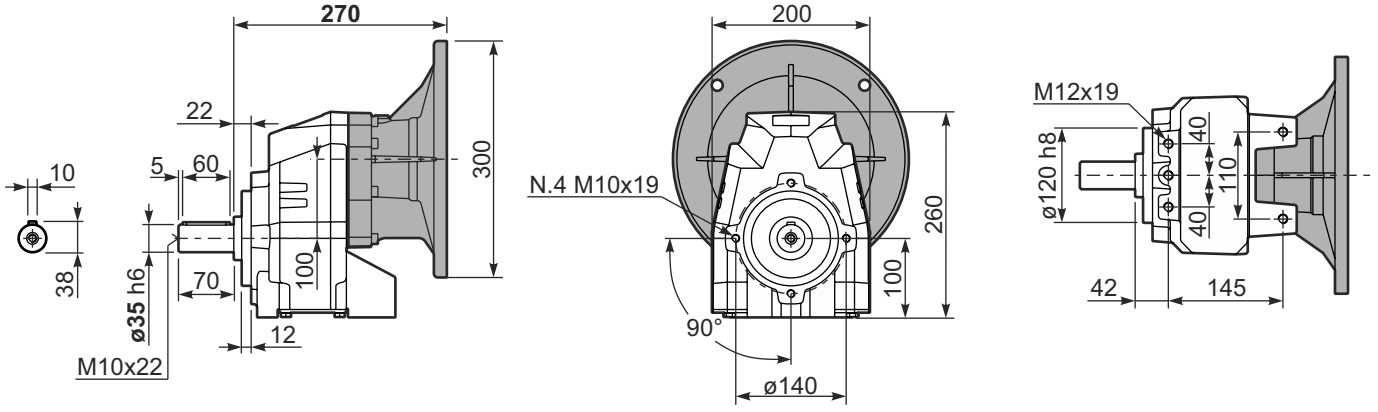
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 38x70	10	41	M10x25
	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	ø38	08
56	**25.04**	4	642	1.1	4.1	675	B									1316	ø40	09
47.9	**29.23**	4	750	0.9	3.5	675	B									1314	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 **702C** is supplied with synthetic oil for lifetime lubrification, 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.

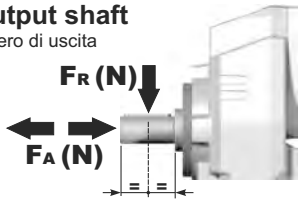
E El reductor tamaño **702C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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		

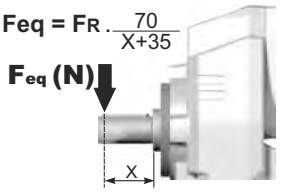
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$F_{eq} = F_R \cdot \frac{70}{X+35}$



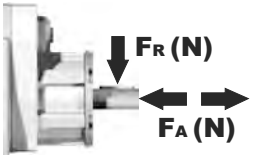
n_2	FA	FR
300	680	3400
250	760	3800
200	900	4500

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

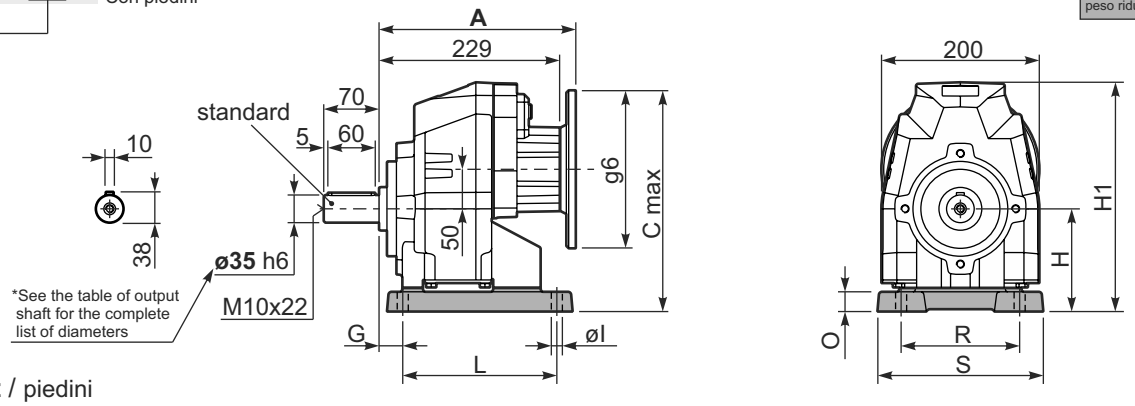


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P702C**S6**... With feet
Con piedini

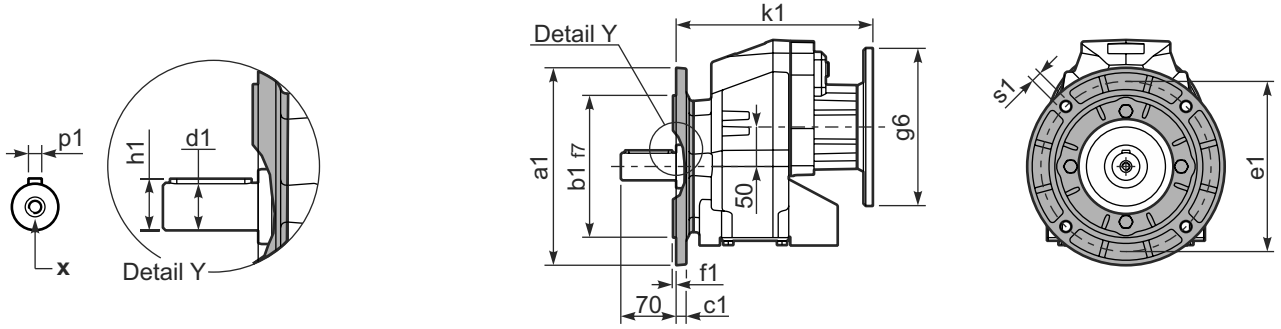
Gearbox weight peso riduttore	With flange **30.0 kg**
	With feet **33.5 kg**



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



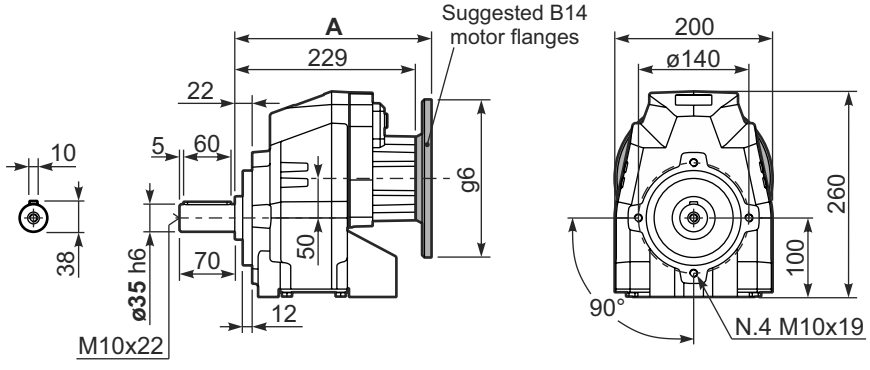
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M12x28

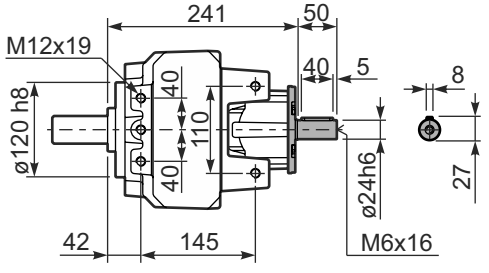
Available output flanges / flange di uscita

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	KC023.4.041
80/90 B5	249.5	310	200	249.5	KC023.4.042
100/112 B5	255.5	335	250	255.5	KC023.4.043
132 B5	277	360	300	277	KC40.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
80 B14	247.5	270	120	247.5	KC085.4.046
90 B14	247.5	280	140	247.5	KC085.4.045
100/112 B14	258.5	290	160	258.5	KC085.4.047
132 B14	277	310	200	277	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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft ø	Ratios code
							63	71	80	90	71	80	90			
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	ø38	10
7.6	**184.15**	0.55	653	1.0	0.57	675	B				C	C		101314	ø40	11
6.8	**205.87**	0.55	730	0.9	0.51	675	B				C	C		91316	On request	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 lubrification, 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.

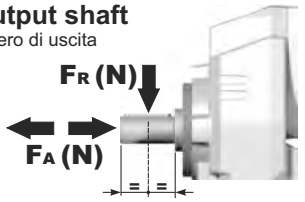
E El reductor tamaño **703C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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		

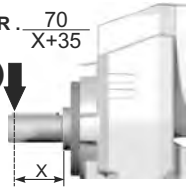
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



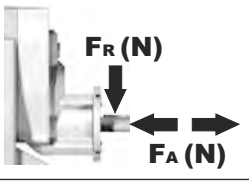
$F_{eq} = F_R \cdot \frac{70}{X+35}$



n_2	FA	FR	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

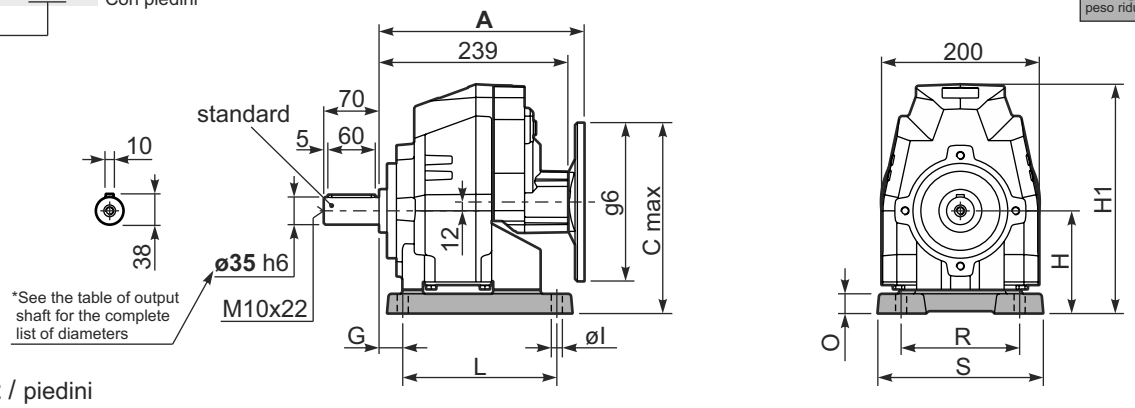


n_1	FA	FR
1400	240	1200
900	280	1400
500	310	1700

tab. 2

P703C**S6**... With feet
Con piedini

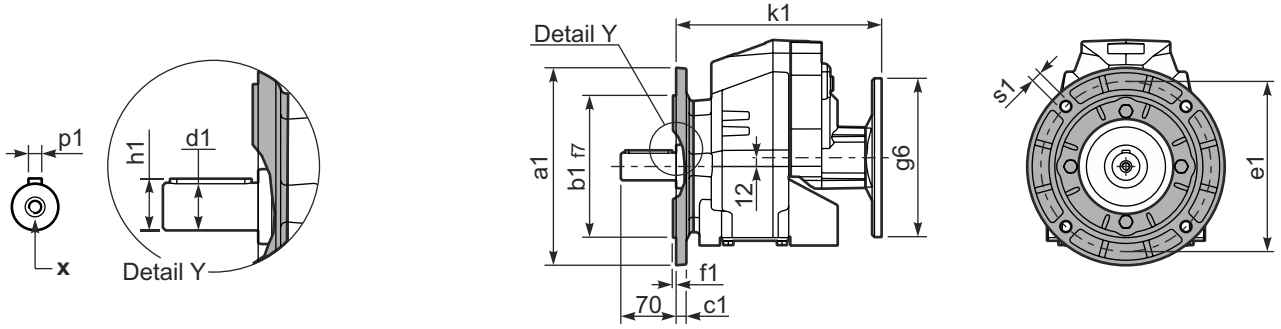
Gearbox weight peso riduttore	With flange **30.0 kg**
	With feet **33.5 kg**



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



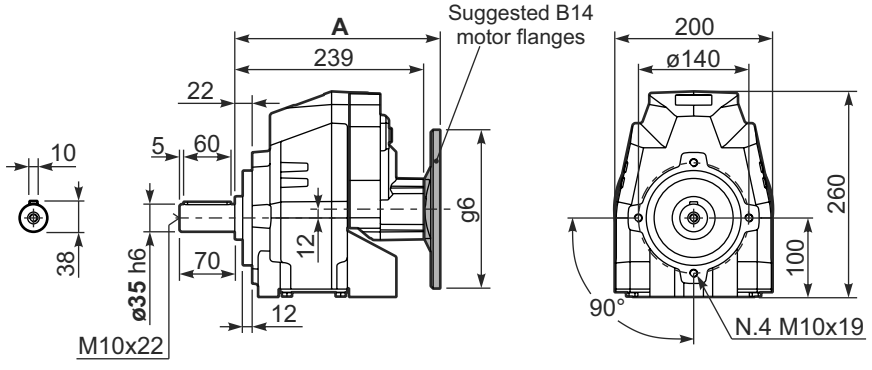
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M12x28

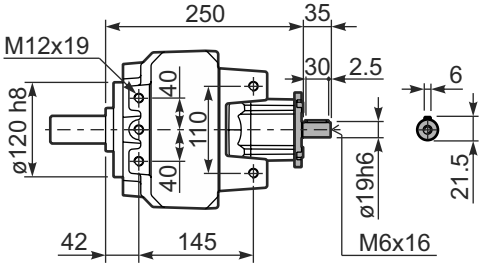
Available output flanges / flange di uscita

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	258.5	232	120	258.5	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: G	Available B5 motor flanges: 132	B14 motor flanges	Output Shaft		Ratios code
227	**6.17**	9	371	1.2	**10.9**	**450**				18111	**standard**	01
198	**7.06**	9	425	1.4	**12.7**	**600**			**not available**	16113	**ø40**	02
170	**8.21**	9	494	1.4	**12.2**	**670**				14115	ø50	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

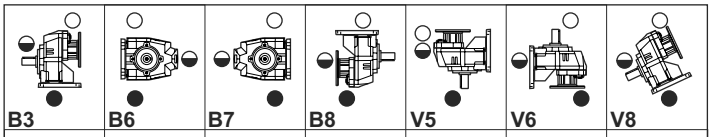
EN Unit **801C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and 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.

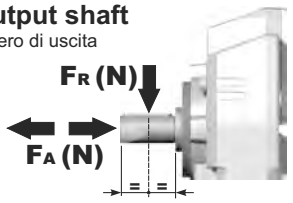


B3	B6	B7	B8	V5	V6	V8
3.20 LT	1.90 LT	1.90 LT	1.55 LT	3.20 LT	2.20 LT	Ask
AGIP Blasia 460						

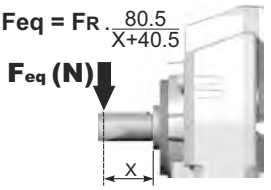
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{80.5}{X+40.5}$$



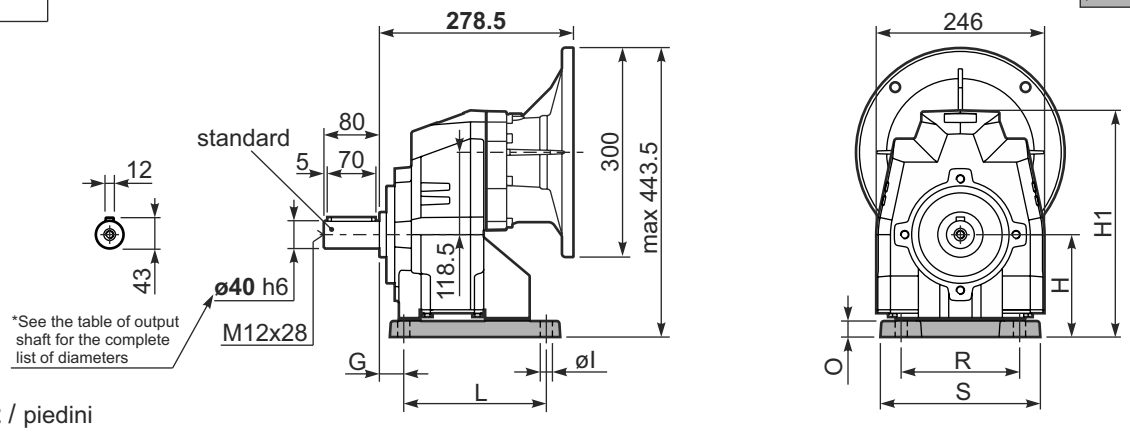
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1200	6000	**140**	1600	8000	**70**	2200	11000
250	1400	7000	**120**	1800	9000	**40**	2600	13000
200	1500	7500	**85**	2000	10000	**15**	3000	15000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

P801C**S7**... With feet
Con piedini

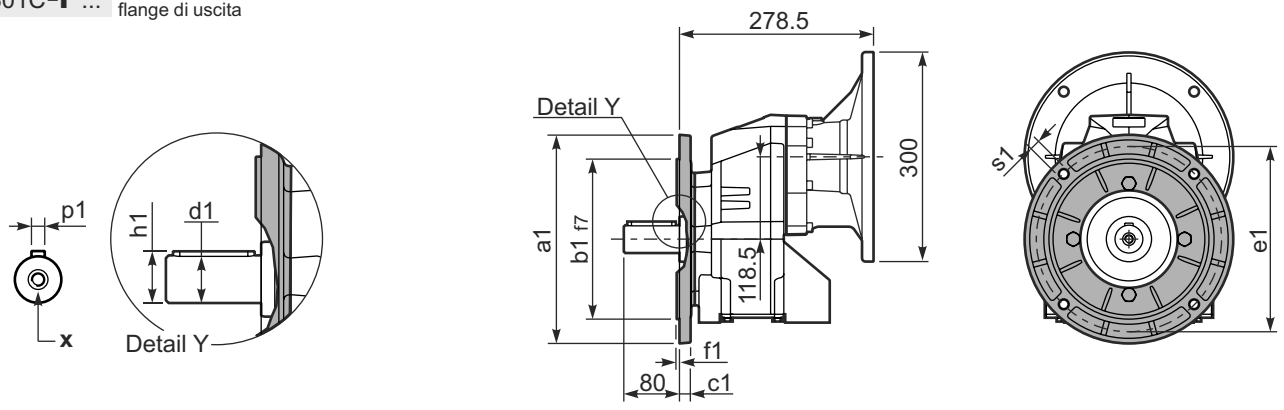
Gearbox weight peso riduttore	With flange **45.5 kg**
	With feet **49.5 kg**



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

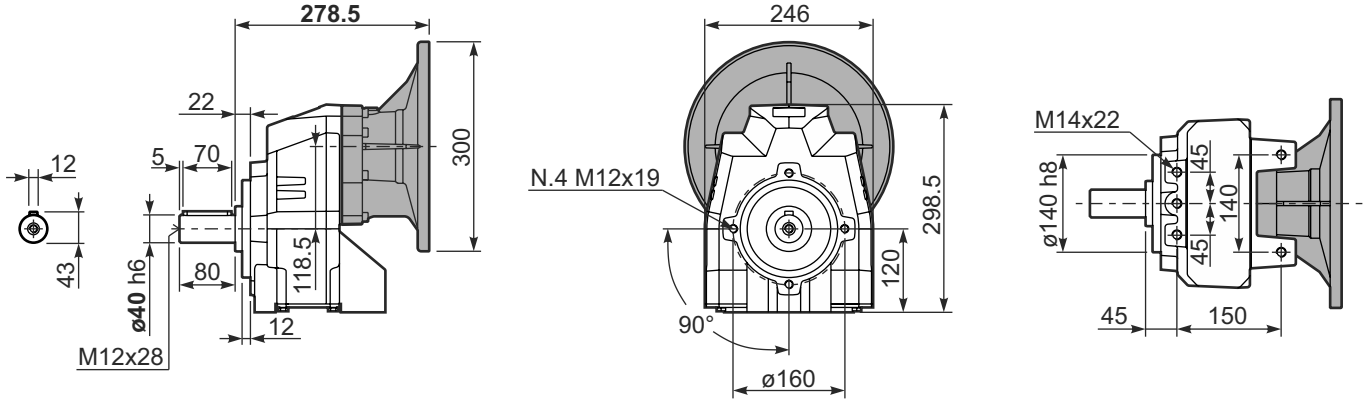
	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100 -	14 -	53.5 -	M16x36 -

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
250	180	13	215	4	14	KC80.9.013
300	230	16	265	4	14	KC80.9.014
-	-	-	-	-	-	-

With flange and feet only on request. Ask for compatibility

P801C**-N**... Basic gearbox
Riduttore base



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
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

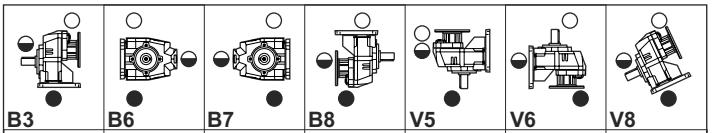
EN Unit **802C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and 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.

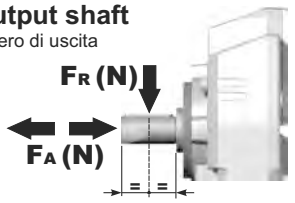


B3	B6	B7	B8	V5	V6	V8
3.20 LT	1.90 LT	1.90 LT	1.55 LT	3.20 LT	2.20 LT	Ask
AGIP Blasia 460						

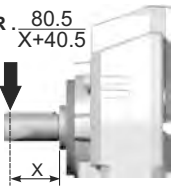
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



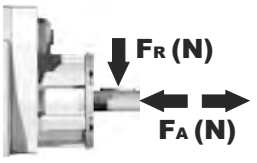
$$Feq = FR \cdot \frac{80.5}{X+40.5}$$



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.

Input shaft
Albero in entrata

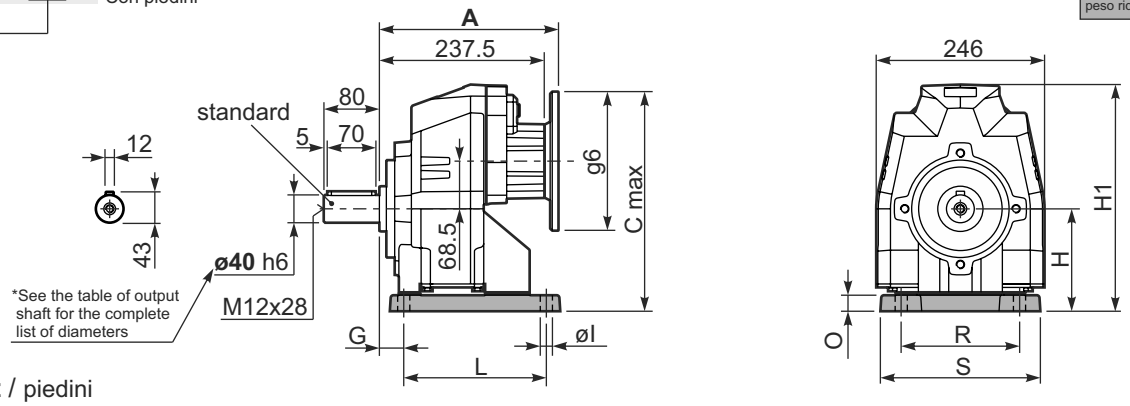


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

P802C**S7**... With feet
Con piedini

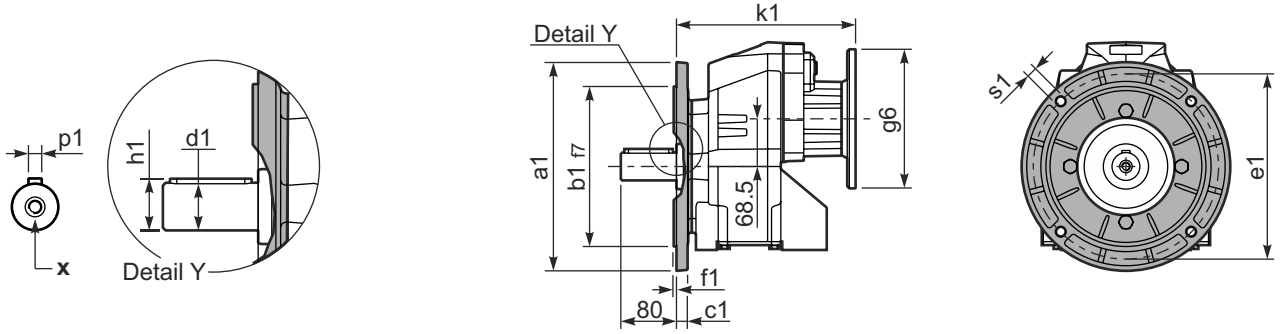
Gearbox weight peso riduttore	With flange **39.5 kg**
	With feet **43.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	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
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P802C**-F**... Output flanges
flange di uscita



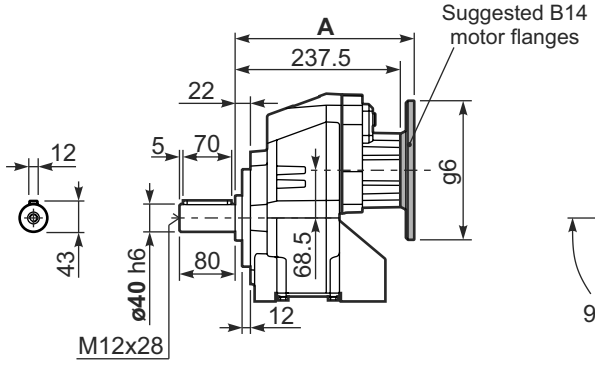
***Available output shaft** / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100 -	14 -	53.5 -	M16x36 -

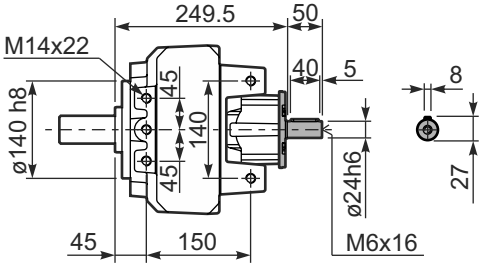
Available output flanges / flange di uscita

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	KC023.4.041
80/90 B5	258	343.5	200	258	KC023.4.042
100/112 B5	264	368.5	250	264	KC023.4.043
132 B5	285.5	393.5	300	285.5	KC40.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
80 B14	256	303.5	120	256	KC085.4.046
90 B14	256	313.5	140	256	KC085.4.045
100/112 B14	267	323.5	160	267	KC085.4.047
132 B14	285.5	343.5	200	285.5	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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft ø	Ratios code
							63	71	80	90	71	80	90			
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	ø50 On request	09
6.8	**206.32**	0.75	992	0.9	0.68	900	B				C	C		170814		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 **803C** 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 **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.

F Le réducteur de type **803C** 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

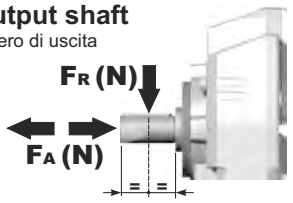
E El reductor tamaño **803C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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						

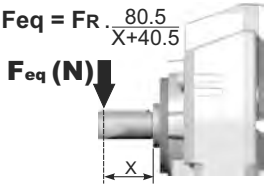
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



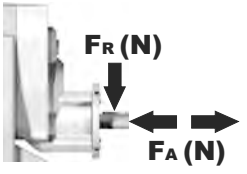
$F_{eq} = F_R \cdot \frac{80.5}{X+40.5}$



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.

Input shaft
Albero in entrata

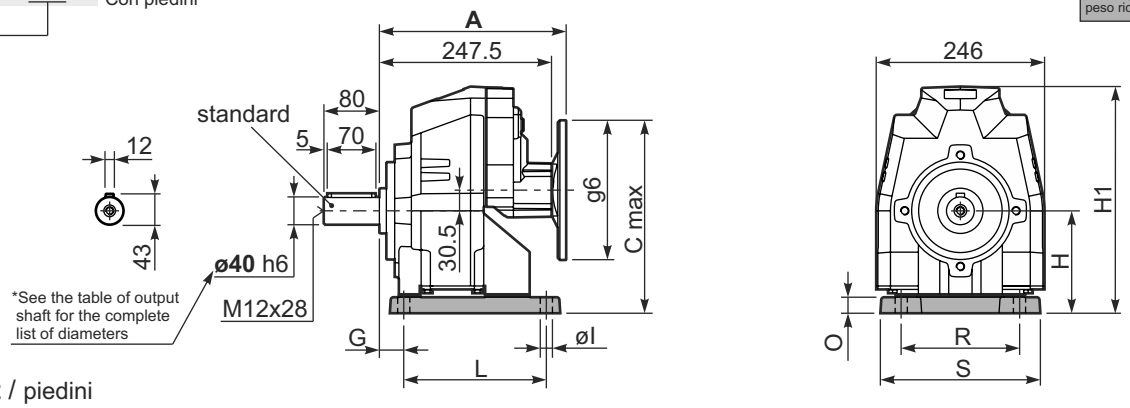


n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

P803C**S7**... With feet
Con piedini

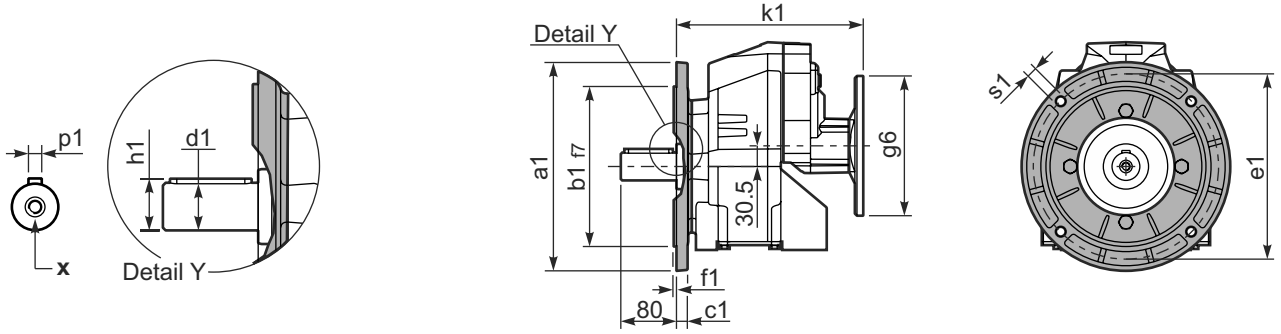
Gearbox weight peso riduttore	With flange **39.5 kg**
	With feet **43.5 kg**



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



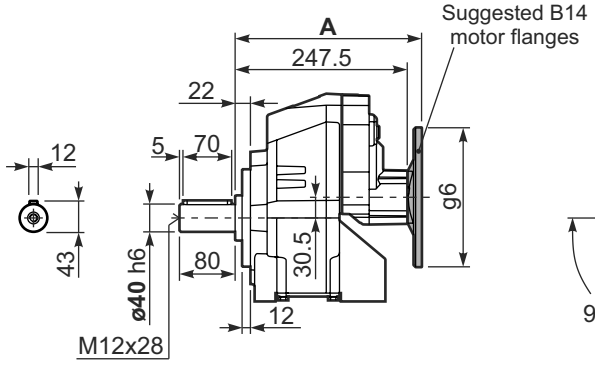
***Available output shaft** / Albero di uscita

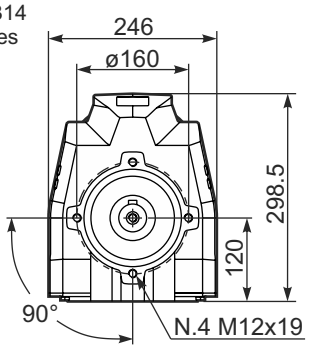
	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100 -	14 -	53.5 -	M16x36 -

Available output flanges / flange di uscita

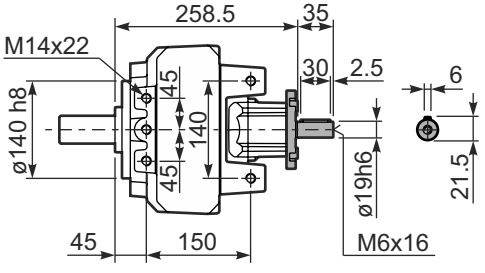
a1 ø	b1	c1	e1	f1	s1	kit code	
250	180	13	215	4	14	KC80.9.013	With flange and feet only on request. Ask for compatibility
300	230	16	265	4	14	KC80.9.014	
-	-	-	-	-	-	-	

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	267	265.5	120	267	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
							160	180	-	-	-	-			
412	**3.40**	22	480	1.3	**26.4**	**600**							1551	**standard**	01
343	**4.08**	22	575	1.2	**25.7**	**700**			**not available**				1353	**ø50**	02
285	**4.91**	22	693	1.0	**21.3**	**700**							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

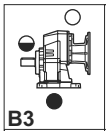
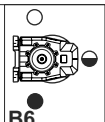
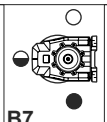
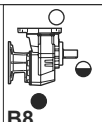
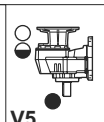
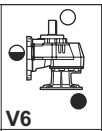
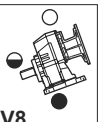
EN Unit **851C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and 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

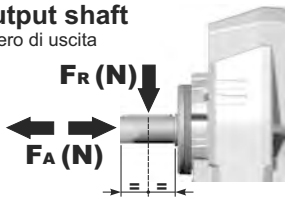
E El reductor tamaño **851C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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						

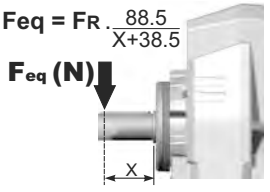
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$



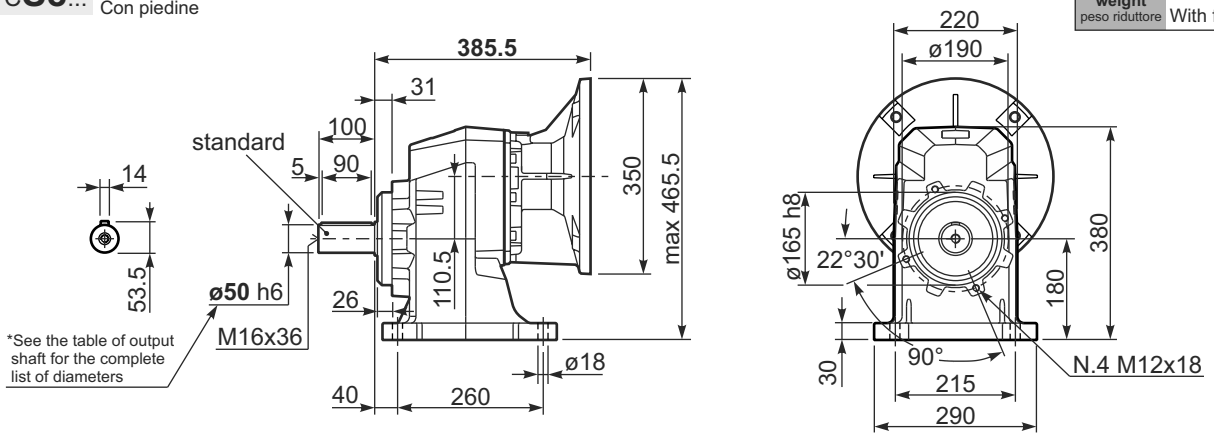
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	**140**	2400	12000	**70**	3000	15000
250	2000	10000	**120**	2600	13000	**40**	3200	16000
200	2200	11000	**85**	2800	14000	**15**	4000	20000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

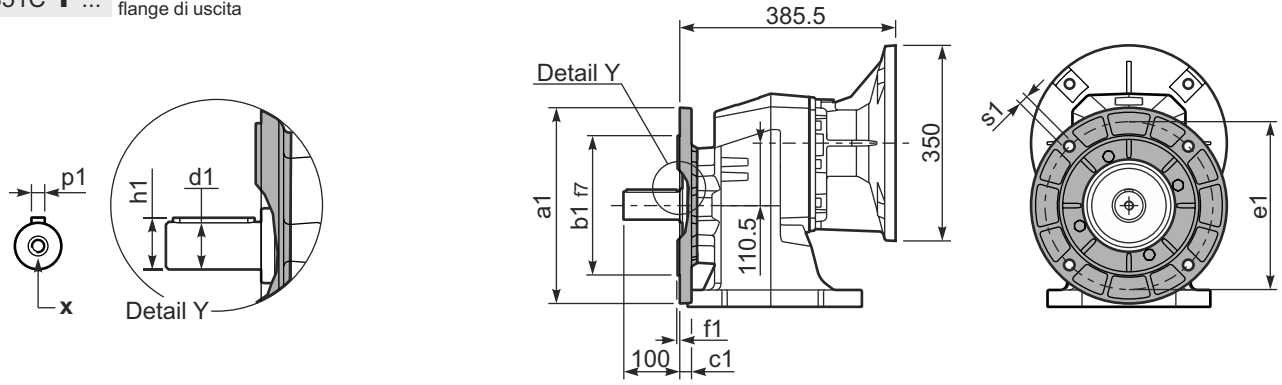
tab. 2

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]	Available B5 motor flanges G 132	Available B5 motor flanges H 160	Available B5 motor flanges I 180	B14 motor flanges - - - -					Output Shaft	Ratios code
317	**4.42**	22	611	1.1	**24.2**	**700**								3015		01
264	**5.30**	22	733	1.0	**20.2**	**700**								3013		02
219	**6.38**	18.5	742	1.1	**19.1**	**800**								3011		03
168	**8.33**	15	784	1.0	**14.7**	**800**								2015		04
140	**9.99**	15	940	1.0	**13.8**	**900**								2013	**standard**	05
124	**11.26**	15	1060	1.0	**14.9**	**1100**								1615	**ø50**	06
116	**12.03**	15	1132	1.1	**15.2**	**1200**								2011		07
104	**13.50**	15	1271	1.1	**15.8**	**1400**								1613	ø60	08
96	**14.65**	15	1378	1.1	**15.6**	**1500**								1315	On request	09
86	**16.26**	15	1531	1.0	**14.1**	**1500**								1611		10
80	**17.56**	11	1214	1.2	**13.0**	**1500**								1313		11
65	**21.50**	11	1486	1.1	**11.4**	**1600**								1113		12
54	**25.88**	9	1526	1.0	**9.4**	**1600**								1111		13
45.0	**31.09**	7.5	1475	1.0	**7.2**	**1460**								813		14
37.4	**37.43**	5.5	1312	1.2	**6.5**	**1600**								811		15

not available

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 **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

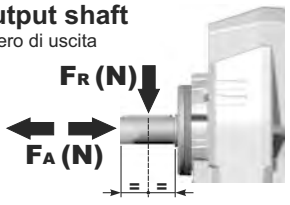
E El reductor tamaño **852C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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						

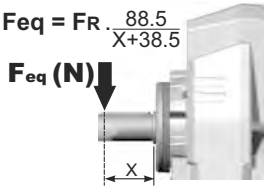
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



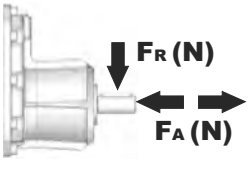
$$Feq = FR \cdot \frac{88.5}{X+38.5}$$



n_2	FA	FR
300	1800	9000
250	2000	10000
200	2200	11000
140	2400	12000
120	2600	13000
85	2800	14000
70	3000	15000
40	3200	16000
15	4000	20000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata

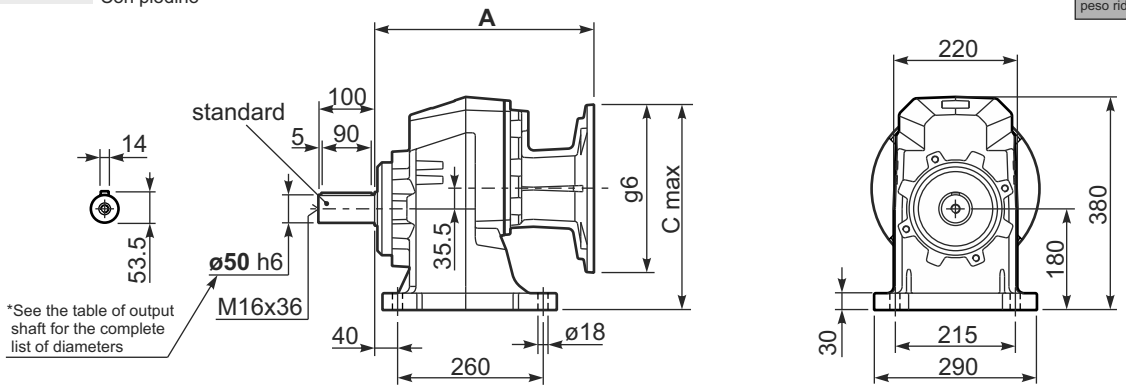


n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

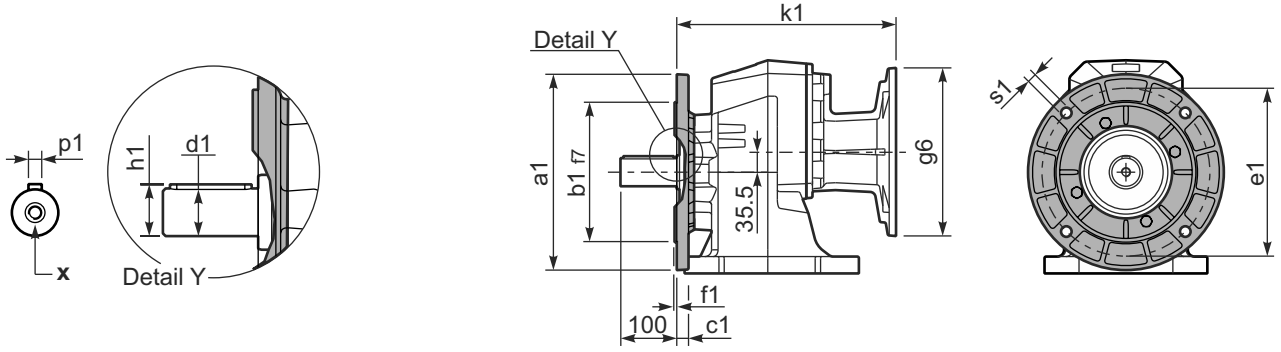
tab. 2

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



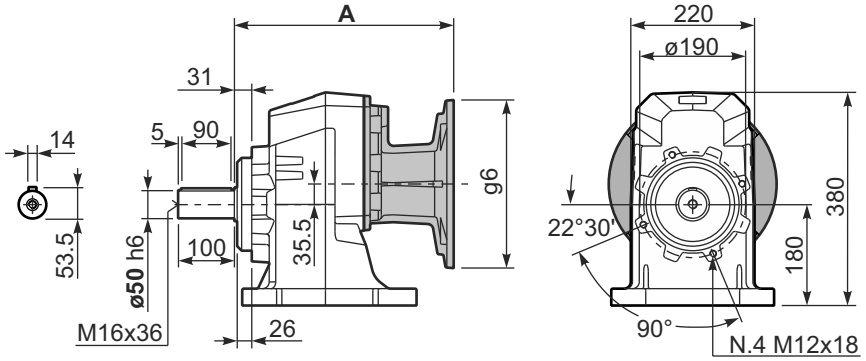
***Available output shaft** / Albero di uscita

	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

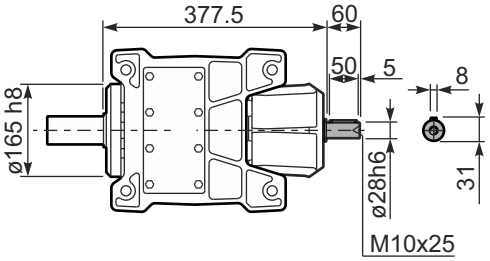
a1 ø	b1	c1	e1	f1	s1	kit code	
300	230	21	265	4	14	KC90.9.014	All flanges are compatible with the foot
350	250	21	300	5	18	KC90.9.015	
-	-	-	-	-	-	-	

P852C**S8**... Basic gearbox
Riduttore base



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
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.

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Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
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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
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Voir tableau 1 concernant les huiles et les quantités conseillées.
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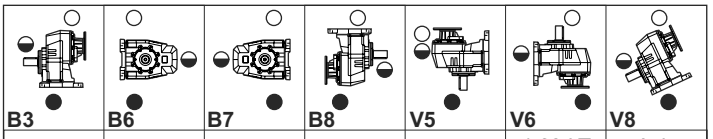
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.



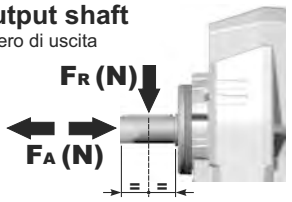
B3	B6	B7	B8	V5	V6	V8
5.50 LT	3.80 LT	3.80 LT	3.20 LT	7.00 LT	4.60 LT	Ask

AGIP Blasia 460

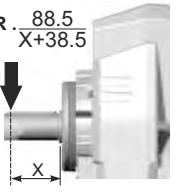
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



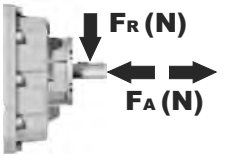
$$Feq = FR \cdot \frac{88.5}{X+38.5}$$



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.

Input shaft
Albero in entrata

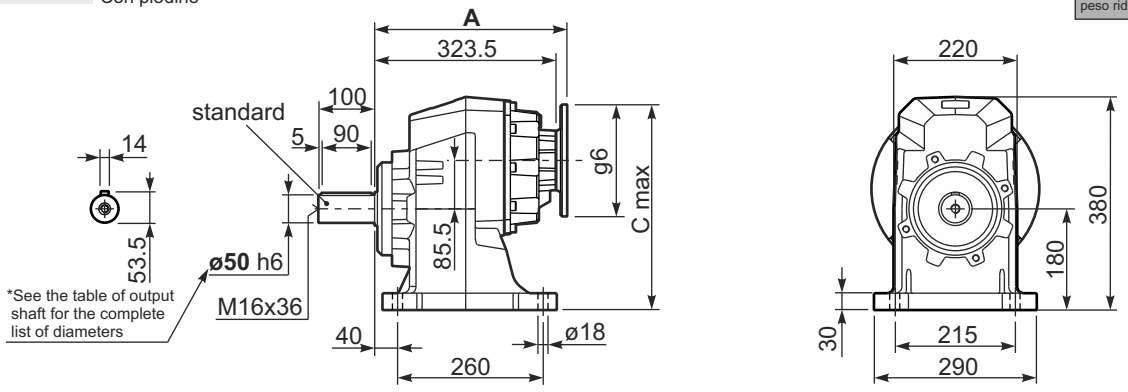


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

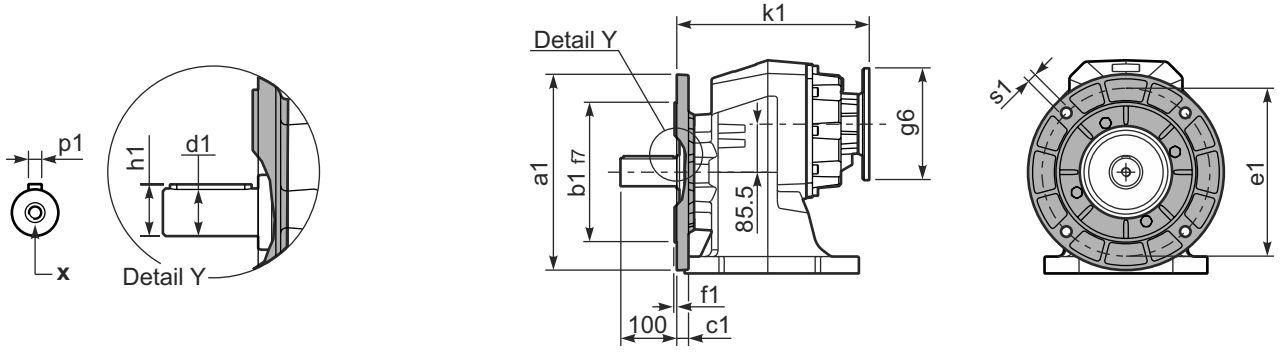
tab. 2

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



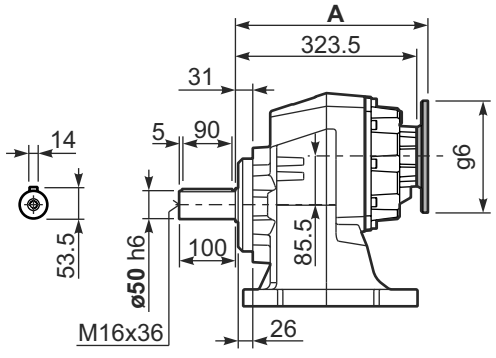
***Available output shaft** / Albero di uscita

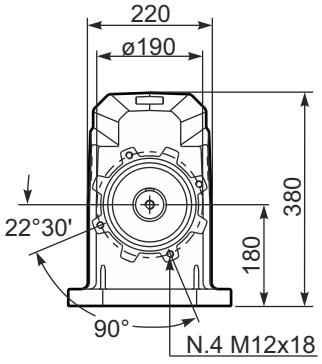
	Shaft - d1	p1	h1	x
Standard	ø 50x100	14	53.5	M16x36
On request A richiesta	ø 60x120 -	18 -	64 -	M20x42 -

Available output flanges / flange di uscita

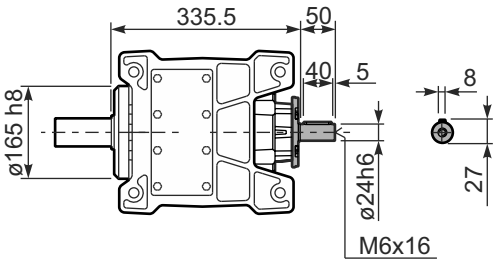
a1 ø	b1	c1	e1	f1	s1	kit code	
300	230	21	265	4	14	KC90.9.014	All flanges are compatible with the foot
350	250	21	300	5	18	KC90.9.015	
-	-	-	-	-	-	-	

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	KC023.4.041
80/90 B5	344	365.5	200	344	KC023.4.042
100/112 B5	350	390.5	250	350	KC023.4.043
132 B5	371.5	415.5	300	371	KC50.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
80 B14	342	325.5	120	342	KC085.4.046
90 B14	342	335.5	140	342	KC085.4.045
100/112 B14	353	345.5	160	353	KC085.4.047
132 B14	371.5	365.5	200	371.5	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 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	**ø60**	02
304	**4.60**	22	649	1.5	**30.9**	**950**							1569		03
256	**5.46**	22	771	1.3	**27.4**	**1000**			**not available**				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

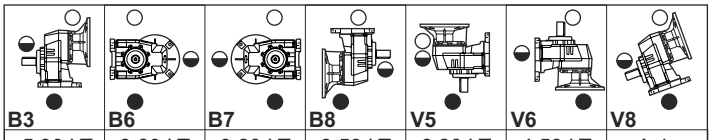
EN Unit **901C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and 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.



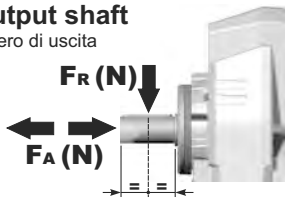
B3	B6	B7	B8	V5	V6	V8
5.90 LT	3.80 LT	3.80 LT	3.50 LT	6.80 LT	4.50 LT	Ask

AGIP Blasia 460

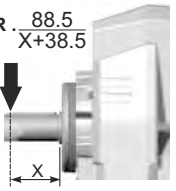
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



$$Feq = FR \cdot \frac{88.5}{X+38.5}$$



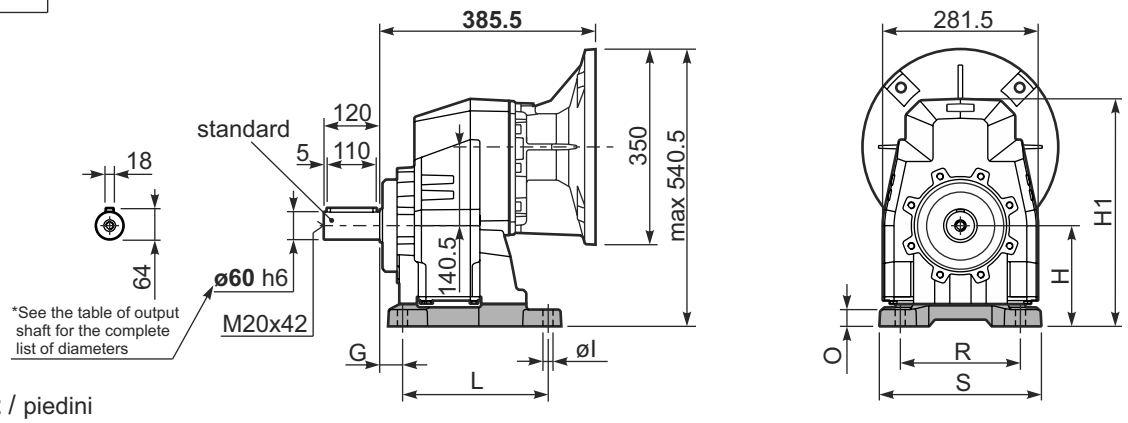
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2070	10350	**140**	2760	13800	**70**	3450	17250
250	2300	11500	**120**	2990	14950	**40**	3680	18400
200	2530	12650	**85**	3220	16100	**15**	4600	23000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

P901C**S8**... With feet
Con piedini

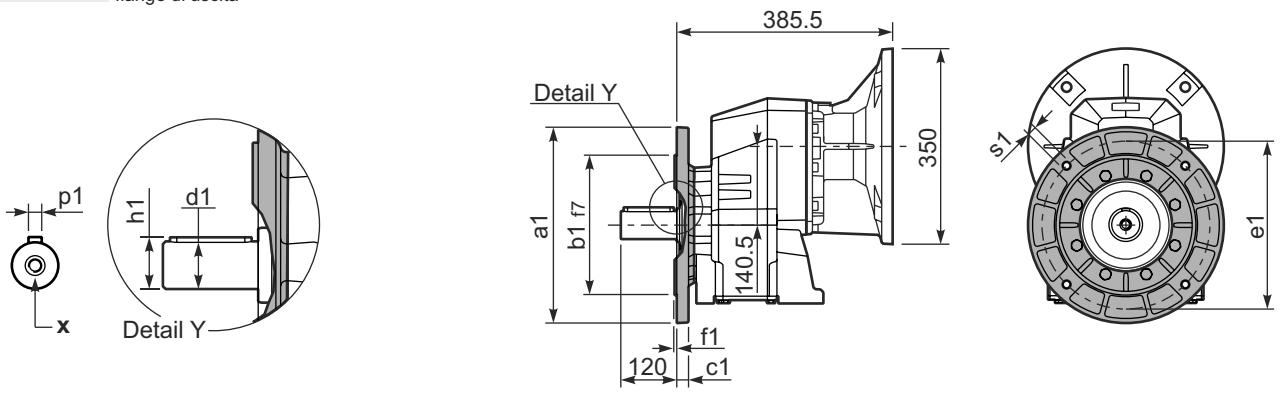
Gearbox weight peso riduttore	With flange **102 kg** With feet **110.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øI	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
H7	027/273	40	225	250	245	300	452	55	22	-	KC90.9.023
HS	-	40	175	215	260	290	402	25	18	-	KC90.9.025
-	-	-	-	-	-	-	-	-	-	-	-

P901C**-F**... Output flanges
flange di uscita



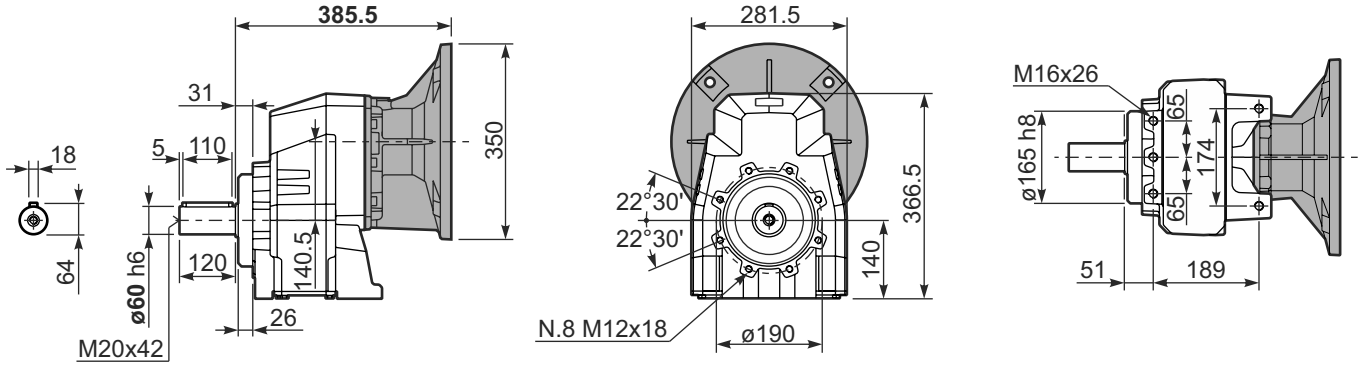
***Available output shaft** / Albero di uscita

	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	With flange and feet only on request. Ask for compatibility
350	250	21	300	5	18	KC90.9.015	
-	-	-	-	-	-	-	

P901C**-N**... Basic gearbox
Riduttore base



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 G 132	Available B5 motor flanges H 160	Available B5 motor flanges I 180	B14 motor flanges - - - - - - - -		Output Shaft ø	Ratios code
234	**5.98**	22	827	1.2	25.5	1000				not available	3015		01
197	**7.10**	22	982	1.2	25.3	1175					3013		02
162	**8.63**	22	1193	1.1	23.9	1350					3011		03
124	**11.27**	18.5	1310	1.1	20.3	1500					2015		04
105	**13.38**	18.5	1555	1.1	19.4	1700					2013		05
92	**15.24**	18.5	1771	1.1	19.0	1900					1615	**standard ø60**	06
86	**16.26**	18.5	1889	1.1	19.7	2100					2011		07
77	**18.09**	18.5	2102	1.0	17.7	2100					1613		08
71	**19.82**	15	1865	1.1	15.9	2060					1315	ø50	09
64	**21.98**	15	2069	1.0	14.6	2100					1611	On request	10
60	**23.53**	15	2214	0.9	13.6	2100					1313		11
58	**24.25**	11	1677	1.2	12.2	1940					1115		12
48.6	**28.80**	11	1991	1.1	11.1	2100					1113		13
40.0	**34.99**	9	2063	1.0	9.2	2100					1111		14
33.6	**41.64**	7.5	1976	1.0	7.2	1960					813		15
27.7	**50.60**	5.5	1774	1.2	6.3	2100					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

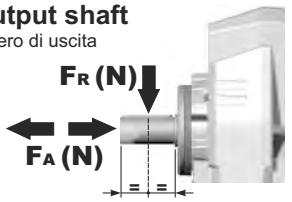
E El reductor tamaño **902C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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						

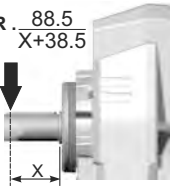
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



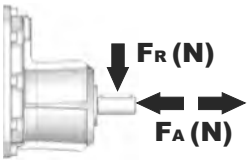
$$Feq = FR \cdot \frac{88.5}{X+38.5}$$



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

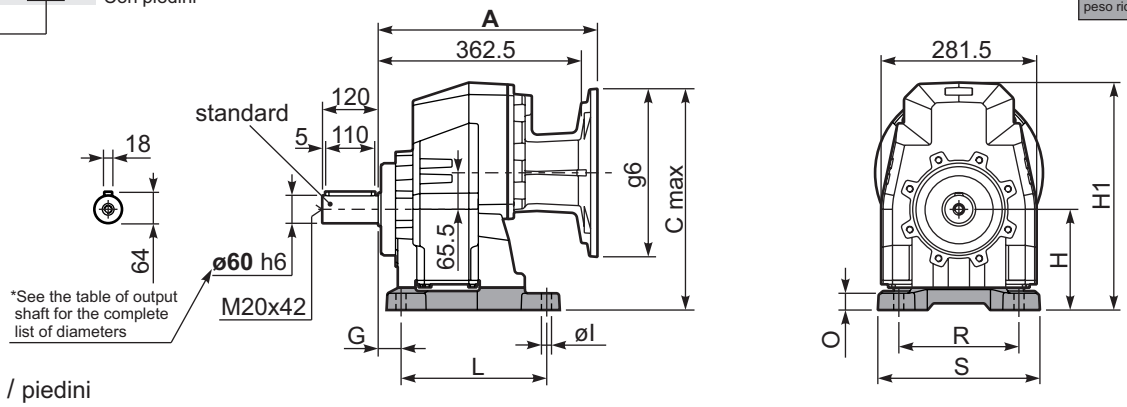


n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2

P902C**S8**... With feet
Con piedini

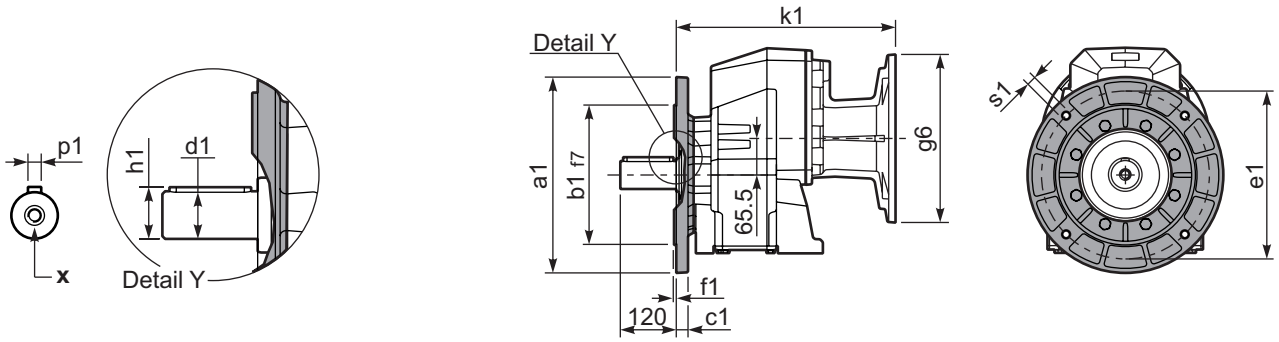
Gearbox weight / peso riduttore: With flange **98.5 kg** / With feet **107.0 kg**



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
H7	027/273	40	225	250	245	300	452	55	22	-	KC90.9.023
HS	-	40	175	215	260	290	402	25	18	-	KC90.9.025
-	-	-	-	-	-	-	-	-	-	-	-

P902C**-F**... Output flanges
flange di uscita



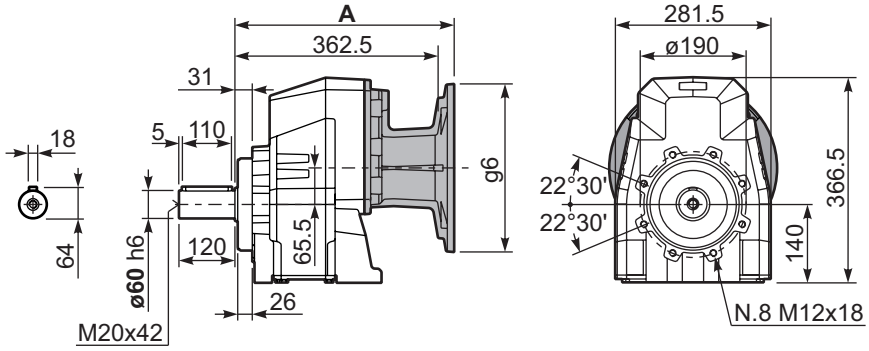
***Available output shaft** / Albero di uscita

	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

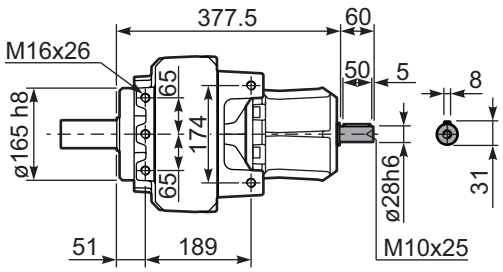
a1 ø	b1	c1	e1	f1	s1	kit code	
300	230	21	265	4	14	KC90.9.014	With flange and feet only on request. Ask for compatibility
350	250	21	300	5	18	KC90.9.015	
-	-	-	-	-	-	-	

P902C**-N**... Basic gearbox
Riduttore base



B5 Motor Flanges	A	C_{max}	g6	k1	kit code
132 B5	391	440.5	300	391	-
160/180 B5	402	465.5	350	402	-

R902C**-N**... Input Shaft
Albero in entrata



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
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

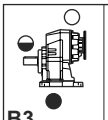
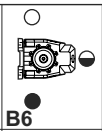
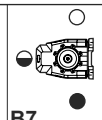
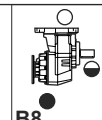
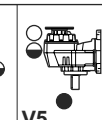
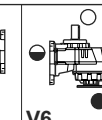
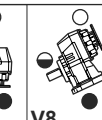
EN Unit **903C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and 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

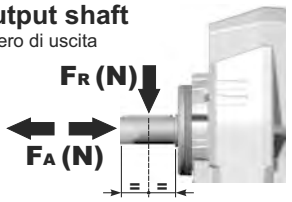
E El reductor tamaño **903C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La 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						

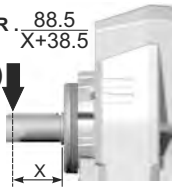
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



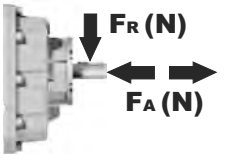
$Feq = FR \cdot \frac{88.5}{X+38.5}$



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

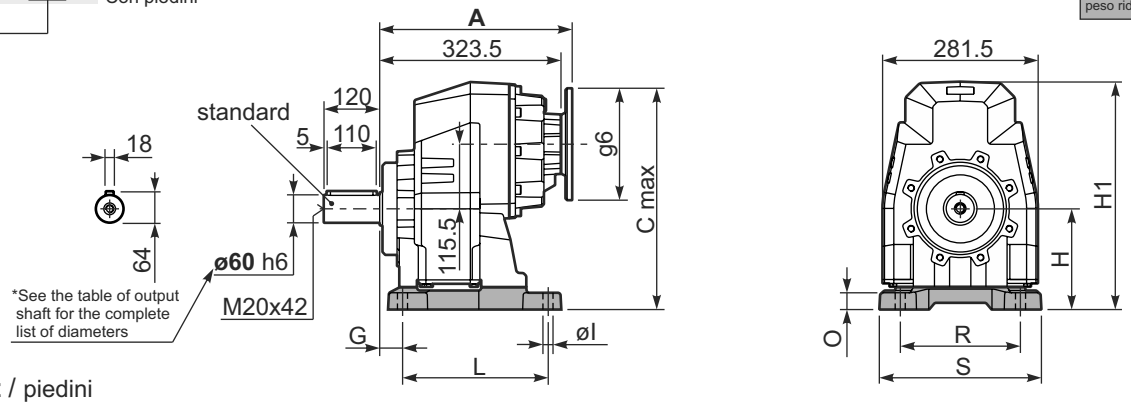


n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

P903C**S8**... With feet
Con piedini

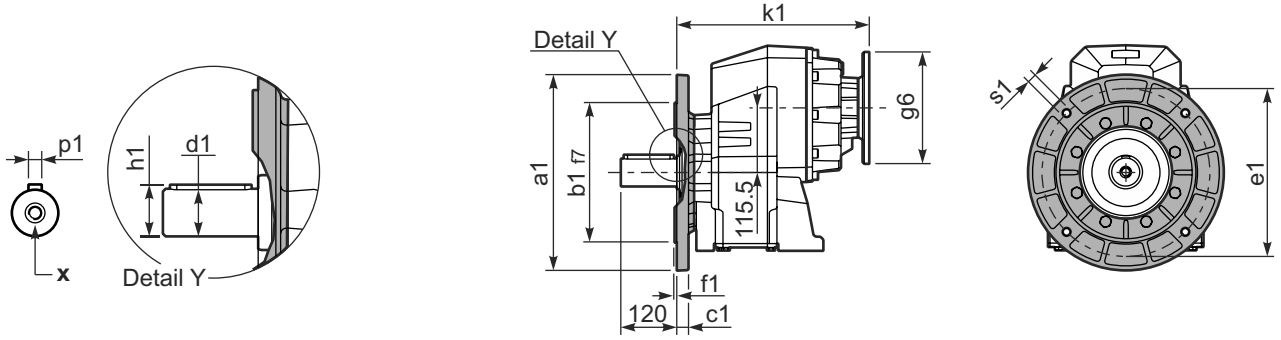
Gearbox weight peso riduttore	With flange **86.0 kg**
	With feet **94.5 Kg**



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
H7	027/273	40	225	250	245	300	452	55	22	-	KC90.9.023
HS	-	40	175	215	260	290	402	25	18	-	KC90.9.025
-	-	-	-	-	-	-	-	-	-	-	-

P903C-**F**... Output flanges
flange di uscita



***Available output shaft** / Albero di uscita

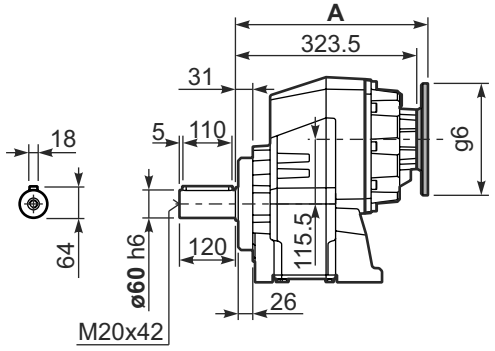
	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	ø 50x100 -	14 -	53.5 -	M16x36 -

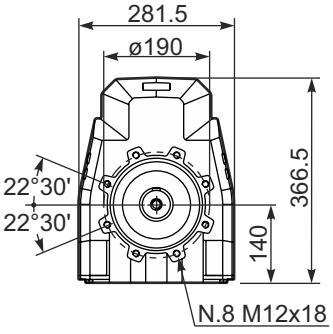
Available output flanges / flange di uscita

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
-	-	-	-	-	-	-

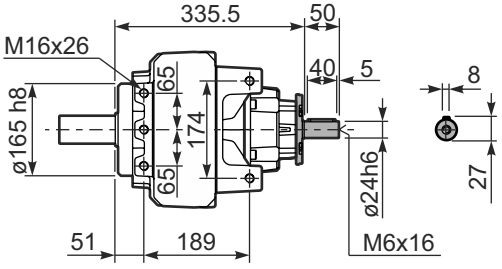

With flange and feet only on request. Ask for compatibility

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	KC023.4.041
80/90 B5	344	440.5	200	344	KC023.4.042
100/112 B5	350	465.5	250	350	KC023.4.043
132 B5	371.5	490.5	300	371.5	KC50.4.043

B14 Motor Flanges	A	C_{max}	g6	k1	kit code
80 B14	342	400.5	120	342	KC085.4.046
90 B14	342	410.5	140	342	KC085.4.045
100/112 B14	353	420.5	160	353	KC085.4.047
132 B14	371.5	440.5	200	371.5	KC50.4.041

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



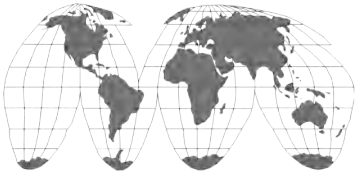
Removable inspection cover
Allows periodic inspection of gearing during routine maintenance

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

1 Stage



Types / Tipi / Tipen / Types / Tipos

8-7	8-17	8-27
FA41 225Nm	**FC61** 380Nm	**FC81** 1175Nm

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

2 and 3 Stage



Types / Tipi / Tipen / Types / Tipos

8-5	8-9	8-11	8-13	8-15	8-19	8-21	8-23	8-25	8-29	8-31	8-33
FS20 90Nm	**FA42** 320Nm	**FA43** 320Nm	**FA52** 490Nm	**FA53** 510Nm	**FC62** 675Nm	**FC63** 675Nm	**FC72** 900Nm	**FC73** 900Nm	**FC82** 2100Nm	**FC83** 2100Nm	**FS50** 480Nm

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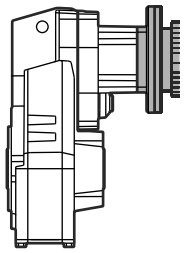
Types / Tipi / Tipen / Types / Tipos

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

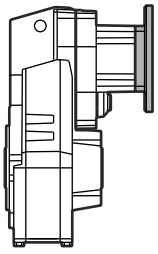
CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Type - Tipo - Typ Type - Tipo	**Size** - Grandezza - Grösse Taille - Tomaño	**Mounting** - Montaggio Montage - Fixation Tipo de montaje	**Rapporto** - Ratio Untersetzung Reduction - Relacion
M	**FA42**	**C**	**10.04**

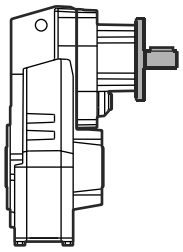
Shaft mounted helical
Riduttori ad assi paralleli



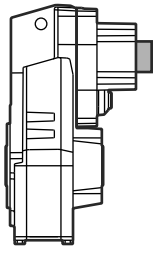
With IEC motor
M



With motor flange
P



With male input shaft
R



Modular base
B

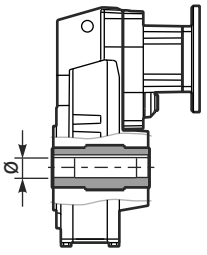
1 Stage Riduzione Stufe Trains Etapa
2 Stages Riduzioni Stufen Trains Etapas
3 Stages Riduzioni Stufen Trains Etapas

Aluminum/Alluminio/Aluminium/Aluminio

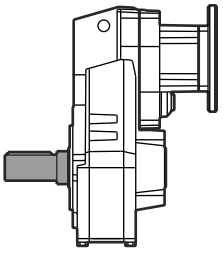
FA41
FS20
FA42
FA52
FA43
FA53
FS50

Cast Iron/Ghisa/Grauguss/Fonte/Fundicion

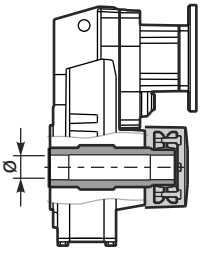
FC61
FC81
FC62
FC72
FC82
FC63
FC73
FC83



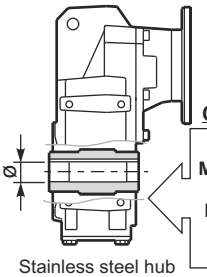
Hollow output shaft
C



Single output shaft
A



Shrink Disk
D
Only on request for Q.ty
A richiesta per quantità



Stainless steel hub
I

On request for q.ty

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

See technical data table

Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

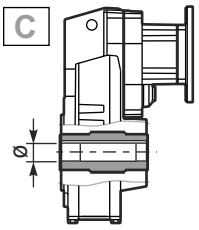
Dossier according to 94/9/EG II. b ii stored
TÜV NORD 0032

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.

Output shaft
Albero uscita
Abtriebswelle
Arbre de sortie
Eje en salida

D

C



➡ STANDARD
⇨ Only on request for Q.ty
A richiesta per quantità

FS20
B ➡ ø20

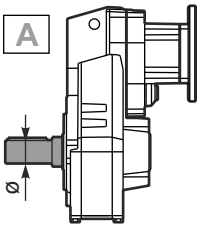
FA41 FA42 FA43 FS50
D ➡ ø30
E ⇨ ø35

FA52 FA53 FC61 FC62 FC63
E ➡ ø35
F ⇨ ø40

FC72 FC73
F ➡ ø40
G ⇨ ø45

FC81 FC82 FC83
H ➡ ø50
I ⇨ ø55

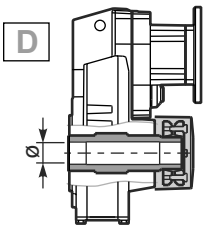
A



Single output shaft

M FA41/2/3 ⇨ ø30
N FA52/3 FC61/2/3 ⇨ ø35
O FC72/3 ⇨ ø40
K FC81/2/3 ⇨ ø50

D

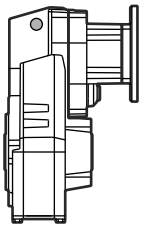


Shrink disk

Q FA42/3 ⇨ ø30
T FA52/3 FC62/3 ⇨ ø35
U FC72/3 ⇨ ø40
V FC82/3 ⇨ ø50

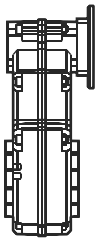
Type - Tipo - Typ
Types - Tipo

ST



ST

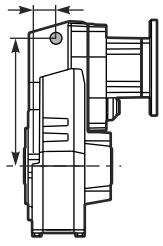
Foro standard
Standard bore



only for FS20

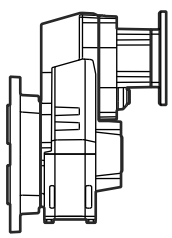
ST

Senza braccio
di reazione
Without reaction arm



Available torque arms, see our web site.
Bracci di reazione disponibili, vedi il nostro sito web.

S..

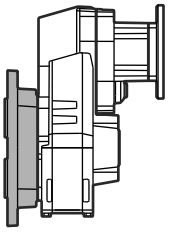


-F

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

FA41 FA42 FA43
2 ➡ ø160
3 ⇨ ø200
4 ⇨ ø250

FA52 FA53 FC61 FC62 FC63
4 ➡ ø250
5 ⇨ ø300

FC72 FC73
4 ➡ ø250
5 ⇨ ø300
6 ⇨ ø350

FC81 FC82 FC83
5 ➡ ø300
6 ⇨ ø350
7 ⇨ ø400

Motor size - Grandezza motore
Motor Grösse
Grandeur moteur - Tamaño motor

-C

Standard Flange
Flangia Standard

IEC ø

B5	B14
-A=56 (ø120)	**-O**=56 (ø80)
-B=63 (ø140)	**-P**=63 (ø90)
-C=71 (ø160)	**-Q**=71 (ø105)
-D=80 (ø200)	**-R**=80 (ø120)
-E=90 (ø200)	**-T**=90 (ø140)
-F=100÷112 (ø250)	**-U**=100÷112 (ø160)
-G=132 (ø300)	**-V**=132 (ø200)
-H=160 (ø350)	
-I=180 (ø350)	

Type R / Tipo R

FA43 FS20 FS50	FA42 FA53 FC63 FC73
-1 ➡ ø14	**-2 ➡ ø19**
FA52 FC62 FC72 FC83	FC82
-3 ➡ ø24	**-4 ➡ ø28**

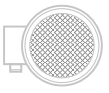
Without flange / Senza flangia

FA43 FS20 FS50	FA42 FA53 FC63 FC73
-Z ⇨ ø9 (56B5)	**-1 ⇨** ø14 (71B5)
-0 ⇨ ø11 (63B5)	**-2 ⇨** ø19 (80B5)
-1 ➡ ø14 (71B5)	**-3 ➡** ø24 (90B5)
FA52 FC62 FC72 FC83	
-2 ⇨ ø19 (80B5)	
-3 ⇨ ø24 (90B5)	
-4 ➡ ø28 (100B5)	

➡ STANDARD

Terminal box position
Posizione morsettiera
Klemmkastenlage
Position boîte à bornes
Posición caja de bornes

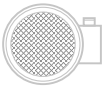
B



A



B
STANDARD



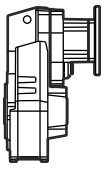
C



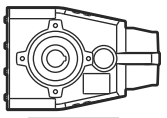
D

Mounting position
Posizione montaggio
Einbaulage
Position de montage
Position de montaje

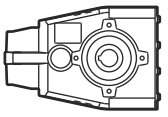
H1



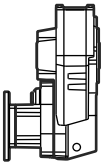
H1
STANDARD



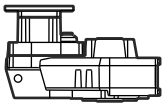
H4



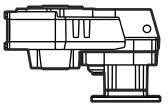
H3



H2



H5



H6

Specify only for vertical positions

Specificare solo per posizione verticale

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

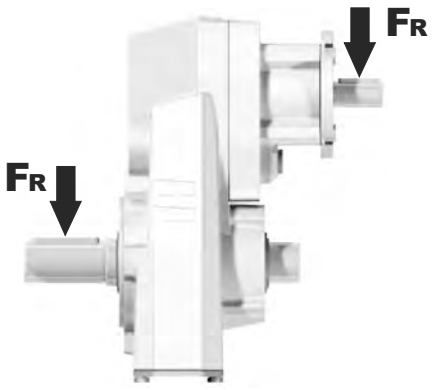
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$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



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

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

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	C	D	E	F	Available B14 motor flanges Q	R	T	U		Output Shaft Ø	Ratios code
							63	71	80	90	100 112	71	80	90	100 112			
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 Applicazione cont. o interm. con n.ro operazioni/ora	≤ 10 Uniform / Uniforme	0.8	1	1.25
	≤ 10 Moderate / Moderato	1	1.25	1.5
	≤ 10 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
	> 10 Moderate / Moderato	1.25	1.5	1.75
	> 10 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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q		Hollow Shaft	Ratios code
							63	71	56	63	71			
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	*	**0.05**	**90**			C	C		974		07
3.5	**400.37**	0.06	166	*	**0.04**	**90**			C	C		776		08

The dynamic efficiency is **0.93** 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

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

EN Unit **FS20** is supplied with synthetic oil for lifetime lubrification, 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.

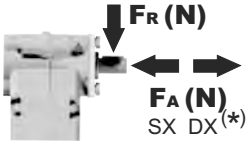
▪ LUBRICATION FS20 Oil Quantity 0.50 Lt.

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



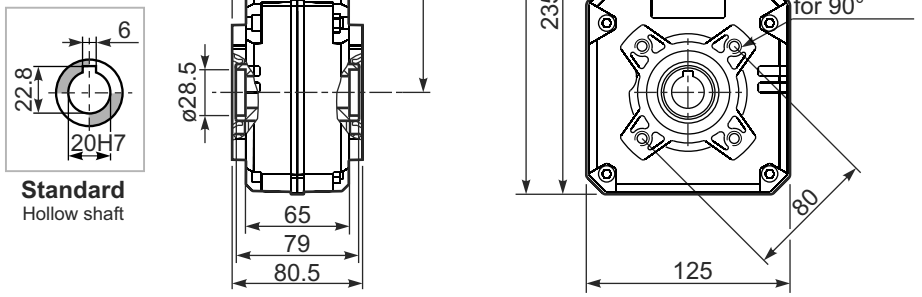
n_1	FA	FR
1400	140	700
900	160	800

***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

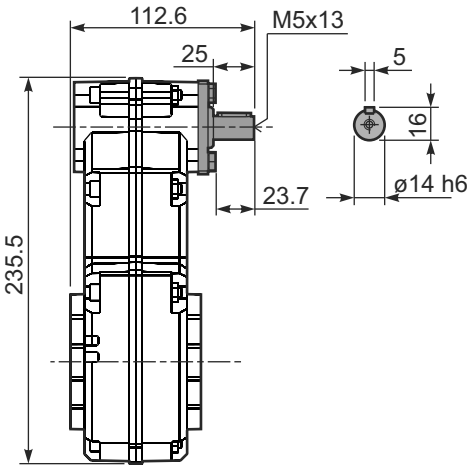
Gearbox weight peso riduttore	4.3 kg



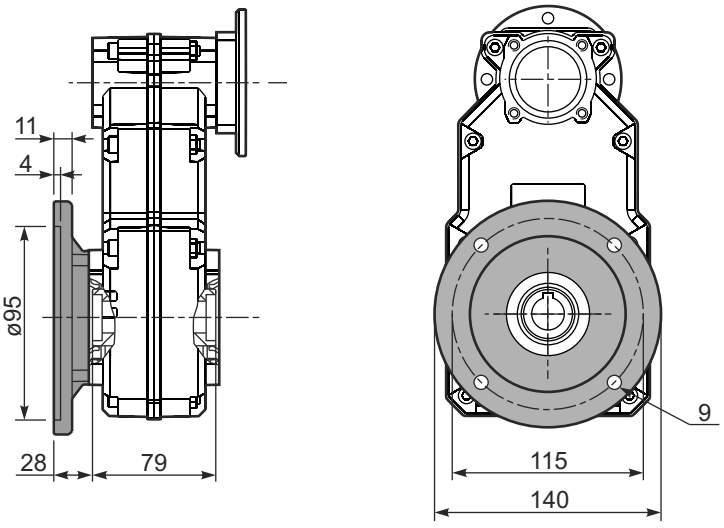
B14 Motor Flanges	H	g6	k1	kit code
56 B14	245.5	80	94.2	KC40.4.049
63 B14	251.5	90	96.7	K050.4.047
71 B14	259	105	94.2	K050.4.045

B5 Motor Flanges	H	g6	k1	kit code
63 B5	276.5	138	94.7	K050.4.041
71 B5	286.5	160	92.7	K050.4.042

RFS20... Input Shaft
Albero in entrata



PFS20-F Output flange
flangia di uscita



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 D (80)	B5 E (90)	B5 F (100 112)	Available B14 motor flanges R (80)	B14 T (90)	B14 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	ø35	04
178	**7.85**	4	205	1.1	4.3	225	B	B		B	B		13102	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

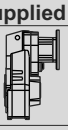
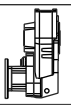
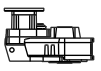
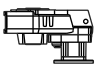
EN Unit **FA41** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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

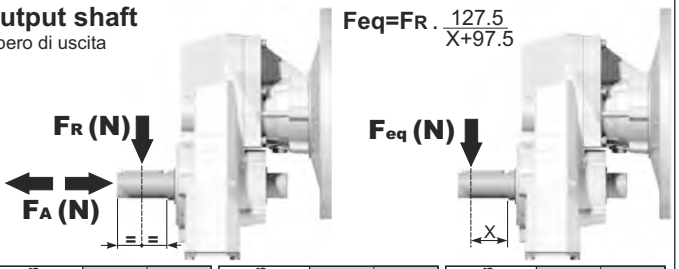
For all details on lubrication and plugs check our website Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{127.5}{X+97.5}$$



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.

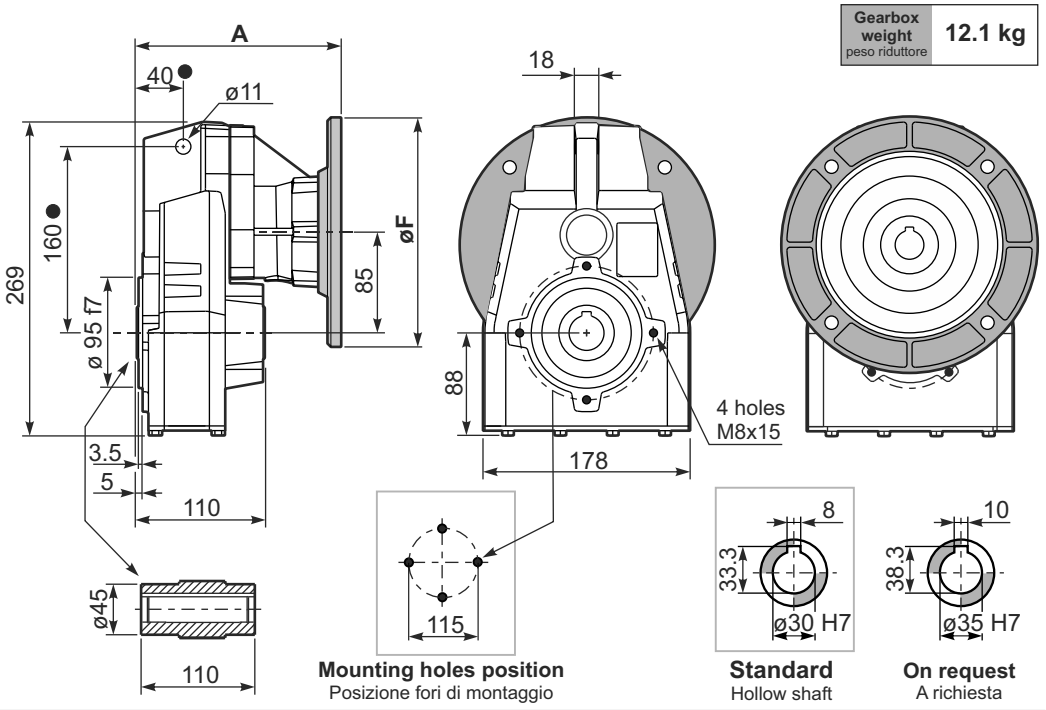
tab. 2

PFA41C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	12.1 kg

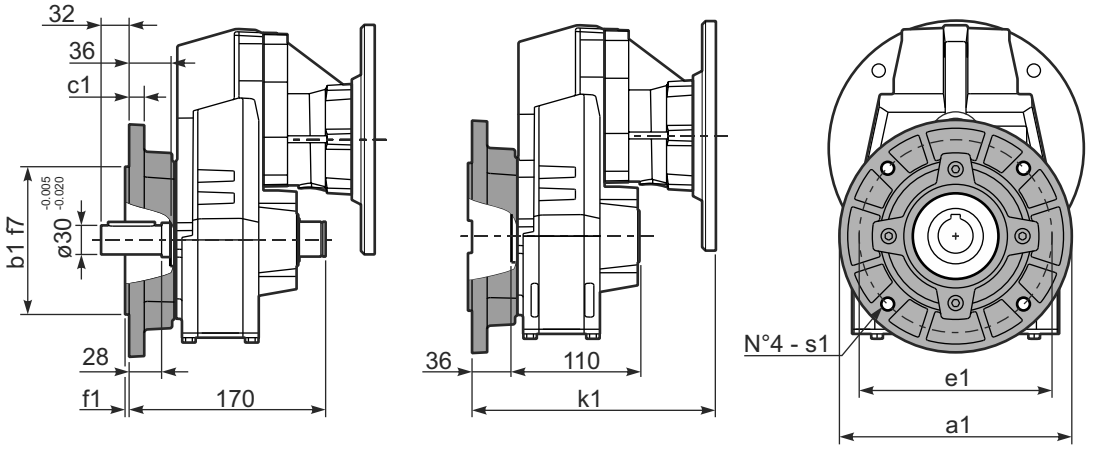
M. flanges	Kit code	øF	A
80/90B5	KC023.4.042	200	179.5
100/112B5	KC023.4.043	250	185.5
80B14	KC085.4.046	120	177.5
90B14	KC085.4.045	140	177.5
100/112B14	KC085.4.047	160	188.5

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



PFA41...-F... Output flange
Flangia uscita

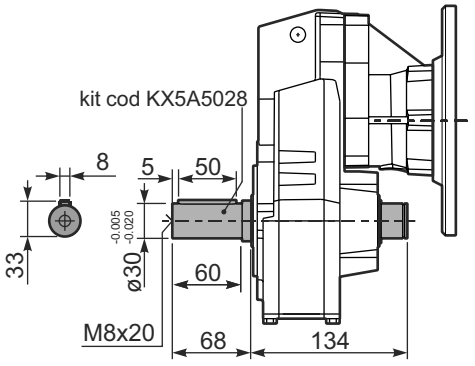
M. flanges	k1
80/90B5	215.5
100/112B5	221.5
80B14	213.5
90B14	213.5
100/112B14	224.5



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	C	D	E	F	Available B14 motor flanges Q	R	T	U		Output Shaft ø	Ratios code
							63	71	80	90	100 112	71	80	90	100 112			
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**	2.2	351	0.9	**2.0**	320	B					C	C			1518	**ø30**	09
54	**25.85**	2.2	367	0.9	**1.9**	320	B					C	C			1713		10
47.5	**29.49**	1.5	289	1.1	**1.7**	320	B					C	C			1318	ø35	11
46.1	**30.34**	1.5	297	1.1	**1.6**	320	B					C	C			1513	On request	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

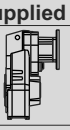
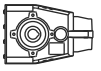
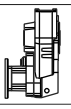
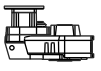
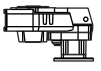
EN Unit **FA42** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

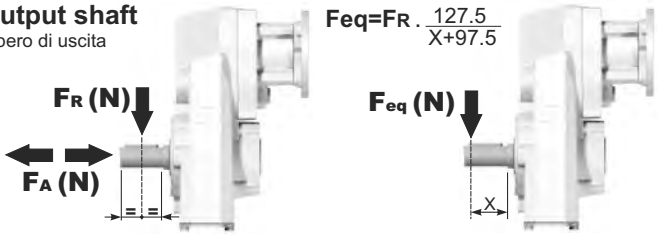
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
					
H1	**H4**	**H3**	**H2**	**H5**	**H6**
1.15 LT	0.70 LT	0.70 LT	0.70 LT	1.20 LT	0.8 LT
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320		

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

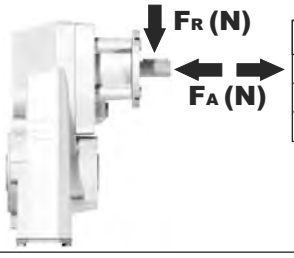
$F_{eq} = F_R \cdot \frac{127.5}{X+97.5}$



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

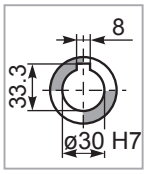
tab. 2

PFA42C... Basic gearbox
Riduttore base

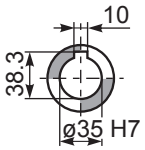
Gearbox weight peso riduttore: **9.0 kg**

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	185
71B14	K063.4.047	105	167.5
80B14	K063.4.046	120	168.5
90B14	K063.4.041	140	169.5
100/112B14	KC40.4.041	160	185

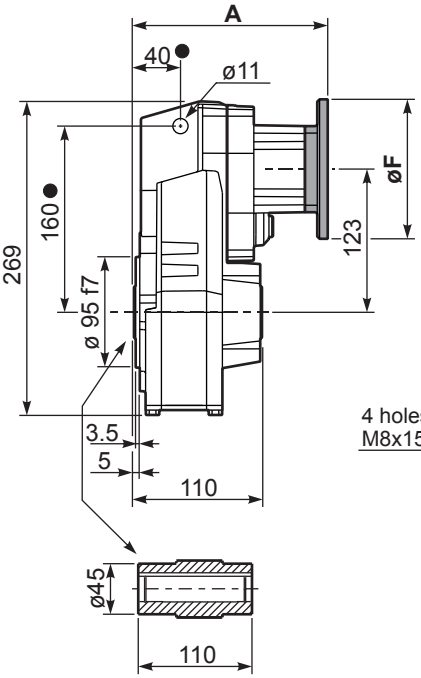
● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

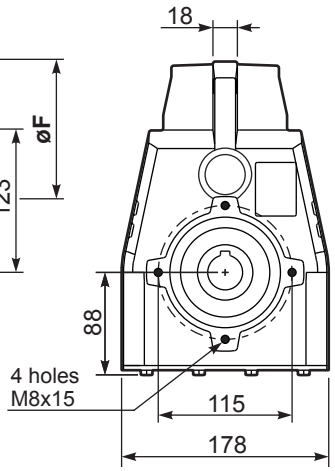


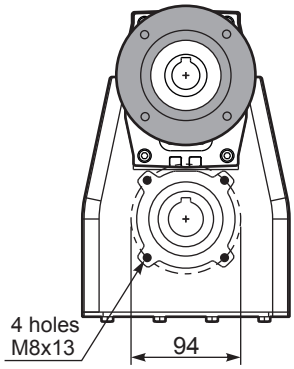
Standard
Hollow shaft



On request
A richiesta

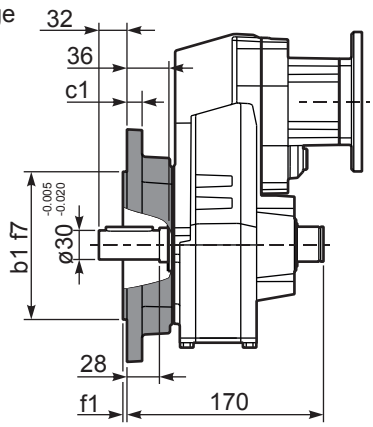


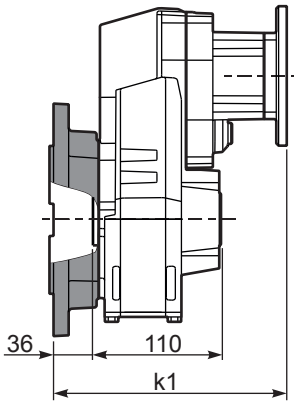


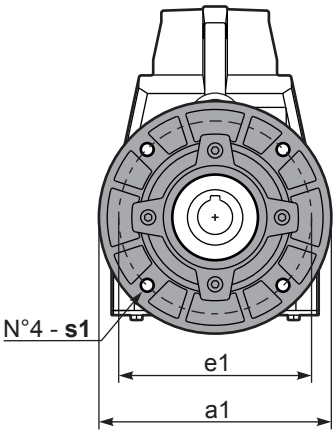


PFA42...-F... Output flange
Flangia uscita

Motor Flange	k1
63B5	205.5
71B5	203.5
80/90B5	205.5
100/112B5	221
71B14	203.5
80B14	204.5
90B14	205.5
100/112B14	221



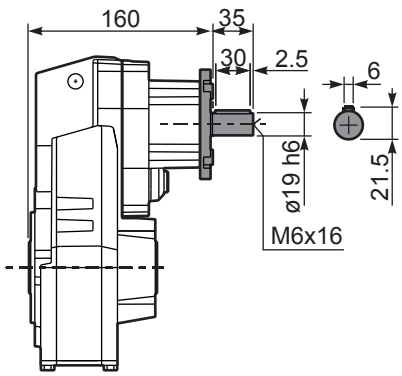




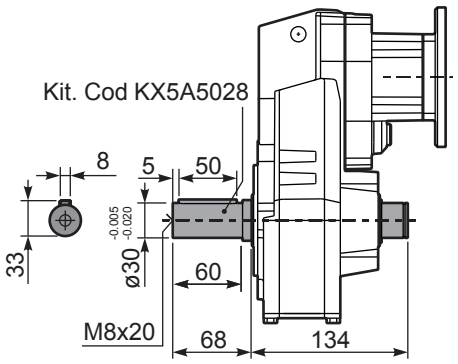
Available output flanges
Flange di uscita

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

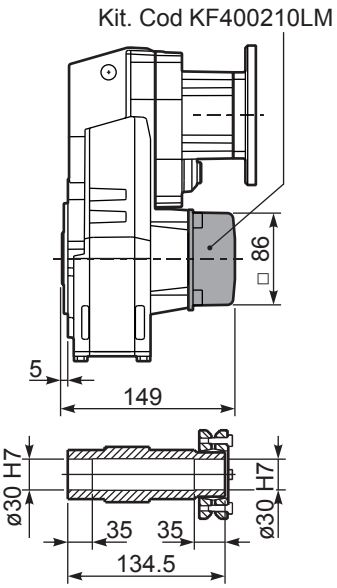
RFA42C... Input Shaft
Albero in entrata



PFA42 A... Single output shaft
Albero uscita semplice



PFA42D... Shrink disk
Calettatore



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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q		Output Shaft ø	Ratios code
							63	71	56	63	71			
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 ø30**	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		08
7.6	**183.48**	0.25	294	1.1	**0.27**	320			C	C		91318	ø35	09
6.5	**214.15**	0.18	262	1.2	**0.23**	320			C	C		71713	On request	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

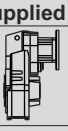
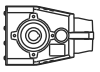
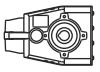
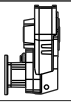
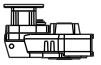
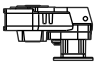
EN Unit **FA43** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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
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

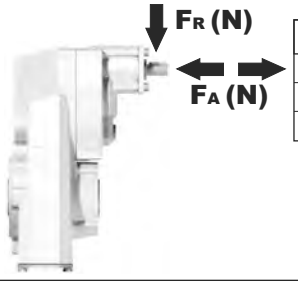
$F_{eq} = F_R \cdot \frac{127.5}{X+97.5}$



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

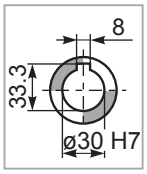
tab. 2

PFA43C... Basic gearbox
Riduttore base

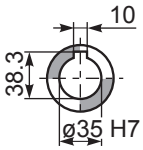
Gearbox weight peso riduttore: **8.9 kg**

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	173
71B5	K050.4.042	160	171
56B14	KC40.4.049	80	172.5
63B14	K050.4.047	90	175
71B14	K050.4.045	105	172.5

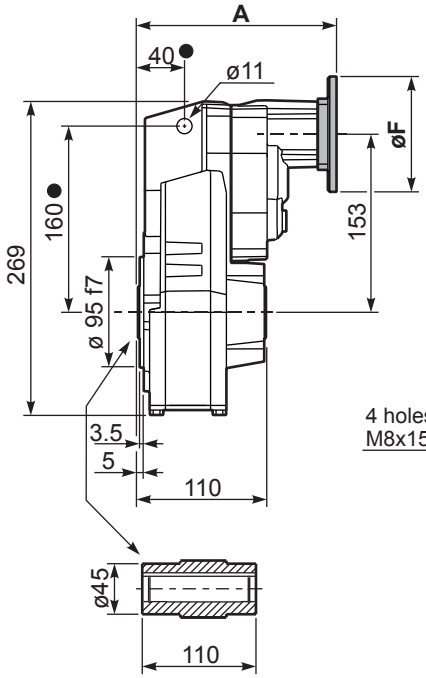
● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

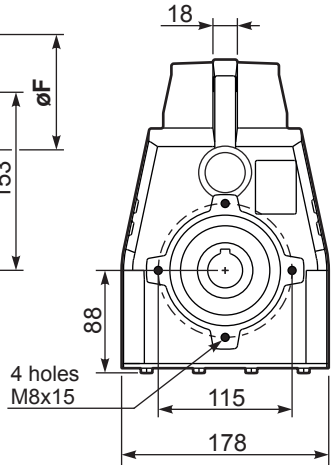


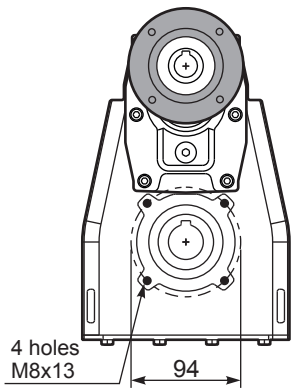
Standard
Hollow shaft



On request
A richiesta

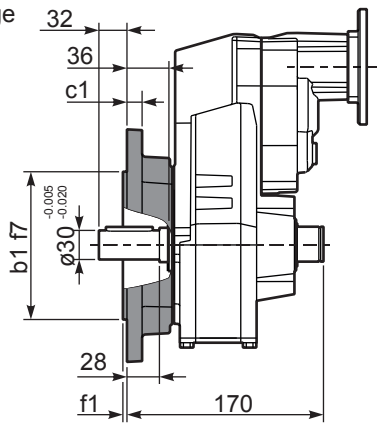


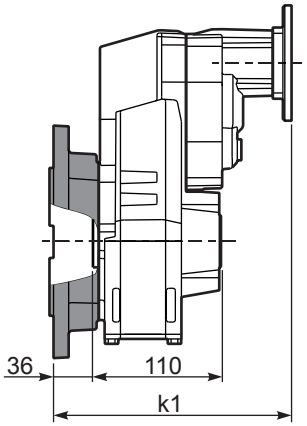


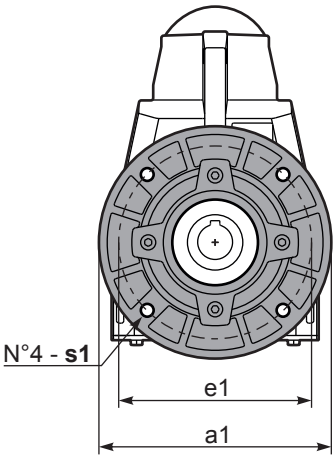


PFA43...-F... Output flange
Flangia uscita

Motor Flange	k1
63B5	209
71B5	207
56B14	208.5
63B14	211
71B14	208.5



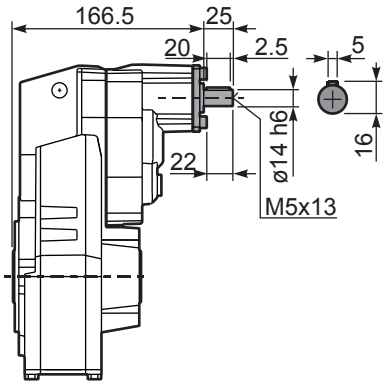




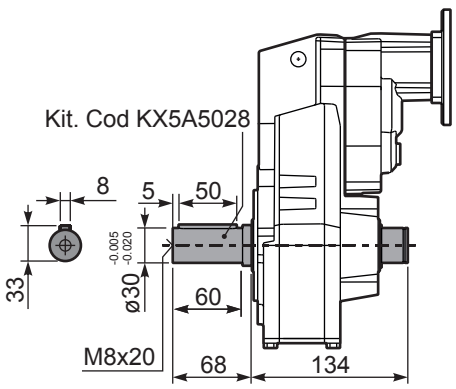
Available output flanges
Flange di uscita

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

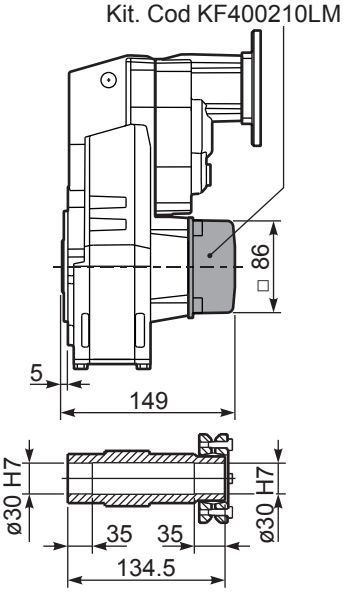
RFA43C... Input Shaft
Albero in entrata



PFA43A... Single output shaft
Albero uscita semplice



PFA43D... Shrink disk
Calettatore



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
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 On request	09
47.9	**29.23**	3	564	0.9	2.6	490	B									1314		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

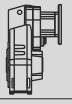
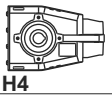
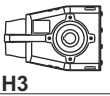
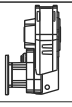
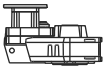
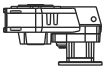
EN Unit **FA52** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

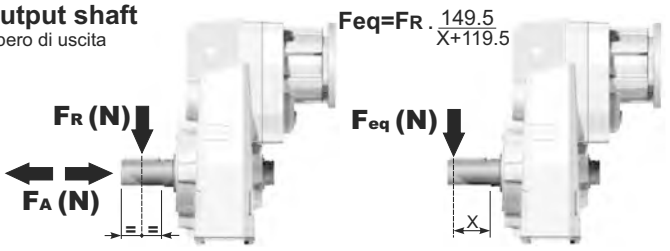
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
 H1	 H4	 H3	 H2	 H5	 H6
1.85 LT	1.15 LT	1.15 LT	1.30 LT	2.10 LT	1.30 LT
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320		

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

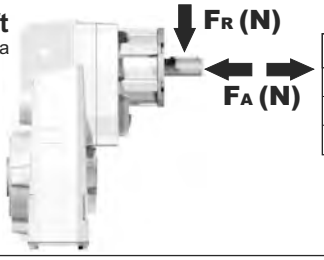
$$Feq = FR \cdot \frac{149.5}{X+119.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	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

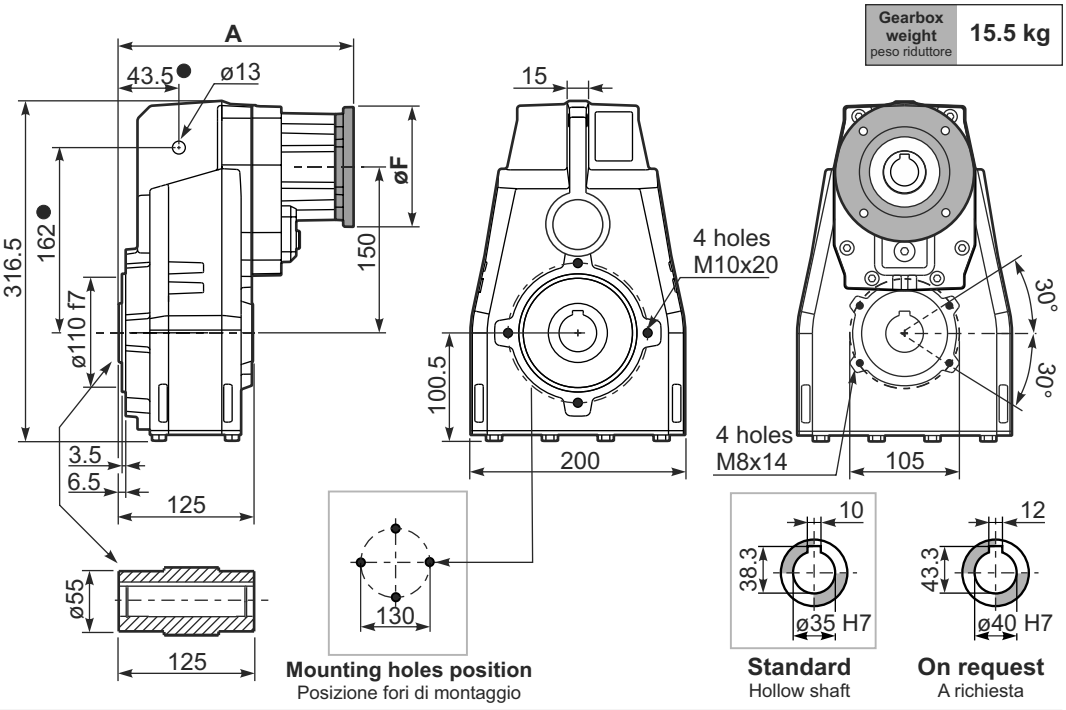
tab. 2

PFA52C... Basic gearbox
Riduttore base

Gearbox weight / peso riduttore: **15.5 kg**

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	227
80/90B5	KC023.4.042	200	229
100/112B5	KC023.4.043	250	235
132B5	KC50.4.043	300	256.5
80B14	KC085.4.046	120	227
90B14	KC085.4.045	140	227
100/112B14	KC085.4.047	160	238
132B14	KC50.4.041	200	256.5

- Available torque arms, see our web site
  Bracci di reazione disponibili, consulta il nostro sito web



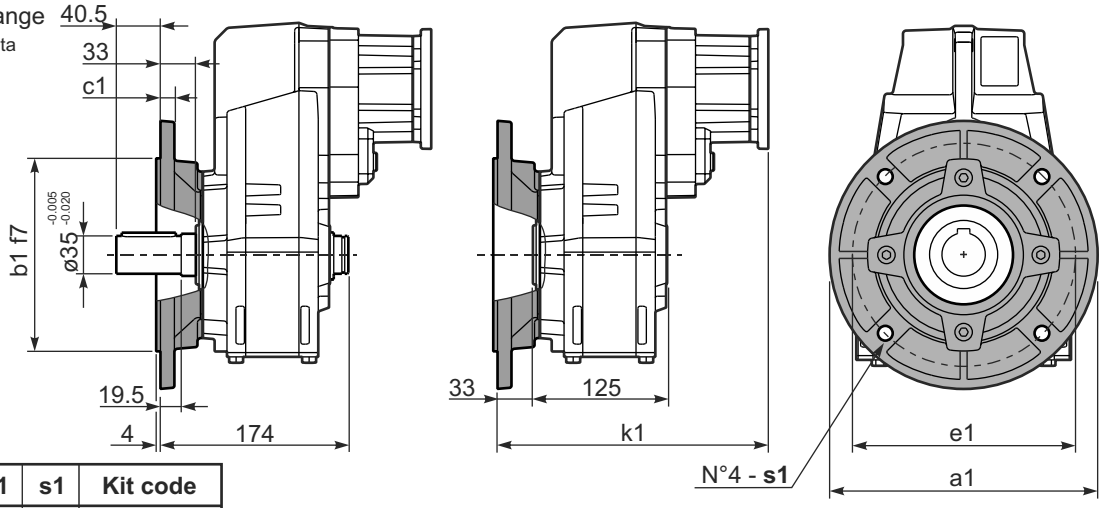
Mounting holes position
Posizione fori di montaggio

Standard
Hollow shaft

On request
A richiesta

PFA52...-F... Output flange
Flangia uscita

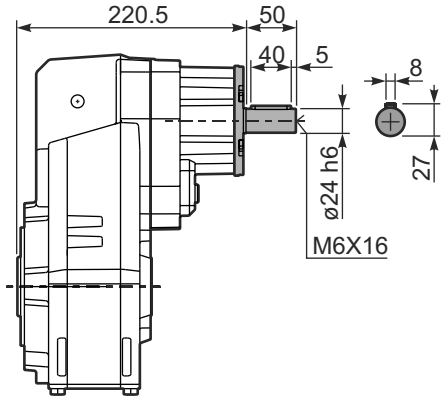
M. flanges	k1
71B5	260
80/90B5	262
100/112B5	268
132B5	289.5
80B14	260
90B14	260
100/112B14	271
132B14	289.5



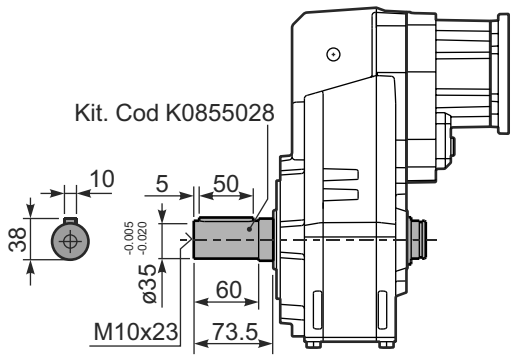
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
300	230	16	265	14	KF60.9.012

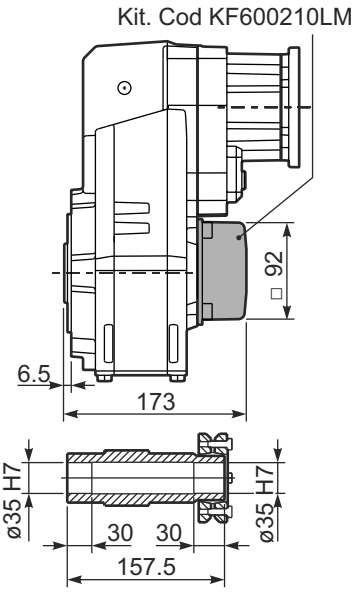
RFA52C... Input Shaft
Albero in entrata



PFA52 A... Single output shaft
Albero uscita semplice



PFA52D... Shrink disk
Calettatore



8

FA53 Compact gear 510Nm

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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft	Ratios code
							63	71	80	90	71	80	90			
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

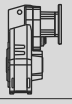
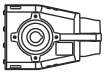
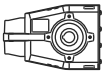
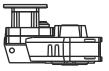
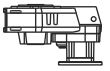
EN Unit **FA53** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

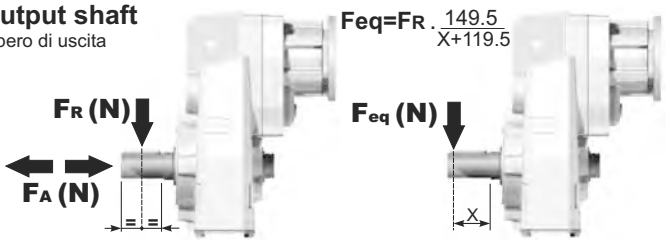
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
 **H1**	 **H4**	 **H3**	**H2**	 **H5**	 **H6**
2.15 LT	1.25 LT	1.25 LT	1.45 LT	2.35 LT	1.45 LT
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320		

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

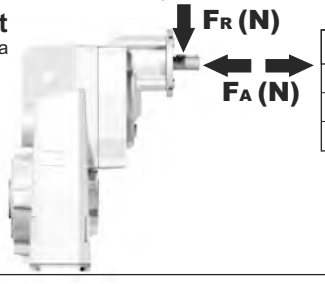
$$Feq = FR \cdot \frac{149.5}{X+119.5}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	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

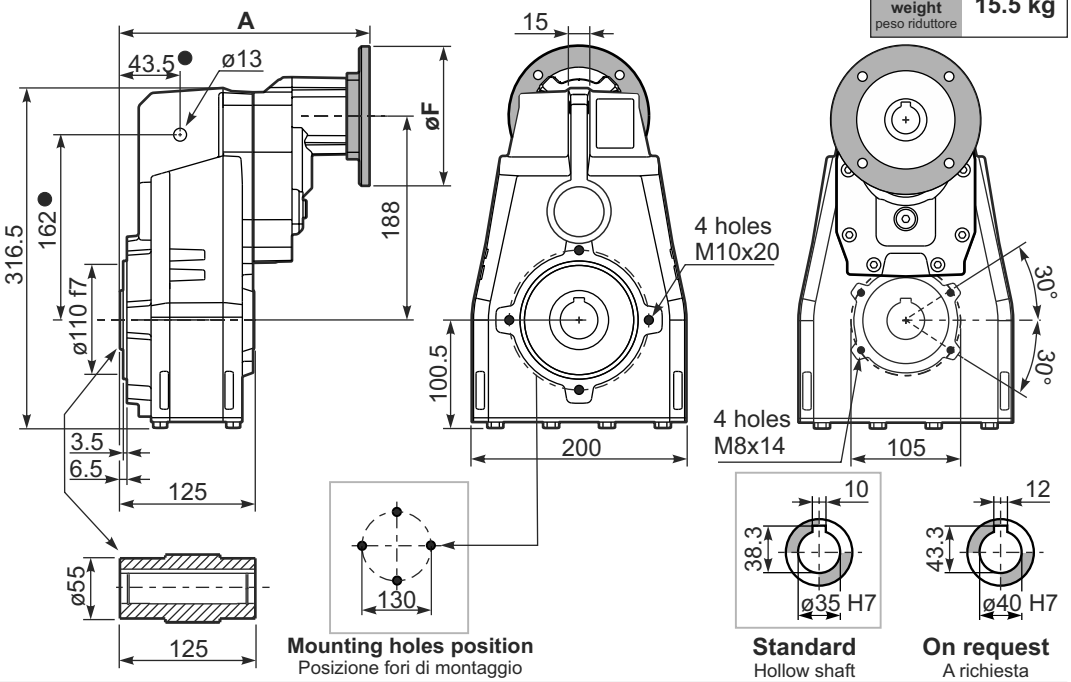
tab. 2

PFA53C... Basic gearbox
Riduttore base

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	238
90B14	K063.4.041	140	239

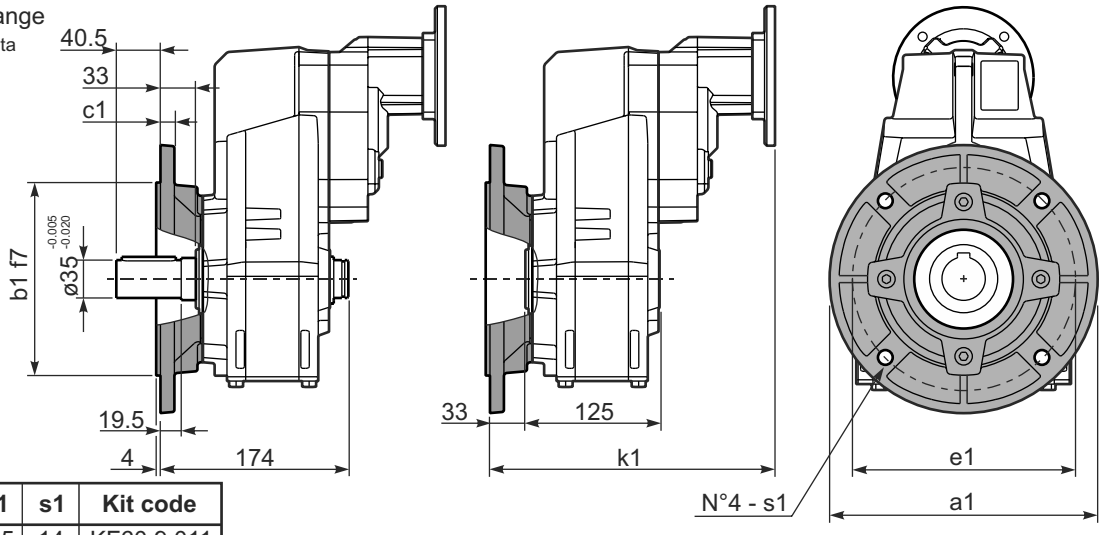
● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

Gearbox weight peso riduttore **15.5 kg**



PFA53...-F... Output flange
Flangia uscita

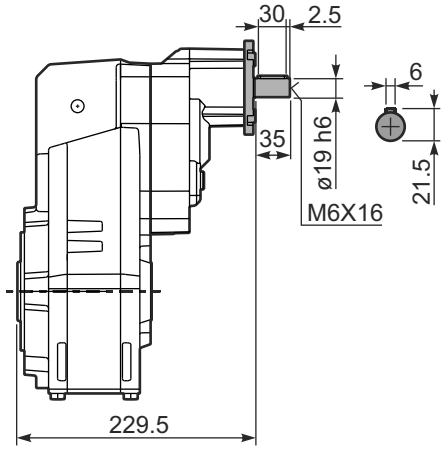
Motor Flange	k1
63B5	272
71B5	270
80/90B5	272
71B14	270
80B14	271
90B14	272



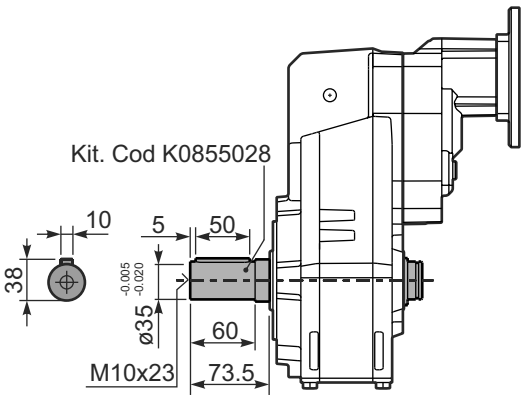
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
300	230	16	265	14	KF60.9.012

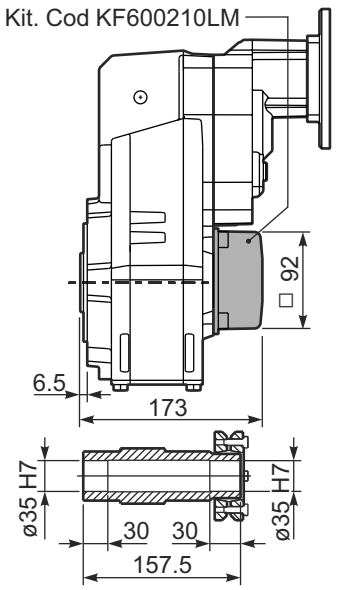
RFA53C... Input Shaft
Albero in entrata



PFA53A... Single output shaft
Albero uscita semplice



PFA53D... 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]
507	**2.76**	9	166	1.6	14.4	265
395	**3.54**	9	213	1.3	11.6	275
277	**5.06**	9	304	1.0	8.6	290
241	**5.81**	7.5	281	1.2	8.5	330
206	**6.79**	7.5	329	1.2	8.4	380

Available B5 motor flanges: G 132

B14 motor flanges: - - - - / - - - -

not available

	Output Shaft	Ratios code
2980	**standard**	01
2485	**ø35**	02
1891		03
1693	ø40	04
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

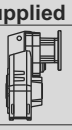
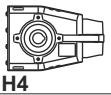
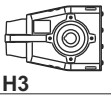
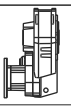
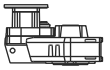
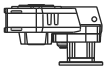
EN Unit **FC61** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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**
1.85 LT	1.15 LT	1.15 LT	1.30 LT	1.95 LT	1.30 LT
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320		

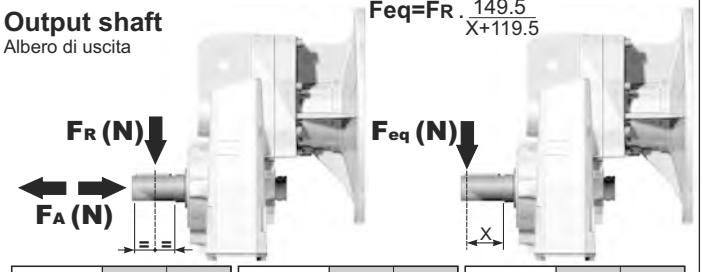
For all details on lubrication and plugs check our website / Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

$F_{eq} = F_R \cdot \frac{149.5}{X+119.5}$



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

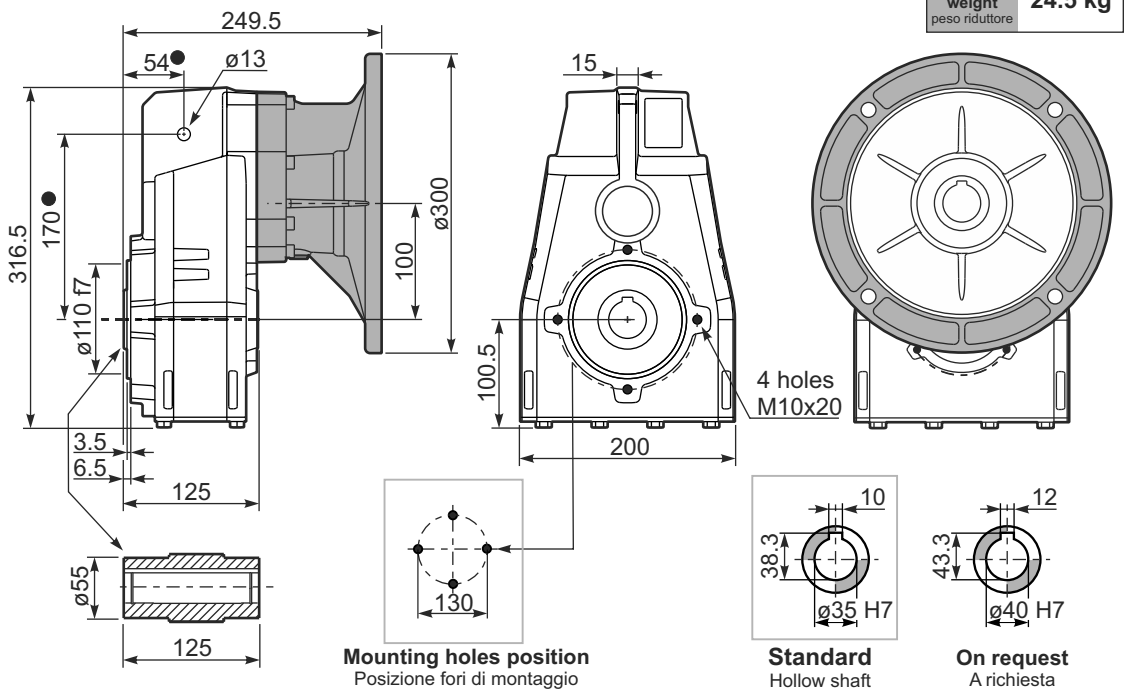
On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

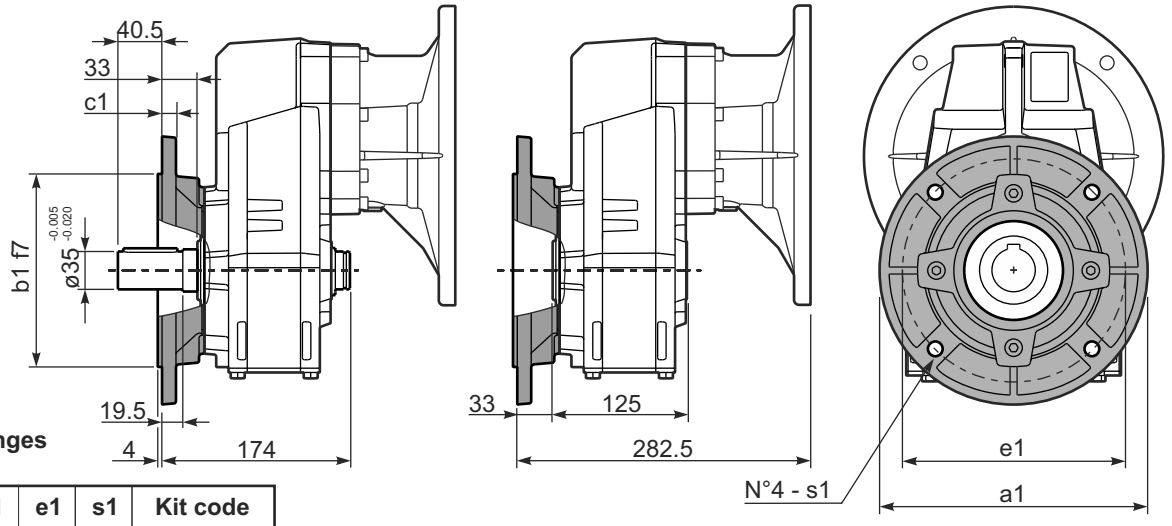
PFC61C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	24.5 kg

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



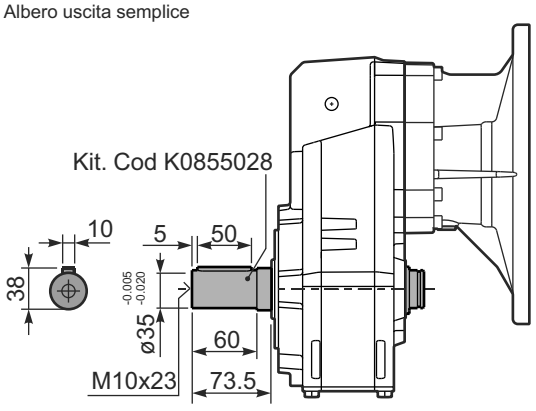
PFC61...**-F**... Output flange
Flangia uscita



Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
300	230	16	265	14	KF60.9.012

PFC61 **A**... Single output shaft
Albero uscita semplice



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	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

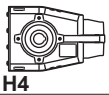
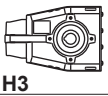
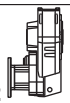
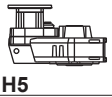
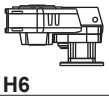
EN Unit **FC62** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

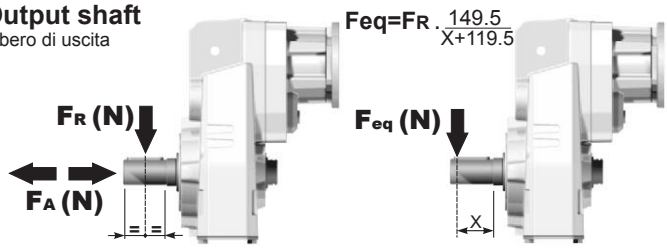
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
 H1	 H4	 H3	 H2	 H5	 H6
1.85 LT	1.15 LT	1.15 LT	1.30 LT	2.10 LT	1.30 LT
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320		

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

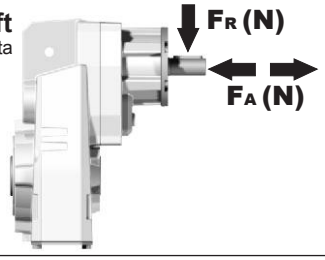
$F_{eq} = F_R \cdot \frac{149.5}{X+119.5}$



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



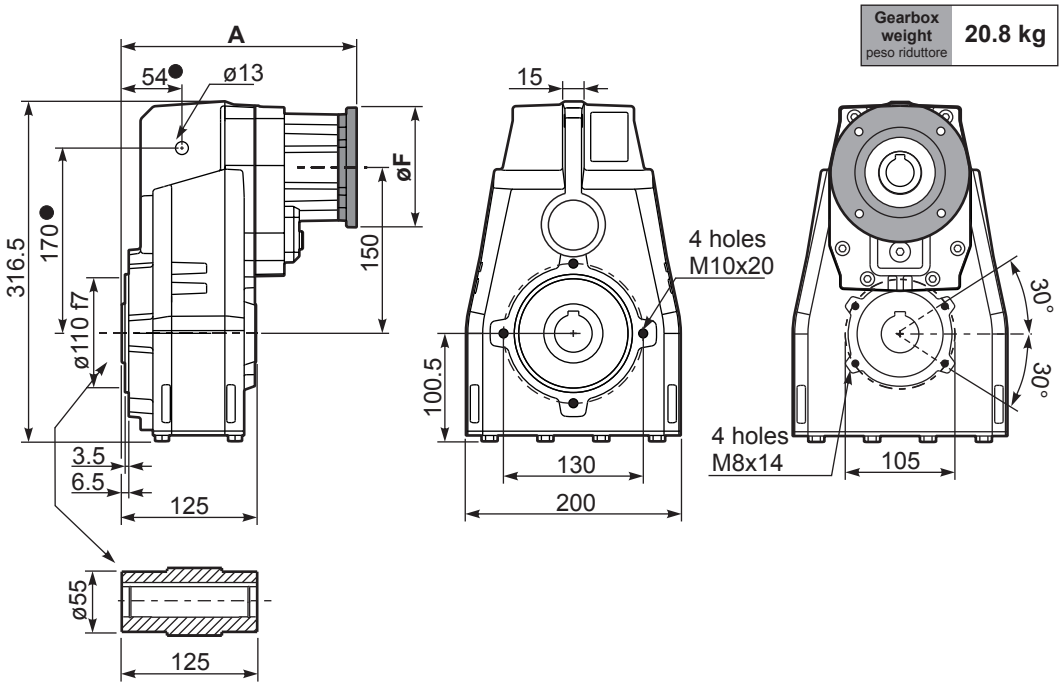
n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

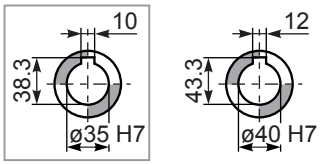
PFC62C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore **20.8 kg**

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	227
80/90B5	KC023.4.042	200	229
100/112B5	KC023.4.043	250	235
132B5	KC50.4.043	300	256.5
80B14	KC085.4.046	120	227
90B14	KC085.4.045	140	227
100/112B14	KC085.4.047	160	238
132B14	KC50.4.041	200	256.5



- Available torque arms, see our web site
  Bracci di reazione disponibili, consulta il nostro sito web

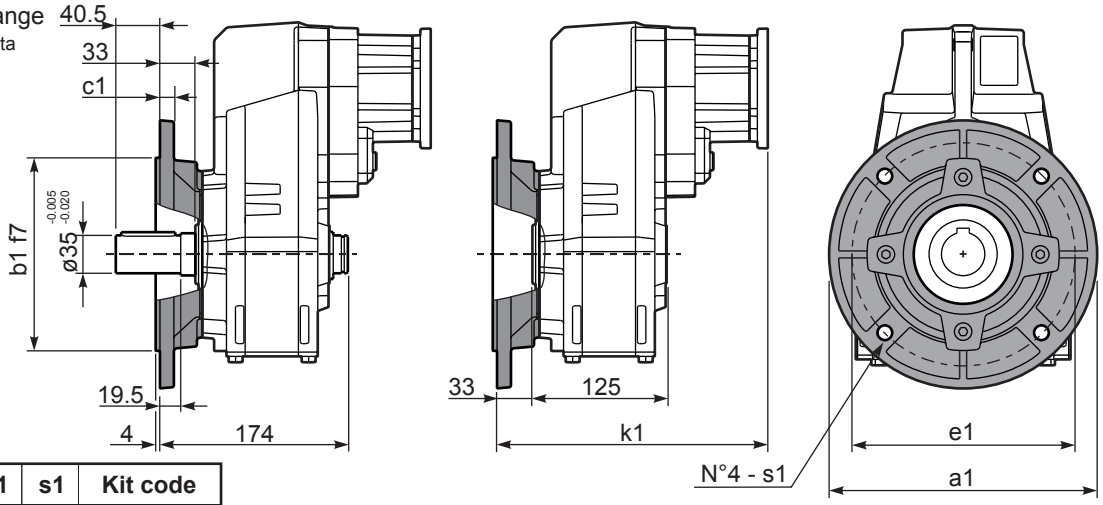


Standard
Hollow shaft

On request
A richiesta

PFC62...-F... Output flange
Flangia uscita

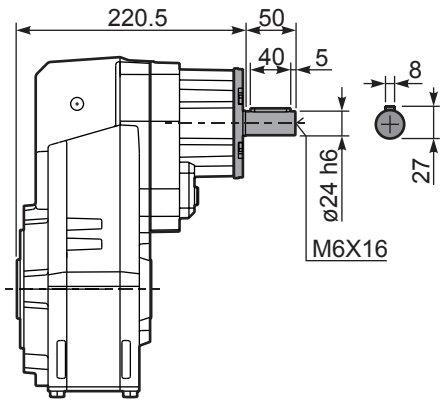
M. flanges	k1
71B5	260
80/90B5	262
100/112B5	268
132B5	289.5
80B14	260
90B14	260
100/112B14	271
132B14	289.5



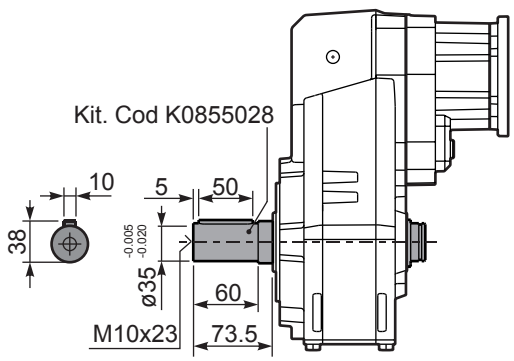
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
300	230	16	265	14	KF60.9.012

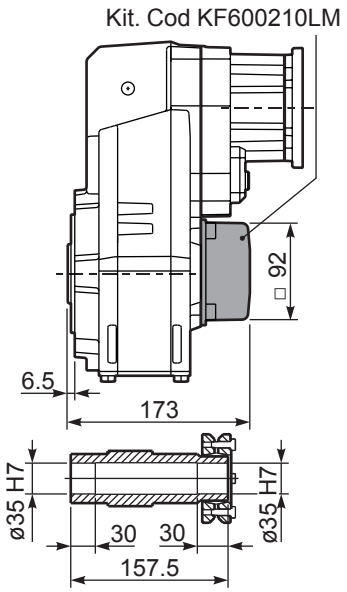
RFC62C... Input Shaft
Albero in entrata



PFC62 A... Single output shaft
Albero uscita semplice



PFC62D... Shrink disk
Calettatore



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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft ø	Ratios code
							63	71	80	90	71	80	90			
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

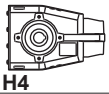
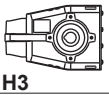
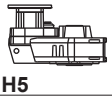
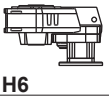
EN Unit **FC63** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

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.

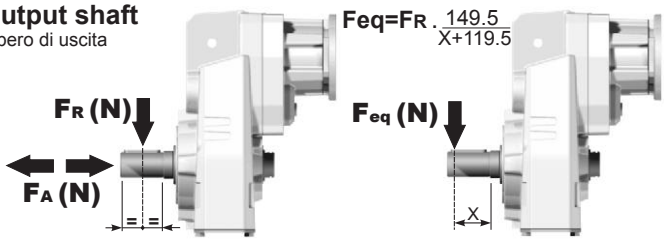
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio				
 H1	 H4	 H3	 H2	 H5	 H6
2.15 LT	1.25 LT	1.25 LT	1.45 LT	2.35 LT	1.45 LT
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320		

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

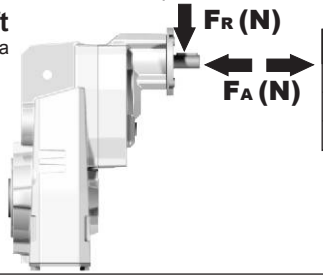
$F_{eq} = F_R \cdot \frac{149.5}{X+119.5}$



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



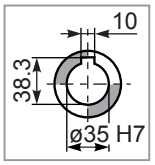
n_1	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

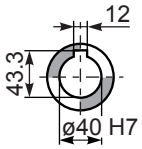
PFC63C... Basic gearbox
Riduttore base

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	238
90B14	K063.4.041	140	239

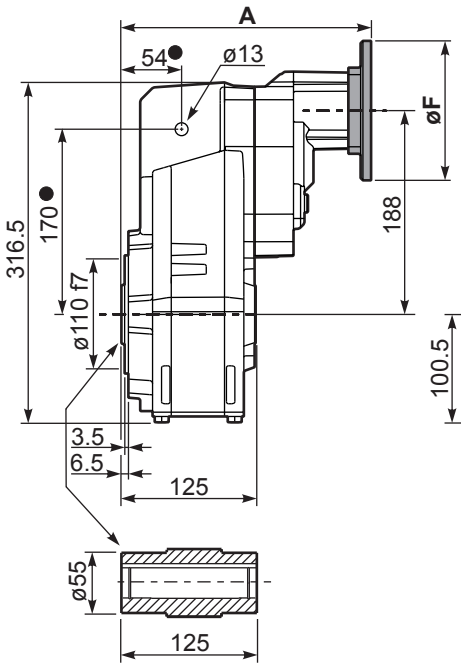
● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

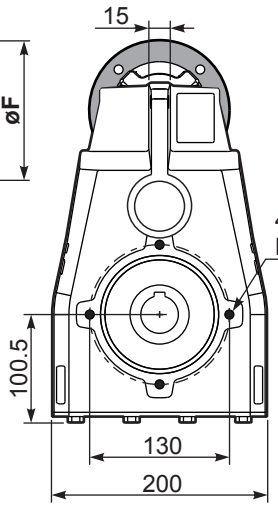


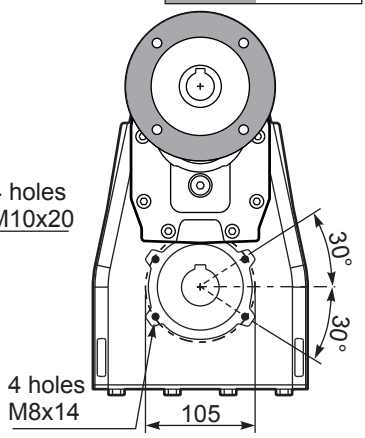
Standard
Hollow shaft



On request
A richiesta



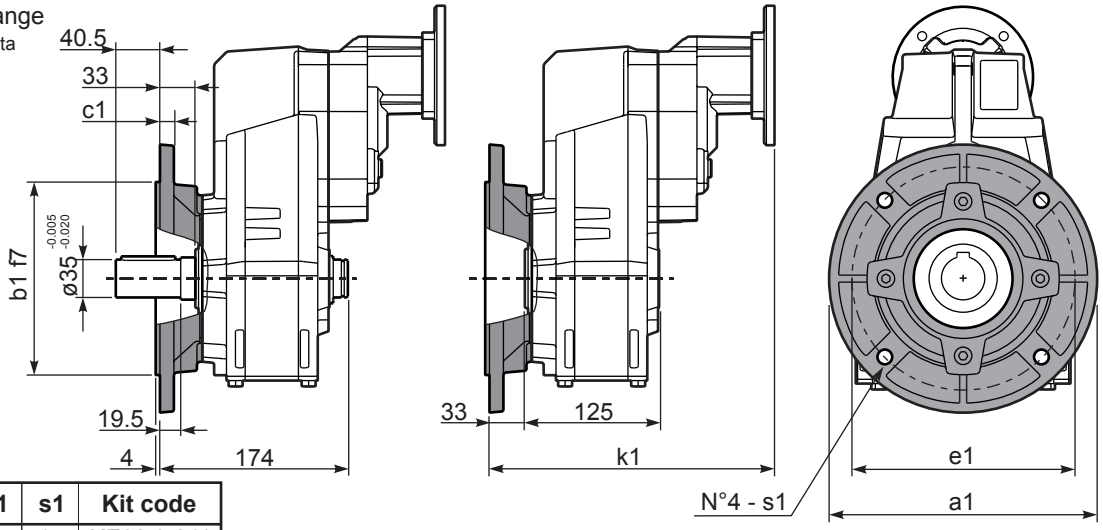




Gearbox weight peso riduttore **20.8 kg**

PFC63...-F... Output flange
Flangia uscita

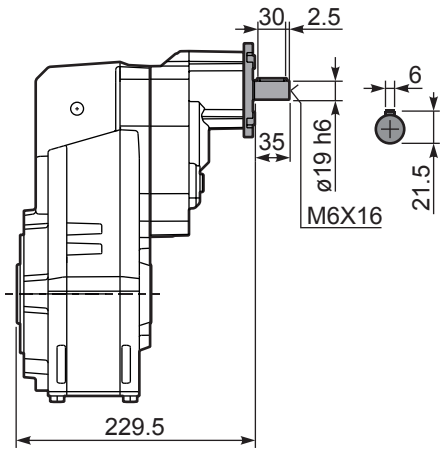
Motor Flange	k1
63B5	272
71B5	270
80/90B5	272
71B14	270
80B14	271
90B14	272



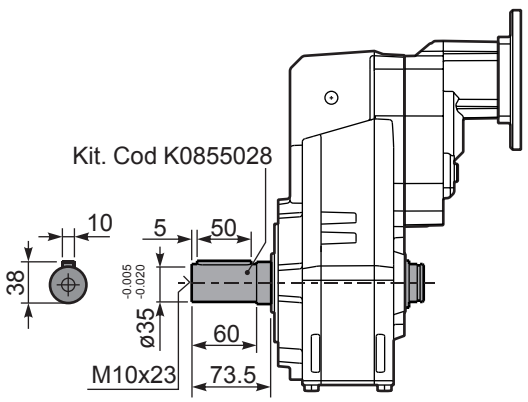
Available output flanges
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
300	230	16	265	14	KF60.9.012

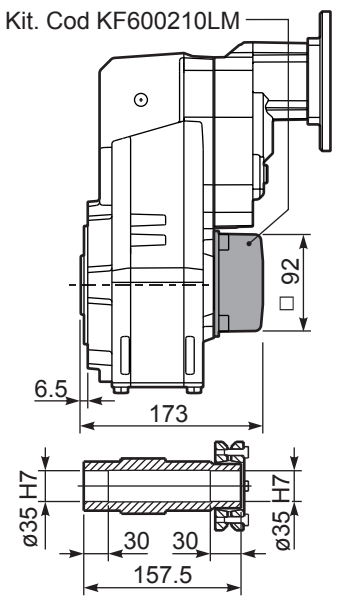
RFC63C... Input Shaft
Albero in entrata



PFC63A... Single output shaft
Albero uscita semplice



PFC63D... Shrink disk
Calettatore



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
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 **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.

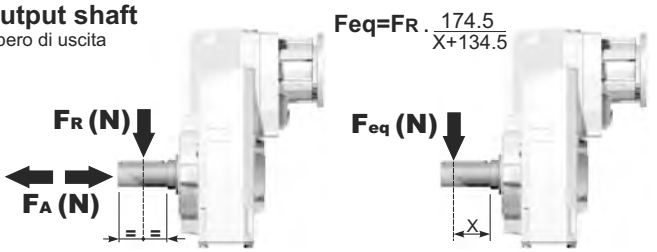
H1	H4	H3	H2	H5	H6
3.50 LT	1.90 LT	1.90 LT	1.80 LT	3.60 LT	1.90 LT
AGIP Blasia 460					

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

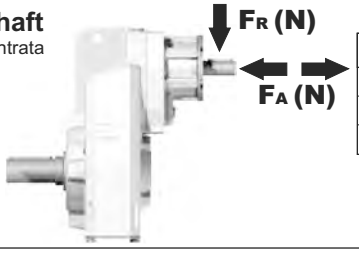
$F_{eq} = F_R \cdot \frac{174.5}{X+134.5}$



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



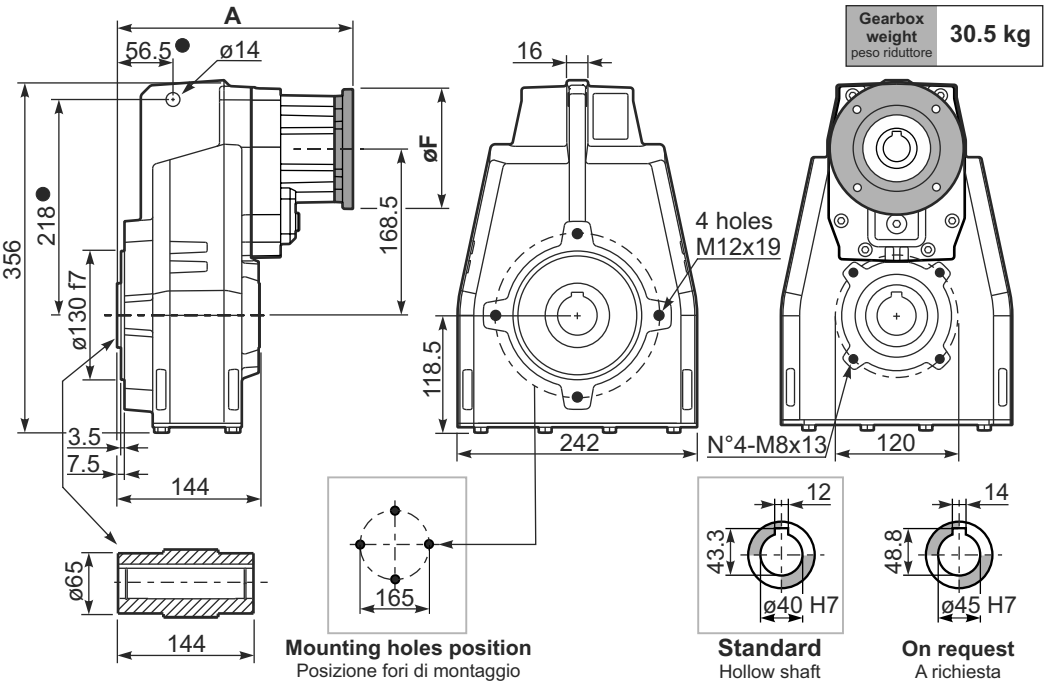
n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

PFC72C... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	238.5
80/90B5	KC023.4.042	200	240.5
100/112B5	KC023.4.043	250	246.5
132B5	KC50.4.043	300	268
80B14	KC085.4.046	120	238.5
90B14	KC085.4.045	140	238.5
100/112B14	KC085.4.047	160	249.5
132B14	KC50.4.041	200	268

- Available torque arms, see our web site
  Bracci di reazione disponibili, consulta il nostro sito web



Gearbox weight / peso riduttore: **30.5 kg**

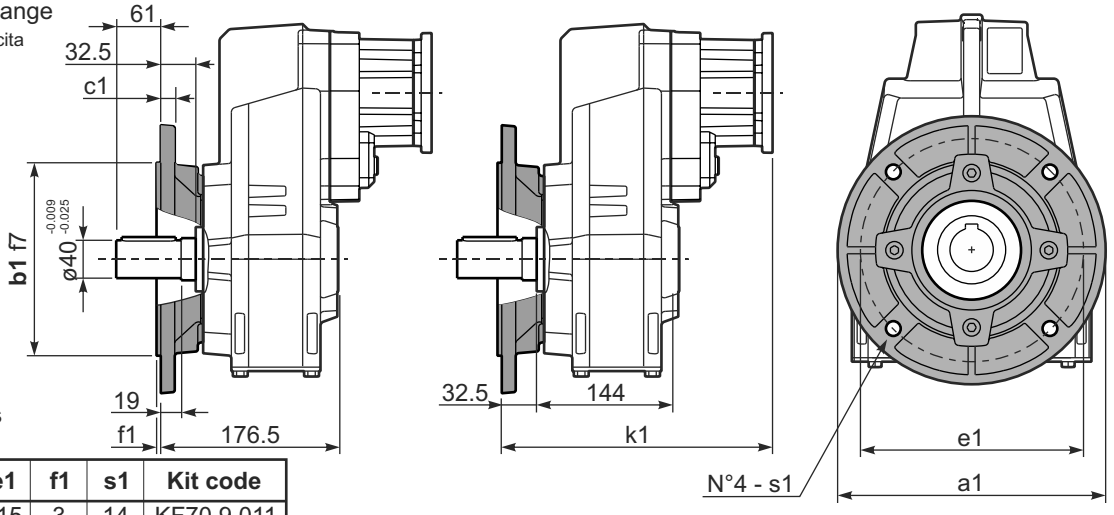
Mounting holes position
Posizione fori di montaggio

Standard
Hollow shaft

On request
A richiesta

PFC72...-F... Output flange
Flangia uscita

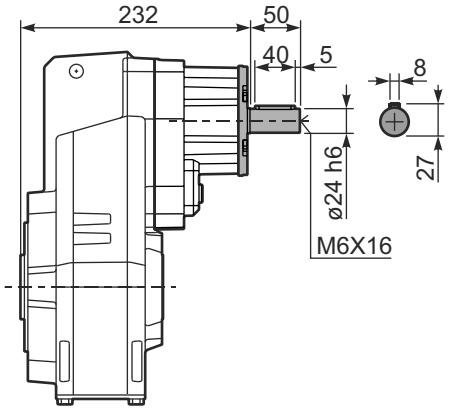
M. flanges	k1
71B5	271
80/90B5	273
100/112B5	279
132B5	300.5
80B14	271
90B14	271
100/112B14	282
132B14	300.5



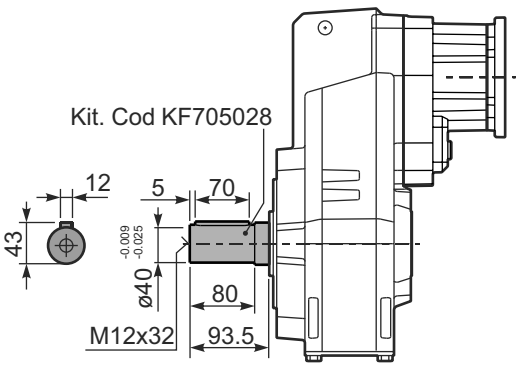
Available output flanges
Flange di uscita

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
350	250	18	300	4	18	KF70.9.013

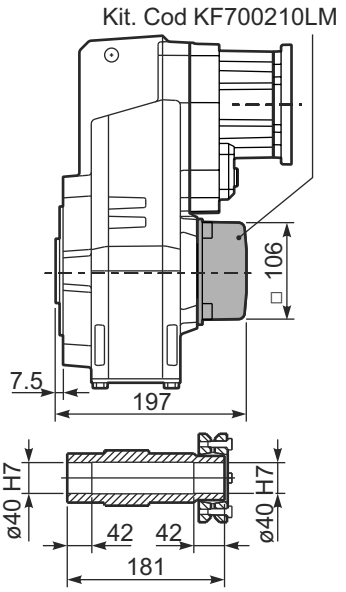
RFC72C... Input Shaft
Albero in entrata



PFC72 A... Single output shaft
Albero uscita semplice



PFC72D... Shrink disk
Calettatore



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	C	D	E	Available B14 motor flanges Q	R	T		Output Shaft ø	Ratios code
							63	71	80	90	71	80	90			
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 **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.

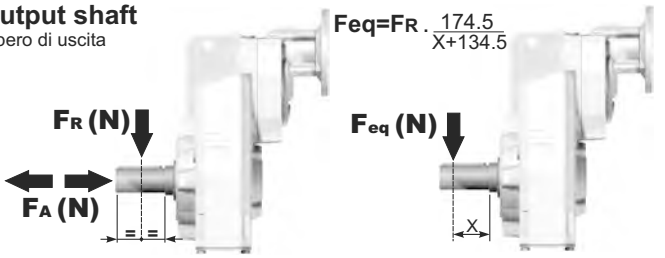
H1	H4	H3	H2	H5	H6
3.55 LT	1.95 LT	1.95 LT	1.95 LT	3.75 LT	2.00 LT
AGIP Blasia 460					

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

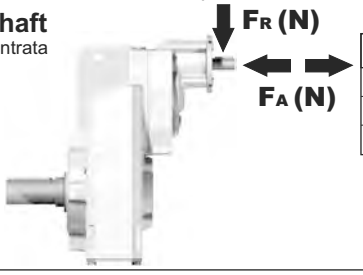
$$Feq = FR \cdot \frac{174.5}{X+134.5}$$



n_2	FA	FR	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

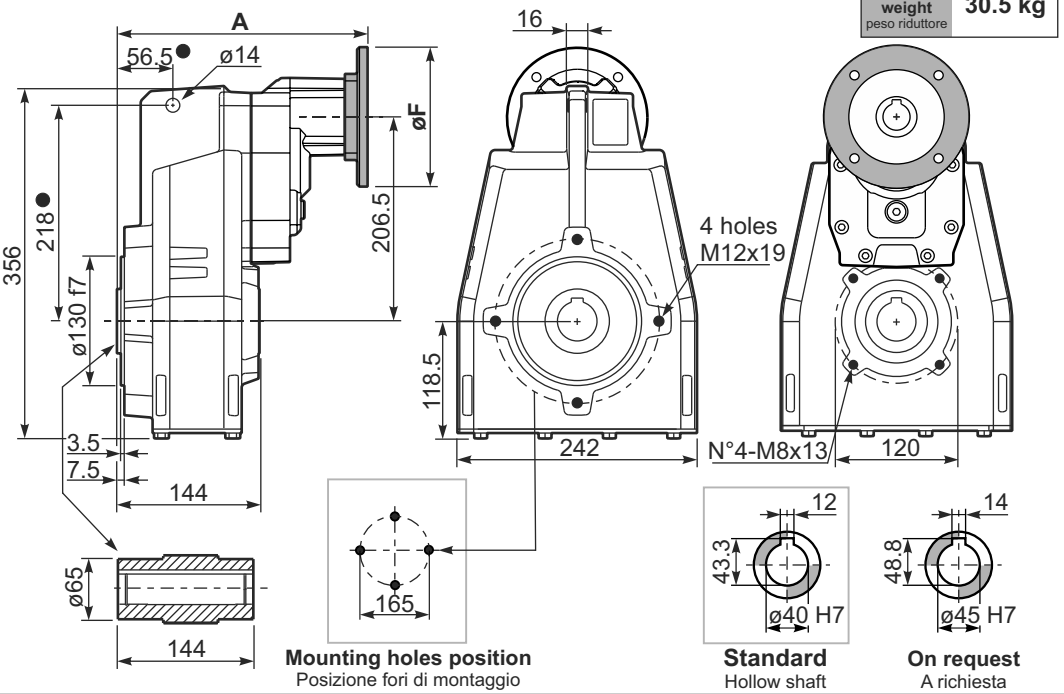
tab. 2

PFC73C... Basic gearbox
Riduttore base

Gearbox weight / peso riduttore: **30.5 kg**

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	249.5
90B14	K063.4.041	140	250.5

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



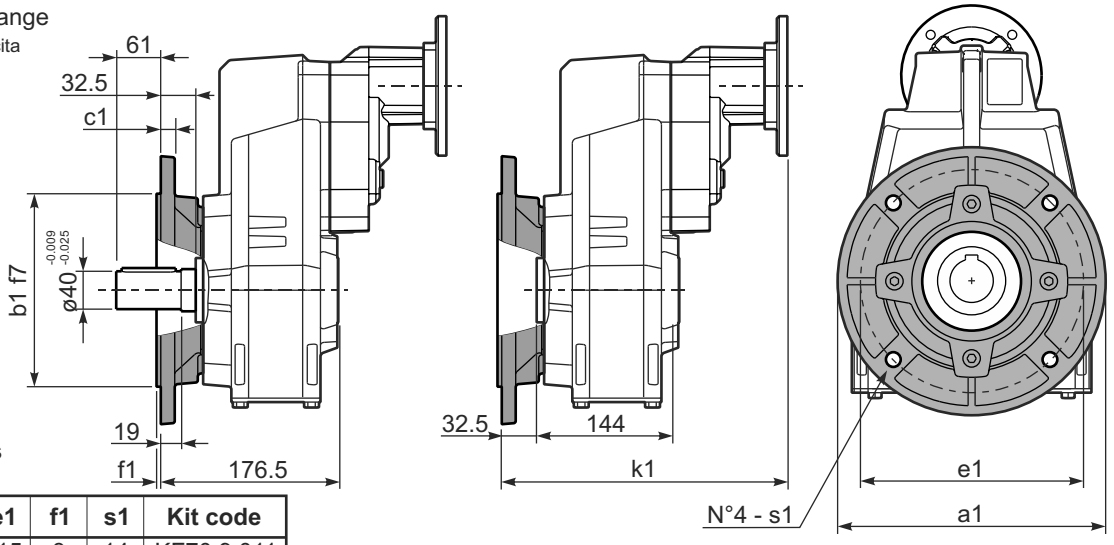
Mounting holes position
Posizione fori di montaggio

Standard
Hollow shaft

On request
A richiesta

PFC73...-F... Output flange
Flangia uscita

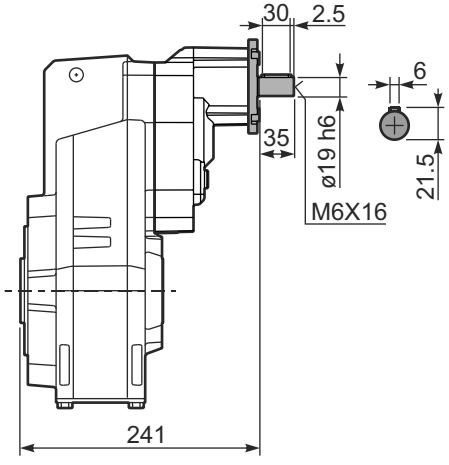
M. flanges	k1
63B5	283
71B5	281
80/90B5	283
71B14	281
80B14	282
90B14	283



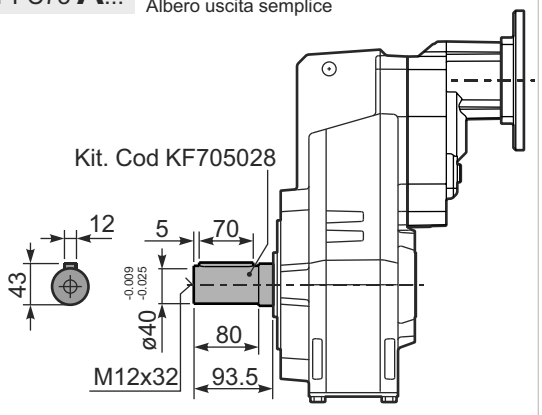
Available output flanges
Flange di uscita

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
350	250	18	300	4	18	KF70.9.013

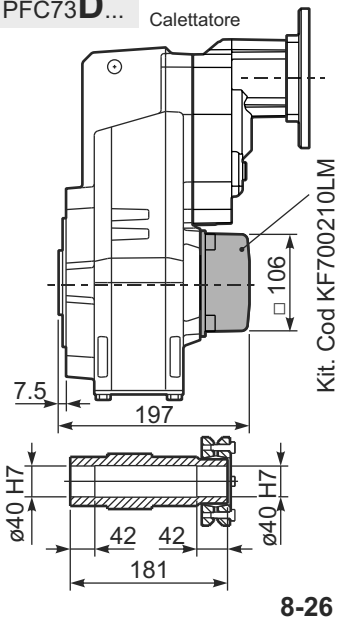
RFC73C... Input Shaft
Albero in entrata



PFC73 A... Single output shaft
Albero uscita semplice



PFC73D... Shrink disk
Calettatore



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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 H	Available B5 motor flanges I	B14 motor flanges - - - -	B14 motor flanges - - - -	Output Shaft	Output Shaft ø	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 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 **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

AGIP Blasia 460

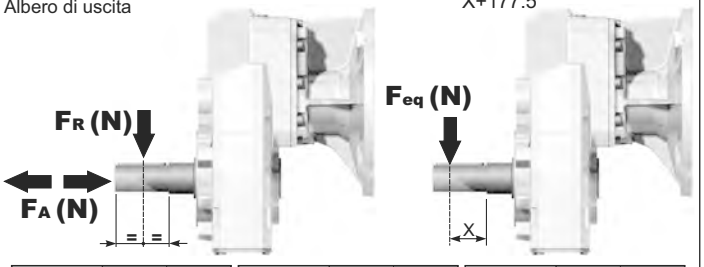
For all details on lubrication and plugs check our website
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

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

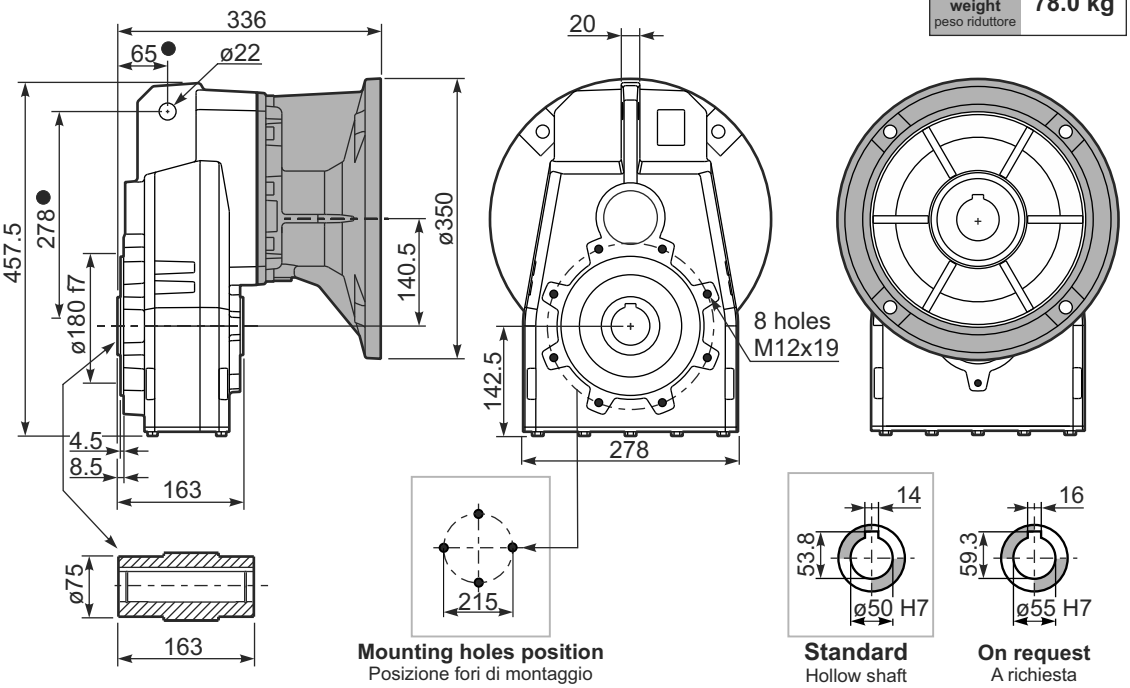
On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

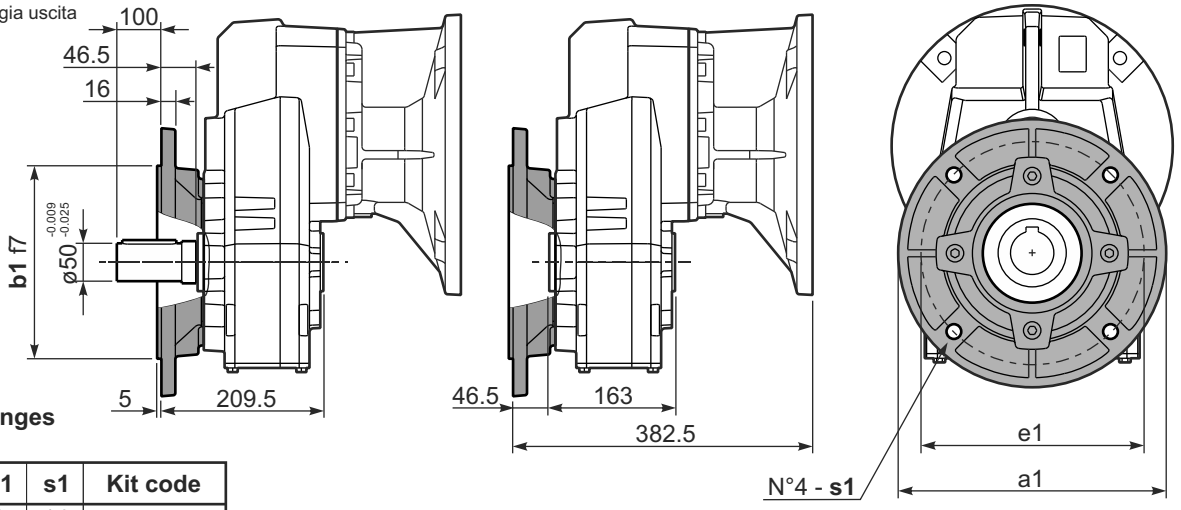
PFC81C... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	78.0 kg

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



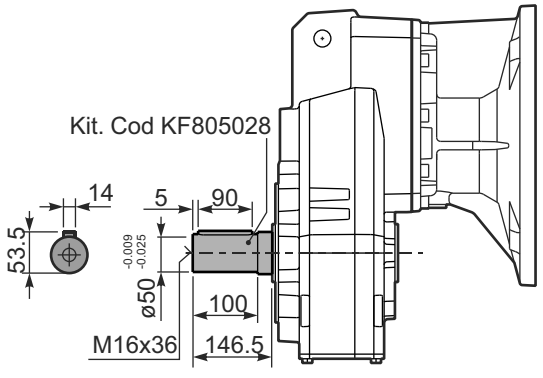
PFC81...**-F**... Output flange
Flangia uscita



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
400	300	350	18	KF80.9.013

PFC81**A**... Single output shaft
Albero uscita semplice



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 G 132	Available B5 motor flanges H 160	Available B5 motor flanges I 180	B14 motor flanges - - - -	Output Shaft	Ratios code
234	**5.98**	22	827	1.2	25.5	1000					3015		01
197	**7.10**	22	982	1.2	25.3	1175					3013		02
162	**8.63**	22	1193	1.1	23.9	1350					3011		03
124	**11.27**	18.5	1310	1.1	20.3	1500					2015		04
105	**13.38**	18.5	1555	1.1	19.4	1700					2013		05
92	**15.24**	18.5	1771	1.1	19.0	1900					1615		06
86	**16.26**	18.5	1889	1.1	19.7	2100					2011	**standard ø50**	07
77	**18.09**	18.5	2102	1.0	17.7	2100				**not available**	1613		08
71	**19.82**	15	1865	1.1	15.9	2060					1315		09
64	**21.98**	15	2069	1.0	14.6	2100					1611	ø55 On request	10
60	**23.53**	15	2214	0.9	13.6	2100					1313		11
58	**24.25**	11	1677	1.2	12.2	1940					1115		12
48.6	**28.80**	11	1991	1.1	11.1	2100					1113		13
40.0	**34.99**	9	2063	1.0	9.2	2100					1111		14
33.6	**41.64**	7.5	1976	1.0	7.2	1960					813		15
27.7	**50.60**	5.5	1774	1.2	6.3	2100					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.

F Le réducteur de type **FC82** 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 **FC82** 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.

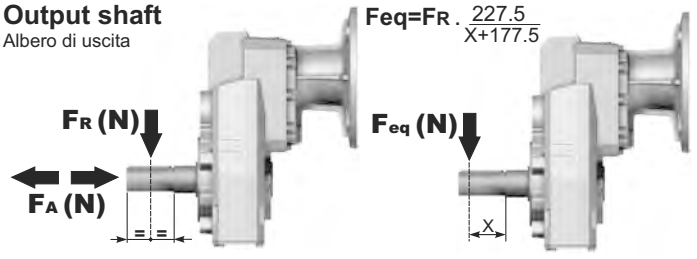
H1	H4	H3	H2	H5	H6
5.70 LT	3.60 LT	3.60 LT	3.60 LT	6.60 LT	4.50 LT
AGIP Blasia 460					

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

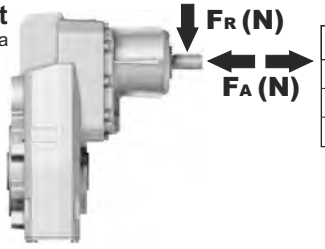
$F_{eq} = F_R \cdot \frac{227.5}{X+177.5}$



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

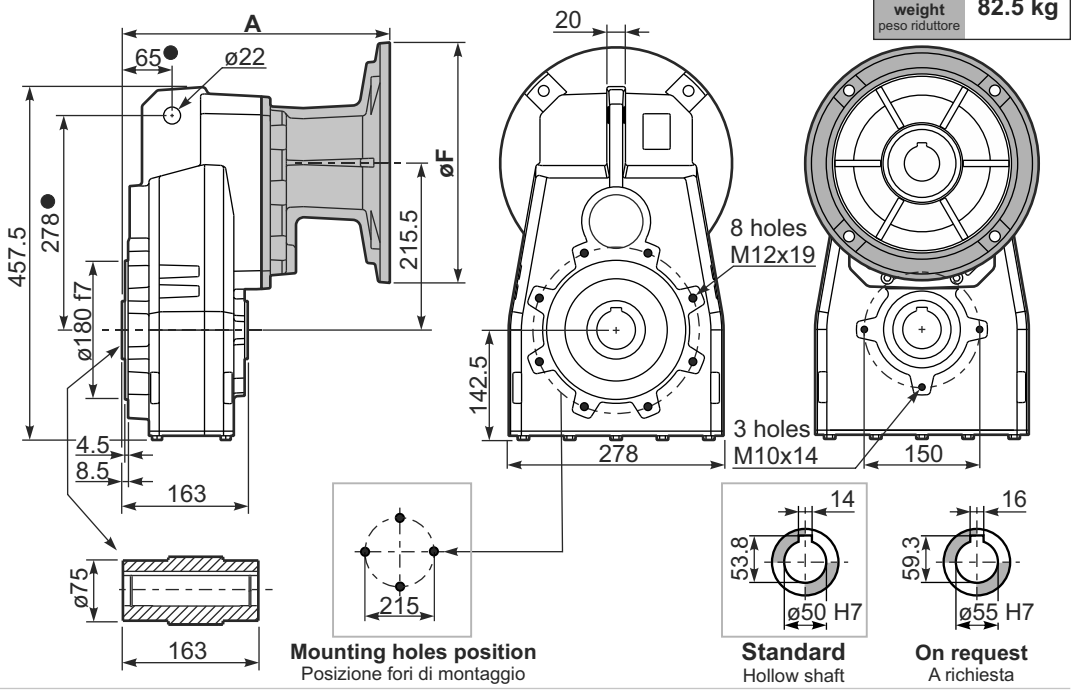
tab. 2

PFC82C... Basic gearbox
Riduttore base

M. flanges	Kit code	øF	A
132B5	-	300	341.5
160/180B5	-	350	352.5

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web

Gearbox weight peso riduttore **82.5 kg**



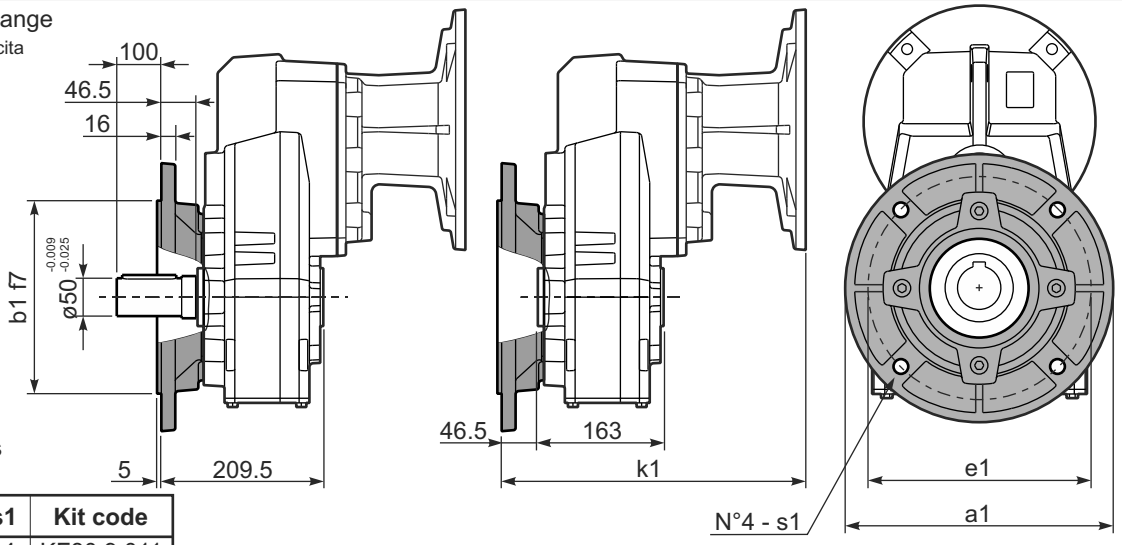
Mounting holes position
Posizione fori di montaggio

Standard
Hollow shaft

On request
A richiesta

PFC82...-F... Output flange
Flangia uscita

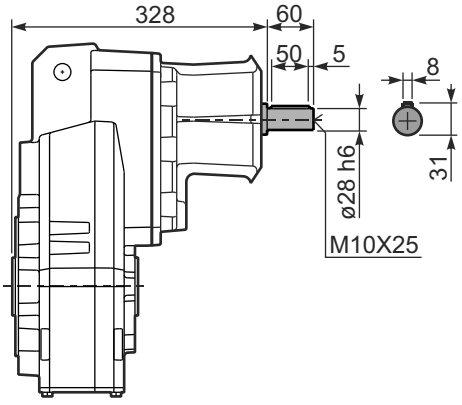
M. flanges	k1
132B5	388
160/180B5	399



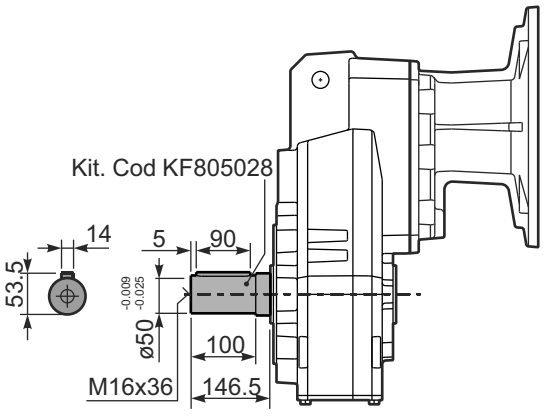
Available output flanges
Flange di uscita

a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012
400	300	350	18	KF80.9.013

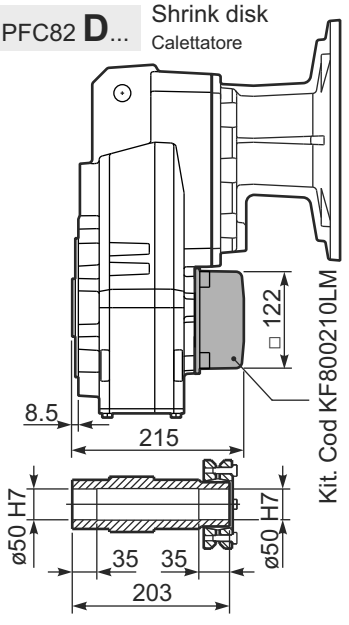
RFC82C... Input Shaft
Albero in entrata



PFC82 A... Single output shaft
Albero uscita semplice



PFC82 D... Shrink disk
Calettatore



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	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 **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.

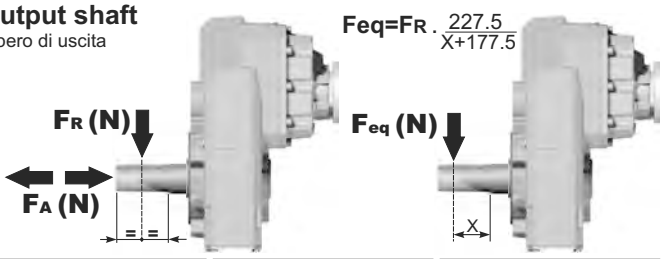
H1	H4	H3	H2	H5	H6
5.80 LT	3.90 LT	3.90 LT	3.90 LT	6.80 LT	4.90 LT
AGIP Blasia 460					

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

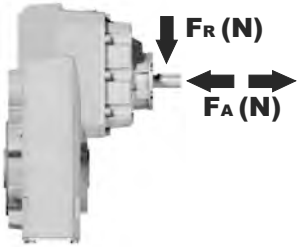
$$Feq = FR \cdot \frac{227.5}{X+177.5}$$



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.

Input shaft
Albero in entrata



n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

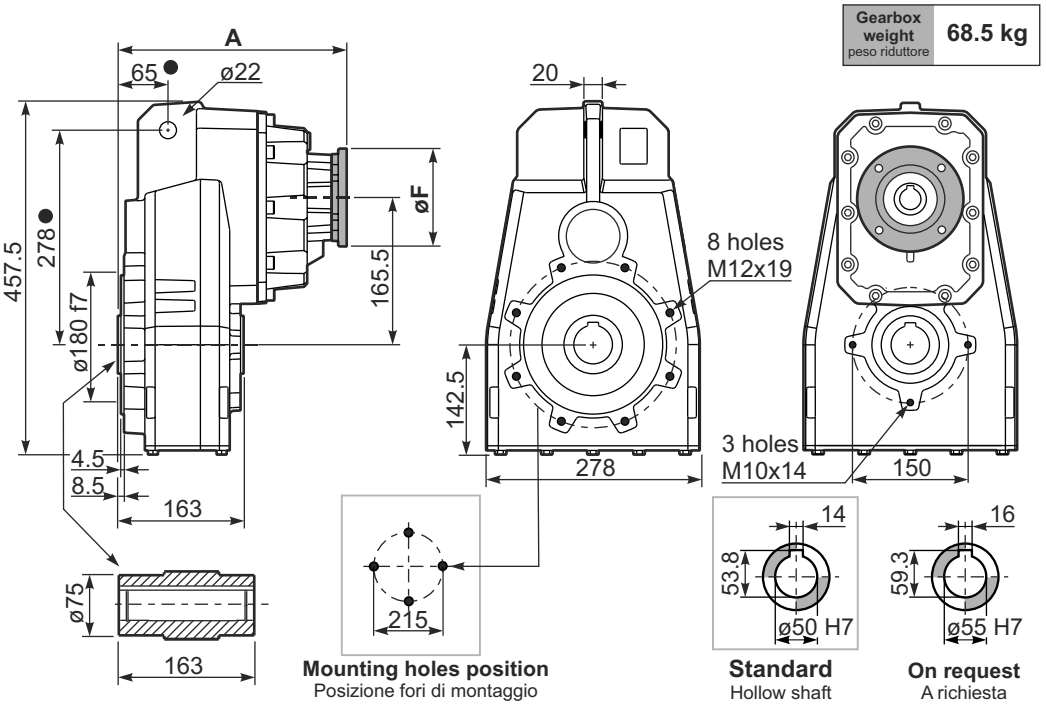
tab. 2

PFC83C... Basic gearbox
Riduttore base

Gearbox weight / peso riduttore: 68.5 kg

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	292.5
80/90B5	KC023.4.042	200	294.5
100/112B5	KC023.4.043	250	300.5
132B5	KC50.4.043	300	322
80B14	KC085.4.046	120	292.5
90B14	KC085.4.045	140	292.5
100/112B14	KC085.4.047	160	303.5
132B14	KC50.4.041	200	322

● Available torque arms, see our web site
Bracci di reazione disponibili, consulta il nostro sito web



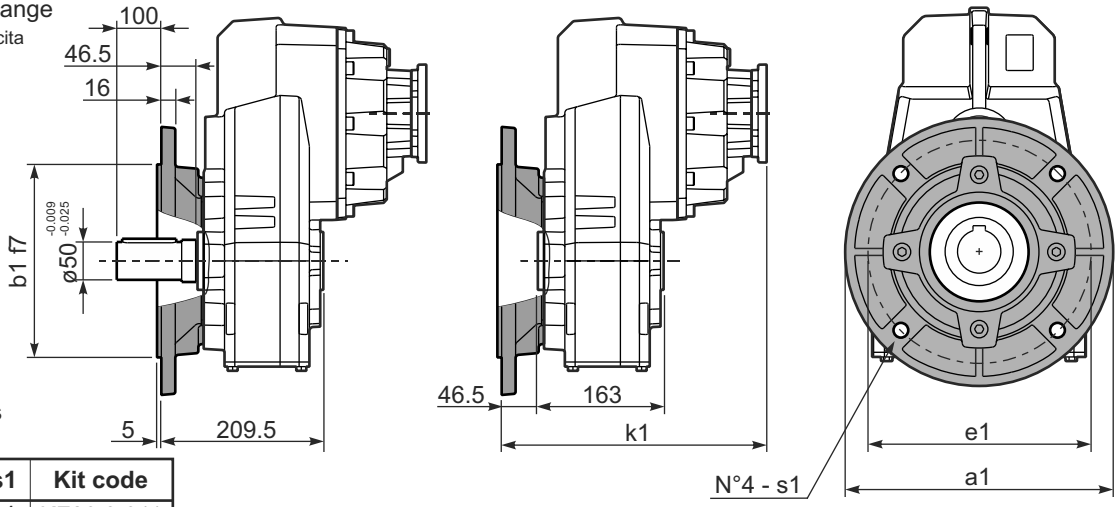
Mounting holes position
Posizione fori di montaggio

Standard
Hollow shaft

On request
A richiesta

PFC83...-F... Output flange
Flangia uscita

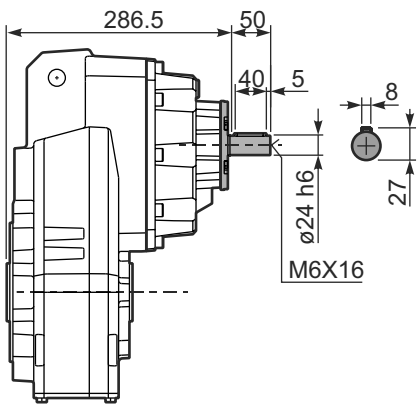
M. flanges	k1
71B5	339
80/90B5	341
100/112B5	347
132B5	368.5
80B14	339
90B14	339
100/112B14	350
132B14	368.5



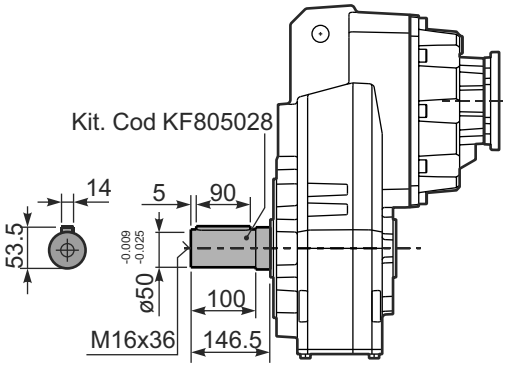
Available output flanges
Flange di uscita

a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012
400	300	350	18	KF80.9.013

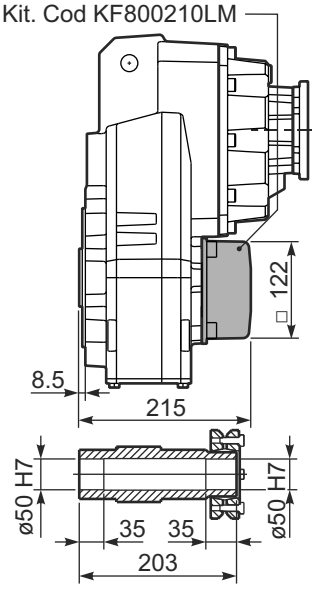
RFC83C... Input Shaft
Albero in entrata



PFC83 A... Single output shaft
Albero uscita semplice



PFC83D... 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	Available B5 motor flanges C	Available B14 motor flanges O	Available B14 motor flanges P	Available B14 motor flanges Q		Output Shaft	Ratios code
							63	71	56	63	71			
29.3	**47.70**	1.1	334	1.4	**1.6**	480			C	C		281316		01
16.2	**86.27**	0.75	415	1.2	**0.87**	480			C	C		191316		02
14.0	**100.00**	0.75	481	1.0	**0.75**	480			C	C		171316	**standard ø30**	03
11.9	**117.38**	0.55	416	1.2	**0.64**	480			C	C		151316		04
10.0	**140.10**	0.55	497	1.0	**0.53**	480			C	C		131316		05
7.3	**191.24**	0.37	454	1.1	**0.39**	480			C	C		101316	On request ø35	06
5.6	**249.59**	0.25	399	1.2	**0.30**	480			C	C		91316		07
4.2	**329.58**	0.25	527	0.9	**0.23**	480			C	C		71316		08

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 **FS50** is supplied with synthetic oil for lifetime lubrification, 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 **FS50** 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 **FS50** 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 **FS50** 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.

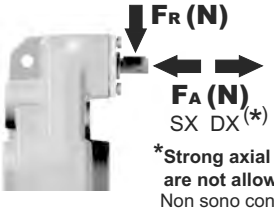
E El reductor tamaño **FS50** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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**
0.95 LT	0.50 LT	0.50 LT	0.70 LT	0.95 LT	0.95 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

Input shaft
Albero in entrata



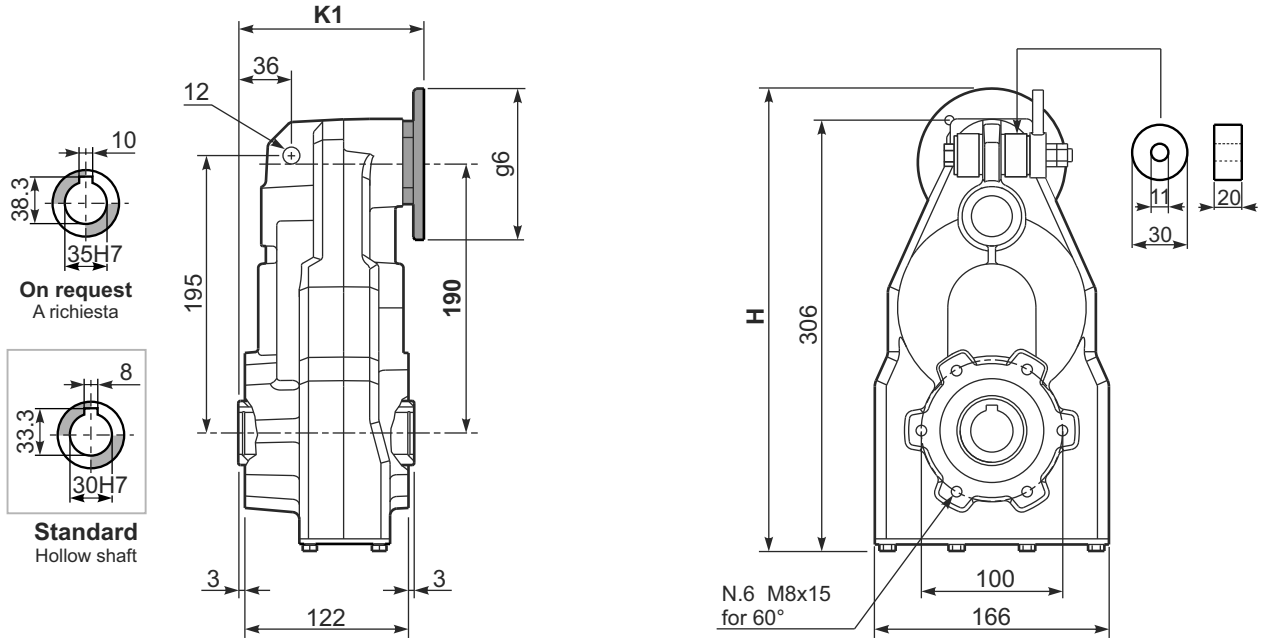
n_1	FA	FR
1400	140	700
900	160	800

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

tab. 2

PFS50C... Basic gearbox
Riduttore base

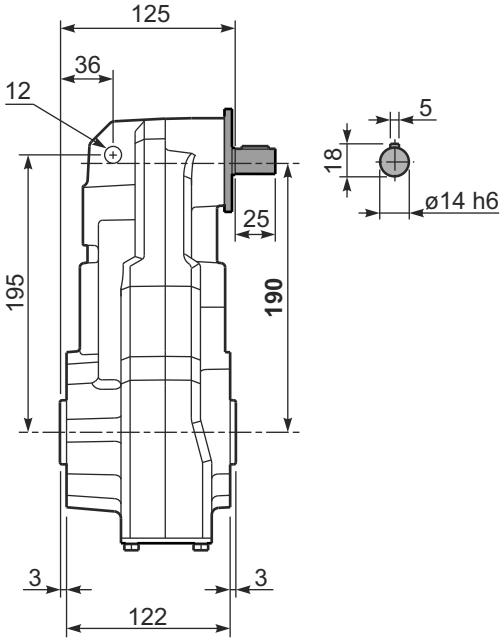
Gearbox weight peso riduttore	11.5 kg



B14 Motor Flanges	H	g6	k1	kit code
56 B14	314	80	130.5	KC40.4.049
63 B14	320	90	133	K050.4.047
71 B14	328	105	130.5	K050.4.045

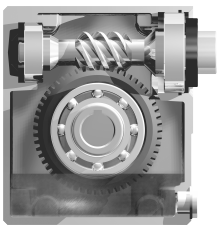
B5 Motor Flanges	H	g6	k1	kit code
63 B5	345	140	131	K050.4.041
71 B5	355	160	129	K050.4.042

RFS50C... Input shaft
Albero in entrata

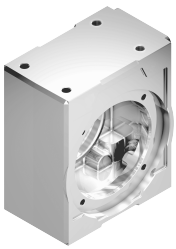


Stainlessteel Gears I30 ÷ I11

STANDARD FEATURES



Special housing designed to keep adeguate lubrication with low Oil q.ty to avoid internal pressures.

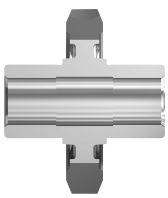


Full Stainless Steel Housing.

Life lubricated fully synthetic oil

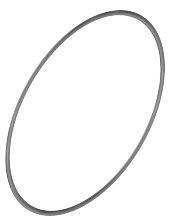


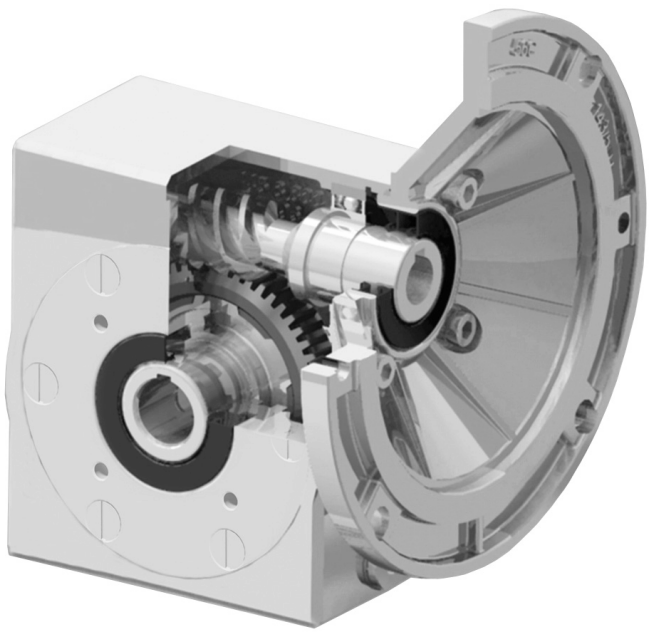
Output seals (FPM-fkm) with external dust protection lips.



Stainless Steel Hollow shaft.

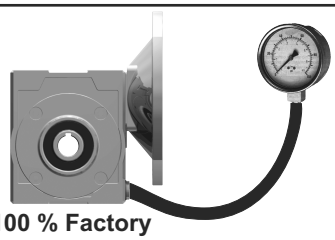
O-rings on all closing covers.





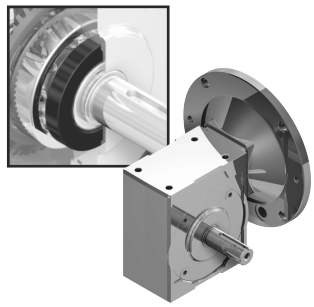


Optional interchangeable right or left hand output shafts available.



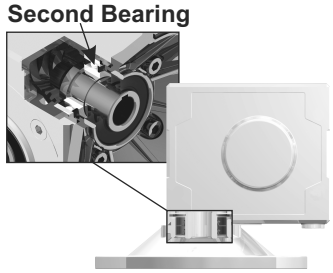
100 % Factory pressure leak test.

OPTIONS



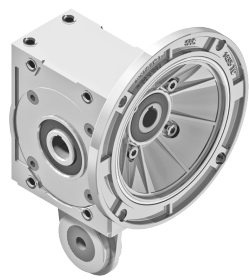
Protective seals cup to stand high pressure cleaning for hollow or extended shaft version.

Second Bearing



Standard second bearing on motor flange side and two oil seals with vertical motor position.

TORQUE ARM



Specific type datasheet on page...



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

9-5	9-7	9-9	9-11	9-13	9-15
I30 21Nm	**I45** 41Nm	**I50** 72Nm	**I63** 147Nm	**I85** 347Nm	**I11** 651Nm

Types / Tipi / Tipen / Types / Tipos ⇨



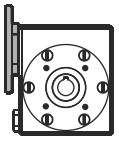
On page / A pagina / Auf Seite / À la page / En la página

M-3							
63B 0.18kw 1/4cv	**71A** 0.25kw 1/3cv	**71B** 0.37kw 1/2cv	**80A** 0.55kw 3/4cv	**80B** 0.75kw 1cv	**90S** 1.1kw 1 1/2cv	**90L** 1.5kw 2cv	**100LA** 2.2kw 3cv

Types / Tipi / Tipen / Types / Tipos ⇨

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Type - Tipo - Typ Type - Tipo	**Size** - Grandezza Grösse - Taille Tomaño	**Mounting** - Montaggio Montage - Fixation Tipo de montaje	**Ratio** - Rapporto Untersetzung Reduction - Relaciòn	**Hub** - Mozzo corona Hohlwelle - Arbre creux Nucleo corona	**Output shaft** Albero lento Abtriebswelle Arbre de sortie Eje solida	**Motor size** - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor
P	**I45**	**UN**	**10**	**I**	**S**	**-Q**



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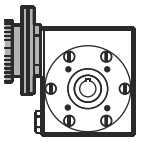

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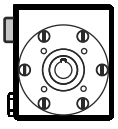

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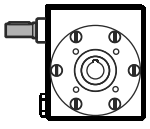
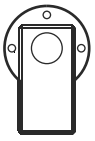


R

I30
I45
I50
I63
I85
I11



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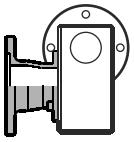

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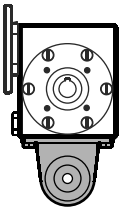


BR

Full stainless steel Torque arm

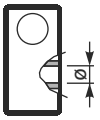
See technical data table

Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos



I

STANDARD

I30 ⇨ ø14
I45 ⇨ ø18
I50 ⇨ ø25
I63 ⇨ ø25
I85 ⇨ ø35
I11 ⇨ ø42

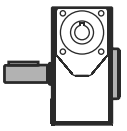
Z

INCH

I45 ⇨ ø0.750”
I50 ⇨ ø1.000”
I63 ⇨ ø1.125”
I85 ⇨ ø1.500”
I11 ⇨ ø2.000”



Ø



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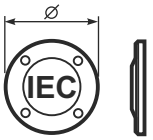
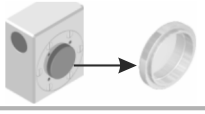
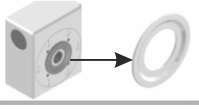


I30	**-O** 56B14 (ø80)	**-P** 63B14 (ø90)	**-W** 56C (ø6.5”)
I45	**-P** 63B14 (ø90)	**-Q** 71B14 (ø105)	**-W** 56C (ø6.5”)
I50	**-P** 63B14 (ø90)	**-Q** 71B14 (ø105)	**-R** 80B14 (ø120)
	-W 56C (ø6.5”)		
I63	**-Q** 71B14 (ø105)	**-R** 80B14 (ø120)	**-T** 90B14 (ø140)
	-W 56C (ø6.5”)	**-X** 143/5TC (ø6.5”)	
I85	**-D** 80B5 (ø200)	**-E** 90B5 (ø200)	**-U** 100-112B14 (ø160)
	-W 56C (ø6.5”)	**-X** 143/5TC (ø6.5”)	**-Y** 182/4TC (ø8.88”)
I11	**-D** 80B5 (ø200)	**-E** 90B5 (ø200)	**-U** 100-112B14 (ø160)
	-X 143/5TC (ø6.5”)	**-Y** 182/4TC (ø8.88”)	**AA** 213/5TC (ø8.88”)

On request

A	**Protective seals cup** **CLOSE TYPE**	
B	**Protective seals cup** **OPEN TYPE**	
C	**Food lube**	
D	**Nema input flanges**	

-M
without flange
Senza flangia

-0
Type R
Tipo R

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.

YOUR ORDER NOTES

FORMULE UTILI / USEFUL FORMULAS / NÜTZLICHE FORMELIN / FORMULES UTILES / FÓRMULAS ÚTILES

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

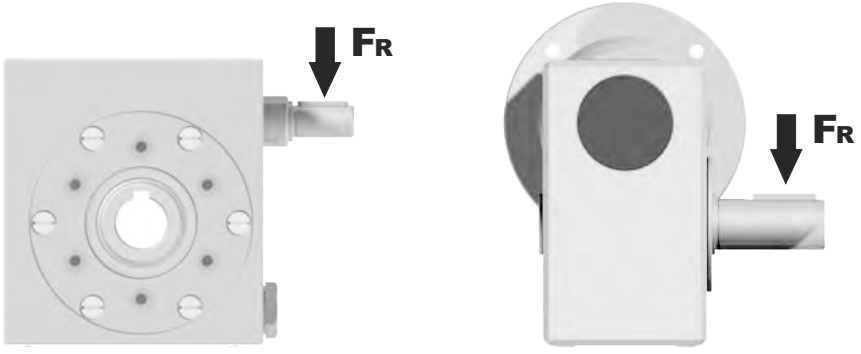
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$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

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

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



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

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

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

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

I45 Stainlessteel - Gear 41Nm

Rating - Stainlessteel 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]	B5 motor flanges not available -	-	Available B14 motor flanges P 63	Q 71	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	0.37	14	2.2	0.80	30			**B**-C		80	2.2	01
140	**10**	0.37	20	1.5	0.57	30			**B**-C		79	2.2	02
100	**14**	0.37	27	1.1	0.41	30			**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]	B5 motor flanges not available		Available B14 motor flanges O	Available B14 motor flanges P	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-	-					
							-	-	56	63			
280	**5**	0.18	5	3.3	0.60	17			B-C		82	1.26	09
200	**7**	0.18	7	2.4	0.44	17			B-C		80	1.44	01
140	**10**	0.18	10	1.8	0.32	17			B-C		78	1.44	02
93	**15**	0.18	13	1.4	0.25	19			B-C		73	1.44	03
70	**20**	0.18	17	1.1	0.20	19			B-C		70	1.09	04
47	**30**	0.12	15	1.4	0.17	21			B-C		62	1.44	05
35	**40**	0.12	19	1.1	0.13	20			B-C		57	1.09	06
23	**61**	0.09	19	1.1	0.10	20			B-C		50	0.72	07
17.5	**80**	0.09	16	1.0	0.06	16			B-C		48	0.56	08

* The nominal power should be reduced if the ambient temperature is ≥ 30°C, or when a cooler gearbox is required.
* Diminuire la potenza nominale in caso di temperatura ambiente ≥ 30°C o se è richiesta una bassa temperatura di utilizzo del riduttore.

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 **I30** 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 **I30** 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 **I30** 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 **I30** 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 **I30** 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.

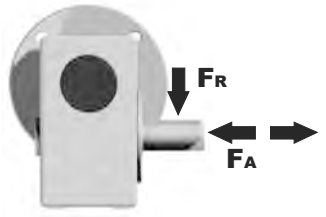
▪ LUBRICATION I30 Oil Quantity 0.10 Lt.

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

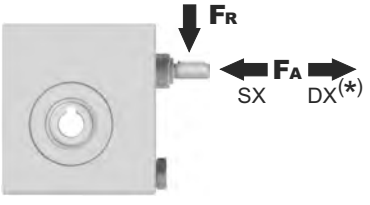
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

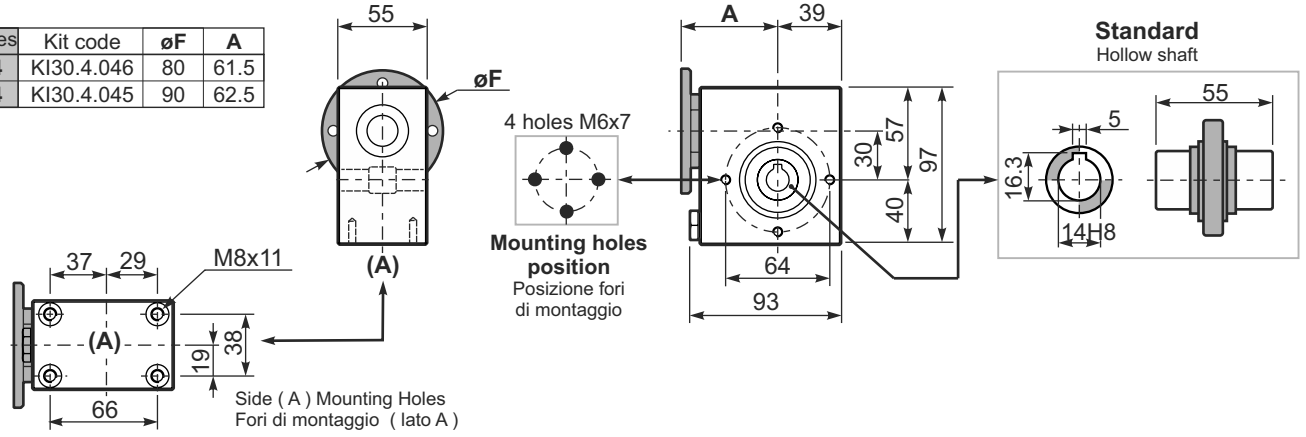
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

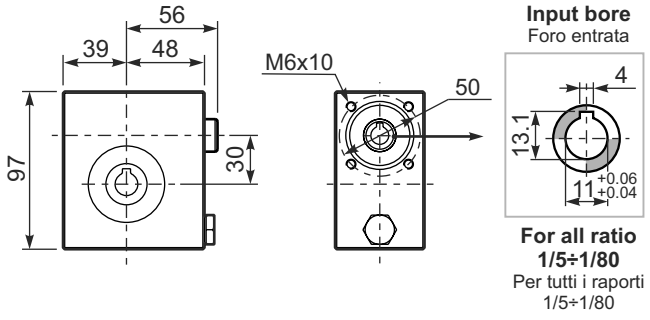
Gearbox weight peso riduttore	2.5 kg

PI30**UN**... Basic wormbox
Riduttore base

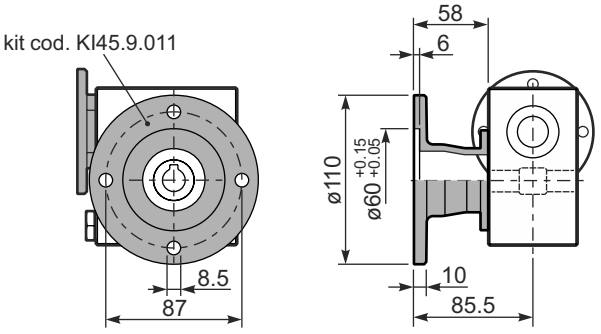
M. flanges	Kit code	øF	A
56B14	KI30.4.046	80	61.5
63B14	KI30.4.045	90	62.5



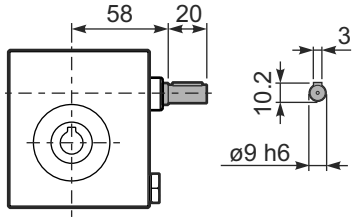
BI30UN... Modular base
Base modulare



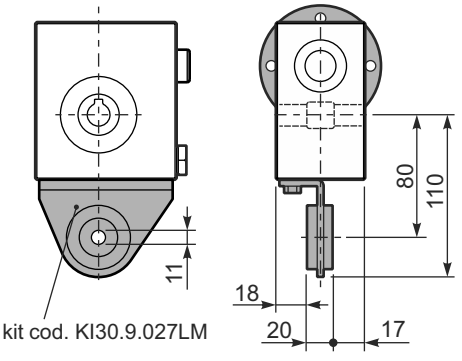
PI30**FL**... Output flange
Flangia uscita



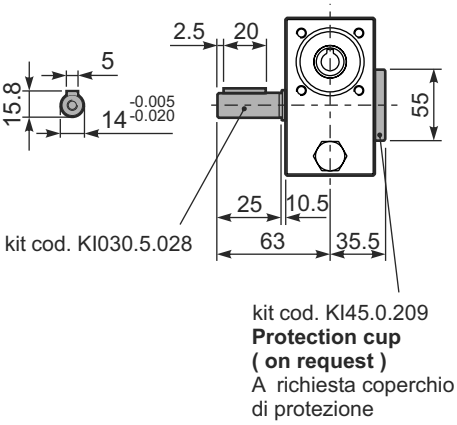
RI30UN... Input shaft
Albero in entrata



PI30**BR**... Reaction arm
Braccio di reazione



PI30.....**S**... Single Shaft
Albero lento 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 not available		Available B14 motor flanges P	Q	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-	-					
							-	-	63	71			
200	**7**	0.37	14	2.2	**0.80**	**30**			**B**-C		80	2.2	01
140	**10**	0.37	20	1.5	**0.57**	**30**			**B**-C		79	2.2	02
100	**14**	0.37	27	1.1	**0.41**	**30**			**B**-C		77	2.4	03
67	**21**	0.37	36	1.2	**0.43**	**41**			**B**-C		67	1.6	04
50	**28**	0.25	31	1.3	**0.33**	**41**			**B**-C		65	2.5	05
38	**37**	0.25	40	1.0	**0.26**	**41**			**B**-C		63	1.8	06
30	**46**	0.25	46	0.9	**0.22**	**41**			**B**-C		59	1.5	07
23	**60**	0.18	41	1.0	**0.18**	**41**			**B**-C		56	1.2	08
20	**70**	0.12	31	1.0	**0.12**	**30**			**B**-C		54	1.0	09
13.7	**102**	0.09	31	1.0	**0.09**	**29**			**B**-C		49	0.72	10

* The nominal power should be reduced if the ambient temperature is ≥ 30°C, or when a cooler gearbox is required.
* Diminuire la potenza nominale in caso di temperatura ambiente ≥ 30°C o se è richiesta una bassa temperatura di utilizzo del riduttore.

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 **I45** 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 **I45** 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 **I45** 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 **I45** 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 **I45** 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.

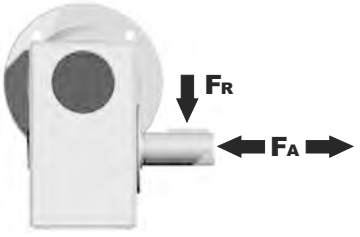
▪ LUBRICATION I45 Oil Quantity 0.24 Lt.

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

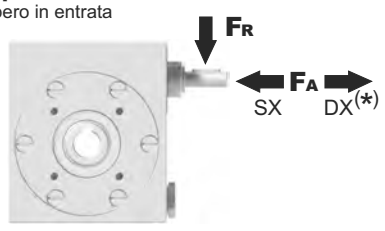
▪ RADIAL AND AXIAL LOADS

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

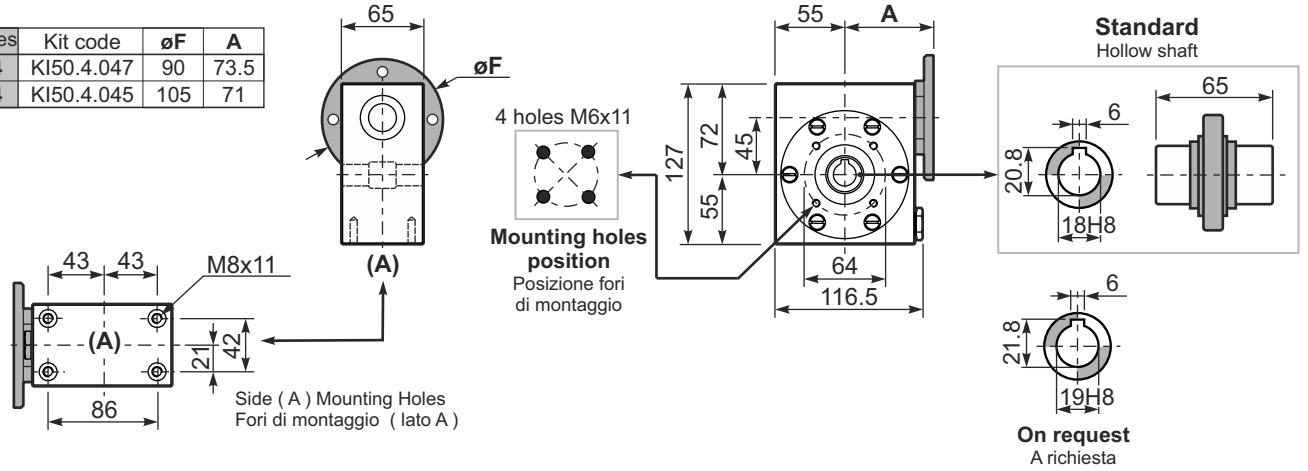
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

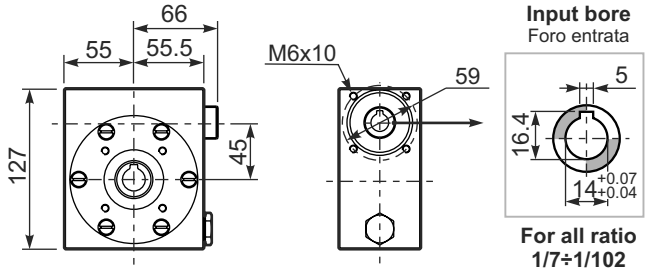
Gearbox weight / peso riduttore: 5.0 kg

PI45**UN**... Basic wormbox
Riduttore base

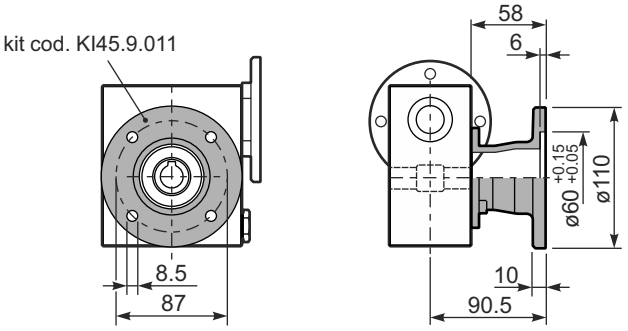
M. flanges	Kit code	øF	A
63B14	KI50.4.047	90	73.5
71B14	KI50.4.045	105	71



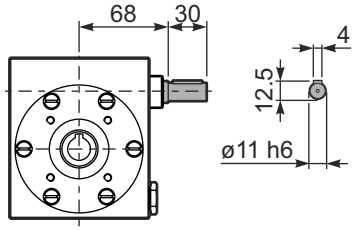
B I45UN... Modular base
Base modulare



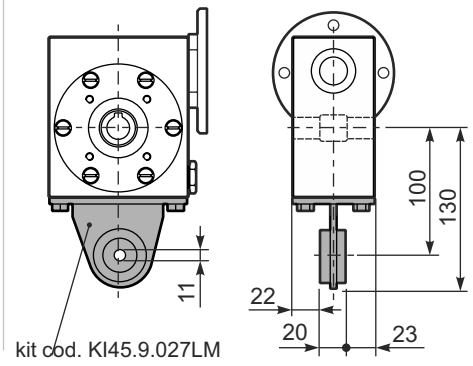
PI45**FL**... Output flange
Flangia uscita



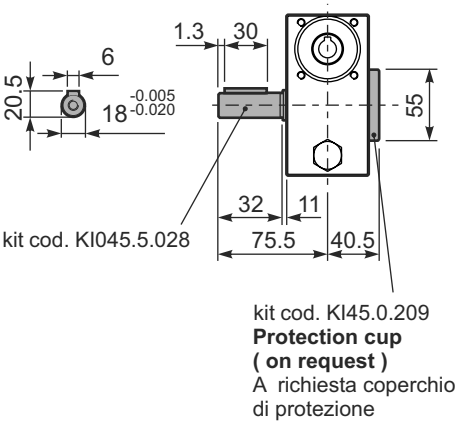
R I45UN... Input shaft
Albero in entrata



PI45**BR**... Reaction arm
Braccio di reazione



PI45.....**S**... Single Shaft
Albero lento semplice



9

▪ 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 not available		Available B14 motor flanges P	Q	R	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-	-						
							-	-	63	71	80			
200	**7**	0.75	29	1.9	1.5	57			B-C	**B**		82	2.5	01
140	**10**	0.75	41	1.5	1.1	62			B-C	**B**		80	2.4	02
100	**14**	0.75	57	1.2	0.90	68			B-C	**B**		79	2.6	03
78	**18**	0.55	51	1.2	0.67	62			B-C	**B**		75	2.0	04
54	**26**	0.55	67	1.0	0.54	66			B-C	**B**		69	2.7	05
47	**30**	0.55	79	0.9	0.50	72			B-C	**B**		70	2.5	12
39	**36**	0.37	63	1.2	0.43	72			B-C			69	2.1	06
33	**43**	0.37	72	1.0	0.35	68			B-C			66	1.8	07
23	**60**	0.25	59	1.0	0.26	62			B-C			58	1.3	08
21	**68**	0.25	66	0.9	0.22	58			B-C			57	1.2	09
17.5	**80**	0.18	53	1.1	0.19	57			B-C			54	1.0	10
14	**100**	0.12	41	1.3	0.15	51			B-C			50	0.8	11

* The nominal power should be reduced if the ambient temperature is ≥ 30°C, or when a cooler gearbox is required.
* Diminuire la potenza nominale in caso di temperatura ambiente ≥ 30°C o se è richiesta una bassa temperatura di utilizzo del riduttore.

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 **I50** 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 **I50** 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 **I50** 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 **I50** 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 **I50** 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.

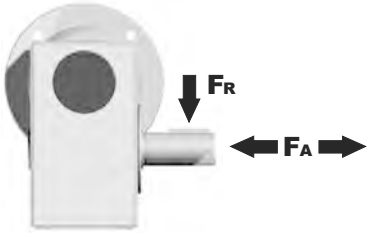
▪ LUBRICATION I50 Oil Quantity 0.38 Lt

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

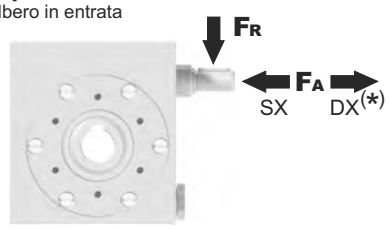
▪ RADIAL AND AXIAL LOADS

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

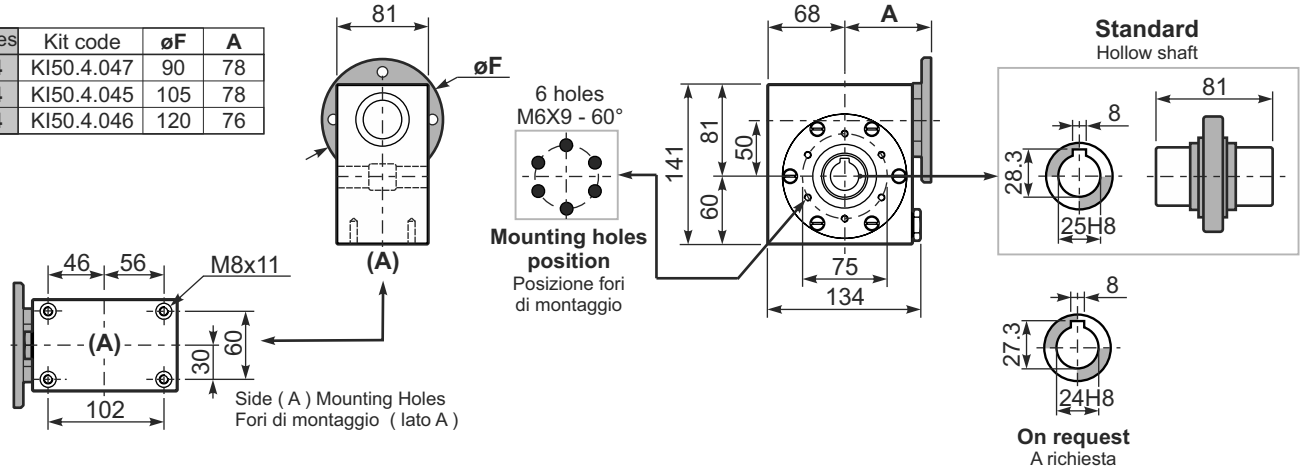
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

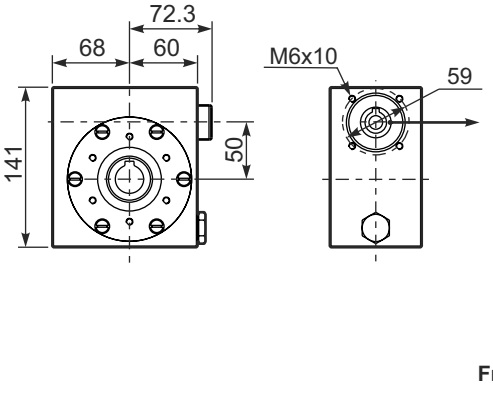
Gearbox weight / peso riduttore: 7.3 kg

PI50**UN**... Basic wormbox
Riduttore base

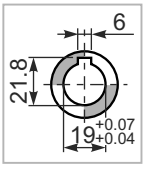
M. flanges	Kit code	øF	A
63B14	KI50.4.047	90	78
71B14	KI50.4.045	105	78
80B14	KI50.4.046	120	76



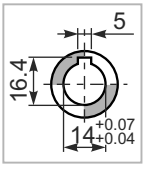
B**I50UN**... Modular base
Base modulare



Input bore
Foro entrata

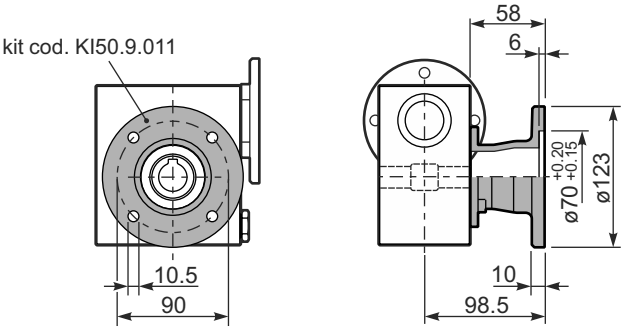


From 1/7 to 1/30
Dal 1/7 al 1/30

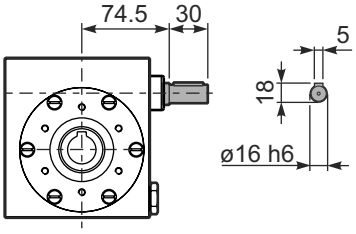


From 1/36 to 1/100
Dal 1/36 al 1/100

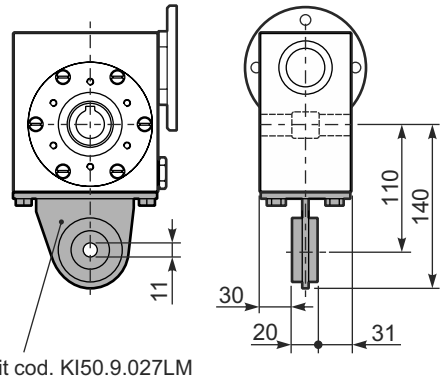
PI50**FL**... Output flange
Flangia uscita



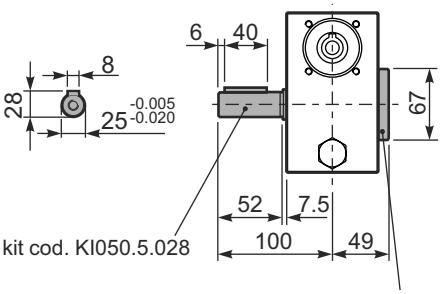
R**I50UN**... Input shaft
Albero in entrata



PI50**BR**... Reaction arm
Braccio di reazione



PI50.....**S**... Single Shaft
Albero lento semplice



kit cod. KI50.0.209
Protection cup
(on request)
A richiesta coperchio di protezione

▪ 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 not available		Available B14 motor flanges Q	R	T	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
							-	-						
							-	-	71	80	90			
200	**7**	1.8	71	1.8	3.2	125			B-C	**B**-C		83	3.1	01
140	**10**	1.8	99	1.4	2.4	134			B-C	**B**-C		81	3.1	02
93	**15**	1.5	121	1.1	1.7	138			B-C	**B**-C		79	3.1	03
74	**19**	1.1	111	1.2	1.4	138			B-C	**B**-C		78	2.6	04
58	**24**	1.1	135	1.0	1.2	142			B-C	**B**-C		75	2.0	05
47	**30**	1.1	167	0.9	0.96	146			B-C	**B**-C		74	3.2	06
39	**36**	0.75	125	1.2	0.88	147			B-C	**B**-C		68	2.7	07
31	**45**	0.55	111	1.2	0.67	135			B-C	C		66	2.1	08
21	**67**	0.55	151	0.8	0.45	124			B-C	C		60	1.5	09
17.5	**80**	0.37	115	1.0	0.38	119			B-C	C		57	1.3	10
14.9	**94**	0.37	123	1.0	0.36	119			B-C	C		52	1.1	11

* The nominal power should be reduced if the ambient temperature is ≥ 30°C, or when a cooler gearbox is required.

* Diminuire la potenza nominale in caso di temperatura ambiente ≥ 30°C o se è richiesta una bassa temperatura di utilizzo del riduttore.

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 **I63** 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 **I63** 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 **I63** 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 **I63** 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 **I63** 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.

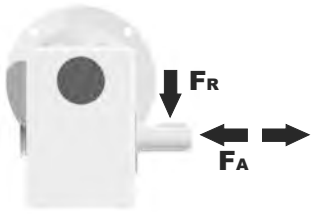
Standard ← On request →

B3	B6	B7	B8	V5	V6
0.98 LT	0.69 LT	0.69 LT	0.98 LT	0.98 LT	0.98 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

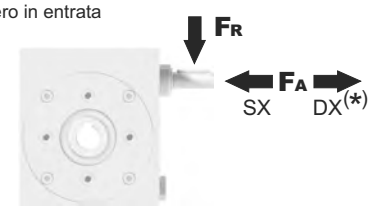
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2	FA	FR
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

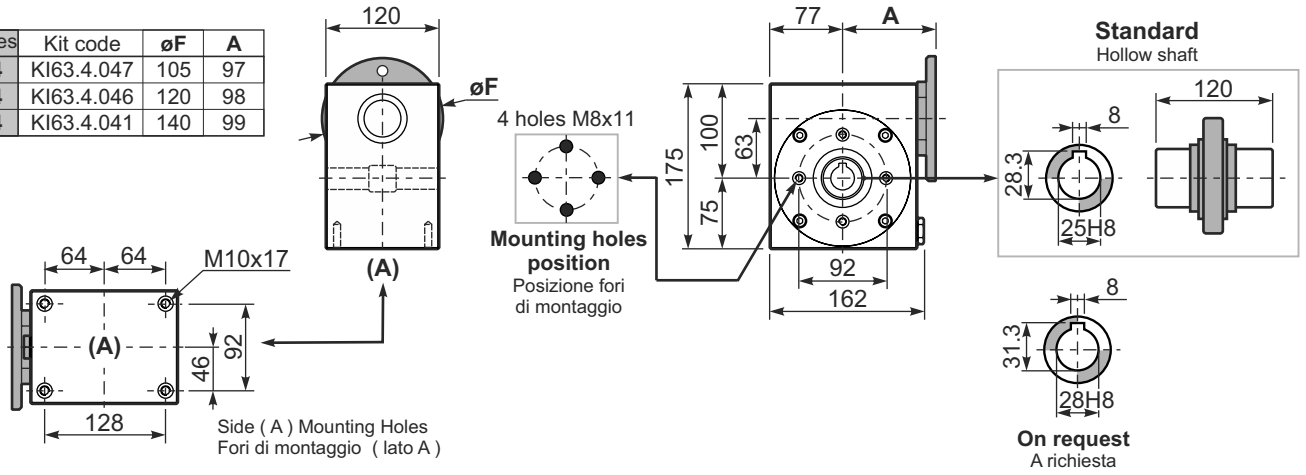
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

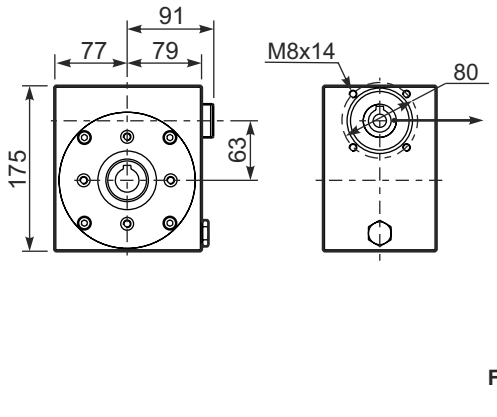
Gearbox weight peso riduttore	14.6 kg

PI63**UN**... Basic wormbox
Riduttore base

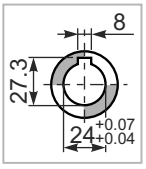
M. flanges	Kit code	øF	A
71B14	KI63.4.047	105	97
80B14	KI63.4.046	120	98
90B14	KI63.4.041	140	99



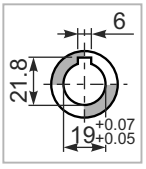
B I63UN... Modular base
Base modulare



Input bore
Foro entrata

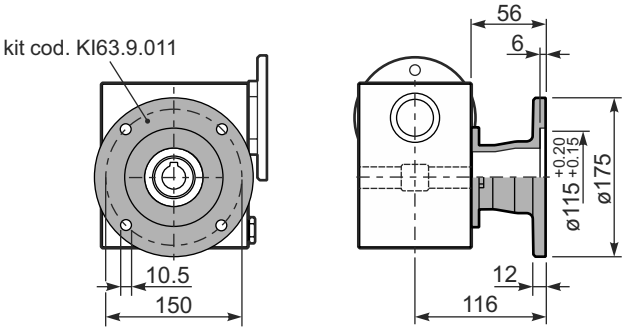


From 1/7 to 1/36
Dal 1/7 al 1/36

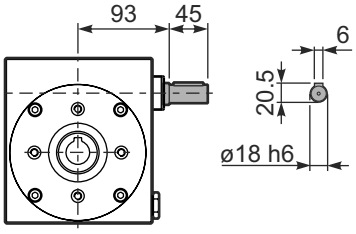


From 1/45 to 1/94
Dal 1/45 al 1/94

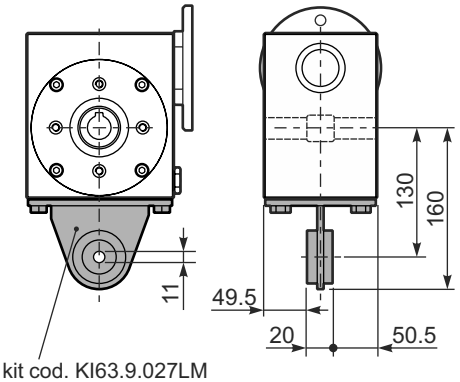
PI63**FL**... Output flange
Flangia uscita



R I63UN... Input shaft
Albero in entrata

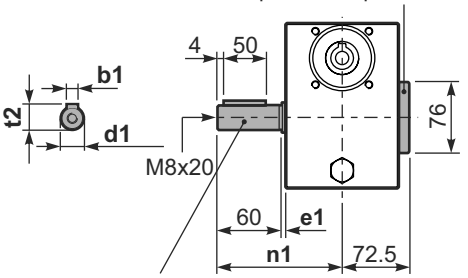


PI63**BR**... Reaction arm
Braccio di reazione



PI63.....**S**... Single Shaft
Albero lento semplice

kit cod. KI63.0.209
Protection cup (on request)
A richiesta coperchio di protezione



kit cod. KI063.5.028
kit.cod. KI070.5.028 On request

	b1	e1	d1	n1	t2
Standard	8	3.2	25 -0.005 -0.020	121.9	28
On request	8	3.5	28 -0.005 -0.020	122.2	31

▪ 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	Available B5 motor flanges E 90	Available B14 motor flanges U 100-112	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	4.0	168	1.5	6.1	257	B	B		88	4.23	01
140	**10**	4.0	218	1.3	5.2	284	B	B		80	4.2	02
100	**14**	3.0	223	1.4	4.1	305	B	B		78	4.5	03
70	**20**	2.2	237	1.2	2.7	294	B	B		79	3.4	04
64	**22**	2.2	258	1.1	2.5	294	B	B		78	3.1	05
50	**28**	2.2	315	1.1	2.4	347	B	B		75	4.7	06
37	**38**	1.5	276	1.2	1.8	336	B			71	3.5	07
30	**46**	1.5	320	1.0	1.5	326	B			68	3.1	08
27	**52**	1.1	258	1.1	1.2	289	B			66	2.7	09
21	**67**	1.1	327	0.9	0.97	289	B			65	2.1	10
18.9	**74**	0.75	220	1.2	0.91	268	B			58	1.9	11
14.6	**96**	0.55	191	1.3	0.70	242	B			53	1.5	12

* The nominal power should be reduced if the ambient temperature is ≥ 30°C, or when a cooler gearbox is required.
* Diminuire la potenza nominale in caso di temperatura ambiente ≥ 30°C o se è richiesta una bassa temperatura di utilizzo del riduttore.

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 **I85** 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 **I85** 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 **I85** 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 **I85** 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 **I85** 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.

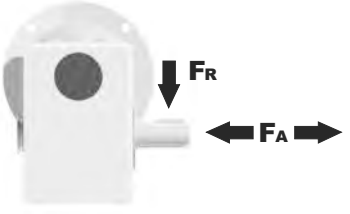
Standard ← On request →

B3	B6	B7	B8	V5	V6
2.10 LT	1.50 LT	1.50LT	2.10 LT	2.10 LT	2.10 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

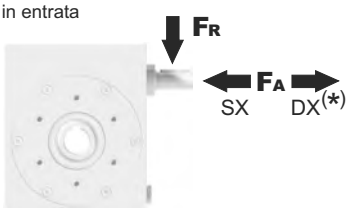
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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	160	809

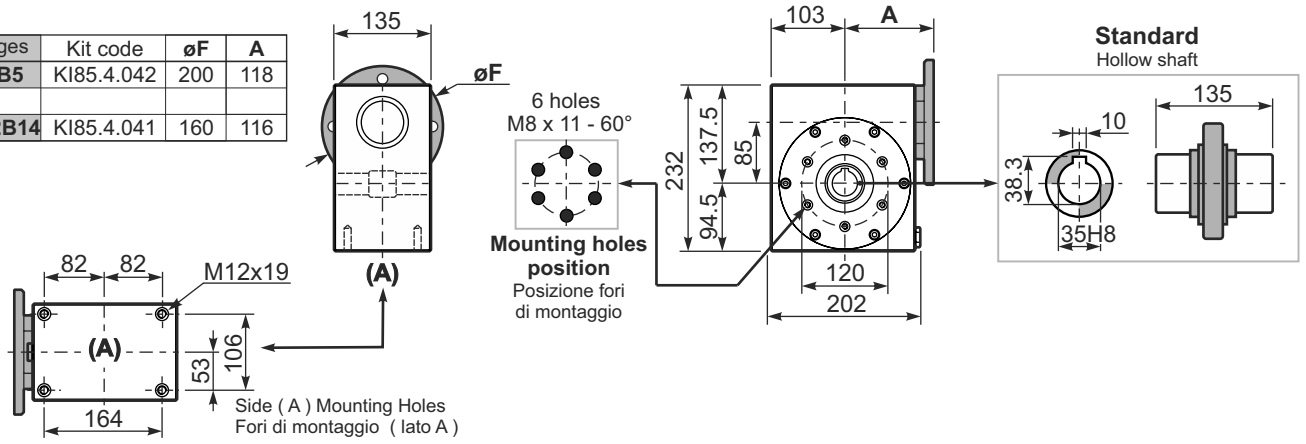
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

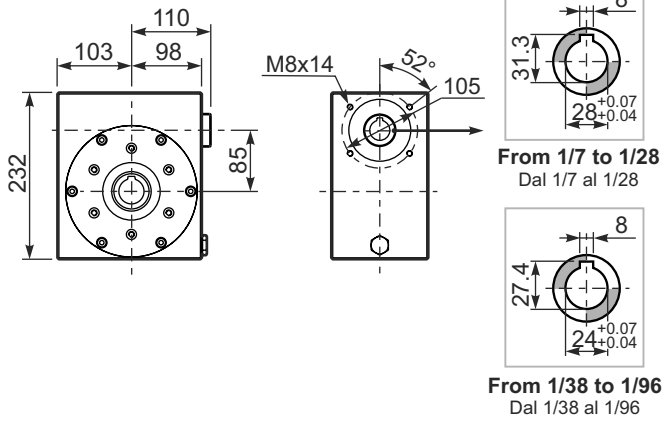
Gearbox weight peso riduttore	23.3 kg

PI85**UN**... Basic wormbox
Riduttore base

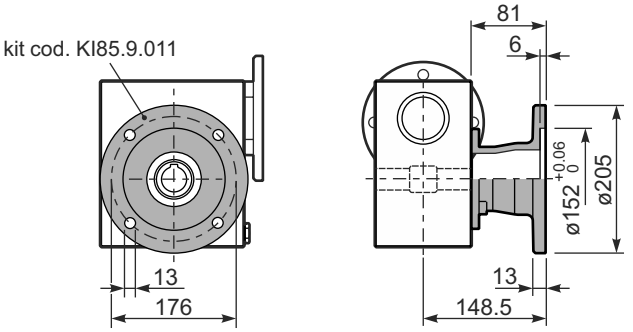
M. flanges	Kit code	øF	A
80-90B5	KI85.4.042	200	118
100-112B14	KI85.4.041	160	116



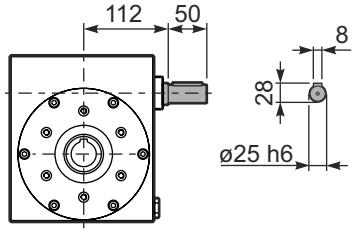
B I85UN... Modular base
Base modulare



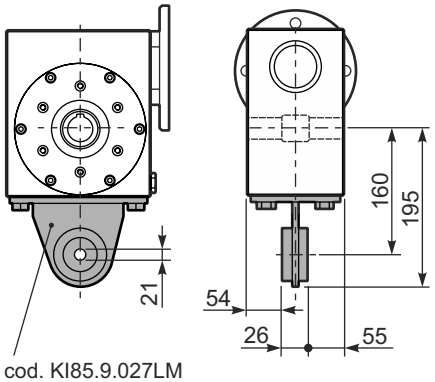
PI85**FL**... Output flange
Flangia uscita



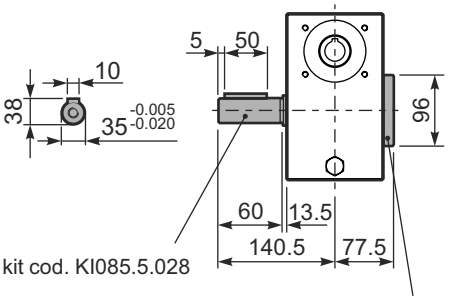
R I85UN... Input shaft
Albero in entrata



PI85**BR**... Reaction arm
Braccio di reazione



PI85.....**S**... Single Shaft
Albero lento semplice



kit cod. KI85.0.209
Protection cup
(on request)
A richiesta coperchio di protezione

▪ 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	Available B5 motor flanges E 90	Available B14 motor flanges U 100-112	Dynamic efficiency RD	Tooth Module [mm]	Ratios code
200	**7**	4.0	168	2.9	**11.5**	**483**	B	B		88	5.5	01
140	**10**	4.0	235	2.2	**9.0**	**525**	B	B		86	5.4	02
88	**16**	4.0	358	1.5	**6.0**	**536**	B	B		82	5.3	03
70	**20**	4.0	447	1.2	**4.9**	**546**	B	B		82	4.5	04
61	**23**	3.0	377	1.4	**4.1**	**515**	B	B		80	3.9	05
47	**30**	3.0	467	1.4	**4.2**	**651**	B	B		76	5.6	06
37	**38**	3.0	583	1.1	**3.3**	**641**	B	B		75	4.7	07
31	**45**	2.2	493	1.2	**2.7**	**599**	B	B		73	4.0	08
26	**53**	2.2	557	1.1	**2.5**	**620**	B	B		70	3.5	09
22	**64**	1.5	452	1.2	**1.8**	**536**	B			69	2.9	10
16.7	**84**	1.1	410	1.2	**1.3**	**494**	B			65	2.2	11
14.1	**99**	1.1	446	1.1	**1.2**	**483**	B			60	1.9	12

* The nominal power should be reduced if the ambient temperature is ≥ 30°C, or when a cooler gearbox is required.
* Diminuire la potenza nominale in caso di temperatura ambiente ≥ 30°C o se è richiesta una bassa temperatura di utilizzo del riduttore.

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 **I11** 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 **I11** 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 **I11** 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 **I11** 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 **I11** 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.

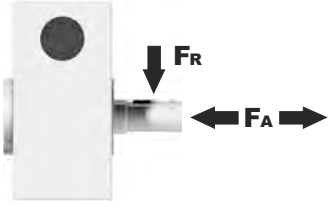
Standard ← On request →

B3	B6	B7	B8	V5	V6
3.50 LT	2.50 LT	2.50 LT	2.10 LT	1.60 LT	1.60 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

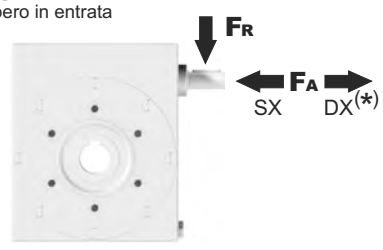
▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



n_2 [min^{-1}]	FA [N]	FR [N]
200	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

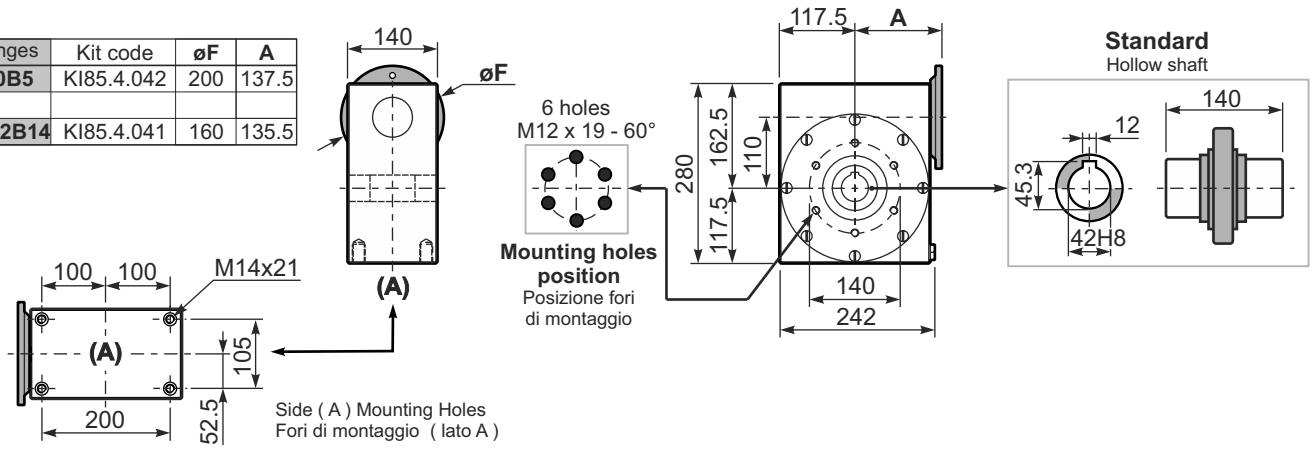
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

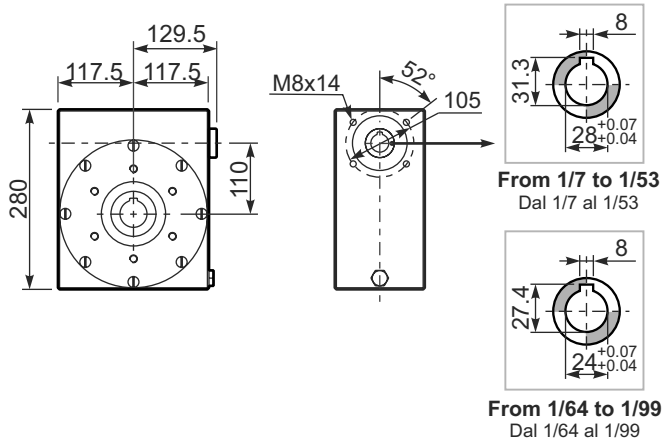
Gearbox weight peso riduttore	38.5 kg

PI11**UN**... Basic wormbox
Riduttore base

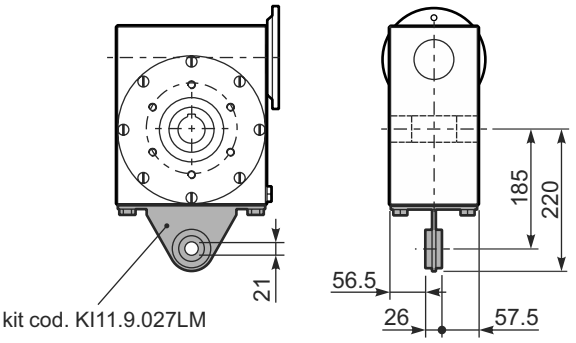
M. flanges	Kit code	øF	A
80-90B5	KI85.4.042	200	137.5
100-112B14	KI85.4.041	160	135.5



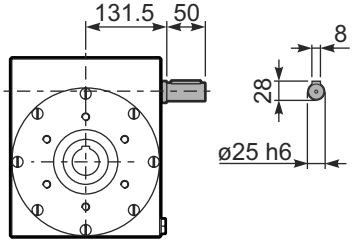
B I11UN... Modular base
Base modulare



PI11**BR**... Reaction arm
Braccio di reazione



R I11UN... Input shaft
Albero in entrata

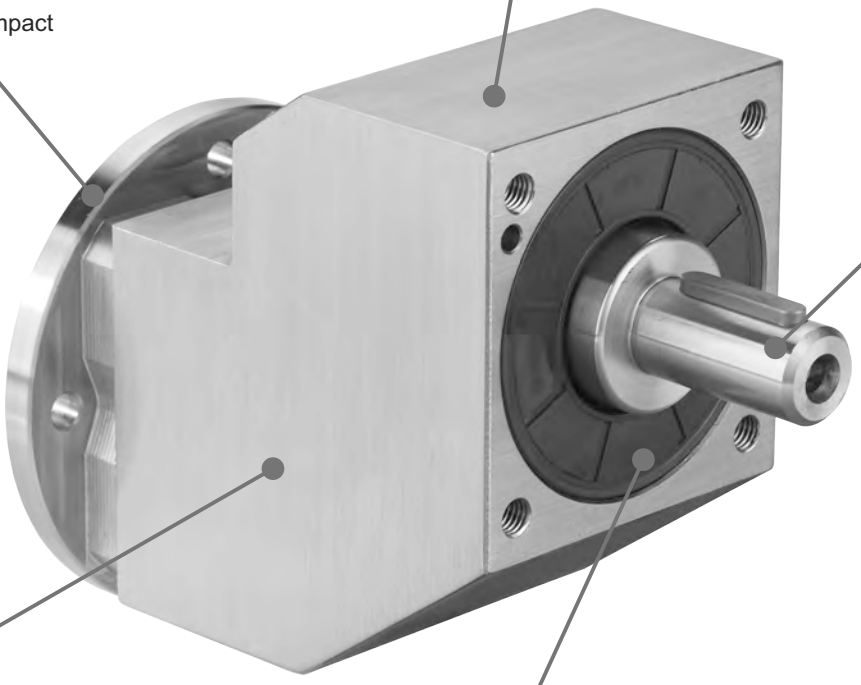


Stainless steel one step gearboxes

A modular and compact product

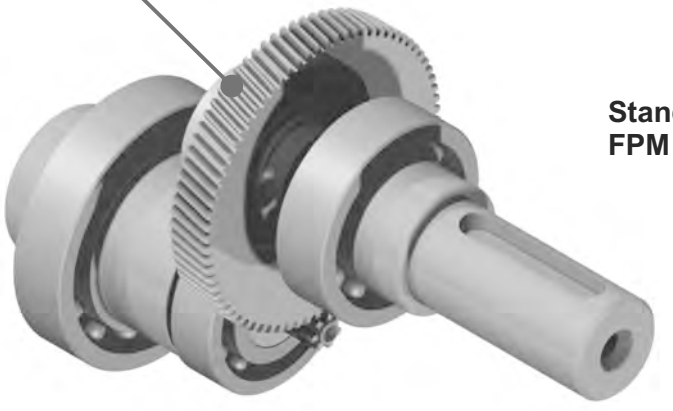
Smooth stainless steel housing

Flange
Fully modular to
IEC B14 and Compact
integrated motor.
NEMA C flange



Stainless steel
Output shaft
With well
proportioned
bearings

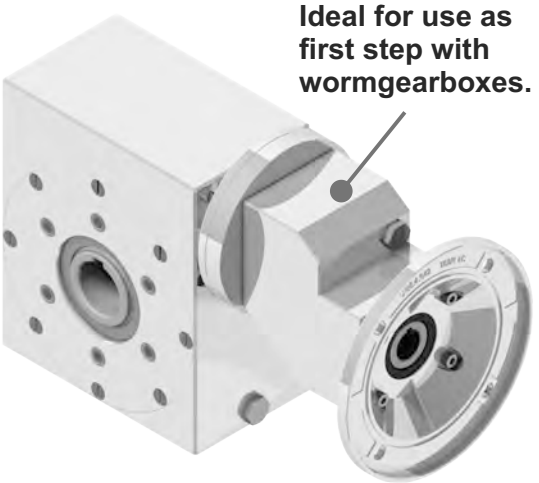
Gears
Hardened and
ground gears.



Lubricated for life with
synthetic oil
with operative range
from -15° to +130°C

Standard
FPM (fkm) seals

Ideal for use as
first step with
wormgearboxes.



Specific type datasheet on page...

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



Types / Tipi / Tipen / Types / Tipos

10-5	10-6
411I 38Nm	**511I** 110Nm

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



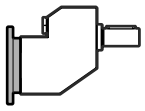
Types / Tipi / Tipen / Types / Tipos

M-3							
63B 0.18kw 1/4cv	**71A** 0.25kw 1/3cv	**71B** 0.37kw 1/2cv	**80A** 0.55kw 3/4cv	**80B** 0.75kw 1cv	**90S** 1.1kw 1 1/2cv	**90L** 1.5kw 2cv	**100LA** 2.2kw 3cv

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Type - Tipo Typ Type - Tipo	**Size** - Grandezza Grösse - Taille Tomaño	**Mounting** Montaggio Montage Fixation Tipo de montaje	**Ratio** - Rapporto Untersetzung Reduction Relaciòn	**Output shaft** Albero lento Abtriebswelle Arbre de sortie Eje solida	**Output flange** Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	**Motor size** Grandezza motore Motor Grösse Grandeur moteur Tamaño motor	**Mounting position** Posizione montaggio Einbaulage Position de montage Position de montaje
P	**411I**	**-F**	**1.57**	**C**	**4**	**-Q**	**B3**

Type



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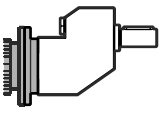

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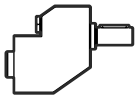
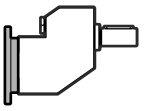


B

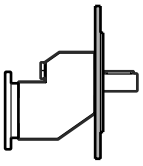
Size

411I
511I

Mounting



-N



-F

Ratio

See technical data table

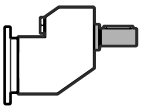
Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

Output shaft



➡ **STANDARD**

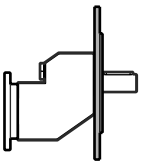
411I

C ➡ **ø19**

511I

G ➡ **ø28**

Output flange



N Senza flangia Without flange

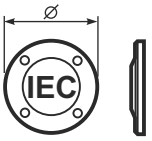
411I

4 ➡ **ø200**

511I

5 ➡ **ø250**

Motor size

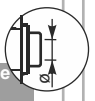


411I

-Q 71B14 (ø105)
-R 80B14 (ø120)
-T 90B14 (ø140)

511I

-D 80B5 (ø200)
-E 90B5 (ø200)
-U 100-112 B14 (ø160)



Without flange
Senza flangia

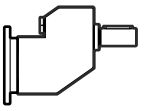
411I

-1 ⇨ ø14 (71B5)
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)

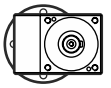
511I

-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)
-4 ⇨ ø28 (100B5)

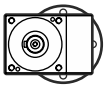
Mounting position



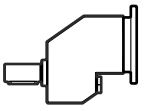
B3
STANDARD



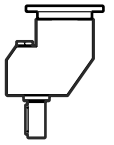
B6



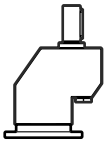
B7



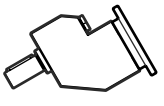
B8



V5



V6



V8

On request

B	**Food lube**

TÜV NORD 0032 — Dossier according to 94/9/EG 8. b ii stored — Ex

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.

- B3 is supplied with standard oil quantity
- Please specify in the order if you required other mounting positions

YOUR ORDER NOTES

FORMULE UTILI / USEFUL FORMULAS / NÜTZLICHE FORMELIN / FORMULES UTILES / FÓRMULAS ÚTILES

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

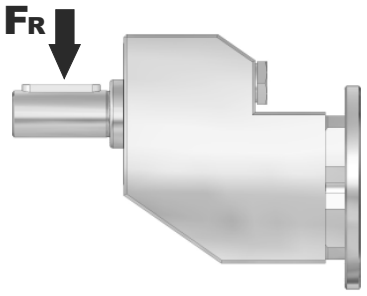
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$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

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

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

411I One step 38Nm

Rating - Stainlessteel 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]	B5 motor flanges not available	Available B14 motor flanges Q	R	T		Output Shaft	Ratios code
							- - - - - - - -	71	80	90			
892	**1.57**	1.5	15.7	1.3	**1.90**	**20**		C	C		2844		01
493	**2.84**	1.5	28.4	1.2	**1.84**	**35**		C	C		1954		02
426	**3.29**	1.5	32.9	1.2	**1.73**	**38**		C	C		1756	**standard ø19**	03
362	**3.87**	1.5	38.7	1.0	**1.54**	**40**		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
	≤ 10 Moderate / Moderato	1	1.25	1.5
	≤ 10 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
	> 10 Moderate / Moderato	1.25	1.5	1.75
	> 10 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]	B5 motor flanges not available				Available B14 motor flanges Q	R	T		Output Shaft ø	Ratios code
							-	-	-	-	71	80	90			
891	**1.57**	1.5	16	1.3	**1.9**	**20**					C	C		2844		01
493	**2.84**	1.5	28	1.2	**1.8**	**35**					C	C		1954		02
425	**3.29**	1.5	33	1.2	**1.7**	**38**					C	C		1756		03
362	**3.87**	1.5	39	1.0	**1.5**	**40**					C	C		1558	**standard ø19**	04
303	**4.62**	1.5	46	1.0	**1.5**	**47**					C	C		1360		05
222	**6.30**	1.1	46	1.0	**1.1**	**46**					C	C		1063		06
170	**8.22**	0.55	30	1.3	**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

* The nominal power should be reduced if the ambient temperature is ≥ 30°C, or when a cooler gearbox is required.

* Diminuire la potenza nominale in caso di temperatura ambiente ≥ 30°C o se è richiesta una bassa temperatura di utilizzo del riduttore.

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 **411I** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.

I Il riduttore **411I** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.

D Das Getriebe **411I** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.

F Le réducteur **411I** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.

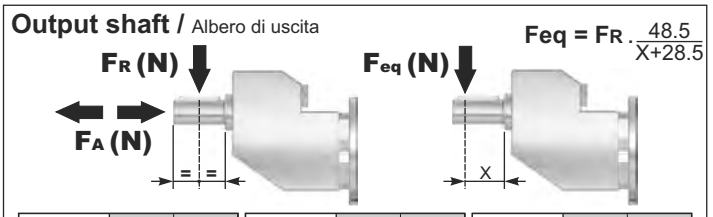
E El reductor tamaño **411I** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.

▪ LUBRICATION 411I Oil Quantity 0.14 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

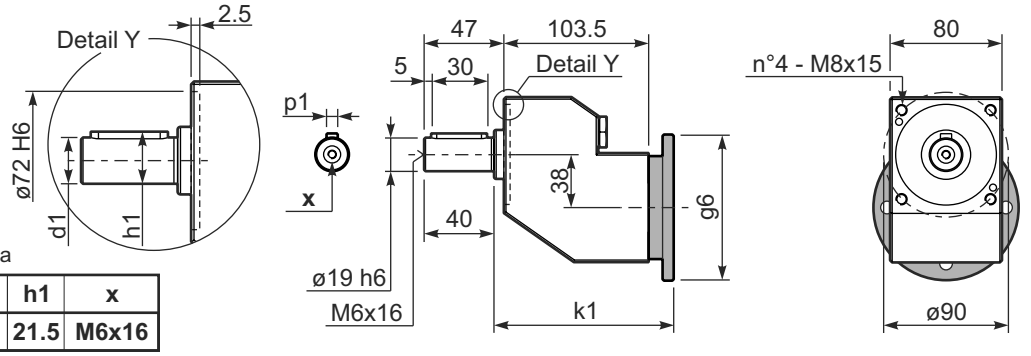
Output shaft / Albero di uscita



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	182	910	**400**	230	1150	**200**	290	1450
600	100	1000	**300**	250	1250	**140**	320	1600

P411I-**N**... Basic gearbox
Riduttore base

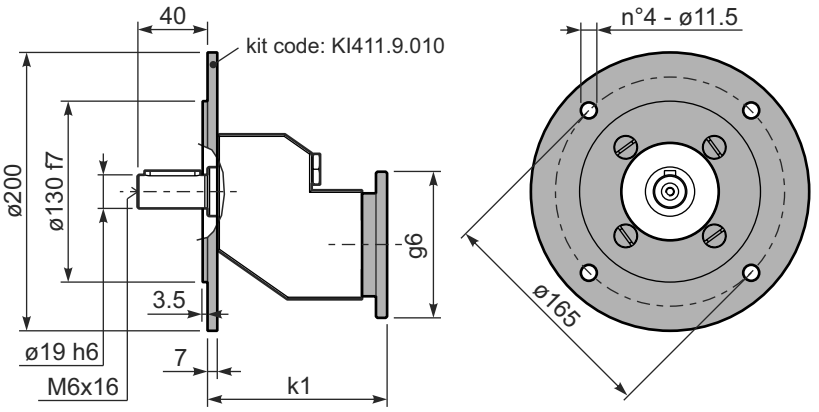
Gearbox weight / peso riduttore	5.5 kg



Output shafts / albero di uscita

	Shaft - d1	p1	h1	x
Standard	**ø 19x40**	**6**	**21.5**	**M6x16**

P411I-**F**... Output flange
flangia di uscita



Input flanges / flange di entrata

	k1	g6	kit code
71 B14	128.5	105	KI63.4.047
80 B14	129.5	120	KI63.4.046
90 B14	130.5	140	KI63.4.041

▪ 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 D	Available B5 motor flanges E	Available B14 motor flanges U		Output Shaft ø	Ratios code
							80	90	100 - 112			
1077	**1.30**	4	34	1.2	**4.6**	**40**				3039	**standard ø28**	01
571	**2.45**	4	64	1.1	**4.3**	**70**				2049		02
423	**3.31**	4	87	1.0	**4.1**	**90**				1653		03
325	**4.31**	4	113	1.0	**3.8**	**110**				1356		04
266	**5.27**	3	104	1.1	**3.1**	**110**				1158		05
184	**7.63**	2.2	111	1.0	**2.2**	**110**				861		06
133	**10.50**	1.1	77	1.0	**1.1**	**80**				663		07

The dynamic efficiency is **0.98** for all ratios

* The nominal power should be reduced if the ambient temperature is ≥ 30°C, or when a cooler gearbox is required.

* Diminuire la potenza nominale in caso di temperatura ambiente ≥ 30°C o se è richiesta una bassa temperatura di utilizzo del riduttore.

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 **511I** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.

I Il riduttore **511I** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.

D Das Getriebe **511I** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.

F Le réducteur **511I** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.

E El reductor tamaño **511I** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.

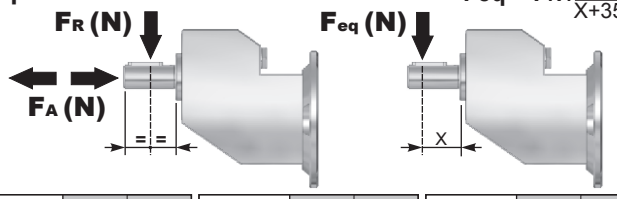
▪ LUBRICATION 511I Oil Quantity 0.45 Lt.

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

Output shaft / Albero di uscita

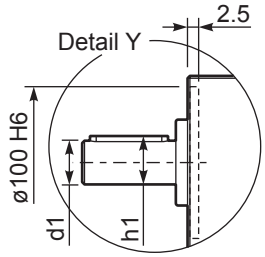
$F_{eq} = F_R \cdot \frac{65.5}{X+35.5}$

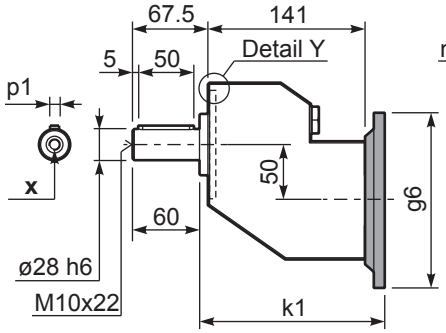


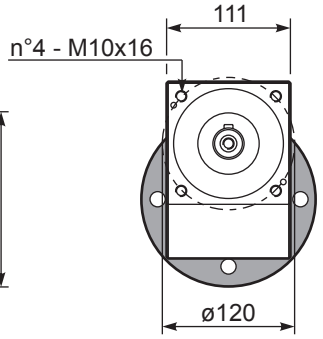
n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
700	294	1470	**400**	370	1850	**200**	460	2300
600	320	1600	**300**	400	2000	**140**	510	2550

P511I-**N**... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	12.0 kg







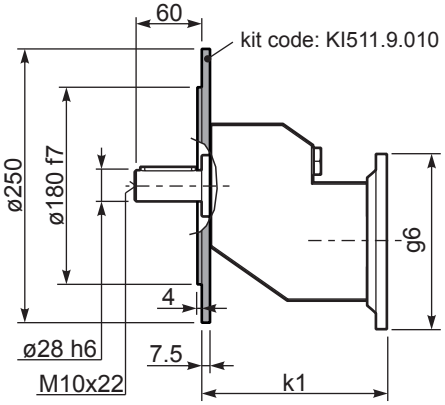
Output shafts / albero di uscita

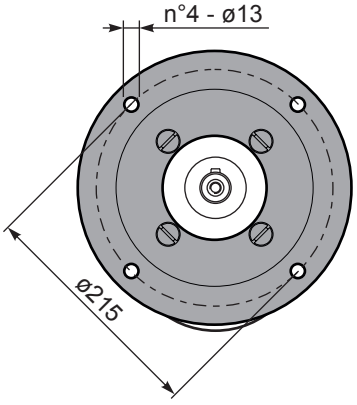
	Shaft - d1	p1	h1	x
Standard	**ø 28x60**	**8**	**31**	**M10x22**

P511I-**F**... Output flange
flangia di uscita

Input flanges / flange di entrata

	k1	g6	kit code
80-90B5	168.5	200	KI85.4.042
100-112B14	166.5	160	KI85.4.041





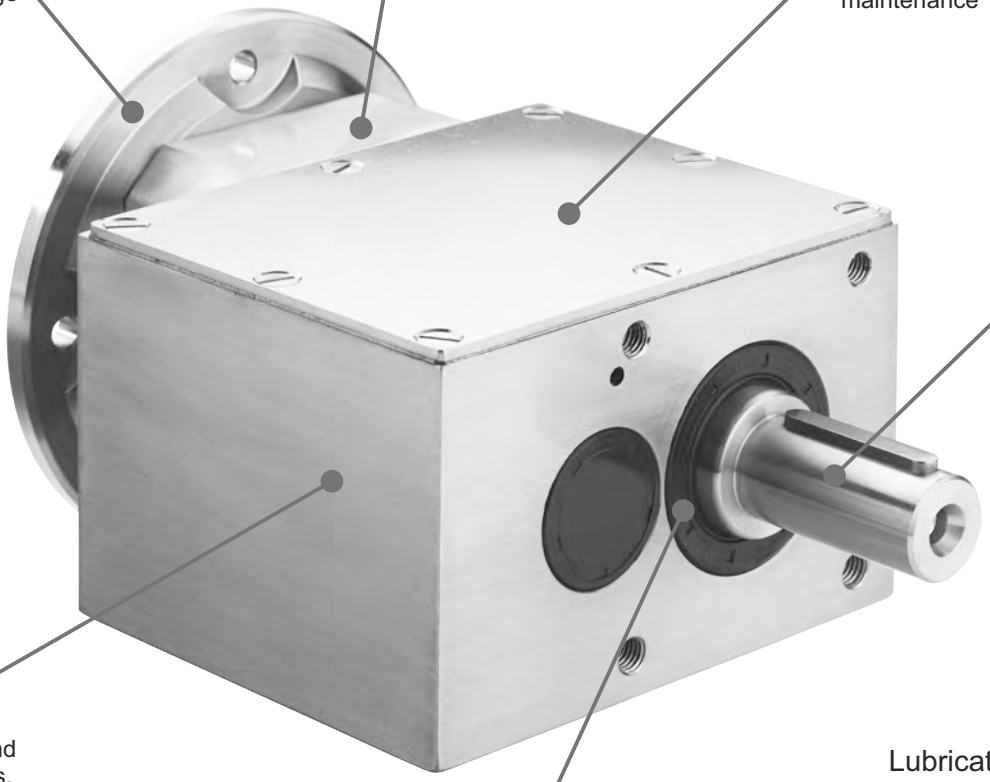
Stainless steel in line gearboxes

A modular and compact product

Smooth stainless steel housing

Flange
Fully modular to IEC B14 and Compact integrated motor. NEMA C flange

Removable inspection cover
Allows periodic inspection of gearing during routine maintenance



Stainless steel Output shaft
With well proportioned bearings

Gears
Hardened and ground gears.



Lubricated for life with synthetic oil with operative range from -15° to +130°C



Standard FPM (fkm) seals

Specific type datasheet on page...

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



Types / Tipi / Tipen / Types / Tipos

11-5	11-7
442I 160Nm	**452I** 300Nm

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



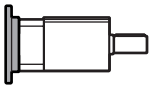
Types / Tipi / Tipen / Types / Tipos

M-3							
63B 0.18kw 1/4cv	**71A** 0.25kw 1/3cv	**71B** 0.37kw 1/2cv	**80A** 0.55kw 3/4cv	**80B** 0.75kw 1cv	**90S** 1.1kw 1 1/2cv	**90L** 1.5kw 2cv	**100LA** 2.2kw 3cv

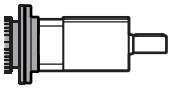
CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

Type - Tipo Typ Type - Tipo	**Size** - Grandezza Grösse - Taille Tomaño	**Mounting** Montaggio Montage Fixation Tipo de montaje	**Ratio** - Rapporto Untersetzung Reduction Relaciòn	**Output shaft** Albero lento Abtriebswelle Arbre de sortie Eje solida	**Output flange** Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	**Motor size** Grandezza motore Motor Grösse Grandeur moteur Tamaño motor	**Mounting position** Posizione montaggio Einbaulage Position de montage Position de montaje
P	**442I**	**-F**	**3.52**	**E**	**4**	**-Q**	**B3**

P



M

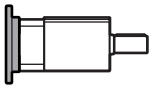


B

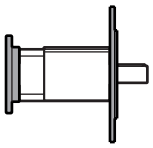


442I
452I

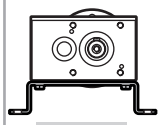
-N



-F



H..



You see feet code in the chart of the dimensions

Vedi codice piede nella tabella delle dimensioni

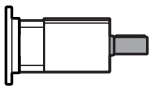
See technical data table

Vedi tabelle dati tecnici.

Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos



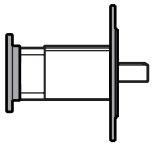
➡ **STANDARD**

442I

E ➡ **ø24**

452I

G ➡ **ø28**



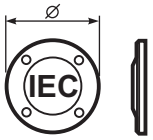
N Senza flangia Without flange

442I

4 ➡ **ø200**

452I

5 ➡ **ø250**

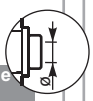


442I

-Q 71B14 (ø105)
-R 80B14 (ø120)
-T 90B14 (ø140)

452I

-D 80B5 (ø200)
-E 90B5 (ø200)
-U 100-112 B14 (ø160)



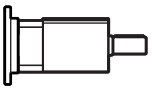
Without flange
Senza flangia

442I

-1 ⇨ ø14 (71B5)
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)

452I

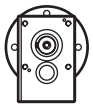
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)
-4 ⇨ ø28 (100B5)



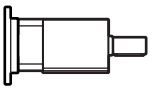
B3
STANDARD



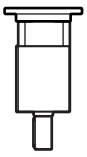
B6



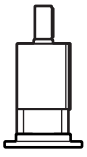
B7



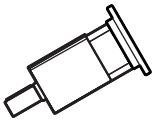
B8



V5



V6



V8

On request

B **Food lube**

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.

- B3 is supplied with standard oil quantity
- Please specify in the order if you required other mounting positions

YOUR ORDER NOTES

FORMULE UTILI / USEFUL FORMULAS / NÜTZLICHE FORMELIN / FORMULES UTILES / FÓRMULAS ÚTILES

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

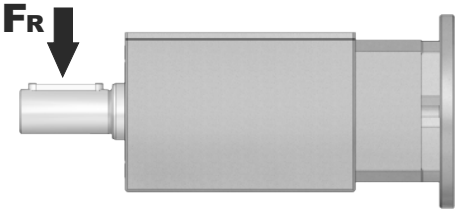
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$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

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

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

442I Coaxial - Gear 160Nm

Rating - Stainlessteel 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]	B5 motor flanges not available				Available B14 motor flanges Q	R	T	-		Output Shaft	Ratios code
							-	-	-	-	71	80	90	-			
398	**3.52**	1.5	35	2.3	3.5	80					C	C			2821		01
320	**4.37**	1.5	43	2.1	3.2	90					C	C			2818	**standard ø24**	02
252	**5.55**	1.5	55	1.8	2.8	100					C	C			2813		03
220	**6.36**	1.5	62	1.5	2.3	95					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 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]	B5 motor flanges not available				Available B14 motor flanges Q	R	T	-		Output Shaft ø	Ratios code
							-	-	-	-	71	80	90	-			
398	**3.52**	1.5	35	2.3	3.5	80					C	C			2821		01
320	**4.37**	1.5	43	2.1	3.2	90					C	C			2818		02
252	**5.55**	1.5	55	1.8	2.8	100					C	C			2813		03
220	**6.36**	1.5	62	1.5	2.3	95					C	C			1921		04
191	**7.33**	1.5	72	1.7	2.5	120					C	C			2812		05
177	**7.89**	1.5	77	1.6	2.3	120					C	C			1918		06
139	**10.06**	1.5	99	1.5	2.3	150					C	C			1913		08
120	**11.66**	1.5	114	1.5	2.3	174					C	C			1713		09
106	**13.26**	1.5	130	1.2	1.8	160					C	C			1912		10
102	**13.68**	1.5	134	1.1	1.6	144					C	C			1513		25
91	**15.37**	1.5	151	1.1	1.6	160					C	C			1712		11
86	**16.20**	1.5	159	0.9	1.3	138					C	C			1910	**standard ø24**	12
78	**18.04**	1.5	177	0.9	1.4	160					C	C			1512		23
74	**18.80**	1.1	135	1.0	1.1	138					C	C			1710		24
65	**21.54**	1.1	155	1.0	1.1	160					C	C			1312		14
63	**22.29**	1.1	161	1.0	1.1	167					C	C			1013		15
53	**26.30**	0.75	129	1.1	0.80	138					C	C			1310		16
47.6	**29.40**	0.75	144	1.1	0.83	160					C	C			1012		17
39	**35.91**	0.55	129	1.1	0.59	138					C	C			1010		18
36.5	**38.37**	0.55	138	1.2	0.64	160					C	C			912		19
29.9	**46.86**	0.55	169	0.8	0.45	138					C	C			910		20
27.6	**50.67**	0.37	123	1.1	0.40	132					C	C			712		21
22.6	**61.88**	0.37	150	0.9	0.34	138					C	C			710		22

The dynamic efficiency is **0.96** for all ratios

* The nominal power should be reduced if the ambient temperature is ≥ 30°C, or when a cooler gearbox is required.

* Diminuire la potenza nominale in caso di temperatura ambiente ≥ 30°C o se è richiesta una bassa temperatura di utilizzo del riduttore.

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

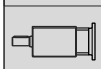
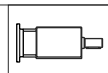
EN Unit **442I** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **442I** 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 **442I** 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 **442I** 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 **442I** 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.

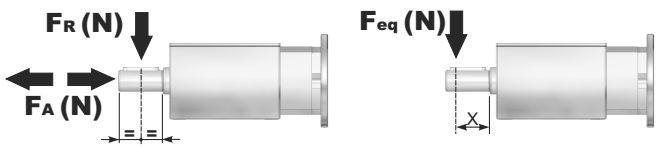
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
0.35 LT	0.55 LT	0.55 LT	0.55 LT	0.75 LT	0.60 LT	Ask

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

$$Feq = F_R \cdot \frac{49}{X+24}$$

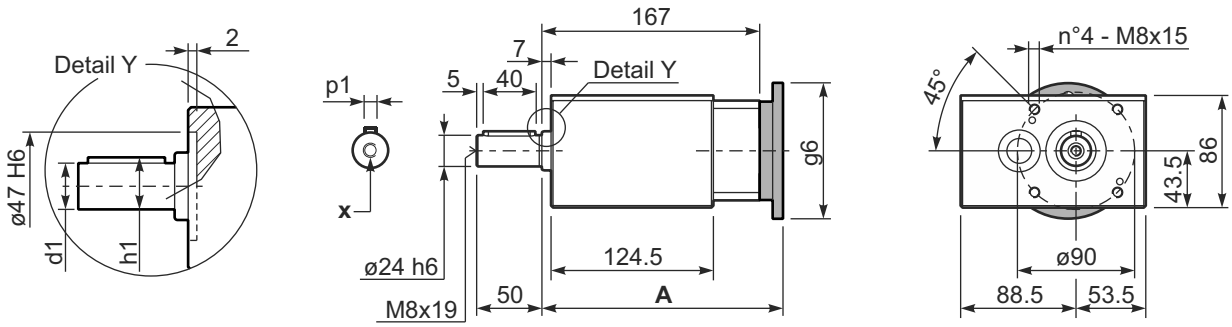


n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	310	1550	**140**	406	2030	**70**	540	2700
250	330	1650	**120**	448	2240	**40**	600	3000
200	360	1800	**85**	480	2400	**15**	600	3000

tab. 2

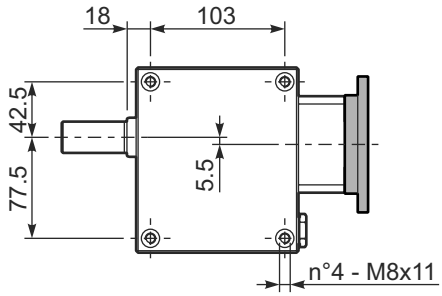
P442I-**N**... Basic gearbox
Riduttore base

Gearbox weight peso riduttore		
	With flange	**9.9 kg**
	With feet	**9.2 Kg**



Output shafts / albero di uscita

	Shaft - d1	p1	h1	x
Standard	**ø 24x50**	**8**	**27**	**M8x19**



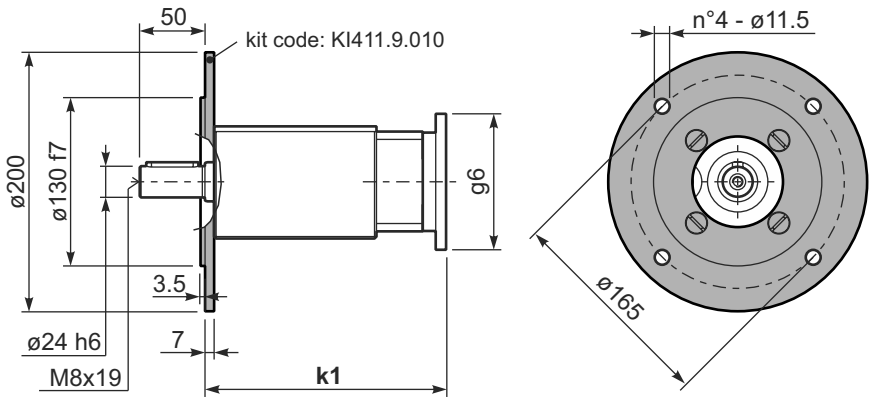
Input flanges / flange di entrata

	A	g6	kit code
71 B14	185	105	KI63.4.047
80 B14	186	120	KI63.4.046
90 B14	187	140	KI63.4.041

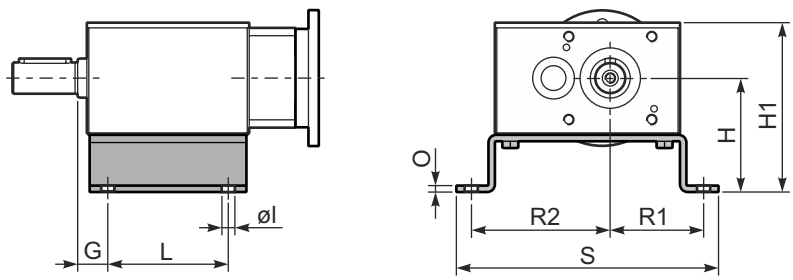
P442I-**F**... Output flanges
flange di uscita

Input flanges / flange di entrata

	k1	g6	kit code
71 B14	185	105	KI63.4.047
80 B14	186	120	KI63.4.046
90 B14	187	140	KI63.4.041



P442I**H1**.. With feet
Con piedini



Feet / piedini

Feet Code	G	L	R1	R2	S	H	H1	O	øl	kit code
H1	19.5	100	67.5	102.5	190	49.5	92	6	10	KI4429022
H2	19.5	100	75	110	205	88	130.5	5	10	KI4429023

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

▪ 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	Available B5 motor flanges E 90	Available B14 motor flanges U 100 - 112		Output Shaft	Ratios code
388	**3.61**	4	95	1.6	6.3	150				3018		01
331	**4.23**	4	111	1.5	6.1	170				3016		02
279	**5.01**	4	131	1.5	6.1	200				3014		03
231	**6.07**	4	159	1.6	6.3	250				3012		04
206	**6.81**	4	178	1.6	6.2	277				2018		05
176	**7.96**	4	209	1.4	5.8	300				2016		06
148	**9.45**	4	248	1.2	4.9	304				2014		07
122	**11.43**	4	299	1.0	4.0	300				2012	**standard ø28**	08
99	**14.21**	3	279	0.9	2.8	265				2010		09
84	**16.62**	3	327	0.9	2.8	304				1314		10
70	**20.10**	2.2	290	1.0	2.3	300				1312		11
56	**24.98**	1.85	303	0.9	1.6	265				1310		12
47.6	**29.41**	1.5	289	1.1	1.6	304				814		13
39.3	**35.58**	1.5	349	0.9	1.3	300				812		14
34.6	**40.50**	1.1	292	1.0	1.1	290				614		15
31.7	**44.22**	1.1	319	0.8	0.92	265				810		16
28.6	**49.00**	0.75	241	1.2	0.93	300				612		17
23.0	**60.90**	0.75	299	0.9	0.66	265				610		18

The dynamic efficiency is **0.96** for all ratios

* The nominal power should be reduced if the ambient temperature is ≥ 30°C, or when a cooler gearbox is required.

* Diminuire la potenza nominale in caso di temperatura ambiente ≥ 30°C o se è richiesta una bassa temperatura di utilizzo del riduttore.

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

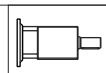
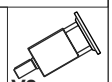
EN Unit **452I** is supplied with synthetic oil for lifetime lubrification, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **452I** 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 **452I** 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 **452I** 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.

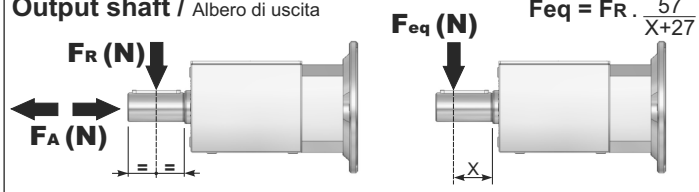
E El reductor tamaño **452I** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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	0.80 LT	0.90 LT	0.80 LT	1.10 LT	1.00 LT	Ask

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



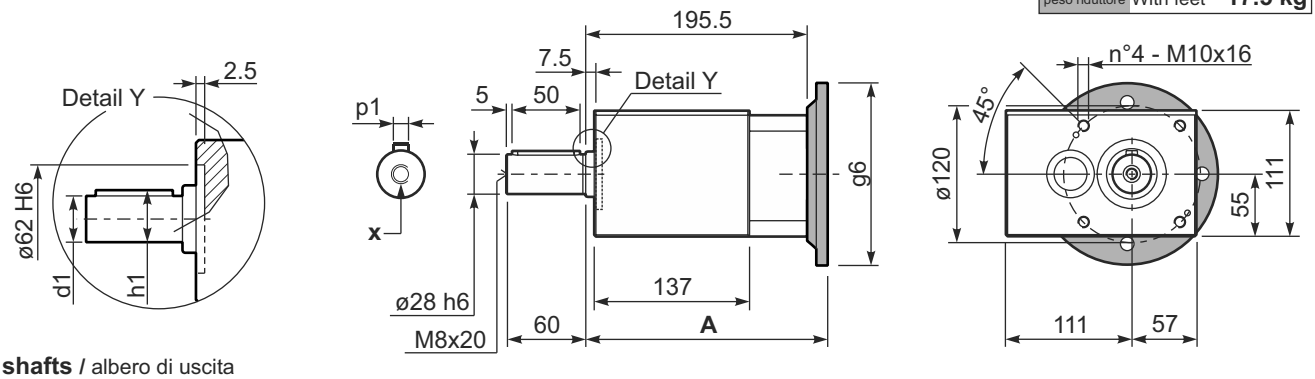
Feq = FR . 57 / X+27

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

tab. 2

P452I-**N**... Basic gearbox
Riduttore base

Gearbox weight peso riduttore	With flange	19.2 kg
	With feet	17.5 kg

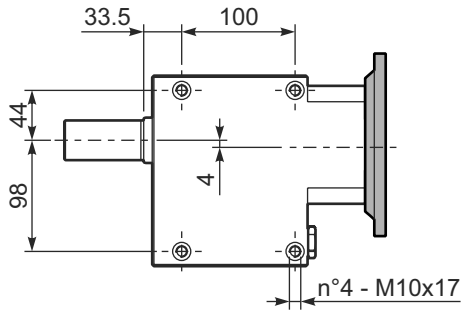


Output shafts / albero di uscita

	Shaft - d1	p1	h1	x
Standard	**ø 28x60**	**8**	**31**	**M8x20**

Input flanges / flange di entrata

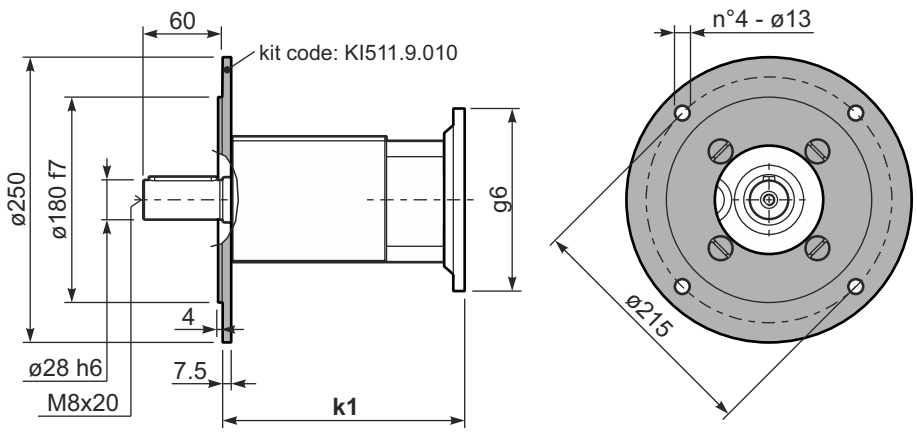
	A	g6	kit code
80-90B5	215.5	200	KI85.4.042
100-112B14	213.5	160	KI85.4.041



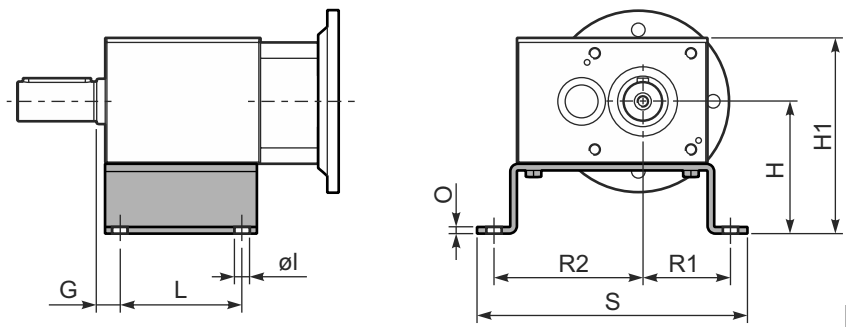
P452I-**F**... Output flanges
flange di uscita

Input flanges / flange di entrata

	k1	g6	kit code
80-90B5	215.5	200	KI85.4.042
100-112B14	213.5	160	KI85.4.041



P452I**H1**.. With feet
Con piedini



Feet / piedini

Feet Code	G	L	R1	R2	S	H	H1	O	øI	kit code
H1	21	110	73	127	220	61	117	6	11.5	KI4529022
H2	21	110	83	137	245	118	174	6	11.5	KI4529023

Other feet are available, see our web site
Sono disponibili altri piedini, consulta il nostro sito web

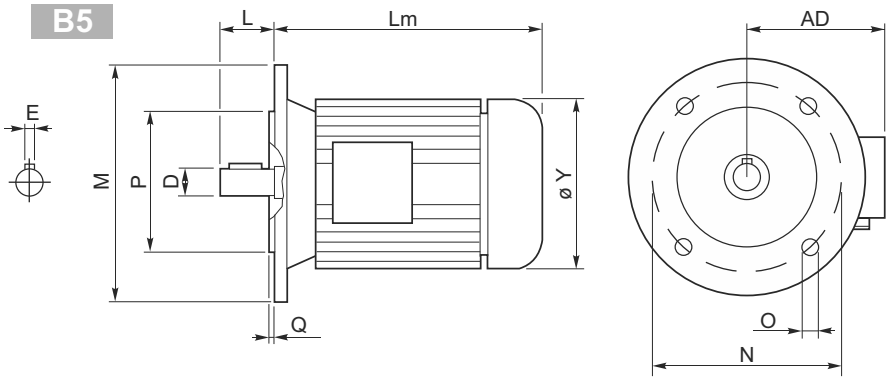
Aluminum IEC motors



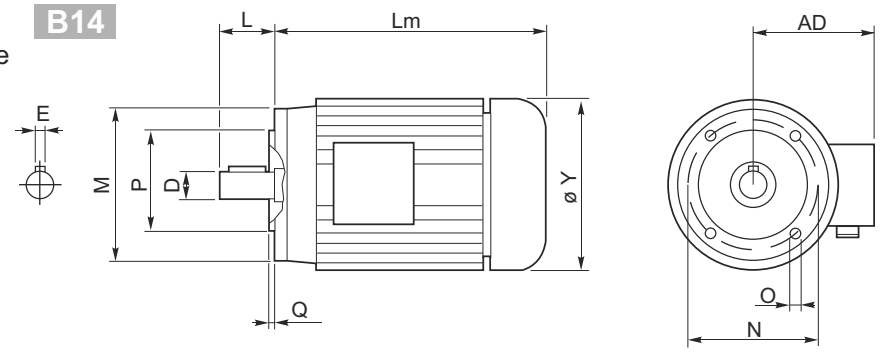
1) 230/400V - 50Hz three-phase asynchronous induction motor
2) Class F insulation
3) S1 duty
4) IP 55 protection
5) Not painted
6) Hard plastic sleeve to protect output shaft during the transportation

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

B5



B14



Outside dimensions may be different according to manufacturers.
Le dimensioni esterne 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	E	L	Lm	Y	AD	P	N	M	O	Q	P	N	M	O	Q	
56 A	**0.09**	0.32	0.38	**0.06**	0.44	0.27	—	—	—	9	3	20	179	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	185	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				225	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	256	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				280													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				321	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	375	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				420													51
				9	61.4	18.5																				
160 M	—	—	—	**11**	72	21.5	—	—	—	42	12	110	503	335	246	250	300	350	18	5	—	—	—	—	—	79.2
160 L	—	—	—	**15**	98	29	—	—	—				547													97.5
180 M	—	—	—	**18.5**	121	35.5	—	—	—	48	14	110	602	366	266	250	300	350	19	5	—	—	—	—	—	170
180 L	—	—	—	**22**	144	42	—	—	—																	



Metric electric motors are in aluminum. On request they can be supplied with different Level of protection and painted with 2 or 3 level of anticorrosive paint.

I motori metrici sono in alluminio, su richiesta possono essere forniti con differenti livelli di protezione e verniciati con vernice anticorrosiva.



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.

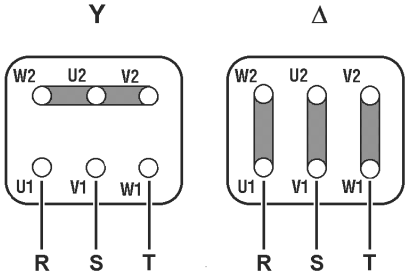
Isolement
CI.F Standard.
Au moment de la commande, spécifiez si vous souhaitez une classe d' isolement différente.

Aislamiento
CI.F standard.
Especificar al efectuar el pedido la clase diferente de aislamiento.

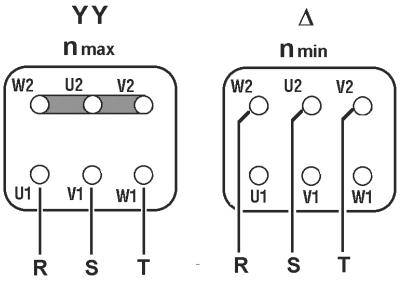
Insulation / Isolamento Isolierung /Aislamiento		E	B	F	H
Max. temp.	C°	120°	130°	155°	175°
	F*	248°	266°	311°	347°

Connections **Collegamenti** **Verbindungselemente** **Branchements** **Conexiones**

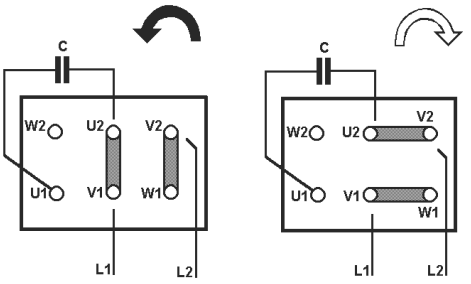
Threephase asyncronous single polarity
Asincrono trifase singola polarità
Asynchronmotor 3-ph eine Drehzahl
Moteur triphasé à une vitesse
Asincrono trifasico de una velocidad



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

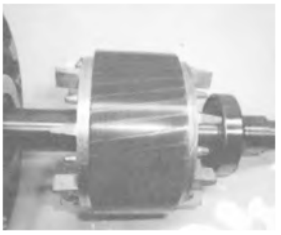


Stainlessteel IEC B14 motors



Features

1) 300 Series Stainless Steel Construction.
2) Inverter duty
3) Washdown Duty Applications.
4) BISSC Certified.
5) Corrosion Resistant.
6) Laser Etched Nameplate.
7) Oversized Bearings on both ends c/w Locked Drive-end Bearing Construction.
8) Oversized Conduit Box c/w Lead Seal.
9) Drill & Tapped Drains.
10) T-Drain included.
11) Double Lip Contact Seals.





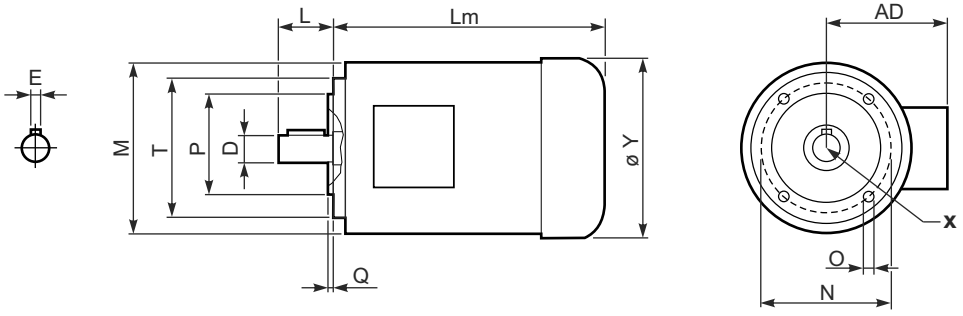








B14



Outside dimensions may be different according to manufacturers.
Le dimensioni esterne sono indicative, possono variare tra i vari costruttori.

	4 poli / poles																Kg
	kW	Nm	A (400V)	D	E	L	Lm	Y	AD	P	N	M	T	O	Q	X	
63	0.18	1.30	0.69	11	4	23.5	252	128	106	60	75	114	90	M5	2.5	-	8.2
71	0.25	1.70	0.91	14	5	30.5	228	146	115	70	85	134	105	M6	2.5	M5x20	8.3
	0.37	2.52	1.14				252										10.4
80	0.55	3.77	1.51	19	6	40	300	158	115	80	100	144	120	M6	3	M6x25	17.5
	0.75	5.11	2.57														
90	1.1	7.45	2.78	24	8	50	321	174	135	95	115	165	140	M8	3	M8x25	22.4
	1.5	10.2	3.61				367										27.6
100	2.2	14.8	5.07	28	8	60	374	203	150	110	130	190	160	M8	3.5	M10x25	33.5

Tecnical data

- **Voltage: 230 / 400V**
- **Phase: 3**
- **Frequency: 50Hz**
- **Poles: 4**
- **International protections : IP 65**
- **Insulation class: F**
- **Duty: S1**

NOTES / NOTE / AUFZEICHNUNG / NOTAS

NOTES / NOTE / AUFZEICHNUNG / NOTAS

IMPORTANT INFORMATION / INFORMAZIONI IMPORTANTI

Please Read Carefully
The following WARNING and CAUTION information is supplied to you for your protection and to provide you with many years of trouble free and safe operation of your product.
Read ALL instructions prior to operating reducer. Injury to personnel or reducer failure may be caused by improper installation, maintenance or operation.

WARNING:

• Written authorization is required to operate or use reducers in man lift or people moving devices.
• Check to make sure that certain applications do not exceed the allowable load capacities published in the current catalog.
• Buyer shall be solely responsible for determining the adequacy of the product for any and all uses to which Buyer shall apply the product. The application by Buyer shall not be subject to any implied warranty of fitness for a particular purpose.
• For safety, Buyer or User should provide protective guards over all shaft extensions and any moving apparatus mounted thereon. The User is responsible for checking all applicable safety codes in his area and providing suitable guards. Failure to do so may result in bodily injury and/or damage to equipment.
• Hot oil and reducers can cause severe burns. Use extreme care when removing lubrication plugs and vents.
• Make certain that the power supply is disconnected before attempting to service or remove any components. Lock out the power supply and tag it to prevent unexpected application power.
• Reducers are not to be considered fail safe or self-locking devices. If these features are required, a properly sized, independent holding device should be utilized. Reducers should not be used as a brake.
• Any brakes that are used in conjunction with a reducer must be sized or positioned in such a way so as to not subject the reducer to loads beyond the catalog rating.
• Lifting supports including eyebolts are to be used for vertically lifting the gearbox only and not other associated attachments or motors.
• Use of an oil with an EP additive on units with backstops may prevent proper operation of the backstop. Injury to personnel, damage to the reducer or other equipment may result.
• Overhung loads subject shaft bearings and shafts to stress which may cause premature bearing failure and or shaft breakage from bending fatigue, it not sized properly.

SELLING CONDITIONS
Warranty for manufacturing defects will expire one-year the invoicing date. Hydro-Mec will replace or repair defective parts but will not accept any further changes for direct or indirect damages of any kind. The warraty will become null and void if repairs or changes are carried out without our prior written authorization.

Our company will not be responsible for any direct or indirect damages, caused by a wrong use of the products or for not observing the catalogue/web indication

Leggere attentamente
Le seguenti raccomandazioni sono fondamentali per la vostra protezione e per garantirvi molti anni di sicuro funzionamento del vostro prodotto senza alcun problema.
Leggere attentamente tutte le istruzioni prima di azionare il riduttore. L'inappropriata installazione, manutenzione o funzionamento del riduttore può causare incidenti al personale addetto e danni al riduttore stesso.

ATTENZIONE!

• E' richiesta autorizzazione scritta per azionare riduttori in ascensori o dispositivi per il movimento delle persone.
• Controllare che alcune applicazioni non eccedano la massima capacità di carico ammessa pubblicata in questo catalogo.
• L'acquirente è l'unico responsabile per la determinazione dell'adeguatezza del prodotto per qualcuna o tutte le utilizzazioni che l'acquirente stesso farà del riduttore. L'applicazione dell'acquirente non potrà essere soggetta ad alcuna implicita garanzia di montaggio per uno scopo particolare.
• Per ragioni di sicurezza l'acquirente dovrà provvedere a porre protezioni adeguate su tutta la lunghezza dell'albero a tutti gli organi in movimento. L'utilizzatore è responsabile del controllo di tutti i codici di sicurezza e la predisposizione di protezioni adeguate. In assenza di tali precauzioni si possono verificare incidenti alle persone e danni agli apparati.
• Olio e riduttori bollenti possono causare gravi ustioni. Usare estrema cautela nella rimozione dei tappi e delle ventole.
• Assicurarsi che la corrente di alimentazione sia scollegata prima di riparare o rimuovere alcun componente. Chiudere l'alimentazione e contrassegnare tale operazione per evitare accensioni accidentali.
• I riduttori non devono essere considerati esenti da guasti o a bloccaggio automatico. Se sono indispensabili queste caratteristiche, deve essere utilizzato un dispositivo indipendente della dimensione adatta. I riduttori non devono essere utilizzati come freni.
• Qualsiasi freno sia utilizzato insieme al riduttore deve essere della giusta grandezza e posizionato in modo da non causare carichi eccessivi non previsti dai dati forniti nel catalogo.
• I dispositivi di sollevamento come le golfare devono essere usati solo per sollevare verticalmente il riduttore e non altri dispositivi associati o motori.
• L'utilizzo di un olio con un additivo EP su gruppi provvisti di dispositivo di arresto possono inficiare l'uso corretto del freno e provocare danni alle persone, alle cose ed al riduttore stesso nonché ad altri apparecchi.
• I Carichi sospesi assoggettano i cuscinetti della vite e la vite stessa a sollecitazioni che possono causare, se non adeguatamente dimensionati, l'usura prematura dei cuscinetti e/o la rottura della vite a causa della resistenza alla flessione.

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