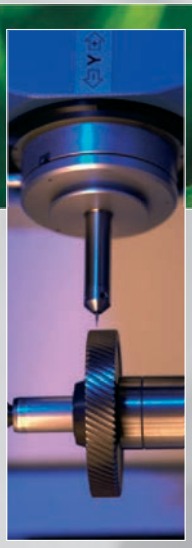
Angletech – Gears

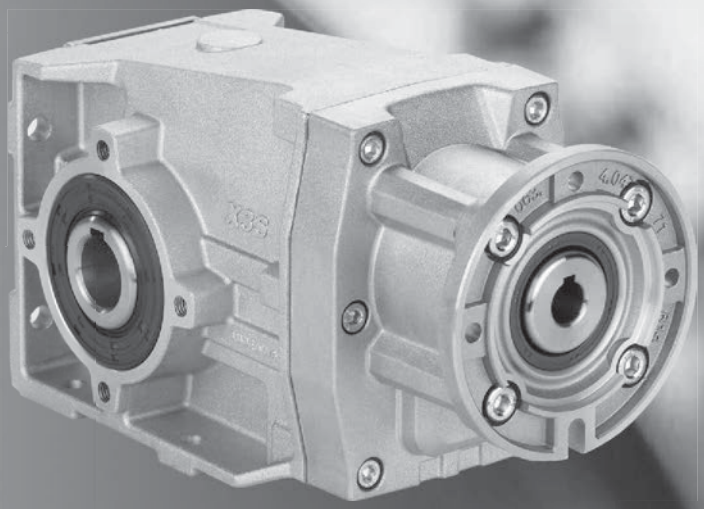


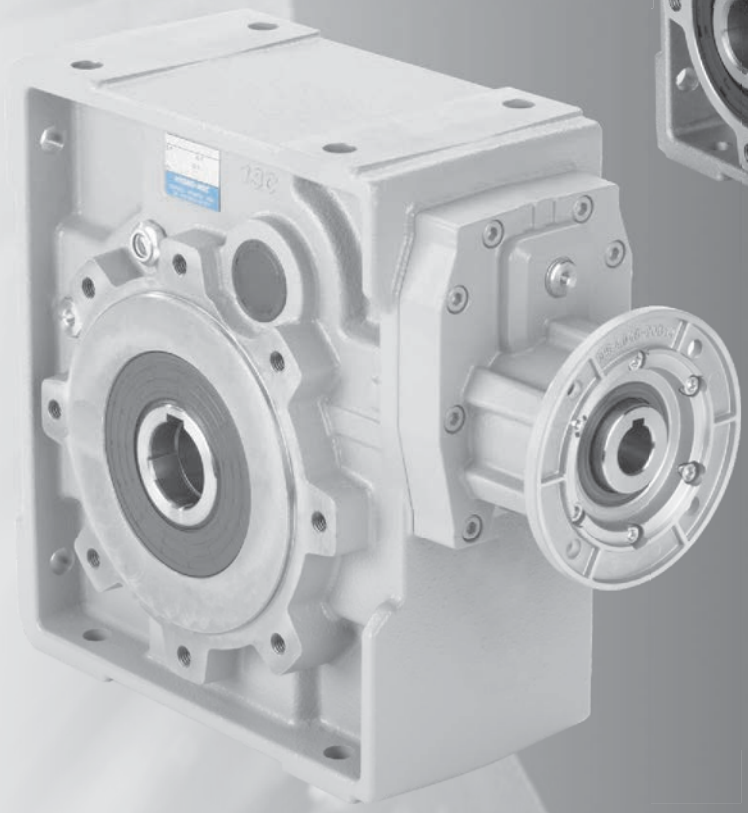
Cat.: **CT-BVM-X-HM015**

Helical-bevel gearboxes

Riduttori ortogonali
0.06 ÷ 45kW

Hypoid and grounded helical gears. Recover energy, with an high efficiency drive





Made in Italy

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

HYDRO·MEC

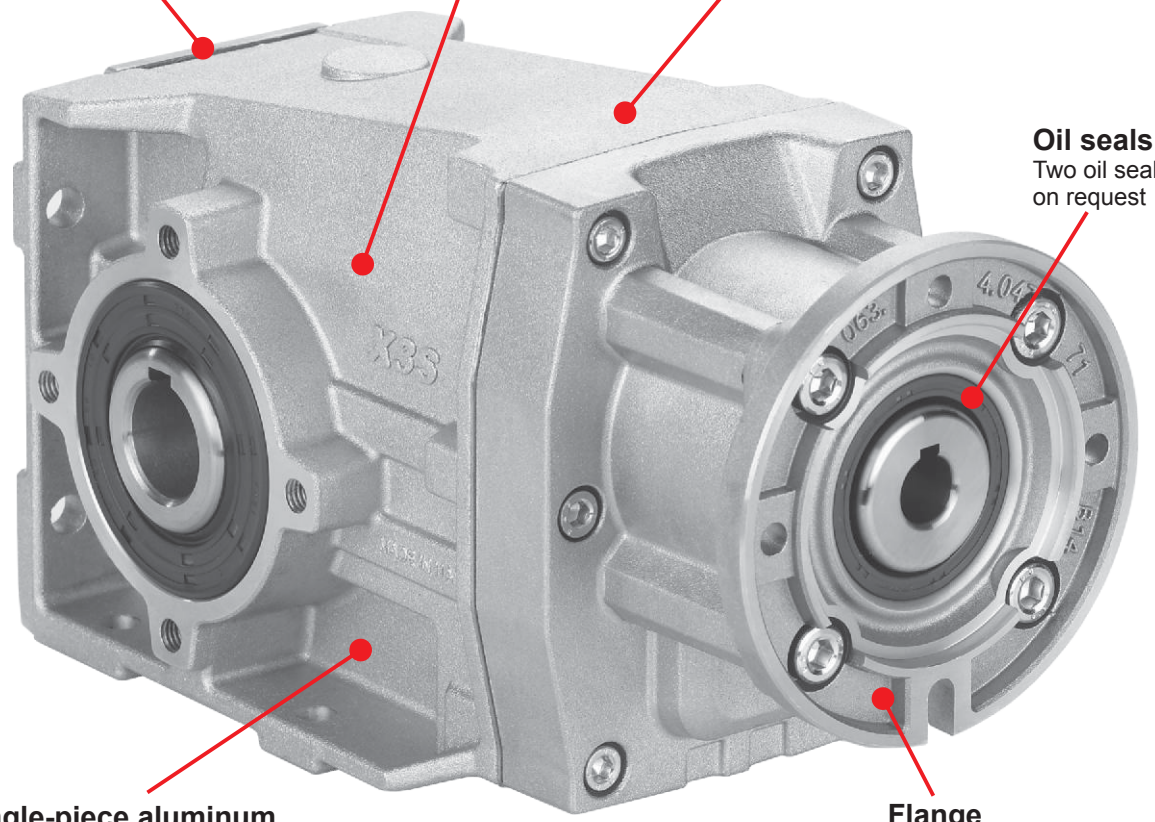
Aluminum and cast iron helical bevel gearboxes

A modular and compact product
Very energy efficent drive

Removable inspection cover
Allows periodic inspection of gearing during routine maintenance

Gears
Hardened and ground gears

Alloy housing
Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint.

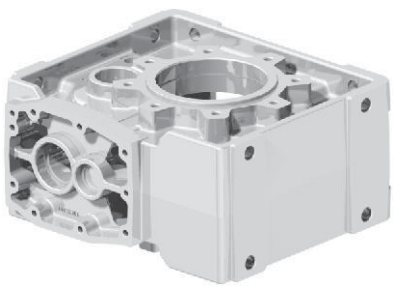


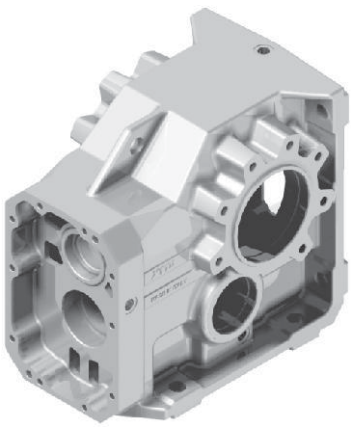
Oil seals
Two oil seals on request

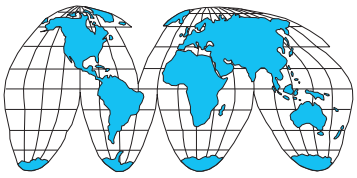
Single-piece aluminum
Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing

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

Cast Iron housing
With high tensile strength. Precision machined for alignment of bearings and gearing



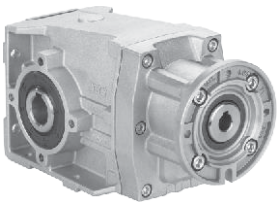




World wide sales network.

Specific type datasheet on page...

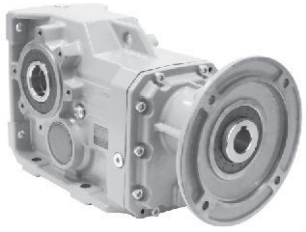
On page / A pagina / Auf Seite / À la page /En la página



Types / Tipi
Typen / Types
Tipos

7-5	7-7	7-9	7-11	7-13	7-15	7-17	7-19	7-21
X22S 50Nm	**X32S** 90Nm	**X33S** 100Nm	**X42A** 150Nm	**X43A** 160Nm	**X52A** 250Nm	**X53A** 250Nm	**X62A** 410Nm	**X63A** 410Nm

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



Types / Tipi
Typen / Types
Tipos

7-23	7-25	7-27	7-29	7-31	7-33	7-35	7-37	7-39	7-41
113C 675Nm	**114C** 675Nm	**133C** 1000Nm	**134C** 1000Nm	**X93C** 1600Nm	**X94C** 1650Nm	**X103** 3000Nm	**X104** 3000Nm	**X113** 4500Nm	**X114** 4600Nm

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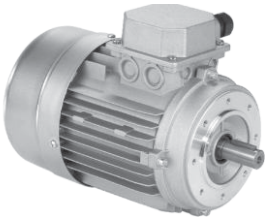


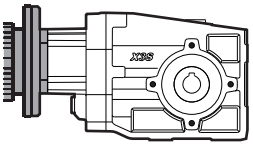
Types / Tipi
Typen / Types
Tipos

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

Type - Tipo - Typ
Type - Tipo

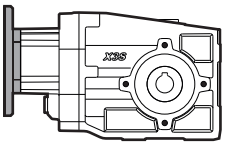
M

Helical-bevel gear
Riduttori ortogonali



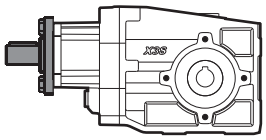
With IEC motor

M



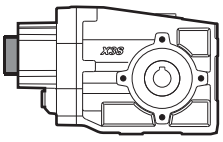
With motor flange

P



With male input shaft

R



Modular base

B

Not available for:
X93C , X103 ,
X104 , X113 ,
X114 .

Size - Grandezza - Grösse
Taille - Tomaño

X22S

2 Stages Riduzioni Stufen Trains Etapas | 3 Stages Riduzioni Stufen Trains Etapas

Aluminum
Alluminio
Aluminium
Aluminium
Aluminio

X22S
X32S
X42A
X52A
X62A

X33S
X43A
X53A
X63A

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

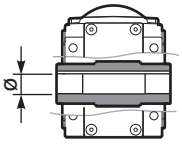
Cast Iron
Ghisa
Grauguss
Fonte
Fundicion

113C
133C
X93C
X103
X113

114C
134C
X94C
X104
X114

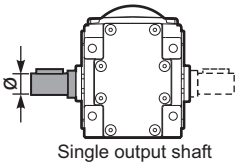
Mounting - Montaggio
Montage - Fixation
Tipo de montaje

C



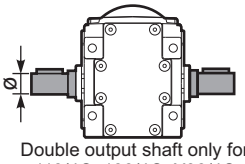
Hollow outpu shaft

C



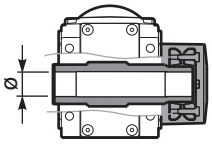
Single output shaft

A



Double output shaft only for
113/4C, 133/4C, X93/4C
X103/4 and X113/4

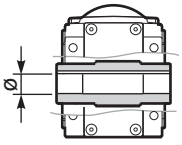
B



Shrink Disk
(only on the DX side)

D

Only on request for Q.ty
A richiesta per quantità



Stainless steel hub

I

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

Only on request for Q.ty
A richiesta per quantità

Rapporto - Ratio
Untersetzung
Reduction
Relacion

4.83

See technical data table

Vedi tabelle dati tecnici.

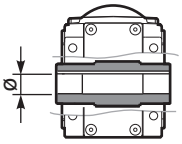
Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos

Output shaft - Albero uscita
Ausgangsflansch
Arbre de sortie
Brida en solida

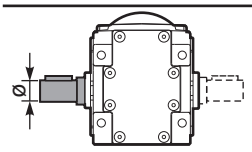
-A



➡ STANDARD

Hollow output shaft

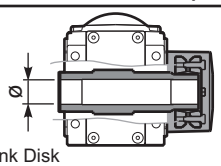
X22S	113C 114C
-A ⇨ ø18	**-F** ➡ **ø40**
-B ➡ **ø20**	**-G** ⇨ ø42
X32S X33S	133C 134C
-B ➡ **ø20**	**-F** ⇨ ø40
-C ⇨ ø25	**-H** ➡ **ø45**
X42A X43A	X93C X94C
-C ➡ **ø25**	**-H** ⇨ ø45
-D ⇨ ø30	**-J** ➡ **ø50**
X52A X53A	X103 X104
-D ➡ **ø30**	**-K** ➡ **ø60**
-E ⇨ ø35	X113 X114
X62A X63A	**-T** ➡ **ø70**
-E ➡ **ø35**	
-F ⇨ ø40	



Single and double output shaft

-I	X22S X32/3S	⇨ ø20
-L	X32/3S X42/3A	⇨ ø25
-M	X52/3A	⇨ ø30
-N	X52/3A X62/3A	⇨ ø35
-V	113/4C	⇨ ø40*
-O	113/4C	⇨ ø42*
-P	133/4C	⇨ ø45*
-1	X93/4C	⇨ ø50*
-3	X103/4	⇨ ø60*
-5	X113/4	⇨ ø70*

*** Also available double output shaft**



Shrink Disk

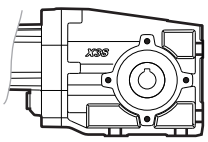
-U	X22S X32/3S	⇨ ø20
-Q	X42/3A	⇨ ø30
-R	X52/3A	⇨ ø35
-S	X62/3A 113/4C	⇨ ø40
-6	133/4C	⇨ ø45
-7	X93/4C	⇨ ø50
-8	X103/4	⇨ ø65
-9	X113/4	⇨ ø75

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

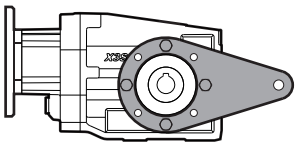
Type - Tipo - Typ
Type - Tipo

BR



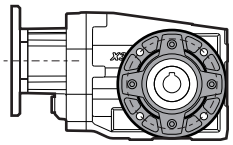
FB

Forma base
Universal



BR

Braccio d reazione
Reaction arm

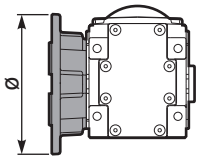


-F

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 X93C X94C

C ⇨ ø280
L ⇨ ø280

133C 134C

C ⇨ ø320

X103 X104

6 ⇨ ø350

X113 X114

7 ⇨ ø450

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

-O

Flange / Flangia

B5

-A=56 (ø120)
-B=63 (ø140)
-C=71 (ø160)
-D=80 (ø200)
-E=90 (ø200)
-F=100÷112 (ø250)
-G=132 (ø300)
-H=160 (ø350)
-I=180 (ø350)
-L=200 (ø400)
CA=225 (ø450)

B14

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

Type R / Tipo R

X22S X33S X43A

-1 ⇨ ø14

X32S X42A X53A X63A 114C 134C

-2 ⇨ ø19

X52A X62A 113C 133C X94C

-3 ⇨ ø24

X93C X104 X114

-4 ⇨ ø28

X103 X113

-6 ⇨ ø42

Without flange / Senza flangia

X22S X33S X43A

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

X32S X42A X53A X63A 114C 134C

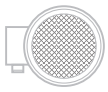
-1 ⇨ ø14 (71B5)
-2 ⇨ ø19 (80B5)
-3 ⇨ ø24 (90B5)

X52A X62A 113C 133C X94C

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

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

B



A

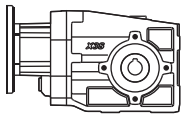
B
STANDARD

C

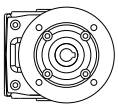
D

Mounting position
Posizione montaggio
Einbaulage
Position de montage
Position de montaje

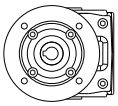
B3



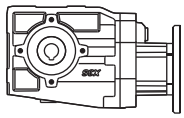
B3
STANDARD



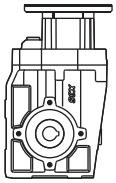
B6



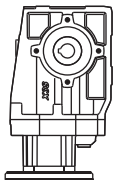
B7



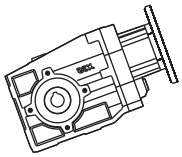
B8



V5



V6



V8

Specify only for vertical positions

Specificare solo per posizione verticale

7

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

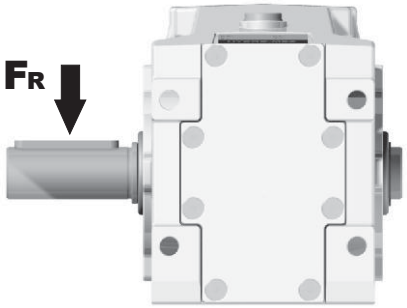
Lifting / sollevamento / hubantriebe / levage / elevactión	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Kg] \cdot \mathbf{g}\ [9.81] \cdot \mathbf{v}\ [m/s]}{\mathbf{1000}}$
Rotation / rotazione / drehung / rotation / rotaction	$\mathbf{P}\ [KW] = \frac{\mathbf{M}\ [Nm] \cdot \mathbf{n}\ [rpm]}{\mathbf{9550}}$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

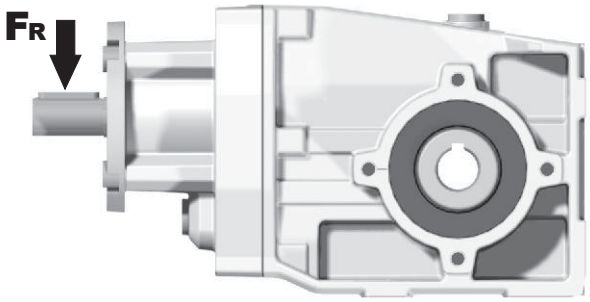
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

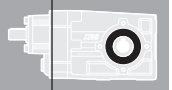
A Nominal torque / Momento torcente nominale / Nenn Drehmoment / Couple nominal / Par de torsión nominal

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

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

X22S Angletech Gear 50Nm

Rating - Aluminum
HELICAL-BEVEL GEARBOXES



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft ø	Ratios code
289.7	**4.83**	0.37	11.7	2.6	**0.95**	**30**			C	C		289		01
189.2	**7.40**	0.37	17.9	1.7	**0.62**	**30**			C	C		287		02
146.2	**9.58**	0.37	23.2	1.7	**0.64**	**40**			C	C		199		03
127.5	**10.98**	0.37	26.6	1.7	**0.63**	**45**			C	C		179		04

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

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

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

Output shaft diam. / Diam. albero uscita / Durchmesser abtriebswelle / Diametre arbre lent / Diametro eje de salida

Notes / Note / Anmerkungen / Note / Notas

fs

Type of load and starts per hour / Tipo di carico e avviamenti per ora		Oper. hours per day / Ore di funz. giorn. 3 h	10 h	24 h
Continuous or intermittent appl. with start / hour 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

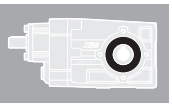
D Motor flange available / Flange disponibili / Erhältliche Motorflansche / Brides disponibles / Bridas disponibles

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

The dynamic efficiency is **0.96** for all ratios

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft ø	Ratios code
290	**4.83**	0.37	12	2.6	**0.95**	**30**			C	C		289		01
189	**7.40**	0.37	18	1.7	**0.62**	**30**			C	C		287		02
146	**9.58**	0.37	23	1.7	**0.64**	**40**			C	C		199		03
128	**10.98**	0.37	27	1.7	**0.63**	**45**			C	C		179		04
107	**13.07**	0.37	32	1.4	**0.53**	**45**			C	C		159	**standard**	05
95	**14.66**	0.37	35	1.3	**0.47**	**45**			C	C		197	**ø20**	06
89	**15.79**	0.37	38	1.2	**0.44**	**45**			C	C		139		07
83	**16.81**	0.37	41	1.1	**0.41**	**45**			C	C		177		08
70	**20.00**	0.37	48	1.0	**0.37**	**48**			C	C		157	ø18	09
64	**21.93**	0.37	53	0.9	**0.35**	**50**			C	C		109	On request	10
58	**24.18**	0.25	39	1.3	**0.32**	**50**			C	C		137		11
48.2	**29.04**	0.25	47	1.1	**0.26**	**50**			C	C		99		12
41.7	**33.57**	0.18	42	1.2	**0.23**	**50**			C	C		107		13
36.2	**38.67**	0.18	48	1.0	**0.20**	**50**			C	C		79		14
31.5	**44.44**	0.18	55	0.9	**0.17**	**50**			C	C		97		15
23.7	**59.18**	0.12	48	1.0	**0.13**	**50**			C	C		77		16
19.9	**70.24**	0.09	45	1.1	**0.11**	**50**			C	C		67		17

Motor Flanges Available
Flange Motore Disponibili

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

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

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

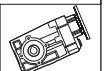
EN Unit **X22S** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X22S** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X22S** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X22S** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X22S** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

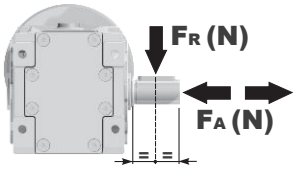
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	 **V8**
0.25 LT	0.25 LT	0.25 LT	0.25 LT	0.43 LT	0.31 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

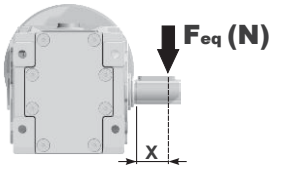
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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





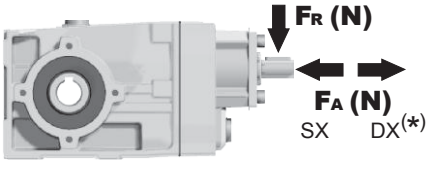
n_2 [min^{-1}]	FA	FR
400	360	1800
250	380	1900
150	420	2100

n_2 [min^{-1}]	FA	FR
100	440	2200
75	440	2200
50	440	2200

n_2 [min^{-1}]	FA	FR
25	440	2200
15	440	2200

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA	FR
1400	140	700
900	160	800
500	190	950

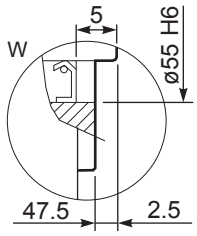
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

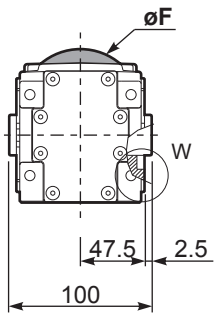
tab. 2

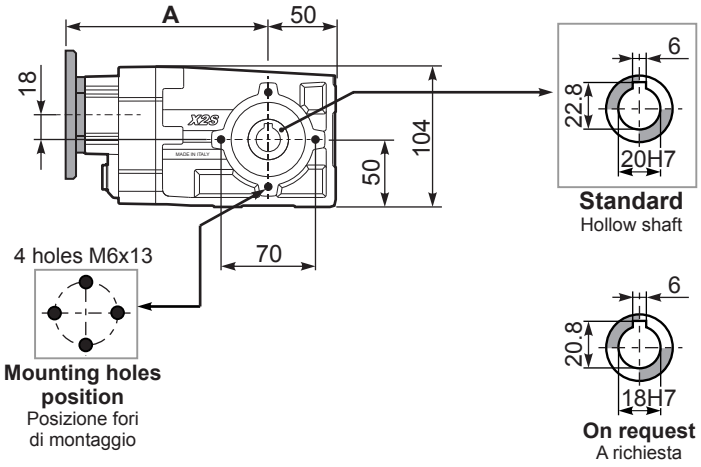
PX22SC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	3.70 kg

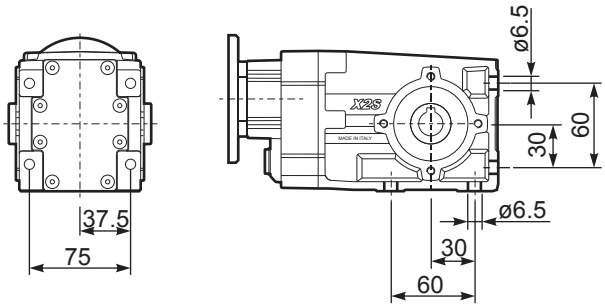
M. flanges	Kit code	øF	A
63B5	K050.4.041	138	154.5
71B5	K050.4.042	160	152
56B14	KC40.4.049	80	152
63B14	K050.4.047	90	154.5
71B14	K050.4.045	105	152



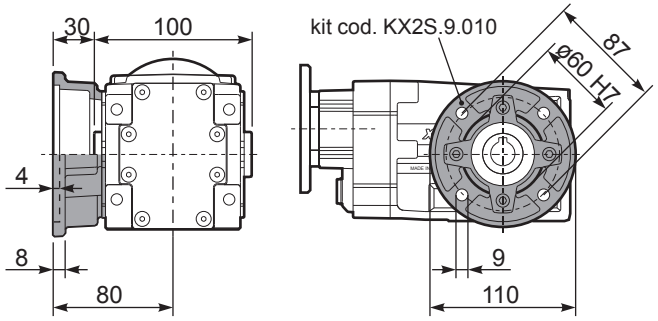




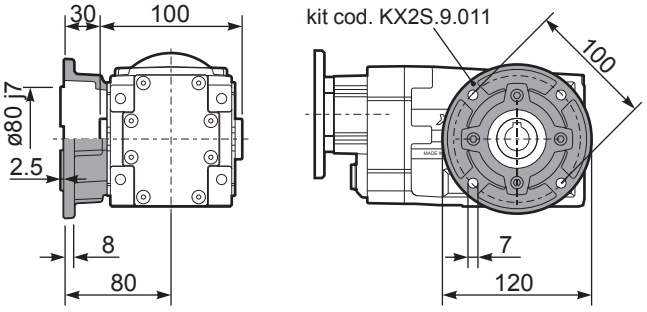
PX22S..-N.. Feet
Piedini



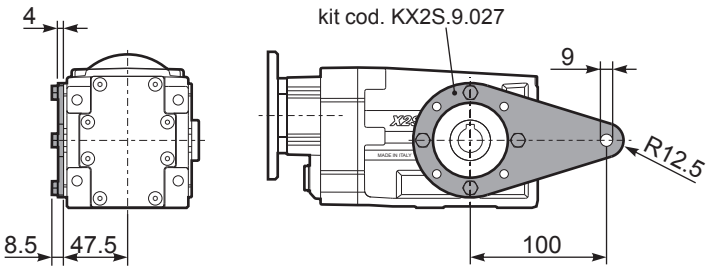
PX22S-F0.. Output flange
Flangia uscita



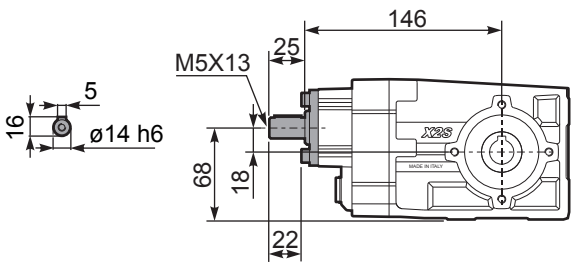
PX22S-F1.. Output flange
Flangia uscita



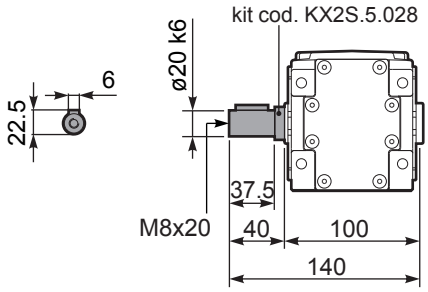
PX22SBR.. Reaction Arm
Braccio di reazione



RX22S.. Input shaft
Albero in entrata



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



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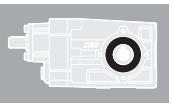

▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
191	**7.33**	1.5	72	1.0	**1.5**	**70**	B				C	C		289		01
125	**11.22**	1.1	80	1.1	**1.2**	**85**	B				C	C		287		02
106	**13.26**	1.1	95	0.9	**0.98**	**85**	B				C	C		199		03
91	**15.37**	1.1	110	0.8	**0.89**	**90**	B				C	C		179		04
78	**18.04**	0.75	89	1.0	**0.76**	**90**	B				C	C		159	**standard**	05
69	**20.30**	0.75	100	0.9	**0.68**	**90**	B				C	C		197	**ø20**	06
65	**21.54**	0.75	106	0.9	**0.64**	**90**	B				C	C		139		07
59	**23.53**	0.55	85	1.1	**0.58**	**90**	B				C	C		177		08
51	**27.62**	0.55	100	0.9	**0.50**	**90**	B				C	C		157	ø25	09
47.6	**29.40**	0.55	106	0.8	**0.47**	**90**	B				C	C		109	On request	10
42.5	**32.97**	0.37	80	1.1	**0.42**	**90**	B				C	C		137		11
36.5	**38.37**	0.37	93	1.0	**0.36**	**90**	B				C	C		99		12
31.1	**45.00**	0.25	73	1.2	**0.31**	**90**	B				C	C		107		13
27.6	**50.67**	0.25	83	1.1	**0.27**	**90**	B				C	C		79		14
23.8	**58.73**	0.18	73	1.2	**0.23**	**90**	B				C	C		97		15
18.1	**77.55**	0.18	97	0.9	**0.18**	**90**	B				C	C		77		16

Motor Flanges Available Flange Motore Disponibili

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

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

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

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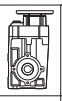
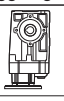
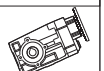
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

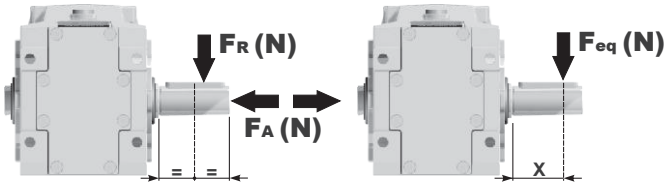
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	 **V5**	 **V6**	 **V8**
0.40 LT	0.60 LT	0.40 LT	0.60 LT	0.85 LT	0.60 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

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

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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



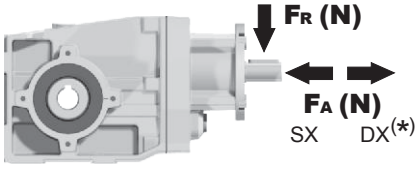
n_2 [min^{-1}]	FA	FR
250	400	2000
150	450	2250
100	500	2500

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

n_2 [min^{-1}]	FA	FR
15	560	2800

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



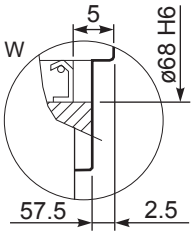
n_1 [min^{-1}]	FA	FR
1400	240	1200
900	280	1400
500	340	1700

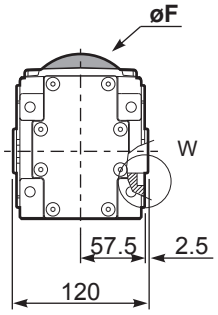
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

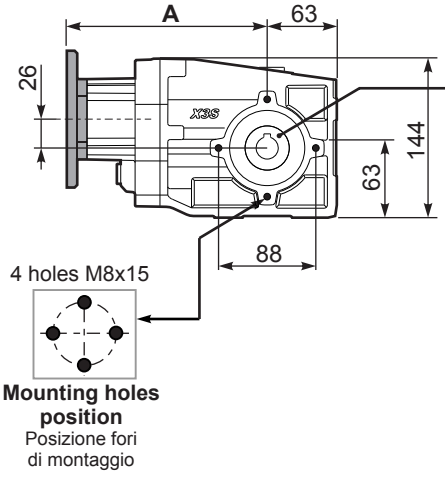
PX32SC... Basic Gearbox
Riduttore base

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	184
71B5	K063.4.042	160	182
80/90B5	K063.4.043	200	184
71B14	K063.4.047	105	182
80B14	K063.4.046	120	184
90B14	K063.4.041	140	184

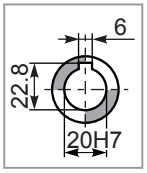




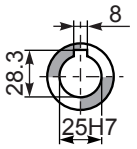
Gearbox weight peso riduttore **6.30 kg**



Mounting holes position
Posizione fori di montaggio

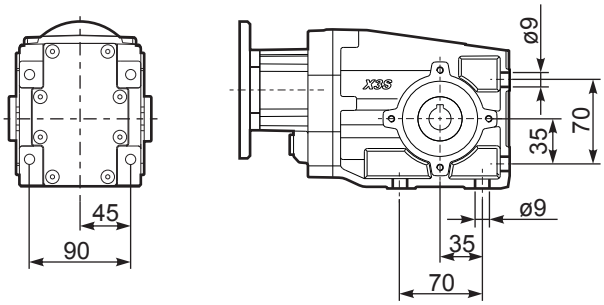


Standard
Hollow shaft

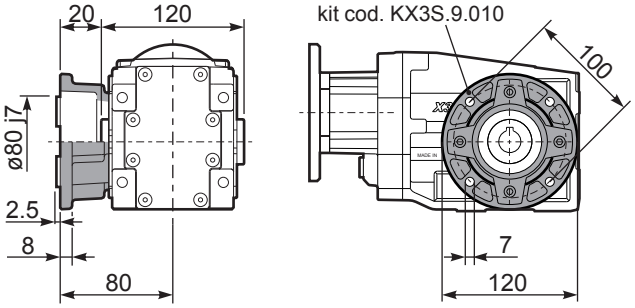


On request
A richiesta

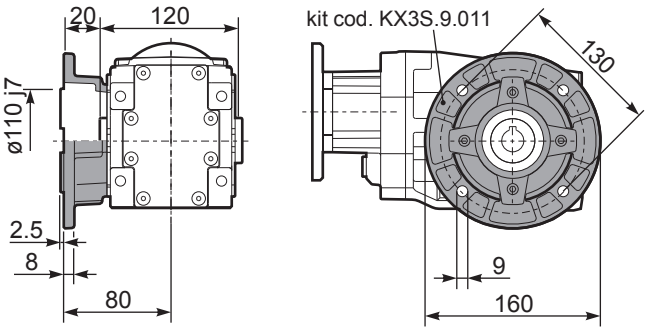
PX32S..-N.. Feet
Piedini



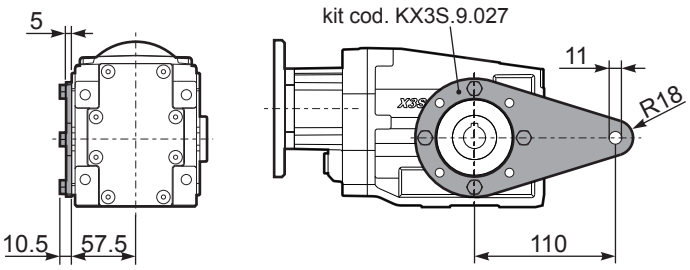
PX32S-F1.. Output flange
Flangia uscita



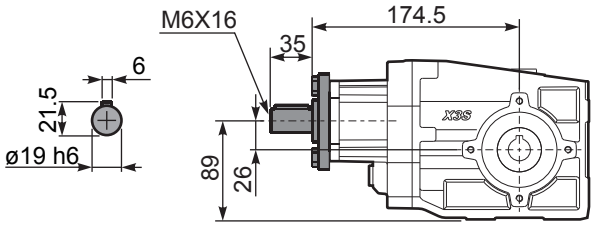
PX32S-F2.. Output flange
Flangia uscita



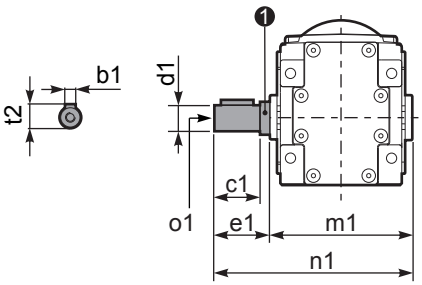
PX32SBR.. Reaction Arm
Braccio di reazione



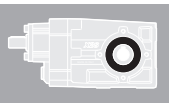
RX32S... Input shaft
Albero in entrata



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



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.94** for all ratios

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft Ø	Ratios code
38.7	**36.17**	0.37	86	1.2	**0.43**	**100**			C	C		17179		02
31.7	**44.21**	0.37	105	1.0	**0.35**	**100**			C	C		19139		03
27.6	**50.68**	0.25	81	1.2	**0.31**	**100**			C	C		17139		04
25.3	**55.36**	0.25	89	1.1	**0.28**	**100**			C	C		17177		05
23.2	**60.31**	0.25	96	1.0	**0.26**	**100**			C	C		15139		06
21.2	**65.88**	0.25	105	0.9	**0.24**	**100**			C	C		15177		07
19.4	**72.25**	0.18	88	1.1	**0.22**	**100**			C	C		10179	**standard**	08
17.6	**79.64**	0.18	97	1.0	**0.20**	**100**			C	C		13177	**ø20**	09
15.2	**92.31**	0.18	113	0.9	**0.17**	**100**			C	C		15137		10
14.6	**95.65**	0.18	117	0.9	**0.16**	**100**			C	C		9179		11
13.8	**101.23**	0.12	80	1.2	**0.15**	**100**			C	C		10139	ø25	12
11.0	**127.37**	0.12	101	1.0	**0.12**	**100**			C	C		7179	On request	13
9.3	**151.16**	0.09	95	1.0	**0.10**	**100**			C	C		6179		14
7.8	**178.46**	0.09	113	0.9	**0.09**	**100**			C	C		7139		15
6.6	**211.79**	0.06	88	1.1	**0.07**	**100**			C	C		6139		16
6.1	**231.37**	0.06	96	1.0	**0.07**	**100**			C	C		6177		17
5.1	**273.16**	0.06	113	0.9	**0.06**	**100**			C	C		7137		18
4.3	**324.18**	0.06	134	0.7	**0.05**	**100**			C	C		6137		19

Motor Flanges Available Flange Motore Disponibili

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

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

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

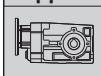
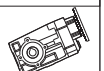
EN Unit **X33S** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X33S** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X33S** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X33S** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X33S** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

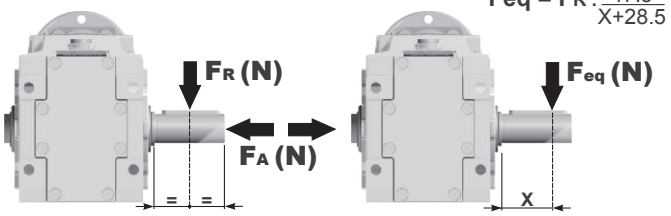
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	**B6**	**B7**	**B8**	**V5**	**V6**	 **V8**
0.70 LT	0.65 LT	0.40 LT	0.65 LT	0.95 LT	0.65 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

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

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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



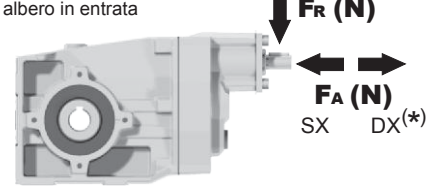
n_2 [min^{-1}]	FA	FR
250	400	2000
150	450	2250
100	500	2500

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

n_2 [min^{-1}]	FA	FR
15	560	2800

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA	FR
1400	140	700
900	160	800
500	190	950

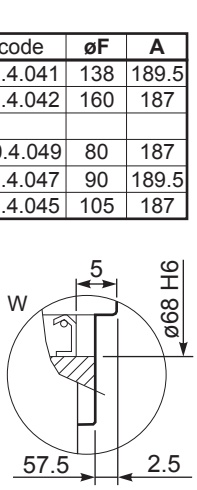
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

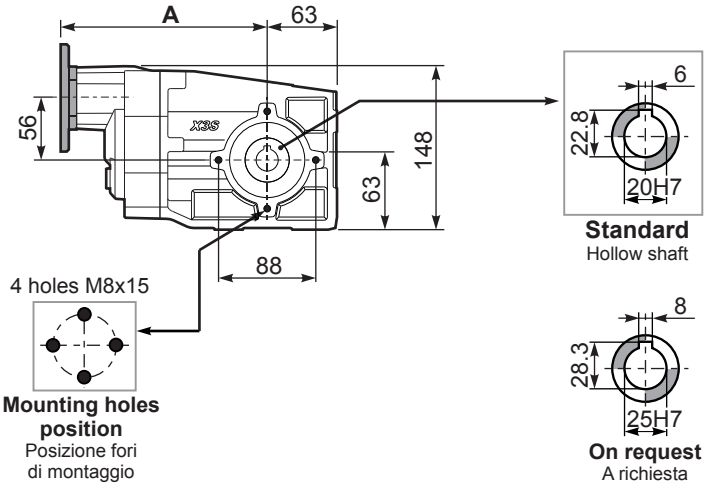
tab. 2

PX33SC... Basic Gearbox
Riduttore base

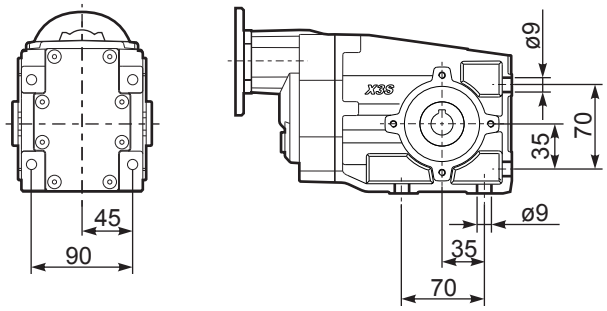
Gearbox weight peso riduttore: **6.55 kg**

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

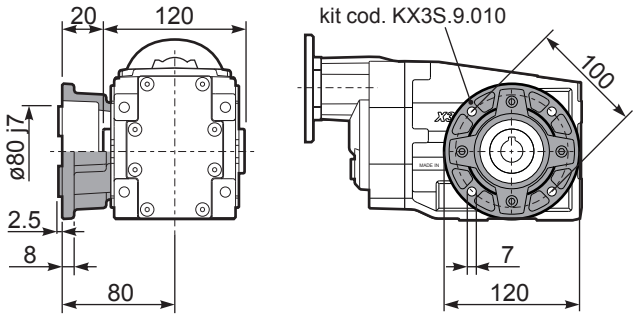




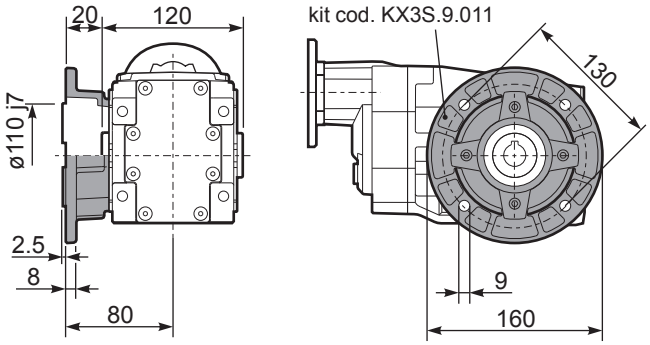
PX33S-N.. Feet
Piedini



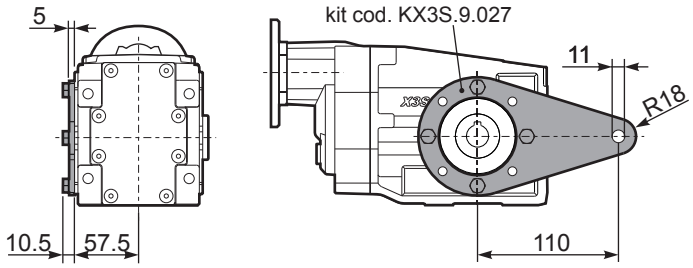
PX33S-F1.. Output flange
Flangia uscita



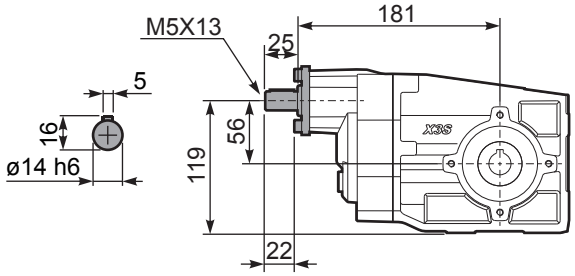
PX33S-F2.. Output flange
Flangia uscita



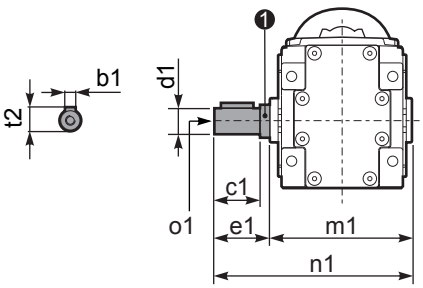
PX33SBR.. Reaction Arm
Braccio di reazione



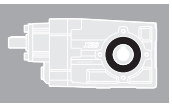
RX33S... Input shaft
Albero in entrata



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



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	-F 100 112	Available B14 motor flanges -Q 71	-R 80	-T 90	-U 100 112		Output Shaft	Ratios code
192	**7.29**	2.2	104	0.9	**2.0**	**95**	B					C	C			2811		01
125	**11.20**	2.2	159	0.9	**2.0**	**150**	B					C	C			288		02
106	**13.18**	1.5	129	1.2	**1.7**	**150**	B					C	C			1911		03
92	**15.27**	1.1	109	1.4	**1.5**	**150**	B					C	C			1711		04
78	**17.93**	1.1	128	1.2	**1.3**	**150**	B					C	C			1511		05
69	**20.25**	1.1	145	1.0	**1.1**	**150**	B					C	C			198	**standard ø25**	06
65	**21.40**	1.1	153	1.0	**1.1**	**150**	B					C	C			1311		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 On request	10
42.6	**32.88**	0.75	161	0.9	**0.70**	**150**	B					C	C			138		11
36.7	**38.12**	0.55	138	1.1	**0.60**	**150**	B					C	C			911		12
31.2	**44.89**	0.55	163	0.9	**0.51**	**150**	B					C	C			108		13
27.8	**50.34**	0.37	122	1.1	**0.40**	**131**	B					C	C			711		14
23.9	**58.58**	0.37	142	1.1	**0.39**	**150**	B					C	C			98		15
18.1	**77.36**	0.25	126	1.2	**0.30**	**150**	B					C	C			78		16

Motor Flanges Available Flange Motore Disponibili

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

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

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

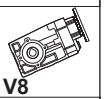
EN Unit **X42A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X42A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X42A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X42A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X42A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

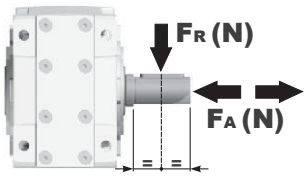
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
0.60 LT	0.75 LT	0.50 LT	0.70 LT	1.10 LT	0.60 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

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

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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



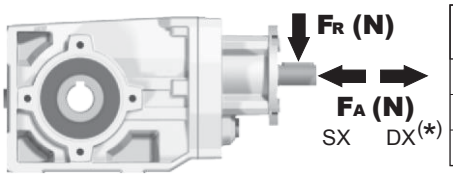
n_2 [min^{-1}]	FA	FR
250	500	2500
150	600	3000
100	700	3500

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

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

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA	FR
1400	240	1200
900	280	1400
500	340	1700

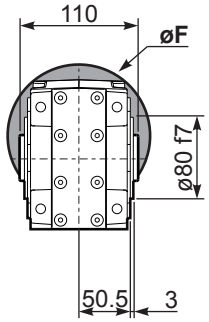
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

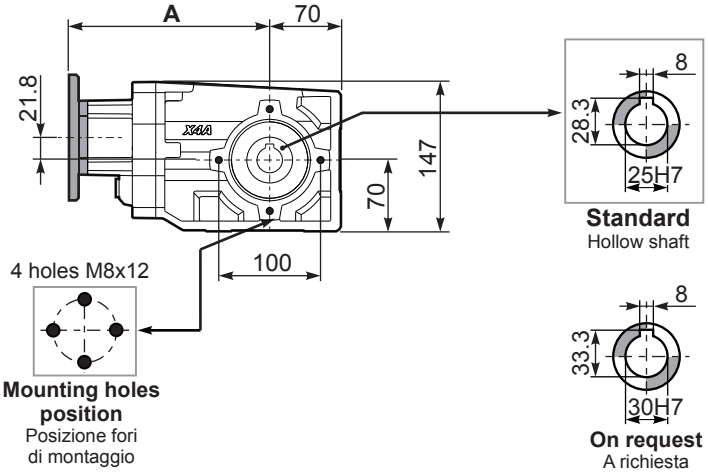
tab. 2

PX42AC... Basic Gearbox
Riduttore base

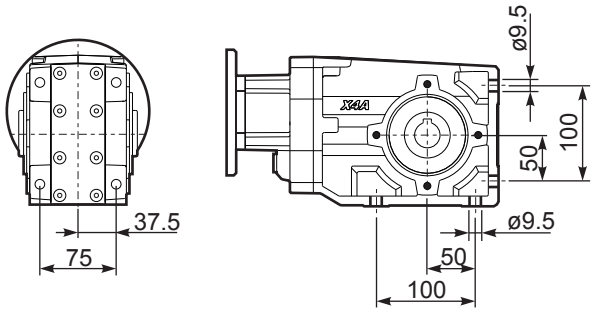
Gearbox weight peso riduttore	7.82 kg

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	199.5
71B5	K063.4.042	160	197.5
80/90B5	K063.4.043	200	199.5
100/112B5	KC40.4.043	250	214.3
71B14	K063.4.047	105	197.5
80B14	K063.4.046	120	199.5
90B14	K063.4.041	140	199.5
100/112B14	KC40.4.041	160	214.3

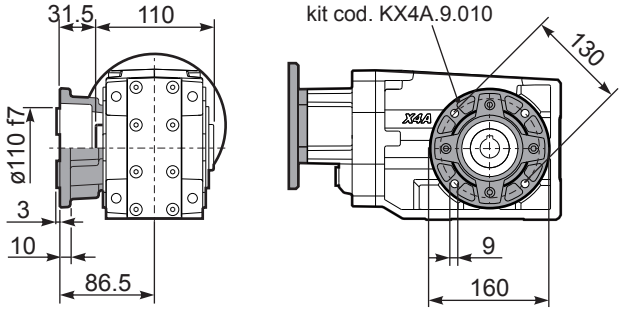




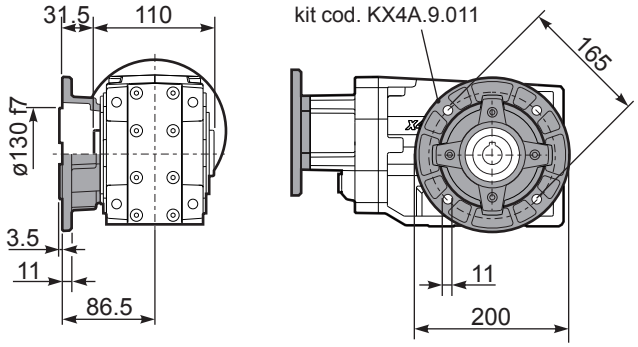
PX42A-N.. Feet
Piedini



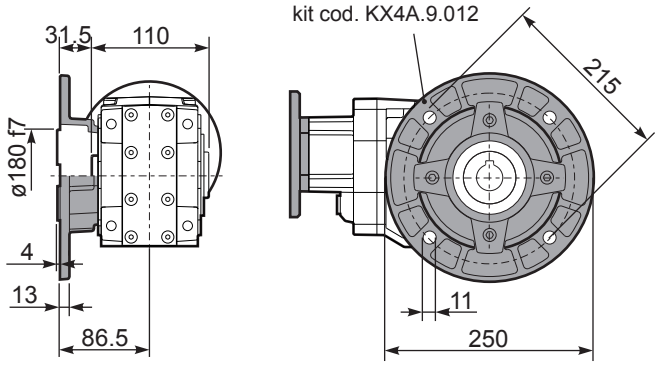
PX42A-F2.. Output flange
Flangia uscita



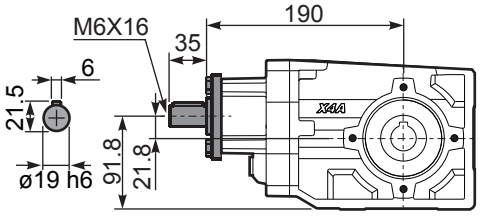
PX42A-F3.. Output flange
Flangia uscita



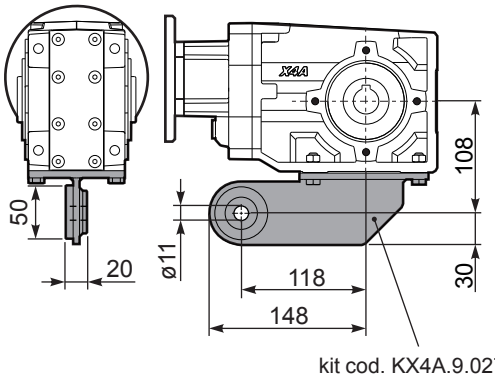
PX42A-F4.. Output flange
Flangia uscita



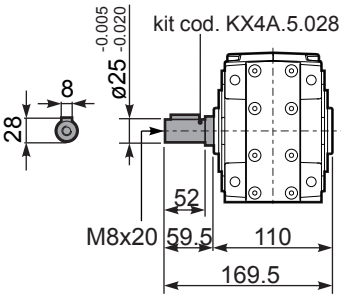
RX42A... Input shaft
Albero in entrata



PX42ABR.. Reaction Arm
Braccio di reazione

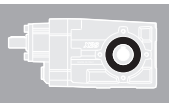


PX42A..A.. Single output shaft
Albero semplice in uscita



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 63	Available B5 motor flanges -C 71	Available B14 motor flanges -O 56	Available B14 motor flanges -P 63	Available B14 motor flanges -Q 71		Output Shaft	Ratios code
27.8	**50.35**	0.37	119	1.3	**0.46**	**150**			C	C		171311		01
25.4	**55.22**	0.37	131	1.1	**0.42**	**150**			C	C		17178		02
23.4	**59.92**	0.37	142	1.1	**0.39**	**150**			C	C		151311		03
21.3	**65.72**	0.37	156	1.0	**0.36**	**150**			C	C		15178		04
19.5	**71.78**	0.25	115	1.3	**0.33**	**150**			C	C		101711		05
17.6	**79.44**	0.25	127	1.2	**0.29**	**150**			C	C		13178	**standard ø25**	06
15.2	**92.08**	0.25	147	1.0	**0.25**	**150**			C	C		15138		07
14.7	**95.03**	0.25	152	1.0	**0.25**	**150**			C	C		91711		08
11.1	**126.55**	0.18	155	1.0	**0.20**	**160**			C	C		71711		09
10.5	**133.15**	0.18	163	1.0	**0.19**	**160**			C	C		91311	ø30 On request	10
9.3	**150.18**	0.12	119	1.3	**0.17**	**160**			C	C		61711		11
7.9	**177.30**	0.12	140	1.1	**0.14**	**160**			C	C		71311		12
6.7	**210.42**	0.09	133	1.2	**0.12**	**160**			C	C		61311		13
6.1	**230.79**	0.09	146	1.1	**0.11**	**160**			C	C		6178		14
5.1	**272.47**	0.06	113	1.4	**0.09**	**160**			C	C		7138		15
4.3	**323.37**	0.06	134	1.2	**0.08**	**160**			C	C		6138		16

Motor Flanges Available Flange Motore Disponibili

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

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

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

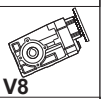
EN Unit **X43A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X43A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X43A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X43A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X43A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

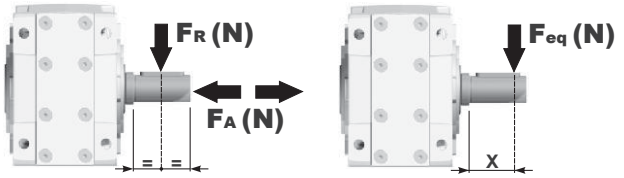
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	 **V8**
0.80 LT	0.80 LT	0.60 LT	0.80 LT	1.20 LT	0.70 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

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

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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



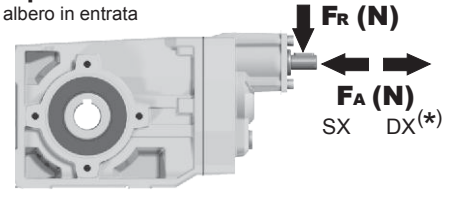
n_2 [min^{-1}]	FA	FR
250	500	2500
150	600	3000
100	700	3500

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

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

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	140	700
900	160	800
500	190	950

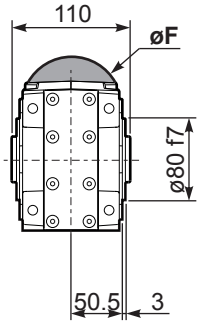
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

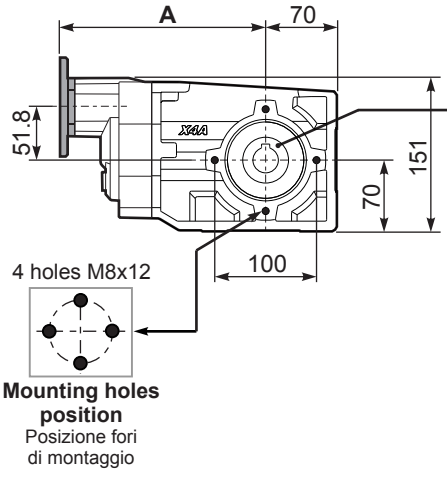
7

PX43AC... Basic Gearbox
Riduttore base

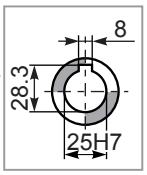
Gearbox weight peso riduttore	7.93 kg

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

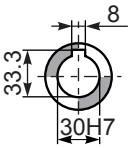




Mounting holes position
Posizione fori di montaggio

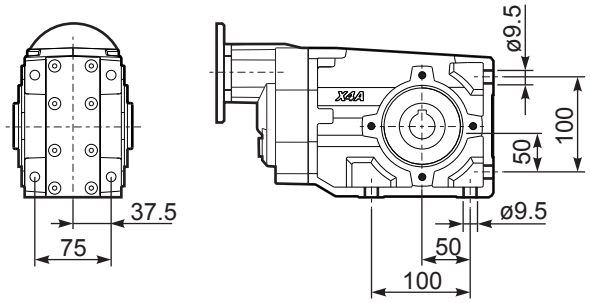


Standard
Hollow shaft

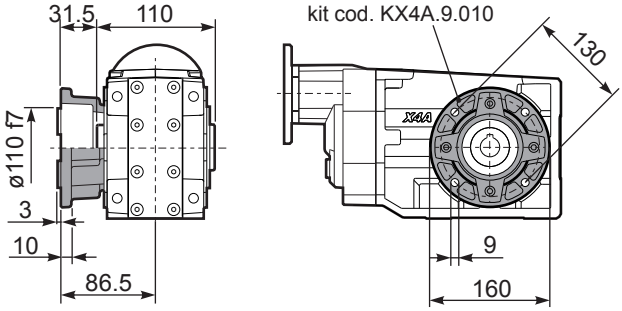


On request
A richiesta

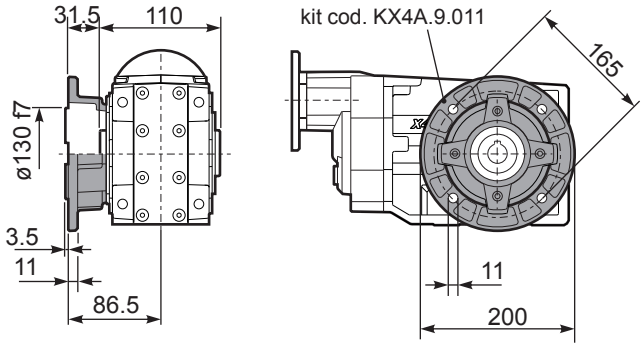
PX43A-N.. Feet
Piedini



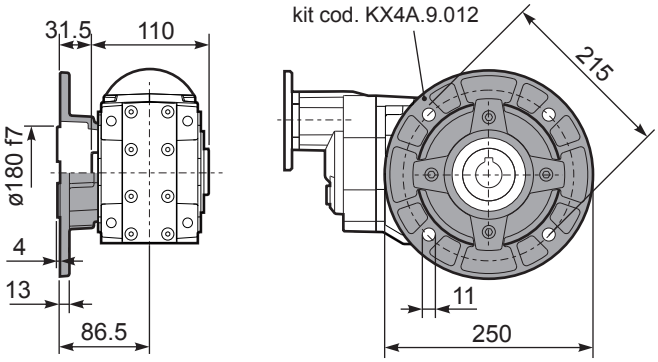
PX43A-F2.. Output flange
Flangia uscita



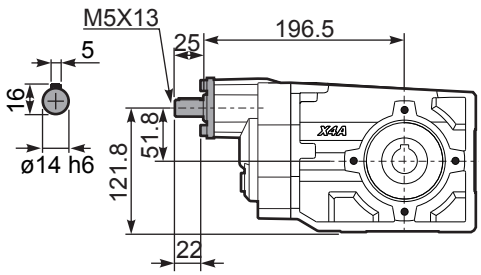
PX43A-F3.. Output flange
Flangia uscita



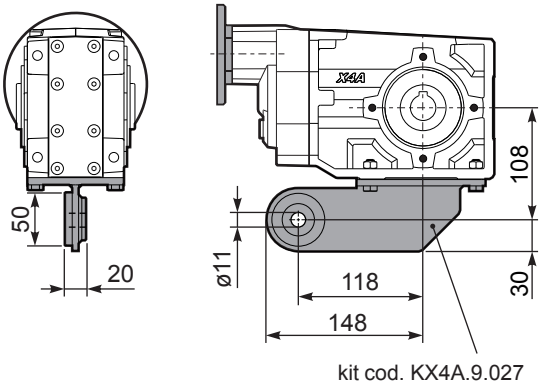
PX43A-F4.. Output flange
Flangia uscita



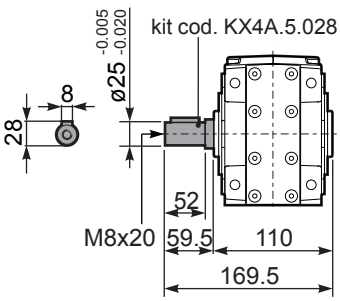
RX43A... Input shaft
Albero in entrata

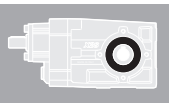


PX43ABR.. Reaction Arm
Braccio di reazione



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





▪ 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	Ratios code
232	**6.03**	3	116	1.2	**3.4**	**135**	B							3011		01
151	**9.26**	3	179	0.9	**2.6**	**155**	B							308		02
123	**11.36**	3	219	1.0	**3.1**	**230**	B							2011		03
91	**15.36**	2.2	218	1.1	**2.5**	**250**	B							1611		04
80	**17.46**	2.2	248	1.0	**2.2**	**250**	B							208	**standard**	05
70	**19.97**	2.2	284	0.9	**1.9**	**250**	B							1311	**ø30**	06
59	**23.60**	1.5	231	1.1	**1.6**	**250**	B							168		07
57	**24.45**	1.5	239	1.0	**1.6**	**250**	B							1111		08
45.6	**30.69**	1.1	220	1.1	**1.2**	**250**	B							138	ø35	09
39.6	**35.35**	1.1	253	1.0	**1.1**	**250**	B							811	On request	10
37.3	**37.57**	1.1	269	0.9	**1.0**	**250**	B							118		11
28.8	**48.68**	0.75	239	1.0	**0.78**	**250**	B							611		12
25.8	**54.33**	0.75	267	0.9	**0.70**	**250**	B							88		13
18.7	**74.81**	0.37	181	1.2	**0.43**	**210**	B							68		14

Motor Flanges Available Flange Motore Disponibili

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

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

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

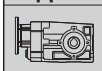
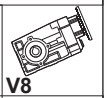
EN Unit **X52A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X52A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X52A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X52A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X52A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
0.90 LT	1.50LT	0.75 LT	1.40 LT	1.95 LT	1.15 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

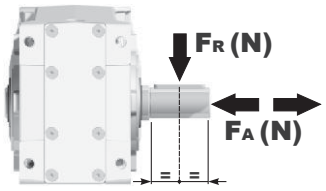
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

▪ RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

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



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

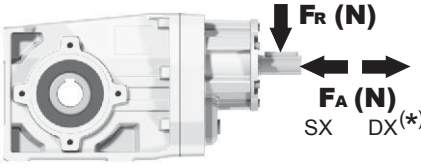
n_2 [min^{-1}]	FA	FR
75	820	4100
50	960	4800
25	1350	6750

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	450	2250
900	500	2500
500	600	3000

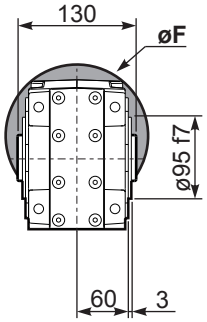
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

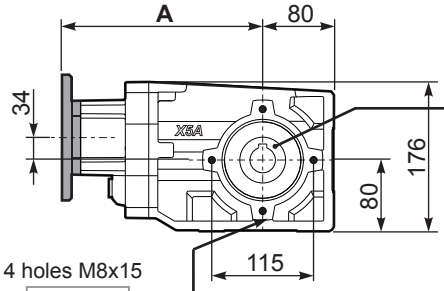
tab. 2

PX52AC... Basic Gearbox
Riduttore base

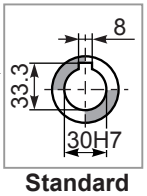
Gearbox weight peso riduttore **12.80 kg**

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

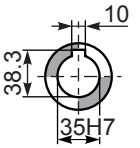




Mounting holes position
Posizione fori di montaggio

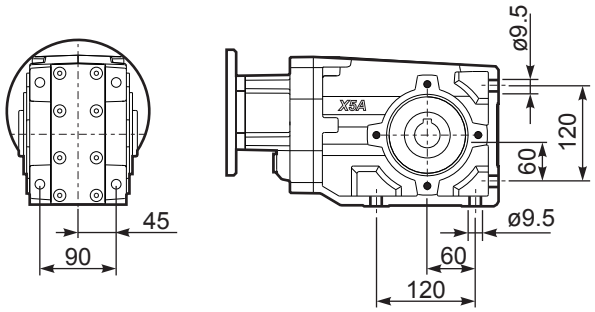


Standard
Hollow shaft

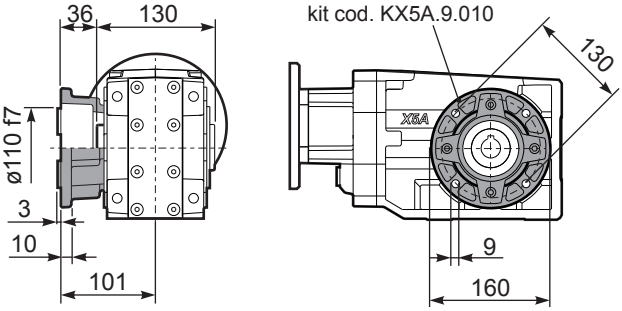


On request
A richiesta

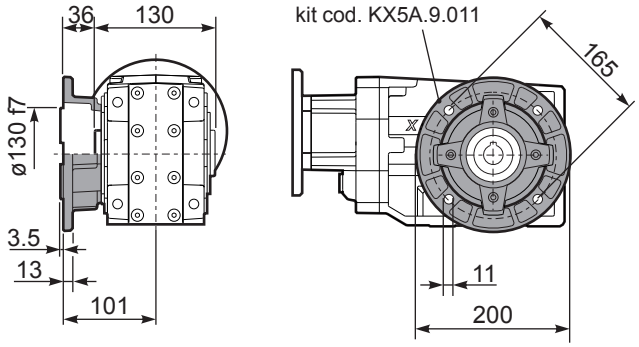
PX52A-N.. Feet
Piedini



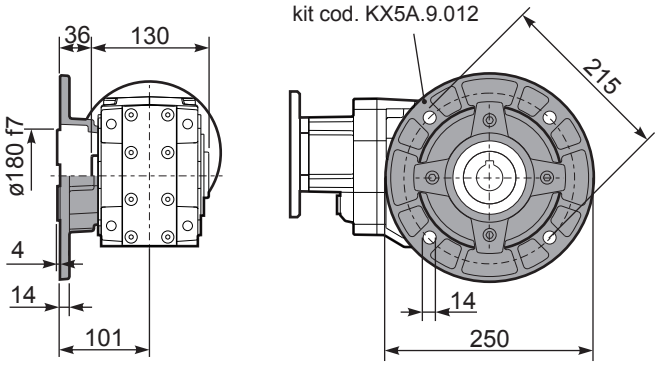
PX52A-F2.. Output flange
Flangia uscita



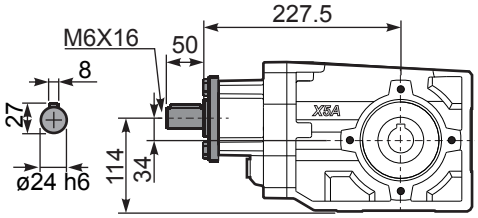
PX52A-F3.. Output flange
Flangia uscita



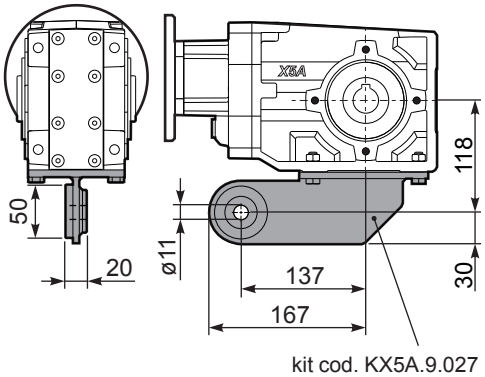
PX52A-F4.. Output flange
Flangia uscita



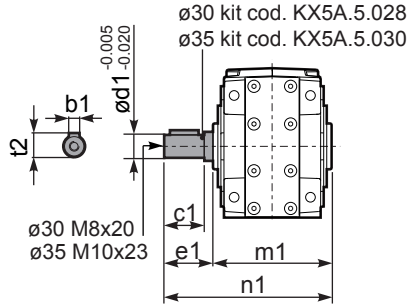
RX52A... Input shaft
Albero in entrata



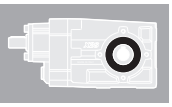
PX52ABR.. Reaction Arm
Braccio di reazione



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



	b1	c1	d1	e1	m1	n1	t2
ø30	8	60	30	68	134	202	33
ø35	10	60	35	73.5	141	214.5	38



▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.94** for all ratios

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft	Ratios code
24.7	**56.76**	0.55	201	1.2	0.69	**250**	B				C	C		191311		01
21.3	**65.79**	0.55	233	1.1	0.59	**250**	B				C	C		171311		02
18.1	**77.23**	0.55	274	0.9	0.50	**250**	B				C	C		151311		03
16.0	**87.23**	0.37	207	1.2	0.45	**250**	B				C	C		19138		04
15.2	**92.18**	0.37	219	1.1	0.42	**250**	B				C	C		131311		05
13.9	**100.47**	0.37	238	1.0	0.39	**250**	B				C	C		19811		06
12.0	**116.45**	0.37	276	0.9	0.33	**250**	B				C	C		17811	**standard**	07
11.1	**125.82**	0.25	201	1.2	0.31	**250**	B				C	C		101311	**ø30**	08
9.9	**141.66**	0.25	227	1.1	0.28	**250**	B				C	C		13138		09
8.6	**163.16**	0.25	261	1.0	0.24	**250**	B				C	C		13811		10
7.8	**178.96**	0.18	219	1.1	0.22	**250**	B				C	C		1788	ø35	11
7.2	**193.36**	0.18	237	1.1	0.20	**250**	B				C	C		10138	On request	12
6.5	**216.84**	0.18	265	0.9	0.18	**250**	B				C	C		71311		13
5.5	**252.36**	0.12	200	1.3	0.15	**250**	B				C	C		9138		14
4.8	**290.67**	0.12	230	1.1	0.13	**250**	B				C	C		9811		15
4.2	**333.23**	0.12	263	0.9	0.12	**250**	B				C	C		7138		16
3.6	**383.82**	0.12	303	0.8	0.10	**250**	B				C	C		7811		17
3.1	**446.70**	0.12*	353	0.7	0.09	**250**	B				C	C		988		18
2.4	**589.85**	0.12*	466	0.5	0.07	**250**	B				C	C		788		19

Motor Flanges Available Flange Motore Disponibili

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

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

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

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

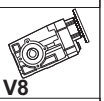
EN Unit **X53A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X53A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X53A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X53A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X53A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

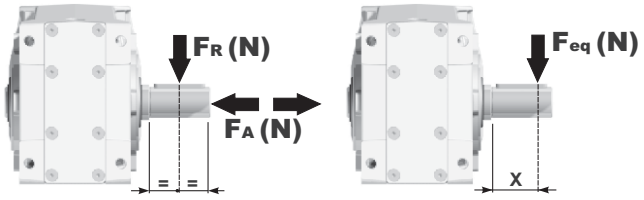
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.30 LT	1.55 LT	0.85 LT	1.45 LT	2.10 LT	1.25 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

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

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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



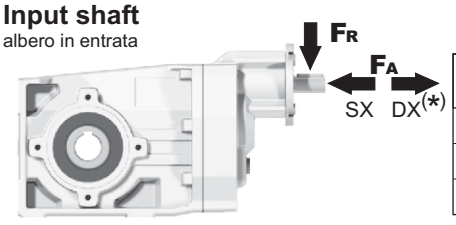
n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	800	4000

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

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

F_R On request taper roller bearings to increase radial loads.
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA [N]	FR [N]
1400	400	2000
900	440	2200
500	440	2200

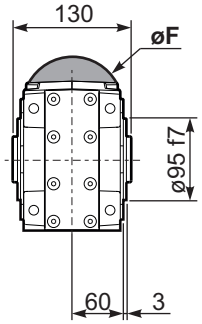
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

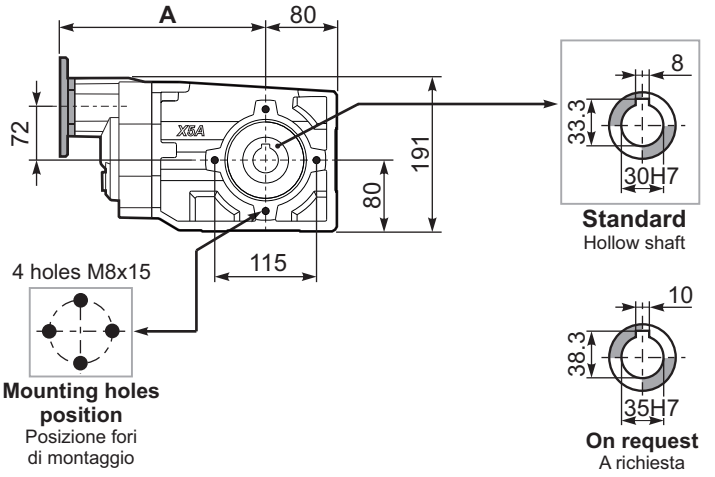
tab. 2

PX53AC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	12.65 kg

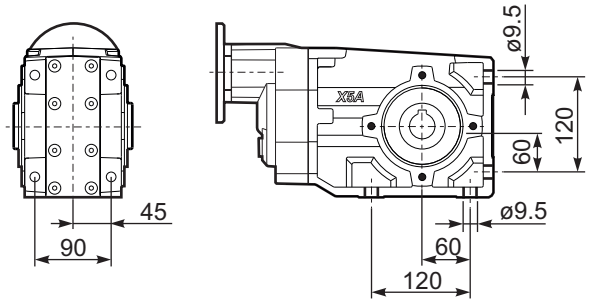
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	246
71B5	K063.4.042	160	244
80/90B5	K063.4.043	200	246
71B14	K063.4.047	105	244
80B14	K063.4.046	120	246
90B14	K063.4.041	140	246



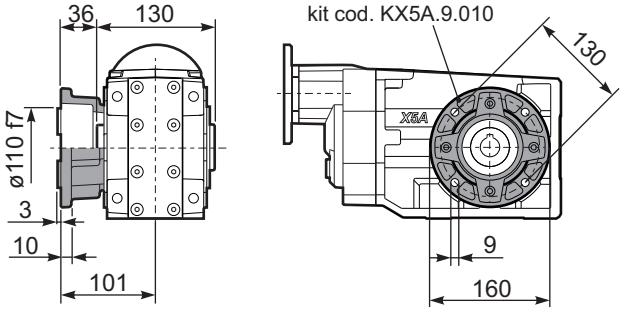


Mounting holes position
Posizione fori di montaggio

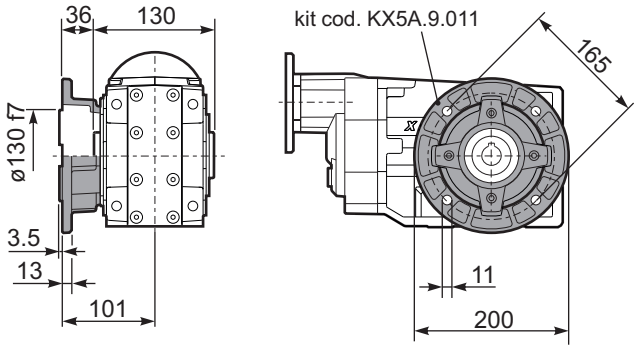
PX53A-N.. Feet
Piedini



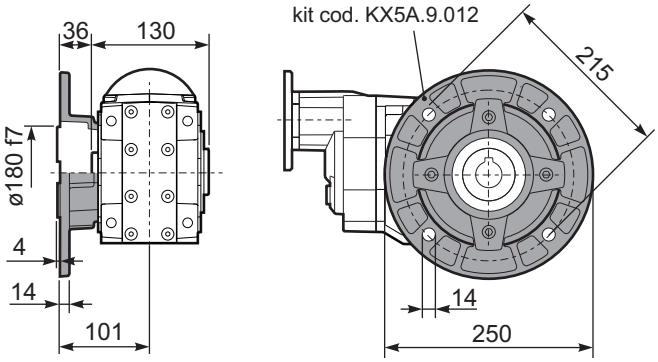
PX53A-F2.. Output flange
Flangia uscita



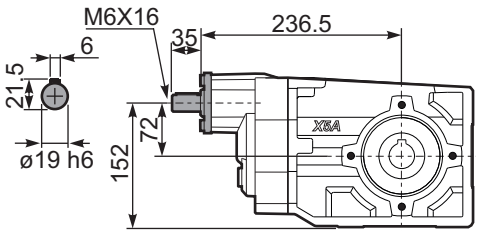
PX53A-F3.. Output flange
Flangia uscita



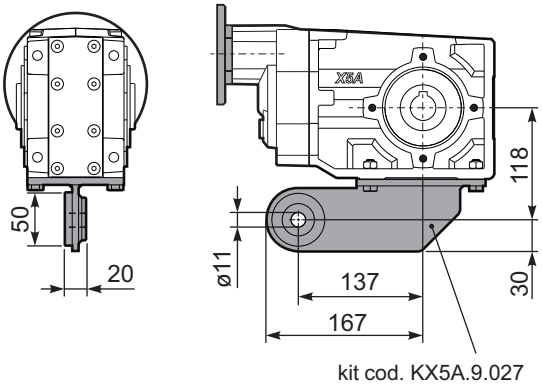
PX53A-F4.. Output flange
Flangia uscita



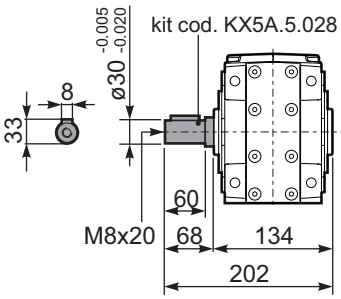
RX53A... Input shaft
Albero in entrata

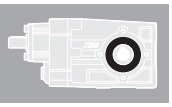


PX53ABR.. Reaction Arm
Braccio di reazione



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





▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.96** for all ratios

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft Ø	Ratios code
232	**6.03**	5.5	211	1.1	**6.1**	**240**	B									3011		01
151	**9.26**	4	238	1.1	**4.5**	**270**	B									308		02
123	**11.36**	4	291	1.2	**4.7**	**350**	B									2011		03
91	**15.36**	4	394	1.0	**3.8**	**385**	B									1611		04
80	**17.46**	4	448	0.9	**3.5**	**400**	B									208	**standard**	05
70	**19.97**	3	386	1.1	**3.1**	**410**	B									1311	**ø35**	06
59	**23.60**	3	456	0.9	**2.7**	**410**	B									168		07
57	**24.45**	3	472	0.9	**2.6**	**410**	B									1111		08
45.6	**30.69**	2.2	436	0.9	**2.0**	**410**	B									138	ø40	09
39.6	**35.35**	1.5	346	1.2	**1.8**	**410**	B									811	On request	10
37.3	**37.57**	1.5	368	1.1	**1.7**	**410**	B									118		11
28.8	**48.68**	1.1	348	1.0	**1.1**	**365**	B									611		12
25.8	**54.33**	1.1	389	1.1	**1.2**	**410**	B									88		13
18.7	**74.81**	0.75	367	1.0	**0.73**	**360**	B									68		14

Motor Flanges Available / Flange Motore Disponibili

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

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

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

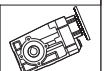
EN Unit **X62A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X62A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X62A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X62A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X62A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

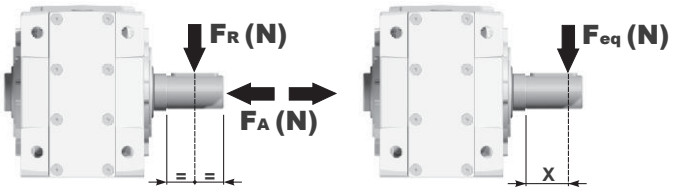
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	 **V8**
1.25 LT	1.70 LT	0.95 LT	1.60 LT	2.45 LT	1.50 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

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

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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



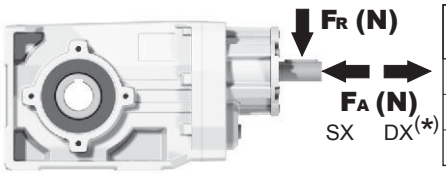
n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	780	3900

n_2 [min^{-1}]	FA	FR
75	890	4450
50	1140	5700
25	1330	6650

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

FR **On request taper roller bearings to increase radial loads.**
A richiesta cuscinetti a rulli conici per aumentare i carichi radiali.

Input shaft
albero in entrata



n_1 [min^{-1}]	FA	FR
1400	450	2250
900	500	2500
500	600	3000

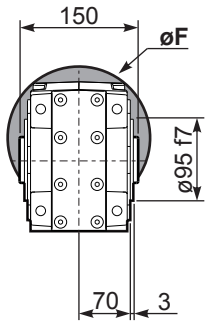
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

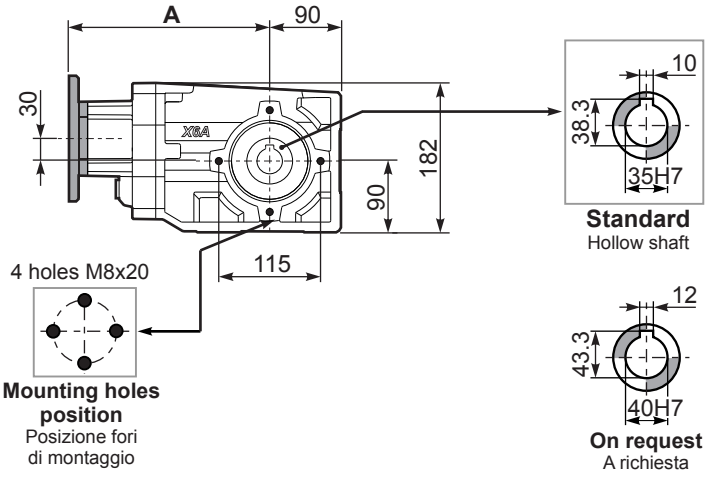
tab. 2

PX62AC... Basic Gearbox
Riduttore base

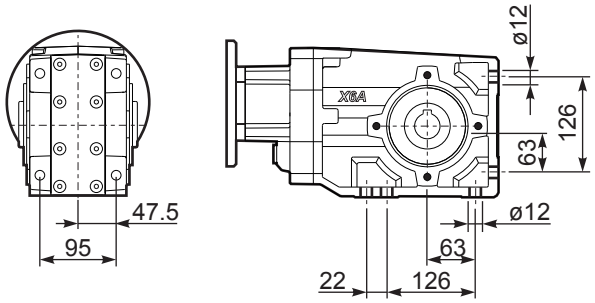
Gearbox weight peso riduttore **15.80 kg**

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	253
80/90B5	KC023.4.042	200	255
100/112B5	KC023.4.043	250	264
132B5	KC50.4.043	300	282
80B14	KC085.4.046	120	255
90B14	KC085.4.045	140	255
100/112B14	KC085.4.047	160	264
132B14	KC50.4.041	200	282

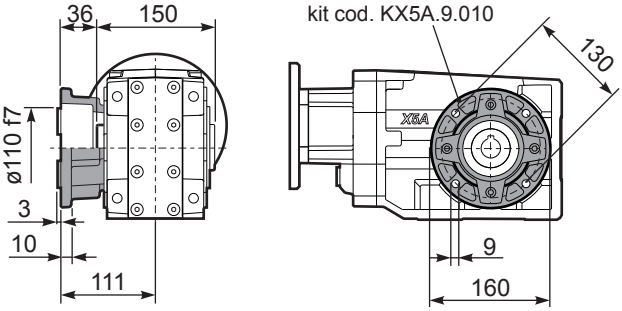




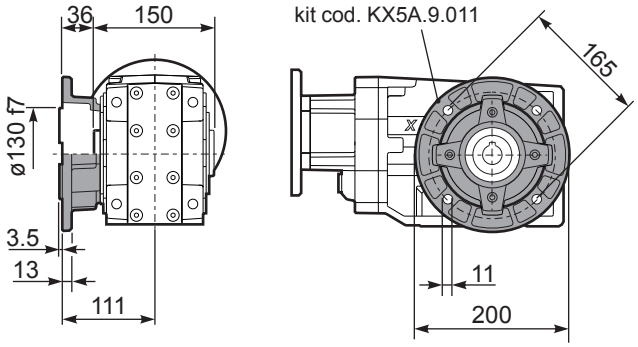
PX62A-**N**.. Feet
Piedini



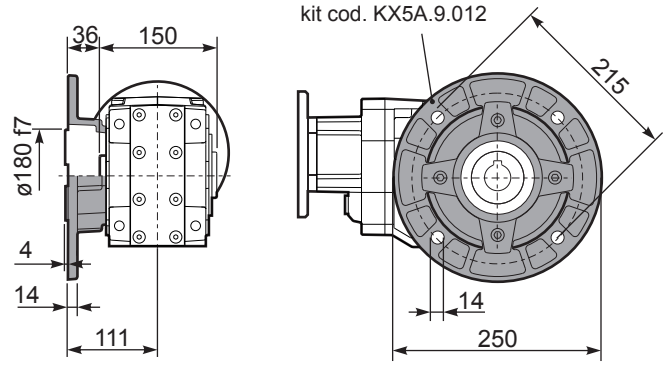
PX62A-**F2**.. Output flange
Flangia uscita



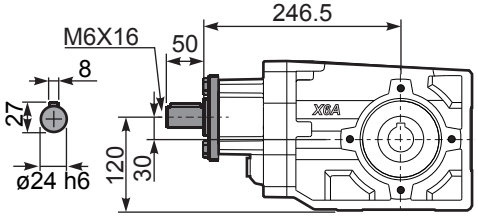
PX62A-**F3**.. Output flange
Flangia uscita



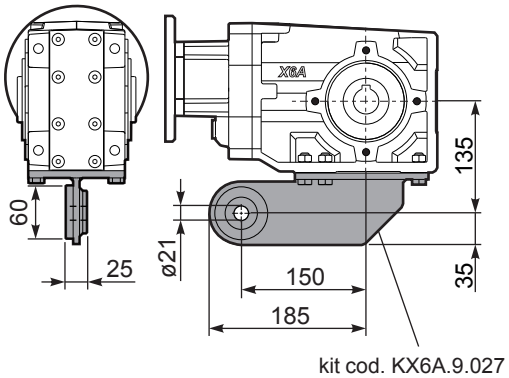
PX62A-**F4**.. Output flange
Flangia uscita



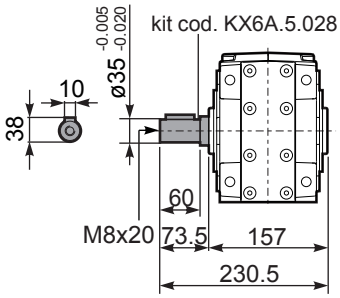
RX62A... Input shaft
Albero in entrata



PX62A**BR**.. Reaction Arm
Braccio di reazione



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



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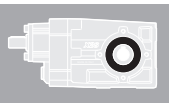


▪ QUICK SELECTION / Selezione veloce

The dynamic efficiency is **0.94** for all ratios

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
24.7	**56.76**	1.1	398	1.0	**1.1**	410	B				C	C		191311		01
21.3	**65.79**	0.75	316	1.3	**0.97**	410	B				C	C		171311		02
18.1	**77.23**	0.75	371	1.1	**0.83**	410	B				C	C		151311		03
16.0	**87.23**	0.75	420	1.0	**0.73**	410	B				C	C		19138		04
15.2	**92.18**	0.75	443	0.9	**0.69**	410	B				C	C		131311		05
13.9	**100.47**	0.55	357	1.2	**0.64**	410	B				C	C		19811		06
12.0	**116.45**	0.55	413	1.0	**0.55**	410	B				C	C		17811	**standard ø35**	07
11.1	**125.82**	0.55	446	0.9	**0.51**	410	B				C	C		101311		08
9.9	**141.66**	0.37	336	1.2	**0.45**	410	B				C	C		13138		09
8.6	**163.16**	0.37	387	1.1	**0.39**	410	B				C	C		13811	ø40 On request	10
7.8	**178.96**	0.37	424	1.0	**0.36**	410	B				C	C		1788		11
7.2	**193.36**	0.37	459	0.9	**0.33**	410	B				C	C		10138		12
6.5	**216.84**	0.25	347	1.2	**0.29**	410	B				C	C		71311		13
5.5	**252.36**	0.25	404	1.0	**0.25**	410	B				C	C		9138		14
4.8	**290.67**	0.25	465	0.9	**0.22**	410	B				C	C		9811		15
4.2	**333.23**	0.18	408	1.0	**0.19**	410	B				C	C		7138		16
3.6	**383.82**	0.18	470	0.9	**0.17**	410	B				C	C		7811		17
3.1	**446.70**	0.12	353	1.2	**0.14**	410	B				C	C		988		18
2.4	**589.85**	0.12	466	0.9	**0.11**	410	B				C	C		788		19

Motor Flanges Available / Flange Motore Disponibili

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

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

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

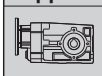
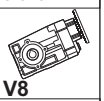
EN Unit **X63A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **X63A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **X63A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **X63A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

E El reductor tamaño **X63A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

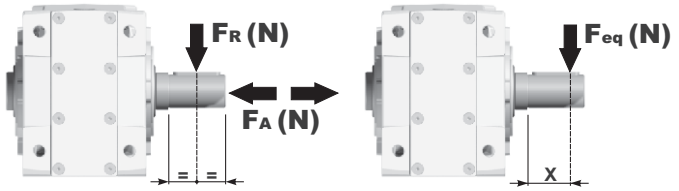
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
1.80 LT	1.80 LT	1.05 LT	1.70 LT	2.60 LT	1.65 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

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

▪ RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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



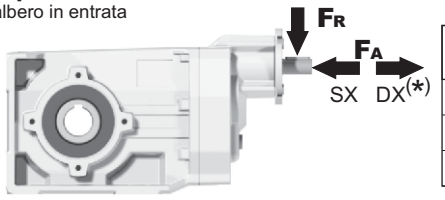
n_2 [min^{-1}]	FA	FR
250	600	3000
150	700	3500
100	780	3900

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 [N]	FR [N]
1400	400	2000
900	440	2200
500	440	2200

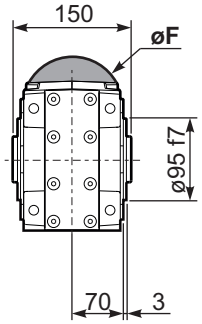
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

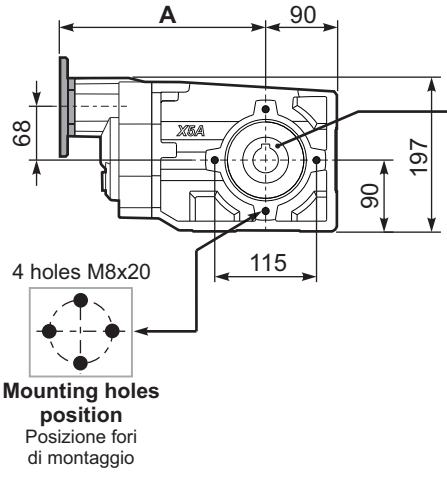
tab. 2

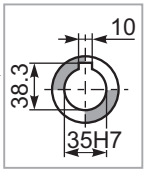
PX63AC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	15.98 kg

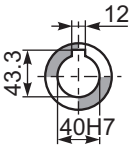
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	265
71B5	K063.4.042	160	263
80/90B5	K063.4.043	200	265
71B14	K063.4.047	105	263
80B14	K063.4.046	120	265
90B14	K063.4.041	140	265







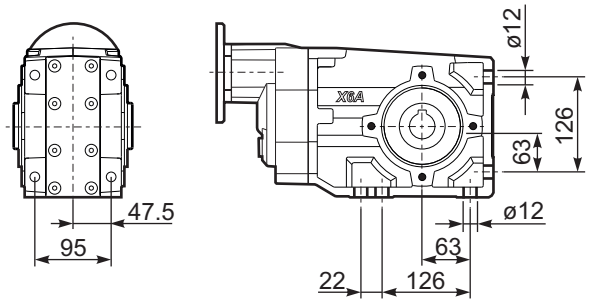
Standard
Hollow shaft



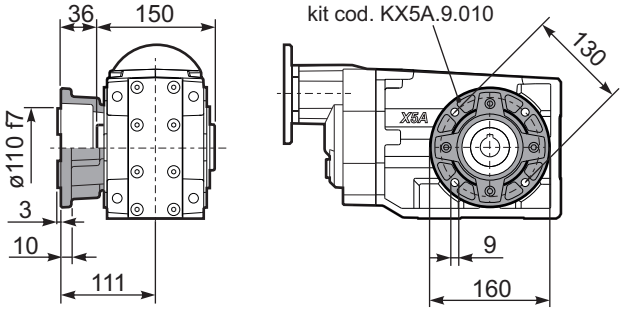
On request
A richiesta

Mounting holes position
Posizione fori di montaggio

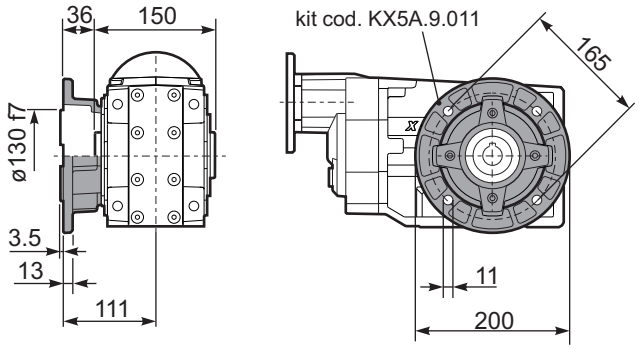
PX63A-N.. Feet
Piedini



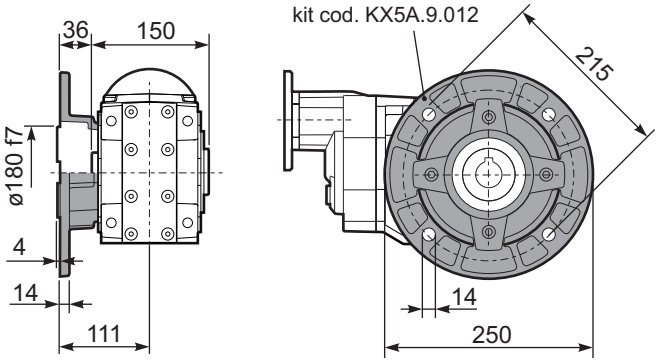
PX63A-F2.. Output flange
Flangia uscita



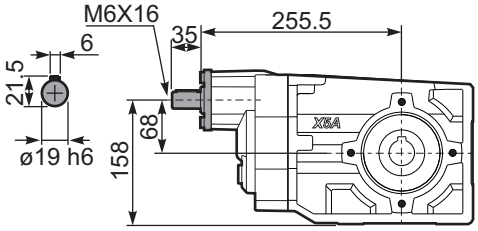
PX63A-F3.. Output flange
Flangia uscita



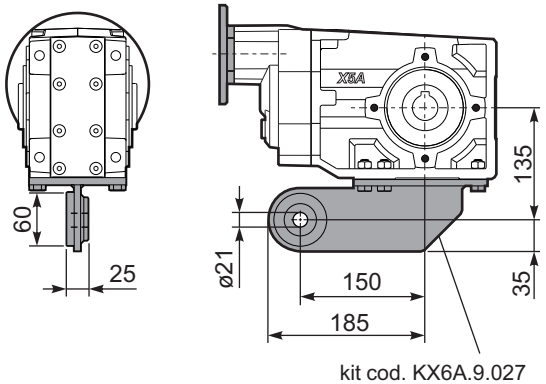
PX63A-F4.. Output flange
Flangia uscita



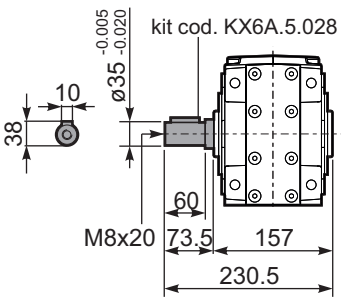
RX63A... Input shaft
Albero in entrata



PX63ABR.. Reaction Arm
Braccio di reazione



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



▪ QUICK SELECTION / Selezione veloce

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
176	**7.94**	7.5	369	1.0	7.5	380	B									302418		01
153	**9.13**	7.5	425	0.9	6.7	390	B									302416		02
131	**10.66**	5.5	366	1.1	6.0	410	B									302414		03
94	**14.97**	5.5	514	1.1	6.0	580	B									202418		04
81	**17.21**	5.5	591	1.0	5.4	600	B									202416		05
69	**20.24**	5.5	695	1.0	5.2	675	B									162418	**standard**	06
60	**23.27**	4	585	1.2	4.5	675	B									162416	**ø40**	07
53	**26.31**	4	661	1.0	4.0	675	B									132418		08
46.3	**30.25**	4	760	0.9	3.5	675	B									132416		09
39.6	**35.32**	3	668	1.0	3.0	675	B									132414	ø42	10
37.8	**37.03**	3	701	1.0	2.8	675	B									112416	On request	11
32.4	**43.23**	2.2	602	1.1	2.4	675	B									112414		12
30.1	**46.58**	2.2	649	1.0	2.3	675	B									82418		13
26.1	**53.55**	2.2	746	0.9	2.0	675	B									82416		14
22.4	**62.52**	1.5	600	1.1	1.7	675	B									82414		15
19.0	**73.75**	1.1	517	1.1	1.2	580	B									62416		16
16.3	**86.09**	1.1	604	1.1	1.2	675	B									62414		17

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

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

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

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

EN Unit **113C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **113C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **113C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **113C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

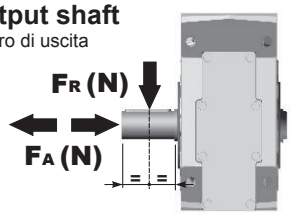
E El reductor tamaño **113C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
4.00 LT	2.60 LT	2.60 LT	2.60 LT	5.15 LT	2.20 LT	Ask
AGIP Telium VSF 320			**SHELL** Omala S4 WE 320			

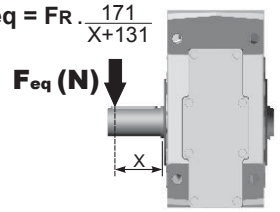
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



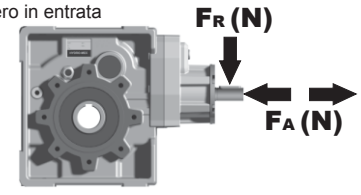
n_2	FA	FR
300	640	3200
250	700	3500
200	740	3700

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



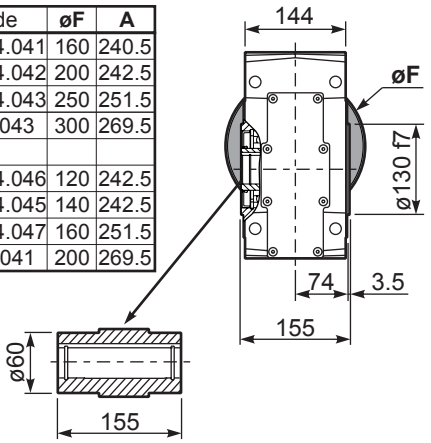
n_1	FA	FR
1400	400	2000
900	440	2200
500	440	2200

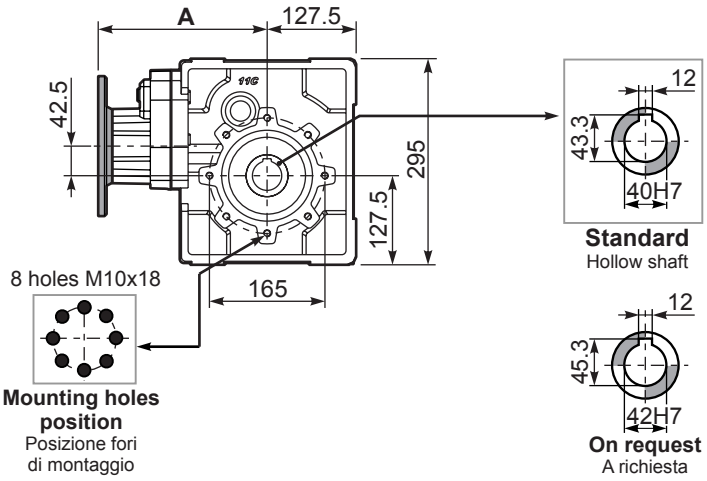
tab. 2

P113CC... Basic Gearbox
Riduttore base

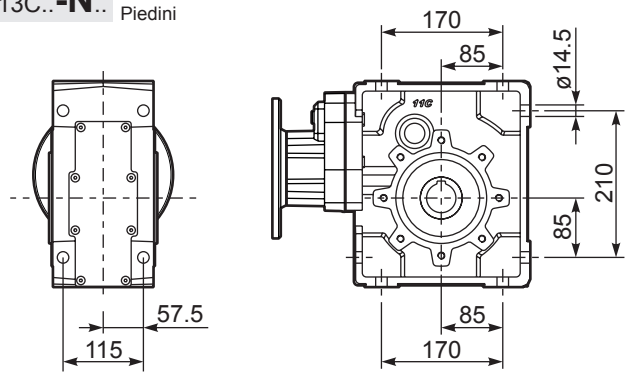
Gearbox weight peso riduttore	38.0 kg

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	251.5
132B5	KC50.4.043	300	269.5
80B14	KC085.4.046	120	242.5
90B14	KC085.4.045	140	242.5
100/112B14	KC085.4.047	160	251.5
132B14	KC50.4.041	200	269.5

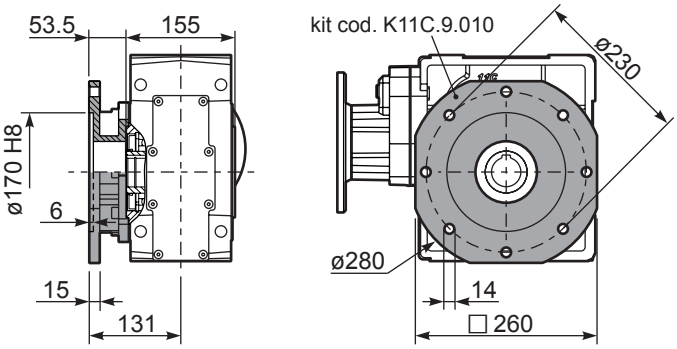




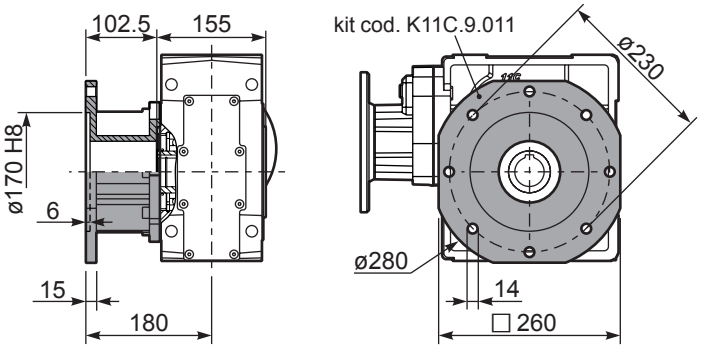
P113C..-N.. Feet
Piedini



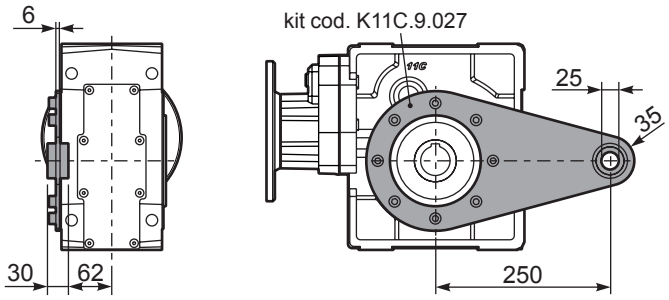
P113C-FC.. Output flange
Flangia uscita



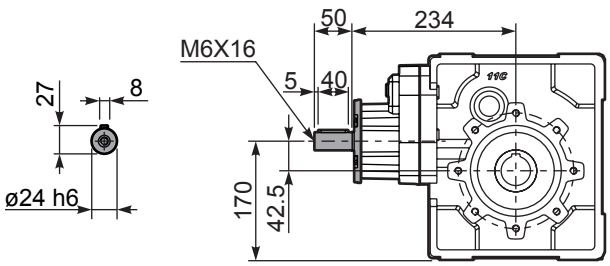
P113C-FL.. Output flange
Flangia uscita



P113CBR.. Reaction Arm
Braccio di reazione

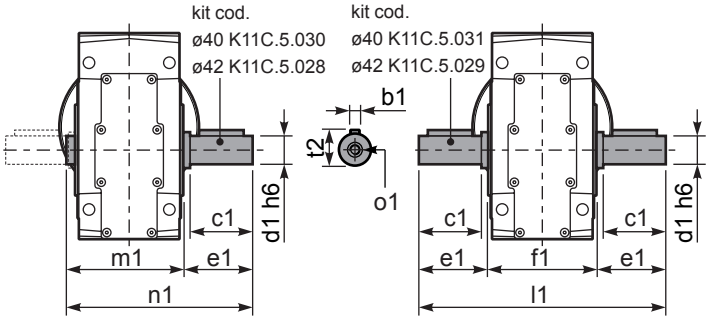


R113C... Input shaft
Albero in entrata



P113C..A.. Single shaft
Albero lento semplice

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



	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
ø40 Standard	12	80	40	84.5	155	324	164.5	249	43	M12
ø42 On request	12	80	42	84.5	155	324	164.5	249	45	M16

▪ QUICK SELECTION / Selezione veloce

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
18.7	**74.79**	1.5	704	1.0	**1.4**	675	B				C	C		19132418		01
16.3	**85.99**	1.1	591	1.1	**1.3**	675	B				C	C		19132416		02
14.0	**99.66**	1.1	685	1.0	**1.1**	675	B				C	C		17132416		03
12.0	**116.35**	0.75	548	1.2	**0.92**	675	B				C	C		17132414		04
11.5	**121.45**	0.75	572	1.2	**0.89**	675	B				C	C		13132418		05
10.0	**139.64**	0.75	658	1.0	**0.77**	675	B				C	C		13132416	**standard**	06
9.2	**152.21**	0.75	717	0.9	**0.71**	675	B				C	C		19082416	**ø40**	07
8.6	**163.02**	0.55	567	1.2	**0.66**	675	B				C	C		13132414		08
7.9	**177.69**	0.55	618	1.1	**0.61**	675	B				C	C		19082414		09
6.8	**205.95**	0.55	716	0.9	**0.52**	675	B				C	C		17082414	ø42	10
6.3	**222.52**	0.55	774	0.9	**0.48**	675	B				C	C		10132414	On request	11
5.6	**248.76**	0.37	578	1.2	**0.43**	675	B				C	C		9132416		12
4.8	**290.41**	0.37	675	1.0	**0.37**	675	B				C	C		9132414		13
4.1	**337.39**	0.37	784	0.9	**0.32**	675	B				C	C		10082416		14
3.6	**393.88**	0.25	618	1.1	**0.27**	675	B				C	C		10082414		15
3.2	**440.33**	0.25	690	1.0	**0.24**	675	B				C	C		9082416		16
2.7	**514.06**	0.18	616	1.1	**0.21**	675	B				C	C		9082414		17
2.4	**581.44**	0.18	697	1.0	**0.18**	675	B				C	C		7082416		18
2.1	**678.79**	0.12	526	1.3	**0.16**	675	B				C	C		7082414		19

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

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

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

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

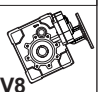
EN Unit **114C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore **114C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.
Vedi tab.1 per oli e quantità consigliati.
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Das Getriebe **114C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur **114C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

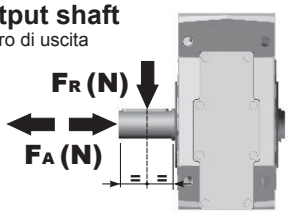
E El reductor tamaño **114C** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
						
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
4.10 LT	2.70 LT	2.70 LT	2.70 LT	5.30 LT	2.35 LT	Ask
AGIP Telium VSF 320				**SHELL** Omala S4 WE 320		

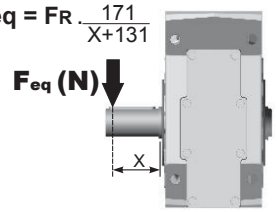
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



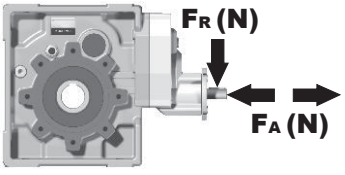
$$Feq = FR \cdot \frac{171}{X+131}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	640	3200	**140**	860	4300	**70**	1080	5400
250	700	3500	**120**	900	4500	**40**	1300	6500
200	740	3700	**85**	1000	5000	**15**	1840	9200

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



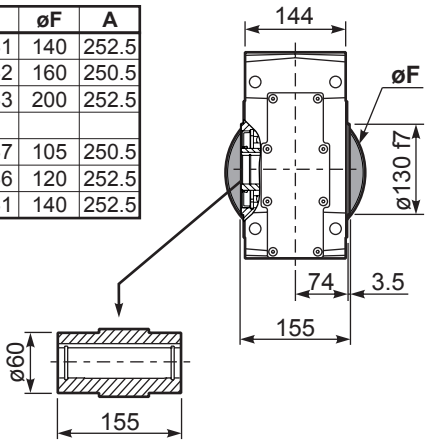
n_1	FA	FR
1400	240	1200
900	280	1400
500	310	1700

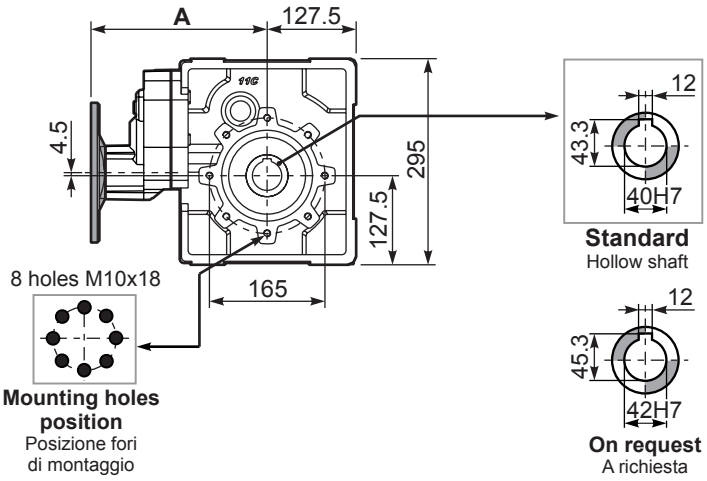
tab. 2

P114CC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	38.0 kg

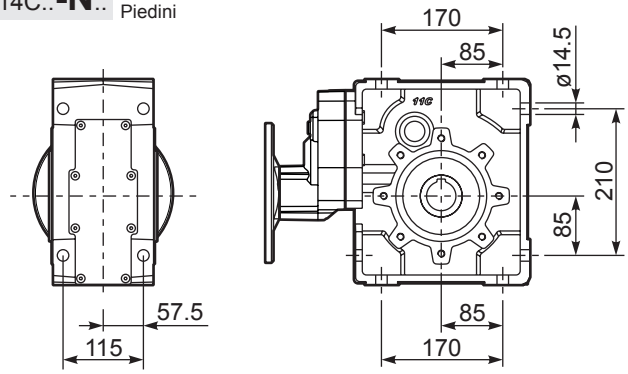
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	252.5
71B5	K063.4.042	160	250.5
80/90B5	K063.4.043	200	252.5
71B14	K063.4.047	105	250.5
80B14	K063.4.046	120	252.5
90B14	K063.4.041	140	252.5



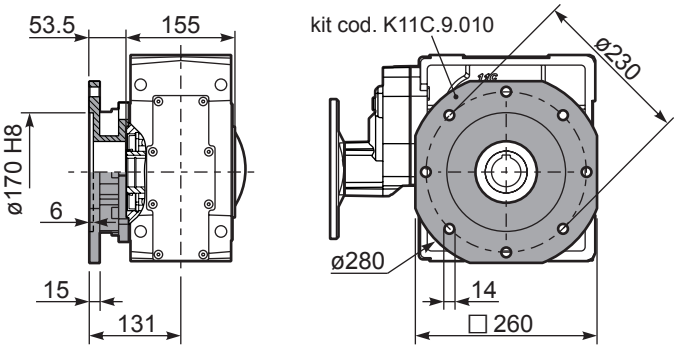


Mounting holes position
Posizione fori di montaggio

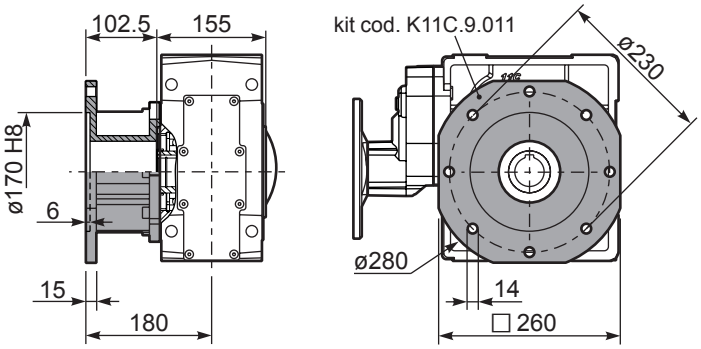
P114C..-N.. Feet
Piedini



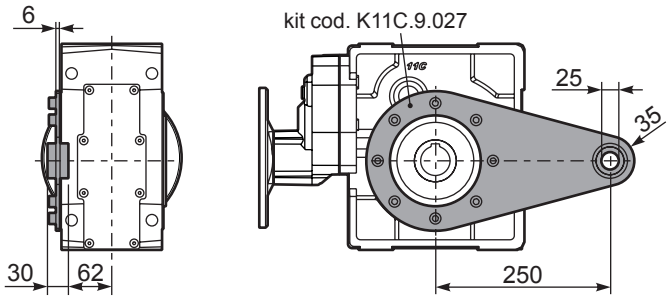
P114C-FC.. Output flange
Flangia uscita



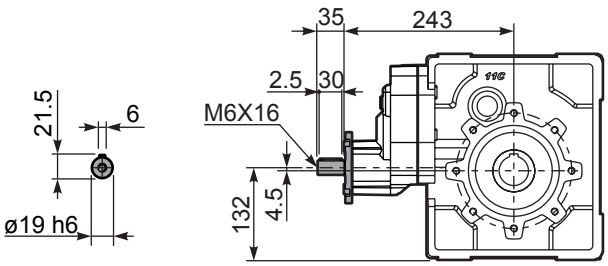
P114C-FL.. Output flange
Flangia uscita



P114CBR.. Reaction Arm
Braccio di reazione

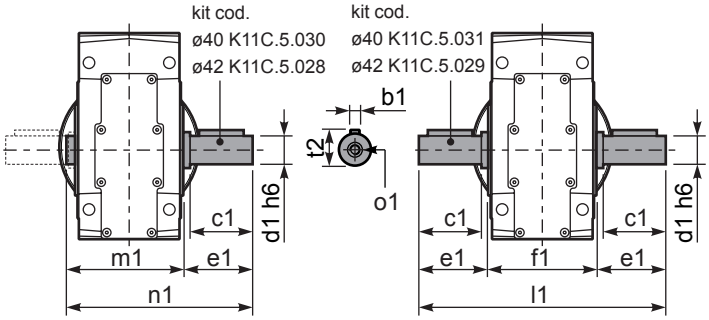


R114C... Input shaft
Albero in entrata



P114C..A.. Single shaft
Albero lento semplice

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



	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
ø40 Standard	12	80	40	84.5	155	324	164.5	249	43	M12
ø42 On request	12	80	42	84.5	155	324	164.5	249	45	M16

▪ QUICK SELECTION / Selezione veloce

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
145	**9.69**	9	560	1.3	**12.2**	**755**	B									302418		01
126	**11.09**	9	641	1.1	**9.6**	**680**	B									302416		02
108	**12.90**	9	746	1.1	**9.6**	**790**	B									302414		03
77	**18.26**	7.5	849	1.1	**8.0**	**935**	B									202418		04
67	**20.91**	7.5	972	1.0	**7.5**	**1000**	B									202416		05
58	**24.32**	5.5	835	1.2	**6.4**	**1000**	B									202414	**standard**	06
49.5	**28.27**	5.5	971	1.0	**5.5**	**1000**	B									162416	**ø45**	07
42.6	**32.88**	4	826	1.2	**4.7**	**1000**	B									162414		08
38.1	**36.76**	4	924	1.1	**4.2**	**1000**	B									132416		09
32.7	**42.76**	3	809	1.2	**3.6**	**1000**	B									132414	ø40	10
31.1	**45.00**	3	851	1.2	**3.5**	**1000**	B									112416	on request	11
26.8	**52.33**	3	990	1.0	**3.0**	**1000**	B									112414		12
24.6	**56.82**	2.2	791	1.1	**2.3**	**850**	B									82418		13
21.5	**65.07**	2.2	906	1.1	**2.3**	**975**	B									82416		14
18.5	**75.68**	2.2	1054	0.9	**2.1**	**1000**	B									82414		15
15.6	**89.61**	1.1	628	1.1	**1.2**	**710**	B									62416		16
13.4	**104.22**	1.1	731	1.1	**1.2**	**820**	B									62414		17

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available Flange Motore Disponibili

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

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

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

EN Unit **133C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **133C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **133C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **133C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

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_R (N)

F_A (N)

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

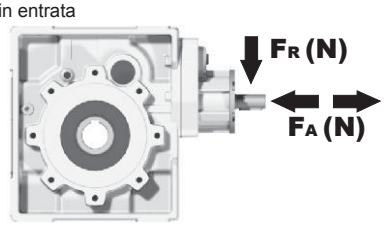
F_{eq} (N)

X

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

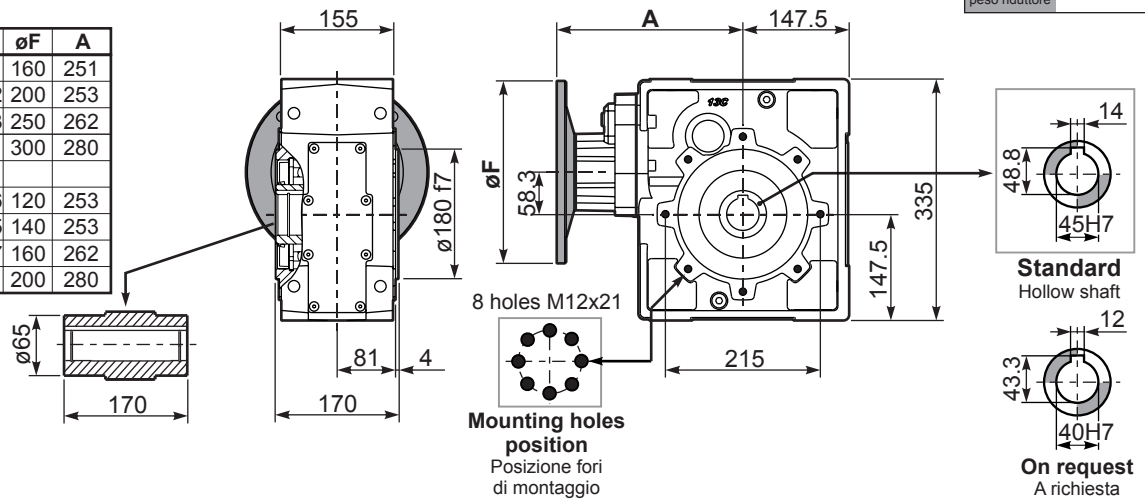
tab. 2

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.

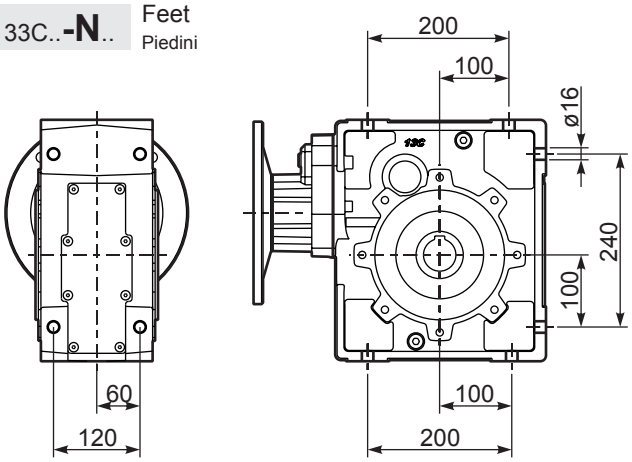
P133CC... Basic gearbox
Riduttore base

Gearbox weight / peso riduttore: **53.5 kg**

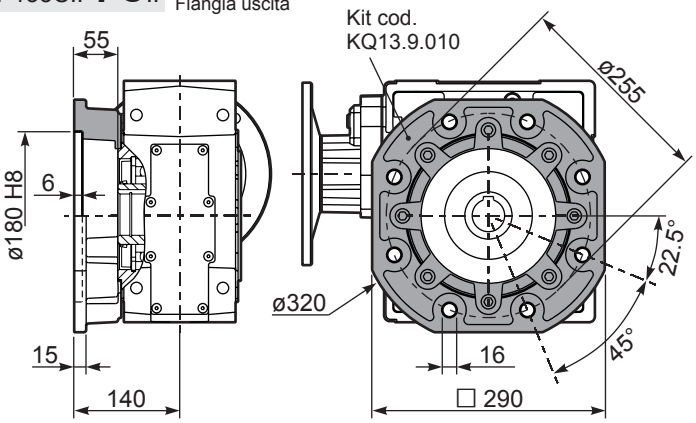
M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	251
80/90B5	KC023.4.042	200	253
100/112B5	KC023.4.043	250	262
132B5	KC50.4.043	300	280
80B14	KC085.4.046	120	253
90B14	KC085.4.045	140	253
100/112B14	KC085.4.047	160	262
132B14	KC50.4.041	200	280



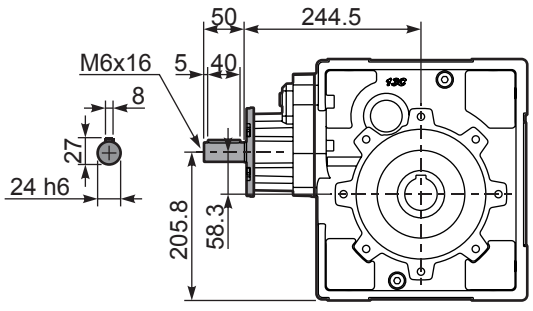
P133C..**-N**.. Feet
Piedini



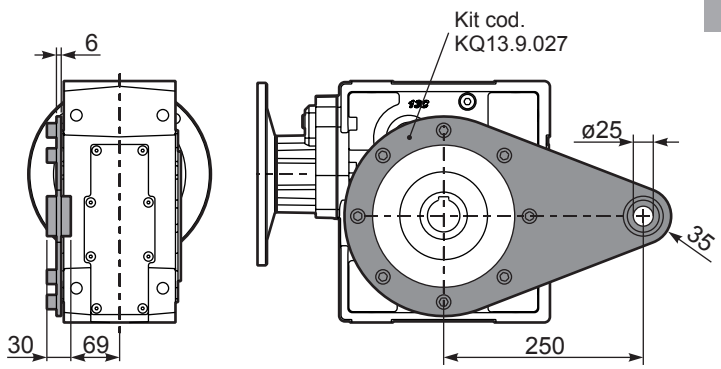
P133C..**-FC**.. Output flange
Flangia uscita



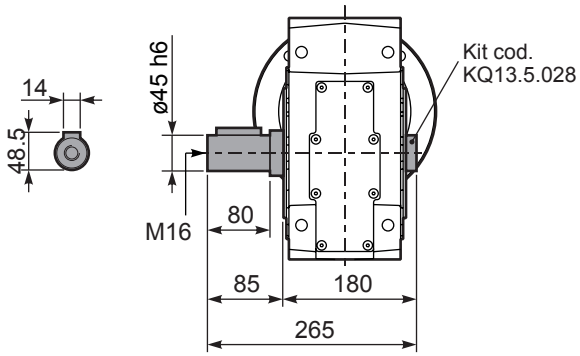
R133C... Input Shaft
Albero in entrata



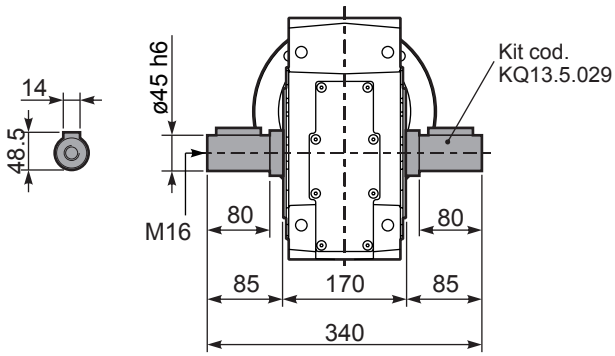
P133C**BR**.. Reaction arm
Braccio di reazione



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



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



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▪ QUICK SELECTION / Selezione veloce

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -B 63	-C 71	-D 80	-E 90	Available B14 motor flanges -Q 71	-R 80	-T 90		Output Shaft ø	Ratios code
15.3	**91.23**	1.5	858	1.2	**1.7**	**1000**	B				C	C		19132418		01
13.4	**104.48**	1.5	983	1.0	**1.5**	**1000**	B				C	C		19132416		02
11.6	**121.10**	1.5	1139	0.9	**1.3**	**1000**	B				C	C		17132416		03
9.9	**140.84**	1.1	968	1.0	**1.1**	**1000**	B				C	C		17132414		04
8.5	**165.32**	1.1	1136	0.9	**0.96**	**1000**	B				C	C		15132414		05
7.6	**184.94**	0.75	872	1.1	**0.86**	**1000**	B				C	C		19082416		06
7.1	**197.34**	0.75	930	1.1	**0.81**	**1000**	B				C	C		13132414	**standard**	07
6.5	**215.10**	0.75	1014	1.0	**0.74**	**1000**	B				C	C		19082414	**ø45**	08
6.0	**231.60**	0.55	805	1.2	**0.69**	**1000**	B				C	C		10132416		09
5.6	**249.31**	0.55	867	1.2	**0.64**	**1000**	B				C	C		17082414		10
5.2	**269.37**	0.55	937	1.1	**0.59**	**1000**	B				C	C		10132414	ø40	11
4.8	**292.64**	0.55	1018	1.0	**0.54**	**1000**	B				C	C		15082414	on request	12
4.6	**302.26**	0.55	1051	1.0	**0.53**	**1000**	B				C	C		9132416		13
4.0	**349.30**	0.37	812	1.2	**0.46**	**1000**	B				C	C		13082414		14
3.5	**399.12**	0.37	928	1.1	**0.40**	**1000**	B				C	C		7132416		15
2.9	**476.80**	0.37	1108	0.9	**0.33**	**1000**	B				C	C		10082414		16
2.2	**622.28**	0.25	976	1.0	**0.26**	**1000**	B				C	C		9082414		17
1.7	**821.70**	0.18	985	1.0	**0.19**	**1000**	B				C	C		7082414		18

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

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

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

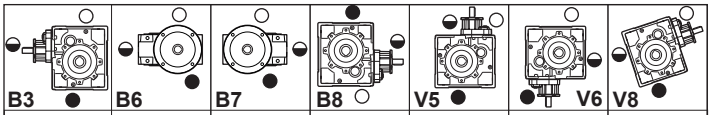
C) **Motor Flange Holes Position** Posizione Fori Flangia Motore

EN Unit **134C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **134C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **134C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **134C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants.
S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur



B3	B6	B7	B8	V5	V6	V8
6.10 LT	4.40 LT	4.40 LT	3.40 LT	7.50 LT	3.20 LT	Ask

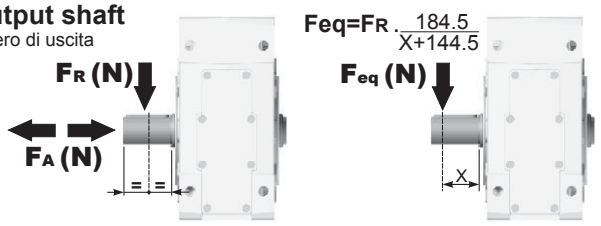
AGIP Blasia 460

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

tab. 1

RADIAL AND AXIAL LOADS

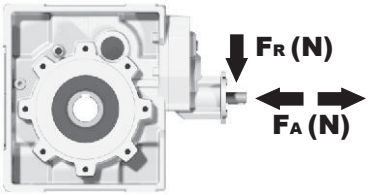
Output shaft
Albero di uscita



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	800	4000	**140**	1120	5600	**70**	1400	7000
250	900	4500	**120**	1200	6000	**40**	1700	8500
200	960	4800	**85**	1300	6500	**15**	2400	12000

On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero in entrata



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

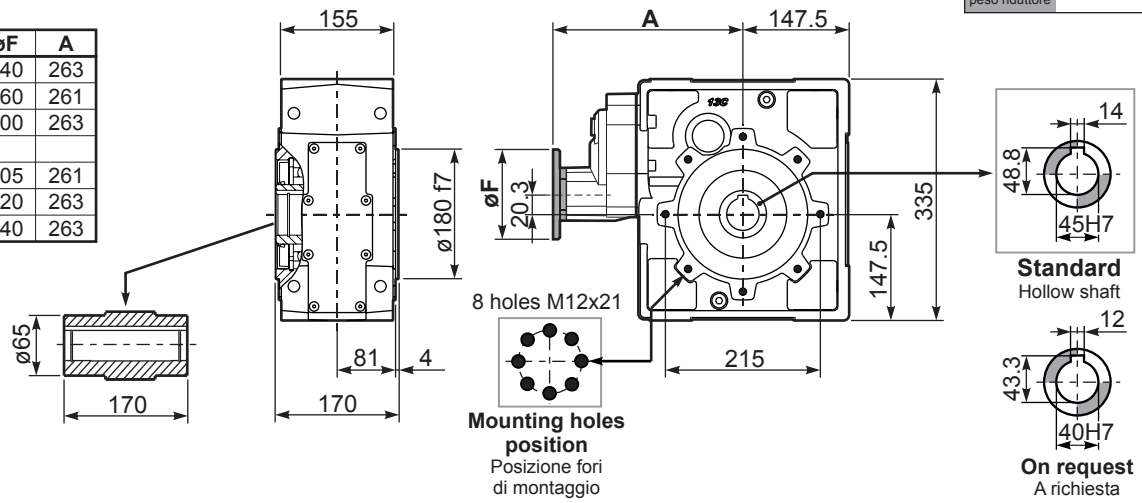
tab. 2

E El reductor tamaño **134C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

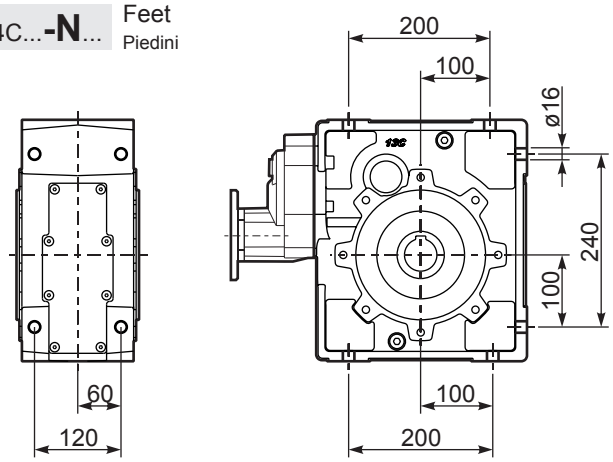
P134CC... Basic gearbox
Riduttore base

Gearbox weight / peso riduttore: **53.5 kg**

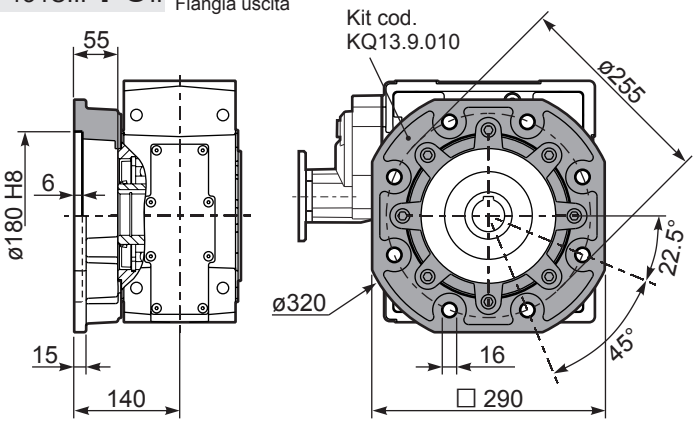
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	263
71B5	K063.4.042	160	261
80/90B5	K063.4.043	200	263
71B14	K063.4.047	105	261
80B14	K063.4.046	120	263
90B14	K063.4.041	140	263



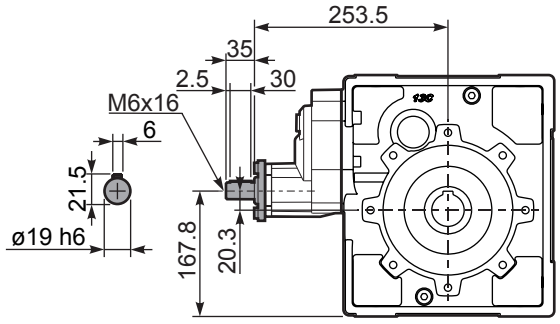
P134C...-N... Feet
Piedini



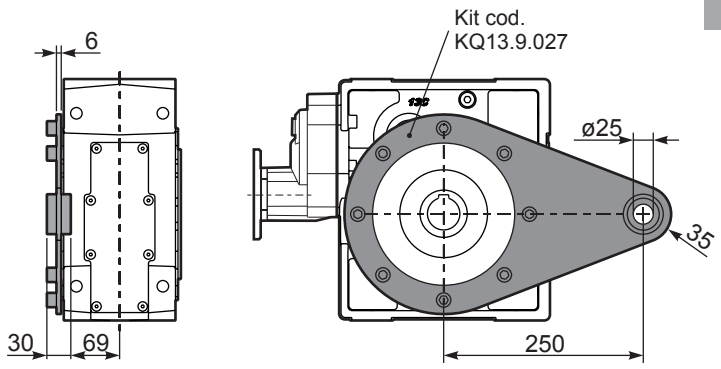
P134C...-FC.. Output flange
Flangia uscita



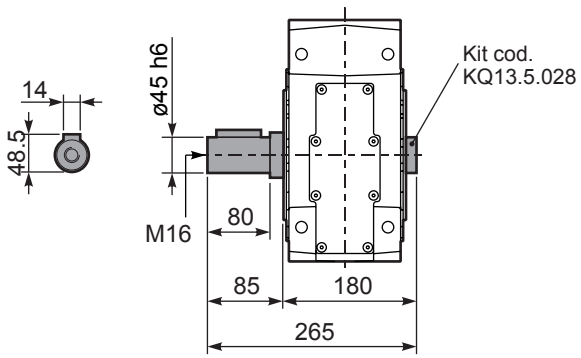
R134C... Input Shaft
Albero in entrata



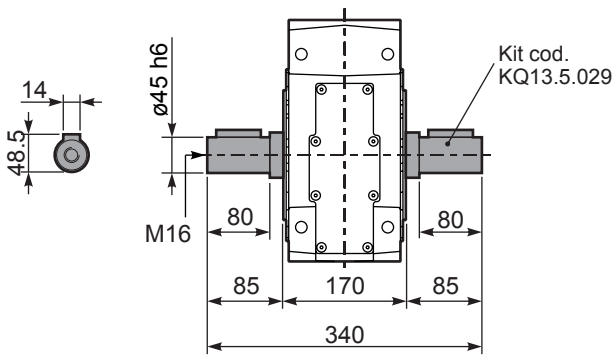
P134CBR.. Reaction arm
Braccio di reazione



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



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



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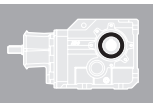


▪ QUICK SELECTION / Selezione veloce

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -F / 100 112	B5 -G / 132	B5 -H / 160	B5 -I / 180	B14 motor flanges - - - - / - - - -		Output Shaft ø	Ratios code
236	**5.94**	22	806	1.0	**21.0**	**800**	B					302915		01
196	**7.13**	18.5	812	1.0	**17.9**	**820**	B					302913		02
163	**8.58**	18.5	977	1.0	**17.3**	**950**	B					302911		03
125	**11.20**	15	1033	1.0	**13.9**	**1000**	B					202915		04
104	**13.43**	15	1239	1.1	**15.7**	**1350**	B					202913		05
92	**15.15**	15	1397	1.0	**14.4**	**1400**	B					162915	**standard ø50**	06
87	**16.17**	15	1492	1.0	**14.0**	**1450**	B					202911		07
77	**18.16**	15	1675	0.9	**13.3**	**1550**	B				**not available**	162913		08
71	**19.70**	11	1335	1.2	**12.3**	**1550**	B					132915	ø45	09
64	**21.87**	11	1482	1.1	**11.4**	**1600**	B					162911	On request	10
59	**23.62**	11	1600	1.0	**10.6**	**1600**	B					132913		11
48.4	**28.91**	9	1671	1.0	**8.6**	**1600**	B					112913		12
40.2	**34.81**	7.5	1618	1.0	**7.2**	**1600**	B					112911		13
33.5	**41.81**	5.5	1436	1.1	**6.0**	**1600**	B					82913		14
27.8	**50.34**	5.5	1729	0.9	**5.0**	**1600**	B					82911		15

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available / Flange Motore Disponibili

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

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

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

EN Unit **X93C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X93C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X93C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X93C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X93C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

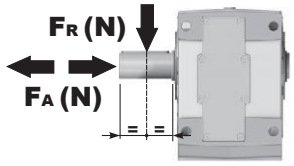
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
4.20 LT	3.60 LT	4.40 LT	5.10 LT	7.10 LT	5.00 LT	Ask
AGIP Blasia 460						

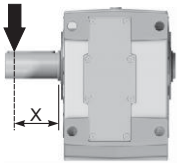
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

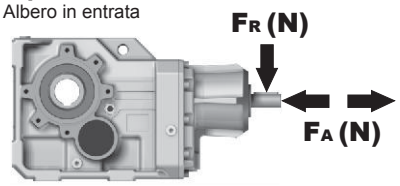
$$Feq = FR \cdot \frac{218}{X+168}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	**140**	2700	13500	**70**	3020	15100
250	2400	12000	**120**	2800	14000	**40**	3200	16000
200	2600	13000	**85**	2900	14500	**15**	3500	17500

Input shaft
Albero in entrata



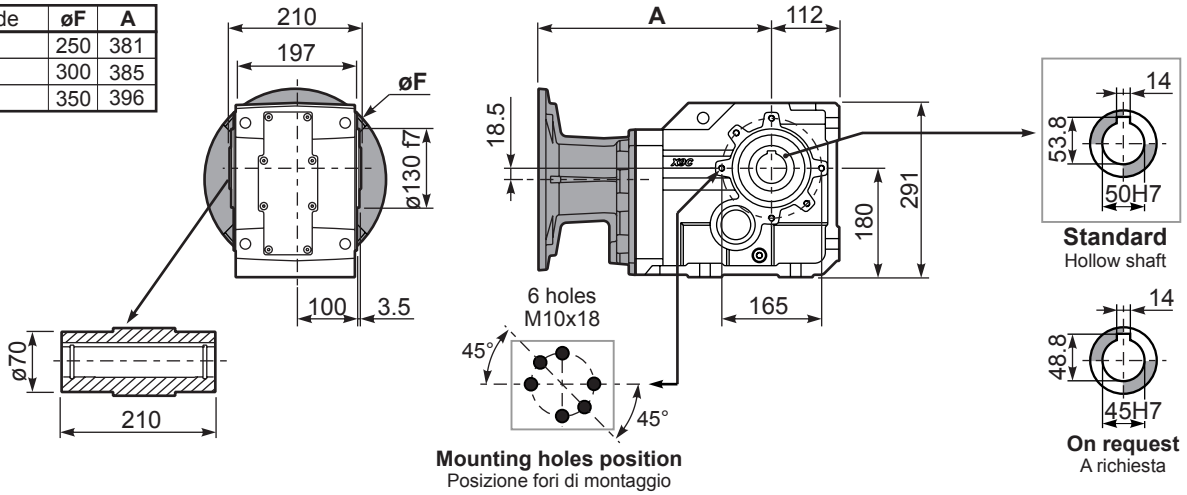
n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2

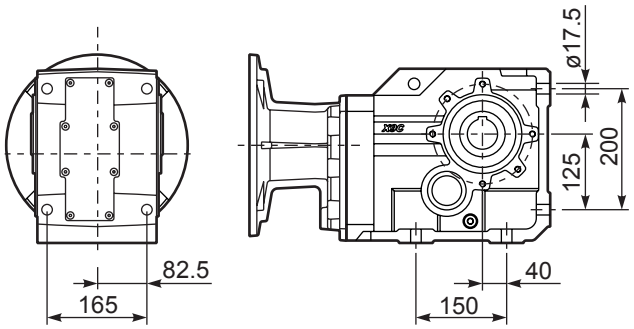
PX93CC... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	75.0 kg

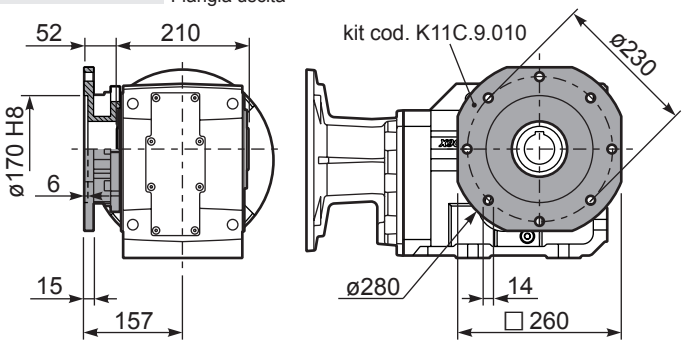
M. flanges	Kit code	øF	A
100/112B5	-	250	381
132B5	-	300	385
160/180B5	-	350	396



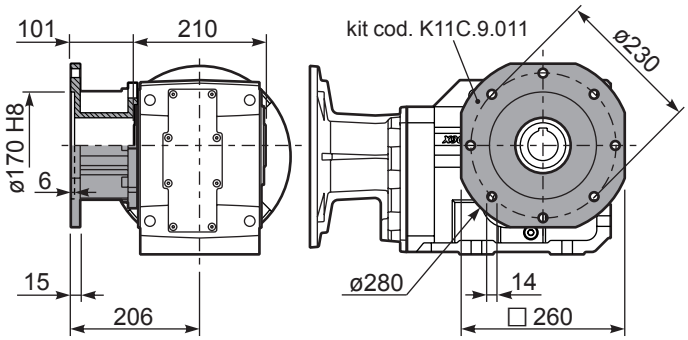
PX93C...FB.. Feet
Piedini



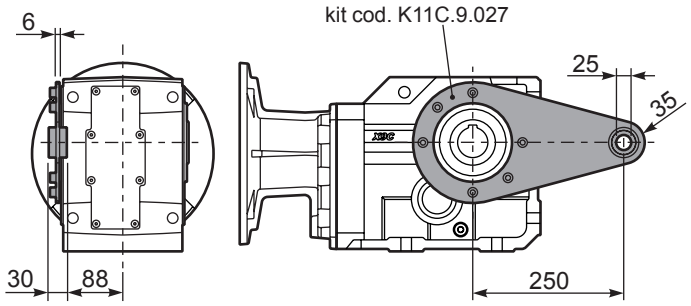
PX93C...-FC.. Output flange
Flangia uscita



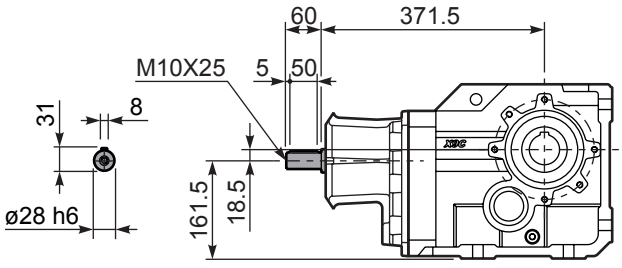
PX93C...-FL.. Output flange
Flangia uscita



PX93C...BR.. Reaction Arm
Braccio di reazione

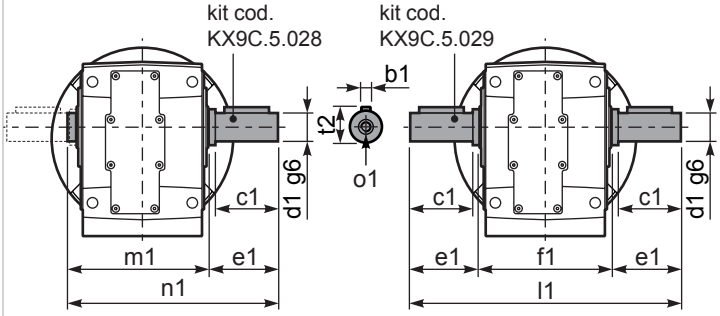


RX93C... Input shaft
Albero in entrata



PX93CA... Single shaft
Albero lento semplice

PX93CB... Double shaft
Albero lento bisp.



	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	14	100	50	105	210	420	218	323	53.5	M16
-	-	-	-	-	-	-	-	-	-	-

▪ QUICK SELECTION / Selezione veloce

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	Available B5 motor flanges -C 71	-D 80	-E 90	-F 100 112	-G 132	Available B14 motor flanges -R 80	-T 90	-U 100 112	-V 132		Output Shaft ø	Ratios code
45.6	**30.70**	7.5	1399	1.1	**8.3**	**1600**	B									30132913		01
37.9	**36.97**	7.5	1685	0.9	**6.9**	**1600**	B									30132911		02
29.0	**48.26**	5.5	1625	1.0	**5.3**	**1600**	B									20132915		03
24.2	**57.86**	4	1425	1.1	**4.4**	**1600**	B									20132913		04
21.5	**65.24**	4	1607	1.0	**3.9**	**1600**	B									16132915		05
20.1	**69.68**	4	1716	1.0	**3.8**	**1650**	B									20132911	**standard**	06
17.9	**78.23**	3	1450	1.1	**3.4**	**1650**	B									16132913	**ø50**	07
16.5	**84.85**	3	1573	1.0	**3.0**	**1600**	B									13132915		08
14.9	**94.20**	3	1747	0.9	**2.8**	**1650**	B									16132911		09
13.8	**101.74**	3	1886	0.9	**2.6**	**1650**	B									13132913	ø45	10
11.4	**122.51**	2.2	1672	1.0	**2.1**	**1650**	B									13132911	On request	11
9.3	**149.95**	1.5	1411	1.2	**1.8**	**1650**	B									11132911		12
7.8	**180.09**	1.5	1694	1.0	**1.5**	**1650**	B									8132913		13
6.8	**206.81**	1.1	1421	1.1	**1.2**	**1600**	B									6132915		14
6.5	**216.85**	1.1	1490	1.1	**1.2**	**1650**	B									8132911		15
5.6	**247.99**	1.1	1704	1.0	**1.1**	**1650**	B									6132913		16
4.7	**298.61**	0.75	1407	1.2	**0.88**	**1650**	B									6132911		17

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

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

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

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

EN Unit **X94C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X94C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X94C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X94C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X94C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

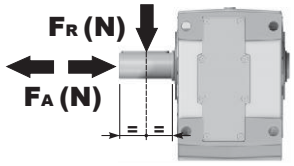
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	**B6**	**B7**	**B8**	**V5**	**V6**	**V8**
4.50 LT	3.80 LT	4.50 LT	5.30 LT	7.60 LT	5.30 LT	Ask
AGIP Blasia 460						

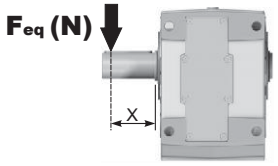
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

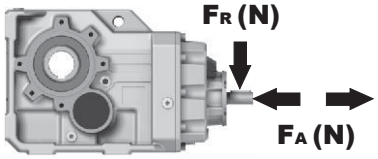
$$Feq = FR \cdot \frac{218}{X+168}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	1800	9000	**140**	2700	13500	**70**	3020	15100
250	2400	12000	**120**	2800	14000	**40**	3200	16000
200	2600	13000	**85**	2900	14500	**15**	3500	17500

Input shaft
Albero in entrata



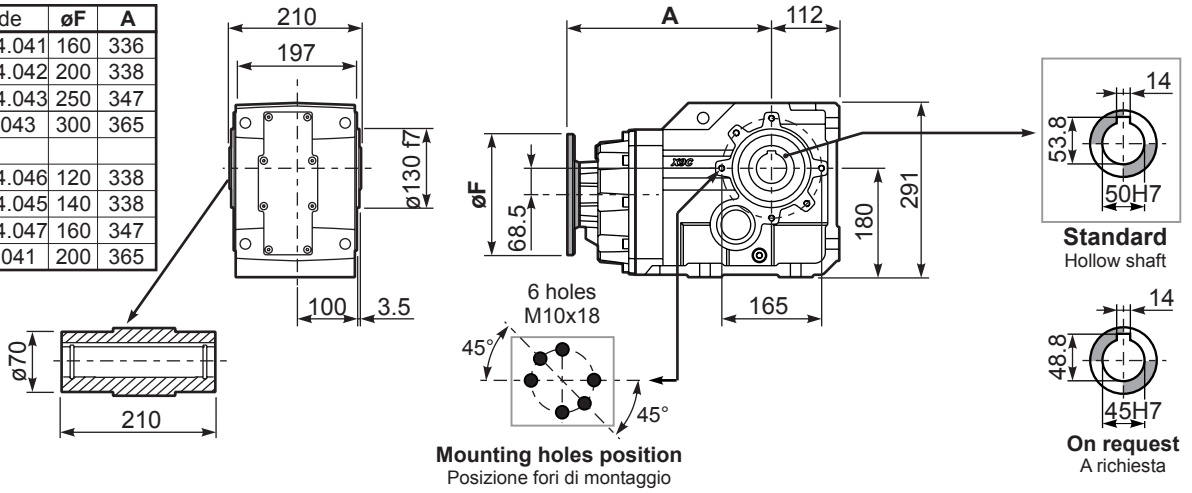
n_1	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

PX94CC... Basic Gearbox
Riduttore base

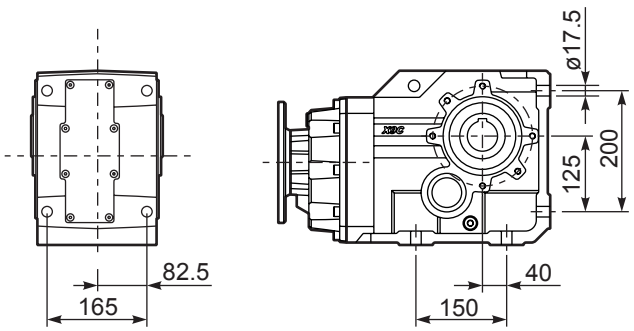
Gearbox weight / peso riduttore: **68.5 kg**

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	336
80/90B5	KC023.4.042	200	338
100/112B5	KC023.4.043	250	347
132B5	KC50.4.043	300	365
80B14	KC085.4.046	120	338
90B14	KC085.4.045	140	338
100/112B14	KC085.4.047	160	347
132B14	KC50.4.041	200	365

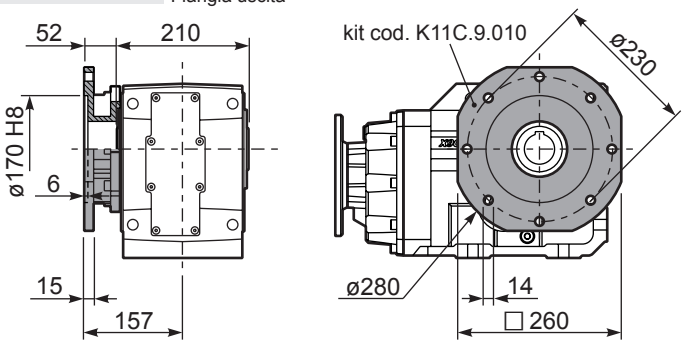


Mounting holes position
Posizione fori di montaggio

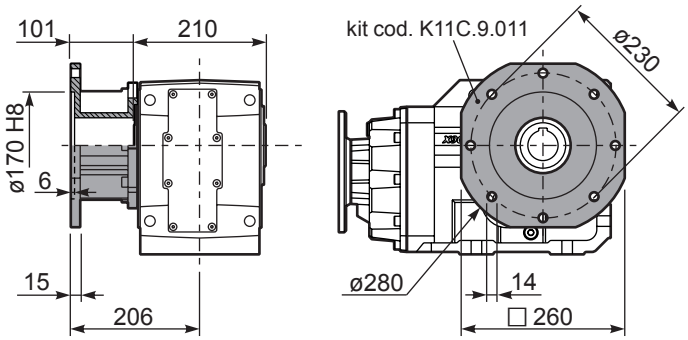
PX94C...FB.. Feet
Piedini



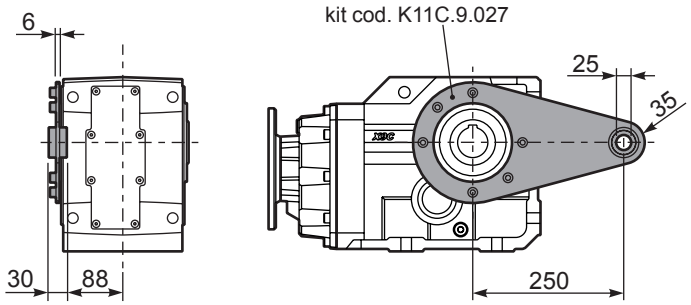
PX94C...-FC.. Output flange
Flangia uscita



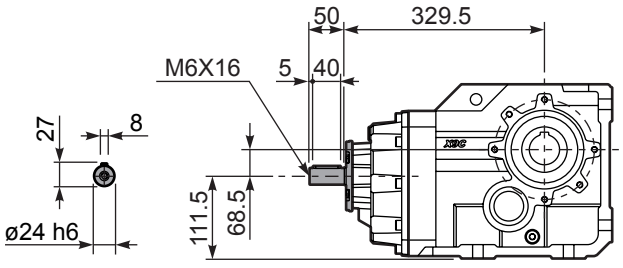
PX94C...-FL.. Output flange
Flangia uscita



PX94C...BR.. Reaction Arm
Braccio di reazione

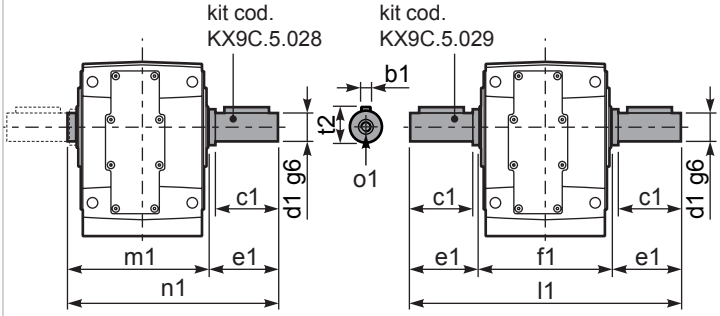


RX94C... Input shaft
Albero in entrata

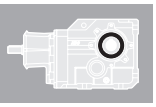


PX94CA... Single shaft
Albero lento semplice

PX94CB... Double shaft
Albero lento bisp.



	b1	c1	d1	e1	f1	l1	m1	n1	t2	o1
Standard	14	100	50	105	210	420	218	323	53.5	M16
-	-	-	-	-	-	-	-	-	-	-



▪ QUICK SELECTION / Selezione veloce

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -G 132	B5 -H 160	B5 -I 180	B5 -L 200	B14 motor flanges - - - -	Output Shaft	Ratios code
219	**6.39**	30	1180	1.1	**31.7**	**1300**						392914	01
200	**7.00**	30	1292	1.1	**31.2**	**1400**						392913	02
164	**8.55**	30	1578	1.0	**27.4**	**1500**						392911	03
140	**10.01**	22	1357	1.2	**24.9**	**1600**						302914	04
128	**10.97**	22	1486	1.1	**24.2**	**1700**						302913	05
105	**13.39**	22	1815	1.2	**24.5**	**2100**						302911	06
89	**15.71**	22	2130	1.0	**21.8**	**2200**						222914	07
81	**17.21**	22	2333	1.0	**20.8**	**2300**						222913	08
67	**21.02**	18.5	2394	1.0	**17.8**	**2400**						222911	09
59	**23.73**	18.5	2703	1.0	**17.1**	**2600**						162914	10
54	**25.99**	18.5	2960	0.9	**16.8**	**2800**						162913	11
50	**27.93**	15	2576	1.1	**16.2**	**2900**						142914	12
45.8	**30.59**	15	2822	1.0	**14.8**	**2900**						142913	13
44.1	**31.74**	15	2928	1.0	**14.2**	**2900**						162911	14
37.5	**37.36**	11	2532	1.1	**12.1**	**2900**						142911	15
33.8	**41.37**	11	2804	1.0	**10.9**	**2900**						102914	16
30.9	**45.31**	9	2618	1.1	**10.0**	**2900**						102913	17
25.3	**55.33**	7.5	2573	1.2	**8.5**	**3000**						102911	18

not available (B5 motor flanges)

standard ø60 (Output Shaft)

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

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

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

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

EN Unit **X103** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X103** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X103** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X103** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X103** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3 ●	B6 ●	B7 ●	B8	V5 ●	V6	V8 ●
11.50 LT	5.50 LT	10.50 LT	7.50 LT	13.50 LT	9.50 LT	Ask

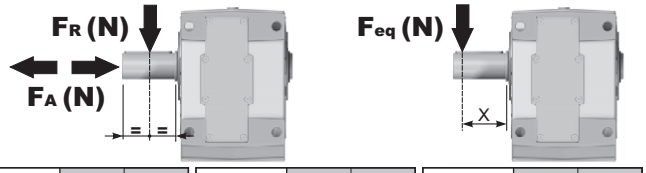
AGIP Blasia 460

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

RADIAL AND AXIAL LOADS

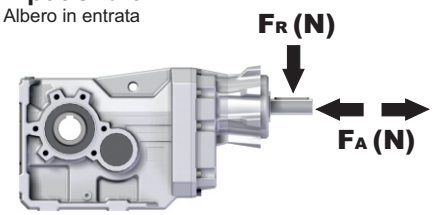
Output shaft
Albero di uscita

$$Feq = FR \cdot \frac{253}{X+193}$$



n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2000	10000	**140**	2800	14000	**70**	3500	17500
250	2500	12500	**120**	3000	15000	**40**	4200	21000
200	2700	13500	**85**	3200	16000	**15**	5400	27000

Input shaft
Albero in entrata



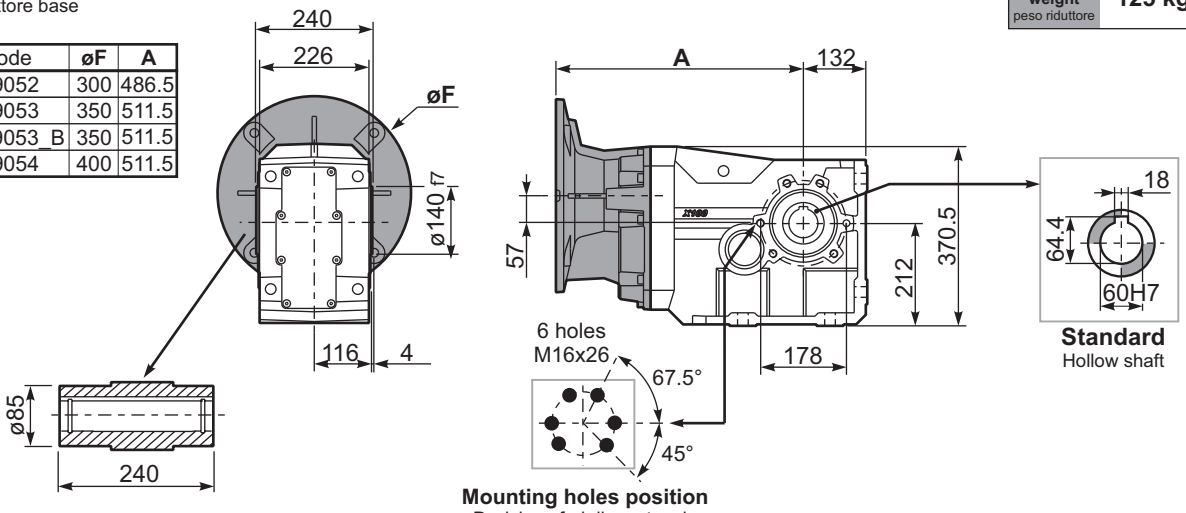
n_1	FA	FR
1400	1120	5600
900	1220	6100
500	1300	6500

tab. 2

PX103C... Basic Gearbox
Riduttore base

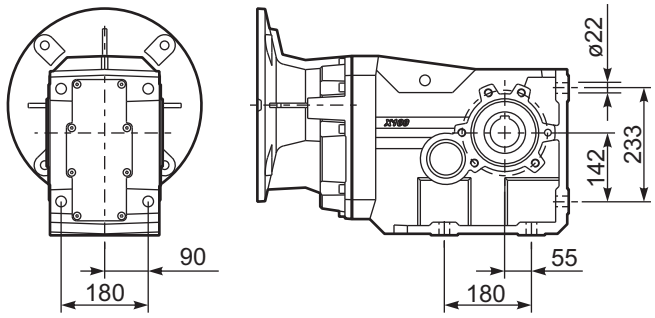
M. flanges	Kit code	øF	A
132B5	KC1109052	300	486.5
160B5	KC1109053	350	511.5
180B5	KC1109053_B	350	511.5
200B5	KC1109054	400	511.5

Gearbox weight peso riduttore: **125 kg**

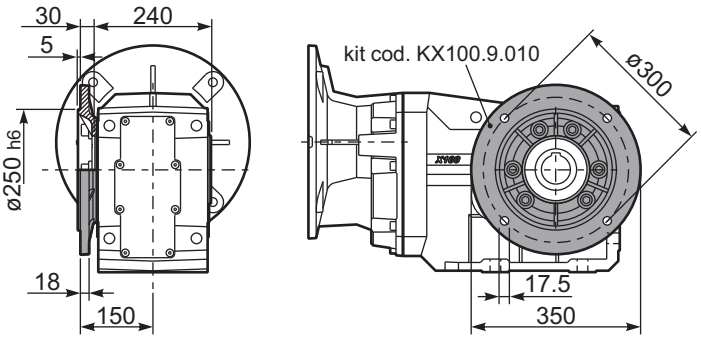


Mounting holes position
Posizione fori di montaggio

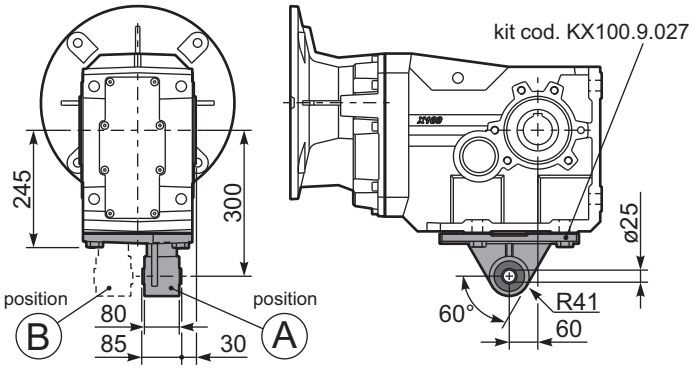
PX103...FB.. Feet
Piedini



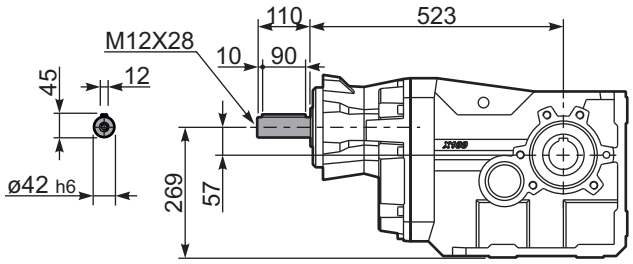
PX103...-F6.. Output flange
Flangia uscita



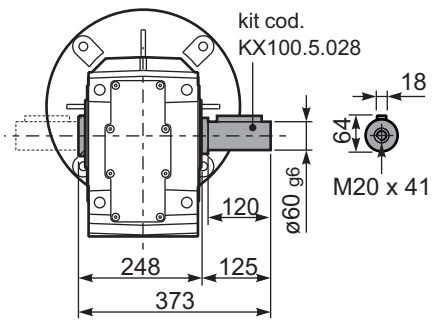
PX103...BR.. Reaction Arm
Braccio di reazione



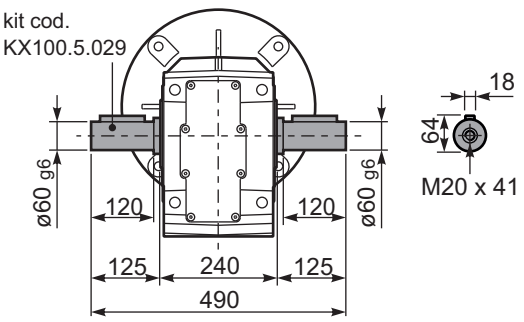
RX103... Input shaft
Albero in entrata



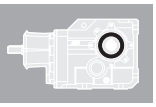
PX103A... Single shaft
Albero lento semplice



PX103B... Double shaft
Albero lento bisp.



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 -F	Available B5 motor flanges -G	B14 motor flanges				Output Shaft ø	Ratios code
							100 112	132	-	-	-			
28.8	**48.57**	9	2750	1.1	**9.5**	**2900**	B					30142911		01
20.5	**68.43**	7.5	3118	1.0	**7.0**	**3000**	B					20142914		02
18.7	**74.95**	5.5	2523	1.2	**6.4**	**3000**	B					20142913		03
15.1	**92.53**	5.5	3115	1.0	**5.2**	**3000**	B					16142914		04
13.8	**101.33**	4	2496	1.2	**4.7**	**3000**	B					16142913		05
11.6	**120.33**	4	2963	1.0	**4.0**	**3000**	B					13142914		06
11.3	**123.75**	4	3048	1.0	**3.9**	**3000**	B					16142911		07
10.6	**131.78**	4	3245	0.9	**3.6**	**3000**	B					13142913		08
9.5	**147.28**	3	2731	1.1	**3.2**	**3000**	B					11142914		09
8.7	**161.30**	3	2990	1.0	**3.0**	**3000**	B					11142913		10
7.1	**196.98**	2.2	2689	1.1	**2.4**	**3000**	B					11142911		11
6.6	**212.99**	2.2	2907	1.0	**2.2**	**3000**	B					8142914		12
6.0	**233.26**	2.2	3184	0.9	**2.0**	**3000**	B					8142913		13
4.9	**284.86**	2.2	3889	0.8	**1.7**	**3000**	B					8142911		14

not available — **standard ø60**

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

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

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

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

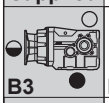
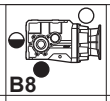
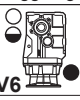
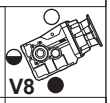
EN Unit **X104** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X104** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X104** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X104** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X104** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

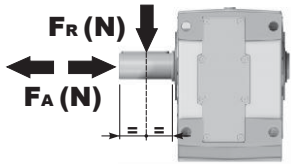
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 B3	B6	B7	 B8	V5	 V6	 V8
12.00 LT	6.00 LT	11.50 LT	8.00 LT	14.50 LT	11.00 LT	Ask
AGIP Blasia 460						

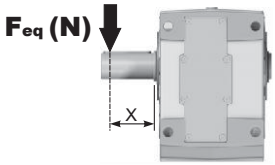
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

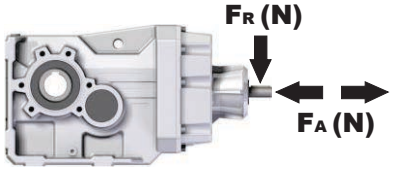
$$Feq = FR \cdot \frac{253}{X+193}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2000	10000	**140**	2800	14000	**70**	3500	17500
250	2500	12500	**120**	3000	15000	**40**	4200	21000
200	2700	13500	**85**	3200	16000	**15**	5400	27000

Input shaft
Albero in entrata



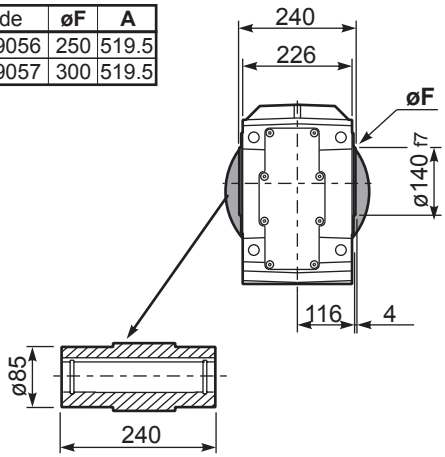
n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

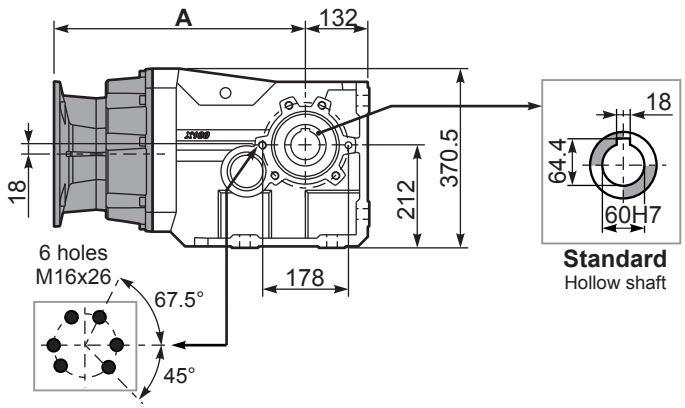
tab. 2

PX104C... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore	118 kg

M. flanges	Kit code	øF	A
100/112B5	KC1109056	250	519.5
132B5	KC1109057	300	519.5

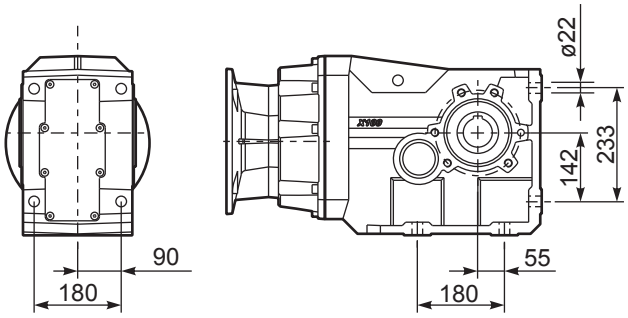




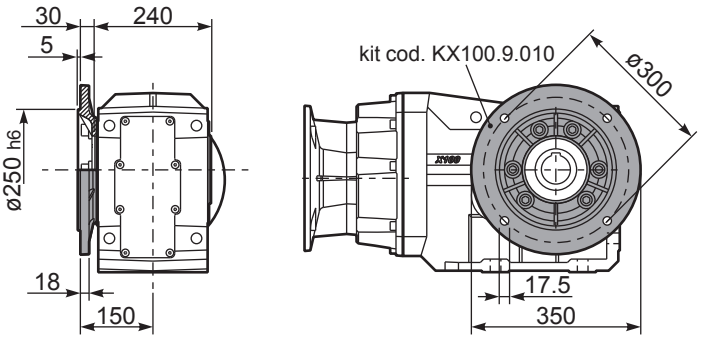
Standard
Hollow shaft

Mounting holes position
Posizione fori di montaggio

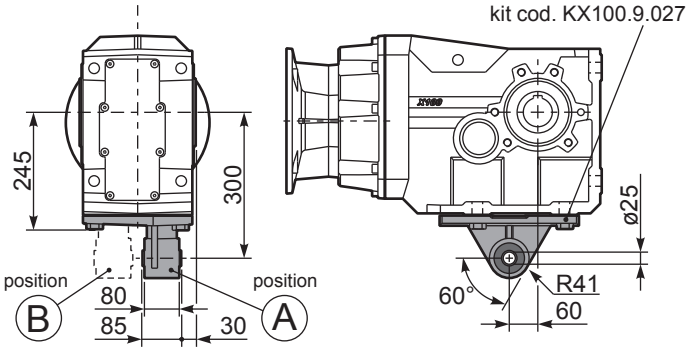
PX104...FB.. Feet
Piedini



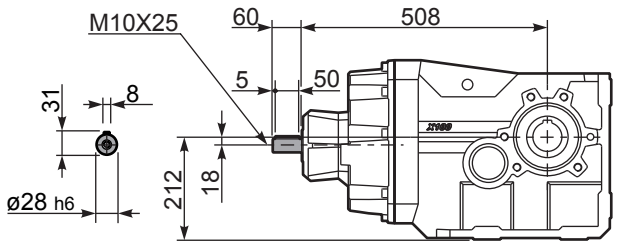
PX104...-F6.. Output flange
Flangia uscita



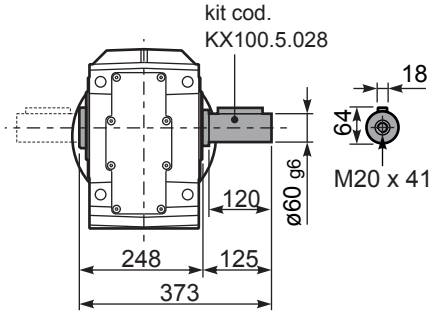
PX104...BR.. Reaction Arm
Braccio di reazione



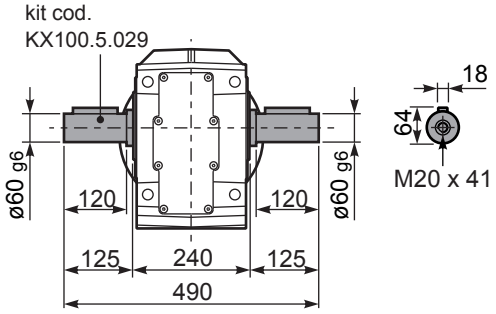
RX104... Input shaft
Albero in entrata



PX104A... Single shaft
Albero lento semplice



PX104B... Double shaft
Albero lento bisp.



7

▪ QUICK SELECTION / Selezione veloce

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -G 132	-H 160	-I 180	-L 200	CA 225	B14 motor flanges –	-	-		Output Shaft ø	Ratios code
219	**6.39**	45	1757	1.4	**61.0**	**2500**									392914		01
200	**7.00**	45	1925	1.4	**59.0**	**2650**									392913		02
164	**8.55**	45	2350	1.2	**51.1**	**2800**									392911		03
140	**10.01**	45	2752	1.2	**49.8**	**3200**									302914		04
128	**10.97**	45	3014	1.1	**45.5**	**3200**									302913		05
105	**13.39**	37	3025	1.1	**39.6**	**3400**									302911		06
89	**15.71**	37	3550	1.0	**34.7**	**3500**									222914		07
81	**17.21**	37	3888	1.0	**33.5**	**3700**									222913		08
67	**21.02**	30	3877	1.0	**29.7**	**4000**									222911		09
59	**23.73**	30	4378	0.9	**26.9**	**4100**									162914		10
54	**25.99**	22	3523	1.2	**25.8**	**4300**									162913		11
50	**27.93**	22	3786	1.1	**24.0**	**4300**									142914		12
45.8	**30.59**	22	4146	1.1	**22.9**	**4500**									142913		13
44.1	**31.74**	22	4302	1.0	**22.1**	**4500**									162911		14
37.5	**37.36**	18.5	4255	1.1	**18.8**	**4500**									142911		15
33.8	**41.37**	18.5	4712	1.0	**17.0**	**4500**									102914		16
30.9	**45.31**	15	4179	1.1	**15.5**	**4500**									102913		17
25.3	**55.33**	11	3750	1.2	**12.7**	**4500**									102911		18

not available

standard ø70

The dynamic efficiency is **0.94** for all ratios

Motor Flanges Available
Flange Motore Disponibili

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

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

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

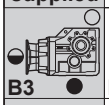
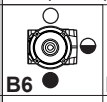
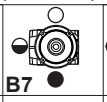
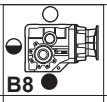
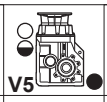
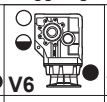
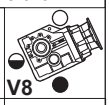
EN Unit **X113** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X113** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X113** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X113** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X113** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

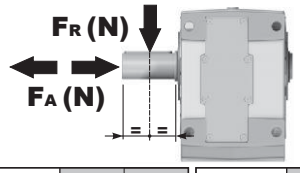
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 B3 ●	 B6 ●	 B7 ●	 B8 ●	 V5 ●	 V6 ●	 V8 ●
13.50 LT	8.00 LT	15.50 LT	14.50 LT	22.00 LT	13.00 LT	Ask
AGIP Blasia 460						

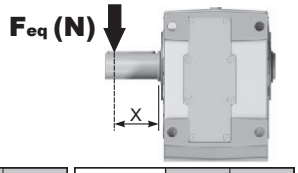
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

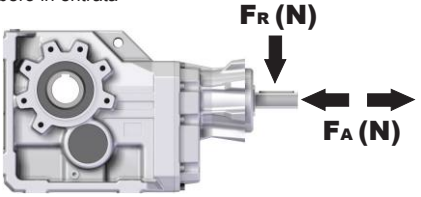
$$Feq = FR \cdot \frac{325.5}{X+255.5}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2100	10500	**140**	3100	15500	**70**	4200	21000
250	2600	13000	**120**	3240	16200	**40**	5600	28000
200	3000	15000	**85**	3600	18000	**15**	8000	40000

Input shaft
Albero in entrata



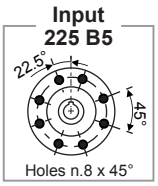
n_1	FA	FR
1400	1120	5600
900	1220	6100
500	1300	6500

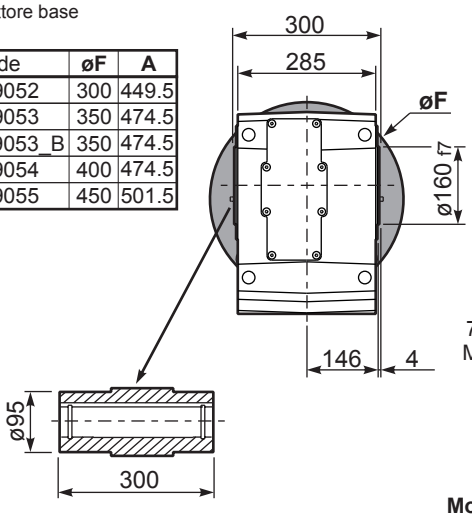
tab. 2

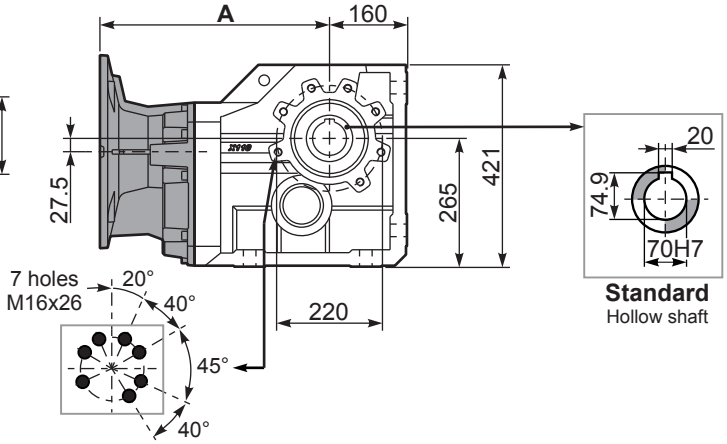
PX113C... Basic Gearbox
Riduttore base

Gearbox weight peso riduttore: **170 kg**

M. flanges	Kit code	øF	A
132B5	KC1109052	300	449.5
160B5	KC1109053	350	474.5
180B5	KC1109053_B	350	474.5
200B5	KC1109054	400	474.5
225B5	KC1109055	450	501.5

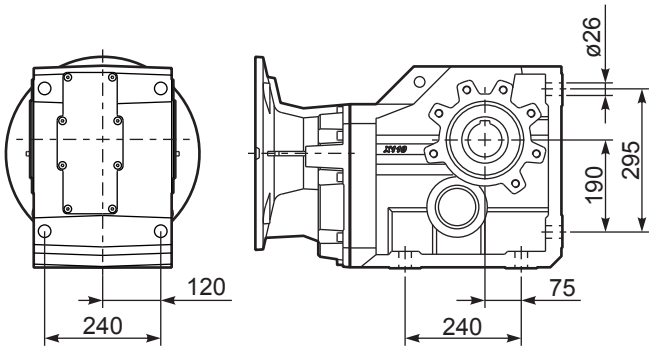




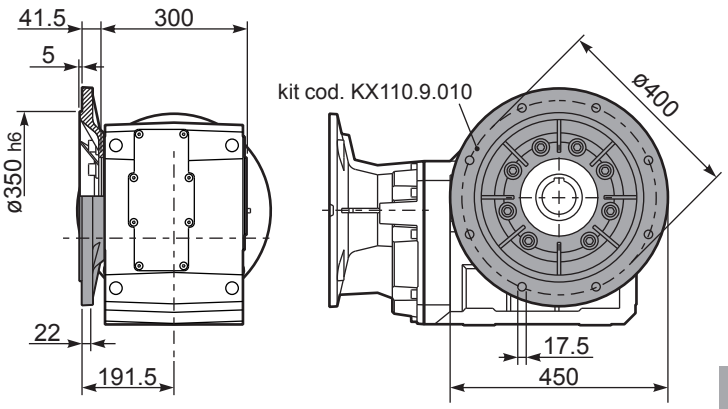


Mounting holes position
Posizione fori di montaggio

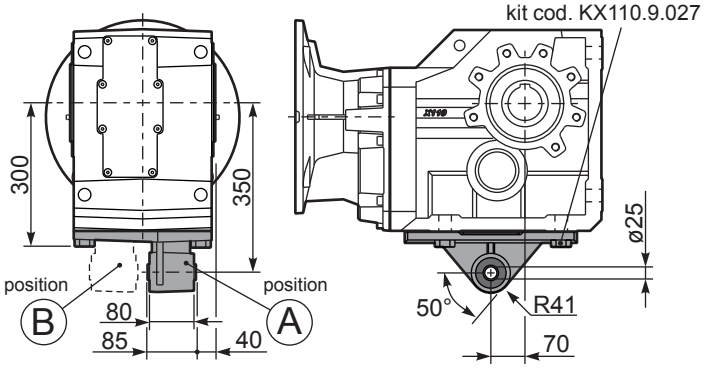
PX113...FB.. Feet
Piedini



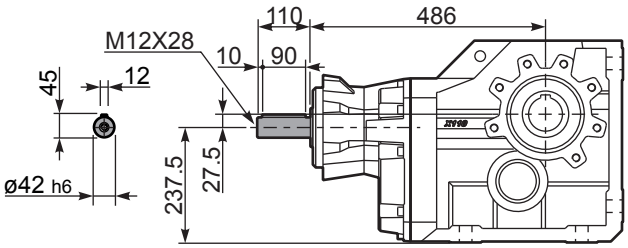
PX113...-F7.. Output flange
Flangia uscita



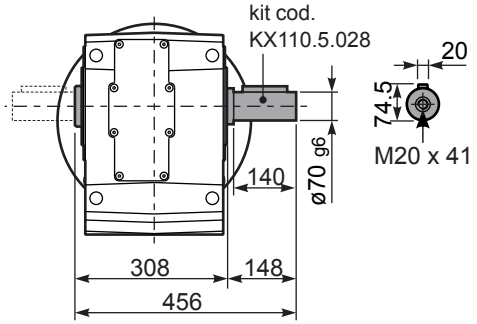
PX113...BR.. Reaction Arm
Braccio di reazione



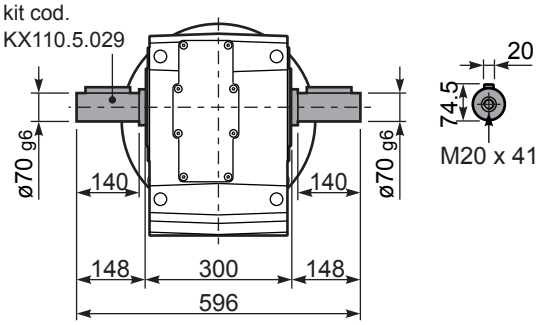
RX113... Input shaft
Albero in entrata



PX113A... Single shaft
Albero lento semplice



PX113B... Double shaft
Albero lento bisp.



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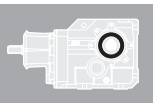


▪ QUICK SELECTION / Selezione veloce

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

Output Speed n_2 [min^{-1}]	Ratio i	Motor power P_{1M} [kW]	Output torque M_{2M} [Nm]	Service factor f.s.	Nominal power P_{1R} [kW]	Nominal torque M_{2R} [Nm]	B5 motor flanges -F: 100 112	B5 -G: 132	B5 -H: 160	B14 motor flanges - - -	B14 - - -	B14 - - -		Output Shaft ø	Ratios code
28.8	**48.57**	15	4390	1.0	**14.8**	**4500**	B						30142911		01
20.5	**68.43**	11	4545	1.0	**10.7**	**4600**	B						20142914		02
18.7	**74.95**	11	4977	0.9	**9.8**	**4600**	B						20142913		03
15.1	**92.53**	7.5	4216	1.1	**7.9**	**4600**	B						16142914		04
13.8	**101.33**	7.5	4617	1.0	**7.2**	**4600**	B						16142913		05
11.6	**120.33**	5.5	4051	1.1	**6.1**	**4600**	B						13142914		06
11.3	**123.75**	5.5	4166	1.1	**5.8**	**4500**	B						16142911		07
10.6	**131.78**	5.5	4436	1.0	**5.6**	**4600**	B						13142913		08
9.5	**147.28**	5.5	4958	0.9	**5.0**	**4600**	B						11142914		09
8.7	**161.30**	4	3972	1.2	**4.5**	**4600**	B						11142913		10
7.1	**196.98**	3	3652	1.2	**3.6**	**4500**	B						11142911		11
6.6	**212.99**	3	3949	1.2	**3.4**	**4600**	B						8142914		12
6.0	**233.26**	3	4324	1.1	**3.1**	**4600**	B						8142913		13
4.9	**284.86**	2.2	3889	1.2	**2.5**	**4500**	B						8142911		14

not available — **standard ø70**

The dynamic efficiency is **0.92** for all ratios

Motor Flanges Available Flange Motore Disponibili

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

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

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

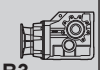
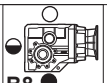
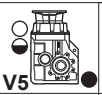
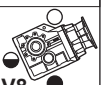
EN Unit **X114** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.
See table 1 for lubrication and recommended quantity.
In table 2 please see possible radial loads and axial loads on the gearbox.

I Il riduttore tipo **X114** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti.
Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.
Tab.1 per oli e quantità consigliati.
Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **X114** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden.
Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

F Le réducteur de type **X114** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.
Voir tableau 1 concernant les huiles et les quantités conseillées.
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

E El reductor tamaño **X114** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.
Ver tabla 1, para cantidades y aceites recomendados.
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

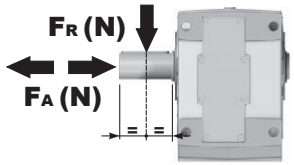
Standard supplied	**For these mounting position specify in the order or add oil** Per queste posizioni specificare in fase d'ordine o aggiungere olio					
 **B3**	**B6** ●	**B7** ●	 **B8** ●	 **V5** ●	**V6** ●	 **V8** ●
14.50 LT	8.50 LT	16.50 LT	16.00 LT	23.00 LT	14.50 LT	Ask
AGIP Blasia 460						

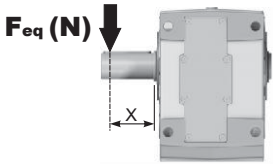
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

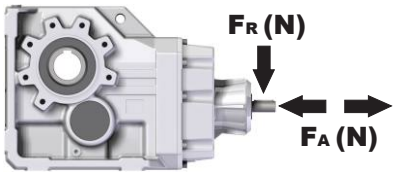
$$Feq = FR \cdot \frac{325.5}{X+255.5}$$





n_2	FA	FR	n_2	FA	FR	n_2	FA	FR
300	2100	10500	**140**	3100	15500	**70**	4200	21000
250	2600	13000	**120**	3240	16200	**40**	5600	28000
200	3000	15000	**85**	3600	18000	**15**	8000	40000

Input shaft
Albero in entrata



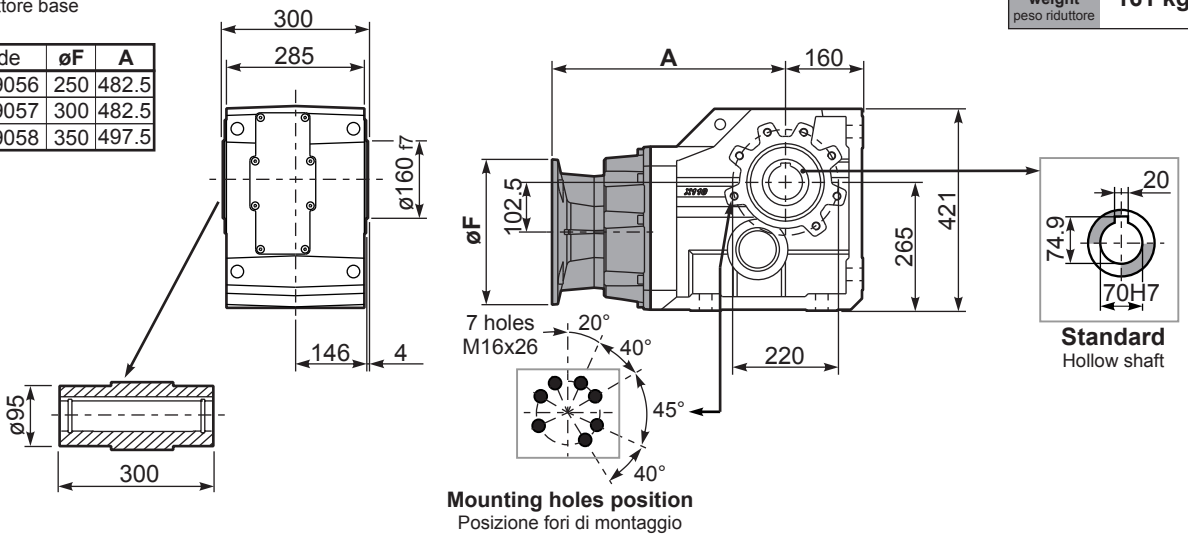
n_1	FA	FR
1400	700	3500
900	840	4200
500	900	4500

tab. 2

PX114C... Basic Gearbox
Riduttore base

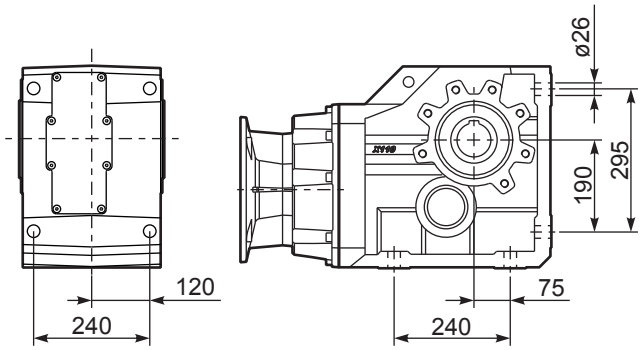
M. flanges	Kit code	øF	A
100/112B5	KC1109056	250	482.5
132B5	KC1109057	300	482.5
160B5	KC1109058	350	497.5

Gearbox weight peso riduttore: **161 kg**

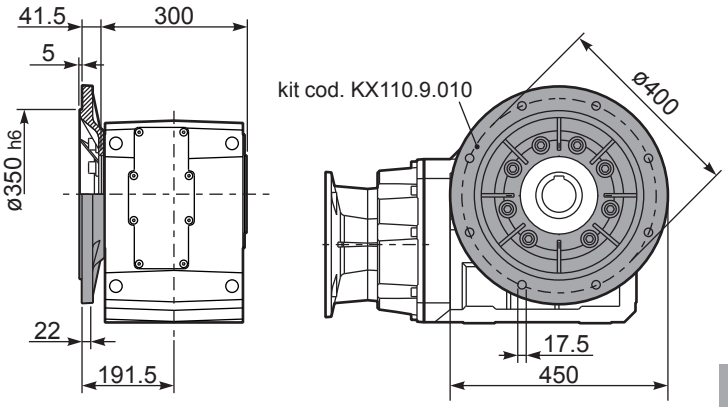


Mounting holes position
Posizione fori di montaggio

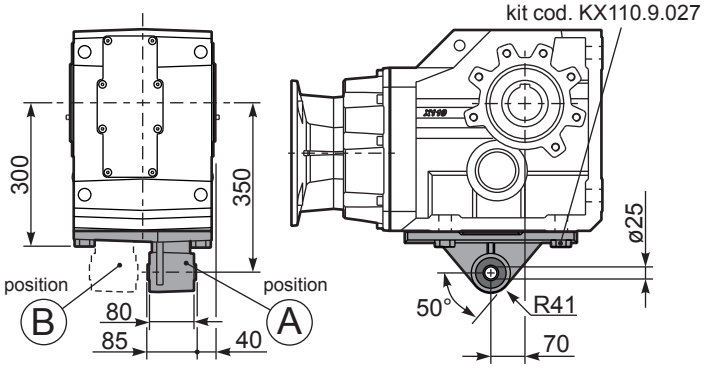
PX114...FB.. Feet
Piedini



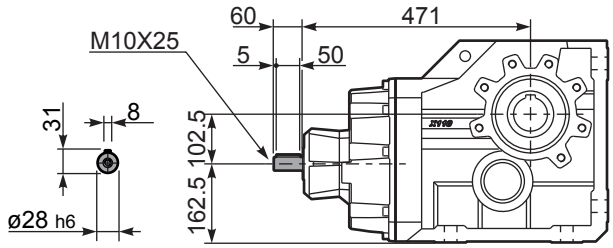
PX114...-F7.. Output flange
Flangia uscita



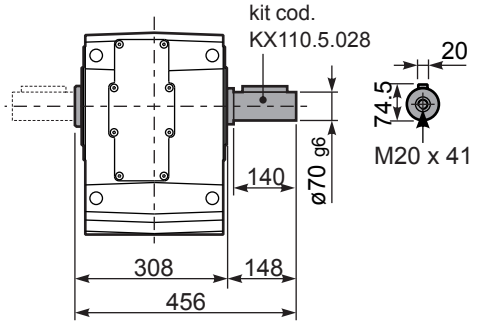
PX114...BR.. Reaction Arm
Braccio di reazione



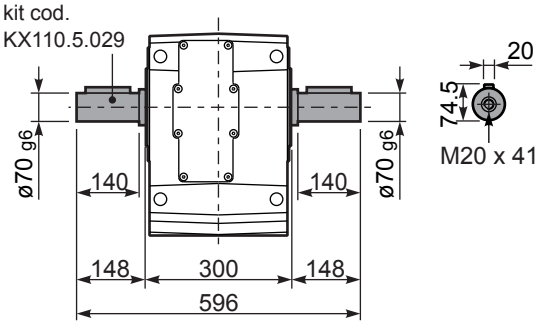
RX114... Input shaft
Albero in entrata



PX114A... Single shaft
Albero lento semplice

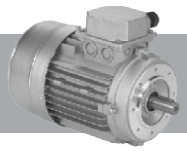


PX114B... Double shaft
Albero lento bisp.



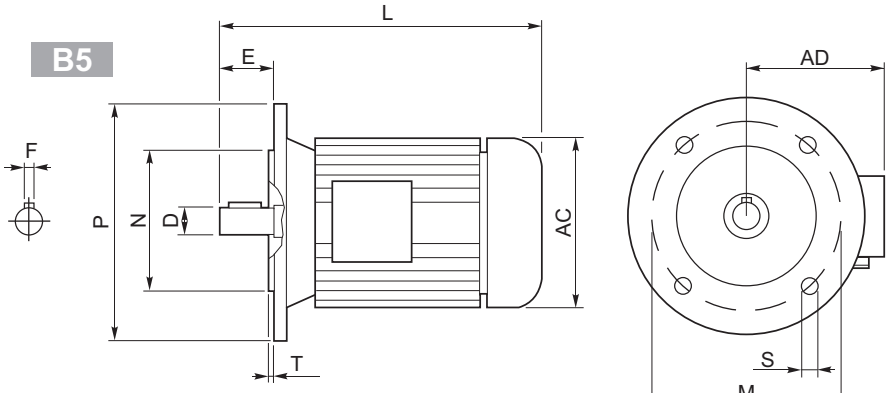
7

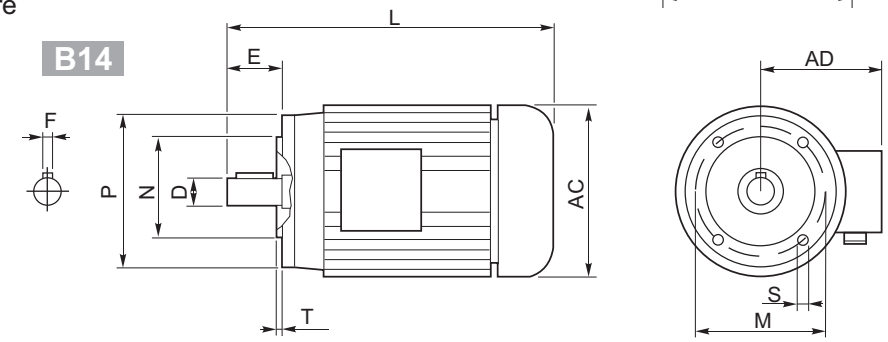
Aluminum IEC motors



1) 230/400V - 50Hz three-phase asynchronous induction motor
2) Class F insulation
3) S1 duty
4) IP 55 protection
5) Not painted
6) Hard plastic sleeve to protect output shaft during the transportation

1) 230/400V - 50Hz motore trifase asincrono
2) Isolamento Classe F
3) S1 servizio continuo
4) Protezione IP 55
5) Non verniciato
6) Manicotto di protezione per l'albero motore

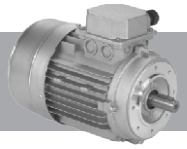




Outside dimensions and weight may be different according to manufacturers.
Le dimensioni esterne e il peso sono indicative, possono variare tra i vari costruttori.

	2 poli / poles			4 poli / poles			6 poli / poles			B5-B14						B5					B14					Kg
	kW	Nm	A (400V)	kW	Nm	A (400V)	kW	Nm	A (400V)	D	F	E	L	AC	AD	N	M	P	S	T	N	M	P	S	T	
56 A	**0.09**	0.32	0.38	**0.06**	0.44	0.27	**—**	—	—	9	3	20	199	108	96	80	100	120	7	2.5	50	65	80	M5	2.5	2.7
56 B	**0.12**	0.42	0.46	**0.09**	0.67	0.37	**—**	—	—																	2.9
63 A	**0.18**	0.63	0.60	**0.12**	0.84	0.50	**0.09**	0.99	0.57	11	4	23	208	120	99	95	115	140	9.5	3	60	75	90	M5	2.5	3.8
63 B	**0.25**	0.87	0.76	**0.18**	1.30	0.69	**0.12**	1.32	0.74																	4.2
71 A	**0.37**	1.30	1.00	**0.25**	1.70	0.91	**0.18**	1.90	0.80	14	5	30	-	130	104	110	130	160	9.5	3.5	70	85	105	M6	2.5	5.9
71 B	**0.55**	1.90	1.54	**0.37**	2.52	1.14	**0.25**	2.72	1.10				255	141	107											6.5
80 A	**0.75**	2.60	1.85	**0.55**	3.77	1.51	**0.37**	3.84	1.18	19	6	40	296	159	127	130	165	200	11.5	3.5	80	100	120	M6	3	8.5
80 B	**1.1**	3.90	2.64	**0.75**	5.11	2.57	**0.55**	5.84	1.80																	10
90 S	**1.5**	5.00	3.31	**1.1**	7.45	2.78	**0.75**	7.92	2.32	24	8	50	-	170	135	130	165	200	11.5	3.5	95	115	140	M8	3	12.5
90 L	**2.2**	7.50	4.46	**1.5**	10.2	3.61	**1.1**	11.6	3.45				330													15
100 LA	**3.0**	10.0	6.28	**2.2**	14.8	5.07	**1.5**	15.4	3.88	28	8	60	-	190	148	180	215	250	13	4	110	130	160	M8	3.5	20
100 LB	**—**	—	—	**3.0**	20.1	6.66	**—**	—	—																	22
112 M	**4.0**	13.4	8.10	**4.0**	26.7	8.55	**2.2**	22.6	5.30				381	210	164											35
132 S	**5.5**	18.3	11.2	**5.5**	36.5	11.4	**3.0**	30.2	7.20	38	10	80	455	244	180	230	265	300	14	4	130	165	200	M10	4	41
	7.5	24.9	15.3																							51
132 M	**—**	—	—	**7.5**	49.4	15.0	**4.0**	40.0	9.13				500													51
				9	61.4	18.5																				
160 M	**—**	—	—	**11**	72	21.5	**—**	—	—	42	12	110	613	335	246	250	300	350	18	5	—	—	—	—	—	79.2
160 L	**—**	—	—	**15**	98	29	**—**	—	—				657													97.5
180 M	**—**	—	—	**18.5**	121	35.5	**—**	—	—	48	14	110	712	366	266	250	300	350	19	5	—	—	—	—	—	170
180 L	**—**	—	—	**22**	144	42	**—**	—	—																	
200 L	**—**	—	—	**30**	196	53	**—**	—	—	55	16	110	780	405	341	300	350	400	19	5	—	—	—	—	—	240
225 S	**—**	—	—	**37**	240	69	**—**	—	—	60	18	140	888	463	360	350	400	450	19	5	—	—	—	—	—	305
225 M	**—**	—	—	**45**	292	84	**—**	—	—																	310

ELECTRIC MOTORS / MOTORI ELETTRICI / ELEKTROMOTOREN
MOTEURS ÉLECTRIQUES / MOTORES ELÉCTRICOS



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.

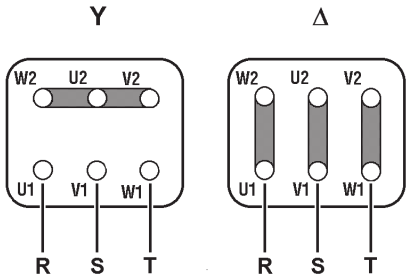
Isolement
CI.F Standard.
Au moment de la commande, spécifiez si vous souhaitez une classe d' isolement différente.

Aislamiento
CI.F standard.
Especificar al efectuar el pedido la clase diferente de aislamiento.

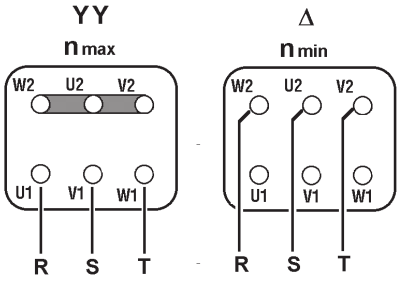
Insulation / Isolamento Isolierung /Aislamiento		E	B	F	H
Max. temp.	C°	120°	130°	155°	175°
	F*	248°	266°	311°	347°

Connections **Collegamenti** **Verbindungselemente** **Branchements** **Conexiones**

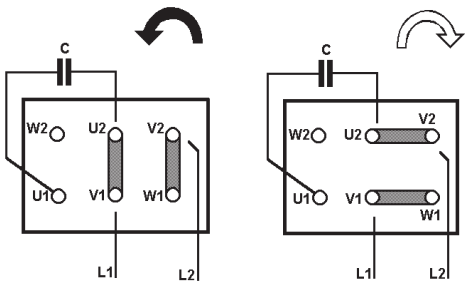
Threephase asyncronous single polarity
Asincrono trifase singola polarità
Asynchronmotor 3-ph eine Drehzahl
Moteur triphasé à une vitesse
Asincrono trifasico de una velocidad



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



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.
• Gearboxes operating in high position should have a protective shield for any possible parts falling down for casual accidents where people are moving under them.
• 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:

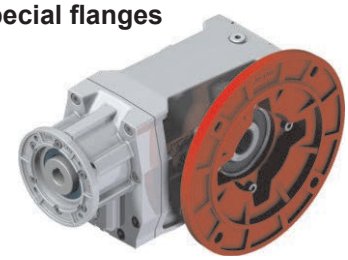
• E' richiesta autorizzazione scritta per azionare riduttori in ascensori o dispositivi per il movimento delle persone.
• Controllare che alcune applicazioni non eccedano la massima capacità di carico ammessa pubblicata in questo catalogo.
• L'acquirente è l'unico responsabile per la determinazione dell'adeguatezza 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.
• Su riduttori installati in posizioni elevate utilizzare protezioni adeguate per qualsiasi distacco accidentale di parti nel caso di passaggio di persone al di sotto.
• 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.

CONDIZIONI DI VENDITA
La garanzia relativa a difetti di costruzione ha la durata di un anno dalla data di fatturazione della merce. Tale garanzia comporta per Hydro-mec l'onere della sostituzione o riparazione delle parti difettose ma non ammette ulteriori addebiti per eventuali danni diretti o indiretti di qualsiasi natura.
La garanzia decade nel caso in cui siano state eseguite riparazioni o apportate modifiche senza nostro consenso scritto.

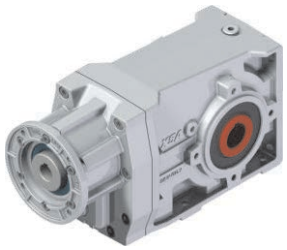
La nostra ditta non si ritiene responsabile per eventuali danni diretti o indiretti derivanti da un uso improprio dei prodotti e dalla mancata osservanza delle indicazioni riportate a catalogo o web..

New options available

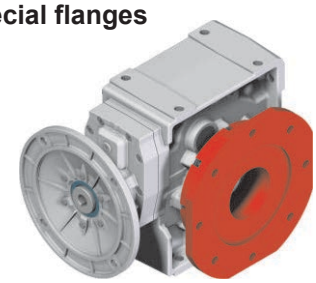
Special flanges



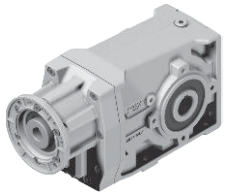
Stainless steel output shafts



Special flanges



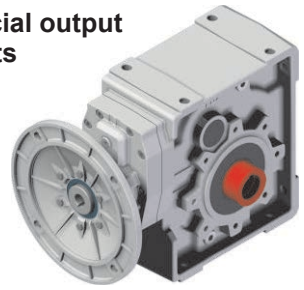
Color	RAL
light grey	7035



Special paint - Anticorrosive paint

Special output shafts

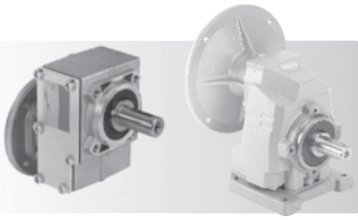
Special output shafts



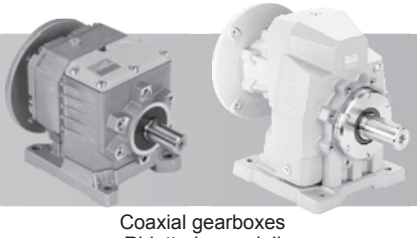
Others HYDRO-MEC products

Worm gearboxes
Rid. a vite senza fine

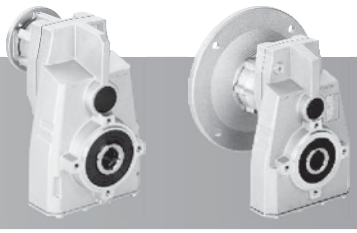
Square worm gearboxes
Rid. a vite senza fine quadro



One step gearboxes
Riduttori ad uno stadio



Coaxial gearboxes
Riduttori coassiali



Shaft mounted gearboxes
Riduttori pendolari

Stainlessteel worm gearboxes
Rid. a vite senza fine Inox

Stainlessteel one step gearbox
Riduttore uno stadio Inox

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*CT- BVM- X- HM015