

# Angletech

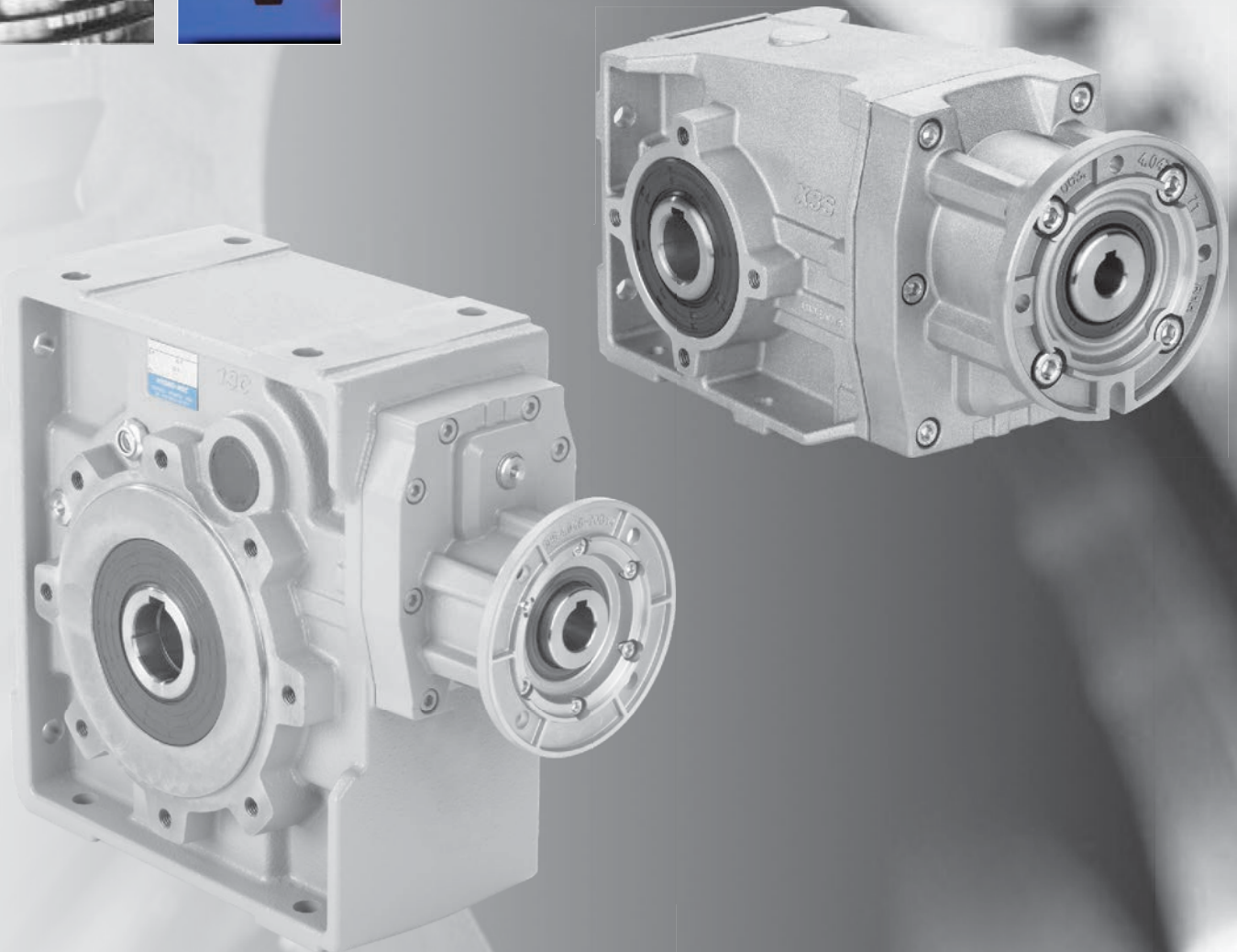
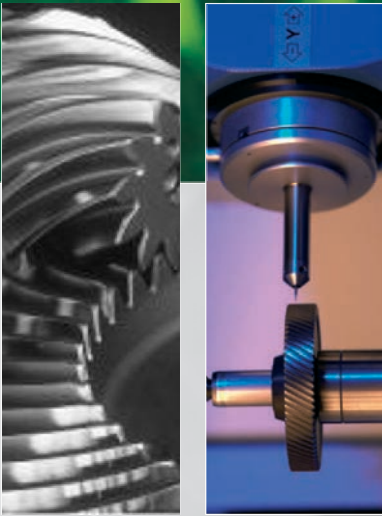
# Gears

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 efficient 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

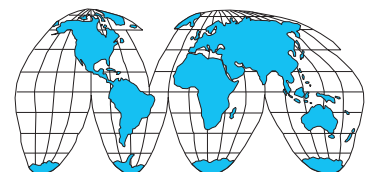
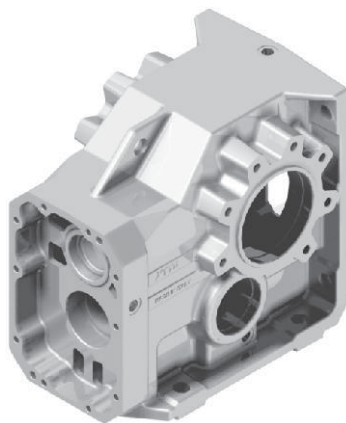
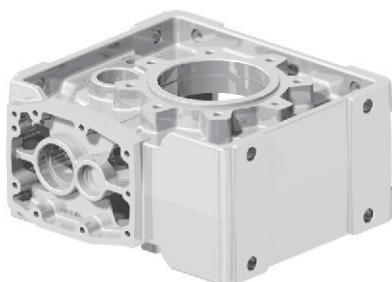
Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing

## Flange

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

## Cast Iron housing

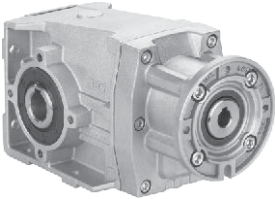








With high tensile strength. Precision machined for alignment of bearings and gearing



World wide sales network.

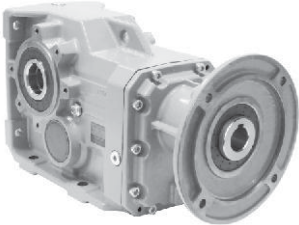


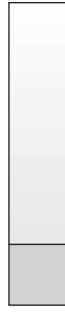






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<b>X22S</b> 50Nm	<b>X32S</b> 90Nm	<b>X33S</b> 100Nm	<b>X42A</b> 150Nm	<b>X43A</b> 160Nm	<b>X52A</b> 250Nm	<b>X53A</b> 250Nm	<b>X62A</b> 410Nm	<b>X63A</b> 410Nm

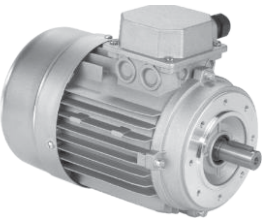









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<b>113C</b> 675Nm	<b>114C</b> 675Nm	<b>133C</b> 1000Nm	<b>134C</b> 1000Nm	<b>X93C</b> 1600Nm	<b>X94C</b> 1650Nm	<b>X103</b> 3000Nm	<b>X104</b> 3000Nm	<b>X113</b> 4500Nm	<b>X114</b> 4600Nm

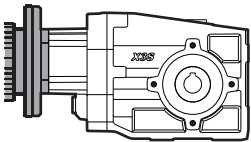
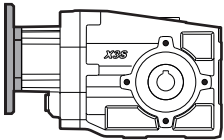
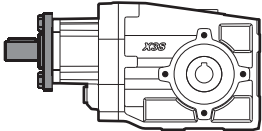
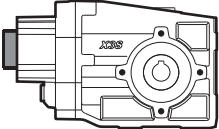
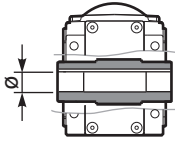
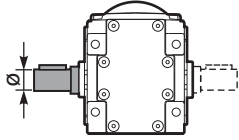
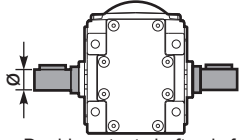
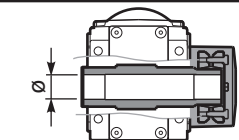
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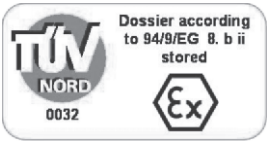
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<b>56A</b> 56B	<b>63A</b> 63B	<b>71A</b> 71B	<b>80A</b> 80B	<b>90S</b> 90L	<b>100LA</b> 100LB	<b>112M</b>	<b>132S</b> 132M	<b>160M</b> 160L	<b>180M</b> 180L

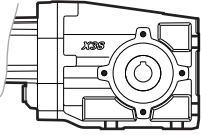
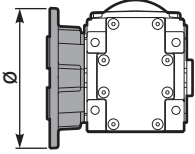


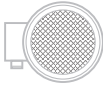
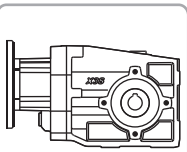
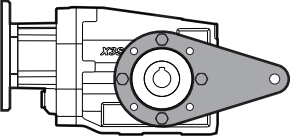

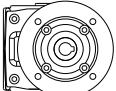
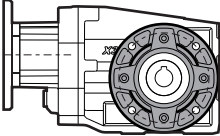

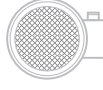

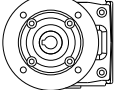
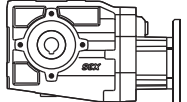
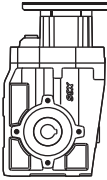
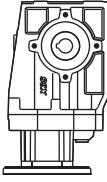
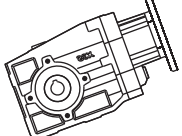
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Type - Tipo - Typ Type - Tipo	Size - Grandezza - Größe Taille - Tomaño	Mounting - Montaggio Montage - Fixation Tipo de montaje	Rapporto - Ratio Untersetzung Reduction Relacion	Output shaft - Albero uscita Ausgangsflansch Arbre de sortie Brida en solida																																																																																				
<b>M</b>	<b>X22S</b>	<b>C</b>	<b>4.83</b>	<b>-A</b>																																																																																				
<p>Helical-bevel gear Riduttori ortogonali</p>  <p>With IEC motor <b>M</b></p>  <p>With motor flange <b>P</b></p>  <p>With male input shaft <b>R</b></p>  <p>Modular base <b>B</b></p> <p>Not available for: X93C, X103, X104, X113, X114.</p>	<p>2 Stages Riduzioni Stufen Trains Etapas</p> <p>3 Stages Riduzioni Stufen Trains Etapas</p> <p><b>Aluminum</b> <b>Alluminio</b> <b>Aluminium</b> <b>Aluminio</b></p> <p><b>X22S</b> <b>X32S</b> <b>X42A</b> <b>X52A</b> <b>X62A</b></p> <p><b>X33S</b> <b>X43A</b> <b>X53A</b> <b>X63A</b></p> <p>3 Stages Riduzioni Stufen Trains Etapas</p> <p>4 Stages Riduzioni Stufen Trains Etapas</p> <p><b>Cast Iron</b> <b>Ghisa</b> <b>Grauguss</b> <b>Fonte</b> <b>Fundicion</b></p> <p><b>113C</b> <b>133C</b> <b>X93C</b> <b>X103</b> <b>X113</b></p> <p><b>114C</b> <b>134C</b> <b>X94C</b> <b>X104</b> <b>X114</b></p>	<p>Hollow output shaft <b>C</b></p>  <p>Single output shaft <b>A</b></p>  <p>Double output shaft only for 113/4C, 133/4C, X93/4C X103/4 and X113/4 <b>B</b></p>  <p>Shrink Disk (only on the DX side) <b>D</b></p> <p>Only on request for Q.ty A richiesta per quantità</p> <p>Stainless steel hub <b>I</b></p> <p><b>Stainless steel hub</b> <b>Mozzo in acciaio Inox</b> <b>Edelstahlhohlwelle</b> <b>Moyeu en acier Inox</b> <b>Nucleo corona de</b> <b>acero Inox</b></p> <p>Only on request for Q.ty A richiesta per quantità</p>	<p>See technical data table</p> <p>Vedi tabella dati tecnici.</p> <p>Technisches Datenblatt beachten</p> <p>Voir Tableau données techniques</p> <p>Ver tabla datos técnicos</p>	<p>→ STANDARD</p> <p>Hollow output shaft</p> <table border="1"> <tr> <td>X22S</td> <td>113C 114C</td> </tr> <tr> <td><b>-A</b> ⇒ <math>\varnothing 18</math></td> <td><b>-F</b> ⇒ <math>\varnothing 40</math></td> </tr> <tr> <td><b>-B</b> ⇒ <math>\varnothing 20</math></td> <td><b>-G</b> ⇒ <math>\varnothing 42</math></td> </tr> <tr> <td>X32S X33S</td> <td>133C 134C</td> </tr> <tr> <td><b>-B</b> ⇒ <math>\varnothing 20</math></td> <td><b>-F</b> ⇒ <math>\varnothing 40</math></td> </tr> <tr> <td><b>-C</b> ⇒ <math>\varnothing 25</math></td> <td><b>-H</b> ⇒ <math>\varnothing 45</math></td> </tr> <tr> <td>X42A X43A</td> <td>X93C X94C</td> </tr> <tr> <td><b>-C</b> ⇒ <math>\varnothing 25</math></td> <td><b>-H</b> ⇒ <math>\varnothing 45</math></td> </tr> <tr> <td><b>-D</b> ⇒ <math>\varnothing 30</math></td> <td><b>-J</b> ⇒ <math>\varnothing 50</math></td> </tr> <tr> <td>X52A X53A</td> <td>X103 X104</td> </tr> <tr> <td><b>-D</b> ⇒ <math>\varnothing 30</math></td> <td><b>-K</b> ⇒ <math>\varnothing 60</math></td> </tr> <tr> <td><b>-E</b> ⇒ <math>\varnothing 35</math></td> <td>X113 X114</td> </tr> <tr> <td>X62A X63A</td> <td><b>-T</b> ⇒ <math>\varnothing 70</math></td> </tr> <tr> <td><b>-E</b> ⇒ <math>\varnothing 35</math></td> <td></td> </tr> <tr> <td><b>-F</b> ⇒ <math>\varnothing 40</math></td> <td></td> </tr> </table> <p>Single and double output shaft</p> <table border="1"> <tr> <td><b>-I</b></td> <td>X22S X32/3S</td> <td>⇒ <math>\varnothing 20</math></td> </tr> <tr> <td><b>-L</b></td> <td>X32/3S X42/3A</td> <td>⇒ <math>\varnothing 25</math></td> </tr> <tr> <td><b>-M</b></td> <td>X52/3A</td> <td>⇒ <math>\varnothing 30</math></td> </tr> <tr> <td><b>-N</b></td> <td>X52/3A X62/3A</td> <td>⇒ <math>\varnothing 35</math></td> </tr> <tr> <td><b>-V</b></td> <td>113/4C</td> <td>⇒ <math>\varnothing 40^*</math></td> </tr> <tr> <td><b>-O</b></td> <td>113/4C</td> <td>⇒ <math>\varnothing 42^*</math></td> </tr> <tr> <td><b>-P</b></td> <td>133/4C</td> <td>⇒ <math>\varnothing 45^*</math></td> </tr> <tr> <td><b>-1</b></td> <td>X93/4C</td> <td>⇒ <math>\varnothing 50^*</math></td> </tr> <tr> <td><b>-3</b></td> <td>X103/4</td> <td>⇒ <math>\varnothing 60^*</math></td> </tr> <tr> <td><b>-5</b></td> <td>X113/4</td> <td>⇒ <math>\varnothing 70^*</math></td> </tr> </table> <p>* Also available double output shaft</p>  <p>Shrink Disk</p> <table border="1"> <tr> <td><b>-U</b></td> <td>X22S X32/3S</td> <td>⇒ <math>\varnothing 20</math></td> </tr> <tr> <td><b>-Q</b></td> <td>X42/3A</td> <td>⇒ <math>\varnothing 30</math></td> </tr> <tr> <td><b>-R</b></td> <td>X52/3A</td> <td>⇒ <math>\varnothing 35</math></td> </tr> <tr> <td><b>-S</b></td> <td>X62/3A 113/4C</td> <td>⇒ <math>\varnothing 40</math></td> </tr> <tr> <td><b>-6</b></td> <td>133/4C</td> <td>⇒ <math>\varnothing 45</math></td> </tr> <tr> <td><b>-7</b></td> <td>X93/4C</td> <td>⇒ <math>\varnothing 50</math></td> </tr> <tr> <td><b>-8</b></td> <td>X103/4</td> <td>⇒ <math>\varnothing 65</math></td> </tr> <tr> <td><b>-9</b></td> <td>X113/4</td> <td>⇒ <math>\varnothing 75</math></td> </tr> </table>	X22S	113C 114C	<b>-A</b> ⇒ $\varnothing 18$	<b>-F</b> ⇒ $\varnothing 40$	<b>-B</b> ⇒ $\varnothing 20$	<b>-G</b> ⇒ $\varnothing 42$	X32S X33S	133C 134C	<b>-B</b> ⇒ $\varnothing 20$	<b>-F</b> ⇒ $\varnothing 40$	<b>-C</b> ⇒ $\varnothing 25$	<b>-H</b> ⇒ $\varnothing 45$	X42A X43A	X93C X94C	<b>-C</b> ⇒ $\varnothing 25$	<b>-H</b> ⇒ $\varnothing 45$	<b>-D</b> ⇒ $\varnothing 30$	<b>-J</b> ⇒ $\varnothing 50$	X52A X53A	X103 X104	<b>-D</b> ⇒ $\varnothing 30$	<b>-K</b> ⇒ $\varnothing 60$	<b>-E</b> ⇒ $\varnothing 35$	X113 X114	X62A X63A	<b>-T</b> ⇒ $\varnothing 70$	<b>-E</b> ⇒ $\varnothing 35$		<b>-F</b> ⇒ $\varnothing 40$		<b>-I</b>	X22S X32/3S	⇒ $\varnothing 20$	<b>-L</b>	X32/3S X42/3A	⇒ $\varnothing 25$	<b>-M</b>	X52/3A	⇒ $\varnothing 30$	<b>-N</b>	X52/3A X62/3A	⇒ $\varnothing 35$	<b>-V</b>	113/4C	⇒ $\varnothing 40^*$	<b>-O</b>	113/4C	⇒ $\varnothing 42^*$	<b>-P</b>	133/4C	⇒ $\varnothing 45^*$	<b>-1</b>	X93/4C	⇒ $\varnothing 50^*$	<b>-3</b>	X103/4	⇒ $\varnothing 60^*$	<b>-5</b>	X113/4	⇒ $\varnothing 70^*$	<b>-U</b>	X22S X32/3S	⇒ $\varnothing 20$	<b>-Q</b>	X42/3A	⇒ $\varnothing 30$	<b>-R</b>	X52/3A	⇒ $\varnothing 35$	<b>-S</b>	X62/3A 113/4C	⇒ $\varnothing 40$	<b>-6</b>	133/4C	⇒ $\varnothing 45$	<b>-7</b>	X93/4C	⇒ $\varnothing 50$	<b>-8</b>	X103/4	⇒ $\varnothing 65$	<b>-9</b>	X113/4	⇒ $\varnothing 75$
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<b>-R</b>	X52/3A	⇒ $\varnothing 35$																																																																																						
<b>-S</b>	X62/3A 113/4C	⇒ $\varnothing 40$																																																																																						
<b>-6</b>	133/4C	⇒ $\varnothing 45$																																																																																						
<b>-7</b>	X93/4C	⇒ $\varnothing 50$																																																																																						
<b>-8</b>	X103/4	⇒ $\varnothing 65$																																																																																						
<b>-9</b>	X113/4	⇒ $\varnothing 75$																																																																																						



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	Output flange Flangia di uscita Ausgangs Flansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Terminal box position Posizione morsettieria Klemmkastenlage Position boîte à bornes Posición caja de bornes	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje
<b>BR</b>	<b>N</b>	<b>-O</b>	<b>B</b>	<b>B3</b>
 <p><b>FB</b> Forma base Universal</p>	 <p><b>N</b> Senza flangia Without flange X22S</p>	<p><b>Flange Flangia</b> </p> <p><b>B5</b></p> <p><b>-A</b>=56 (ø120) <b>-B</b>=63 (ø140) <b>-C</b>=71 (ø160) <b>-D</b>=80 (ø200) <b>-E</b>=90 (ø200) <b>-F</b>=100÷112 (ø250) <b>-G</b>=132 (ø300) <b>-H</b>=160 (ø350) <b>-I</b>=180 (ø350) <b>-L</b>=200 (ø400) <b>CA</b>=225 (ø450)</p> <p><b>Without flange Senza flangia</b> </p> <p>X22S X33S X43A</p> <p><b>-Z</b> ⇨ ø9 (56B5) <b>-0</b> ⇨ ø11 (63B5) <b>-1</b> ⇨ ø14 (71B5)</p> <p>X32S X42A X53A X63A 114C 134C</p> <p><b>-1</b> ⇨ ø14 (71B5) <b>-2</b> ⇨ ø19 (80B5) <b>-3</b> ⇨ ø24 (90B5)</p> <p>X52A X62A 113C 133C X94C</p> <p><b>-2</b> ⇨ ø19 (80B5) <b>-3</b> ⇨ ø24 (90B5) <b>-4</b> ⇨ ø28 (100B5)</p>	 <p><b>A</b></p>	 <p><b>B3</b> STANDARD</p>
 <p><b>BR</b> Braccio di reazione Reaction arm</p>	<p><b>0</b> ⇨ ø110 <b>1</b> ⇨ ø120</p> <p>X32S X33S</p> <p><b>1</b> ⇨ ø120 <b>2</b> ⇨ ø160</p> <p>X42-3A X52-3A X62-3A</p> <p><b>2</b> ⇨ ø160 <b>3</b> ⇨ ø200 <b>4</b> ⇨ ø250</p> <p>113C 114C X93C X94C</p> <p><b>C</b> ⇨ ø280 <b>L</b> ⇨ ø280</p> <p>133C 134C</p> <p><b>C</b> ⇨ ø320</p> <p>X103 X104</p> <p><b>6</b> ⇨ ø350</p> <p>X113 X114</p> <p><b>7</b> ⇨ ø450</p>	<p><b>B14</b></p> <p><b>-O</b>=56 (ø80) <b>-P</b>=63 (ø90) <b>-Q</b>=71 (ø105) <b>-R</b>=80 (ø120) <b>-T</b>=90 (ø140) <b>-U</b>=100÷112 (ø160) <b>-V</b>=132 (ø200)</p>	 <p><b>B</b> STANDARD</p>	 <p><b>B6</b></p>
 <p><b>-F</b> Flangia uscita output flange</p>	<p>X42-3A X52-3A X62-3A</p> <p><b>2</b> ⇨ ø160 <b>3</b> ⇨ ø200 <b>4</b> ⇨ ø250</p> <p>113C 114C X93C X94C</p> <p><b>C</b> ⇨ ø280 <b>L</b> ⇨ ø280</p> <p>133C 134C</p> <p><b>C</b> ⇨ ø320</p> <p>X103 X104</p> <p><b>6</b> ⇨ ø350</p> <p>X113 X114</p> <p><b>7</b> ⇨ ø450</p>	<p><b>Type R Tipo R</b> </p> <p>X22S X33S X43A</p> <p><b>-1</b> ⇨ ø14</p> <p>X32S X42A X53A X63A 114C 134C</p> <p><b>-2</b> ⇨ ø19</p> <p>X52A X62A 113C 133C X94C</p> <p><b>-3</b> ⇨ ø24</p> <p>X93C X104 X114</p> <p><b>-4</b> ⇨ ø28</p> <p>X103 X113</p> <p><b>-6</b> ⇨ ø42</p>	 <p><b>C</b></p>  <p><b>D</b></p>	 <p><b>B7</b></p>  <p><b>B8</b></p>
				 <p><b>V5</b></p>  <p><b>V6</b></p>  <p><b>V8</b></p> <p>Specify only for vertical positions Specificare solo per posizione verticale</p>

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

Lifting / sollevamento / hubantriebe / levage / elevación

$$P [KW] = \frac{M [Kg] \cdot g [9.81] \cdot v [m / s]}{1000}$$

Rotation / rotazione / drehung / rotation / rotacion

$$P [KW] = \frac{M [Nm] \cdot n [rpm]}{9550}$$

Linear movement / traslazione / linearbewegung / translation / translacion

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

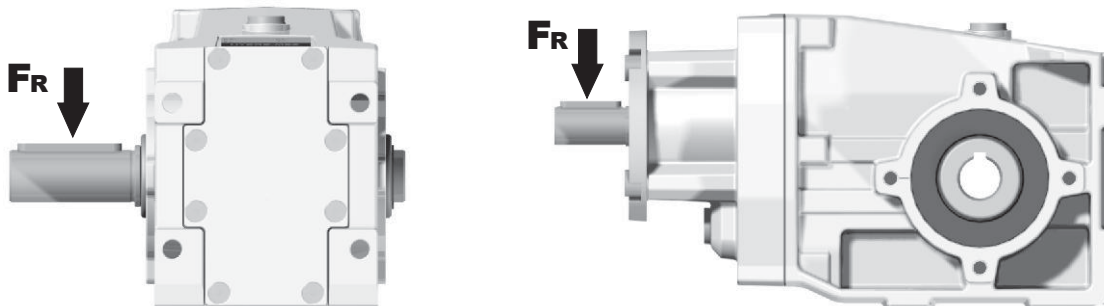
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

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

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

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



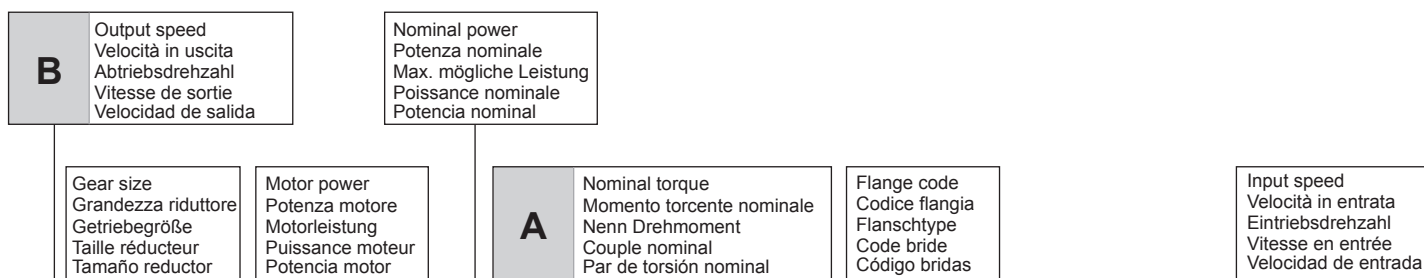
$$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$$

$$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$$

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

How to select a gearbox / Come selezionare un riduttore / Wie wählt man ein Getriebe  
Comment sélectionner un réducteur / Cómo seleccionar un reductor



**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<sub>1</sub>) = 1400 min<sup>-1</sup>

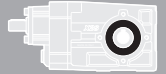
Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code 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



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	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	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

<b>D</b>	Motor flange available Flange disponibili Erhältliche Motorflansche Brides disponibles Bridas disponibles	
<b>B)</b>	Mounting with reduction ring Montaggio con boccia di riduzione Reduzierhülsen Montage avec douille de réduction Montaje con casquillo de reducción	
<b>C)</b>	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-socket Position trous bride/barrette à bornes moteur Posición agujeros brida / base motor	
<b>B)</b>	Available without reduction bushes Disponibile anche senza boccia Auch ohne Reduzierbuchse verfügbar Disponible aussi sans douille de réduction Disponible también sin casquillo	

<b>A</b>	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>B</b>	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	Sélectionner la vitesse de sortie	Seleccionar la velocidad de salida
<b>C</b>	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
<b>D</b>	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<sub>1</sub>) = 1400 min<sup>-1</sup>**

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

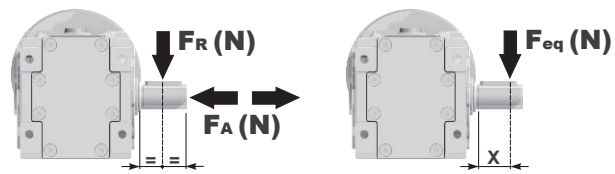
For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

## RADIAL AND AXIAL LOADS

### Output shaft

Albero di uscita

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

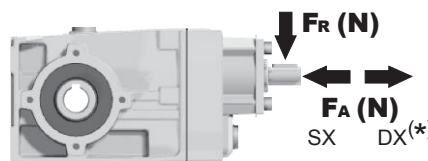


n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR
400	360	1800	100	440	2200	25	440	2200
250	380	1900	75	440	2200	15	440	2200
150	420	2100	50	440	2200			

**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 <sub>1</sub> [min <sup>-1</sup> ]	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

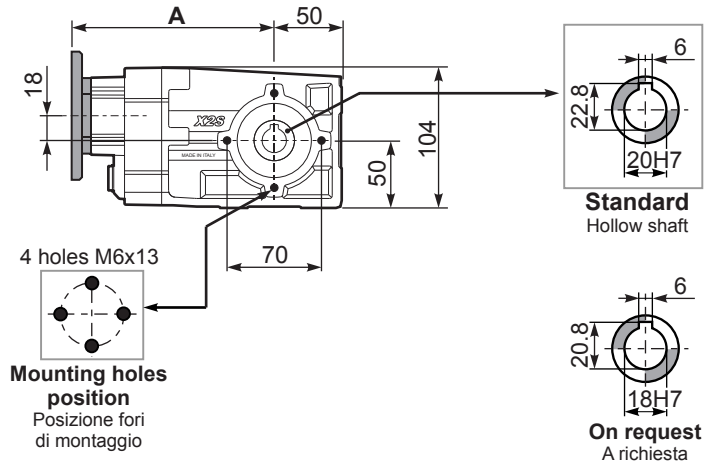
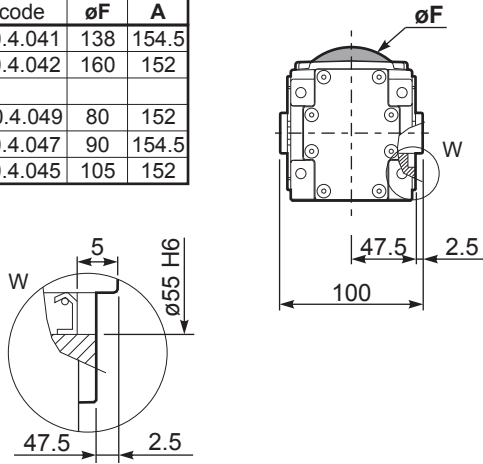
**tab. 2**



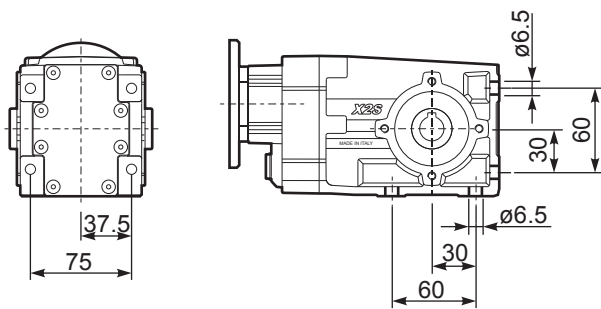
**P**X22SC... Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **3.70 kg**

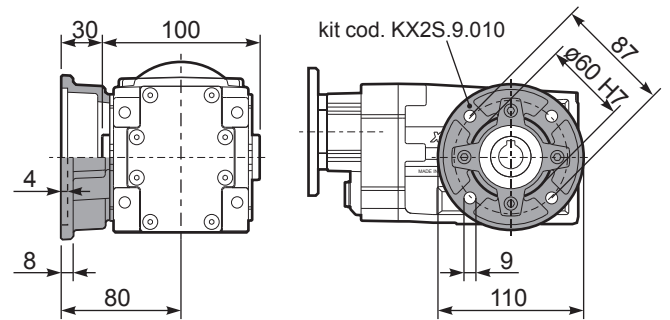
M. flanges	Kit code	øF	A
<b>63B5</b>	K050.4.041	138	154.5
<b>71B5</b>	K050.4.042	160	152
<b>56B14</b>	KC40.4.049	80	152
<b>63B14</b>	K050.4.047	90	154.5
<b>71B14</b>	K050.4.045	105	152



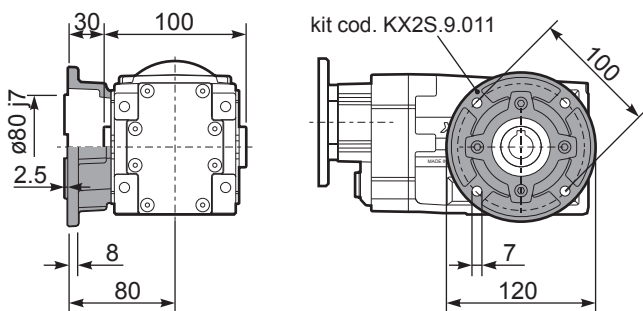
PX22S..-**N**.. Feet  
Piedini



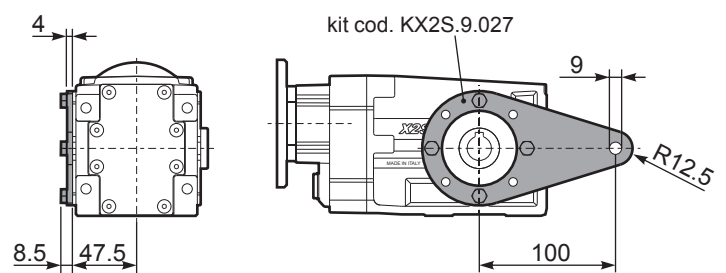
PX22S-**F0**.. Output flange  
Flangia uscita



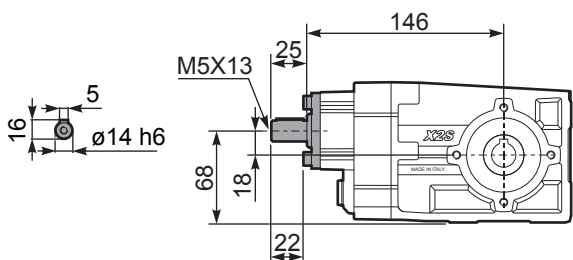
PX22S-**F1**.. Output flange  
Flangia uscita



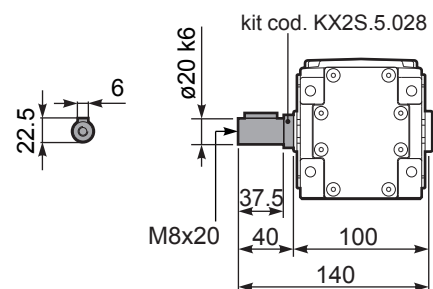
PX22S-**BR**.. Reaction Arm  
Braccio di reazione

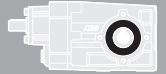


**R**X22S.. Input shaft  
Albero in entrata



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





**QUICK SELECTION / Selezione veloce** The dynamic efficiency is **0.96** for all ratios **input speed (n<sub>1</sub>) = 1400 min<sup>-1</sup>**

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

Motor Flanges Available Flange Motore Disponibili    
  B) Supplied with Reduction Bushing Fornito con Bussola di Riduzione    
 B) Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione    
  C) Motor Flange Holes Position Posizione Fori Flangia Motore

**EN** Unit **X32S** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **X32S** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **X32S** ist mit synthetischem Öl gefüllt und ist lebensdauer geschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **X32S** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **X32S** se suministra, lubricado de por vida con aceite sintético y no requieren 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.

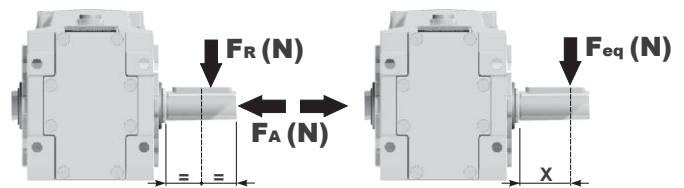
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio						
0.40 LT	0.60 LT	0.40 LT	0.60 LT	0.85 LT	0.60 LT	Ask	
AGIP Telium VSF 320				SHELL Omala S4 WE 320			

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

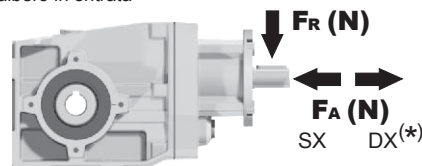
$$F_{eq} = F_R \cdot \frac{47.5}{X+28.5}$$



n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR
250	400	2000	75	560	2800	15	560	2800
150	450	2250	50	560	2800			
100	500	2500	25	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 <sub>1</sub> [min <sup>-1</sup> ]	FA	FR
1400	240	1200
900	280	1400
500	340	1700

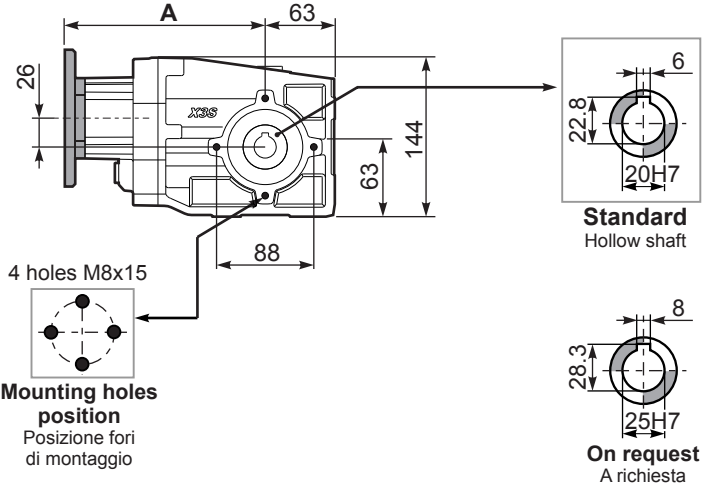
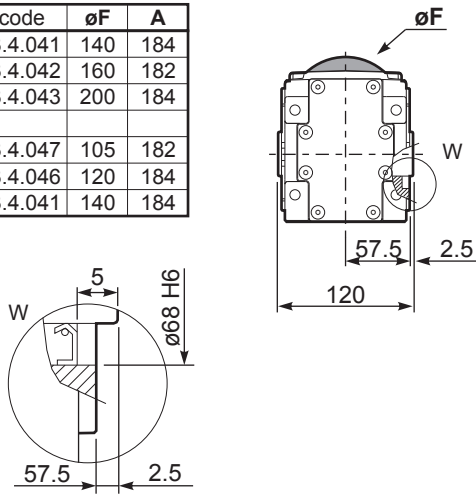
**\*Strong axial loads in the DX direction are not allowed.**  
Non sono consentiti forti carichi assiali con direzione DX

**tab. 2**

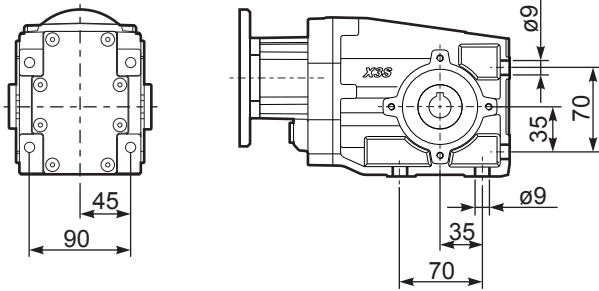
**PX32SC...** Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **6.30 kg**

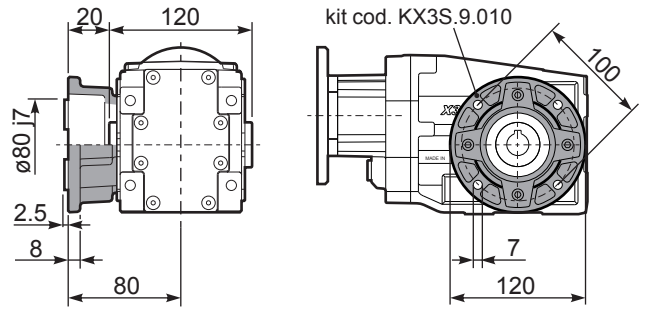
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	184
71B5	K063.4.042	160	182
80/90B5	K063.4.043	200	184
71B14	K063.4.047	105	182
80B14	K063.4.046	120	184
90B14	K063.4.041	140	184



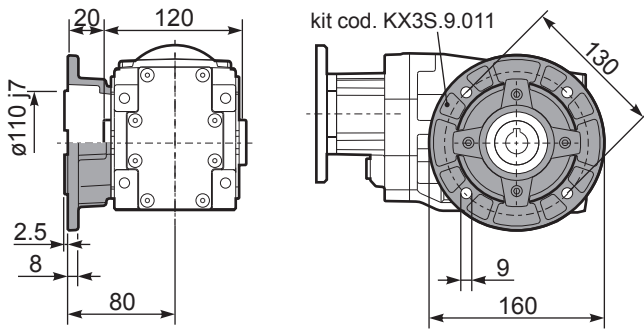
**PX32S..-N..** Feet  
Piedini



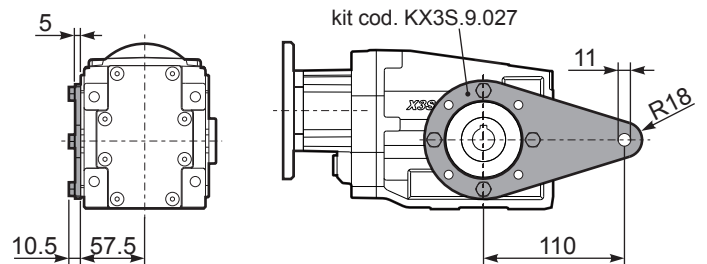
**PX32S..-F1..** Output flange  
Flangia uscita



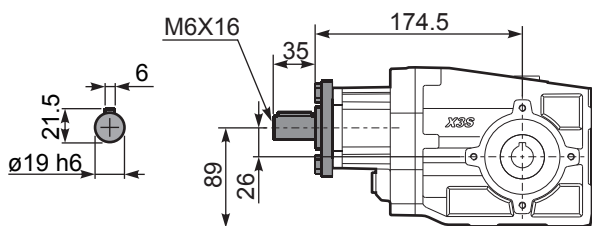
**PX32S..-F2..** Output flange  
Flangia uscita



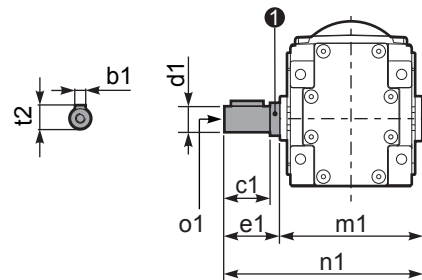
**PX32SBR..** Reaction Arm  
Braccio di reazione



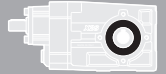
**RX32S...** Input shaft  
Albero in entrata



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



d1	b1	c1	e1	m1	n1	t2	o1	1	kit code
ø20 <sup>-0.005/-0.020</sup>	6	37.5	40	120	140	22.5	M8x20		KX2S.5.028
ø25 <sup>-0.005/-0.020</sup>	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<sub>1</sub>) = 1400 min<sup>-1</sup>**

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

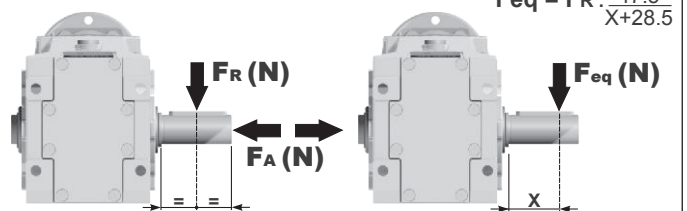
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
0.70 LT	0.65 LT	0.40 LT	0.65 LT	0.95 LT	0.65 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

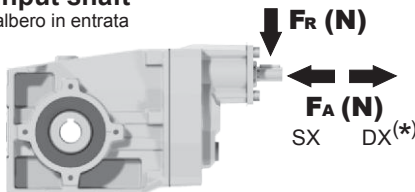


n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR
250	400	2000	75	560	2800	15	560	2800
150	450	2250	50	560	2800			
100	500	2500	25	560	2800			

**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 <sub>1</sub> [min <sup>-1</sup> ]	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

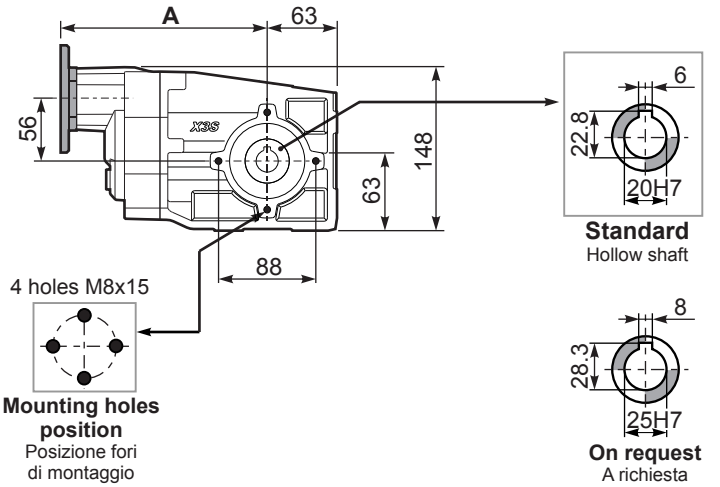
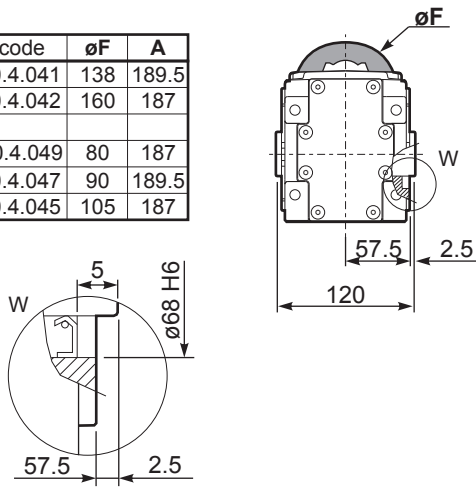
tab. 2



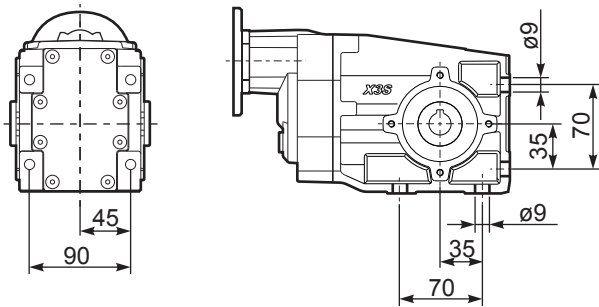
**PX33SC...** Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **6.55 kg**

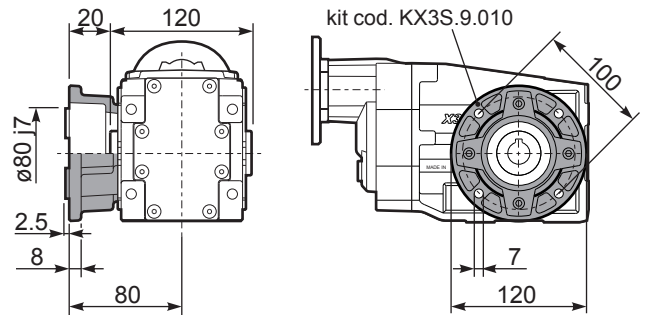
M. flanges	Kit code	øF	A
<b>63B5</b>	K050.4.041	138	189.5
<b>71B5</b>	K050.4.042	160	187
<b>56B14</b>	KC40.4.049	80	187
<b>63B14</b>	K050.4.047	90	189.5
<b>71B14</b>	K050.4.045	105	187



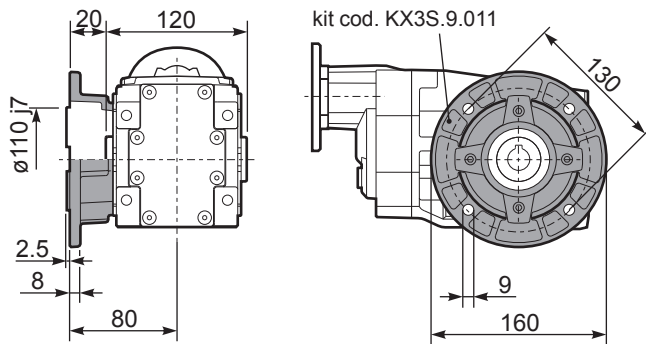
**PX33S-N..** Feet  
Piedi



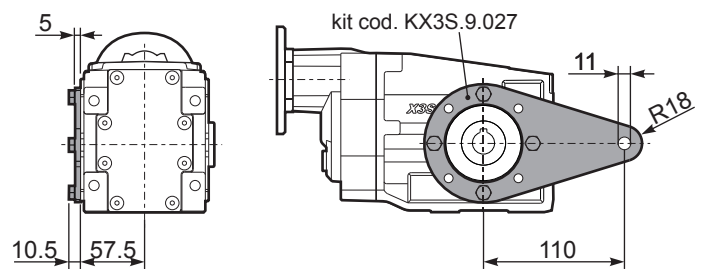
**PX33S-F1..** Output flange  
Flangia uscita



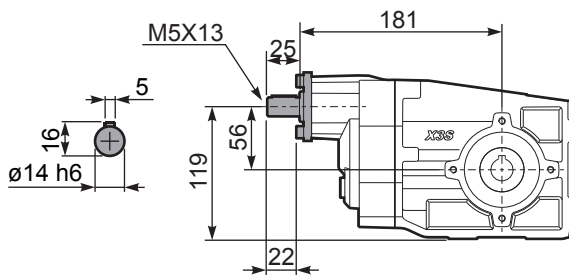
**PX33S-F2..** Output flange  
Flangia uscita



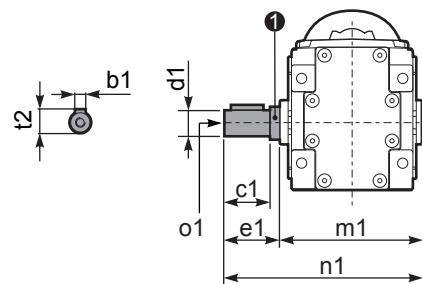
**PX33SBR..** Reaction Arm  
Braccio di reazione



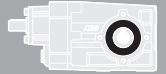
**RX33S...** Input shaft  
Albero in entrata



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



d1	b1	c1	e1	m1	n1	t2	o1	① kit code
ø20 <sup>-0.005/-0.020</sup>	6	37.5	40	120	140	22.5	M8x20	KX2S.5.028
ø25 <sup>-0.005/-0.020</sup>	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<sub>1</sub>) = 1400 min<sup>-1</sup>**

Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code
							-B	-C	-D	-E	-F	-Q	-R	-T	-U		
							63	71	80	90	100	112	71	80	90		
192	<b>7.29</b>	2.2	104	0.9	<b>2.0</b>	<b>95</b>	B					C	C			2811	01
125	<b>11.20</b>	2.2	159	0.9	<b>2.0</b>	<b>150</b>	B					C	C			288	02
106	<b>13.18</b>	1.5	129	1.2	<b>1.7</b>	<b>150</b>	B					C	C			1911	03
92	<b>15.27</b>	1.1	109	1.4	<b>1.5</b>	<b>150</b>	B					C	C			1711	04
78	<b>17.93</b>	1.1	128	1.2	<b>1.3</b>	<b>150</b>	B					C	C			1511	05
69	<b>20.25</b>	1.1	145	1.0	<b>1.1</b>	<b>150</b>	B					C	C			198	06
65	<b>21.40</b>	1.1	153	1.0	<b>1.1</b>	<b>150</b>	B					C	C			1311	07
60	<b>23.47</b>	0.75	115	1.3	<b>0.98</b>	<b>150</b>	B					C	C			178	08
51	<b>27.55</b>	0.75	135	1.1	<b>0.83</b>	<b>150</b>	B					C	C			158	09
47.9	<b>29.21</b>	0.75	143	1.0	<b>0.78</b>	<b>150</b>	B					C	C			1011	10
42.6	<b>32.88</b>	0.75	161	0.9	<b>0.70</b>	<b>150</b>	B					C	C			138	11
36.7	<b>38.12</b>	0.55	138	1.1	<b>0.60</b>	<b>150</b>	B					C	C			911	12
31.2	<b>44.89</b>	0.55	163	0.9	<b>0.51</b>	<b>150</b>	B					C	C			108	13
27.8	<b>50.34</b>	0.37	122	1.1	<b>0.40</b>	<b>131</b>	B					C	C			711	14
23.9	<b>58.58</b>	0.37	142	1.1	<b>0.39</b>	<b>150</b>	B					C	C			98	15
18.1	<b>77.36</b>	0.25	126	1.2	<b>0.30</b>	<b>150</b>	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 requieren 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.

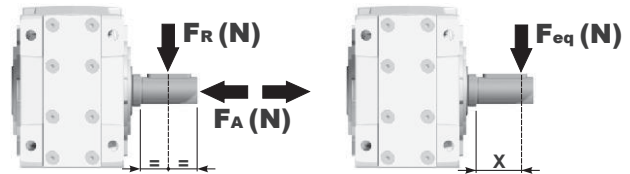
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
0.60 LT	0.75 LT	0.50 LT	0.70 LT	1.10 LT	0.60 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

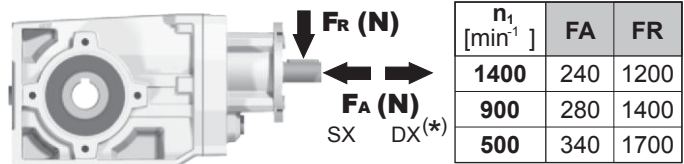
$$F_{eq} = F_R \cdot \frac{54}{X+28}$$



n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR
250	500	2500	75	800	4000	15	960	4800
150	600	3000	50	960	4800			
100	700	3500	25	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 <sub>1</sub> [min <sup>-1</sup> ]	FA	FR
1400	240	1200
900	280	1400
500	340	1700

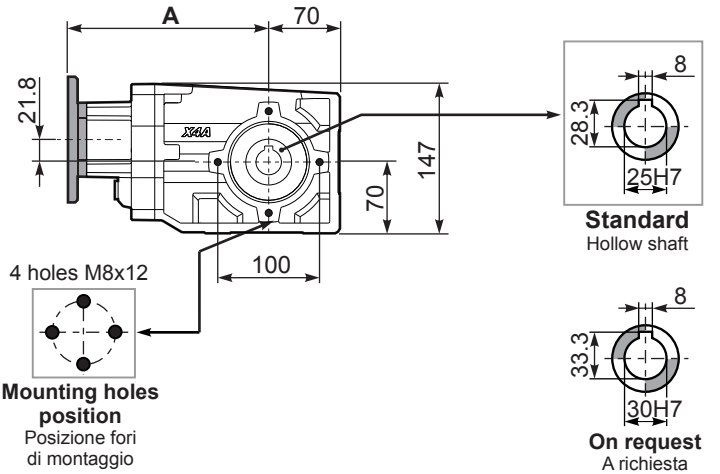
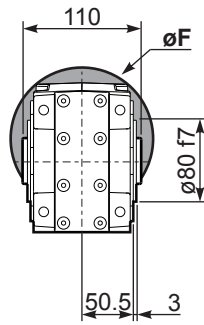
**\*Strong axial loads in the DX direction are not allowed.**  
Non sono consentiti forti carichi assiali con direzione DX

**tab. 2**

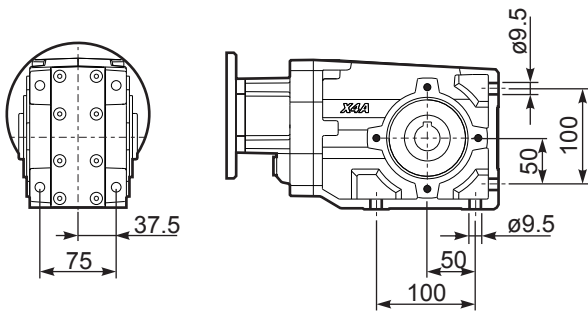
**PX42AC...** Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **7.82 kg**

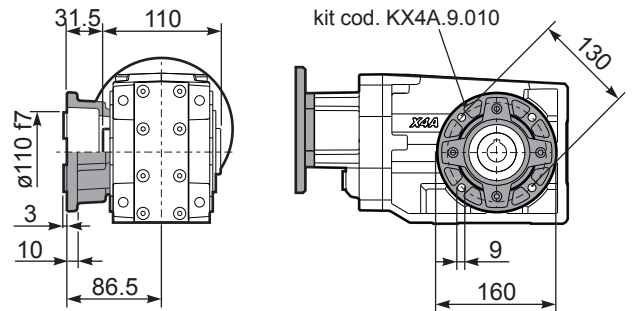
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	199.5
71B5	K063.4.042	160	197.5
80/90B5	K063.4.043	200	199.5
100/112B5	KC40.4.043	250	214.3
71B14	K063.4.047	105	197.5
80B14	K063.4.046	120	199.5
90B14	K063.4.041	140	199.5
100/112B14	KC40.4.041	160	214.3



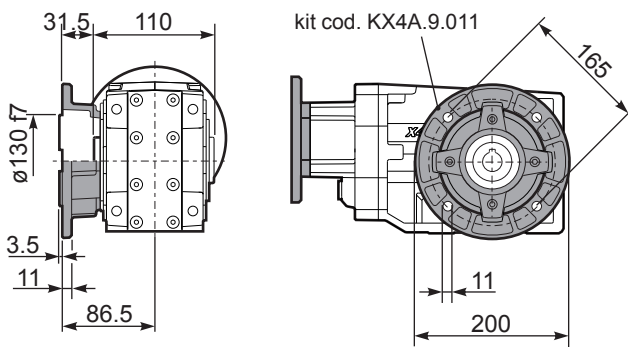
**PX42A-N..** Feet  
Piedini



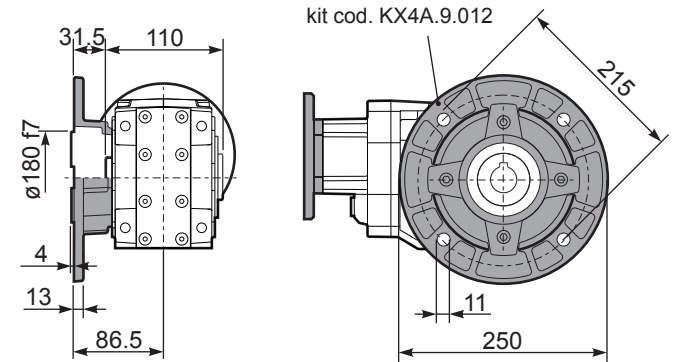
**PX42A-F2..** Output flange  
Flangia uscita



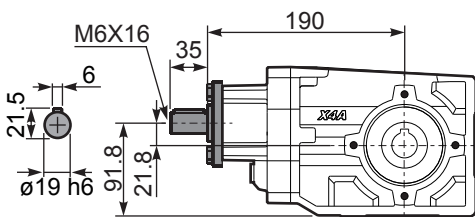
**PX42A-F3..** Output flange  
Flangia uscita



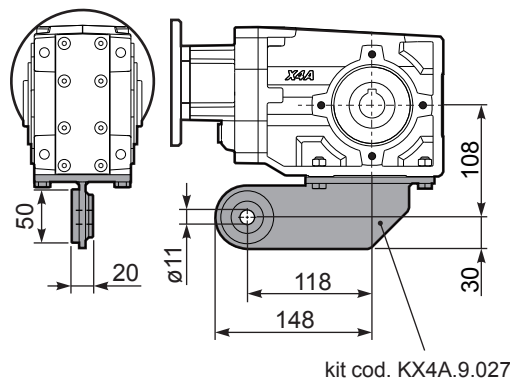
**PX42A-F4..** Output flange  
Flangia uscita



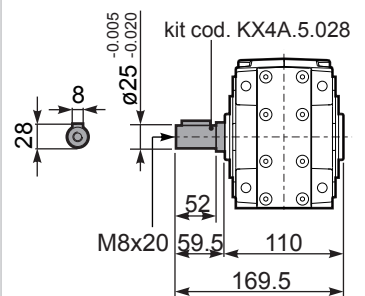
**RX42A...** Input shaft  
Albero in entrata

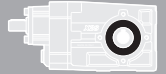


**PX42ABR..** Reaction Arm  
Braccio di reazione



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





**QUICK SELECTION / Selezione veloce** The dynamic efficiency is **0.94** for all ratios **input speed (n<sub>1</sub>) = 1400 min<sup>-1</sup>**

Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-O	-P	-Q		
							63	71	56	63	71		
27.8	<b>50.35</b>	0.37	119	1.3	<b>0.46</b>	<b>150</b>			C	C		171311	01
25.4	<b>55.22</b>	0.37	131	1.1	<b>0.42</b>	<b>150</b>			C	C		17178	02
23.4	<b>59.92</b>	0.37	142	1.1	<b>0.39</b>	<b>150</b>			C	C		151311	03
21.3	<b>65.72</b>	0.37	156	1.0	<b>0.36</b>	<b>150</b>			C	C		15178	04
19.5	<b>71.78</b>	0.25	115	1.3	<b>0.33</b>	<b>150</b>			C	C		101711	05
17.6	<b>79.44</b>	0.25	127	1.2	<b>0.29</b>	<b>150</b>			C	C		13178	06
15.2	<b>92.08</b>	0.25	147	1.0	<b>0.25</b>	<b>150</b>			C	C		15138	07
14.7	<b>95.03</b>	0.25	152	1.0	<b>0.25</b>	<b>150</b>			C	C		91711	08
11.1	<b>126.55</b>	0.18	155	1.0	<b>0.20</b>	<b>160</b>			C	C		71711	09
10.5	<b>133.15</b>	0.18	163	1.0	<b>0.19</b>	<b>160</b>			C	C		91311	10
9.3	<b>150.18</b>	0.12	119	1.3	<b>0.17</b>	<b>160</b>			C	C		61711	11
7.9	<b>177.30</b>	0.12	140	1.1	<b>0.14</b>	<b>160</b>			C	C		71311	12
6.7	<b>210.42</b>	0.09	133	1.2	<b>0.12</b>	<b>160</b>			C	C		61311	13
6.1	<b>230.79</b>	0.09	146	1.1	<b>0.11</b>	<b>160</b>			C	C		6178	14
5.1	<b>272.47</b>	0.06	113	1.4	<b>0.09</b>	<b>160</b>			C	C		7138	15
4.3	<b>323.37</b>	0.06	134	1.2	<b>0.08</b>	<b>160</b>			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.

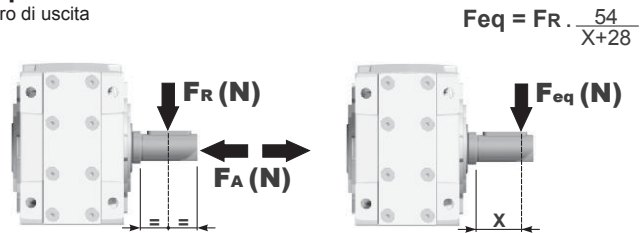
**E** El reductor tamaño **X43A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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

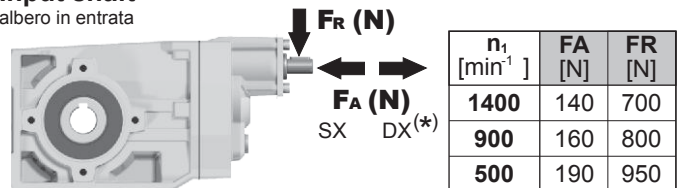
**Output shaft**  
Albero di uscita



n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR
250	500	2500	75	800	4000	15	960	4800
150	600	3000	50	960	4800			
100	700	3500	25	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



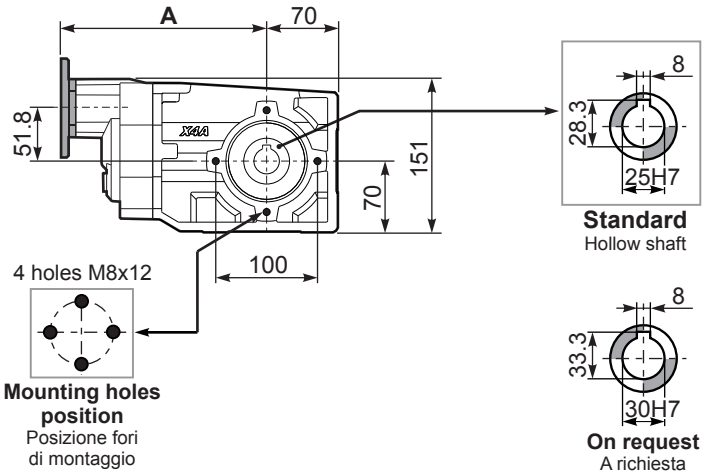
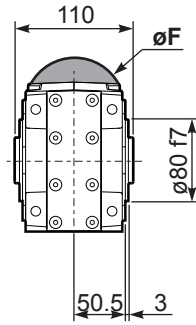
**\*Strong axial loads in the DX direction are not allowed.**  
Non sono consentiti forti carichi assiali con direzione DX



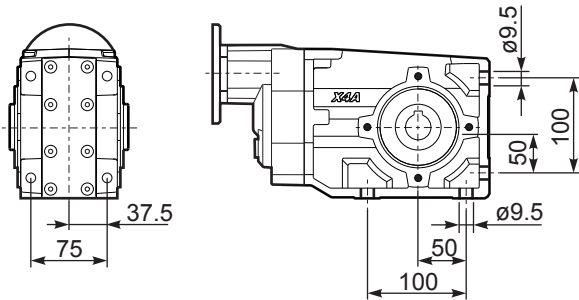
**PX43AC...** Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **7.93 kg**

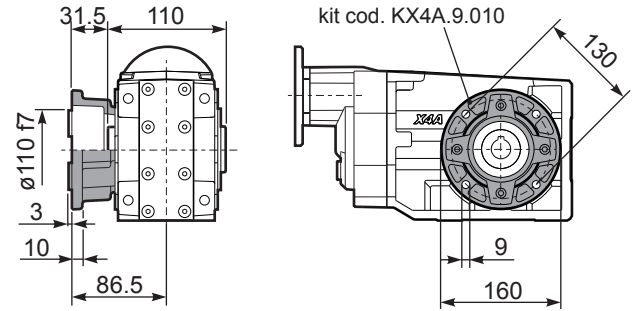
M. flanges	Kit code	øF	A
<b>63B5</b>	K050.4.041	138	205
<b>71B5</b>	K050.4.042	160	202.5
<b>56B14</b>	KC40.4.049	80	202.5
<b>63B14</b>	K050.4.047	90	205
<b>71B14</b>	K050.4.045	105	202.5



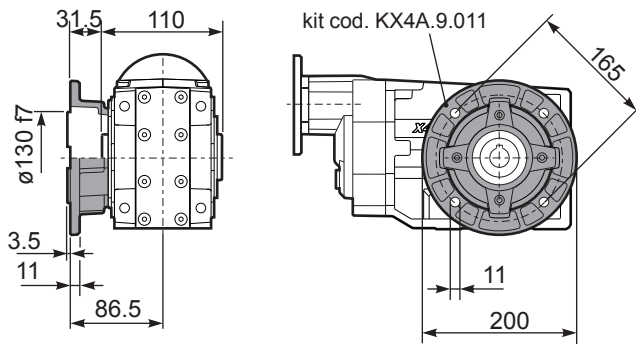
**PX43A-N..** Feet  
Piedini



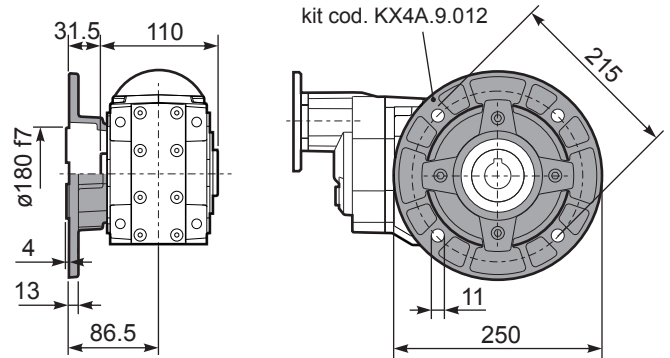
**PX43A-F2..** Output flange  
Flangia uscita



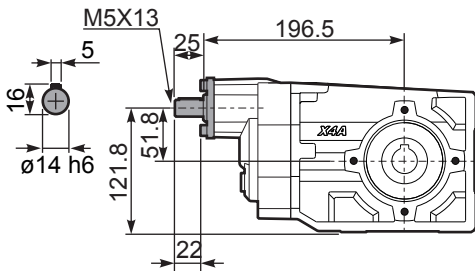
**PX43A-F3..** Output flange  
Flangia uscita



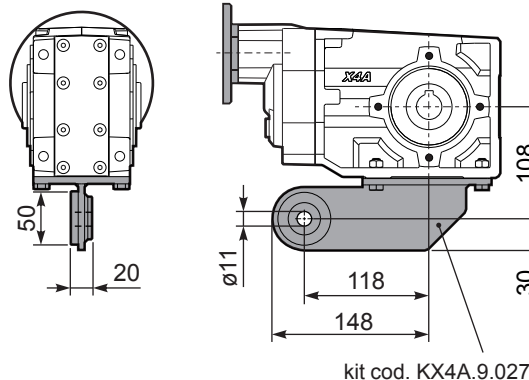
**PX43A-F4..** Output flange  
Flangia uscita



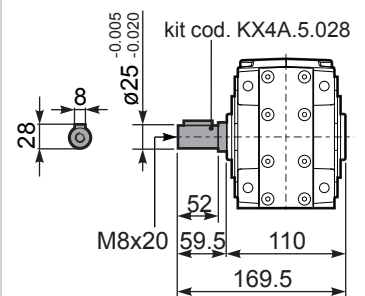
**RX43A...** Input shaft  
Albero in entrata

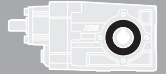


**PX43ABR..** Reaction Arm  
Braccio di reazione



**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<sup>-1</sup>

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	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				Available B14 motor flanges			Output Shaft 	Ratios code
							-C	-D	-E	-F	-R	-T	-U		
							71	80	90	100 112	80	90	100 112		
232	<b>6.03</b>	3	116	1.2	<b>3.4</b>	<b>135</b>	B							3011	01
151	<b>9.26</b>	3	179	0.9	<b>2.6</b>	<b>155</b>	B							308	02
123	<b>11.36</b>	3	219	1.0	<b>3.1</b>	<b>230</b>	B							2011	03
91	<b>15.36</b>	2.2	218	1.1	<b>2.5</b>	<b>250</b>	B							1611	04
80	<b>17.46</b>	2.2	248	1.0	<b>2.2</b>	<b>250</b>	B							208	05
70	<b>19.97</b>	2.2	284	0.9	<b>1.9</b>	<b>250</b>	B							1311	06
59	<b>23.60</b>	1.5	231	1.1	<b>1.6</b>	<b>250</b>	B							168	07
57	<b>24.45</b>	1.5	239	1.0	<b>1.6</b>	<b>250</b>	B							1111	08
45.6	<b>30.69</b>	1.1	220	1.1	<b>1.2</b>	<b>250</b>	B							138	09
39.6	<b>35.35</b>	1.1	253	1.0	<b>1.1</b>	<b>250</b>	B							811	10
37.3	<b>37.57</b>	1.1	269	0.9	<b>1.0</b>	<b>250</b>	B							118	11
28.8	<b>48.68</b>	0.75	239	1.0	<b>0.78</b>	<b>250</b>	B							611	12
25.8	<b>54.33</b>	0.75	267	0.9	<b>0.70</b>	<b>250</b>	B							88	13
18.7	<b>74.81</b>	0.37	181	1.2	<b>0.43</b>	<b>210</b>	B							68	14

**A) Motor Flanges Available**  
Flange Motore Disponibili

**B) Supplied with Reduction Bushing**  
Fornito con Bussola di 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 requieren 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						
<b>B3</b>	<b>B6</b>	<b>B7</b>	<b>B8</b>	<b>V5</b>	<b>V6</b>	<b>V8</b>	<b>V8</b>
0.90 LT	1.50LT	0.75 LT	1.40 LT	1.95 LT	1.15 LT	Ask	Ask
<b>AGIP</b> Telium VSF 320				<b>SHELL</b> Omala S4 WE 320			

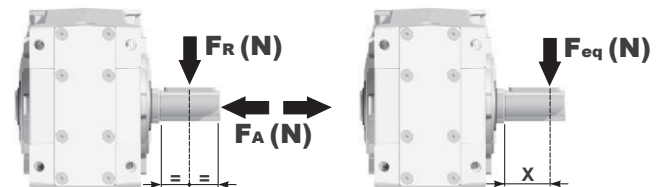
For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

#### RADIAL AND AXIAL LOADS

##### Output shaft

Albero di uscita

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

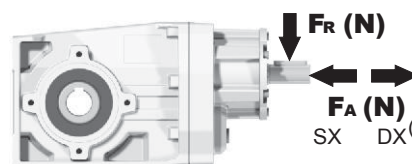


$n_2$ [min <sup>-1</sup> ]	FA	FR	$n_2$ [min <sup>-1</sup> ]	FA	FR	$n_2$ [min <sup>-1</sup> ]	FA	FR
<b>250</b>	600	3000	<b>75</b>	820	4100	<b>15</b>	1660	8300
<b>150</b>	700	3500	<b>50</b>	960	4800			
<b>100</b>	800	4000	<b>25</b>	1350	6750			

**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 <sup>-1</sup> ]	FA	FR
<b>1400</b>	450	2250
<b>900</b>	500	2500
<b>500</b>	600	3000

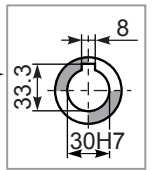
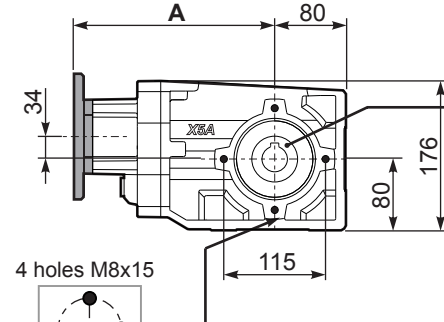
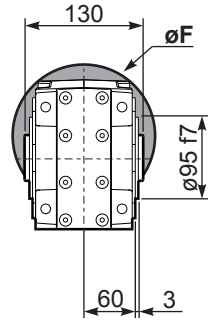
**\*Strong axial loads in the DX direction are not allowed.**  
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

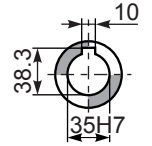
**PX52AC...** Basic Gearbox  
Riduttore base

Gearbox weight **12.80 kg**  
peso riduttore

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



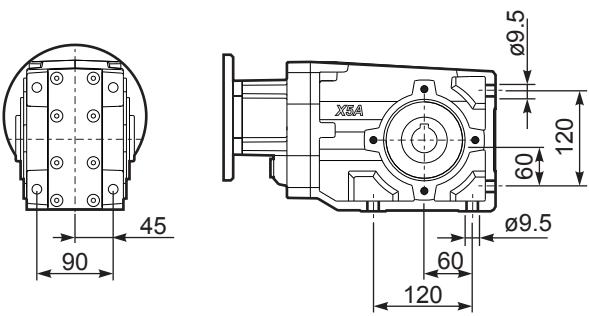
**Standard**  
Hollow shaft



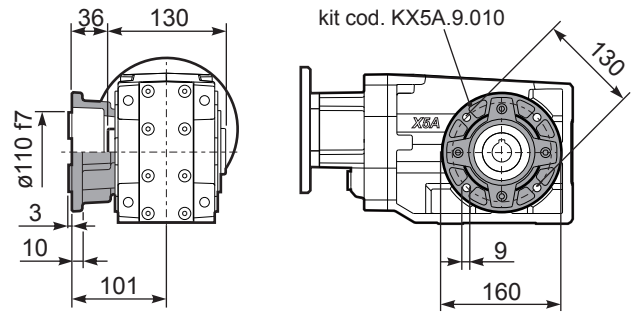
**On request**  
A richiesta

**Mounting holes position**  
Posizione fori di montaggio

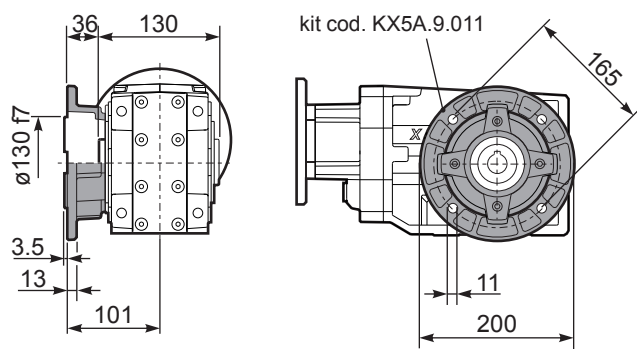
**PX52A-N..** Feet  
Piedini



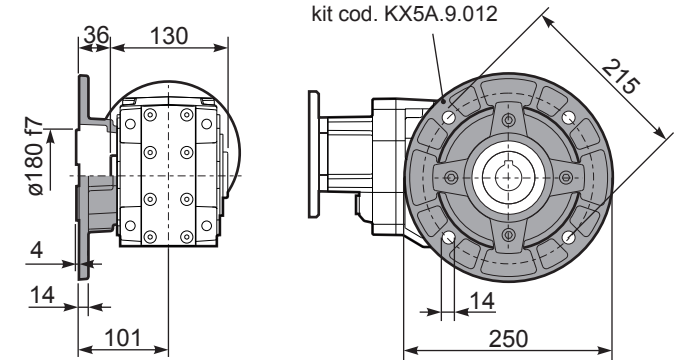
**PX52A-F2..** Output flange  
Flangia uscita



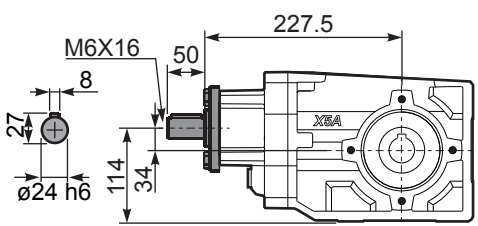
**PX52A-F3..** Output flange  
Flangia uscita



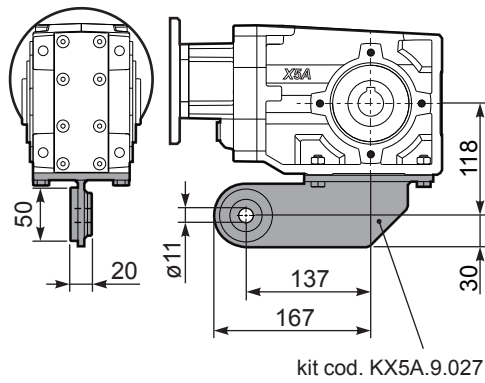
**PX52A-F4..** Output flange  
Flangia uscita



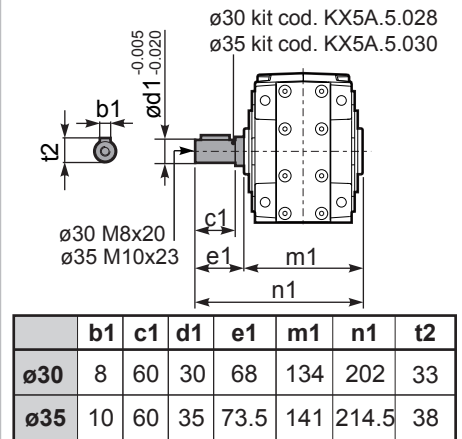
**RX52A...** Input shaft  
Albero in entrata



**PX52ABR..** Reaction Arm  
Braccio di reazione



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





**QUICK SELECTION / Selezione veloce** The dynamic efficiency is **0.94** for all ratios **input speed (n<sub>1</sub>) = 1400 min<sup>-1</sup>**

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

**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 requieren 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.

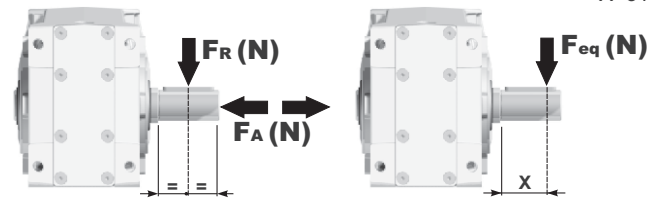
Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
1.30 LT	1.55 LT	0.85 LT	1.45 LT	2.10 LT	1.25 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

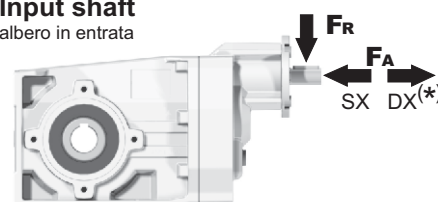
$$F_{eq} = F_R \cdot \frac{61.5}{X+31}$$



n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR
250	600	3000	75	820	4100	15	1660	8300
150	700	3500	50	960	4800			
100	800	4000	25	1350	6750			

**F<sub>R</sub>** 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 <sub>1</sub> [min <sup>-1</sup> ]	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

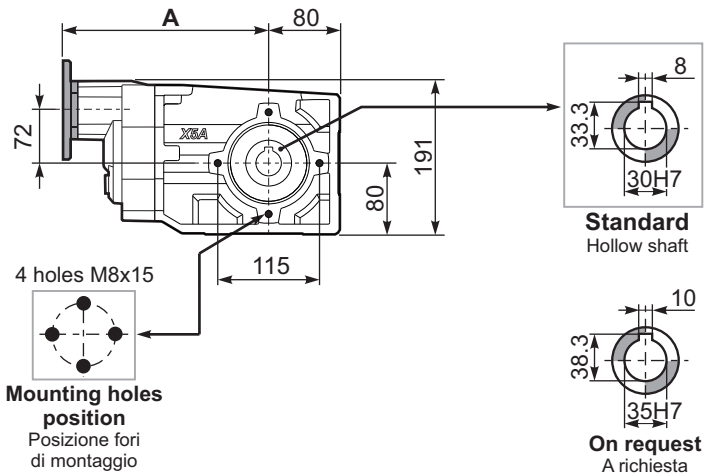
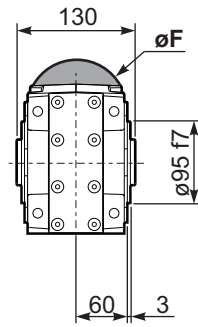
**tab. 2**



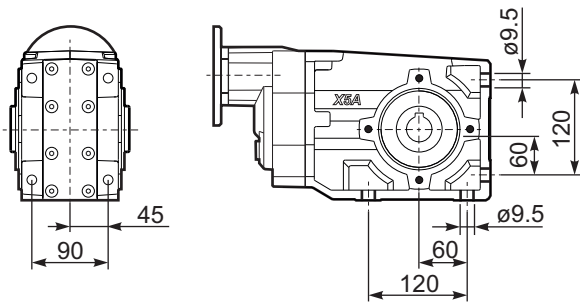
**PX53AC...** Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **12.65 kg**

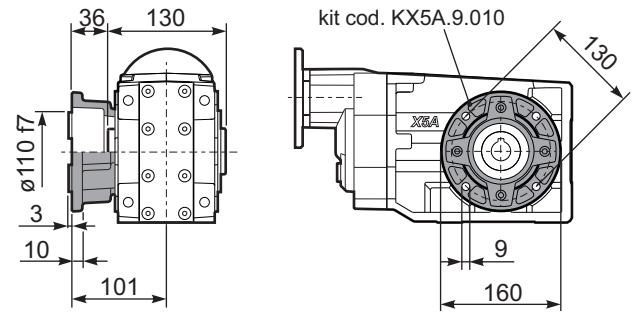
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	246
71B5	K063.4.042	160	244
80/90B5	K063.4.043	200	246
71B14	K063.4.047	105	244
80B14	K063.4.046	120	246
90B14	K063.4.041	140	246



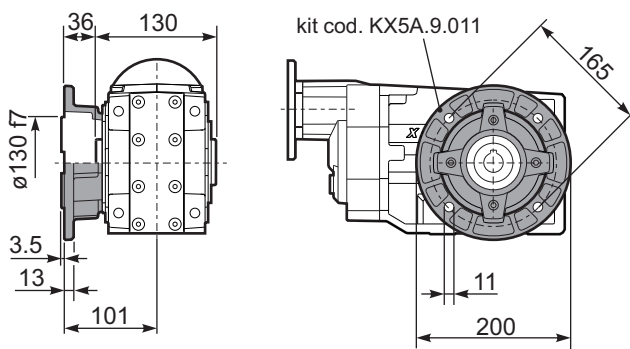
**PX53A-N..** Feet  
Piedini



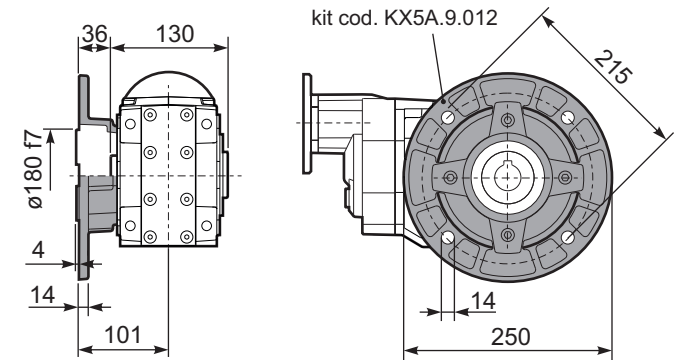
**PX53A-F2..** Output flange  
Flangia uscita



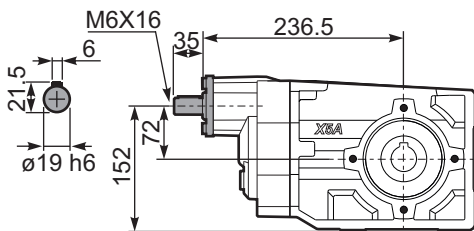
**PX53A-F3..** Output flange  
Flangia uscita



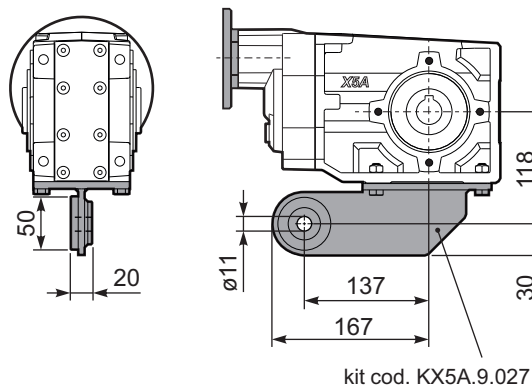
**PX53A-F4..** Output flange  
Flangia uscita



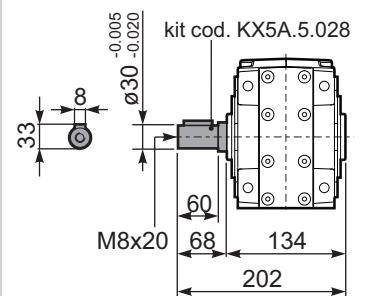
**RX53A...** Input shaft  
Albero in entrata

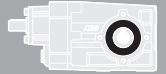


**PX53ABR..** Reaction Arm  
Braccio di reazione



**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<sub>1</sub>) = 1400 min<sup>-1</sup>**

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

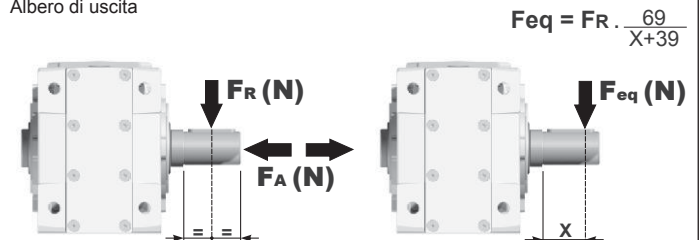
**E** El reductor tamaño **X62A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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	V8
1.25 LT	1.70 LT	0.95 LT	1.60 LT	2.45 LT	1.50 LT	Ask	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

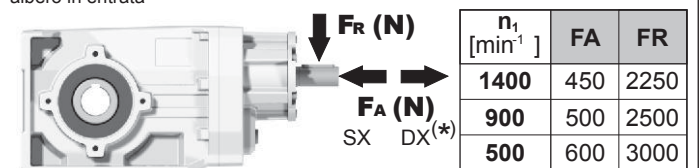
**Output shaft**  
Albero di uscita



n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR
250	600	3000	75	890	4450	15	1660	8300
150	700	3500	50	1140	5700			
100	780	3900	25	1330	6650			

**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



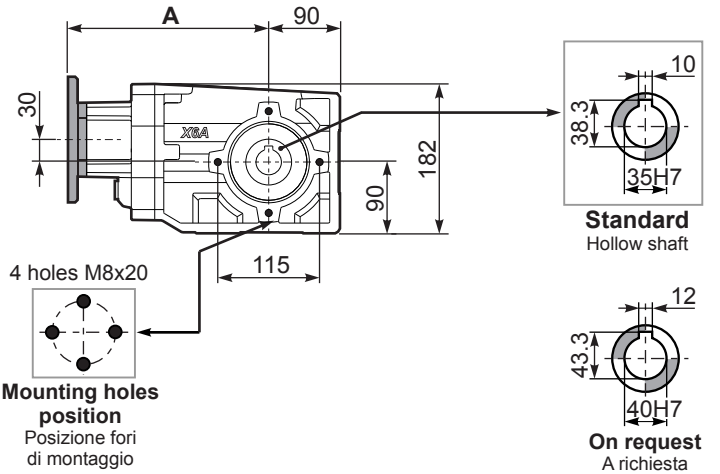
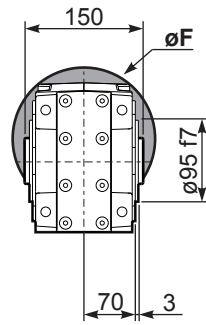
**\*Strong axial loads in the DX direction are not allowed.**  
Non sono consentiti forti carichi assiali con direzione DX

**tab. 2**

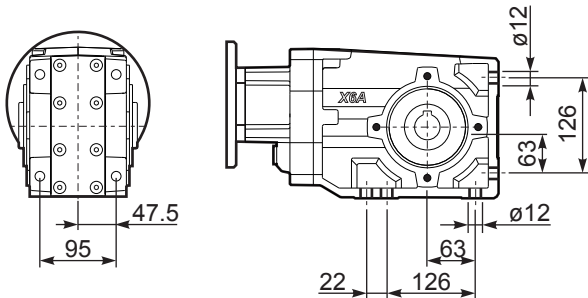
**PX62AC...** Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **15.80 kg**

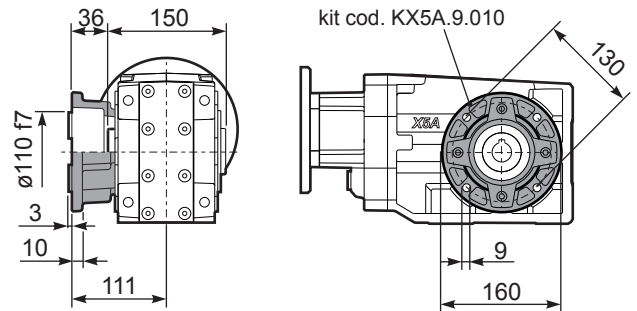
M. flanges	Kit code	øF	A
<b>71B5</b>	KC023.4.041	160	253
<b>80/90B5</b>	KC023.4.042	200	255
<b>100/112B5</b>	KC023.4.043	250	264
<b>132B5</b>	KC50.4.043	300	282
<b>80B14</b>	KC085.4.046	120	255
<b>90B14</b>	KC085.4.045	140	255
<b>100/112B14</b>	KC085.4.047	160	264
<b>132B14</b>	KC50.4.041	200	282



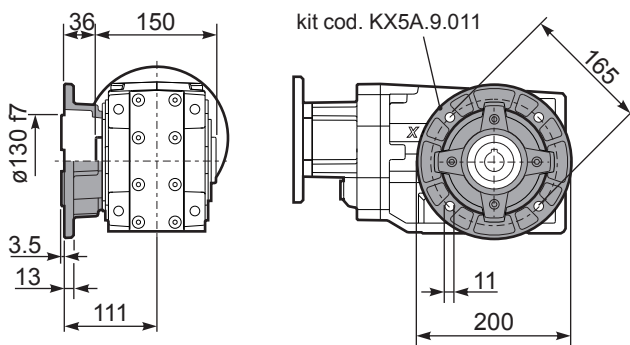
**PX62A-N..** Feet  
Piedini



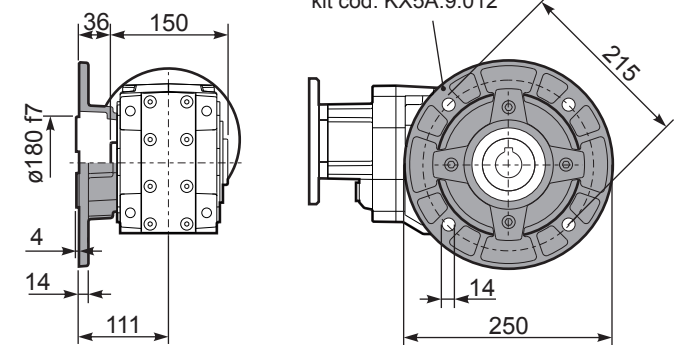
**PX62A-F2..** Output flange  
Flangia uscita



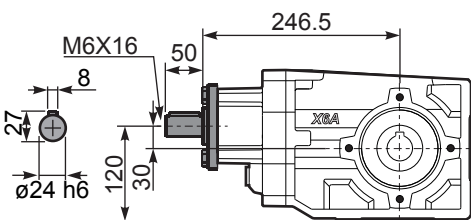
**PX62A-F3..** Output flange  
Flangia uscita



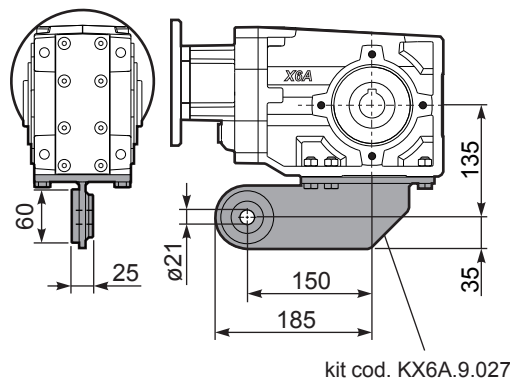
**PX62A-F4..** Output flange  
Flangia uscita



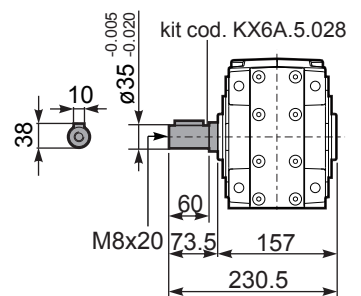
**RX62A...** Input shaft  
Albero in entrata

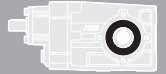


**PX62ABR..** Reaction Arm  
Braccio di reazione



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





**QUICK SELECTION / Selezione veloce** The dynamic efficiency is **0.94** for all ratios **input speed (n<sub>1</sub>) = 1400 min<sup>-1</sup>**

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

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

n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR	n <sub>2</sub> [min <sup>-1</sup> ]	FA	FR
250	600	3000	75	890	4450	15	1660	8300
150	700	3500	50	1140	5700			
100	780	3900	25	1330	6650			

**F<sub>R</sub>** 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 <sub>1</sub> [min <sup>-1</sup> ]	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

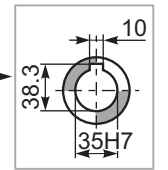
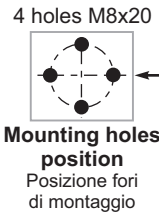
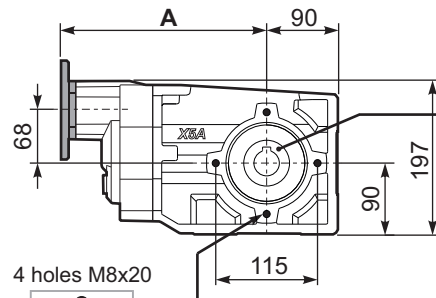
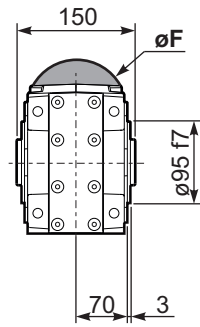
tab. 2



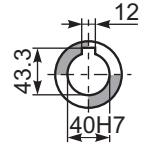
**PX63AC...** Basic Gearbox  
Riduttore base

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

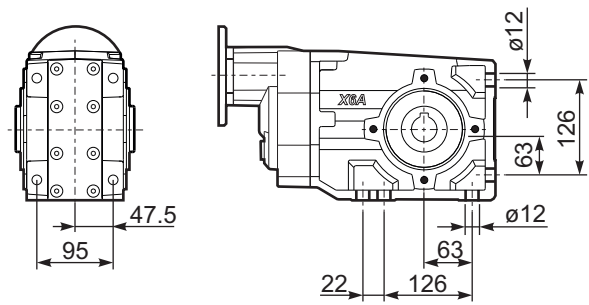


**Standard**  
Hollow shaft

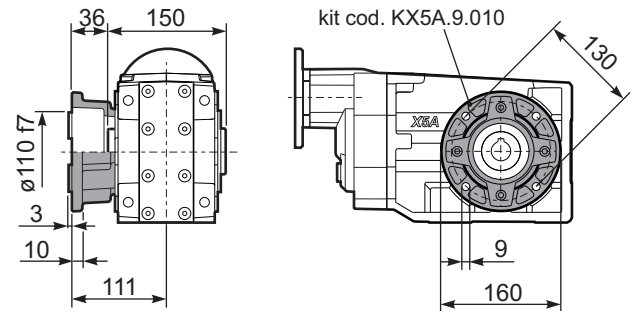


**On request**  
A richiesta

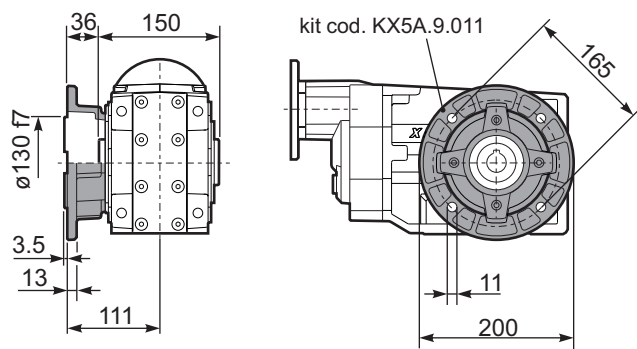
**PX63A-N..** Feet  
Piedini



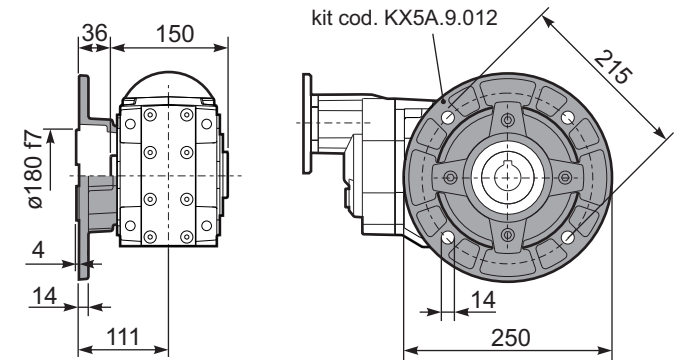
**PX63A-F2..** Output flange  
Flangia uscita



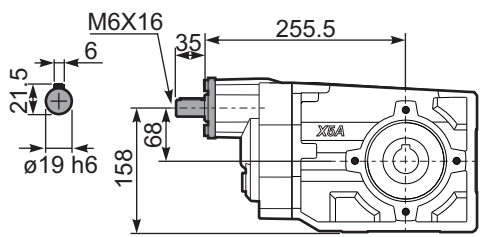
**PX63A-F3..** Output flange  
Flangia uscita



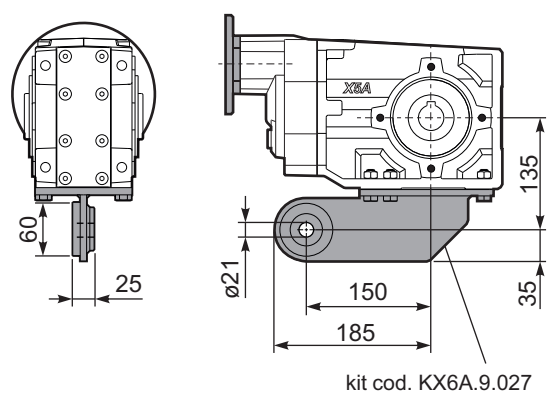
**PX63A-F4..** Output flange  
Flangia uscita



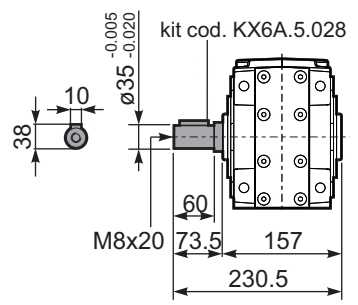
**RX63A...** Input shaft  
Albero in entrata

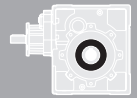


**PX63ABR..** Reaction Arm  
Braccio di reazione



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





## QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<sup>-1</sup>

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	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					Available B14 motor flanges				Output Shaft 	Ratios code	
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100 112	132	80	90	100 112	132			
176	<b>7.94</b>	7.5	369	1.0	7.5	380	B										302418	01
153	<b>9.13</b>	7.5	425	0.9	6.7	390	B										302416	02
131	<b>10.66</b>	5.5	366	1.1	6.0	410	B										302414	03
94	<b>14.97</b>	5.5	514	1.1	6.0	580	B										202418	04
81	<b>17.21</b>	5.5	591	1.0	5.4	600	B										202416	05
69	<b>20.24</b>	5.5	695	1.0	5.2	675	B										162418	06
60	<b>23.27</b>	4	585	1.2	4.5	675	B										162416	07
53	<b>26.31</b>	4	661	1.0	4.0	675	B										132418	08
46.3	<b>30.25</b>	4	760	0.9	3.5	675	B										132416	09
39.6	<b>35.32</b>	3	668	1.0	3.0	675	B										132414	10
37.8	<b>37.03</b>	3	701	1.0	2.8	675	B										112416	11
32.4	<b>43.23</b>	2.2	602	1.1	2.4	675	B										112414	12
30.1	<b>46.58</b>	2.2	649	1.0	2.3	675	B										82418	13
26.1	<b>53.55</b>	2.2	746	0.9	2.0	675	B										82416	14
22.4	<b>62.52</b>	1.5	600	1.1	1.7	675	B										82414	15
19.0	<b>73.75</b>	1.1	517	1.1	1.2	580	B										62416	16
16.3	<b>86.09</b>	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 requieren 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					
4.00 LT	2.60 LT	2.60 LT	2.60 LT	5.15 LT	2.20 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$F_R (N)$   
 $F_A (N)$

$F_{eq} = F_R \cdot \frac{171}{X+131}$

$F_{eq} (N)$

$n_2$	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

$F_R (N)$   
 $F_A (N)$

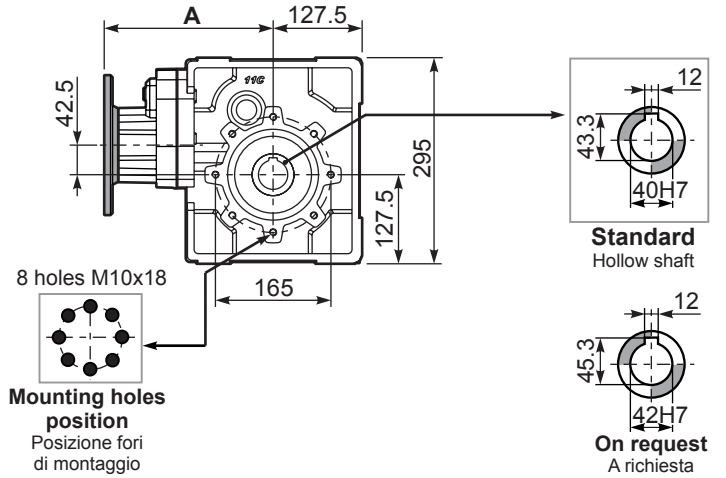
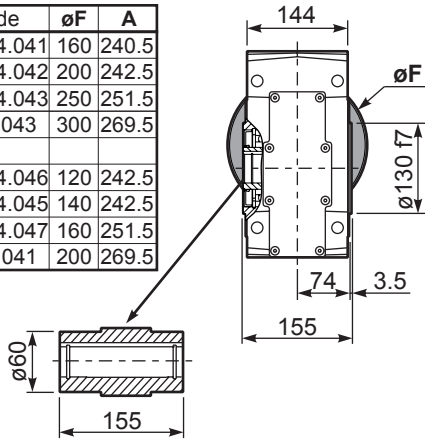
$n_1$	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

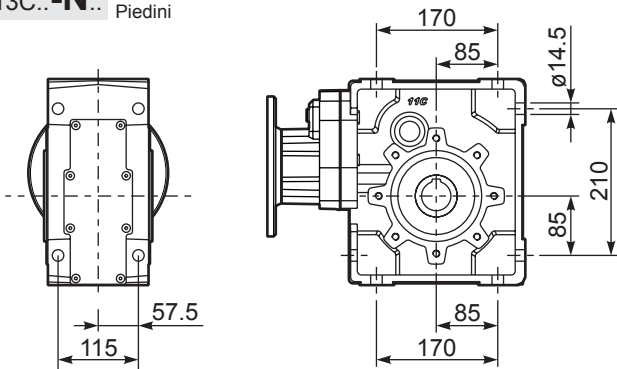
**P113CC...** Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **38.0 kg**

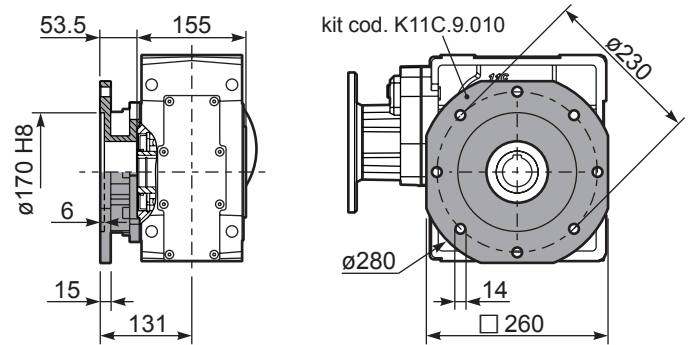
M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	240.5
80/90B5	KC023.4.042	200	242.5
100/112B5	KC023.4.043	250	251.5
132B5	KC50.4.043	300	269.5
80B14	KC085.4.046	120	242.5
90B14	KC085.4.045	140	242.5
100/112B14	KC085.4.047	160	251.5
132B14	KC50.4.041	200	269.5



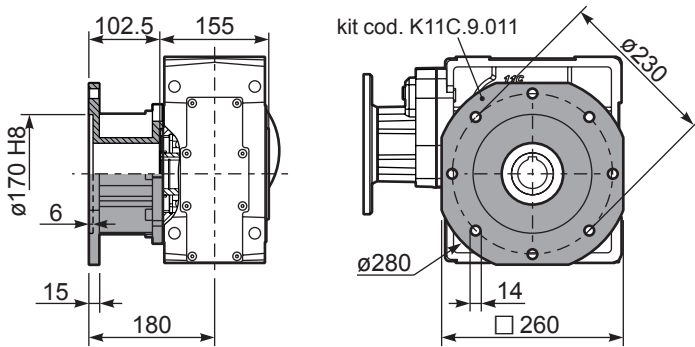
**P113C..-N..** Feet  
Piedini



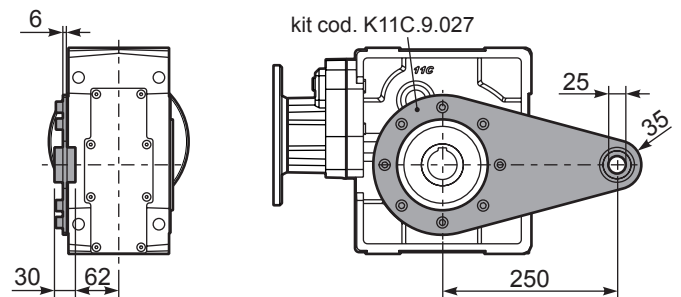
**P113C-FC..** Output flange  
Flangia uscita



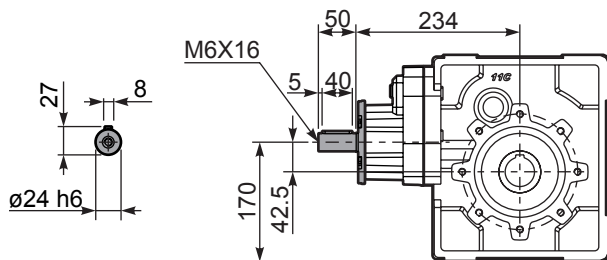
**P113C-FL..** Output flange  
Flangia uscita



**P113CBR..** Reaction Arm  
Braccio di reazione

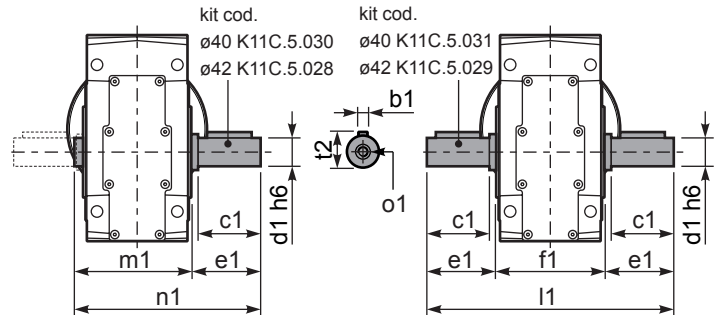


**R113C...** Input shaft  
Albero in entrata

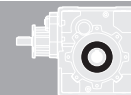


**P113C..A..** Single shaft  
Albero lento semplice

**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<sup>-1</sup>

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

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

**A** Motor Flanges Available  
Flange Motore Disponibili

**B** Supplied with Reduction Bushing  
Fornito con Bussola di 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 lebensdauer geschmiert. 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 requieren 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					
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 [www.angletech.com](#) **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

$n_2$	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

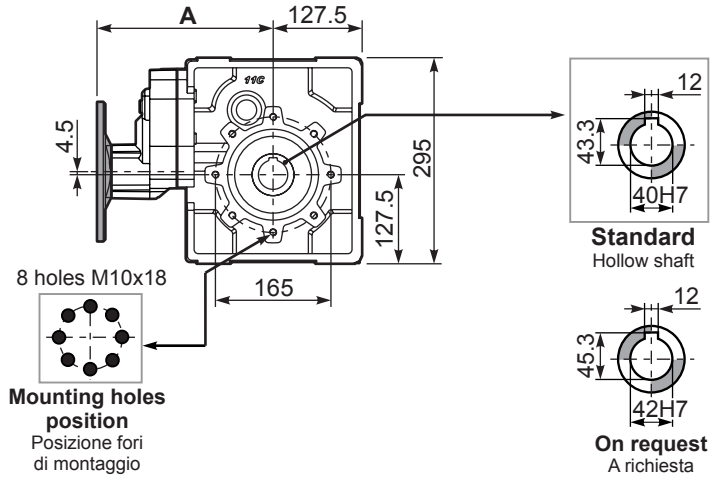
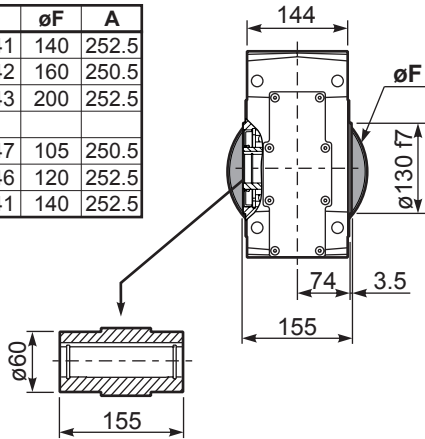
**tab. 2**



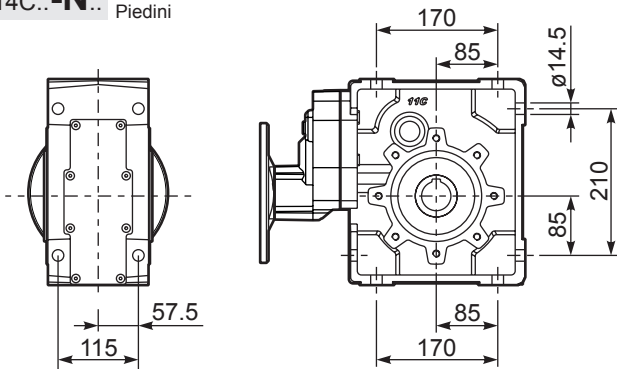
**P114CC...** Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **38.0 kg**

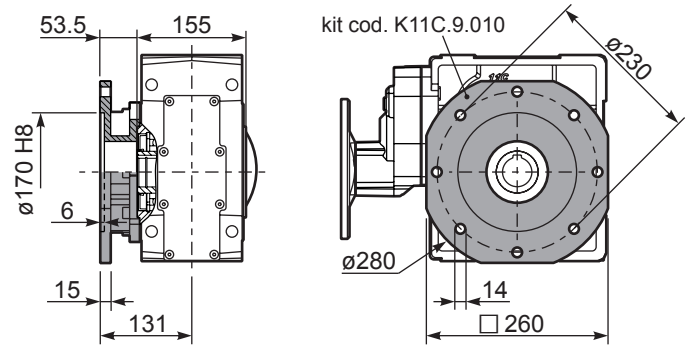
M. flanges	Kit code	øF	A
63B5	K063.4.041	140	252.5
71B5	K063.4.042	160	250.5
80/90B5	K063.4.043	200	252.5
71B14	K063.4.047	105	250.5
80B14	K063.4.046	120	252.5
90B14	K063.4.041	140	252.5



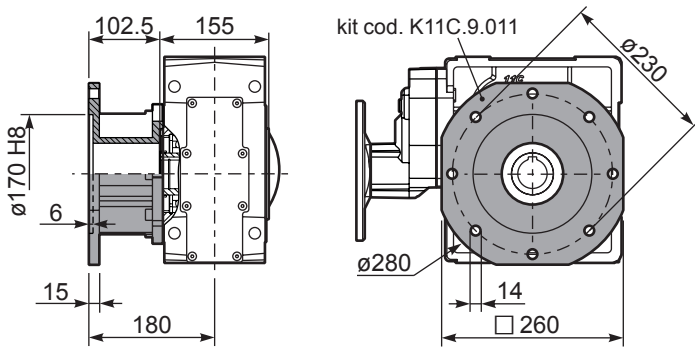
**P114C..-N..** Feet  
Piedini



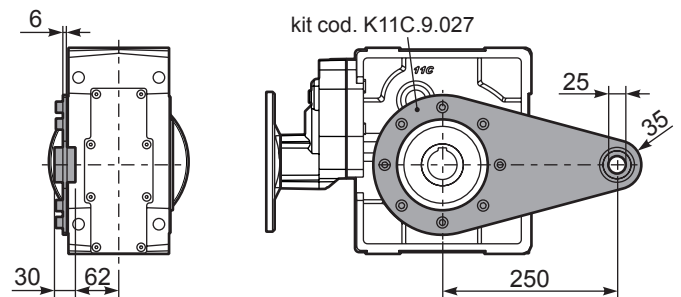
**P114C-FC..** Output flange  
Flangia uscita



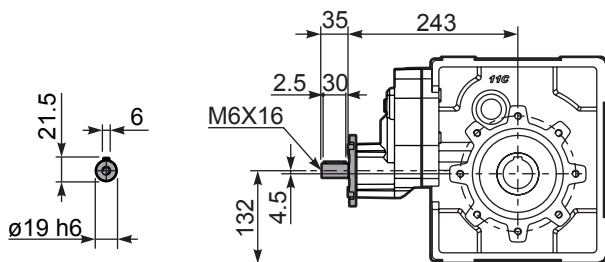
**P114C-FL..** Output flange  
Flangia uscita



**P114CBR..** Reaction Arm  
Braccio di reazione

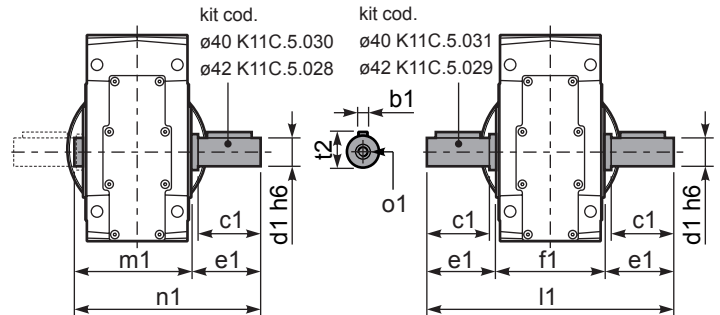


**R114C...** Input shaft  
Albero in entrata

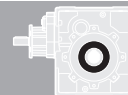


**P114C..A..** Single shaft  
Albero lento semplice

**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 <sub>1</sub> ) = 1400 min <sup>-1</sup>										
Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft $\varnothing$	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
145	<b>9.69</b>	9	560	1.3	<b>12.2</b>	<b>755</b>	B									302418	01
126	<b>11.09</b>	9	641	1.1	<b>9.6</b>	<b>680</b>	B									302416	02
108	<b>12.90</b>	9	746	1.1	<b>9.6</b>	<b>790</b>	B									302414	03
77	<b>18.26</b>	7.5	849	1.1	<b>8.0</b>	<b>935</b>	B									202418	04
67	<b>20.91</b>	7.5	972	1.0	<b>7.5</b>	<b>1000</b>	B									202416	05
58	<b>24.32</b>	5.5	835	1.2	<b>6.4</b>	<b>1000</b>	B									202414	06
49.5	<b>28.27</b>	5.5	971	1.0	<b>5.5</b>	<b>1000</b>	B									162416	07
42.6	<b>32.88</b>	4	826	1.2	<b>4.7</b>	<b>1000</b>	B									162414	08
38.1	<b>36.76</b>	4	924	1.1	<b>4.2</b>	<b>1000</b>	B									132416	09
32.7	<b>42.76</b>	3	809	1.2	<b>3.6</b>	<b>1000</b>	B									132414	10
31.1	<b>45.00</b>	3	851	1.2	<b>3.5</b>	<b>1000</b>	B									112416	11
26.8	<b>52.33</b>	3	990	1.0	<b>3.0</b>	<b>1000</b>	B									112414	12
24.6	<b>56.82</b>	2.2	791	1.1	<b>2.3</b>	<b>850</b>	B									82418	13
21.5	<b>65.07</b>	2.2	906	1.1	<b>2.3</b>	<b>975</b>	B									82416	14
18.5	<b>75.68</b>	2.2	1054	0.9	<b>2.1</b>	<b>1000</b>	B									82414	15
15.6	<b>89.61</b>	1.1	628	1.1	<b>1.2</b>	<b>710</b>	B									62416	16
13.4	<b>104.22</b>	1.1	731	1.1	<b>1.2</b>	<b>820</b>	B									62414	17

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

- Motor Flanges Available** Flange Motore Disponibili
- B) Supplied with Reduction Bushing** Fornito con Bussola di Riduzione
- B) Available on Request without reduction bushing** Disponibile a Richiesta senza Bussola di Riduzione
- C) Motor Flange Holes Position** Posizione Fori Flangia Motore

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

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

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

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

**E** El reductor tamaño 133C se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
6.00 LT	4.30 LT	4.30 LT	3.30 LT	7.40 LT	3.10 LT	Ask

**AGIP Blasias 460**

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

**F<sub>eq</sub> (N)**

n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	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

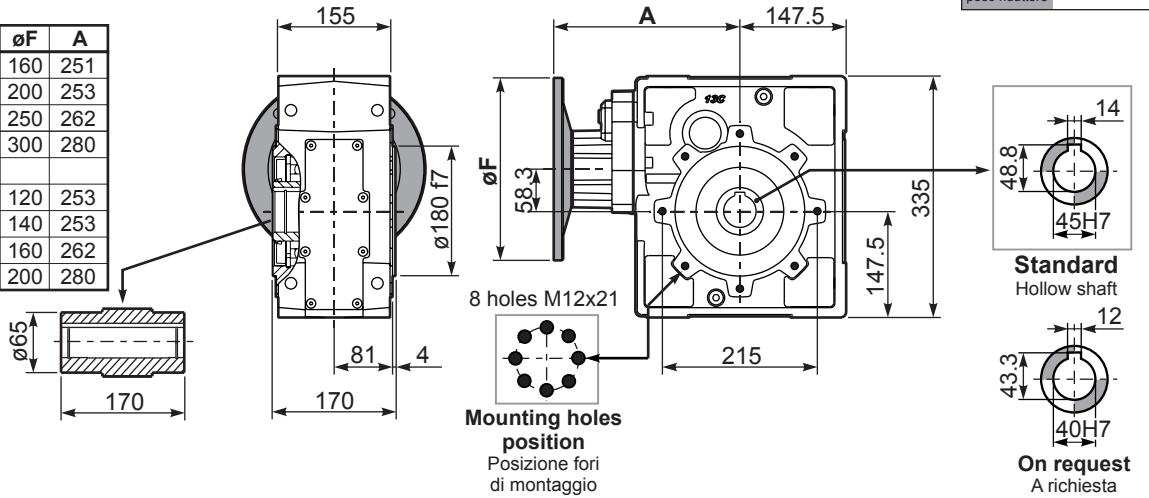
n <sub>1</sub>	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

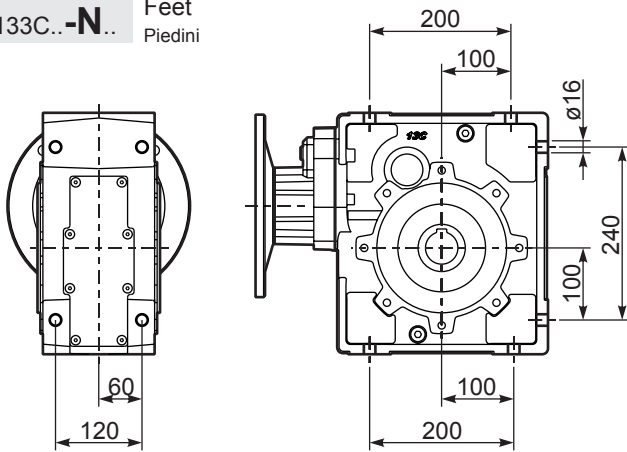
**P133CC...** Basic gearbox  
Riduttore base

Gearbox weight  
peso riduttore **53.5 kg**

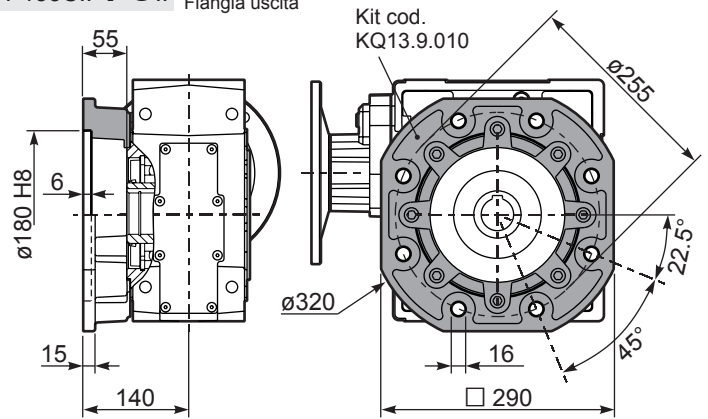
M. flanges	Kit code	øF	A
<b>71B5</b>	KC023.4.041	160	251
<b>80/90B5</b>	KC023.4.042	200	253
<b>100/112B5</b>	KC023.4.043	250	262
<b>132B5</b>	KC50.4.043	300	280
<b>80B14</b>	KC085.4.046	120	253
<b>90B14</b>	KC085.4.045	140	253
<b>100/112B14</b>	KC085.4.047	160	262
<b>132B14</b>	KC50.4.041	200	280



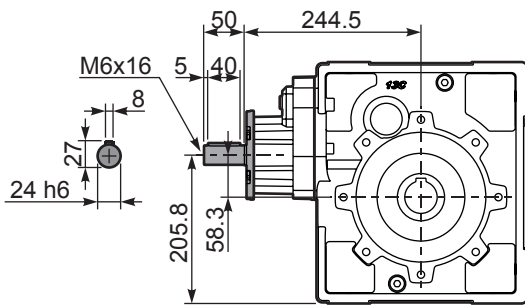
**P133C..-N..** Feet  
Piedini



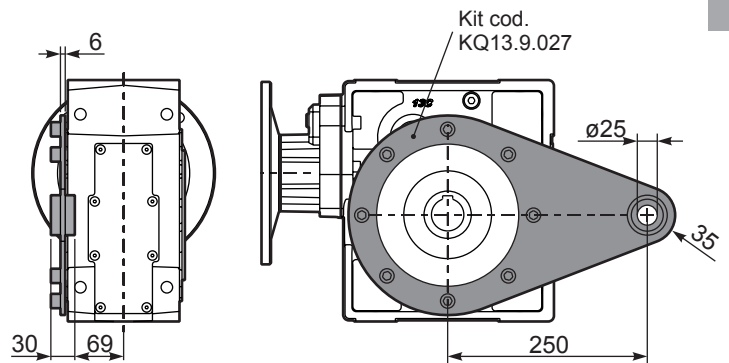
**P133C..-FC..** Output flange  
Flangia uscita



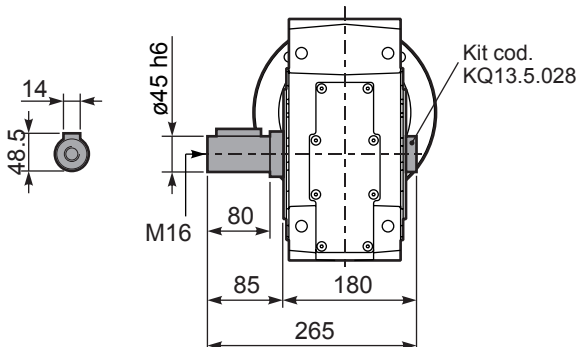
**R133C...** Input Shaft  
Albero in entrata



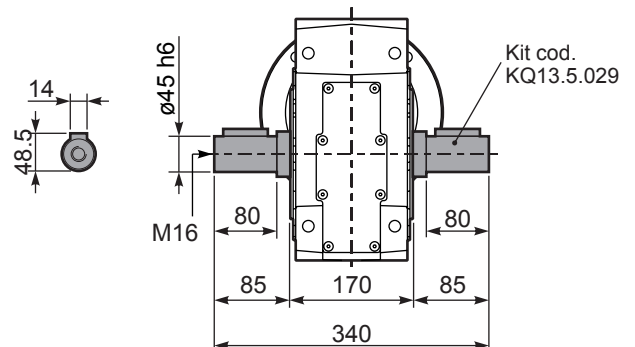
**P133CBR..** Reaction arm  
Braccio di reazione

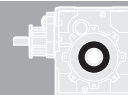


**P133C..A..** Single output Shaft  
Albero lento semplice



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





### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<sup>-1</sup>

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	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				Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
15.3	<b>91.23</b>	1.5	858	1.2	1.7	1000	B				C	C		19132418	01
13.4	<b>104.48</b>	1.5	983	1.0	1.5	1000	B				C	C		19132416	02
11.6	<b>121.10</b>	1.5	1139	0.9	1.3	1000	B				C	C		17132416	03
9.9	<b>140.84</b>	1.1	968	1.0	1.1	1000	B				C	C		17132414	04
8.5	<b>165.32</b>	1.1	1136	0.9	0.96	1000	B				C	C		15132414	05
7.6	<b>184.94</b>	0.75	872	1.1	0.86	1000	B				C	C		19082416	06
7.1	<b>197.34</b>	0.75	930	1.1	0.81	1000	B				C	C		13132414	07
6.5	<b>215.10</b>	0.75	1014	1.0	0.74	1000	B				C	C		19082414	08
6.0	<b>231.60</b>	0.55	805	1.2	0.69	1000	B				C	C		10132416	09
5.6	<b>249.31</b>	0.55	867	1.2	0.64	1000	B				C	C		17082414	10
5.2	<b>269.37</b>	0.55	937	1.1	0.59	1000	B				C	C		10132414	11
4.8	<b>292.64</b>	0.55	1018	1.0	0.54	1000	B				C	C		15082414	12
4.6	<b>302.26</b>	0.55	1051	1.0	0.53	1000	B				C	C		9132416	13
4.0	<b>349.30</b>	0.37	812	1.2	0.46	1000	B				C	C		13082414	14
3.5	<b>399.12</b>	0.37	928	1.1	0.40	1000	B				C	C		7132416	15
2.9	<b>476.80</b>	0.37	1108	0.9	0.33	1000	B				C	C		10082414	16
2.2	<b>622.28</b>	0.25	976	1.0	0.26	1000	B				C	C		9082414	17
1.7	<b>821.70</b>	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.

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 Blasias 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

**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 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 **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.

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

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

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

**Input shaft**  
Albero in entrata

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

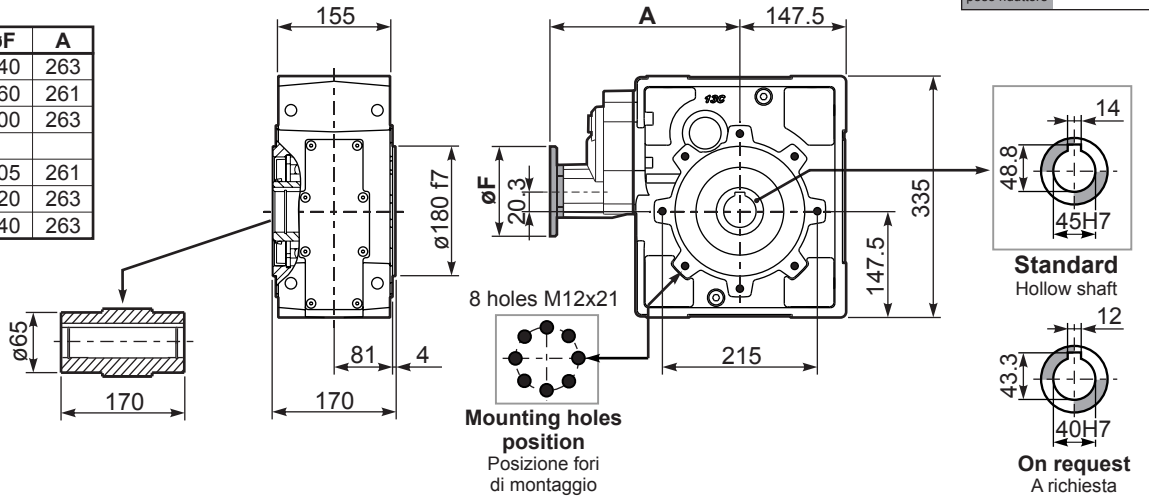
**tab. 2**



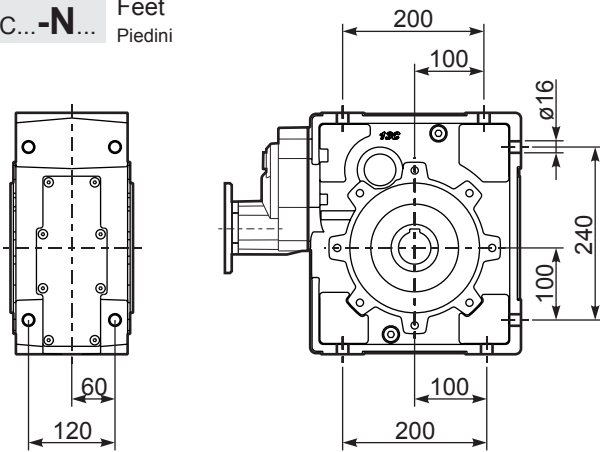
**P134CC...** Basic gearbox  
Riduttore base

Gearbox weight  
peso riduttore **53.5 kg**

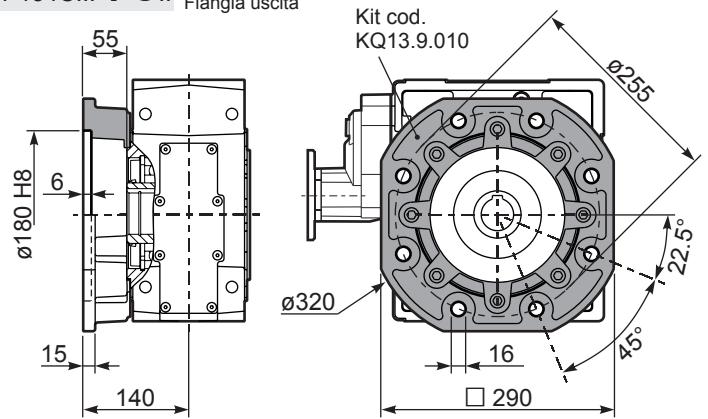
M. flanges	Kit code	øF	A
<b>63B5</b>	K063.4.041	140	263
<b>71B5</b>	K063.4.042	160	261
<b>80/90B5</b>	K063.4.043	200	263
<b>71B14</b>	K063.4.047	105	261
<b>80B14</b>	K063.4.046	120	263
<b>90B14</b>	K063.4.041	140	263



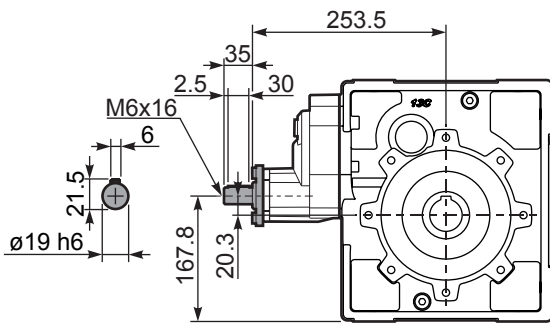
**P134C...-N...** Feet  
Piedini



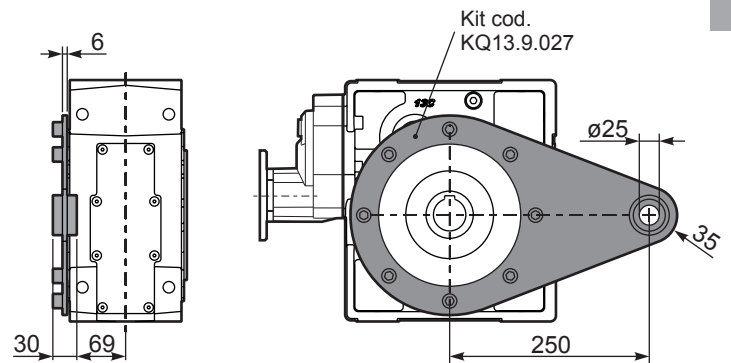
**P134C...-FC..** Output flange  
Flangia uscita



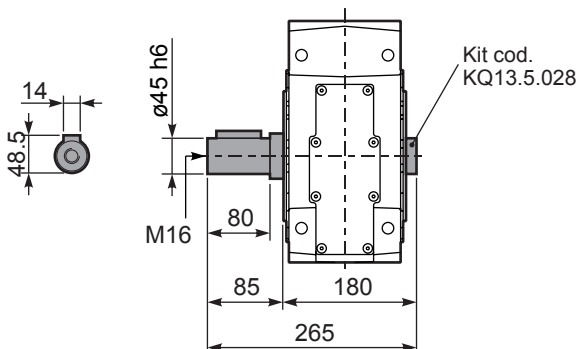
**R134C...** Input Shaft  
Albero in entrata



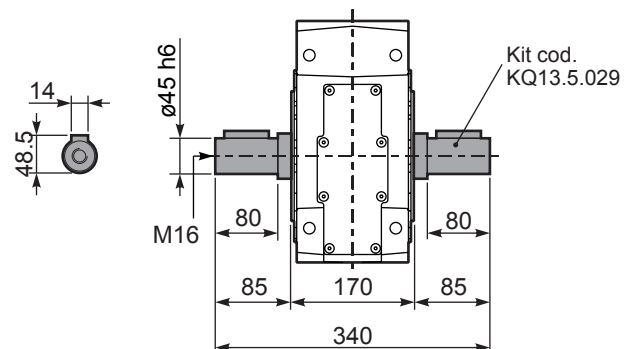
**P134CBR..** Reaction arm  
Braccio di reazione

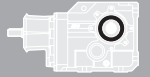


**P134C..A...** Single output Shaft  
Albero lento semplice



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





### QUICK SELECTION / Selezione veloce

input speed (n<sub>1</sub>) = 1400 min<sup>-1</sup>

Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	B5 motor flanges				B14 motor flanges				Output Shaft 	Ratios code 
							-F	-G	-H	-I	-	-	-	-		
							100 112	132	160	180	-	-	-	-		
236	<b>5.94</b>	22	806	1.0	<b>21.0</b>	<b>800</b>	B							302915	standard ø50  ø45 On request	01
196	<b>7.13</b>	18.5	812	1.0	<b>17.9</b>	<b>820</b>	B							302913		02
163	<b>8.58</b>	18.5	977	1.0	<b>17.3</b>	<b>950</b>	B							302911		03
125	<b>11.20</b>	15	1033	1.0	<b>13.9</b>	<b>1000</b>	B							202915		04
104	<b>13.43</b>	15	1239	1.1	<b>15.7</b>	<b>1350</b>	B							202913		05
92	<b>15.15</b>	15	1397	1.0	<b>14.4</b>	<b>1400</b>	B							162915		06
87	<b>16.17</b>	15	1492	1.0	<b>14.0</b>	<b>1450</b>	B							202911		07
77	<b>18.16</b>	15	1675	0.9	<b>13.3</b>	<b>1550</b>	B							162913		08
71	<b>19.70</b>	11	1335	1.2	<b>12.3</b>	<b>1550</b>	B							132915		09
64	<b>21.87</b>	11	1482	1.1	<b>11.4</b>	<b>1600</b>	B							162911		10
59	<b>23.62</b>	11	1600	1.0	<b>10.6</b>	<b>1600</b>	B							132913		11
48.4	<b>28.91</b>	9	1671	1.0	<b>8.6</b>	<b>1600</b>	B							112913		12
40.2	<b>34.81</b>	7.5	1618	1.0	<b>7.2</b>	<b>1600</b>	B							112911		13
33.5	<b>41.81</b>	5.5	1436	1.1	<b>6.0</b>	<b>1600</b>	B							82913		14
27.8	<b>50.34</b>	5.5	1729	0.9	<b>5.0</b>	<b>1600</b>	B							82911		15

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

- Motor Flanges Available Flange Motore Disponibili
- Supplied with Reduction Bushing Fornito con Bussola di Riduzione
- Available on Request without reduction bushing Disponibile a Richiesta senza Bussola di Riduzione
- 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 Blasias 460						

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

**F<sub>eq</sub> (N)**

n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	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

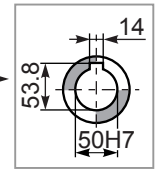
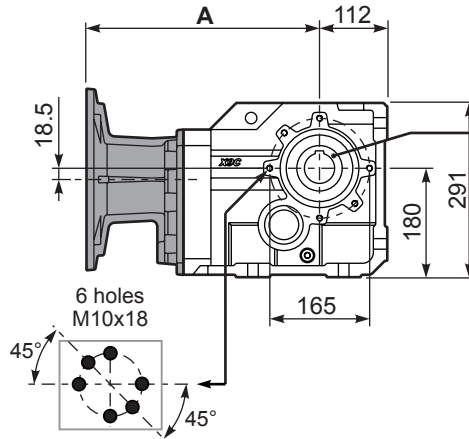
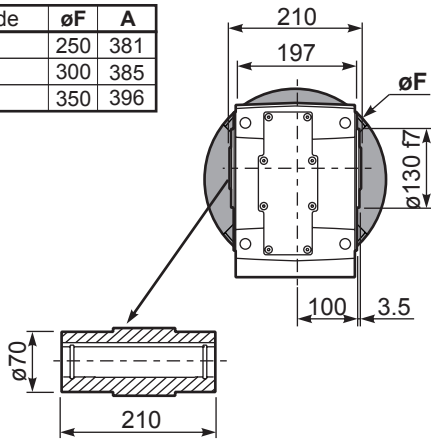
n <sub>1</sub>	FA	FR
1400	700	3500
900	840	4200
500	900	4500

**tab. 2**

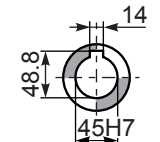
**PX93CC...** Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **75.0 kg**

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



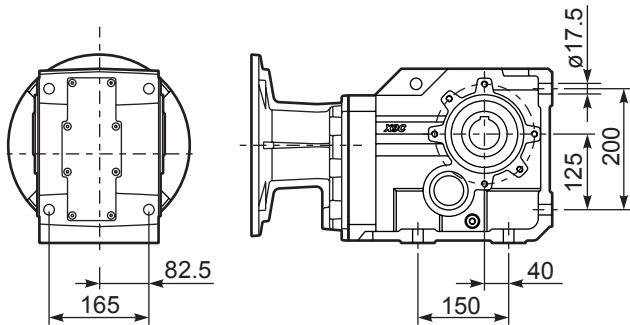
**Standard**  
Hollow shaft



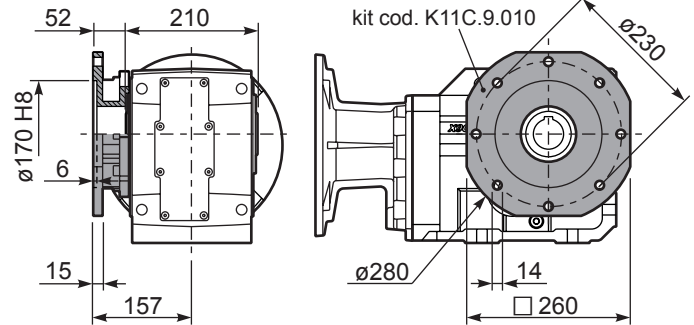
**On request**  
A richiesta

**Mounting holes position**  
Posizione fori di montaggio

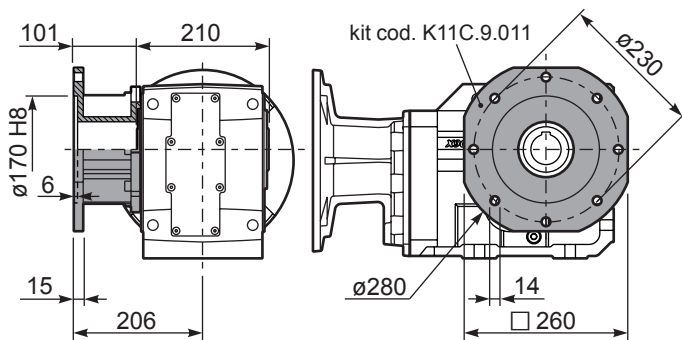
**PX93C...FB..** Feet  
Piedini



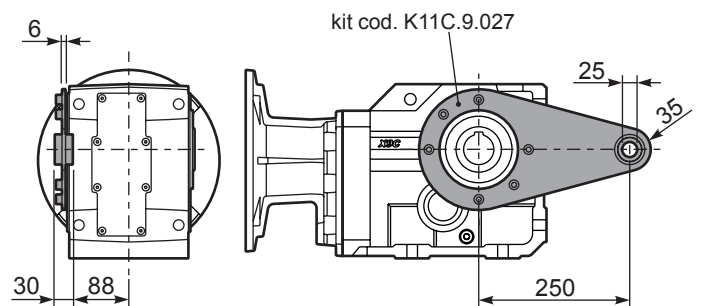
**PX93C...-FC..** Output flange  
Flangia uscita



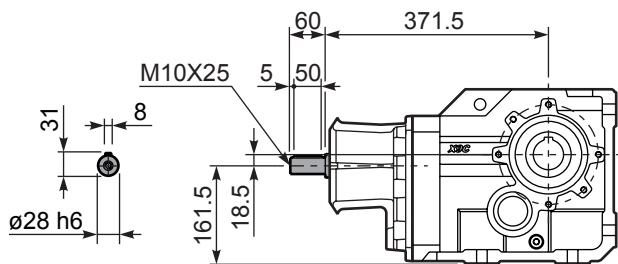
**PX93C...-FL..** Output flange  
Flangia uscita



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

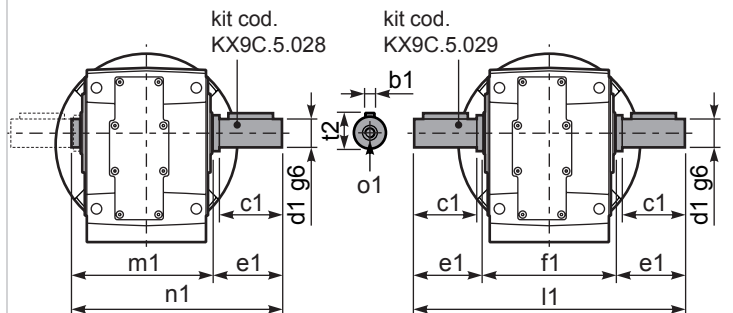


**RX93C...** Input shaft  
Albero in entrata



**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<sup>-1</sup>

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	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					Available B14 motor flanges				Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
45.6	<b>30.70</b>	7.5	1399	1.1	8.3	1600	B									30132913	01
37.9	<b>36.97</b>	7.5	1685	0.9	6.9	1600	B									30132911	02
29.0	<b>48.26</b>	5.5	1625	1.0	5.3	1600	B									20132915	03
24.2	<b>57.86</b>	4	1425	1.1	4.4	1600	B									20132913	04
21.5	<b>65.24</b>	4	1607	1.0	3.9	1600	B									16132915	05
20.1	<b>69.68</b>	4	1716	1.0	3.8	1650	B									20132911	06
17.9	<b>78.23</b>	3	1450	1.1	3.4	1650	B									16132913	07
16.5	<b>84.85</b>	3	1573	1.0	3.0	1600	B									13132915	08
14.9	<b>94.20</b>	3	1747	0.9	2.8	1650	B									16132911	09
13.8	<b>101.74</b>	3	1886	0.9	2.6	1650	B									13132913	10
11.4	<b>122.51</b>	2.2	1672	1.0	2.1	1650	B									13132911	11
9.3	<b>149.95</b>	1.5	1411	1.2	1.8	1650	B									11132911	12
7.8	<b>180.09</b>	1.5	1694	1.0	1.5	1650	B									8132913	13
6.8	<b>206.81</b>	1.1	1421	1.1	1.2	1600	B									6132915	14
6.5	<b>216.85</b>	1.1	1490	1.1	1.2	1650	B									8132911	15
5.6	<b>247.99</b>	1.1	1704	1.0	1.1	1650	B									6132913	16
4.7	<b>298.61</b>	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 Blasias 460						

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

$F_R$  (N)  
 $F_A$  (N)

$F_{eq}$  (N)

$n_2$	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 di entrata

$F_R$  (N)  
 $F_A$  (N)

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

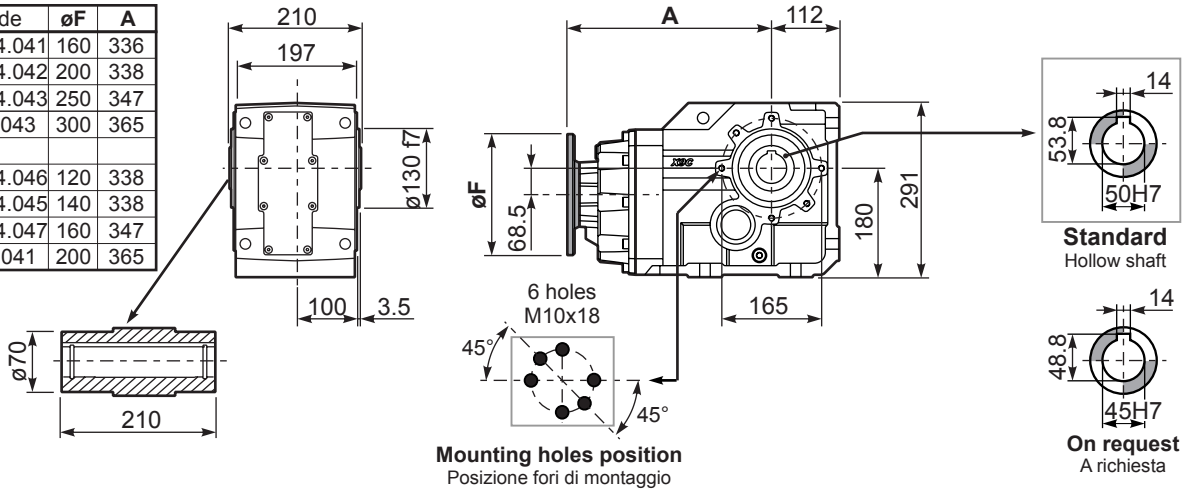
tab. 2



**PX94CC...** Basic Gearbox  
Riduttore base

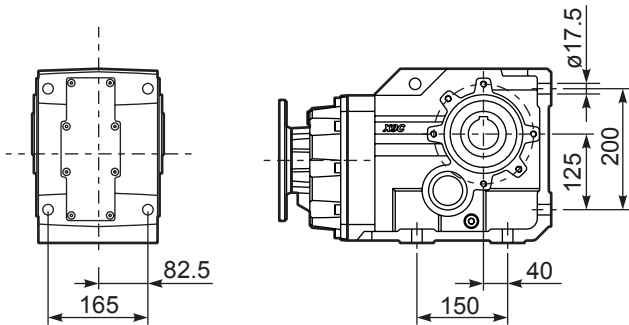
Gearbox weight  
peso riduttore **68.5 kg**

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

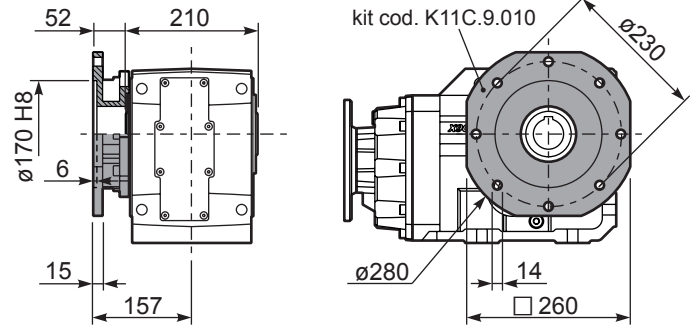


**Mounting holes position**  
Posizione fori di montaggio

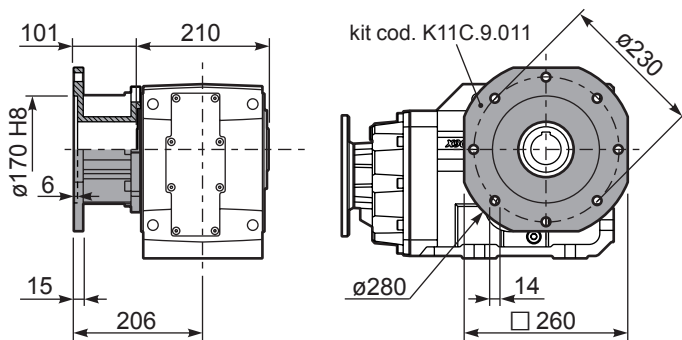
**PX94C...FB..** Feet  
Piedini



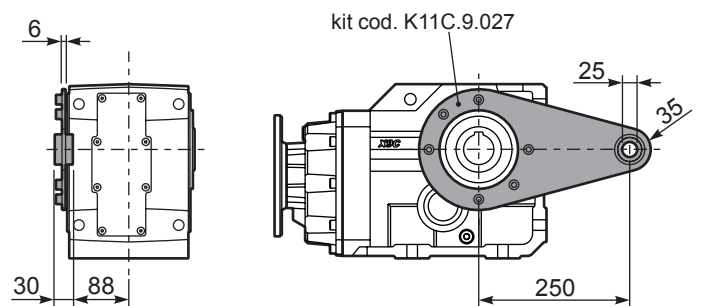
**PX94C...-FC..** Output flange  
Flangia uscita



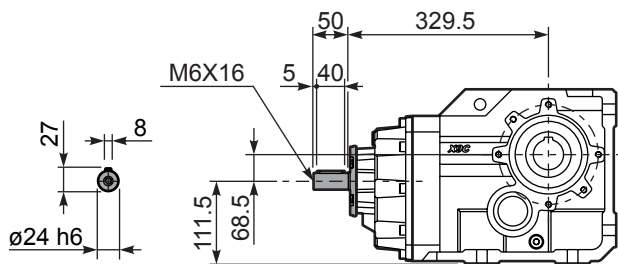
**PX94C...-FL..** Output flange  
Flangia uscita



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

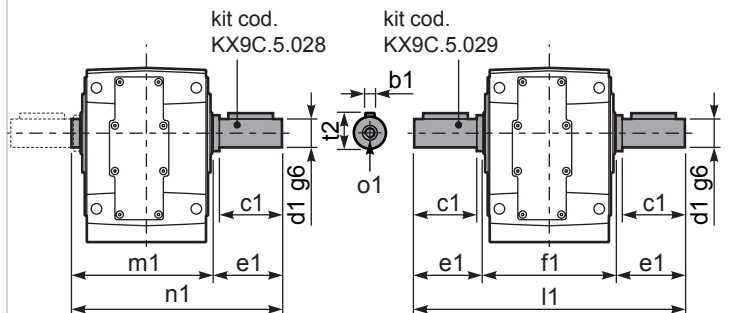


**RX94C...** Input shaft  
Albero in entrata

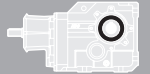


**PX94CA...** Single shaft  
Albero lento semplice

**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<sup>-1</sup>

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

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

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

**I** Il riduttore tipo X103 è fornito privo di lubrificazione con tappi di sfio, 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					
11.50 LT	5.50 LT	10.50 LT	7.50 LT	13.50 LT	9.50 LT	Ask
AGIP Blasias 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								
<b>Output shaft</b> Albero di uscita			$F_{eq} = FR \cdot \frac{253}{X+193}$					
$n_2$	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
<b>Input shaft</b> Albero in entrata								
$n_1$	FA	FR						
1400	1120	5600						
900	1220	6100						
500	1300	6500						

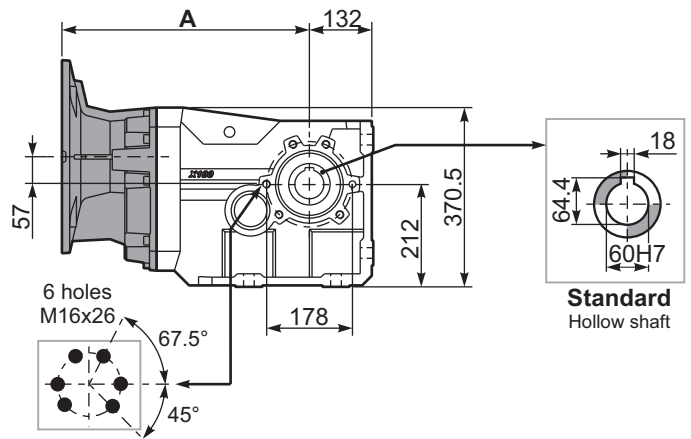
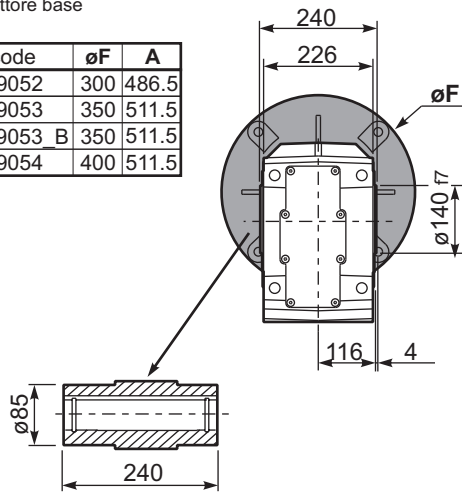
tab. 2

**PX103C...**

Basic Gearbox  
Riduttore base

Gearbox weight  
peso riduttore **125 kg**

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

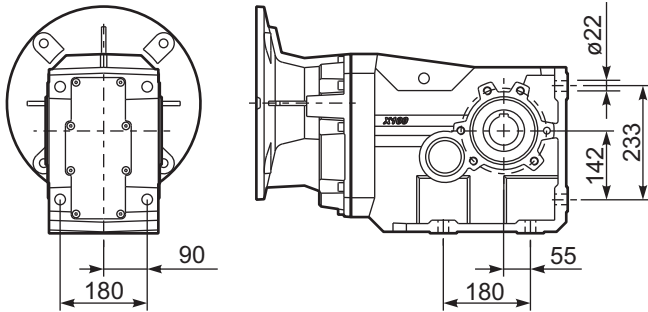


Mounting holes position  
Posizione fori di montaggio

Standard  
Hollow shaft

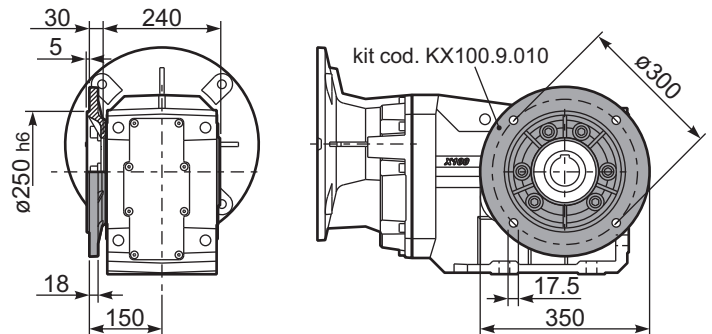
**PX103...FB..**

Feet  
Piedini



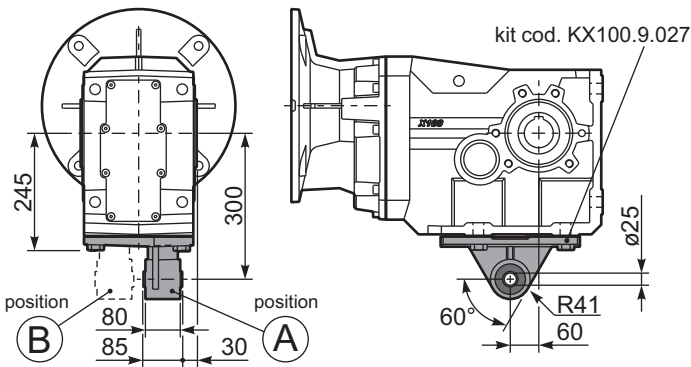
**PX103...-F6..**

Output flange  
Flangia uscita



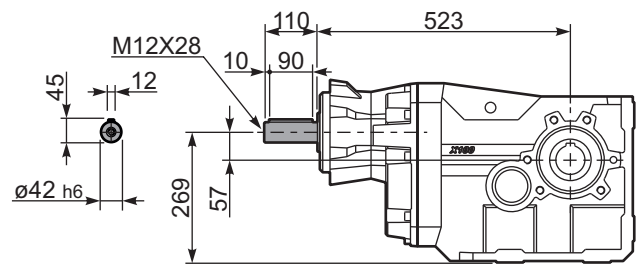
**PX103...BR..**

Reaction Arm  
Braccio di reazione



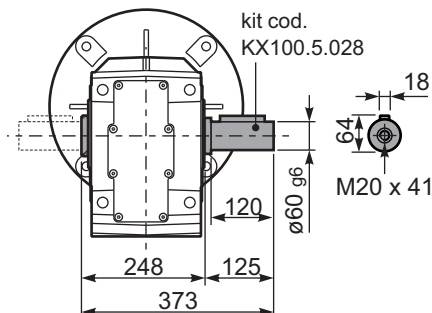
**RX103...**

Input shaft  
Albero in entrata



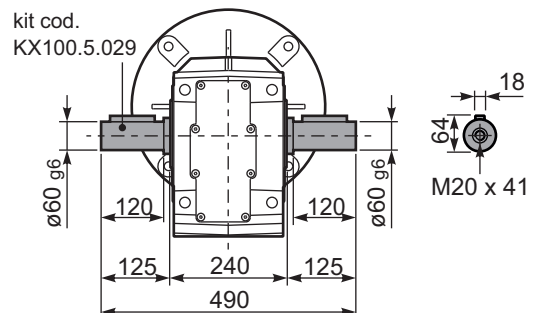
**PX103A...**

Single shaft  
Albero lento semplice



**PX103B...**

Double shaft  
Albero lento bisp.





## QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<sup>-1</sup>

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges		B14 motor flanges				Output Shaft 	Ratios code
							-F	-G	-	-	-			
							100	132	-	-	-			
28.8	<b>48.57</b>	9	2750	1.1	9.5	2900	B					30142911	01	
20.5	<b>68.43</b>	7.5	3118	1.0	7.0	3000	B					20142914	02	
18.7	<b>74.95</b>	5.5	2523	1.2	6.4	3000	B					20142913	03	
15.1	<b>92.53</b>	5.5	3115	1.0	5.2	3000	B					16142914	04	
13.8	<b>101.33</b>	4	2496	1.2	4.7	3000	B					16142913	05	
11.6	<b>120.33</b>	4	2963	1.0	4.0	3000	B					13142914	06	
11.3	<b>123.75</b>	4	3048	1.0	3.9	3000	B					16142911	07	
10.6	<b>131.78</b>	4	3245	0.9	3.6	3000	B					13142913	08	
9.5	<b>147.28</b>	3	2731	1.1	3.2	3000	B					11142914	09	
8.7	<b>161.30</b>	3	2990	1.0	3.0	3000	B					11142913	10	
7.1	<b>196.98</b>	2.2	2689	1.1	2.4	3000	B					11142911	11	
6.6	<b>212.99</b>	2.2	2907	1.0	2.2	3000	B					8142914	12	
6.0	<b>233.26</b>	2.2	3184	0.9	2.0	3000	B					8142913	13	
4.9	<b>284.86</b>	2.2	3889	0.8	1.7	3000	B					8142911	14	

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 Blasias 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

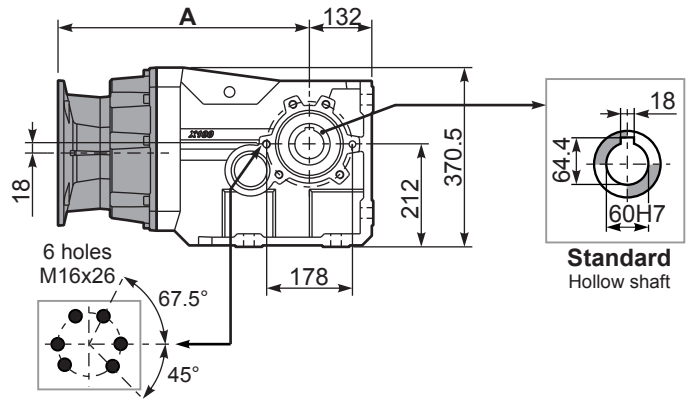
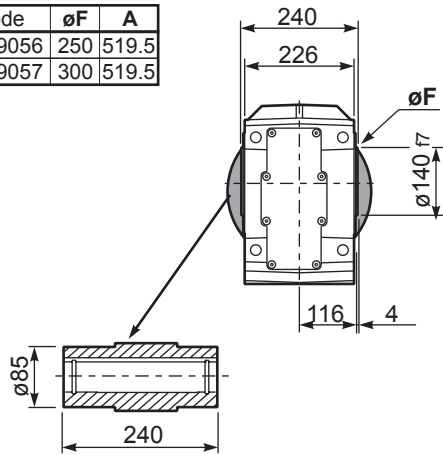
RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = FR \cdot \frac{253}{X+193}$					
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	2000	10000	140	2800	14000	70	3500	17500
250	2500	12500	120	3000	15000	40	4200	21000
200	2700	13500	85	3200	16000	15	5400	27000
<b>Input shaft</b> Albero in entrata								
$n_1$	FA	FR						
1400	700	3500						
900	840	4200						
500	900	4500						

tab. 2

**PX104C...** Basic Gearbox  
Riduttore base

Gearbox weight **118 kg**  
peso riduttore

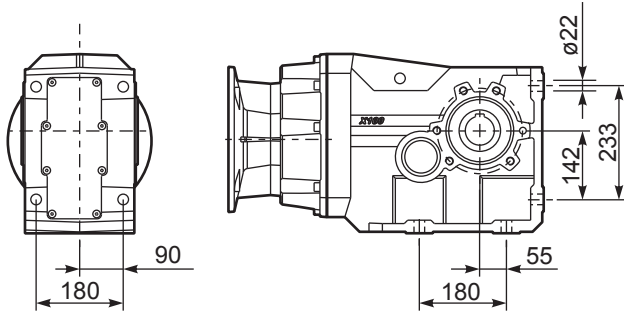
M. flanges	Kit code	øF	A
100/112B5	KC1109056	250	519.5
132B5	KC1109057	300	519.5



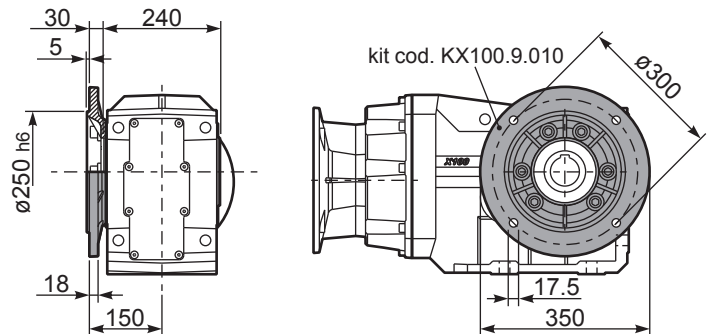
**Mounting holes position**  
Posizione fori di montaggio

**Standard**  
Hollow shaft

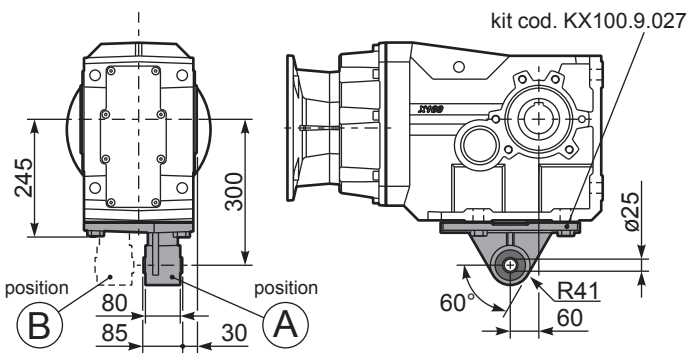
**PX104...FB..** Feet  
Piedini



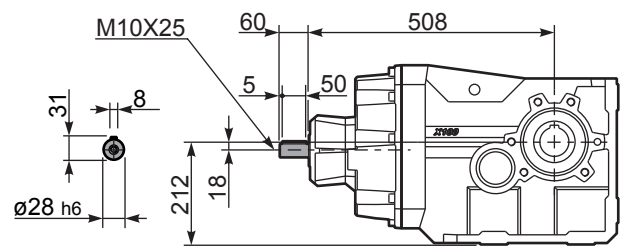
**PX104...-F6..** Output flange  
Flangia uscita



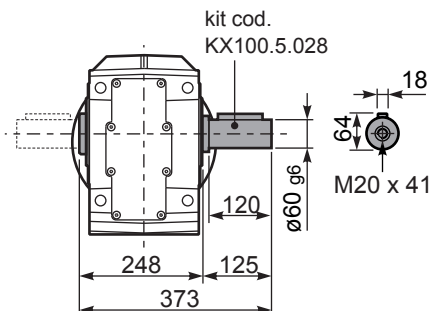
**PX104...BR..** Reaction Arm  
Braccio di reazione



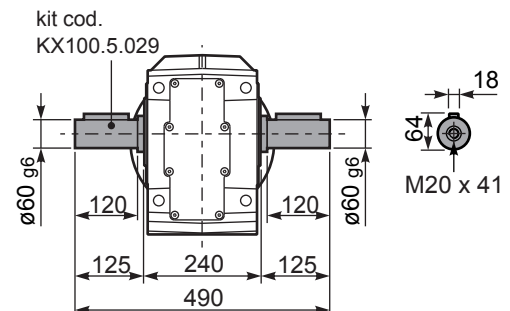
**RX104...** Input shaft  
Albero in entrata



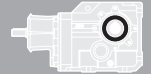
**PX104A...** Single shaft  
Albero lento semplice



**PX104B...** Double shaft  
Albero lento bisp.







## QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<sup>-1</sup>

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

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

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

**I** Il riduttore tipo **X113** è fornito privo di lubrificazione con tappi di sfio, 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 Blasias 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								
<b>Output shaft</b> Albero di uscita			$F_{eq} = FR \cdot \frac{325.5}{X+255.5}$					
$n_2$	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
<b>Input shaft</b> Albero in entrata								
$n_1$	FA	FR						
1400	1120	5600						
900	1220	6100						
500	1300	6500						

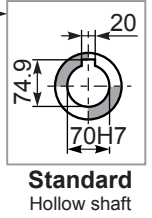
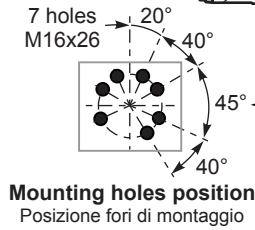
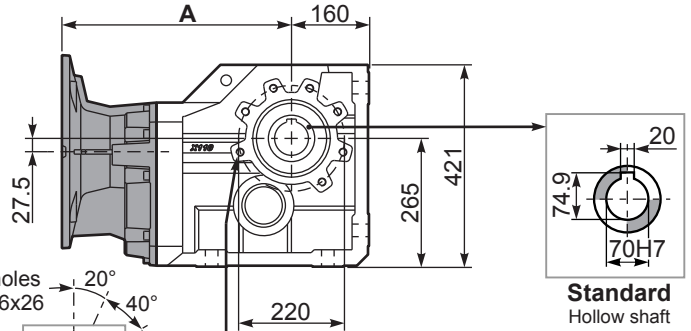
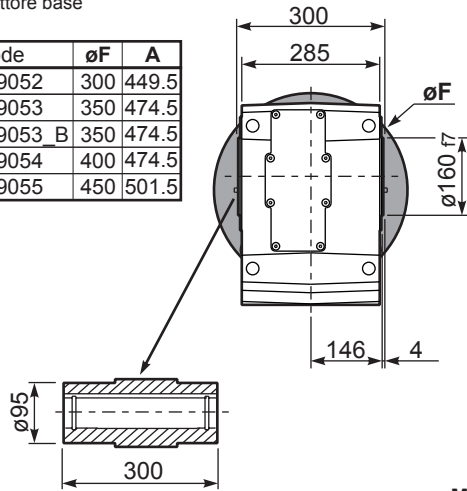
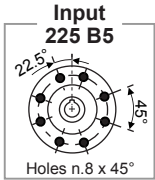
**tab. 2**

**P**X113C...

Basic Gearbox  
Riduttore base

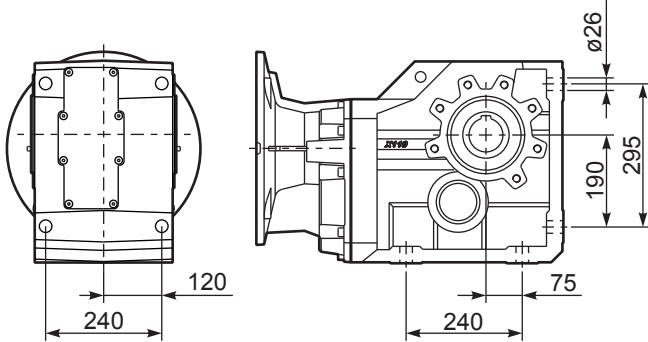
Gearbox weight **170 kg**  
peso riduttore

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



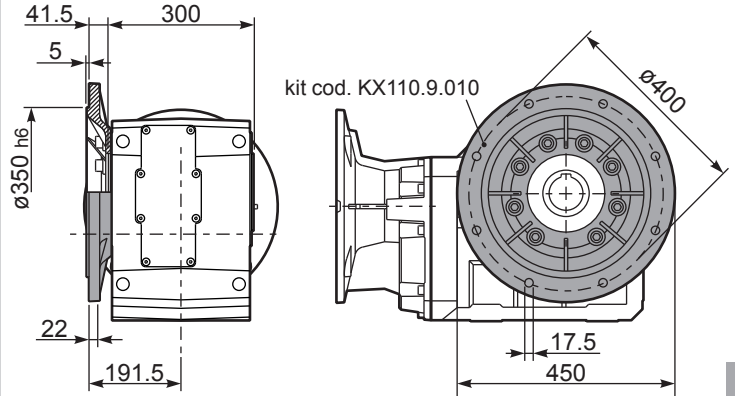
PX113...**FB**..

Feet  
Piedini



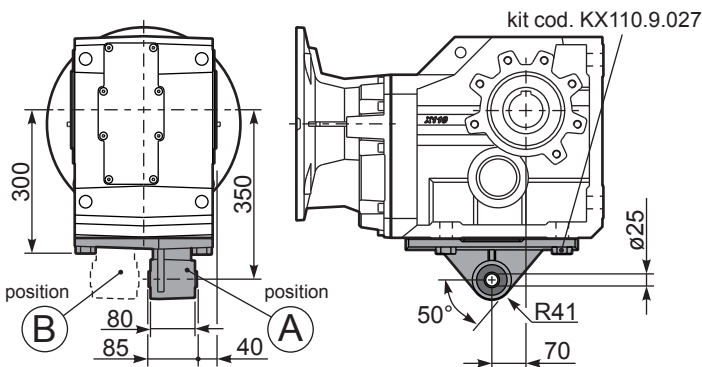
PX113...**-F7**..

Output flange  
Flangia uscita



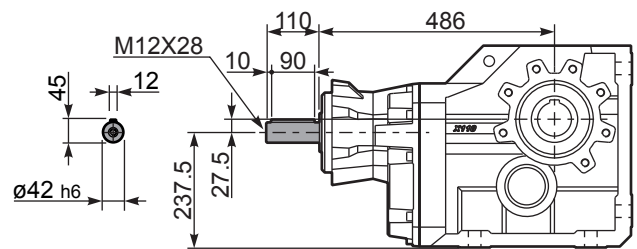
PX113...**BR**..

Reaction Arm  
Braccio di reazione



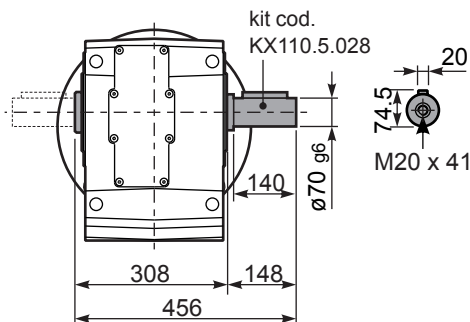
**R**X113...

Input shaft  
Albero in entrata



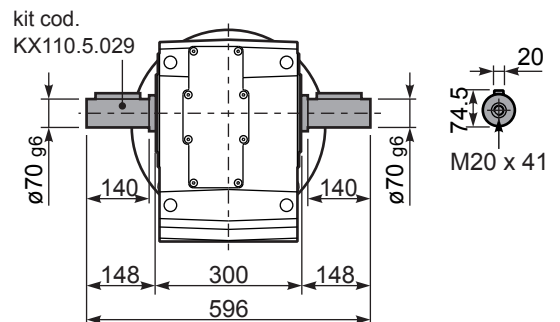
PX113**A**...

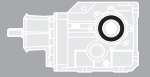
Single shaft  
Albero lento semplice



PX113**B**...

Double shaft  
Albero lento bisp.





## QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<sup>-1</sup>

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	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			B14 motor flanges			Output Shaft 	Ratios code
							-F	-G	-H	-	-	-		
							100	132	160	-	-	-		
28.8	<b>48.57</b>	15	4390	1.0	<b>14.8</b>	<b>4500</b>	B						30142911	01
20.5	<b>68.43</b>	11	4545	1.0	<b>10.7</b>	<b>4600</b>	B						20142914	02
18.7	<b>74.95</b>	11	4977	0.9	<b>9.8</b>	<b>4600</b>	B						20142913	03
15.1	<b>92.53</b>	7.5	4216	1.1	<b>7.9</b>	<b>4600</b>	B						16142914	04
13.8	<b>101.33</b>	7.5	4617	1.0	<b>7.2</b>	<b>4600</b>	B						16142913	05
11.6	<b>120.33</b>	5.5	4051	1.1	<b>6.1</b>	<b>4600</b>	B						13142914	06
11.3	<b>123.75</b>	5.5	4166	1.1	<b>5.8</b>	<b>4500</b>	B						16142911	07
10.6	<b>131.78</b>	5.5	4436	1.0	<b>5.6</b>	<b>4600</b>	B						13142913	08
9.5	<b>147.28</b>	5.5	4958	0.9	<b>5.0</b>	<b>4600</b>	B						11142914	09
8.7	<b>161.30</b>	4	3972	1.2	<b>4.5</b>	<b>4600</b>	B						11142913	10
7.1	<b>196.98</b>	3	3652	1.2	<b>3.6</b>	<b>4500</b>	B						11142911	11
6.6	<b>212.99</b>	3	3949	1.2	<b>3.4</b>	<b>4600</b>	B						8142914	12
6.0	<b>233.26</b>	3	4324	1.1	<b>3.1</b>	<b>4600</b>	B						8142913	13
4.9	<b>284.86</b>	2.2	3889	1.2	<b>2.5</b>	<b>4500</b>	B						8142911	14

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

Motor Flanges Available  
Flange Motore Disponibili

Supplied with Reduction Bushing  
Fornito con Bussola di Riduzione

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

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 Blasias 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								
<b>Output shaft</b> Albero di uscita			$F_{eq} = F_R \cdot \frac{325.5}{X+255.5}$					
$n_2$	$F_A$	$F_R$	$n_2$	$F_A$	$F_R$	$n_2$	$F_A$	$F_R$
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
<b>Input shaft</b> Albero in entrata								
$n_1$	$F_A$	$F_R$						
1400	700	3500						
900	840	4200						
500	900	4500						

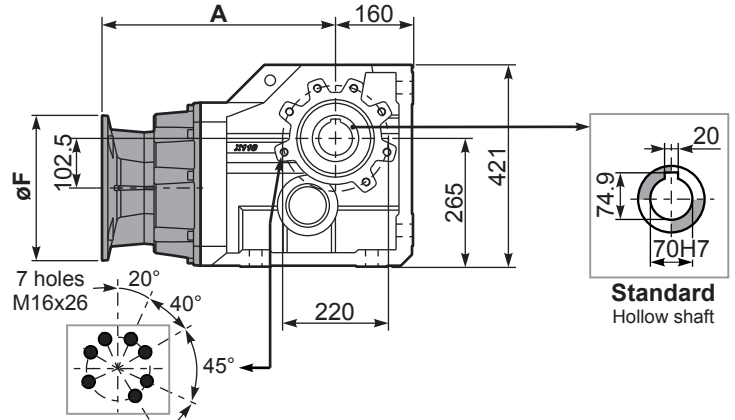
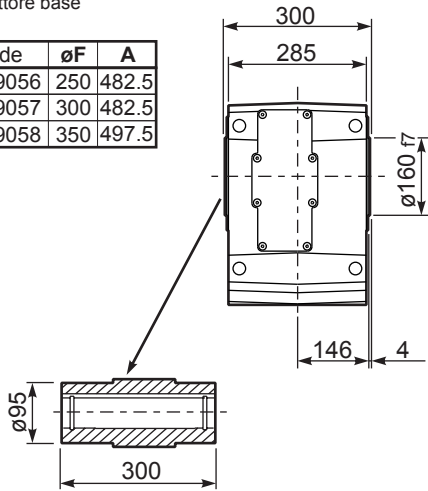
tab. 2

**PX114C...**

Basic Gearbox  
Riduttore base

Gearbox weight **161 kg**  
peso riduttore

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

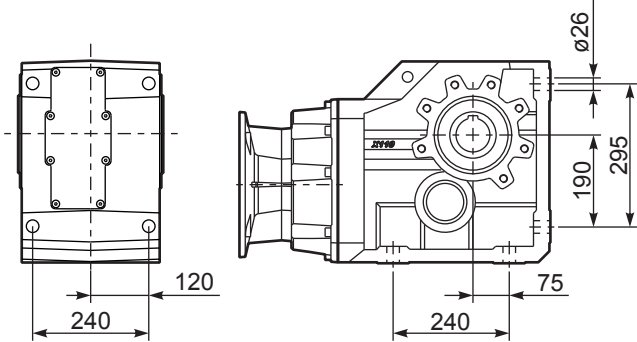


Mounting holes position  
Posizione fori di montaggio

**Standard**  
Hollow shaft

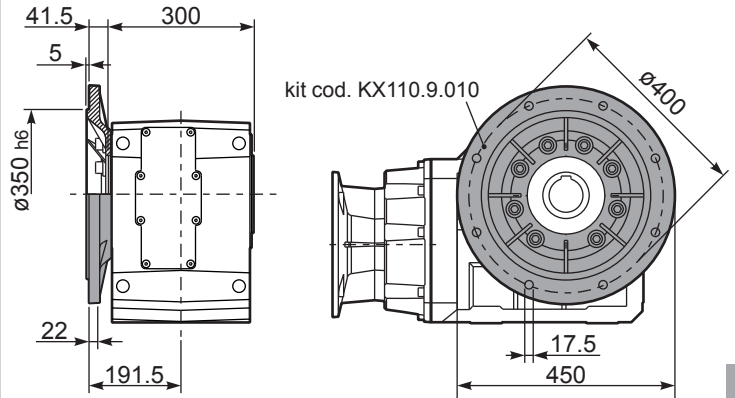
**PX114...FB..**

Feet  
Piedini



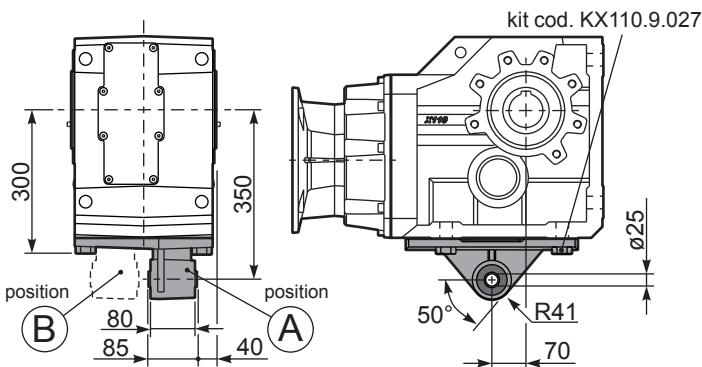
**PX114...-F7..**

Output flange  
Flangia uscita



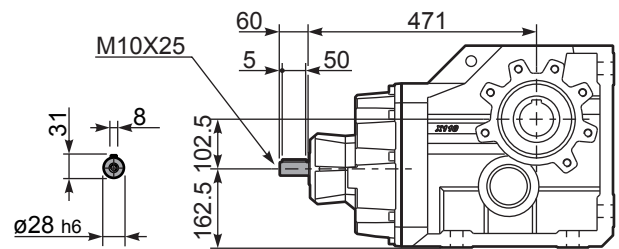
**PX114...BR..**

Reaction Arm  
Braccio di reazione



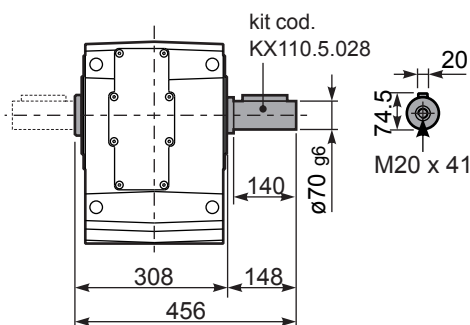
**RX114...**

Input shaft  
Albero in entrata



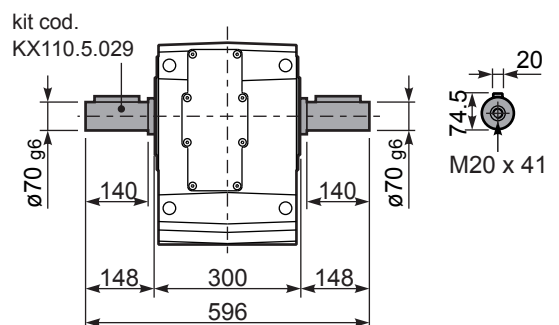
**PX114A...**

Single shaft  
Albero lento semplice



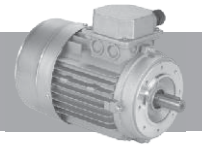
**PX114B...**

Double shaft  
Albero lento bisp.









**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 Isolierungsklasse 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**

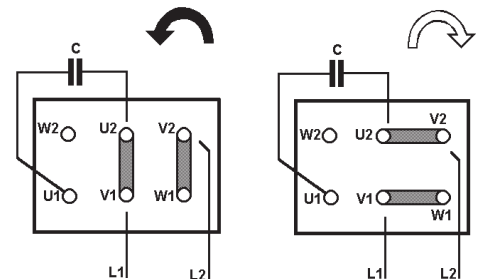
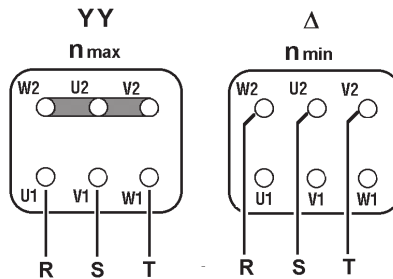
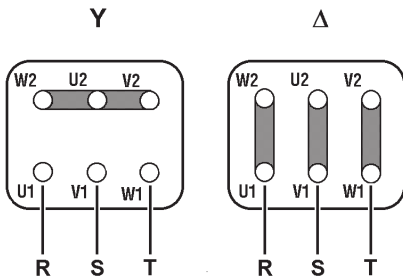
**Branchements**

**Conexiones**

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

Threephase asynchronous double polarity  
Asincrono trifase doppia polarità  
Asynchronmotor 3-ph doppelte Drehzahl  
Moteur triphasé à deux vitesses  
Asincrono trifasico de dos velocidades

Single phase asynchronous  
Asincrono monofase  
Einphasen-Asynchronmotor  
Moteur monophasé  
Asincrono monofasico







**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, if 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 warranty 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.

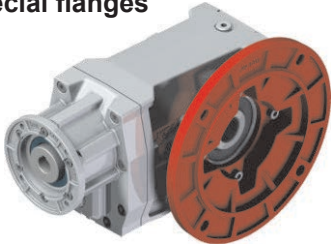
**La nostra ditta non si ritiene responsabile per eventuali danni diretti o indiretti derivanti da un uso improprio dei prodotti e dalla mancata osservanza delle indicazioni riportate a catalogo o web..**



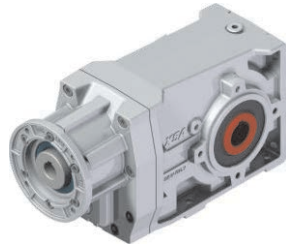


# New options available

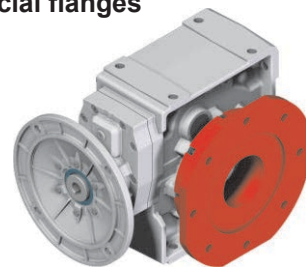
Special flanges



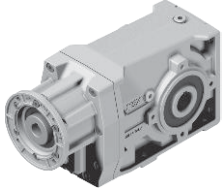
Stainless steel output shafts



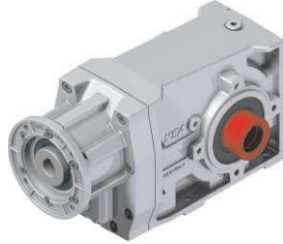
Special flanges



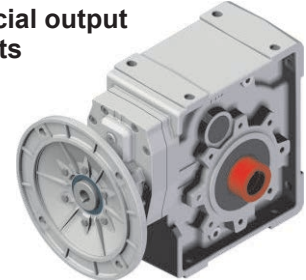
Color	RAL
light grey	7035



Special output shafts



Special output shafts

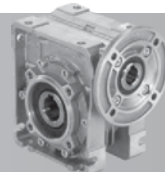


Special paint - Anticorrosive paint

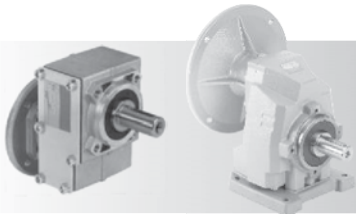
## Others HYDRO-MEC products



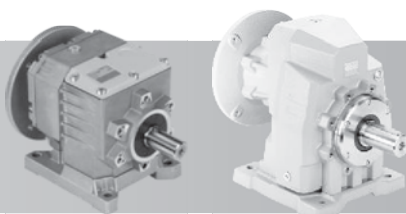
Worm gearboxes  
Rid. a vite senza fine



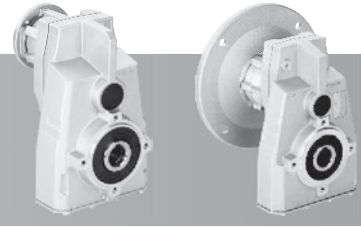
Square worm gearboxes  
Rid. a vite senza fine quadro



One step gearboxes  
Riduttori ad uno stadio



Coaxial gearboxes  
Riduttori coassiali



Shaft mounted gearboxes  
Riduttori pendolari



Stainless steel worm gearboxes  
Rid. a vite senza fine Inox

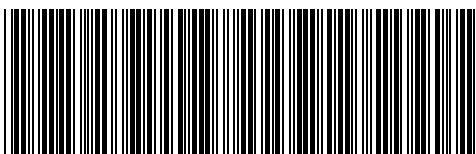


Stainless steel one step gearbox  
Riduttore uno stadio Inox

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\* CT - BVM- X- HM015