

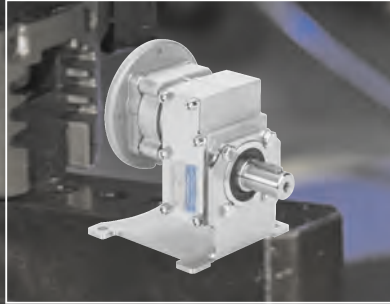
# Coaxial -

# Gears

Cat.: CT-RCM-WO-HM013

## Coaxial gearboxes

Riduttori Coassiali  
0.12 ÷ 22kW



Made in Italy



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



# HYDRO · MEC

# Aluminum one step gearboxes

A modular and compact product

5

## Alloy housing

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

## Flange

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

## Gears

Hardened and ground gears.

## Removable inspection cover

Allows periodic inspection of gearing during routine maintenance

## Output shaft

With well proportioned bearings

## Feet

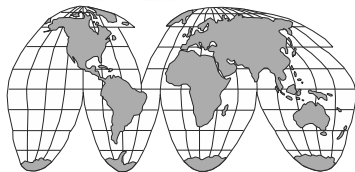
Removable feet.

## Single-piece aluminum alloy housing

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

Ideal for use as first step with wormgearboxes.

Lubricated for life with synthetic oil with operative range from -15° to +130°C



World wide sales network.



# Specific type datasheet on page...

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



Types / Tipi  
Tipen / Types  
Tipos



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

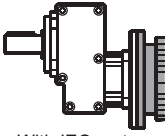
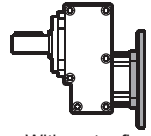
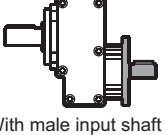
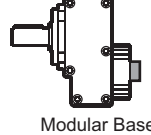
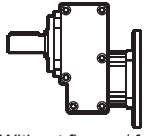
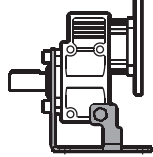
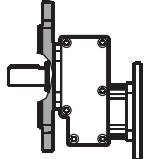
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Types / Tipi  
Tipen / Types  
Tipos

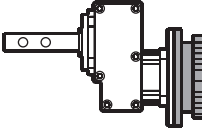


M-1									
56A 56B	63A 63B	71A 71B	80A 80B	90S 90L	100LA 100LB	112M	132S 132M	160M 160L	180M 180L

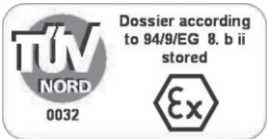
Type - Tipo - Typ Type - Tipo	Size - Grandezza - Grösse Taille - Tomaño	Mounting - Montaggio Montage - Fixation Tipo de montaje
<b>P</b>	<b>311A</b>	<b>-F</b>
<p><b>Aluminum one step gear</b> Riduttori in alluminio a uno stadio</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">                       With IEC motor <b>M</b> </div> <div style="text-align: center;">                       With motor flange <b>P</b> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">                       With male input shaft <b>R</b> </div> <div style="text-align: center;">                       Modular Base <b>B</b> </div> </div>	<p><b>1</b> Stages Riduzioni Stufen Trains Etapas</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80px; text-align: center;"> <b>211A</b>  <b>311A</b>  <b>411A</b>  <b>511A</b> </div>	<div style="display: flex; justify-content: space-around; margin-bottom: 20px;"> <div style="text-align: center;">                       Without flange / feet <b>-N</b> </div> <div style="text-align: center;">                       Mounted feet <b>H1</b> </div> </div> <div style="text-align: center;">                       Output flange mounted <b>-F</b> </div>

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**Special output shaft**  
Albero uscita speciale

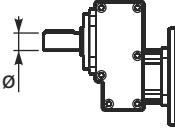
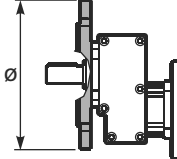
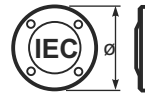


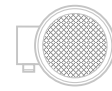



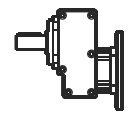
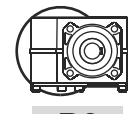

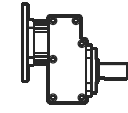
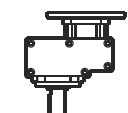
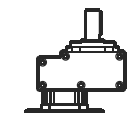


**Only on request for Q.ty**  
A richiesta per quantità



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



Ratio - Rapporto Untersetzung Reduction Relación	Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Terminal box position Posizione morsetteria Klemmkastenlage Position boîte à bornes Posición caja de bornes	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje																																								
<b>2.84</b>	<b>S</b>	<b>2</b>	<b>-C</b>	<b>B</b>	<b>B3</b>																																								
<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>211A</p> <p><b>S</b> → <b>Ø14</b></p> <p>311A</p> <p><b>S</b> → <b>Ø14</b></p> <p><b>C</b> → <b>Ø19</b></p> <p><b>E</b> → <b>Ø24</b></p> <p>411A</p> <p><b>S</b> → <b>Ø14</b></p> <p><b>C</b> → <b>Ø19</b></p> <p><b>E</b> → <b>Ø24</b></p> <p>511A</p> <p><b>C</b> → <b>Ø19</b></p> <p><b>E</b> → <b>Ø24</b></p> <p><b>G</b> → <b>Ø28</b></p>	 <p><b>N</b> Senza flangia Without flange</p> <p>311A</p> <p><b>1</b> ⇒ <b>Ø120</b></p> <p><b>2</b> ⇒ <b>Ø140</b></p> <p><b>3</b> ⇒ <b>Ø160</b></p> <p><b>4</b> ⇒ <b>Ø200</b></p> <p>411A</p> <p><b>1</b> ⇒ <b>Ø120</b></p> <p><b>2</b> ⇒ <b>Ø140</b></p> <p><b>3</b> ⇒ <b>Ø160</b></p> <p><b>4</b> ⇒ <b>Ø200</b></p> <p>511A</p> <p><b>1</b> ⇒ <b>Ø120</b></p> <p><b>2</b> ⇒ <b>Ø140</b></p> <p><b>3</b> ⇒ <b>Ø160</b></p> <p><b>4</b> ⇒ <b>Ø200</b></p> <p><b>5</b> ⇒ <b>Ø250</b></p>	<p>Standard Flange Flangia Standard</p>  <table border="1"> <tr> <td data-bbox="662 459 837 504">B5</td> <td data-bbox="837 459 1021 504">B14</td> </tr> <tr> <td data-bbox="662 504 837 571"><b>-A</b>=56 (Ø120)</td> <td data-bbox="837 504 1021 571"><b>-O</b>=56 (Ø80)</td> </tr> <tr> <td data-bbox="662 571 837 638"><b>-B</b>=63 (Ø140)</td> <td data-bbox="837 571 1021 638"><b>-P</b>=63 (Ø90)</td> </tr> <tr> <td data-bbox="662 638 837 705"><b>-C</b>=71 (Ø160)</td> <td data-bbox="837 638 1021 705"><b>-Q</b>=71 (Ø105)</td> </tr> <tr> <td data-bbox="662 705 837 772"><b>-D</b>=80 (Ø200)</td> <td data-bbox="837 705 1021 772"><b>-R</b>=80 (Ø120)</td> </tr> <tr> <td data-bbox="662 772 837 840"><b>-E</b>=90 (Ø200)</td> <td data-bbox="837 772 1021 840"><b>-T</b>=90 (Ø140)</td> </tr> <tr> <td data-bbox="662 840 837 907"><b>-F</b>=100+112 (Ø250)</td> <td data-bbox="837 840 1021 907"><b>-U</b>=100+112 (Ø160)</td> </tr> <tr> <td data-bbox="662 907 837 974"><b>-G</b>=132 (Ø300)</td> <td data-bbox="837 907 1021 974"><b>-V</b>=132 (Ø200)</td> </tr> </table> <p>Type R / Tipo R</p>  <table border="1"> <tr> <td data-bbox="662 1064 837 1108">211A 311A</td> <td data-bbox="837 1064 1021 1108">511A</td> </tr> <tr> <td data-bbox="662 1108 837 1176"><b>-1</b> ⇒ <b>Ø14</b></td> <td data-bbox="837 1108 1021 1176"><b>-3</b> ⇒ <b>Ø24</b></td> </tr> <tr> <td data-bbox="662 1176 837 1243">411A</td> <td></td> </tr> <tr> <td data-bbox="662 1243 837 1310"><b>-2</b> ⇒ <b>Ø19</b></td> <td></td> </tr> </table> <p>Without flange / Senza flangia</p>  <table border="1"> <tr> <td data-bbox="662 1332 837 1377">211A 311A</td> <td data-bbox="837 1332 1021 1377">411A</td> </tr> <tr> <td data-bbox="662 1377 837 1444"><b>-Z</b> ⇒ <b>Ø9</b> (56B5)</td> <td data-bbox="837 1377 1021 1444"><b>-1</b> ⇒ <b>Ø14</b> (71B5)</td> </tr> <tr> <td data-bbox="662 1444 837 1512"><b>-0</b> ⇒ <b>Ø11</b> (63B5)</td> <td data-bbox="837 1444 1021 1512"><b>-2</b> ⇒ <b>Ø19</b> (80B5)</td> </tr> <tr> <td data-bbox="662 1512 837 1579"><b>-1</b> ⇒ <b>Ø14</b> (71B5)</td> <td data-bbox="837 1512 1021 1579"><b>-3</b> ⇒ <b>Ø24</b> (90B5)</td> </tr> <tr> <td data-bbox="662 1579 837 1646">511A</td> <td></td> </tr> <tr> <td data-bbox="662 1646 837 1713"><b>-2</b> ⇒ <b>Ø19</b> (80B5)</td> <td></td> </tr> <tr> <td data-bbox="662 1713 837 1780"><b>-3</b> ⇒ <b>Ø24</b> (90B5)</td> <td></td> </tr> <tr> <td data-bbox="662 1780 837 1848"><b>-4</b> ⇒ <b>Ø28</b> (100B5)</td> <td></td> </tr> </table> <p>→ STANDARD</p>	B5	B14	<b>-A</b> =56 (Ø120)	<b>-O</b> =56 (Ø80)	<b>-B</b> =63 (Ø140)	<b>-P</b> =63 (Ø90)	<b>-C</b> =71 (Ø160)	<b>-Q</b> =71 (Ø105)	<b>-D</b> =80 (Ø200)	<b>-R</b> =80 (Ø120)	<b>-E</b> =90 (Ø200)	<b>-T</b> =90 (Ø140)	<b>-F</b> =100+112 (Ø250)	<b>-U</b> =100+112 (Ø160)	<b>-G</b> =132 (Ø300)	<b>-V</b> =132 (Ø200)	211A 311A	511A	<b>-1</b> ⇒ <b>Ø14</b>	<b>-3</b> ⇒ <b>Ø24</b>	411A		<b>-2</b> ⇒ <b>Ø19</b>		211A 311A	411A	<b>-Z</b> ⇒ <b>Ø9</b> (56B5)	<b>-1</b> ⇒ <b>Ø14</b> (71B5)	<b>-0</b> ⇒ <b>Ø11</b> (63B5)	<b>-2</b> ⇒ <b>Ø19</b> (80B5)	<b>-1</b> ⇒ <b>Ø14</b> (71B5)	<b>-3</b> ⇒ <b>Ø24</b> (90B5)	511A		<b>-2</b> ⇒ <b>Ø19</b> (80B5)		<b>-3</b> ⇒ <b>Ø24</b> (90B5)		<b>-4</b> ⇒ <b>Ø28</b> (100B5)		 <p><b>A</b></p>  <p><b>B</b> STANDARD</p>  <p><b>C</b></p>  <p><b>D</b></p>	 <p><b>B3</b> STANDARD</p>  <p><b>B6</b></p>  <p><b>B7</b></p>  <p><b>B8</b></p>  <p><b>V5</b></p>  <p><b>V6</b> Specify only for vertical positions Specificare solo per posizione verticale</p>
B5	B14																																												
<b>-A</b> =56 (Ø120)	<b>-O</b> =56 (Ø80)																																												
<b>-B</b> =63 (Ø140)	<b>-P</b> =63 (Ø90)																																												
<b>-C</b> =71 (Ø160)	<b>-Q</b> =71 (Ø105)																																												
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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 / rotation

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

Linear movement / traslazione / linearbewegung / translation / translacion

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

TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

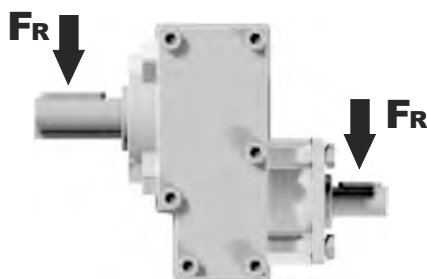
$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

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

5

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

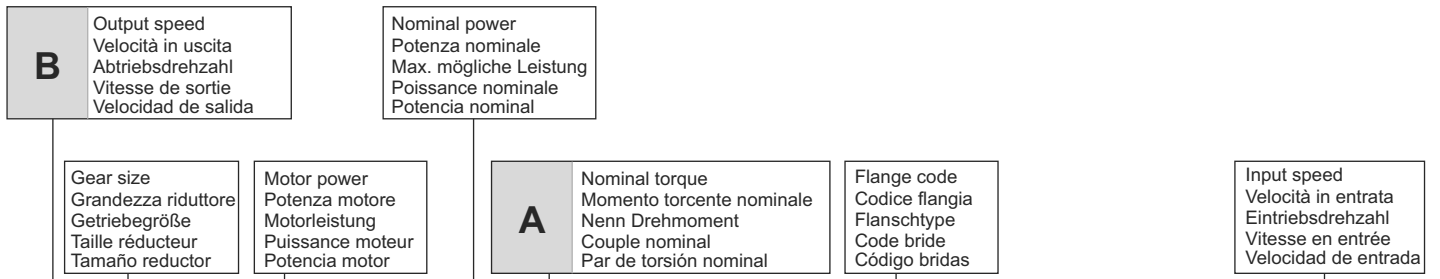
- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée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



	$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$	$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$
<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 sprochets / 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



**311A** One step  
**30Nm**

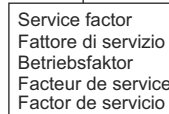
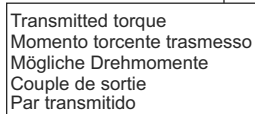
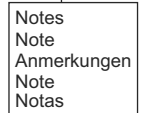
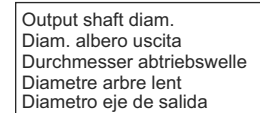
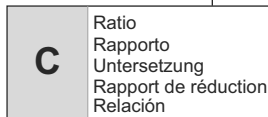
Rating - Aluminum ONE STEP GEARBOXES



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		Ratios code
							B	C	O	P	Q			
892	1.57	0.37	3.9	3.3	1.24	13			C	C		2844	standard ø14	01
493	2.84	0.37	7.0	3.3	1.21	23			C	C		1954		02
426	3.29	0.37	8.1	3.2	1.18	26			C	C		1756		03
362	3.87	0.37	9.6	2.9	1.08	28			C	C		1558		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 boccola 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 boccola Auch ohne Reduzierbuchse verfügbar Disponible aussi sans douille de réduction Disponible tambien 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** 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  standard ø14	Ratios code 
							B	C	D	E	O	P	Q	R		
682	<b>2.05</b>	0.37	5	2.0	<b>0.73</b>	<b>10</b>					C	C			1939	01
595	<b>2.35</b>	0.37	6	2.1	<b>0.76</b>	<b>12</b>					C	C			1740	02
500	<b>2.80</b>	0.37	7	2.0	<b>0.75</b>	<b>14</b>					C	C			1542	03
414	<b>3.38</b>	0.37	8	2.0	<b>0.75</b>	<b>17</b>					C	C			1344	04
298	<b>4.70</b>	0.37	12	1.7	<b>0.64</b>	<b>20</b>					C	C			1047	05
225	<b>6.22</b>	0.37	15	1.5	<b>0.55</b>	<b>23</b>					C	C			956	06
169	<b>8.29</b>	0.37	20	1.0	<b>0.36</b>	<b>20</b>					C	C			758	07
142	<b>9.83</b>	0.25	16	1.0	<b>0.24</b>	<b>16</b>					C	C			659	08

The dynamic efficiency is **0.98** for all ratios

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **211A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **211A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **211A** ist mit synthetischem Öl gefüllt und ist 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 **211A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **211A** se suministra, lubricado de por vida con aceite sintético y no 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.

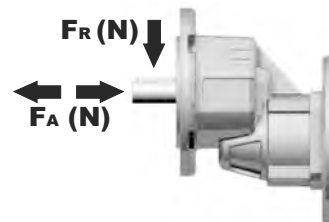
### LUBRICATION 211A Oil Quantity 0.05 Lt.

<b>AGIP</b> Telium VSF 320	<b>SHELL</b> Omala S4 WE 320
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For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

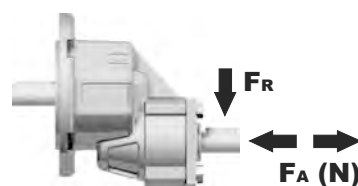
### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita



$n_2$	FA	FR
700	101	504
600	120	600
400	138	696
300	151	756
200	175	876
140	192	960

**Input shaft**  
albero in entrata



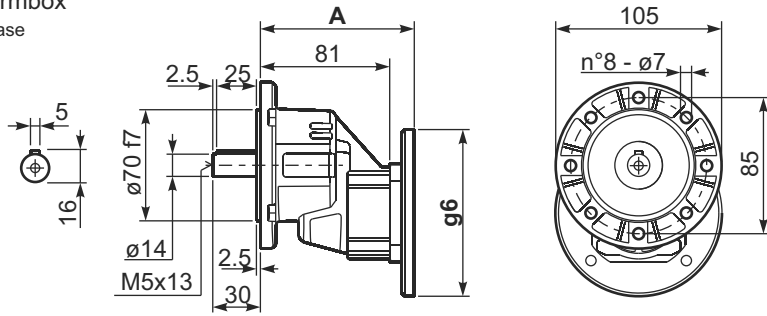
$n_2$	FA	FR
1400	168	840
900	192	960

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

**tab. 2**

**P211A-F...** Basic wormbox  
Riduttore base

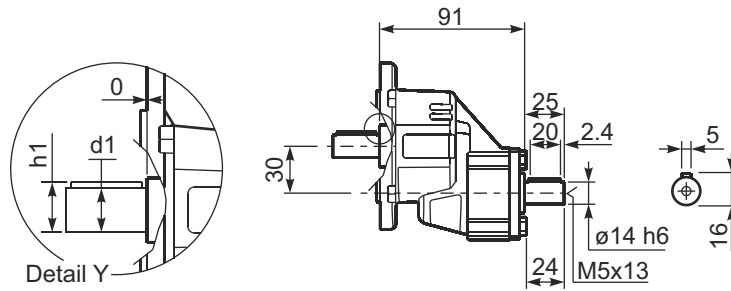
Gearbox weight  
peso riduttore **1.40 kg**



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

B14 Motor Flanges	A	g6	kit code
56 B14	97	80	KC40.4.049
63 B14	99	90	K050.4.047
71 B14	97	105	K050.4.045

**R211A-F...** Basic wormbox  
Riduttore base



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	$\phi 14 \times 30$	5	16	M5x13





### 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	O	P	Q			
891	1.57	0.37	4	3.3	1.2	13			C	C		2844	standard ø14  On request ø19 ø24	01
493	2.84	0.37	7	3.3	1.2	23			C	C		1954		02
425	3.29	0.37	8	3.2	1.2	26			C	C		1756		03
362	3.87	0.37	10	2.9	1.1	28			C	C		1558		04
303	4.62	0.37	11	2.6	0.97	30			C	C		1360		05
222	6.30	0.37	16	2.2	0.83	35			C	C		1063		06
170	8.22	0.37	20	1.9	0.69	38			C	C		974		07
129	10.86	0.37	27	1.0	0.39	28			C	C		776		08

The dynamic efficiency is **0.98** for all ratios

**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 311A is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore 311A viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe 311A ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur 311A est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño 311A se suministra, lubricado de por vida con aceite sintético y no 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.

### LUBRICATION 311A Oil Quantity 0.10 Lt.

**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website

tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

### RADIAL AND AXIAL LOADS

#### Output shaft

Albero di uscita

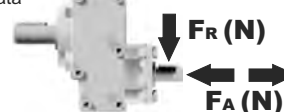
$$F_{eq} = F_R \cdot \frac{38.5}{X+18.5}$$



$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
700	120	640	400	160	800	200	200	1020
600	140	700	300	175	880	140	225	1120

#### Input shaft

Albero in entrata

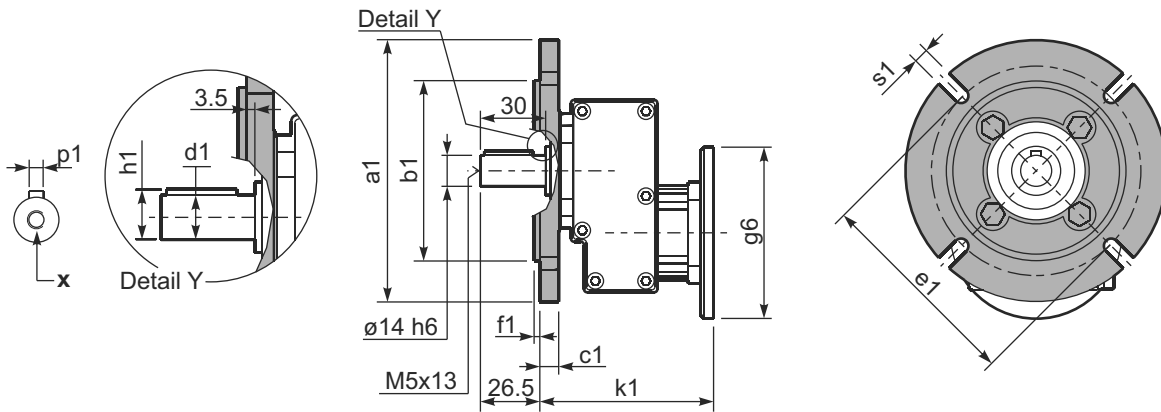


$n_1$	FA	FR
1400	180	860
900	200	980

tab. 2

**P311-F...** Output flange  
flange di uscita

Gearbox weight  
peso riduttore **2.50 kg**



**\*Available output shaft / Albero di uscita**

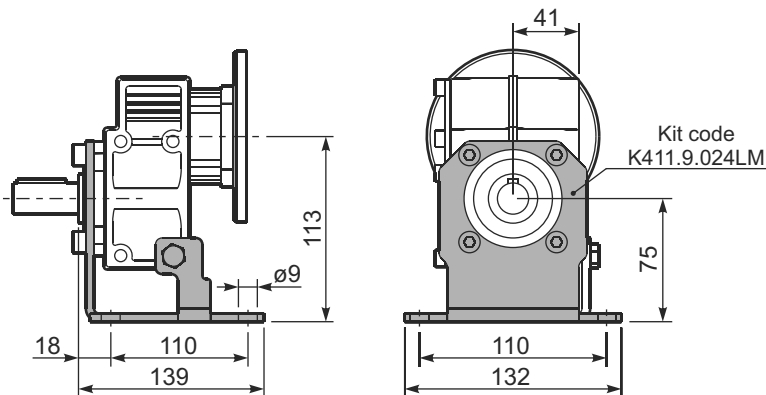
	Shaft - d1	p1	h1	x
Standard	∅ 14x30	5	16	M5x13
On request A richiesta	∅ 19x40 ∅ 24x40	6 8	21.5 27	M6x16 M6x16

**Available output flanges / flange di uscita**

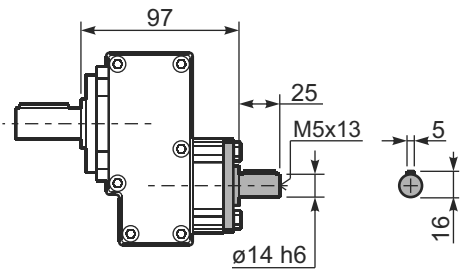
a1 ∅	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

\*Holes position  
posizione fori

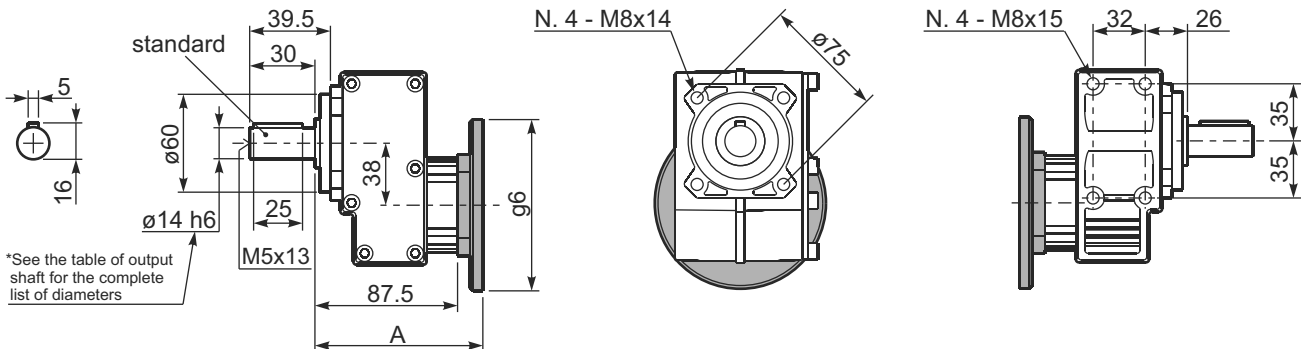
**P311-H1...** With feet  
Con piedini



**R311-N...** Input Shaft  
Albero in entrata



**P311-N...** Basic gearbox  
Riduttore base



B14 Motor Flanges	A	g6	k1	kit code
56 B14	107.5	80	111	KC40.4.049
63 B14	105.5	90	109	K050.4.047
71 B14	103	105	106.5	K050.4.045

B5 Motor Flanges	A	g6	k1	kit code
63 B5	103.5	138	107	K050.4.041
71 B5	101.5	160	105	K050.4.042



### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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			
891	<b>1.57</b>	1.5	16	1.3	<b>1.9</b>	<b>20</b>	B				C	C		2844	standard ø19  On request ø14 ø24	01
493	<b>2.84</b>	1.5	28	1.2	<b>1.8</b>	<b>35</b>	B				C	C		1954		02
425	<b>3.29</b>	1.5	33	1.2	<b>1.7</b>	<b>38</b>	B				C	C		1756		03
362	<b>3.87</b>	1.5	39	1.0	<b>1.5</b>	<b>40</b>	B				C	C		1558		04
303	<b>4.62</b>	1.5	46	1.0	<b>1.5</b>	<b>47</b>	B				C	C		1360		05
222	<b>6.30</b>	1.1	46	1.0	<b>1.1</b>	<b>46</b>	B				C	C		1063		06
170	<b>8.22</b>	0.55	30	1.3	<b>0.69</b>	<b>38</b>	B				C	C		974		07
129	<b>10.86</b>	0.37	27	1.0	<b>0.39</b>	<b>28</b>	B				C	C		776		08

The dynamic efficiency is **0.98** for all ratios

**Motor Flanges Available**  
Flange Motore Disponibili

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

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



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

**EN** Unit **411A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **411A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **411A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **411A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **411A** se suministra, lubricado de por vida con aceite sintético y no 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.

### LUBRICATION 411A Oil Quantity 0.20 Lt.

**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website

tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

### RADIAL AND AXIAL LOADS

#### Output shaft

Albero di uscita

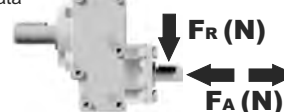
$$F_{eq} = F_R \cdot \frac{40}{X+20}$$



$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
700	182	910	400	230	1150	200	290	1450
600	200	1000	300	250	1250	140	320	1600

#### Input shaft

Albero in entrata

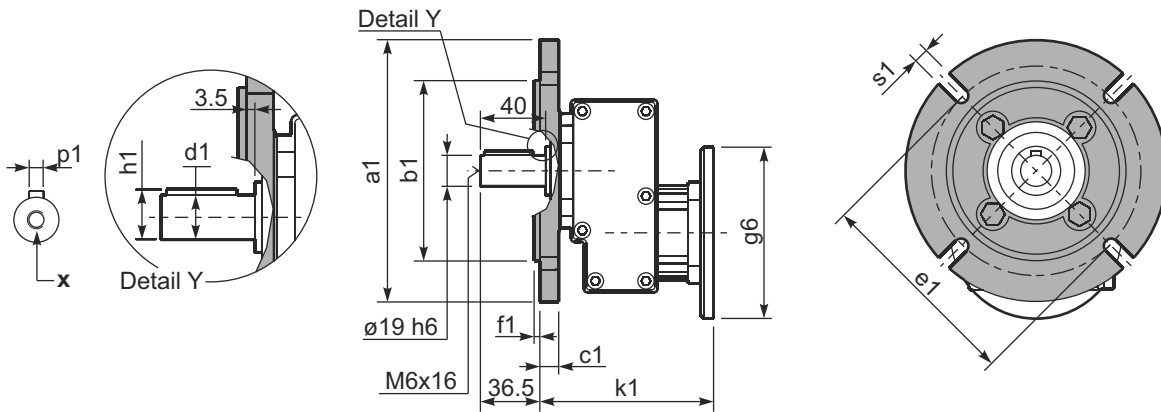


$n_1$	FA	FR
1400	240	1200
900	280	1400

tab. 2

**P411-F...** Output flange  
flange di uscita

Gearbox weight  
peso riduttore **3.20 kg**



**\*Available output shaft / Albero di uscita**

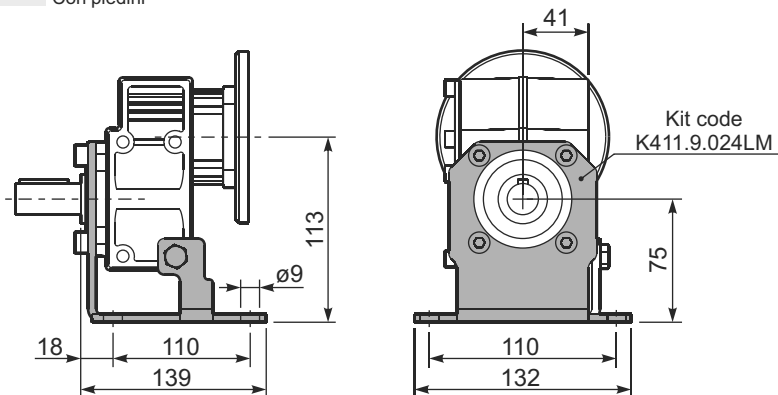
	Shaft - d1	p1	h1	x
Standard	∅ 19x40	6	21.5	M6x16
On request A richiesta	∅ 14x30 ∅ 24x40	5 8	16 27	M5x13 M6x16

**Available output flanges / flange di uscita**

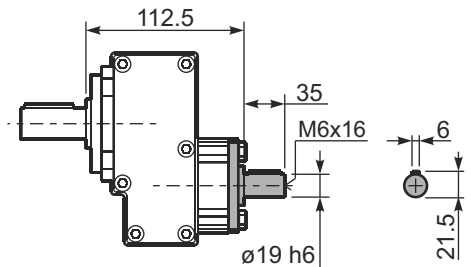
a1 ∅	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

\*Holes position  
posizione fori

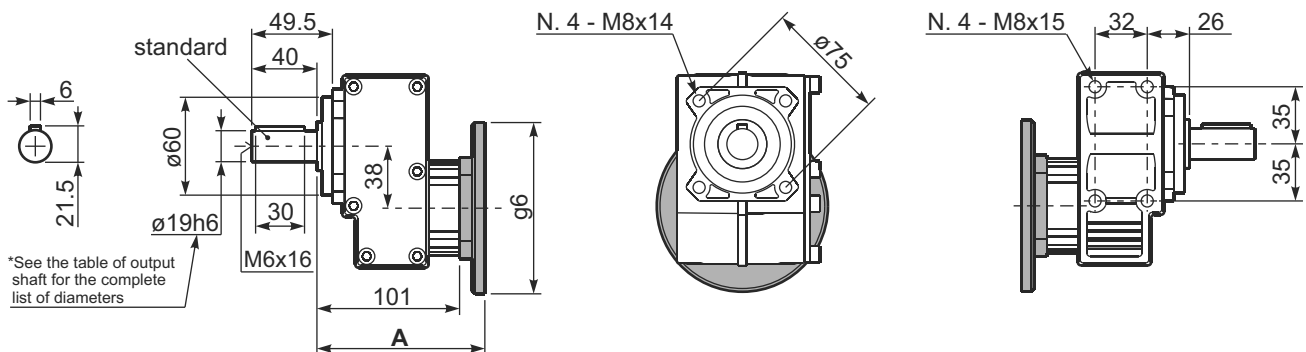
**P411-H1...** With feet  
Con piedini



**R411-N...** Input Shaft  
Albero in entrata



**P411-N...** Basic gearbox  
Riduttore base



B5 Motor Flanges	A	g6	k1	kit code
63 B5	121.5	140	125	K063.4.041
71 B5	119.5	160	123	K063.4.042
80/90 B5	121.5	200	125	K063.4.043

B14 Motor Flanges	A	g6	k1	kit code
71 B14	119.5	105	123	K063.4.047
80 B14	120.5	120	124	K063.4.046
90 B14	121.5	140	125	K063.4.041



**QUICK SELECTION / Selezione veloce** input speed ( $n_1$ ) = 1400 min<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				
							C	D	E	F	G	R	T	U	V			Ratios code		
							71	80	90	100 112	132	80	90	100 112	132					
1077	<b>1.30</b>	4	34	1.2	4.6	40	B										3039	<b>standard</b> <b>ø28</b>	01	
571	<b>2.45</b>	4	64	1.1	4.3	70	B										2049		02	
423	<b>3.31</b>	4	87	1.0	4.1	90	B										1653		03	
325	<b>4.31</b>	4	113	1.0	3.8	110	B										1356		04	
266	<b>5.27</b>	3	104	1.1	3.1	110	B										1158		On request	05
184	<b>7.63</b>	2.2	111	1.0	2.2	110	B										861		ø19	06
133	<b>10.50</b>	1.1	77	1.0	1.1	80	B										663		ø24	07

The dynamic efficiency is **0.98** for all ratios

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

**EN** Unit **511A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **511A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **511A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **511A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **511A** se suministra, lubricado de por vida con aceite sintético y no 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.

### LUBRICATION 511A Oil Quantity 0.29 Lt.

**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website

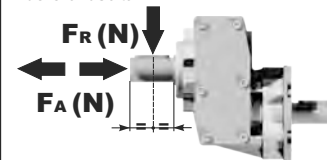
tab. 1

Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

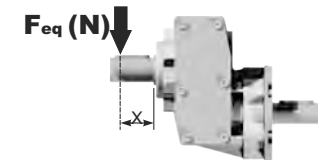
### RADIAL AND AXIAL LOADS

#### Output shaft

Albero di uscita



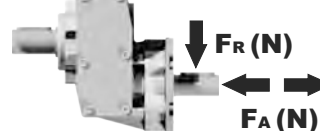
$$F_{eq} = F_R \cdot \frac{52.5}{X+22.5}$$



$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
700	294	1470	400	370	1850	200	460	2300
600	320	1600	300	400	2000	140	510	2550

#### Input shaft

Albero in entrata



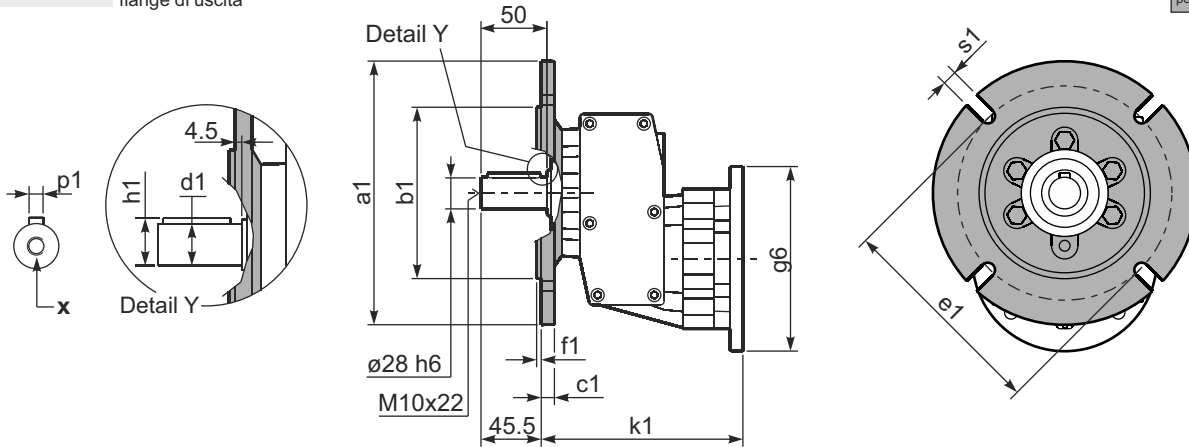
$n_1$	FA	FR
1400	400	2000
900	440	2200

tab. 2



**P511-F...** Output flanges  
flange di uscita

Gearbox weight  
peso riduttore **5.00 kg**



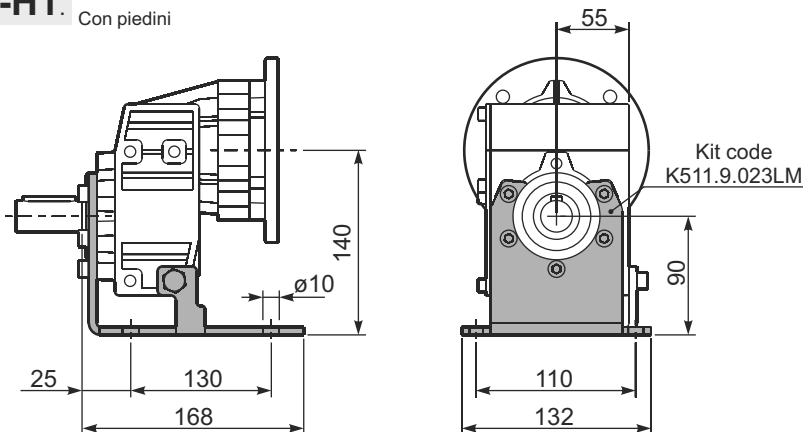
**\*Available output shaft / Albero di uscita**

	Shaft - d1	p1	h1	x
Standard	ø 28x50	8	31	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 19x40	6	21.5	M6x16

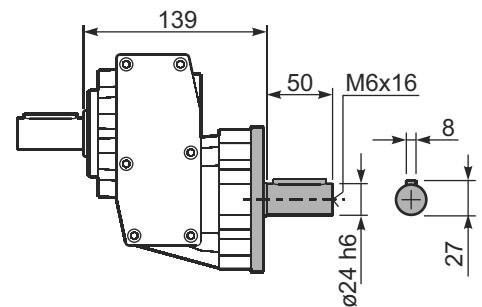
**Available output flanges / flange di uscita**

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	9	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3	9	KC40.9.012
200	130	11	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014

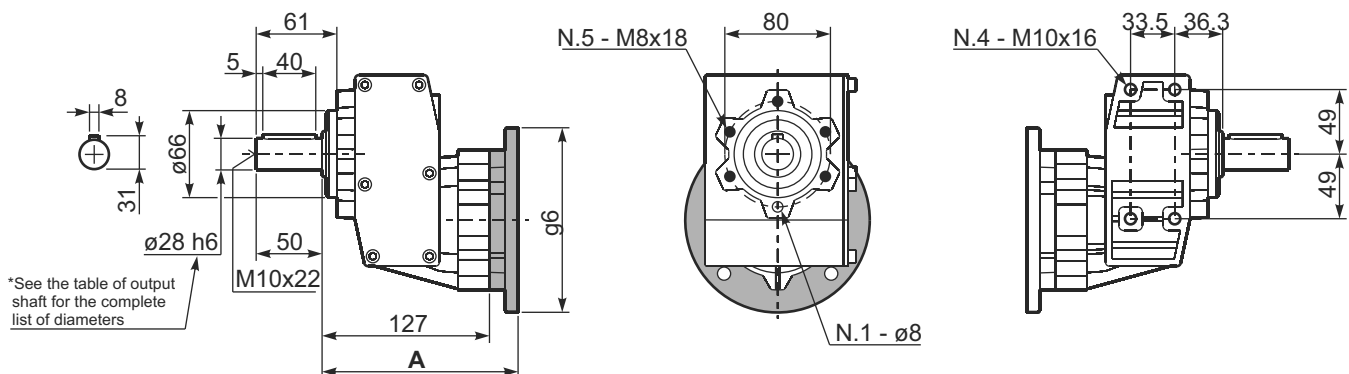
**P511A-H1.** With feet  
Con piedini



**R511A-N...** Input Shaft  
Albero in entrata



**P511-N...** Basic gearbox  
Riduttore base



\*See the table of output shaft for the complete list of diameters

B5 Motor Flanges	A	g6	k1	kit code
71 B5	145	160	149.5	KC023.4.041
80/90 B5	147	200	151.5	KC023.4.042
100/112 B5	153	250	157.5	KC023.4.043
132 B5	175	300	188	KC50.4.043

B14 Motor Flanges	A	g6	k1	kit code
80 B14	145	120	149.5	KC085.4.046
90 B14	145	140	149.5	KC085.4.045
100/112 B14	145	160	149.5	KC085.4.047
132 B14	175	200	188	KC50.4.041

# Aluminum in line gearboxes

## A modular and compact product

### Alloy housing

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

### Flange

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

### Removable inspection cover

Allows periodic inspection of gearing during routine maintenance

### Oil seals

Two oil seals on request

### Output shaft

With well proportioned bearings

### Gears

Hardened and ground gears.

### Feet

Removable feet. With patented locking system.

### Foot prints

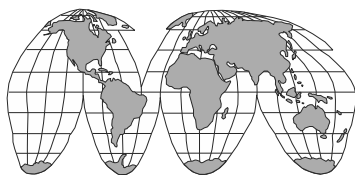
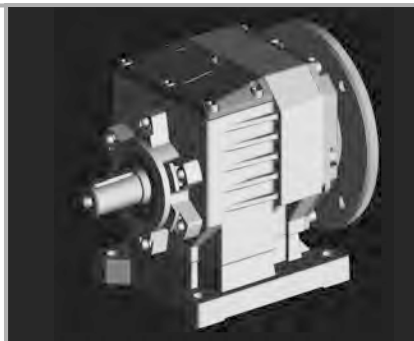
Compatible to the main standard of the market.

Lubricated for life with synthetic oil with operative range from -15° to +130°C



### Single-piece aluminum alloy housing

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



World wide sales network.



# Specific type datasheet on page...

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



Types / Tipi  
Tipen / Types  
Tipos


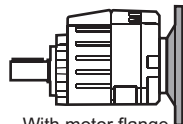
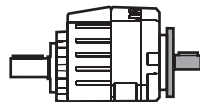
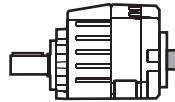

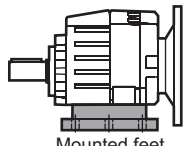
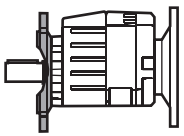
6-5	6-7	6-9	6-11	6-13	6-15	6-17	6-19	6-21
<b>202A</b> 70Nm	<b>302A</b> 120Nm	<b>402A</b> 160Nm	<b>403A</b> 160Nm	<b>452A</b> 300Nm	<b>502A</b> 350Nm	<b>503A</b> 350Nm	<b>602A</b> 520Nm	<b>603A</b> 520Nm

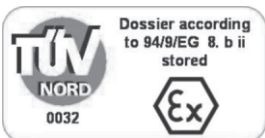
On page / A pagina / Auf Seite / À la page / En la página



Types / Tipi  
Tipen / Types  
Tipos

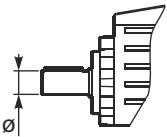
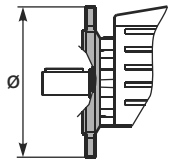
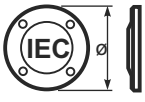
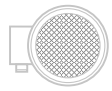

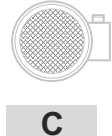

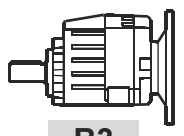
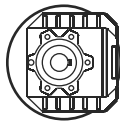
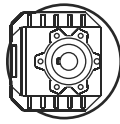
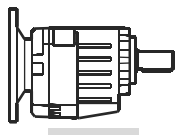
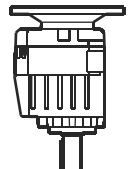
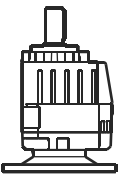
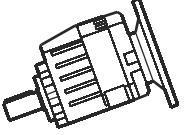
M-1									
<b>56A</b> 56B	<b>63A</b> 63B	<b>71A</b> 71B	<b>80A</b> 80B	<b>90S</b> 90L	<b>100LA</b> 100LB	<b>112M</b>	<b>132S</b> 132M	<b>160M</b> 160L	<b>180M</b> 180L

Type - Tipo - Typ Type - Tipo	Size - Grandezza - Grösse Taille - Tomafío	Mounting - Montaggio Montage - Fixation Tipo de montaje																																																								
<b>P</b>	<b>402A</b>	<b>-F</b>																																																								
<p><b>Aluminum coaxial gear boxes</b> Riduttori coassiali in alluminio</p> <div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>With IEC motor <b>M</b></p> </div> <div style="text-align: center;">  <p>With motor flange <b>P</b></p> </div> </div> <div style="display: flex; justify-content: space-around; margin-top: 20px;"> <div style="text-align: center;">  <p>With male input shaft <b>R</b></p> </div> <div style="text-align: center;">  <p>Modular base <b>B</b></p> </div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;"> <p><b>2</b> Stages Riduzioni Stufen Trains Etapas</p> <div style="background-color: #cccccc; padding: 5px; margin: 5px;"> <p><b>202A</b> <b>302A</b> <b>402A</b> <b>452A</b> <b>502A</b> <b>602A</b></p> </div> </div> <div style="text-align: center;"> <p><b>3</b> Stages Riduzioni Stufen Trains Etapas</p> <div style="background-color: #cccccc; padding: 5px; margin: 5px;"> <p><b>403A</b> <b>503A</b> <b>603A</b></p> </div> </div> </div>	<div style="display: flex; justify-content: space-around;"> <div style="text-align: center;">  <p>Without flange / feet <b>-N</b></p> </div> <div style="text-align: center;">  <p>Mounted feet <b>B..</b></p> </div> </div> <div style="margin-top: 20px;">  <p>Output flange mounted <b>-F</b></p> </div> <div style="margin-top: 20px;"> <p><b>Feet / piedini</b></p> <table border="1"> <thead> <tr> <th>Feet Code reference</th> <th>G</th> <th>H</th> <th>R</th> <th>L</th> <th>L1</th> <th>S</th> </tr> </thead> <tbody> <tr> <td>B1</td> <td>112</td> <td>18</td> <td>85</td> <td>110</td> <td>87</td> <td>50</td> </tr> <tr> <td>B2</td> <td>212/3</td> <td>18</td> <td>100</td> <td>130</td> <td>107.5</td> <td></td> </tr> <tr> <td>S1</td> <td>17</td> <td>18</td> <td>75</td> <td>110</td> <td>90+20</td> <td></td> </tr> <tr> <td>S2</td> <td>27</td> <td>25</td> <td>90</td> <td>110</td> <td>130</td> <td></td> </tr> <tr> <td>M1</td> <td>42/3</td> <td>25</td> <td>80</td> <td>110+120</td> <td>85</td> <td></td> </tr> <tr> <td>L4</td> <td>04</td> <td>13</td> <td>80</td> <td>105</td> <td></td> <td></td> </tr> <tr> <td>L5</td> <td>05</td> <td>16</td> <td>100</td> <td>125</td> <td></td> <td></td> </tr> </tbody> </table> <p>You see feet code in the chart of the dimensions Vedi codice piede nella tabella delle dimensioni</p> </div>	Feet Code reference	G	H	R	L	L1	S	B1	112	18	85	110	87	50	B2	212/3	18	100	130	107.5		S1	17	18	75	110	90+20		S2	27	25	90	110	130		M1	42/3	25	80	110+120	85		L4	04	13	80	105			L5	05	16	100	125		
Feet Code reference	G	H	R	L	L1	S																																																				
B1	112	18	85	110	87	50																																																				
B2	212/3	18	100	130	107.5																																																					
S1	17	18	75	110	90+20																																																					
S2	27	25	90	110	130																																																					
M1	42/3	25	80	110+120	85																																																					
L4	04	13	80	105																																																						
L5	05	16	100	125																																																						



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

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

Ratio - Rapporto Untersetzung Reduction Relación	Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Terminal box position Posizione morsetteria Klemmkastenlage Position boîte à bornes Posición caja de bornes	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje
<b>7.33</b>	<b>V</b>	<b>2</b>	<b>-C</b>	<b>B</b>	<b>B3</b>
See technical data table Vedi tabella dati tecnici Technisches Datenblatt beachten Voir Tableau données techniques Ver tabla datos técnicos	 → <b>STANDARD</b> 202A <b>S</b> ⇒ Ø14 <b>B</b> ⇒ <b>Ø16</b> <b>D</b> ⇒ Ø20 <b>V</b> ⇒ Ø25 302A <b>S</b> ⇒ Ø14 <b>B</b> ⇒ Ø16 <b>C</b> ⇒ Ø19 <b>D</b> ⇒ <b>Ø20</b> <b>E</b> ⇒ Ø24 <b>V</b> ⇒ Ø25 <b>G</b> ⇒ Ø28 402A 403A <b>S</b> ⇒ Ø14 <b>B</b> ⇒ Ø16 <b>C</b> ⇒ Ø19 <b>D</b> ⇒ Ø20 <b>E</b> ⇒ Ø24 <b>V</b> ⇒ <b>Ø25</b> 452A 502A 503A <b>E</b> ⇒ Ø24 <b>V</b> ⇒ Ø25 <b>G</b> ⇒ Ø28 <b>H</b> ⇒ <b>Ø30</b> <b>I</b> ⇒ Ø35 602A 603A <b>G</b> ⇒ Ø28 <b>H</b> ⇒ Ø30 <b>I</b> ⇒ <b>Ø35</b> <b>L</b> ⇒ Ø38 <b>M</b> ⇒ Ø40	 <b>N</b> Senza flangia Without flange 202A 302A <b>1</b> ⇒ Ø120 <b>2</b> ⇒ <b>Ø140</b> <b>3</b> ⇒ Ø160 <b>4</b> ⇒ Ø200 402A 403A <b>1</b> ⇒ Ø120 <b>2</b> ⇒ <b>Ø140</b> <b>3</b> ⇒ Ø160 <b>4</b> ⇒ Ø200 <b>5</b> ⇒ Ø250 452A 502A 503A <b>3</b> ⇒ Ø160 <b>4</b> ⇒ <b>Ø200</b> <b>5</b> ⇒ Ø250 602A 603A <b>3</b> ⇒ Ø160 <b>4</b> ⇒ Ø200 <b>5</b> ⇒ <b>Ø250</b>	<b>Standard Flange Flangia Standard</b>  B5 <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) B14 <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) <b>Type R / Tipo R</b> 202A 403A <b>-1</b> ⇒ Ø14 452A 502A 602A <b>-3</b> ⇒ Ø24 302A 402A 503A 603A <b>-2</b> ⇒ Ø19 <b>Without flange / Senza flangia</b> 202A 403A <b>-Z</b> ⇒ Ø9 (56B5) <b>-0</b> ⇒ Ø11 (63B5) <b>-1</b> ⇒ Ø14 (71B5) 452A 502A 602A <b>-2</b> ⇒ Ø19 (80B5) <b>-3</b> ⇒ Ø24 (90B5) <b>-4</b> ⇒ Ø28 (100B5) 302A 402A 503A 603A <b>-1</b> ⇒ Ø14 (71B5) <b>-2</b> ⇒ Ø19 (80B5) <b>-3</b> ⇒ Ø24 (90B5) → <b>STANDARD</b>	 <b>A</b>  <b>B</b> STANDARD  <b>C</b>  <b>D</b>	 <b>B3</b> STANDARD  <b>B6</b>  <b>B7</b>  <b>B8</b>  <b>V5</b>  <b>V6</b>  <b>V8</b> Specify only for vertical positions Specificare solo per posizione verticale



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 sprochets / 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

**B**

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

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

**A**

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

Flange code  
Codice flangia  
Flanschtype  
Code bride  
Código bridas

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

Gear size  
Grandezza riduttore  
Getriebegröße  
Taille réducteur  
Tamaño reductor

Motor power  
Potenza motore  
Motorleistung  
Puissance moteur  
Potencia motor

# 402A

## Coaxial - Gear 160Nm

Rating - Aluminum COAXIAL GEARBOXES

**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		
							B	C	D	E	Q	R	T	U			Ratio code
398	<b>3.52</b>	3	69	1.2	3.5	80	B				C	C			2821		01
320	<b>4.37</b>	3	86	1.0	3.1	90	B				C	C			2818		02
252	<b>5.55</b>	3	109	0.9	2.8	100	B				C	C			2813		03
220	<b>6.36</b>	2.2	92	1.0	2.3	95	B				C	C			1921		04
191	<b>7.33</b>	2.2	106	1.1	2.5	120	B				C	C			2812		05

**C**

Ratio  
Rapporto  
Untersetzung  
Rapport de réduction  
Relación

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

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

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

Notes  
Note  
Anmerkungen  
Note  
Notas

fs

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

**D**

Motor flange available  
Flange disponibili  
Erhältliche Motorflansche  
Brides disponibles  
Bridas disponibles

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

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

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

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



**QUICK SELECTION / Selezione veloce** The dynamic efficiency is **0.96** for all ratios **input speed (n<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	
							B	C	O	P	Q		
							63	71*	56	63	71		
407	<b>3.44</b>	0.55**	12	2.0	1.1	25			C	C		2821	01
327	<b>4.28</b>	0.55**	15	1.9	1.1	30			C	C		2818	02
257	<b>5.45</b>	0.55**	20	2.0	1.1	40			C	C		2815	03
225	<b>6.23</b>	0.55**	22	2.0	1.1	45			C	C		1921	04
194	<b>7.20</b>	0.55**	26	1.9	1.1	50			C	C		2812	05
181	<b>7.74</b>	0.55**	28	1.8	<b>0.99</b>	50			C	C		1918	06
142	<b>9.85</b>	0.55**	35	1.7	<b>0.93</b>	60			C	C		1915	07
123	<b>11.42</b>	0.55**	41	1.5	<b>0.80</b>	60			C	C		1715	08
107	<b>13.03</b>	0.55**	47	1.3	<b>0.70</b>	60			C	C		1912	09
93	<b>15.10</b>	0.37	37	1.6	<b>0.61</b>	60			C	C		1712	10
86	<b>16.20</b>	0.37	39	1.5	<b>0.57</b>	60			C	C		1910	11
75	<b>18.78</b>	0.37	46	1.3	<b>0.49</b>	60			C	C		1710	12
66	<b>21.15</b>	0.37	51	1.2	<b>0.43</b>	60			C	C		1312	13
64	<b>21.84</b>	0.37	53	1.1	<b>0.42</b>	60			C	C		1015	14
53	<b>26.31</b>	0.37	64	0.9	<b>0.35</b>	60			C	C		1310	15
48.5	<b>28.88</b>	0.37	70	1.0	<b>0.37</b>	70			C	C		1012	16
39	<b>35.91</b>	0.37	87	0.8	<b>0.30</b>	70			C	C		1010	17
37.1	<b>37.69</b>	0.25	62	1.1	<b>0.28</b>	70			C	C		912	18
29.9	<b>46.87</b>	0.25	77	0.9	<b>0.23</b>	70			C	C		910	19
28.1	<b>49.76</b>	0.25	81	0.9	<b>0.21</b>	70			C	C		712	20
22.6	<b>61.89</b>	0.18	73	1.0	<b>0.17</b>	70			C	C		710	21

\*\* Concerning a reduced dimensions electric motor. \* Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14 Riferito a motore con grandezza ridotta \* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

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

6

**EN** Unit **202A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **202A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **202A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **202A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **202A** se suministra, lubricado de por vida con aceite sintético y no 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.

### LUBRICATION 202A Oil Quantity 0.15 Lt.

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

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$F_{eq} = F_R \cdot \frac{35.7}{X+20.7}$

n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	140	700	140	246	1320	70	340	1700
250	151	756	120	270	1350	40	380	1900
200	185	924	85	300	1500	15	-	-

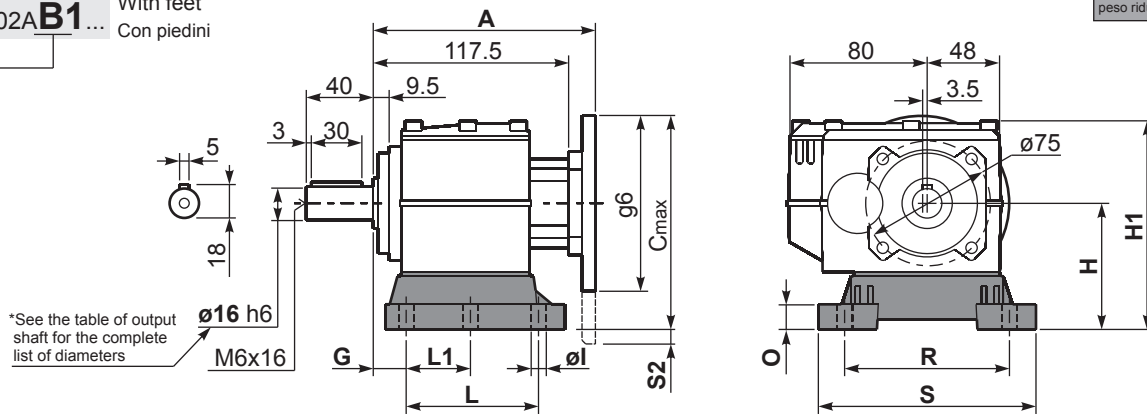
**Input shaft**  
Albero in entrata

n <sub>1</sub>	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

Gearbox weight **3.3 kg**  
 With flange  
 peso riduttore **3.7 Kg**  
 With feet

**P202A-B1...** With feet  
 Con piedini



\*See the table of output shaft for the complete list of diameters  
 $\phi 16$  h6  
 M6x16

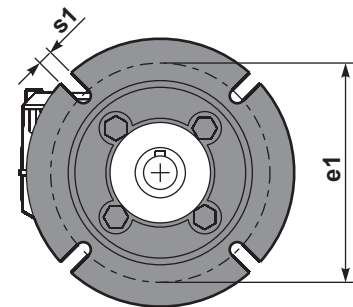
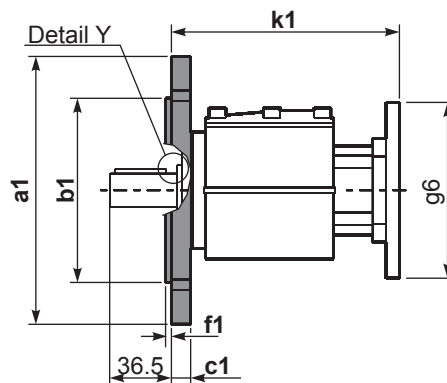
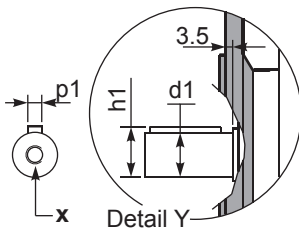
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	ø1	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	125	15	9	-	-	KC30.9.022
B2	212/3	18	100	130	107.5	60	155	145	5	11	-	-	KC30.9.023LM
S1	17-32	18	75	110	110	50	130	115.5	15	9	-	63B5	KC30.9.024
L3	03	12.5	65	91	60	-	105	149	5	9	11.5	71B5	KC30.9.026LM
L4	04	13	80	105	76	-	132	165	5	9	-	-	KC30.9.027LM

Other feet are available, see our web site  
 Sono disponibili altri piedini, consulta il nostro sito web

**A see on page bottom**

Most popular types  
 Tipi più diffusi

**P202A-F...** Output flanges  
 flange di uscita



\*Available output shaft / Alberi di uscita

	Shaft - d1	p1	h1	x
Standard	ø 16x40	5	18	M6x16
On request A richiesta	ø 14x30	5	16	M6x16
	ø 20x40	6	22.5	M8x19
	ø 25x50	8	28	M8x19

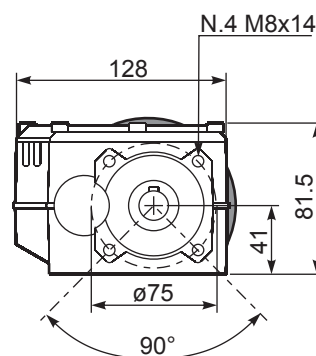
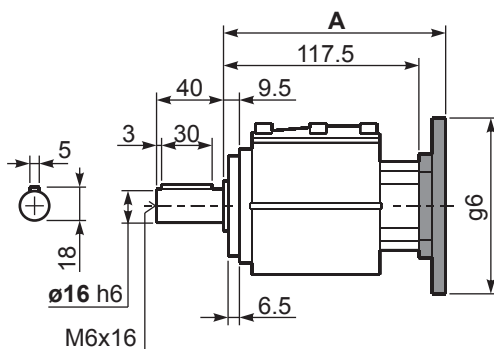
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

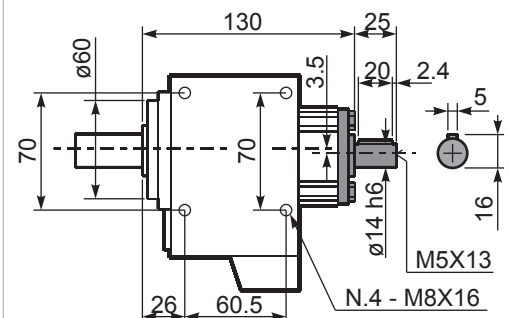
\* Holes position  
 Posizione fori

With flange and feet only on request. Ask for compatibility

**P202A-N...** Basic gearbox  
 Riduttore base



**R202A-N...** Input Shaft  
 Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
63 B5	133.2	170	140	136.7	K050.4.041
71 B5	131.2	180	160	134.7	K050.4.042

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
56 B14	132.7	139	80	136.2	KC40.4.049
63 B14	135.2	146	90	138.7	K050.4.047
71 B14	132.7	152.5	105	136.2	K050.4.045



QUICK SELECTION / Selezione veloce							input speed (n <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		
407	<b>3.44</b>	1.5	34	1.0	1.5	35	B				C	C		2821	01
327	<b>4.28</b>	1.5	42	1.0	1.4	40	B				C	C		2818	02
257	<b>5.45</b>	1.5	54	1.0	1.4	52	B				C	C		2815	03
225	<b>6.23</b>	1.5	61	1.1	1.7	70	B				C	C		1921	04
194	<b>7.20</b>	1.5	71	1.0	1.5	70	B				C	C		2812	05
181	<b>7.74</b>	1.5	76	1.1	1.6	80	B				C	C		1918	06
142	<b>9.85</b>	1.5	97	1.0	1.5	95	B				C	C		1915	07
123	<b>11.42</b>	1.5	112	1.0	1.5	115	B				C	C		1715	08
107	<b>13.03</b>	1.1	94	1.2	1.3	114	B				C	C		1912	09
93	<b>15.10</b>	1.1	109	1.0	1.2	114	B				C	C		1712	10
86	<b>16.20</b>	0.75	80	1.3	1.0	107	B				C	C		1910	11
75	<b>18.78</b>	0.75	92	1.2	0.87	107	B				C	C		1710	12
66	<b>21.15</b>	0.75	104	1.1	0.82	114	B				C	C		1312	13
64	<b>21.84</b>	0.75	107	1.1	0.83	119	B				C	C		1015	14
53	<b>26.31</b>	0.55	95	1.1	0.62	107	B				C	C		1310	15
48.5	<b>28.88</b>	0.55	104	1.1	0.60	114	B				C	C		1012	16
39	<b>35.91</b>	0.37	87	1.2	0.46	107	B				C	C		1010	17
37.1	<b>37.69</b>	0.37	91	1.1	0.41	102	B				C	C		912	18
29.9	<b>46.87</b>	0.37	114	0.9	0.35	107	B				C	C		910	19
28.1	<b>49.76</b>	0.25	81	1.2	0.31	101	B				C	C		712	20
22.6	<b>61.89</b>	0.25	101	1.1	0.26	107	B				C	C		710	21

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

\*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14  
\* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

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

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

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

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

6

**EN** Unit **302A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **302A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **302A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **302A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **302A** se suministra, lubricado de por vida con aceite sintético y no 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.

### LUBRICATION 302A Oil Quantity 0.15 Lt.

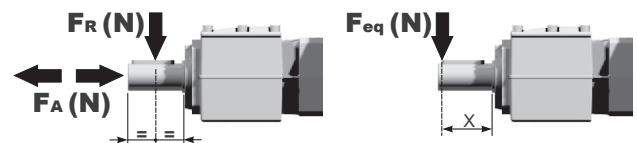
**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

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

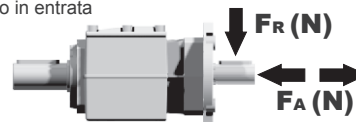
### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita



n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	140	700	140	246	1320	70	340	1700
250	151	756	120	270	1350	40	380	1900
200	185	924	85	300	1500	15	-	-

**Input shaft**  
Albero in entrata

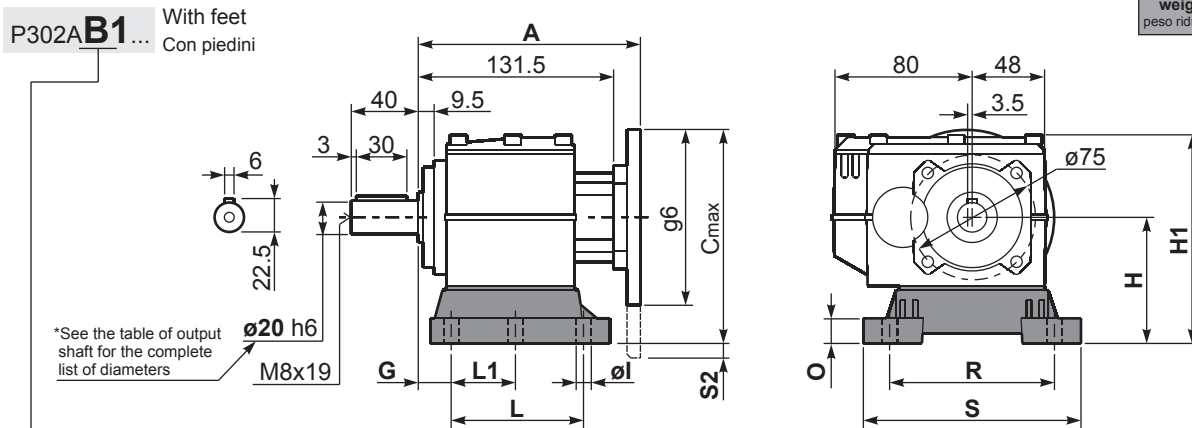


n <sub>1</sub>	FA	FR
1400	226	1130
900	264	1320
500	322	1610

tab. 2



Gearbox weight **3.5 kg**  
 With flange  
 peso riduttore **4.0 Kg**  
 With feet



\*See the table of output shaft for the complete list of diameters  
 $\phi 20$  h6  
 M8x19

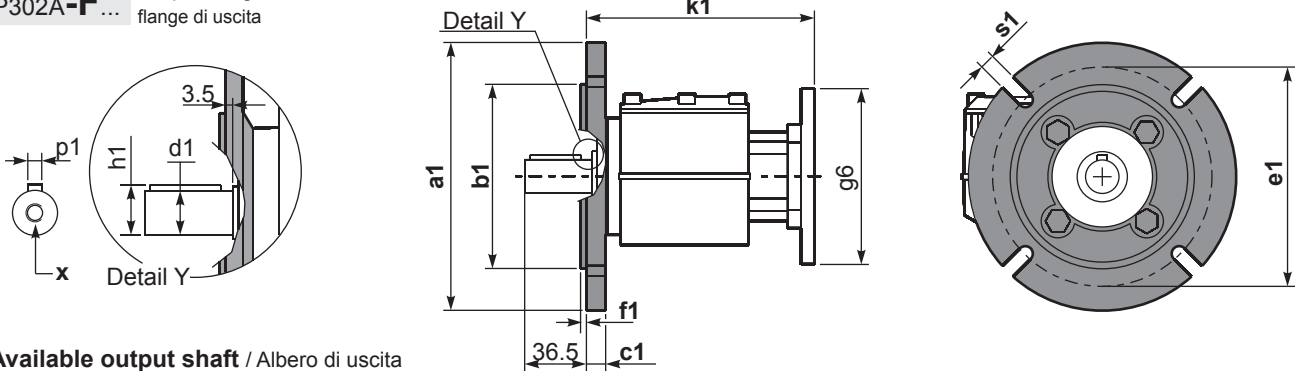
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	ø1	S2 only with motor flange	B5 max. Flange	kit code
<b>B1</b>	112	18	85	110	87	50	130	125	15	9	15 80/90B5	-	KC30.9.022
<b>B2</b>	212/3	18	100	130	107.5	60	155	145	5	11	3.5 80/90B5	-	KC30.9.023LM
<b>S1</b>	17-32	18	75	110	110	50	130	115.5	15	9	5 71B5	71B5	KC30.9.024
<b>S2</b>	27	25	90	110	130	-	130	135	5	9	-	71B5	KC30.9.025LM
<b>L3</b>	03	12.5	65	91	60	-	105	149	5	9	31.5 80/90B5	-	KC30.9.026LM
<b>L4</b>	04	13	80	105	76	-	132	165	5	9	16.5 80/90B5	-	KC30.9.027LM

Other feet are available, see our web site  
 Sono disponibili altri piedini, consulta il nostro sito web

**A see on page bottom**

Most popular types  
 Tipi più diffusi

**P302A-F**... Output flanges  
 flange di uscita



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	$\phi 20 \times 40$	6	22.5	M8x19
On request A richiesta	$\phi 14 \times 30$	5	16	M6x16
	$\phi 16 \times 40$	5	18	M6x16
	$\phi 19 \times 40$	6	21.5	M6x16
	$\phi 24 \times 50$	8	27	M8x19
	$\phi 25 \times 50$	8	28	M8x19
	$\phi 28 \times 50$	8	31	M8x19

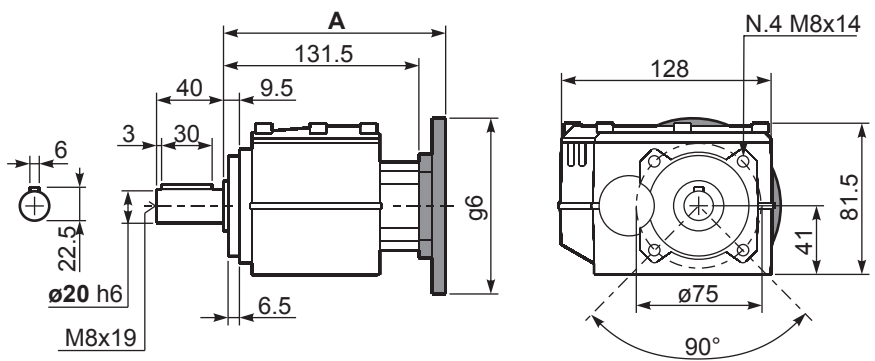
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

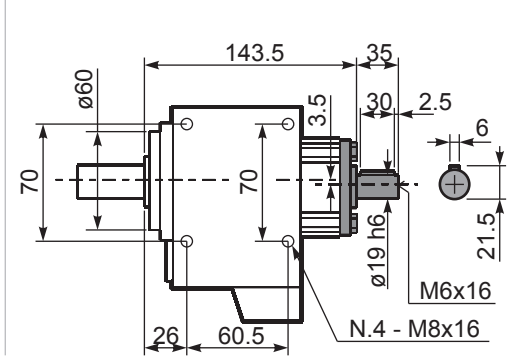
\* Holes position  
 Posizione fori

With flange and feet only on request. Ask for compatibility

**P302A-N**... Basic gearbox  
 Riduttore base



**R302A-N**... Input Shaft  
 Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
63 B5	151.7	170	140	155.2	K063.4.041
71 B5	152.2	180	160	155.7	K063.4.042
80/90 B5	151.2	200	200	154.7	K063.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B14	149.7	152.5	105	153.2	K063.4.047
80 B14	150.7	160	120	154.2	K063.4.046
90 B14	151.7	170	140	155.2	K063.4.041



#### QUICK SELECTION / Selezione veloce

input speed (n<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		
							B	C	D	E	F	Q	R	T	U			Ratios code
							63	71	80*	90*	100*	71	80	90	100	112	100	
398	<b>3.52</b>	3	69	1.2	<b>3.5</b>	<b>80</b>	B					C	C			2821		01
320	<b>4.37</b>	3	86	1.0	<b>3.1</b>	<b>90</b>	B					C	C			2818		02
252	<b>5.55</b>	3	109	0.9	<b>2.8</b>	<b>100</b>	B					C	C			2813		03
220	<b>6.36</b>	2.2	92	1.0	<b>2.3</b>	<b>95</b>	B					C	C			1921		04
191	<b>7.33</b>	2.2	106	1.1	<b>2.5</b>	<b>120</b>	B					C	C			2812		05
177	<b>7.89</b>	2.2	114	1.1	<b>2.3</b>	<b>120</b>	B					C	C			1918		06
139	<b>10.06</b>	2.2	145	1.0	<b>2.3</b>	<b>150</b>	B					C	C			1913		08
120	<b>11.66</b>	1.5	114	1.5	<b>2.3</b>	<b>174</b>	B					C	C			1713	standard	09
106	<b>13.26</b>	1.5	130	1.2	<b>1.8</b>	<b>160</b>	B					C	C			1912	ø25	10
102	<b>13.68</b>	1.5	134	1.1	<b>1.6</b>	<b>144</b>	B					C	C			1513		25
91	<b>15.37</b>	1.5	151	1.1	<b>1.6</b>	<b>160</b>	B					C	C			1712	ø14	11
86	<b>16.20</b>	1.5	159	0.9	<b>1.3</b>	<b>138</b>	B					C	C			1910	ø16	12
78	<b>18.04</b>	1.5	177	0.9	<b>1.4</b>	<b>160</b>	B					C	C			1512	ø19	23
74	<b>18.80</b>	1.1	135	1.0	<b>1.1</b>	<b>138</b>	B					C	C			1710	ø20	24
65	<b>21.54</b>	1.1	155	1.0	<b>1.1</b>	<b>160</b>	B					C	C			1312	ø24	14
63	<b>22.29</b>	1.1	161	1.0	<b>1.1</b>	<b>167</b>	B					C	C			1013	On request	15
53	<b>26.30</b>	0.75	129	1.1	<b>0.80</b>	<b>138</b>	B					C	C			1310		16
47.6	<b>29.40</b>	0.75	144	1.1	<b>0.83</b>	<b>160</b>	B					C	C			1012		17
39	<b>35.91</b>	0.55	129	1.1	<b>0.59</b>	<b>138</b>	B					C	C			1010		18
36.5	<b>38.37</b>	0.55	138	1.2	<b>0.64</b>	<b>160</b>	B					C	C			912		19
29.9	<b>46.86</b>	0.55	169	0.8	<b>0.45</b>	<b>138</b>	B					C	C			910		20
27.6	<b>50.67</b>	0.37	123	1.1	<b>0.40</b>	<b>132</b>	B					C	C			712		21
22.6	<b>61.88</b>	0.37	150	0.9	<b>0.34</b>	<b>138</b>	B					C	C			710		22

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

\*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14  
\* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

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

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

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

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

**EN** Unit **402A** 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 **402A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **402A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **402A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **402A** se suministra, lubricado de por vida con aceite sintético y no 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
0.25 LT	0.30 LT	0.40 LT	0.40 LT	0.40 LT	0.50 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

$F_{eq} = F_R \cdot \frac{46}{X+21}$

**Input shaft**  
Albero di entrata

n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	310	1550	140	406	2030	70	540	2700
250	330	1650	120	448	2240	40	600	3000
200	360	1800	85	480	2400	15	600	3000

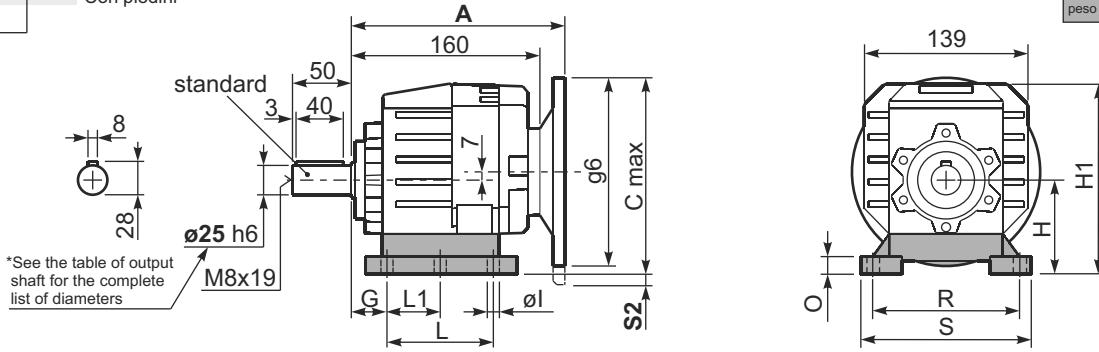
n <sub>1</sub>	FA	FR
1400	240	1200
900	280	1400
500	340	1700

**tab. 2**

3D dimensions on the Web

P402A**B1** ... With feet  
Con piedini

Gearbox weight  
peso riduttore With flange **5.7 kg**  
With feet **5.9 Kg**



Feet / piedini

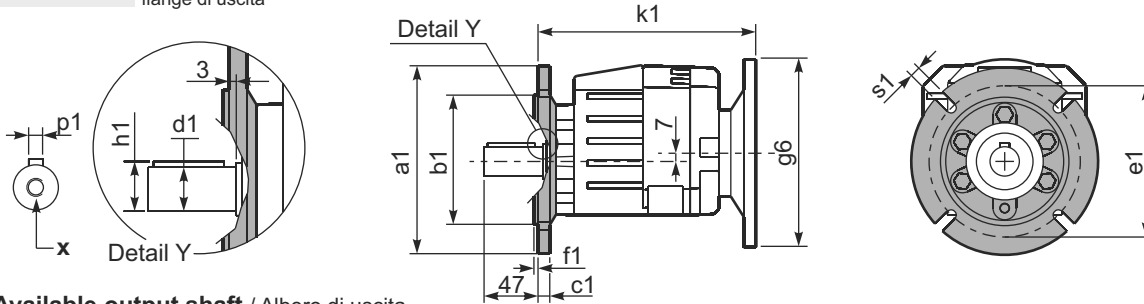
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	∅l	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167	15	-	8/33 80/90B5 100/112B5	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182	17	11	18 100/112B5	-	KC40.9.025
S1	17	18	75	110	90+110	50	145	155	15	9	18/43 80/90B5 100/112B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172	20	9	3/28 80/90B5 100/112B5	-	KC40.9.024
H2	022-223	25	100	110	115	-	145	182	20	9	18 100/112B5	-	KC40.9.026
M1	42/3	25	80	110+120	85	-	145	162	15	9	13/38 80/90B5 100/112B5	-	KC40.9.023
L4	04	13	80	105	76	-	132	162	5	10	13/38 80/90B5 100/112B5	-	KC35.9.023LM
L5	05	16	100	125	90	-	150	182	6	12	18 100/112B5	-	KC40.9.027LM

Other feet are available, see our web site  
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types  
Tipi più diffusi

P402A-**F** ... Output flanges  
flange di uscita

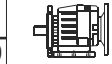


\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	∅ 25x50	8	28	M8x19
On request A richiesta	∅ 14x40	5	16	M5x13
	∅ 16x40	5	18	M6x16
	∅ 19x40	6	21.5	M6x16
	∅ 20x40	6	22.5	M8x19
	∅ 24x50	8	27	M8x19

Available output flanges / flange di uscita

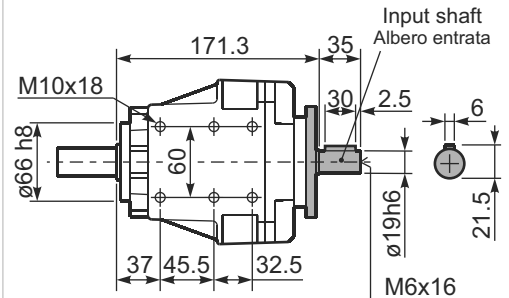
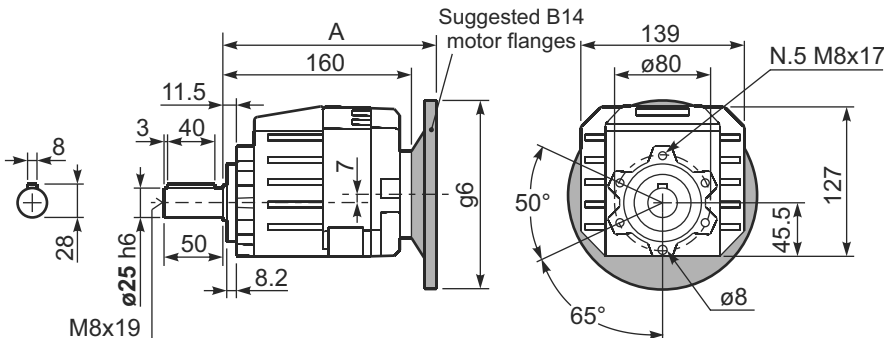
a1 ∅	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	9	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3	9	KC40.9.012
200	130	11	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014



With flange and feet only on request. Ask for compatibility

P402A-**N** ... Basic gearbox  
Riduttore base

R402A-**N** ... Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
63 B5	180.5	177	140	183.5	K063.4.041
71 B5	178.5	187	160	181.5	K063.4.042
80/90 B5	180.5	207	200	183.5	K063.4.043
100/112 B5	196.5	232	250	199.5	KC40.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B14	178.5	159.5	105	181.5	K063.4.047
80 B14	179.5	167	120	182.5	K063.4.046
90 B14	180.5	177	140	183.5	K063.4.041
100/112 B14	196.5	187	160	199.5	KC40.4.041



#### QUICK SELECTION / Selezione veloce

input speed (n<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 
							B	C	O	P	Q		
							63	71	56	63	71		
36.5	<b>38.40</b>	0.37	90	1.9	<b>0.72</b>	<b>175</b>			C	C		171713	02
32.0	<b>43.69</b>	0.37	103	1.5	<b>0.54</b>	<b>149</b>			C	C		191712	03
27.6	<b>50.64</b>	0.37	119	1.3	<b>0.50</b>	<b>160</b>			C	C		171712	04
26.2	<b>53.36</b>	0.37	125	1.1	<b>0.41</b>	<b>138</b>			C	C		191710	05
22.9	<b>61.22</b>	0.37	144	1.1	<b>0.41</b>	<b>160</b>			C	C		191312	06
22.6	<b>61.90</b>	0.37	146	0.9	<b>0.35</b>	<b>138</b>			C	C		171710	07
19.7	<b>70.95</b>	0.37	167	1.0	<b>0.36</b>	<b>160</b>			C	C		131712	08
19.1	<b>73.43</b>	0.37	172	1.0	<b>0.38</b>	<b>175</b>			C	C		101713	09
18.8	<b>74.77</b>	0.25	118	1.2	<b>0.29</b>	<b>138</b>			C	C		191310	10
16.1	<b>86.66</b>	0.25	138	1.0	<b>0.25</b>	<b>138</b>			C	C		131710	11
14.5	<b>96.85</b>	0.25	154	1.0	<b>0.26</b>	<b>160</b>			C	C		101712	12
13.6	<b>102.89</b>	0.25	163	1.1	<b>0.28</b>	<b>180</b>			C	C		101313	13
11.1	<b>126.40</b>	0.25	200	0.8	<b>0.20</b>	<b>160</b>			C	C		91712	17
10.3	<b>135.69</b>	0.25	215	0.7	<b>0.19</b>	<b>160</b>			C	C		101312	15
8.5	<b>165.70</b>	0.12	126	1.1	<b>0.13</b>	<b>138</b>			C	C		101310	16
7.9	<b>177.09</b>	0.12	135	1.2	<b>0.14</b>	<b>160</b>			C	C		91312	18
6.5	<b>216.30</b>	0.12	164	0.8	<b>0.10</b>	<b>138</b>			C	C		91310	19

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

Motor Flanges Available  
Flange Motore Disponibili

B) Supplied with Reduction Bushing  
Fornito con Bussola di Riduzione

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



C) Motor Flange Holes Position  
Posizione Fori Flangia Motore

**EN** Unit **403A** is supplied with synthetic oil for lifetime 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 **403A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **403A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **403A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **403A** se suministra, lubricado de por vida con aceite sintético y no 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					
0.30 LT	0.35 LT	0.45 LT	0.45 LT	0.45 LT	0.55 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

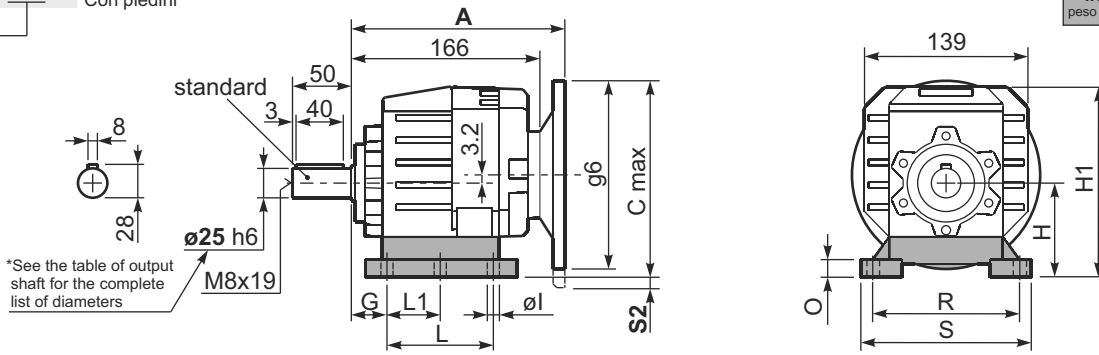
RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = F_r \cdot \frac{46}{X+21}$					
n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	310	1550	140	406	2030	70	540	2700
250	330	1650	120	448	2240	40	600	3000
200	360	1800	85	480	2400	15	600	3000
<b>Input shaft</b> Albero di entrata								
n <sub>1</sub>	FA	FR						
1400	140	700						
900	160	800						
500	190	950						

**tab. 2**

3D dimensions on the Web

P403A-B1... With feet  
Con piedini

Gearbox weight  
peso riduttore With flange **6.1 kg**  
With feet **6.3 kg**



Feet / piedini

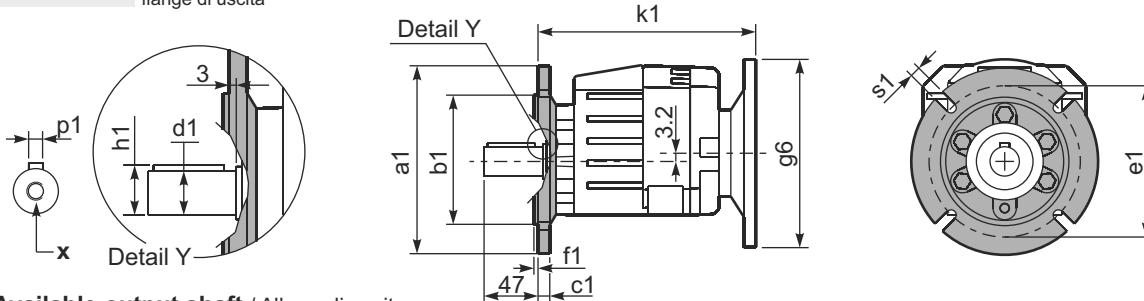
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167	15	-	-	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182	17	11	-	-	KC40.9.025
S1	17	18	75	110	90+110	50	145	155	15	9	2 80/90B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172	20	9	-	-	KC40.9.024
H2	022-223	25	100	110	115	-	145	182	20	9	-	-	KC40.9.026
M1	42/3	25	80	110+120	85	-	145	162	15	9	-	-	KC40.9.023
L4	04	13	80	105	76	-	132	162	5	10	-	-	KC35.9.023LM
L5	05	16	100	125	90	-	150	182	6	12	-	-	KC40.9.027LM

Other feet are available, see our web site  
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types  
Tipi più diffusi

P403A-F... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 25x50	8	28	M8x19
On request A richiesta	ø 14x40	5	16	M5x13
	ø 16x40	5	18	M6x16
	ø 19x40	6	21.5	M6x16
	ø 20x40	6	22.5	M8x19
	ø 24x50	8	27	M8x19

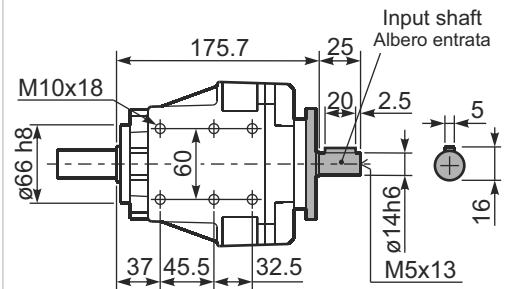
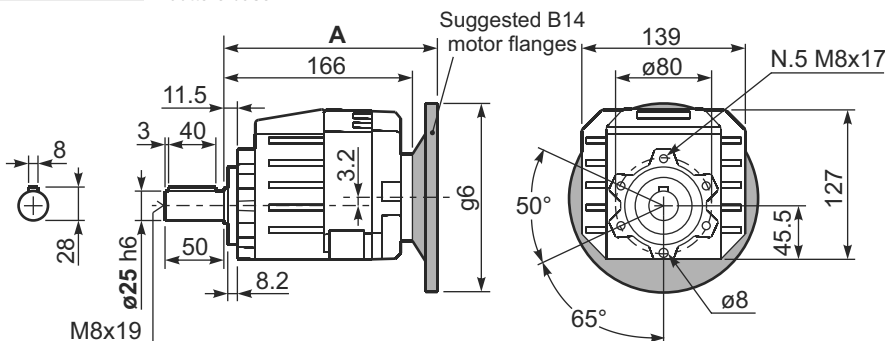
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	9	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3	9	KC40.9.012
200	130	11	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014

With flange and feet only on request. Ask for compatibility

P403A-N... Basic gearbox  
Riduttore base

R403A-N... Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
63 B5	182.5	173.2	140	185.5	K050.4.041
71 B5	180.5	183.2	160	183.5	K050.4.042

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
56 B14	186.5	143.2	80	189.5	KC40.4.049
63 B14	181.5	148.2	90	184.5	K050.4.047
71 B14	182	155.7	105	185	K050.4.045



#### QUICK SELECTION / Selezione veloce

input speed (n<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		
388	<b>3.61</b>	4	95	1.6	6.3	150	B								3018		01
331	<b>4.23</b>	4	111	1.5	6.1	170	B								3016		02
279	<b>5.01</b>	4	131	1.5	6.1	200	B								3014		03
231	<b>6.07</b>	4	159	1.6	6.3	250	B								3012		04
206	<b>6.81</b>	4	178	1.6	6.2	277	B								2018		05
176	<b>7.96</b>	4	209	1.4	5.8	300	B								2016	standard ø30	06
148	<b>9.45</b>	4	248	1.2	4.9	304	B								2014		
122	<b>11.43</b>	4	299	1.0	4.0	300	B								2012		08
99	<b>14.21</b>	3	279	0.9	2.8	265	B								2010	ø24	09
84	<b>16.62</b>	3	327	0.9	2.8	304	B								1314		ø25
70	<b>20.10</b>	2.2	290	1.0	2.3	300	B								1312	ø28	11
56	<b>24.98</b>	1.85	303	0.9	1.6	265	B								1310	ø35	12
47.6	<b>29.41</b>	1.5	289	1.1	1.6	304	B								814	On request	13
39.3	<b>35.58</b>	1.5	349	0.9	1.3	300	B								812		14
34.6	<b>40.50</b>	1.1	292	1.0	1.1	290	B								614		15
31.7	<b>44.22</b>	1.1	319	0.8	0.92	265	B								810		16
28.6	<b>49.00</b>	0.75	241	1.2	0.93	300	B								612		17
23.0	<b>60.90</b>	0.75	299	0.9	0.66	265	B								610		18

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

\*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14  
\* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

6

**EN** Unit **452A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **452A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **452A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **452A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **452A** se suministra, lubricado de por vida con aceite sintético y no 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					
0.31 LT	0.31 LT	0.31 LT	0.31 LT	0.31 LT	0.31 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

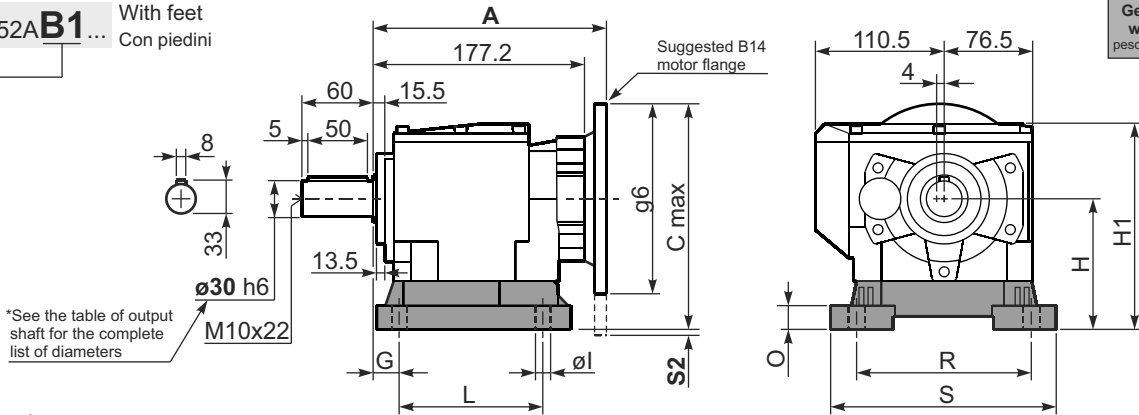
For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS								
<b>Output shaft / Albero di uscita</b>								
						$F_{eq} = F_R \cdot \frac{51}{X+21}$		
n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	415	2070	140	540	2700	70	700	3510
250	430	2160	120	560	2790	40	810	4050
200	470	2340	85	630	3150	15	900	4500
<b>Input shaft / Albero in entrata</b>								
n <sub>1</sub>	FA	FR						
1400	400	2000						
900	440	2200						
500	440	2200						

tab. 2

**P452A-B1...** With feet  
Con piedini

Gearbox weight  
peso riduttore With flange **8.7 kg**  
With feet **8.9 Kg**



Feet / piedini

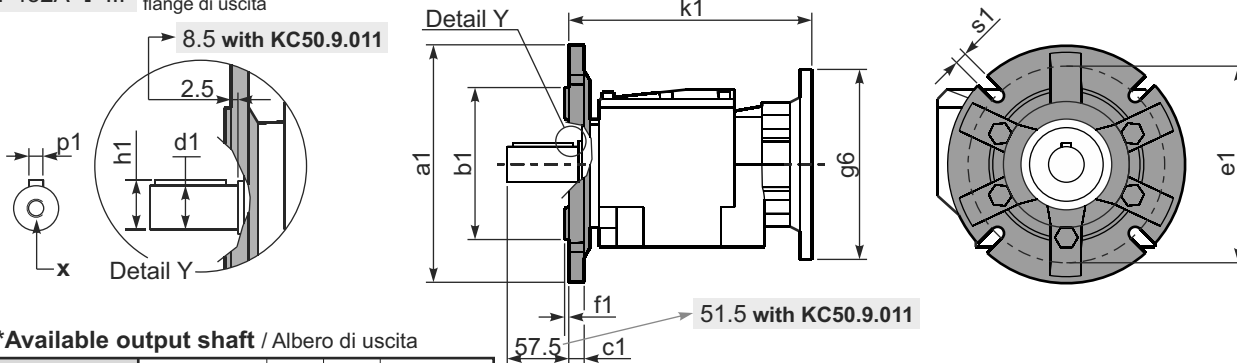
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	162	20	11	15 100/112B5 40 132B5	-	KC50.9.024
B4	30/35	20	130	180	149.5	216	182	18	14	20 132B5	-	KC60.9.024
S4	47-57	30	115	135	165	170	167	24	13.5	-	80/90B5	KC50.9.022
H3	023-233	30	130	135	135	185	231.5	25	14	20 132B5	-	KC50.9.025
M2	52/3	30	110	135+150	100	190	162	18	11	15 100/112B5 40 132B5	-	KC50.9.023
L6	06	19	125	160	106	205	177	8	14	25 132B5	-	KC50.9.026LM
E2	2202/3	13	100	135	192	164	152	6	14	-	71B5	KC50.9.027LM
P4	142	35	142	130	145	160	194	8	14	8 132B5	-	KC50.9.028LM

Other feet are available, see our web site  
Sono disponibili altri piedini, consulta il nostro sito web

A see on page bottom

Most popular types  
Tipi più diffusi

**P452A-F...** Output flanges  
flange di uscita



\*Available output shaft / Alberi di uscita

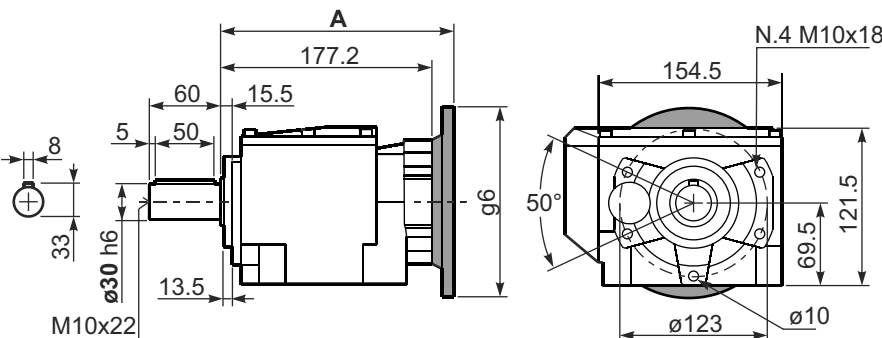
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x60	8	31	M8x19
	ø 35x60	10	38	M10x22

Available output flanges / flange di uscita

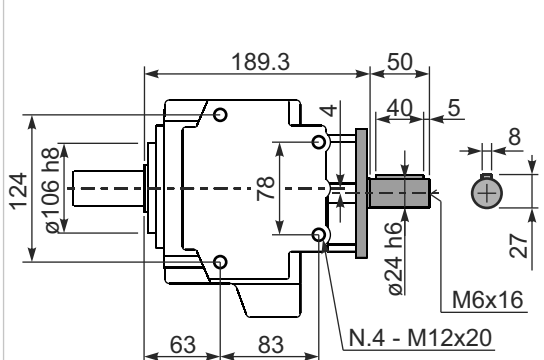
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request.  
Ask for compatibility

**P452A-N...** Basic gearbox  
Riduttore base



**R452A-N...** Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011	B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
71 B5	195.7	222	160	198.2	KC023.4.041	204.2	80 B14	195.7	202	120	198.2	KC085.4.046	204.2
80/90 B5	197.7	242	200	200.2	KC023.4.042	206.2	90 B14	195.7	212	140	198.2	KC085.4.045	204.2
100/112 B5	203.7	267	250	206.2	KC023.4.043	212.2	100/112 B14	206.7	222	160	209.2	KC085.4.047	215.2
132 B5	225.2	292	300	227.7	KC50.4.043	233.7	132 B14	225.2	242	200	227.7	KC50.4.041	233.7





#### 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 	Ratios code	
							C	D	E	F	G	R	T	U	V			
							71	80	90	100* 112	132*	80	90	100 112	132			
388	<b>3.61</b>	5.5	130	1.2	<b>6.3</b>	<b>150</b>	B										3018	01
331	<b>4.23</b>	5.5	152	1.1	<b>6.1</b>	<b>170</b>	B										3016	02
279	<b>5.01</b>	5.5	180	1.1	<b>6.1</b>	<b>200</b>	B										3014	03
231	<b>6.07</b>	5.5	219	1.1	<b>6.3</b>	<b>250</b>	B										3012	04
206	<b>6.81</b>	5.5	245	1.2	<b>6.7</b>	<b>300</b>	B										2018	05
176	<b>7.96</b>	5.5	287	1.2	<b>6.3</b>	<b>330</b>	B										2016	07
148	<b>9.45</b>	5.5	340	1.0	<b>5.7</b>	<b>354</b>	B										2014	08
122	<b>11.43</b>	4	299	1.1	<b>4.4</b>	<b>326</b>	B										2012	09
99	<b>14.21</b>	3	279	0.9	<b>2.7</b>	<b>250</b>	B										2010	10
84	<b>16.62</b>	3	327	1.1	<b>3.3</b>	<b>354</b>	B										1314	11
70	<b>20.10</b>	2.2	290	1.1	<b>2.5</b>	<b>326</b>	B										1312	12
57	<b>24.61</b>	2.2	354	0.9	<b>2.0</b>	<b>326</b>	B										1112	20
56	<b>24.98</b>	1.5	245	1.0	<b>1.5</b>	<b>250</b>	B										1310	13
47.6	<b>29.41</b>	1.5	289	1.2	<b>1.8</b>	<b>354</b>	B										814	14
39.3	<b>35.58</b>	1.5	349	0.9	<b>1.4</b>	<b>326</b>	B										812	15
34.6	<b>40.50</b>	1.1	292	1.0	<b>1.1</b>	<b>295</b>	B										614	16
31.7	<b>44.23</b>	1.1	319	0.8	<b>0.86</b>	<b>250</b>	B										810	17
28.6	<b>49.00</b>	1.1	353	0.9	<b>1.0</b>	<b>326</b>	B										612	18
23.0	<b>60.90</b>	0.75	299	0.8	<b>0.63</b>	<b>250</b>	B										610	19

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

\*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14  
\* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

6

**EN** Unit **502A** 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 **502A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **502A** ist mit synthetischem Öl gefüllt und ist 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 **502A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **502A** se suministra, lubricado de por vida con aceite sintético y no 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
0.45 LT	0.55 LT	1.00 LT	1.10 LT	1.10 LT	1.15 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$F_{eq} = F_R \cdot \frac{54}{X+24}$

n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	460	2300	140	600	3000	70	780	3900
250	480	2400	120	620	3100	40	900	4500
200	520	2600	85	700	3500	15	1000	5000

**Input shaft**  
Albero in entrata

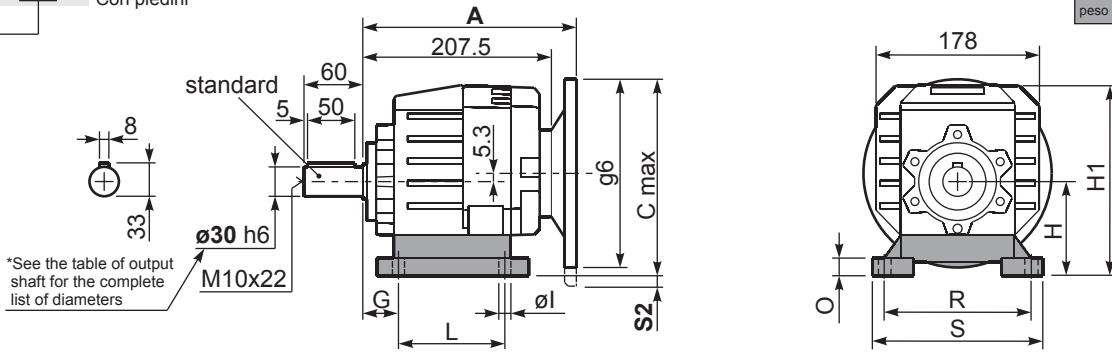
n <sub>1</sub>	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2



P502A **B1** ... With feet  
Con piedini

Gearbox weight **11.7 kg**  
peso riduttore With feet **11.9 Kg**



**Feet / piedini**

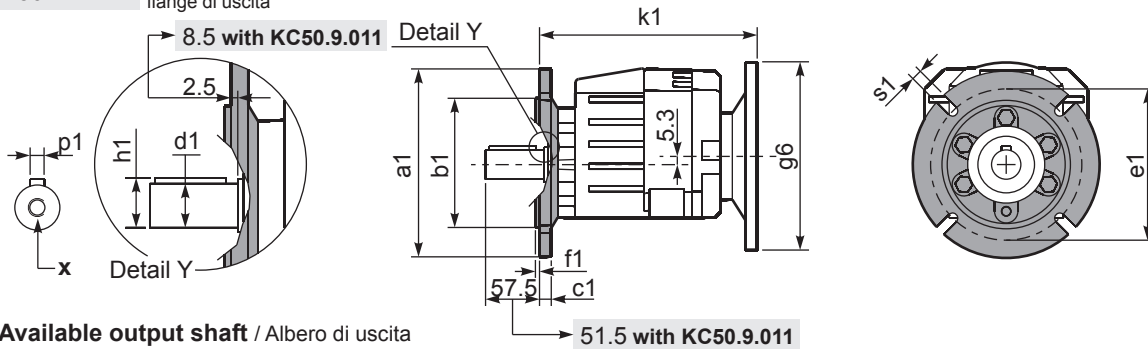
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
<b>B3</b>	312/3	18	110	160	130	190	211.5	20	11	10 100/112B5 35 132B5	-	KC50.9.024
<b>B4</b>	30/35	20	130	180	149.5	216	231.5	18	14	15 132B5	-	KC60.9.024
<b>S4</b>	47-57	30	115	135	165	170	216.5	24	13.5	5 100/112B5 30 132B5	-	KC50.9.022
<b>H3</b>	023-233	30	130	135	135	185	231.5	25	14	15 132B5	-	KC50.9.025
<b>M2</b>	52/3	30	110	135-150	100	190	226.5	18	11	10 100/112B5 35 132B5	-	KC50.9.023
<b>L6</b>	06	19	125	160	106	205	201.5	8	14	20 132B5	-	KC50.9.026LM
<b>E2</b>	2202/3	13	100	135	192	164	201.5	6	14	20 100/112B5 45 132B5	-	KC50.9.027LM
<b>P4</b>	142	35	142	130	145	160	243.5	8	14	3 132B5	-	KC50.9.028LM

Other feet are available, see our web site  
Sono disponibili altri piedini, consulta il nostro sito web

**A see on page bottom**

Most popular types  
Tipi più diffusi

P502A-**F** ... Output flanges  
flange di uscita



**\*Available output shaft / Alberi di uscita**

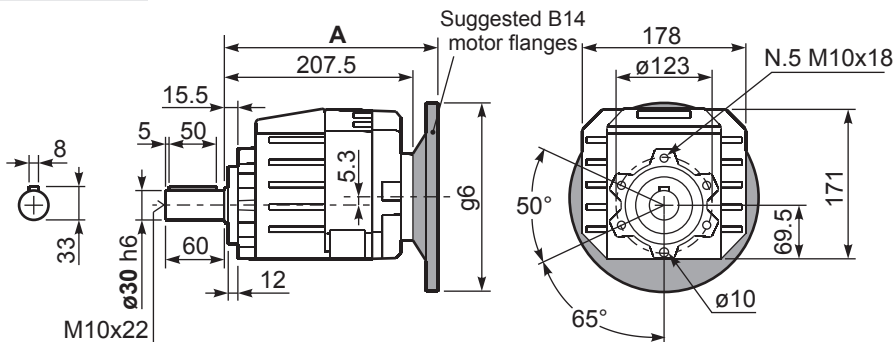
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x60	8	31	M8x19
	ø 35x60	10	38	M10x22

**Available output flanges / flange di uscita**

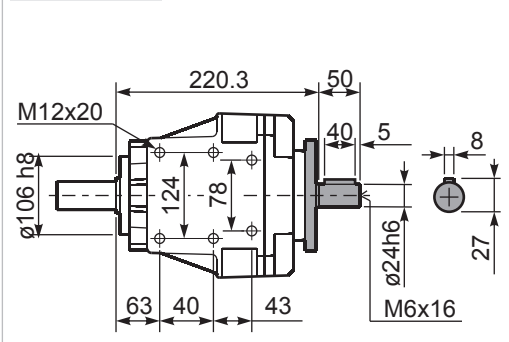
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P502A-**N** ... Basic gearbox  
Riduttore base



**R502A-N** ... Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011	B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
71 B5	226	227.3	160	228.5	KC023.4.041	234.5	80 B14	226	207.3	120	228.5	KC085.4.046	234.5
80/90 B5	228	247.3	200	230.5	KC023.4.042	236.5	90 B14	226	217.3	140	228.5	KC085.4.045	234.5
100/112 B5	234	272.3	250	236.5	KC023.4.043	242.5	100/112 B14	240.7	227.3	160	243.2	KC085.4.047	249.2
132 B5	257	297.3	300	264	KC50.4.043	265.5	132 B14	257	247	200	264	KC50.4.041	265.5



#### 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	Ratios code
							B	C	D	E	Q	R	T		
							63	71	80	90	71	80	90		
35.2	<b>39.79</b>	1.1	278	1.3	1.5	373	B				C	C		191316	01
29.6	<b>47.22</b>	1.1	330	1.1	1.2	354	B				C	C		191314	02
25.6	<b>54.73</b>	1.1	382	0.9	1.0	354	B				C	C		171314	03
21.1	<b>66.22</b>	0.75	315	1.0	0.78	326	B				C	C		171312	04
18.3	<b>76.69</b>	0.75	365	1.0	0.73	354	B				C	C		131314	05
16.7	<b>83.59</b>	0.55	292	1.2	0.67	354	B				C	C		190814	06
15.1	<b>92.78</b>	0.55	324	1.0	0.55	326	B				C	C		131312	07
13.4	<b>104.67</b>	0.55	365	1.0	0.53	354	B				C	C		101314	08
11.9	<b>117.22</b>	0.37	275	1.2	0.44	326	B				C	C		170812	09
11.1	<b>126.65</b>	0.37	297	1.1	0.41	326	B				C	C		101312	10
10.2	<b>136.62</b>	0.37	321	1.1	0.41	354	B				C	C		91314	11
8.5	<b>165.29</b>	0.25	262	1.2	0.31	326	B				C	C		91312	12
7.8	<b>180.40</b>	0.25	286	1.2	0.31	354	B				C	C		71314	13
6.4	<b>218.26</b>	0.25	346	0.9	0.24	326	B				C	C		71312	14
5.8	<b>241.82</b>	0.25	384	0.9	0.23	354	B				C	C		90814	15
4.8	<b>292.57</b>	0.18	334	1.0	0.18	326	B				C	C		90812	16
4.4	<b>319.32</b>	0.18	365	1.0	0.17	354	B				C	C		70814	17
3.6	<b>386.33</b>	0.18	441	0.7	0.13	326	B				C	C		70812	18
2.9	<b>480.16</b>	0.18	548	0.5	0.08	250	B				C	C		70810	19

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

Motor Flanges Available / Flange Motore Disponibili  
 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

6

**EN** Unit **503A** 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 **503A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **503A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **503A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **503A** se suministra, lubricado de por vida con aceite sintético y no 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					
0.75 LT	0.75 LT	1.05 LT	1.15 LT	1.20 LT	1.20 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

For all details on lubrication and plugs check our website **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			$F_{eq} = F_R \cdot \frac{54}{X+24}$					
n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	460	2300	140	600	3000	70	780	3900
250	480	2400	120	620	3100	40	900	4500
200	520	2600	85	700	3500	15	1000	5000
<b>Input shaft</b> Albero in entrata								
n <sub>1</sub>	FA	FR						
1400	400	2000						
900	440	2200						
500	440	2200						

**tab. 2**



# 602A Coaxial - Gear

## 520Nm

Rating - Aluminum COAXIAL GEARBOXES



### 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			
							C	D	E	F	G	R	T	U	V			Ratios code	
							71	80	90	100 112	132*	80	90	100 112	132				
388	<b>3.61</b>	7.5	171	1.1	7.6	180	B										3018		01
331	<b>4.23</b>	7.5	200	1.1	8.0	220	B										3016		02
279	<b>5.01</b>	7.5	238	1.1	7.9	260	B										3014		03
231	<b>6.07</b>	7.5	288	1.0	7.6	300	B										3012		04
206	<b>6.81</b>	7.5	323	1.1	7.9	350	B										2018		05
176	<b>7.96</b>	7.5	378	1.0	7.1	370	B										2016		07
148	<b>9.45</b>	5.5	331	1.2	6.5	400	B										2014	<b>standard</b> 	08
122	<b>11.43</b>	5.5	401	1.0	5.5	415	B										2012		09
100	<b>14.00</b>	4	359	1.2	4.7	435	B										1316		10
84	<b>16.62</b>	4	426	1.2	4.7	515	B										1314		11
70	<b>20.10</b>	4	515	1.0	4.0	520	B										1312		12
57	<b>24.61</b>	3	475	1.1	3.2	520	B										1112		20
47.6	<b>29.41</b>	2.2	418	1.1	2.3	450	B										814		14
39.3	<b>35.58</b>	1.85	431	1.2	2.2	520	B										812	On request	15
34.6	<b>40.50</b>	1.1	290	1.1	1.2	320	B										614		16
31.7	<b>44.23</b>	1.5	433	0.9	1.4	400	B										810		17
28.6	<b>49.00</b>	1.1	351	1.1	1.2	400	B										612		18
23.0	<b>60.90</b>	1.1	436	0.9	1.0	400	B										610		19

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

\*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14  
\* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **602A** is supplied with synthetic oil for lifetime 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 **602A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **602A** ist mit synthetischem Öl gefüllt und ist 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 **602A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **602A** se suministra, lubricado de por vida con aceite sintético y no 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					
0.55 LT	0.85 LT	1.10 LT	1.20 LT	1.20 LT	1.25 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

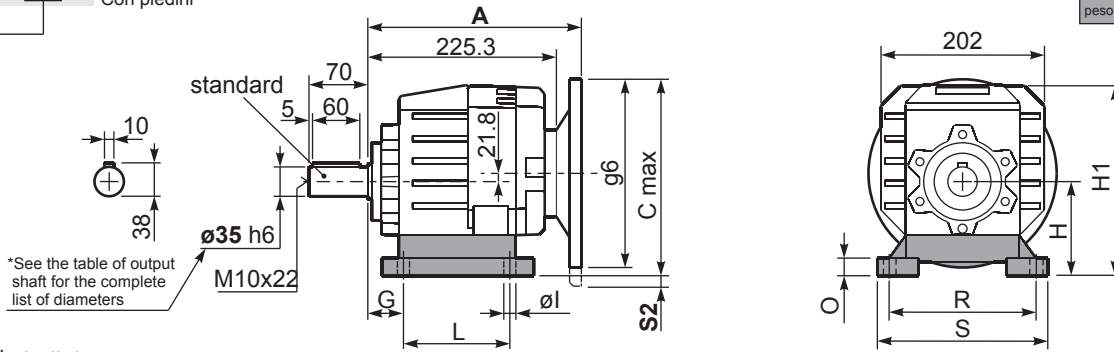
For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = F_r \cdot \frac{60.5}{X+25.5}$					
$n_2$	$F_A$	$F_R$	$n_2$	$F_A$	$F_R$	$n_2$	$F_A$	$F_R$
300	560	2800	140	740	3700	70	890	4200
250	600	3000	120	760	3800	40	1160	5800
200	640	3200	85	840	4000	15	1300	6500
<b>Input shaft</b> Albero di entrata								
$n_1$	$F_A$	$F_R$						
1400	450	2250						
900	500	2500						
500	600	3000						

**tab. 2**

P602A**B1**... With feet  
Con piedini

Gearbox weight **14.1 kg**  
peso riduttore With feet **14.5 kg**



**Feet / piedini**

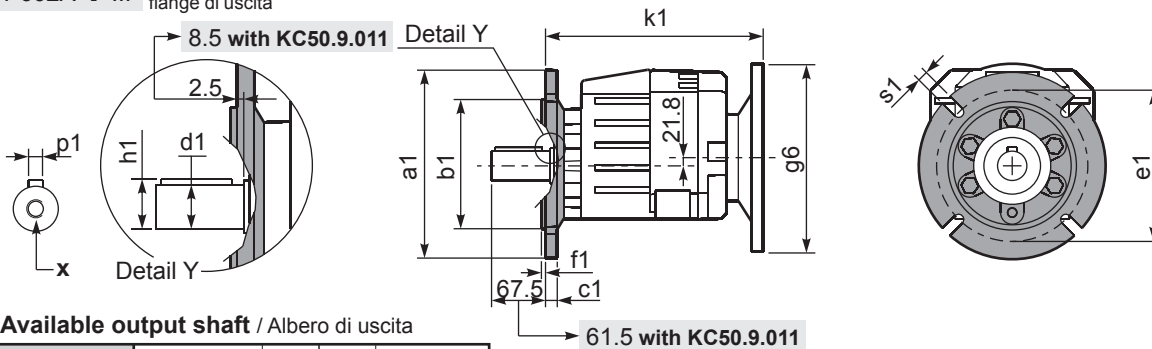
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
<b>B4</b>	412/3	20	130	180	149.5	216	233	18	14	-	-	KC60.9.024
<b>S4</b>	47-57	30	115	135	165	170	218	24	13.5	13 132B5	-	KC50.9.022
<b>M3</b>	62/3	35	120	170-185	110	230	223	20	14	8 132B5	-	KC60.9.023
<b>S7</b>	77	35	140	170	205	204	243	8	14	-	-	KC60.9.029LM
<b>H4</b>	024-243	35	155	170	150	225	258	30	14	-	-	KC60.9.025
<b>L6</b>	06	19	125	160	106	205	228	8	14	3 132B5	-	KC50.9.026LM
<b>E3</b>	2302/3	19.5	125	170	240	205	228	8	14	-	100/112B5	KC60.9.026LM
<b>P6</b>	162	40	162	160	205	200	265	8	14	-	-	KC60.9.027LM
<b>B5</b>	352/3	23.5	115	170	130	205	218	8	14	13 132B5	-	KC60.9.021LM

Other feet are available, see our web site  
Sono disponibili altri piedini, consulta il nostro sito web

**A see on page bottom**

Most popular types  
Tipi più diffusi

P602A-**F**... Output flanges  
flange di uscita



\*Available output shaft / Alberi di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 28x60	8	31	M8x20
	ø 30x60	8	33	M10x22
	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M12x28

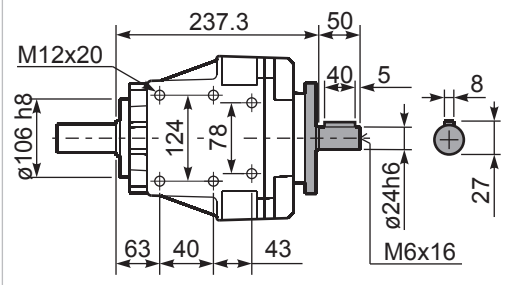
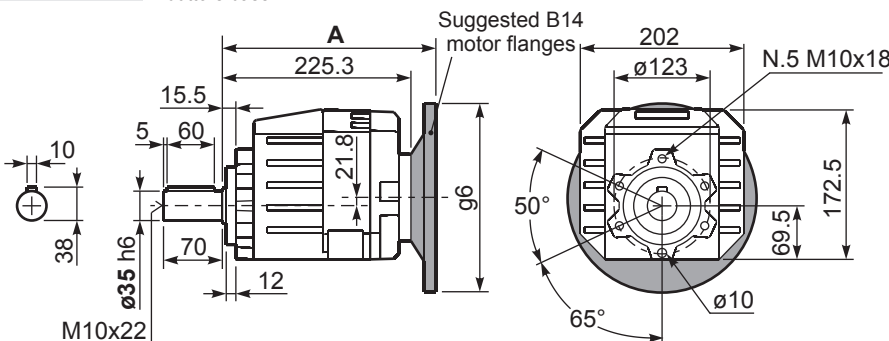
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request.  
Ask for compatibility

P602A-**N**... Basic gearbox  
Riduttore base

R602A-**N**... Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011	B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
71 B5	243.8	263.8	160	246.3	KC023.4.041	252.3	80 B14	243.8	243.8	120	246.3	KC085.4.046	252.3
80/90 B5	245.8	283.8	200	248.3	KC023.4.042	254.3	90 B14	243.8	253.8	140	246.3	KC085.4.045	252.3
100/112 B5	251.8	308.8	250	254.3	KC023.4.043	260.3	100/112 B14	258.5	263.8	160	261	KC085.4.047	267
132 B5	274	333.8	300	282	KC50.4.043	282.5	132 B14	274	283.8	200	282	KC50.4.041	282.5



#### 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	Ratios code
							B	C	D	E	Q	R	T		
							63	71	80	90	71	80	90		
35.2	<b>39.79</b>	1.5	382	1.1	1.7	434	B				C	C		191316	05
29.6	<b>47.22</b>	1.5	453	1.1	1.7	515	B				C	C		191314	06
25.6	<b>54.73</b>	1.5	525	1.0	1.5	515	B				C	C		171314	07
24.5	<b>57.13</b>	1.5	548	0.9	1.4	520	B				C	C		191312	08
21.1	<b>66.22</b>	1.1	464	1.1	1.2	520	B				C	C		171312	09
19.7	<b>71.01</b>	1.1	498	0.9	0.96	435	B				C	C		191310	10
18.3	<b>76.69</b>	1.1	538	1.0	1.0	515	B				C	C		131314	11
17.0	<b>82.30</b>	0.75	396	1.1	0.82	435	B				C	C		171310	12
16.7	<b>83.59</b>	0.75	402	1.1	0.82	440	B				C	C		190814	13
15.1	<b>92.78</b>	0.75	446	1.2	0.87	520	B				C	C		131312	14
13.4	<b>104.68</b>	0.75	503	1.0	0.77	515	B				C	C		101314	15
11.9	<b>117.22</b>	0.75	564	0.9	0.69	520	B				C	C		170812	16
11.1	<b>126.65</b>	0.55	449	1.2	0.64	520	B				C	C		101312	17
10.3	<b>135.74</b>	0.55	482	0.9	0.51	440	B				C	C		130814	18
9.6	<b>145.68</b>	0.37	346	1.3	0.47	435	B				C	C		170810	19
8.9	<b>157.40</b>	0.37	373	1.2	0.43	435	B				C	C		101310	20
8.5	<b>165.29</b>	0.37	392	1.3	0.49	520	B				C	C		91312	21
7.6	<b>185.29</b>	0.37	439	1.0	0.37	440	B				C	C		100814	22
6.8	<b>205.43</b>	0.37	487	0.9	0.33	435	B				C	C		91310	23
6.2	<b>224.18</b>	0.37	532	1.0	0.36	520	B				C	C		100812	24
5.8	<b>241.82</b>	0.25	387	1.1	0.28	440	B				C	C		90814	25
5.0	<b>278.62</b>	0.25	446	1.0	0.24	435	B				C	C		100810	26
4.8	<b>292.57</b>	0.25	468	1.1	0.28	520	B				C	C		90812	27
3.9	<b>363.63</b>	0.18	445	1.0	0.19	435	B				C	C		90810	28

The dynamic efficiency is **0.94** 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 **603A** 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 **603A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **603A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **603A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **603A** se suministra, lubricado de por vida con aceite sintético y no 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
0.75 LT	0.90 LT	1.15 LT	1.25 LT	1.30 LT	1.35 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

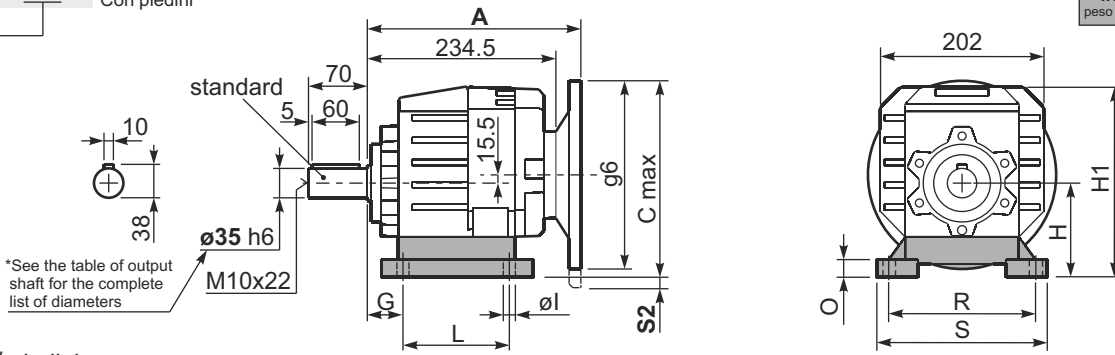
For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = F_R \cdot \frac{60.5}{X+25.5}$					
n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	560	2800	140	740	3700	70	890	4200
250	600	3000	120	760	3800	40	1160	5800
200	640	3200	85	840	4000	15	1300	6500
<b>Input shaft</b> Albero in entrata								
n <sub>1</sub>	FA	FR						
1400	400	2000						
900	440	2200						
500	440	2200						

**tab. 2**

P603A**B1** ... With feet  
Con piedini

Gearbox weight  
peso riduttore With flange **14.3 kg**  
With feet **14.7 Kg**



### Feet / piedini

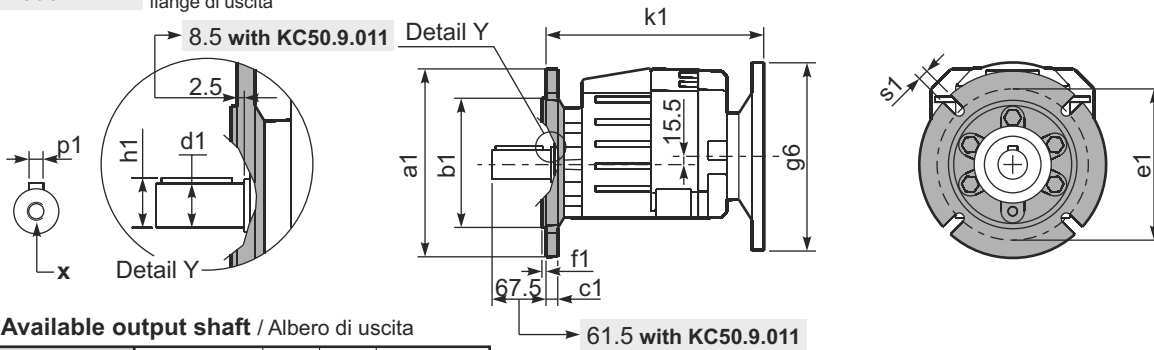
Feet Code	Market reference	G	H	R	L	S	H1	O	Øl	S2 only with motor flange	B5 max. Flange	kit code
B4	412/3	20	130	180	149.5	216	233	18	14	-	-	KC60.9.024
S4	47-57	30	115	135	165	170	218	24	13.5	-	-	KC50.9.022
M3	62/3	35	120	170-185	110	230	223	20	14	-	-	KC60.9.023
S7	77	35	140	170	205	204	243	8	14	-	-	KC60.9.029LM
H4	024-243	35	155	170	150	225	258	30	14	-	-	KC60.9.025
L6	06	19	125	160	106	205	228	8	14	-	-	KC50.9.026LM
E3	2302/3	19.5	125	170	240	205	228	8	14	-	-	KC60.9.026LM
P6	162	40	162	160	205	200	265	8	14	-	-	KC60.9.027LM
B5	352/3	23.5	115	170	130	205	218	8	14	-	-	KC60.9.021LM

Other feet are available, see our web site  
Sono disponibili altri piedini, consulta il nostro sito web

**A see on page bottom**

Most popular types  
Tipi più diffusi

P603A-**F** ... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 35x70	10	38	M10x22
On request A richiesta	Ø 28x60	8	31	M8x20
	Ø 30x60	8	33	M10x22
	Ø 38x70	10	41	M10x25
	Ø 40x80	12	43	M12x28

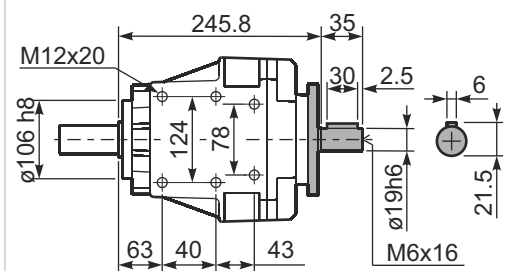
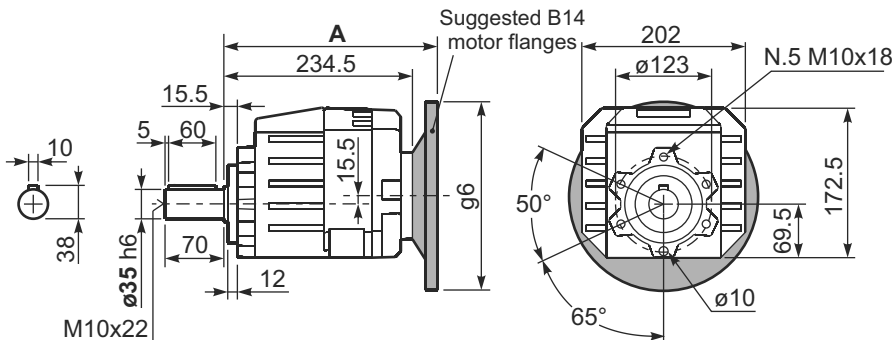
Available output flanges / flange di uscita

a1 Ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P603A-**N** ... Basic gearbox  
Riduttore base

R603A-**N** ... Input Shaft  
Albero in entrata



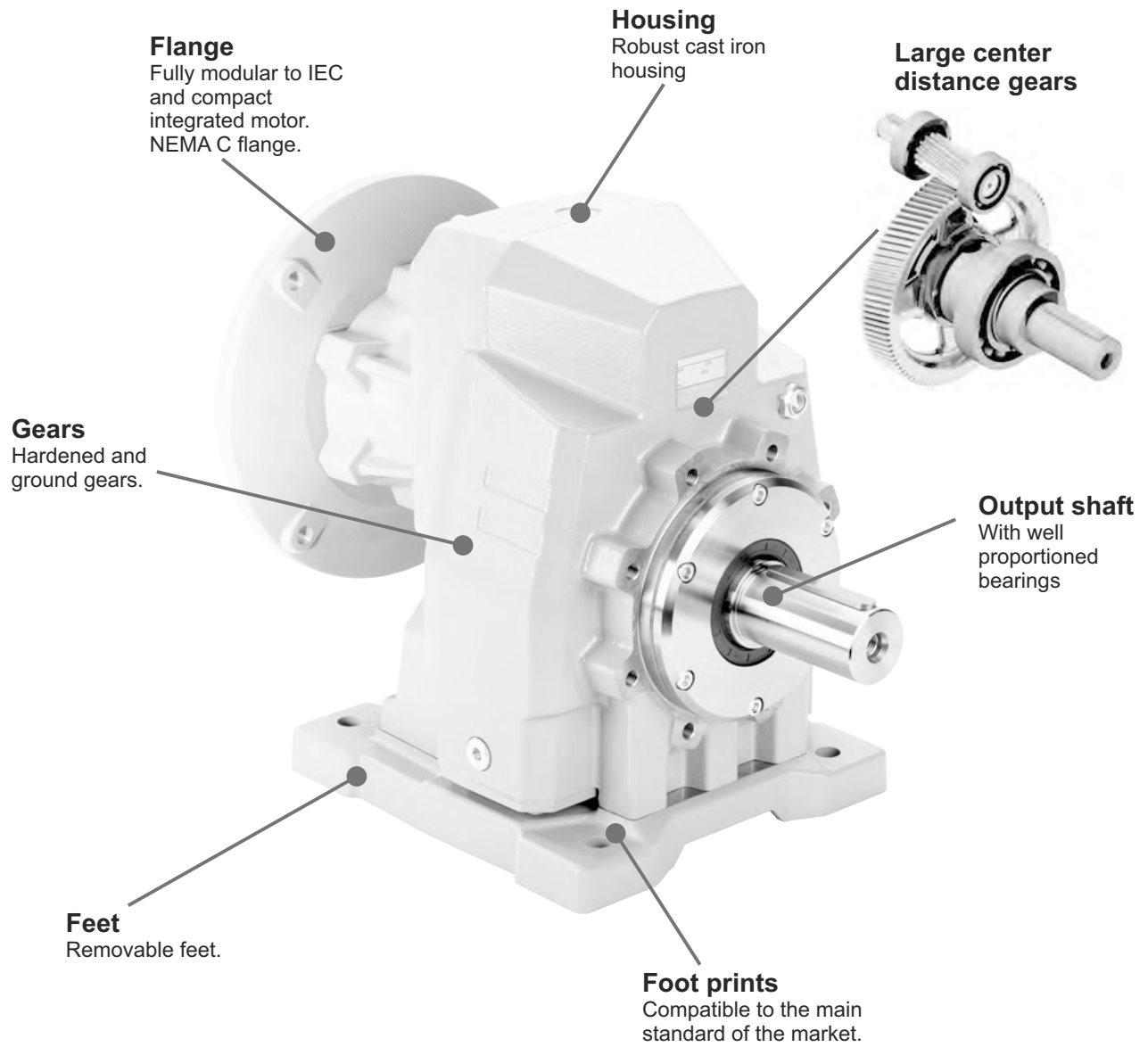
B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
63 B5	255	247.5	140	257.5	K063.4.041	263.5
71 B5	253	257.5	160	255.5	K063.4.042	261.5
80/90 B5	255	277.5	200	257.5	K063.4.043	263.5

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
71 B14	253	230	105	255.5	K063.4.047	261.5
80 B14	254	237.5	120	256.5	K063.4.046	262.5
90 B14	255	247.5	140	257.5	K063.4.041	263.5



# Cast iron gearboxes

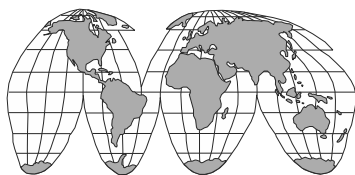
A modular and compact product



7

## Single-piece Cast Iron housing

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



World wide sales network.



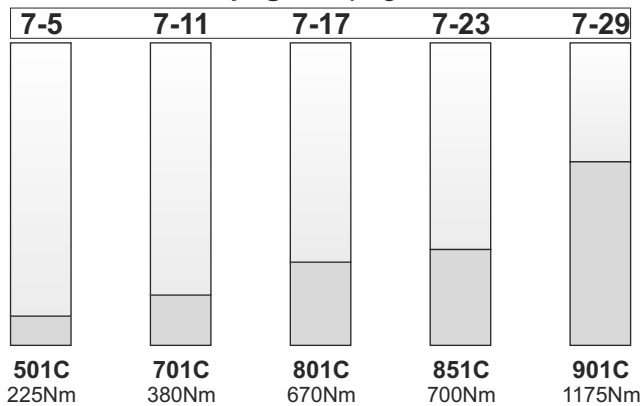
# Specific type datasheet on page...

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

1 Stage



Types / Tipi  
Tipen / Types  
Tipos

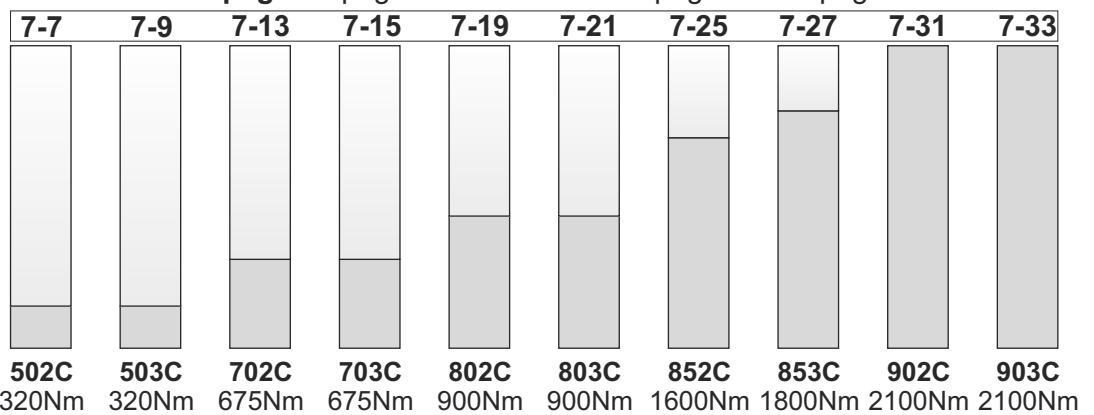


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2 and 3 Stages



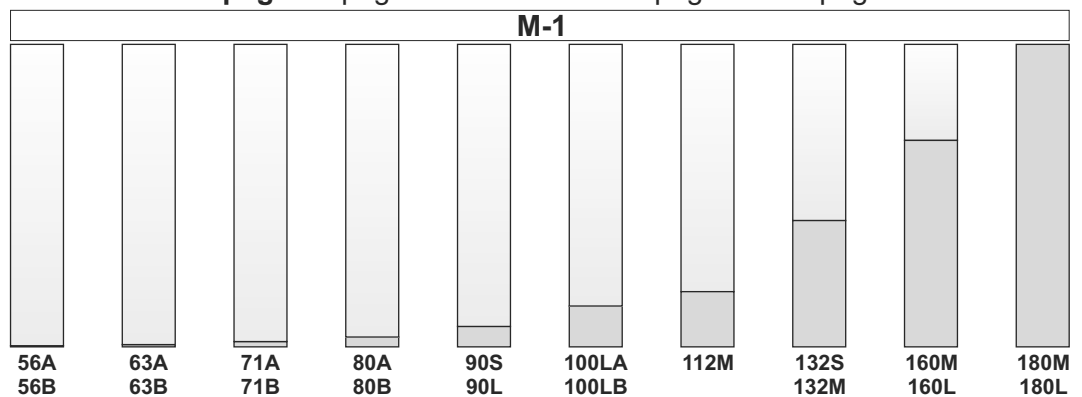
Types / Tipi  
Tipen / Types  
Tipos



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



Types / Tipi  
Tipen / Types  
Tipos



Type - Tipo - Typ  
Type - Tipo

Size - Grandezza - Grösse  
Taille - Tomafío

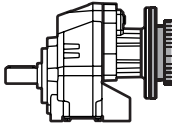
Mounting - Montaggio  
Montage - Fixation  
Tipo de montaje

**P**

**702C**

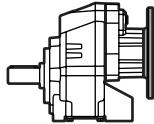
**-F**

Cast iron coaxial gear boxes  
Riduttori coassiali in Ghisa



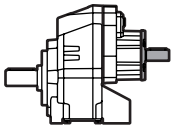
With IEC motor

**M**



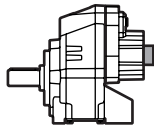
With motor flange

**P**



With male input shaft

**R**



Modular base

**B**

**1** Stage  
Riduzione  
Stufe  
Trains  
Etapas

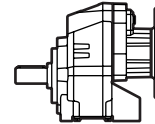
**501C**  
**701C**  
**801C**  
**851C**  
**901C**

**2** Stages  
Riduzioni  
Stufen  
Trains  
Etapas

**502C**  
**702C**  
**802C**  
**852C**  
**902C**

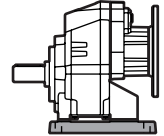
**3** Stages  
Riduzioni  
Stufen  
Trains  
Etapas

**503C**  
**703C**  
**803C**  
**853C**  
**903C**



Without flange / feet

**-N**



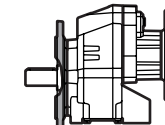
Mounted feet

**B..**

Feet / piedini

Feet Code	Market reference	G	H	R	L	L1	S
B1	112	18	85	110	87	50	
B2	212/3	18	100	130	107.5		
S1	17	18	75	110	90+20		
S2	27	25	90	110	130		
M1	42/3	25	80	110+120	85		
L4	04	13	80	105			
L5	05	16	100	125			

You see feet code in the chart of the dimensions  
Vedi codice piede nella tabella delle dimensioni



Output flange mounted

**-F**



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

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

Ratio - Rapporto  
Untersetzung  
Reduction  
Relación

Output shaft  
Albero uscita  
Abtriebswelle  
Arbre de sortie  
Eje en salida

Output flange  
Flangia uscita  
Ausgangsflansch  
Bride de sortie  
Brida en salida

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

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

Mounting position  
Posizione montaggio  
Einbaulage  
Position de montage  
Posición de montaje

**6.57**

**H**

**4**

**-F**

**B**

**B3**

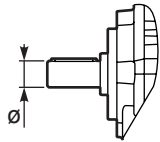
See technical data table

Vedi tabella dati tecnici.

Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos



➔ STANDARD

501C 502C  
503C

**H ➔ Ø30**

**I ➔ Ø35**

701C 702C  
703C

**I ➔ Ø35**

**L ➔ Ø38**

**M ➔ Ø40**

801C  
802C 803C

**M ➔ Ø40**

**P ➔ Ø50**

851C 852C  
853C

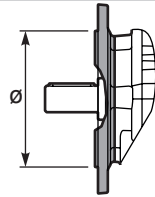
**P ➔ Ø50**

**J ➔ Ø60**

901C 902C  
903C

**P ➔ Ø50**

**J ➔ Ø60**



**N** Senza flangia  
Without flange

501C 502C  
503C

**3 ➔ Ø160**

**4 ➔ Ø200**

**5 ➔ Ø250**

701C 702C  
703C

**4 ➔ Ø200**

**5 ➔ Ø250**

801C  
802C 803C

**5 ➔ Ø250**

**6 ➔ Ø300**

851C  
852C 853C

**6 ➔ Ø300**

**7 ➔ Ø350**

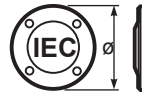
901C  
902C 903C

**6 ➔ Ø300**

**7 ➔ Ø350**

➔ STANDARD

Standard Flange  
Flangia Standard



B5

**-A=56**  
(Ø120)

**-B=63**  
(Ø140)

**-C=71**  
(Ø160)

**-D=80**  
(Ø200)

**-E=90**  
(Ø200)

**-F=100±112**  
(Ø250)

**-G=132**  
(Ø300)

**-H=160**  
(Ø350)

**-I=180**  
(Ø350)

B14

**-O=56**  
(Ø80)

**-P=63**  
(Ø90)

**-Q=71**  
(Ø105)

**-R=80**  
(Ø120)

**-T=90**  
(Ø140)

**-U=100±112**  
(Ø160)

**-V=132**  
(Ø200)

Type R / Tipo R



503C

**-1 ➔ Ø14**

702C 802C  
853C 903C

**-3 ➔ Ø24**

502C 703C  
803C

**-2 ➔ Ø19**

852C 902C

**-4 ➔ Ø28**

Without flange / Senza flangia



503C

**-Z ➔ Ø9**  
(56B5)

**-0 ➔ Ø11**  
(63B5)

**-1 ➔ Ø14**  
(71B5)

702C 802C  
853C 903C

**-2 ➔ Ø19**  
(80B5)

**-3 ➔ Ø24**  
(90B5)

**-4 ➔ Ø28**  
(100B5)

501C

**-4 ➔ Ø28**  
(100B5)

➔ STANDARD



**A**



**B**

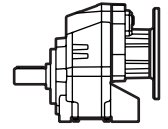
STANDARD



**C**

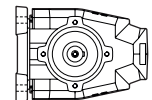


**D**

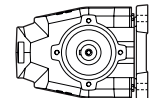


**B3**

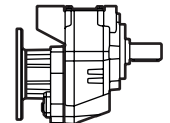
STANDARD



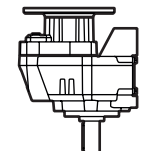
**B6**



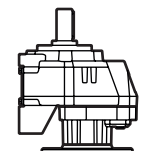
**B7**



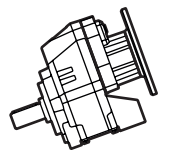
**B8**



**V5**



**V6**



**V8**

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

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

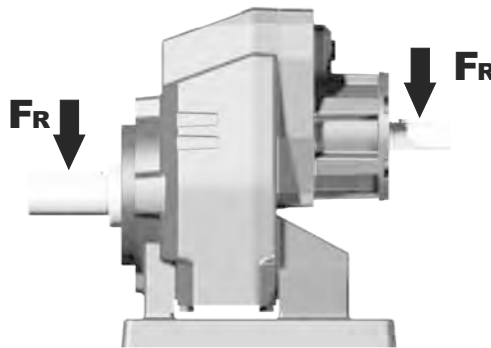
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

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 sprochets / 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

**B**

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

Nominal power  
Potenza nominale  
Max. mögliche Leistung  
Puissance nominale  
Potencia nominal

**A**

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

Flange code  
Codice flangia  
Flanschtype  
Code bride  
Código bridas

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

Gear size  
Grandezza riduttore  
Getriebegröße  
Taille réducteur  
Tamaño reductor

Motor power  
Potenza motore  
Motorleistung  
Puissance moteur  
Potencia motor

# 702C

## Coaxial - Gear 675Nm

Rating - Cast Iron COAXIAL GEARBOXES

**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 	Ratios code 	
							C	D	E	F	G	R	T	U	V			
213	<b>6.57</b>	7.5	312	1.2	8.8	380	B										3018	01
185	<b>7.56</b>	7.5	359	1.1	7.9	390	B										3016	02
159	<b>8.82</b>	7.5	419	1.0	7.1	410	B										3014	03
113	<b>12.39</b>	7.5	588	1.0	7.2	580	B										2018	04
98	<b>14.24</b>	5.5	499	1.2	6.4	600	B										2016	05

**C**

Ratio  
Rapporto  
Untersetzung  
Rapport de réduction  
Relación

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

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

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

Notes  
Note  
Anmerkungen  
Note  
Notas

**fs**

Type of load and starts per hour Tipo di carico e avviamenti per ora		Oper. hours per day Ore di funz. giorn.		
		3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	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

**D**

Motor flange available  
Flange disponibili  
Erhältliche Motorflansche  
Brides disponibles  
Bridas disponibles

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

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

**B)** Available without reduction bushes  
Disponibile anche senza boccia  
Auch ohne Reduzierbuchse verfügbar  
Disponible aussi sans douille de réduction  
Disponible tambien 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

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 	Output Shaft 	Ratios code 
							D	E	F	R	T	U			
							80	90	100 112	80	90	100 112			
481	<b>2.91</b>	4	76	1.8	7.2	140	B	B		B	B		3499	standard	01
373	<b>3.75</b>	4	98	1.6	6.4	160	B	B		B	B		28105	<b>ø30</b>	02
263	<b>5.33</b>	4	140	1.2	4.8	170	B	B		B	B		21112		03
219	<b>6.39</b>	4	167	1.0	4.0	170	B	B		B	B		18115	ø35	04
178	<b>7.85</b>	4	205	1.1	4.3	225	B	B		B	B		13102	On request	05

The dynamic efficiency is **0.98** 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 **501C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **501C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **501C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **501C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

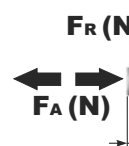
**E** El reductor tamaño **501C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
1.25 LT	0.80 LT	0.80 LT	0.70 LT	1.40 LT	0.80 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

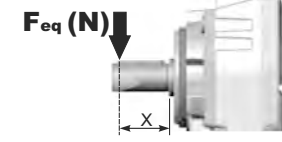
For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

#### RADIAL AND AXIAL LOADS

Output shaft  
Albero di uscita



$$F_{eq} = F_R \cdot \frac{56.5}{X+26.5}$$



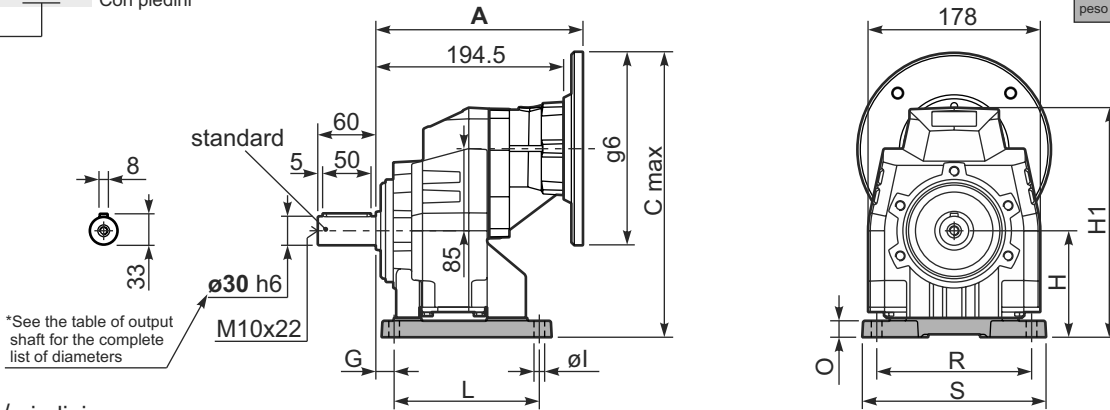
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	500	2500	140	640	3200	70	820	4100
250	540	2700	120	680	3400	40	1020	5100
200	580	2900	85	760	3800	15	1100	5500

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

**tab. 2**

P501C**S4**... With feet  
Con piedini

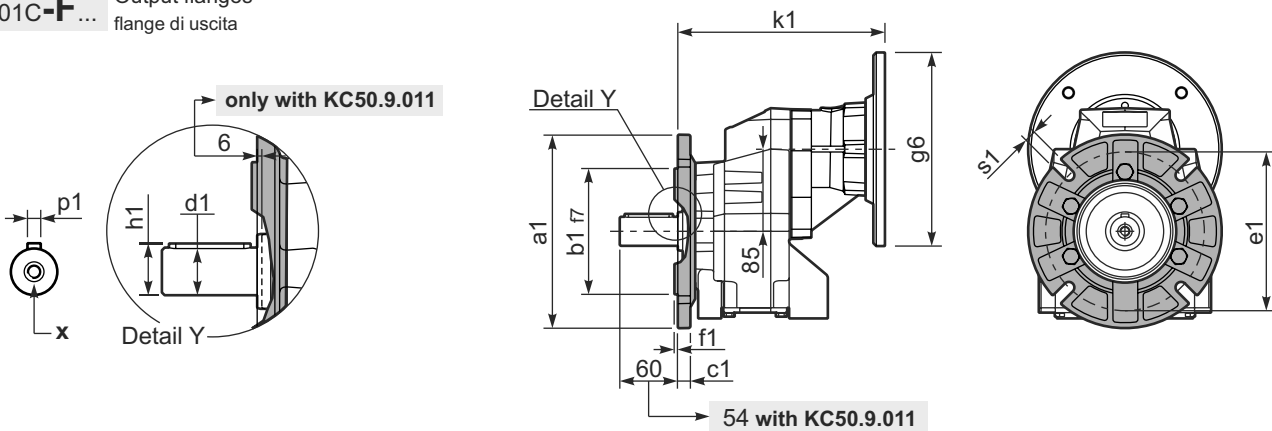
Gearbox weight  
peso riduttore With flange **20.0 kg**  
With feet **22.0 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	237	17	11	-	C50C.9.022
S4	47	30	115	135	165	170	242	22	13.5	-	C50C.9.024
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P501C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

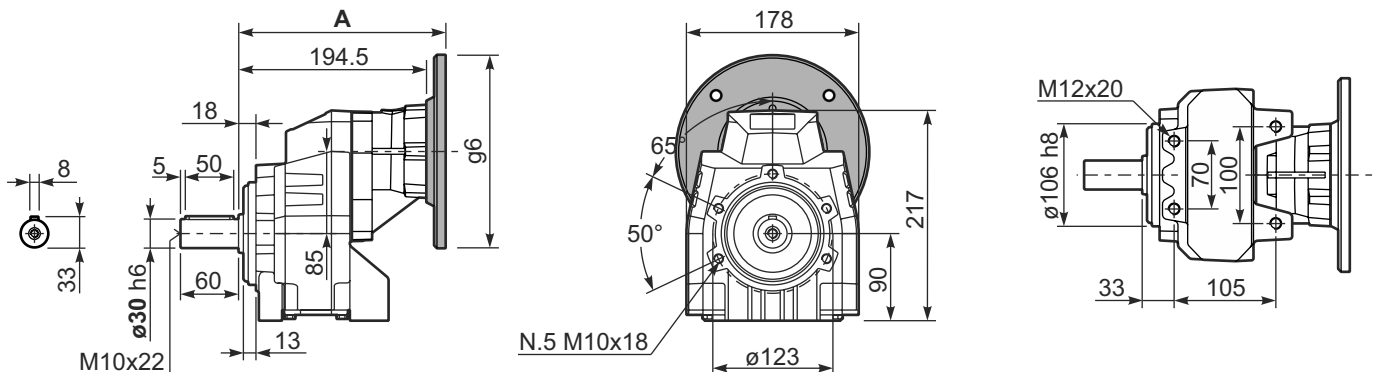
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 35x70	10	38	M10x22
	-	-	-	-

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P501C-**N**... Basic gearbox  
Riduttore base



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
80/90 B5	215	300	200	215	KC023.4.042	221
100/112 B5	221	325	250	221	KC023.4.043	227

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
80 B14	213	260	120	213	KC085.4.046	219
90 B14	213	270	140	213	KC085.4.045	219
100/112 B14	224	280	160	224	KC085.4.047	230



#### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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 	Output Shaft 	Ratios code 
							B	C	D	E	F	Q	R	T	U			
							63	71	80	90	100	112	71	80	90			
167	<b>8.38</b>	4	215	1.0	4.1	225	B					C	C			2821		01
139	<b>10.04</b>	3	194	1.2	3.7	240	B					C	C			2818		02
114	<b>12.33</b>	3	238	1.1	3.2	260	B					C	C			2813		03
92	<b>15.16</b>	2.2	215	1.2	2.6	260	B					C	C			1921		04
80	<b>17.57</b>	2.2	250	1.1	2.3	270	B					C	C			1721		05
77	<b>18.16</b>	2.2	258	1.1	2.4	290	B					C	C			1918		06
67	<b>21.05</b>	2.2	299	1.1	2.3	320	B					C	C			1718	standard	07
63	<b>22.30</b>	2.2	317	1.0	2.2	320	B					C	C			1913	ø30	08
57	<b>24.70</b>	2.2	351	0.9	2.0	320	B					C	C			1518		09
54	<b>25.85</b>	2.2	367	0.9	1.9	320	B					C	C			1713	ø35	10
47.5	<b>29.49</b>	1.5	289	1.1	1.7	320	B					C	C			1318	On request	11
46.1	<b>30.34</b>	1.5	297	1.1	1.6	320	B					C	C			1513		12
41.7	<b>33.60</b>	1.1	240	1.0	1.1	250	B					C	C			1021		13
38.7	<b>36.21</b>	1.1	259	1.2	1.3	320	B					C	C			1313		14
34.8	<b>40.25</b>	1.1	288	1.0	1.1	300	B					C	C			1018		15
28.3	<b>49.43</b>	1.1	354	0.9	0.99	320	B					C	C			1013		16
26.7	<b>52.53</b>	0.75	258	1.0	0.76	260	B					C	C			918		17
21.7	<b>64.51</b>	0.75	317	1.0	0.75	315	B					C	C			913		18
20.2	<b>69.37</b>	0.37	168	1.1	0.42	190	B					C	C			718		19
16.4	<b>85.19</b>	0.37	206	1.1	0.41	230	B					C	C			713		20

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

Motor Flanges Available  
Flange Motore Disponibili

B) Supplied with Reduction Bushing  
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position  
Posizione Fori Flangia Motore

**EN** Unit **502C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **502C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **502C** ist mit synthetischem Öl gefüllt und ist 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 **502C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **502C** se suministra, lubricado de por vida con aceite sintético y no 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
1.25 LT	0.80 LT	0.80 LT	0.70 LT	1.40 LT	0.80 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

$F_{eq} = F_R \cdot \frac{56.5}{X+26.5}$

$F_{eq} (N)$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	500	2500	140	640	3200	70	820	4100
250	540	2700	120	680	3400	40	1020	5100
200	580	2900	85	760	3800	15	1100	5500

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

**Input shaft**  
Albero in entrata

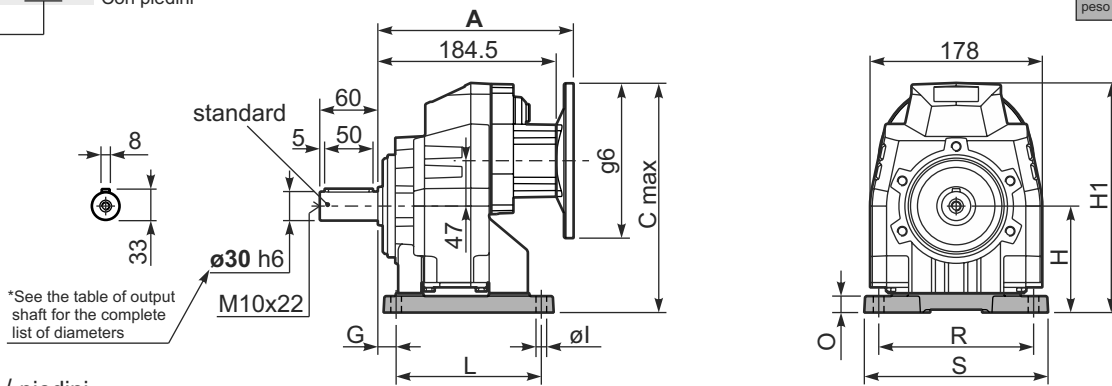
$n_1$	FA	FR
1400	240	1200
900	280	1400
500	340	1700

**tab. 2**



P502C**S4**... With feet  
Con piedini

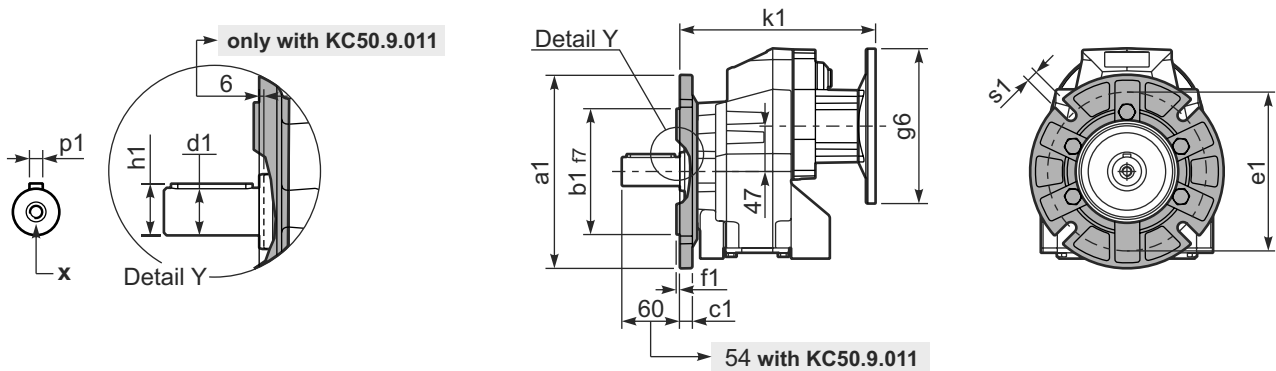
Gearbox weight **15.0 kg**  
peso riduttore With flange  
With feet **17.0 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	237	17	11	-	C50C.9.022
S4	47	30	115	135	165	170	242	22	13.5	-	C50C.9.024
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P502C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 35x70	10	38	M10x22
	-	-	-	-

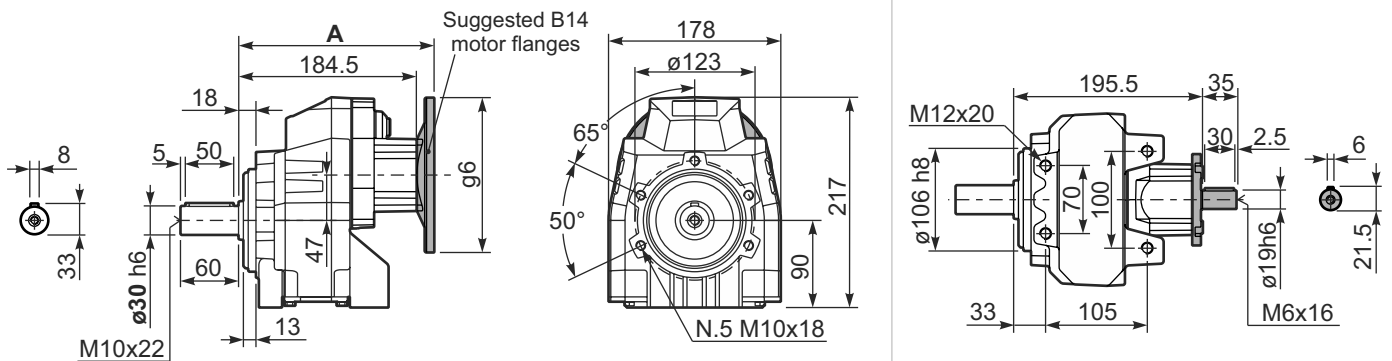
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P502C-**N**... Basic gearbox  
Riduttore base

R502C-**N**... Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
63 B5	205	232	140	205	K063.4.041	211
71 B5	203	242	160	203	K063.4.042	209
80/90 B5	205	262	200	205	K063.4.043	211
100/112 B5	220.5	287	250	220.5	KC40.4.043	226.5

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
71 B14	203	214.5	105	203	K063.4.047	209
80 B14	204	222	120	204	K063.4.046	210
90 B14	205	232	140	205	K063.4.041	211
100/112 B14	220.5	242	160	220.5	KC40.4.041	226.5



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 	Ratios code
							B	C	O	P	Q		
18.8	<b>74.33</b>	0.37	176	1.8	<b>0.67</b>	<b>320</b>			C	C		191313	01
17.0	<b>82.56</b>	0.37	196	1.6	<b>0.60</b>	<b>320</b>			C	C		151318	02
16.0	<b>87.48</b>	0.37	207	1.5	<b>0.57</b>	<b>320</b>			C	C		131713	03
13.8	<b>101.40</b>	0.37	240	1.3	<b>0.49</b>	<b>320</b>			C	C		151313	04
11.4	<b>122.57</b>	0.37	291	1.1	<b>0.41</b>	<b>320</b>			C	C		131313	05
10.1	<b>138.59</b>	0.37	329	1.0	<b>0.36</b>	<b>320</b>			C	C		101318	06
8.7	<b>160.82</b>	0.25	257	1.2	<b>0.31</b>	<b>320</b>			C	C		91713	07
8.2	<b>170.20</b>	0.25	272	1.2	<b>0.29</b>	<b>320</b>			C	C		101313	08
7.6	<b>183.48</b>	0.25	294	1.1	<b>0.27</b>	<b>320</b>			C	C		91318	09
6.5	<b>214.15</b>	0.18	262	1.2	<b>0.23</b>	<b>320</b>			C	C		71713	10
6.2	<b>225.33</b>	0.18	276	1.2	<b>0.22</b>	<b>320</b>			C	C		91313	11
5.7	<b>244.32</b>	0.18	299	1.1	<b>0.20</b>	<b>320</b>			C	C		71318	12
5.5	<b>254.15</b>	0.18	311	1.0	<b>0.20</b>	<b>320</b>			C	C		61713	13
4.8	<b>289.96</b>	0.18	355	0.9	<b>0.17</b>	<b>320</b>			C	C		61318	14
4.7	<b>300.05</b>	0.18	367	0.9	<b>0.17</b>	<b>320</b>			C	C		71313	15
3.9	<b>356.09</b>	0.12	282	1.1	<b>0.14</b>	<b>320</b>			C	C		61313	16

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

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

**EN** Unit **503C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **503C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **503C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **503C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **503C** se suministra, lubricado de por vida con aceite sintético y no 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					
1.35 LT	0.80 LT	0.80 LT	0.70 LT	1.50 LT	0.85 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

For all details on lubrication and plugs check our website [www.503c.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

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

$F_{eq} = F_R \cdot \frac{56.5}{X+26.5}$   
 $F_{eq}$  (N)

n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	500	2500	140	640	3200	70	820	4100
250	540	2700	120	680	3400	40	1020	5100
200	580	2900	85	760	3800	15	1100	5500

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

**Input shaft**  
Albero in entrata

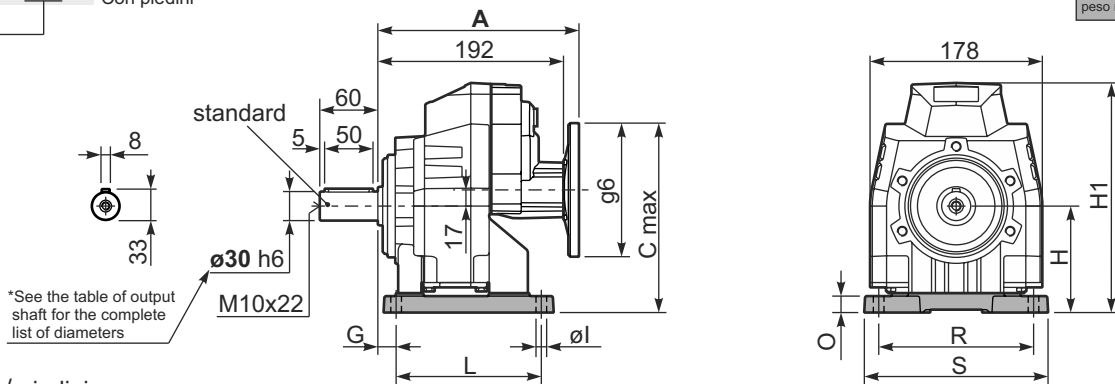
$F_R$  (N)  
 $F_A$  (N)

n <sub>1</sub>	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

P503C**S4**... With feet  
Con piedini

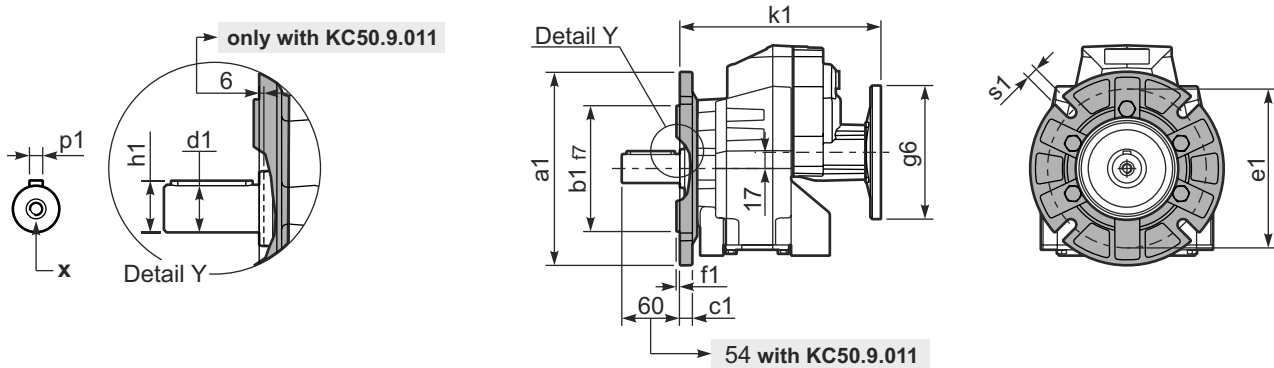
Gearbox weight  
peso riduttore With flange **15.0 kg**  
With feet **17.0 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	237	17	11	-	C50C.9.022
S4	47	30	115	135	165	170	242	22	13.5	-	C50C.9.024
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P503C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 35x70	10	38	M10x22
	-	-	-	-

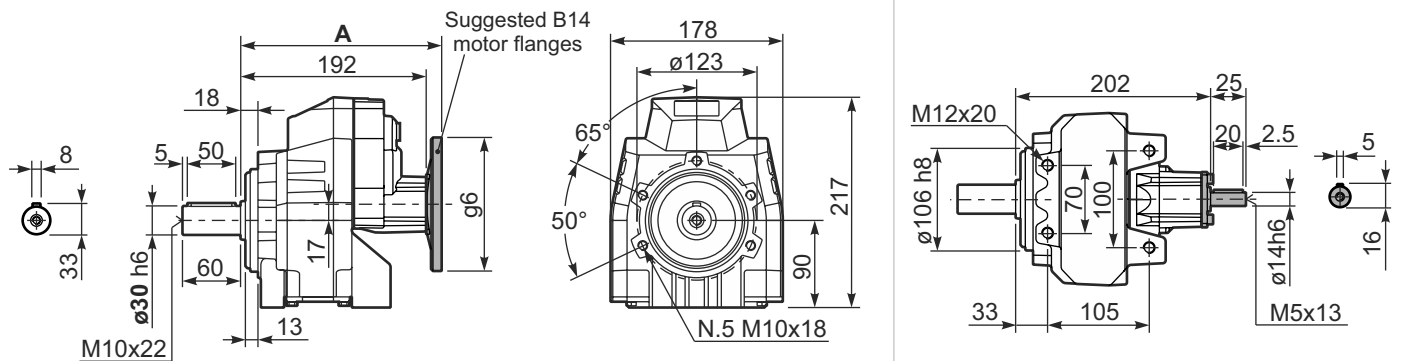
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

With flange and feet only on request. Ask for compatibility

P503C-**N**... Basic gearbox  
Riduttore base

R503C-**N**... Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
63 B5	208.5	202	140	208.5	K050.4.041	214.5
71 B5	206.5	212	160	206.5	K050.4.042	212.5

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
56 B14	208	172	80	208	KC40.4.049	214
63 B14	210.5	177	90	210.5	K050.4.047	216.5
71 B14	208	184.5	105	208	K050.4.045	214



#### 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	
							G	132	-	-	-	-			-
507	<b>2.76</b>	9	166	1.6	<b>14.4</b>	<b>265</b>			<b>not available</b>				2980	<b>standard</b>	01
395	<b>3.54</b>	9	213	1.3	<b>11.6</b>	<b>275</b>							2485	<b>ø35</b>	02
277	<b>5.06</b>	9	304	1.0	<b>8.6</b>	<b>290</b>							1891		03
241	<b>5.81</b>	7.5	281	1.2	<b>8.5</b>	<b>330</b>							1693	ø38	04
206	<b>6.79</b>	7.5	329	1.2	<b>8.4</b>	<b>380</b>							1495	ø40	05
The dynamic efficiency is <b>0.98</b> for all ratios													On request		

**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 **701C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **701C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **701C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **701C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **701C** se suministra, lubricado de por vida con aceite sintético y no 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
1.85 LT	1.40 LT	1.40 LT	1.30 LT	2.25 LT	1.60 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

#### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita



$$F_{eq} = F_R \cdot \frac{70}{X+35}$$

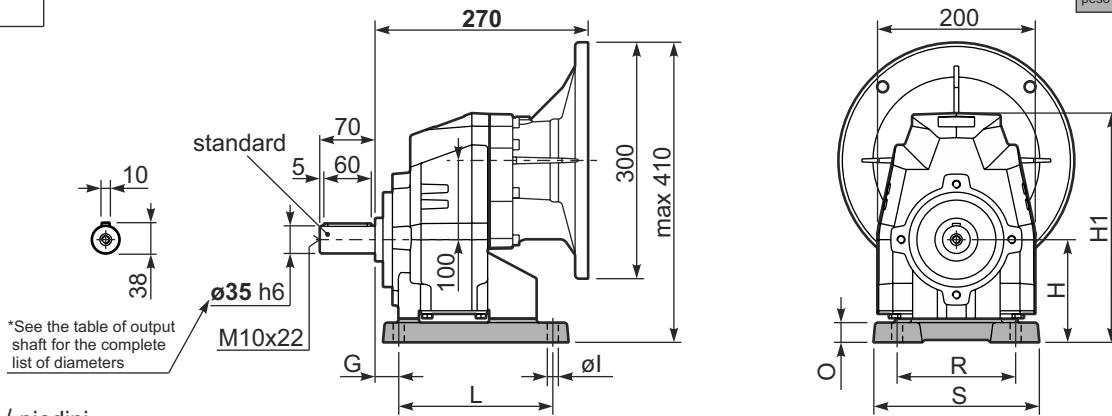
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	680	3400	140	960	4800	70	1300	6500
250	760	3800	120	1040	5200	40	1460	7300
200	900	4500	85	1120	5600	15	1800	9000

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

**tab. 2**

P701C**S6**... With feet  
Con piedini

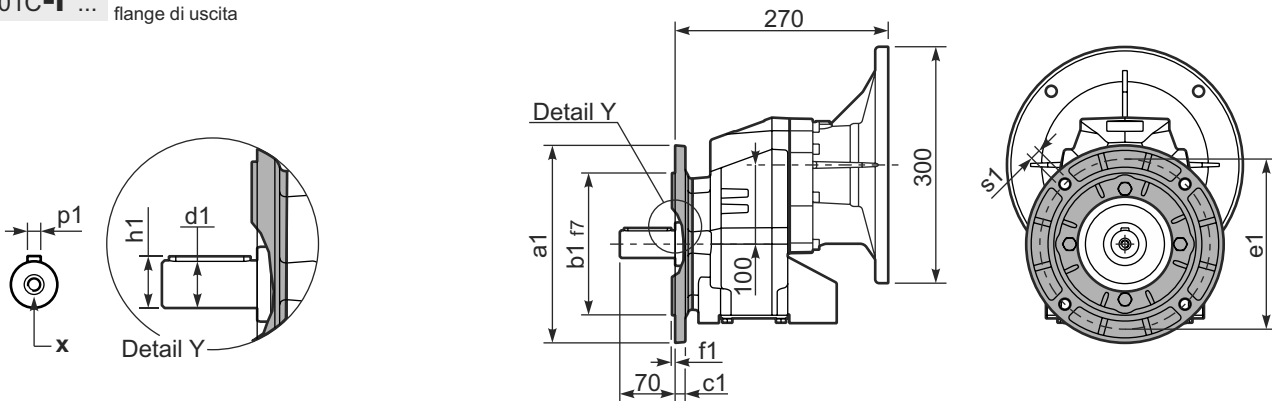
Gearbox weight  
peso riduttore With flange **36.0 kg**  
With feet **39.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B4	412/3	19.5	130	180	149.5	216	290	25	14	-	KC70.9.022
S6	67	30	130	150	195	210	290	25	14	-	KC70.9.024
H5	025/253	35	160	170	175	220	320	30	16	-	KC70.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P701C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Alberi di uscita

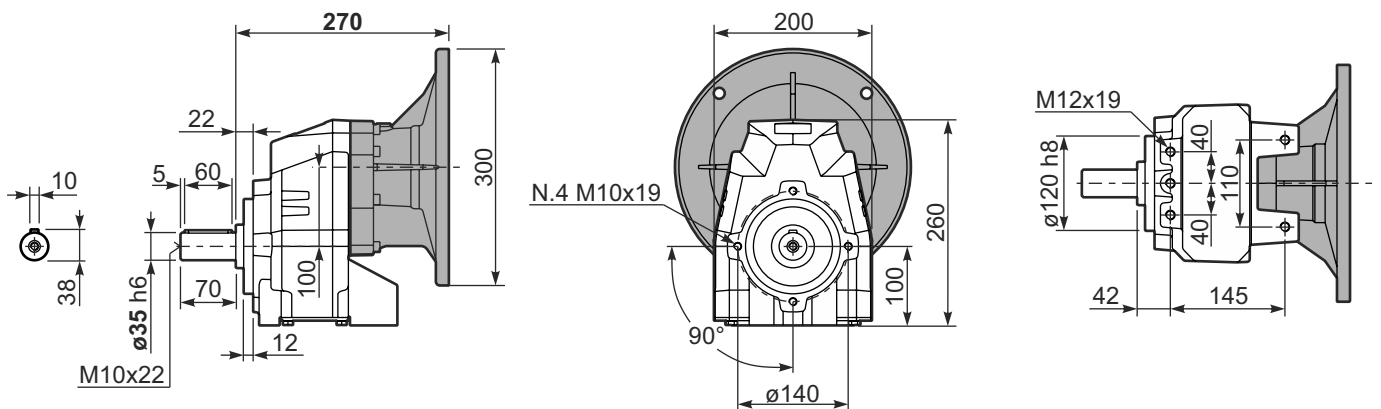
	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M12x28

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
200	130	11	165	3.5	11	KC70.9.012
250	180	13	215	4	14	KC70.9.013
-	-	-	-	-	-	-

With flange and feet only on request. Ask for compatibility

P701C-**N**... Basic gearbox  
Riduttore base





#### 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			
213	<b>6.57</b>	7.5	312	1.2	8.8	380	B										3018	01
185	<b>7.56</b>	7.5	358	1.1	7.9	390	B										3016	02
159	<b>8.82</b>	7.5	419	1.0	7.1	410	B										3014	03
113	<b>12.39</b>	7.5	588	1.0	7.2	580	B										2018	04
98	<b>14.24</b>	5.5	499	1.2	6.4	600	B										2016	05
84	<b>16.75</b>	5.5	587	1.1	6.1	665	B										1618	06
73	<b>19.25</b>	5.5	675	1.0	5.4	675	B										1616	07
64	<b>21.78</b>	4	558	1.2	4.7	675	B										1318	08
56	<b>25.04</b>	4	642	1.1	4.1	675	B										1316	09
47.9	<b>29.23</b>	4	750	0.9	3.5	675	B										1314	10
45.7	<b>30.65</b>	3	592	1.1	3.4	675	B										1116	11
39.1	<b>35.78</b>	3	691	1.0	2.9	675	B										1114	12
36.3	<b>38.55</b>	2.2	548	1.1	2.3	580	B										818	13
31.6	<b>44.32</b>	2.2	630	1.1	2.3	665	B										816	14
27.1	<b>51.74</b>	2.2	735	0.9	2.0	675	B										814	15
22.9	<b>61.03</b>	1.1	437	1.1	1.2	480	B										616	16
19.6	<b>71.25</b>	1.1	510	1.1	1.2	560	B										614	17

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

- Motor Flanges Available Flange Motore Disponibili
- 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 **702C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **702C** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **702C** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **702C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **702C** se suministra, lubricado de por vida con aceite sintético y no 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
2.10 LT	1.40 LT	1.40 LT	1.30 LT	2.25 LT	1.60 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

$F_{eq} = F_R \cdot \frac{70}{X+35}$   
 $F_{eq} (N)$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	680	3400	140	960	4800	70	1300	6500
250	760	3800	120	1040	5200	40	1460	7300
200	900	4500	85	1120	5600	15	1800	9000

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

**Input shaft**  
Albero di entrata

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

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

tab. 2





#### 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		
22.6	<b>61.89</b>	1.5	594	1.1	1.7	675	B				C	C		191318	01
19.7	<b>71.16</b>	1.5	683	1.0	1.5	675	B				C	C		191316	02
17.0	<b>82.48</b>	1.5	792	0.9	1.3	675	B				C	C		171316	03
14.5	<b>96.29</b>	1.1	675	1.0	1.1	675	B				C	C		171314	04
13.9	<b>100.51</b>	1.1	705	1.0	1.0	675	B				C	C		131318	05
12.1	<b>115.56</b>	0.75	556	1.2	0.91	675	B				C	C		131316	06
11.1	<b>125.96</b>	0.75	606	1.1	0.82	665	B				C	C		190816	07
10.4	<b>134.91</b>	0.75	649	1.0	0.78	675	B				C	C		131314	08
9.5	<b>147.05</b>	0.75	707	1.0	0.72	675	B				C	C		190814	09
8.2	<b>170.44</b>	0.55	605	1.1	0.62	675	B				C	C		170814	10
7.6	<b>184.15</b>	0.55	653	1.0	0.57	675	B				C	C		101314	11
6.8	<b>205.87</b>	0.55	730	0.9	0.51	675	B				C	C		91316	12
5.8	<b>240.34</b>	0.37	570	1.2	0.44	675	B				C	C		91314	13
5.0	<b>279.22</b>	0.37	662	1.0	0.37	665	B				C	C		100816	14
4.3	<b>325.97</b>	0.37	773	0.9	0.32	675	B				C	C		100814	15
3.8	<b>364.41</b>	0.25	583	1.1	0.28	665	B				C	C		90816	16
3.3	<b>425.43</b>	0.25	681	1.0	0.25	675	B				C	C		90814	17
2.9	<b>481.19</b>	0.18	589	1.1	0.22	665	B				C	C		70816	18
2.5	<b>561.76</b>	0.18	687	1.0	0.19	675	B				C	C		70814	19

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit 703C is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore 703C viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe 703C ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur 703C est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño 703C se suministra, lubricado de por vida con aceite sintético y no 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
2.20 LT	1.40 LT	1.40 LT	1.30 LT	2.40 LT	1.70 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$F_{eq} = FR \cdot \frac{70}{X+35}$

**Input shaft**  
Albero in entrata

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	680	3400	140	960	4800	70	1300	6500
250	760	3800	120	1040	5200	40	1460	7300
200	900	4500	85	1120	5600	15	1800	9000

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

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

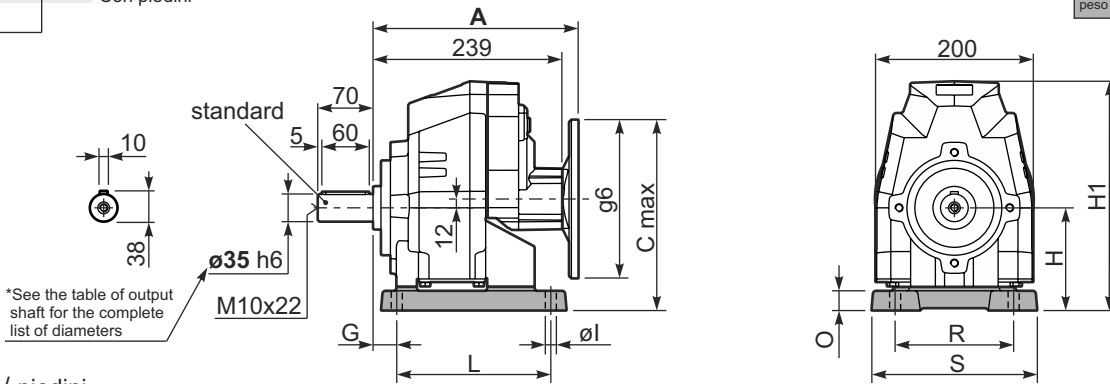
tab. 2



3D dimensions on the Web

P703C**S6**... With feet  
Con piedini

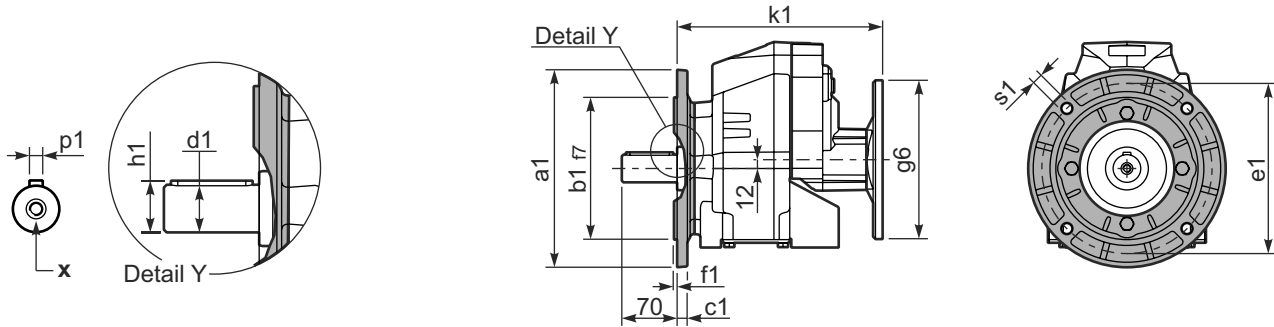
Gearbox weight **30.0 kg**  
peso riduttore With flange  
With feet **33.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	$\phi l$	B5 max. Flange	kit code
B4	412/3	19.5	130	180	149.5	216	290	25	14	-	KC70.9.022
S6	67	30	130	150	195	210	290	25	14	-	KC70.9.024
H5	025/253	35	160	170	175	220	320	30	16	-	KC70.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P703C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

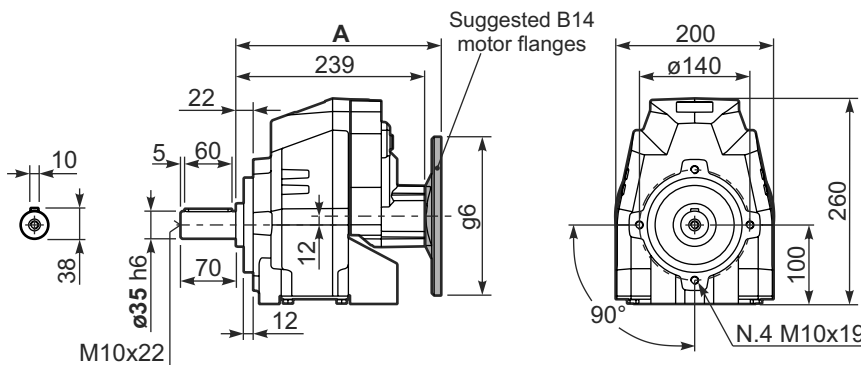
	Shaft - d1	p1	h1	x
Standard	$\phi$ 35x70	10	38	M10x22
On request A richiesta	$\phi$ 38x70	10	41	M10x25
	$\phi$ 40x80	12	43	M12x28

Available output flanges / flange di uscita

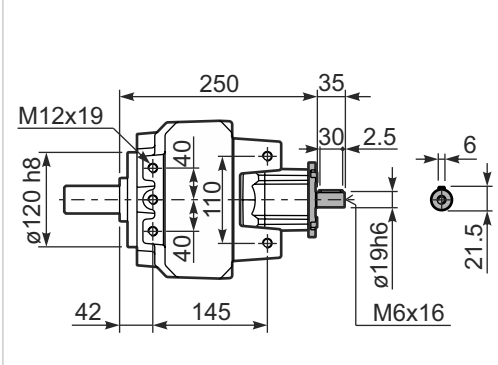
a1 $\phi$	b1	c1	e1	f1	s1	kit code
200	130	11	165	3.5	11	KC70.9.012
250	180	13	215	4	14	KC70.9.013
-	-	-	-	-	-	-

With flange and feet only on request. Ask for compatibility

P703C-**N**... Basic gearbox  
Riduttore base



R703C-**N**... Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
63 B5	259.5	242	140	259.5	K063.4.041
71 B5	257.5	252	160	257.5	K063.4.042
80/90 B5	259.5	272	200	259.5	K063.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B14	257.5	224.5	105	257.5	K063.4.047
80 B14	258.5	232	120	258.5	K063.4.046
90 B14	259.5	242	140	259.5	K063.4.041



#### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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 					
							G														
227	<b>6.17</b>	9	371	1.2	<b>10.9</b>	<b>450</b>					<b>not available</b>				18111	standard <b>ø40</b> ø50 On request	01				
198	<b>7.06</b>	9	425	1.4	<b>12.7</b>	<b>600</b>									-		-	-	-	16113	02
170	<b>8.21</b>	9	494	1.4	<b>12.2</b>	<b>670</b>									-		-	-	-	14115	03

The dynamic efficiency is **0.98** 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 **801C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.  
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **801C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.  
Tab.1 per oli e quantità consigliati.  
Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **801C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben  
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **801C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.  
Voir tableau 1 concernant les huiles et les quantités conseillées.  
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **801C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

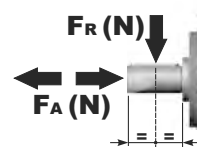
B3	B6	B7	B8	V5	V6	V8
3.20 LT	1.90 LT	1.90 LT	1.55 LT	3.20 LT	2.20 LT	Ask

**AGIP Blasias 460**

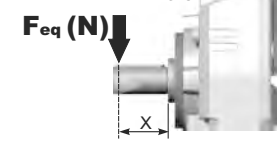
For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

#### RADIAL AND AXIAL LOADS

Output shaft  
Albero di uscita



$$F_{eq} = F_R \cdot \frac{80.5}{X+40.5}$$



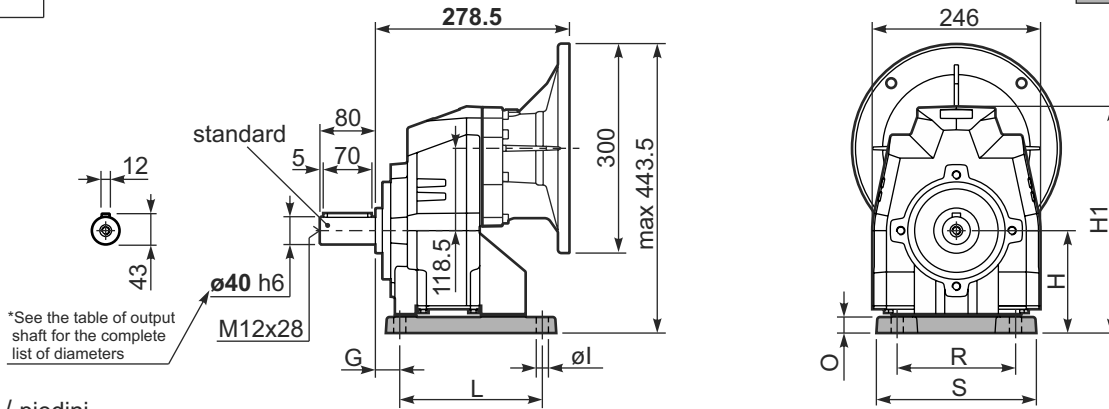
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
<b>300</b>	1200	6000	<b>140</b>	1600	8000	<b>70</b>	2200	11000
<b>250</b>	1400	7000	<b>120</b>	1800	9000	<b>40</b>	2600	13000
<b>200</b>	1500	7500	<b>85</b>	2000	10000	<b>15</b>	3000	15000

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

**tab. 2**

P801C**S7**... With feet  
Con piedini

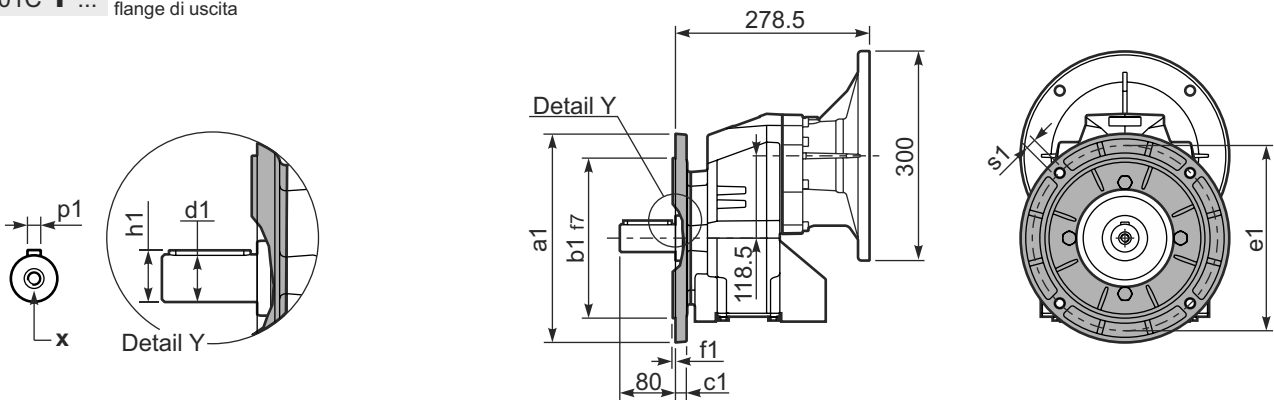
Gearbox weight **45.5 kg**  
peso riduttore With feet **49.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B5	512/3	25	155	225	156	270	333.5	30	18	-	KC80.9.022
S7	77	35	140	170	205	230	318.5	18	17.5	-	KC80.9.024
H6	026/263	40	175	215	215	265	353.5	30	16	-	KC80.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P801C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

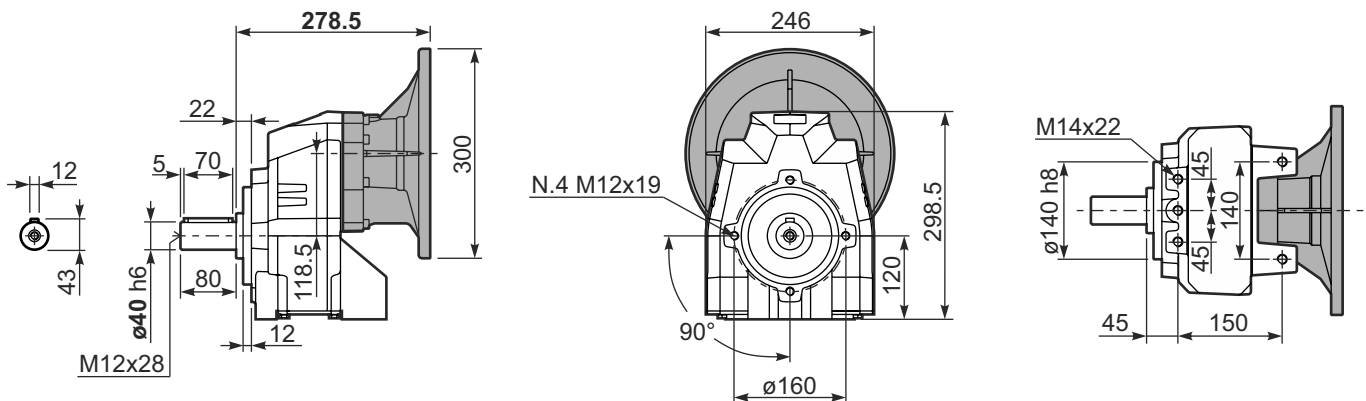
	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100	14	53.5	M16x36
-	-	-	-	-

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
250	180	13	215	4	14	KC80.9.013
300	230	16	265	4	14	KC80.9.014
-	-	-	-	-	-	-

  
With flange and feet  
only on request.  
Ask for compatibility

P801C-**N**... Basic gearbox  
Riduttore base





### 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			
175	8.02	9	473	1.1	9.9	520	B										3018	01
152	9.18	9	541	1.1	9.8	590	B										3016	02
131	10.68	9	630	1.1	9.7	680	B										3014	03
93	15.11	7.5	717	1.1	7.8	775	B										2018	04
81	17.30	7.5	821	1.1	7.8	885	B										2016	05
70	20.13	7.5	955	0.9	6.8	900	B										2014	06
60	23.39	5.5	820	1.1	5.9	900	B										1616	07
51	27.21	5.5	954	0.9	5.1	900	B										1614	08
46.0	30.42	4	780	1.2	4.5	900	B										1316	09
39.6	35.38	4	907	1.0	3.9	900	B										1314	10
37.6	37.24	3	719	1.2	3.7	895	B										1116	11
32.3	43.31	3	836	1.1	3.2	900	B										1114	12
29.8	47.02	2.2	668	1.1	2.3	705	B										818	13
26.0	53.85	2.2	765	1.1	2.3	810	B										816	14
22.4	62.63	2.2	890	1.0	2.2	900	B										814	15
18.9	74.16	1.1	531	1.1	1.2	585	B										616	16
16.2	86.25	1.1	617	1.1	1.2	680	B										614	17

The dynamic efficiency is 0.96 for all ratios

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **802C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.  
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **802C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.  
Tab.1 per oli e quantità consigliati.  
Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **802C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben  
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **802C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.  
Voir tableau 1 concernant les huiles et les quantités conseillées.  
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **802C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.  
Ver tabla 1, para cantidades y aceites recomendados.  
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
3.20 LT	1.90 LT	1.90 LT	1.55 LT	3.20 LT	2.20 LT	Ask

**AGIP 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

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

$F_{eq} = F_R \cdot \frac{80.5}{X+40.5}$

$F_{eq}$  (N)

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	1200	6000	140	1600	8000	70	2200	11000
250	1400	7000	120	1800	9000	40	2600	13000
200	1500	7500	85	2000	10000	15	3000	15000

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

**Input shaft**  
Albero in entrata

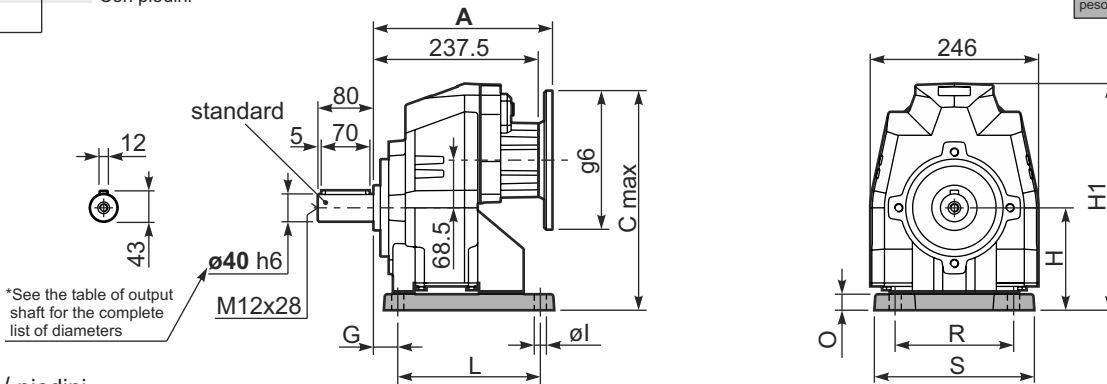
$F_R$  (N)  
 $F_A$  (N)

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

**tab. 2**

P802C**S7**... With feet  
Con piedini

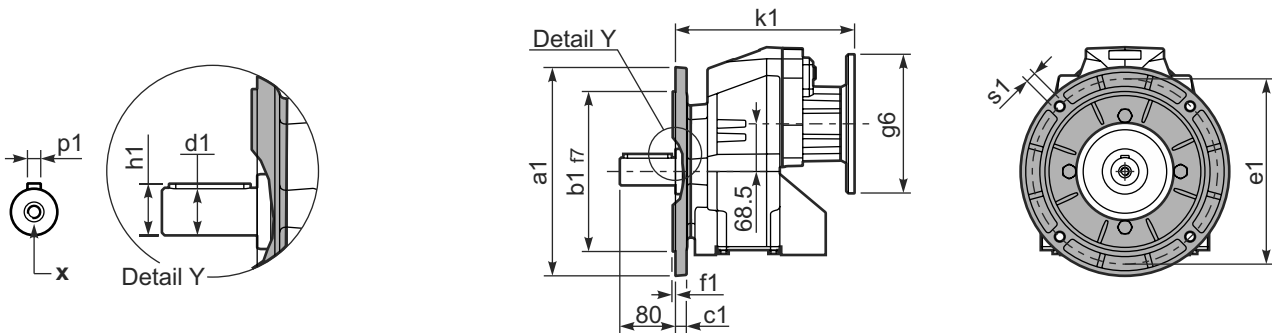
Gearbox weight **39.5 kg**  
peso riduttore With flange  
With feet **43.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B5	512/3	25	155	225	156	270	333.5	30	18	-	KC80.9.022
S7	77	35	140	170	205	230	318.5	18	17.5	-	KC80.9.024
H6	026/263	40	175	215	215	265	353.5	30	16	-	KC80.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P802C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100	14	53.5	M16x36
-	-	-	-	-

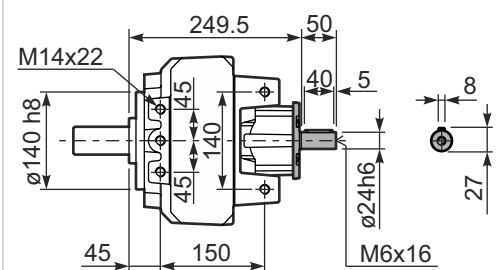
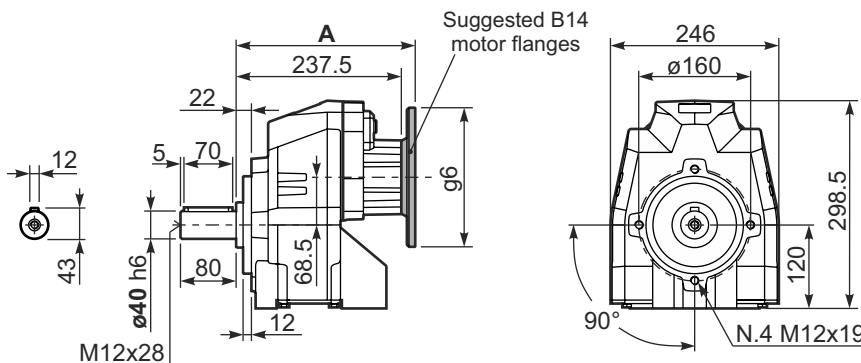
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
250	180	13	215	4	14	KC80.9.013
300	230	16	265	4	14	KC80.9.014
-	-	-	-	-	-	-

With flange and feet only on request. Ask for compatibility

P802C-**N**... Basic gearbox  
Riduttore base

R802C-**N**... Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B5	256	323.5	160	256	KC023.4.041
80/90 B5	258	343.5	200	258	KC023.4.042
100/112 B5	264	368.5	250	264	KC023.4.043
132 B5	285.5	393.5	300	285.5	KC40.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
80 B14	256	303.5	120	256	KC085.4.046
90 B14	256	313.5	140	256	KC085.4.045
100/112 B14	267	323.5	160	267	KC085.4.047
132 B14	285.5	343.5	200	285.5	KC50.4.041



### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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		
18.5	<b>75.50</b>	1.5	725	1.1	1.7	825	B				C	C		191318	01
16.2	<b>86.47</b>	1.5	830	1.1	1.6	900	B				C	C		191316	02
14.0	<b>100.22</b>	1.5	962	0.9	1.4	900	B				C	C		171316	03
12.0	<b>116.56</b>	1.1	817	1.1	1.2	900	B				C	C		171314	04
10.2	<b>136.82</b>	1.1	959	0.9	1.0	900	B				C	C		151314	05
9.1	<b>153.05</b>	0.75	736	1.1	0.83	810	B				C	C		190816	06
8.6	<b>163.31</b>	0.75	785	1.1	0.86	900	B				C	C		131314	07
7.9	<b>178.01</b>	0.75	856	1.1	0.79	900	B				C	C		190814	08
7.3	<b>191.67</b>	0.75	922	1.0	0.73	900	B				C	C		101316	09
6.8	<b>206.32</b>	0.75	992	0.9	0.68	900	B				C	C		170814	10
6.3	<b>222.92</b>	0.55	791	1.1	0.63	900	B				C	C		101314	11
5.8	<b>242.18</b>	0.55	859	1.0	0.58	900	B				C	C		150814	12
5.6	<b>250.15</b>	0.55	888	1.0	0.56	900	B				C	C		91316	13
4.8	<b>289.08</b>	0.55	1026	0.9	0.49	900	B				C	C		130814	14
4.2	<b>330.31</b>	0.37	783	1.1	0.42	890	B				C	C		71316	15
3.5	<b>394.59</b>	0.37	936	1.0	0.36	900	B				C	C		100814	16
2.7	<b>514.99</b>	0.25	824	1.1	0.27	900	B				C	C		90814	17
2.1	<b>680.03</b>	0.18	832	1.1	0.21	900	B				C	C		70814	18

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

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

**EN** Unit **803C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **803C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **803C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **803C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **803C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
3.30 LT	1.90 LT	1.90 LT	1.55 LT	3.40 LT	2.30 LT	Ask

**AGIP 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

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

$F_{eq} = F_R \cdot \frac{80.5}{X+40.5}$   
 $F_{eq}$  (N)

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	1200	6000	140	1600	8000	70	2200	11000
250	1400	7000	120	1800	9000	40	2600	13000
200	1500	7500	85	2000	10000	15	3000	15000

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

**Input shaft**  
Albero in entrata

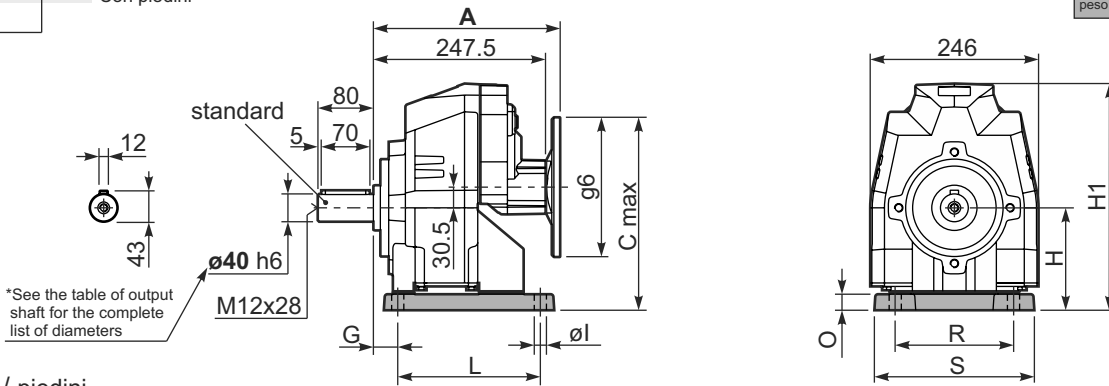
$F_R$  (N)  
 $F_A$  (N)

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

tab. 2

P803C**S7**... With feet  
Con piedini

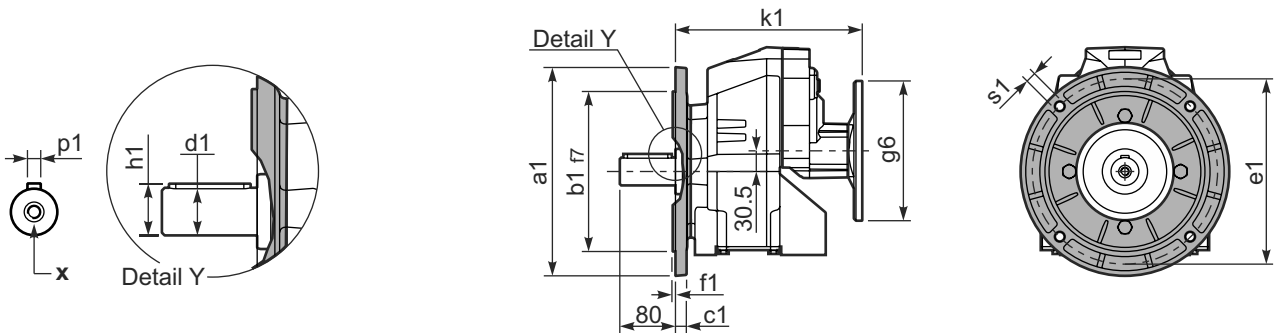
Gearbox weight **39.5 kg**  
peso riduttore With flange  
With feet **43.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B5	512/3	25	155	225	156	270	333.5	30	18	-	KC80.9.022
S7	77	35	140	170	205	230	318.5	18	17.5	-	KC80.9.024
H6	026/263	40	175	215	215	265	353.5	30	16	-	KC80.9.023
-	-	-	-	-	-	-	-	-	-	-	-
-	-	-	-	-	-	-	-	-	-	-	-

P803C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

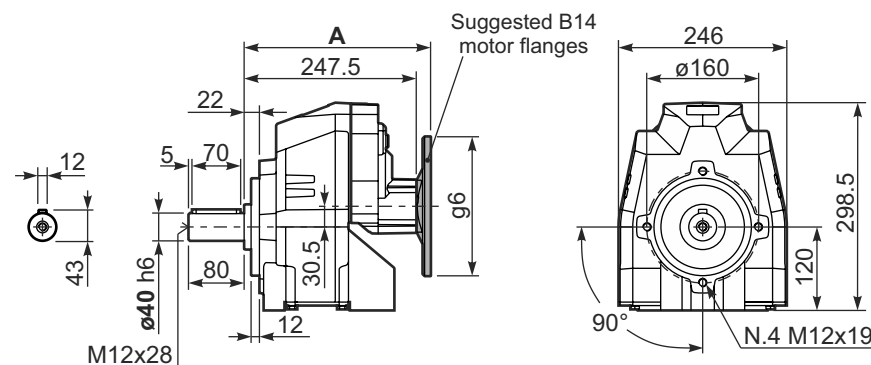
	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100	14	53.5	M16x36
-	-	-	-	-

Available output flanges / flange di uscita

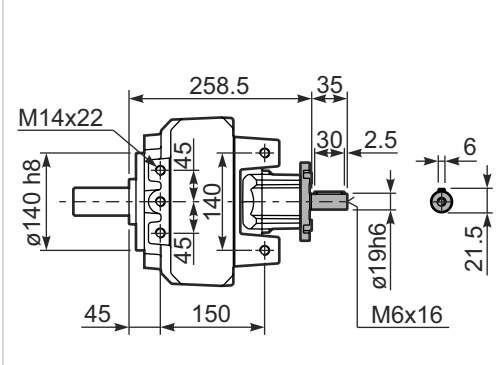
a1 ø	b1	c1	e1	f1	s1	kit code
250	180	13	215	4	14	KC80.9.013
300	230	16	265	4	14	KC80.9.014
-	-	-	-	-	-	-

With flange and feet only on request. Ask for compatibility

P803C-**N**... Basic gearbox  
Riduttore base



R803C-**N**... Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
63 B5	268	275.5	140	268	K063.4.041
71 B5	266	285.5	160	266	K063.4.042
80/90 B5	268	305.5	200	268	K063.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B14	266	258	105	266	K063.4.047
80 B14	267	265.5	120	267	K063.4.046
90 B14	268	275.5	140	268	K063.4.041



### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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 	
							H	I	-	-	-	-			-
412	<b>3.40</b>	22	480	1.3	<b>26.4</b>	<b>600</b>			<b>not available</b>				1551	<b>standard</b>	01
343	<b>4.08</b>	22	575	1.2	<b>25.7</b>	<b>700</b>			<b>not available</b>				1353	<b>ø50</b>	02
285	<b>4.91</b>	22	693	1.0	<b>21.3</b>	<b>700</b>			<b>not available</b>				1154	<b>ø60</b>	03

The dynamic efficiency is **0.98** for all ratios

On request

**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 **851C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **851C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **851C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **851C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **851C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
5.30 LT	3.60 LT	3.60 LT	2.80 LT	5.80 LT	4.10 LT	Ask

**AGIP Blasias 460**

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$

$F_{eq}$  (N)

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	1800	9000	140	2400	12000	70	3000	15000
250	2000	10000	120	2600	13000	40	3200	16000
200	2200	11000	85	2800	14000	15	4000	20000

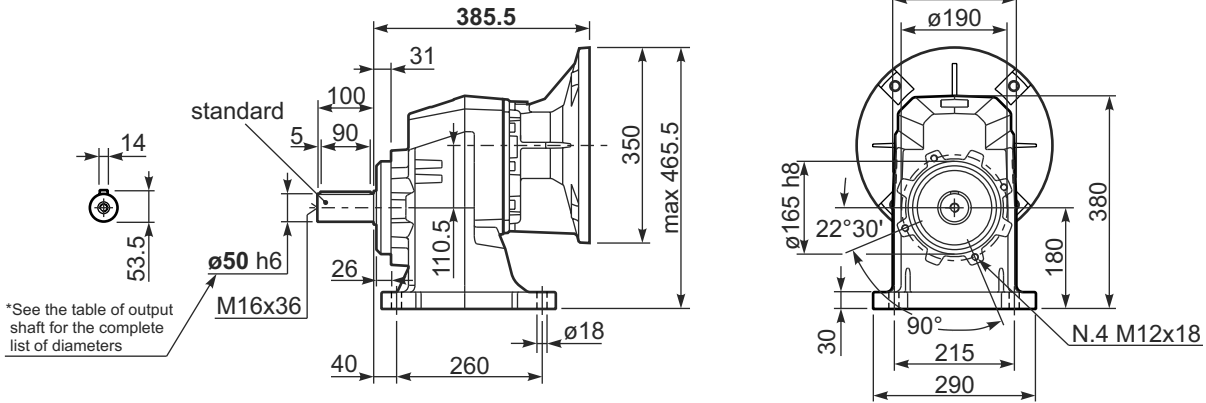
**On request reinforced bearings to increase loads.**  
A richiesta cuscinetti rinforzati per aumentare i carichi.

**tab. 2**

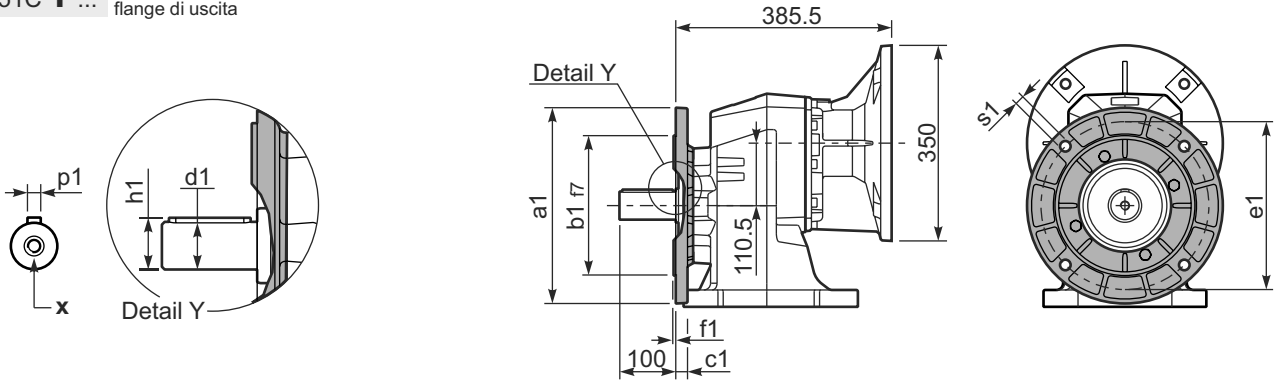


P851C**S8**... With foot  
Con piedine

Gearbox weight With flange **90.0 kg**  
peso riduttore With feet **80.5 kg**



P851C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	∅ 50x100	14	53.5	M16x36
On request A richiesta	∅ 60x120	18	64	M20x42
	-	-	-	-

Available output flanges / flange di uscita

a1 ∅	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-

All flanges are compatible with the foot



#### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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 
							G	H	I	-	-	-	-		
							132	160	180	-	-	-	-		
317	<b>4.42</b>	22	611	1.1	<b>24.2</b>	<b>700</b>								3015	01
264	<b>5.30</b>	22	733	1.0	<b>20.2</b>	<b>700</b>								3013	02
219	<b>6.38</b>	18.5	742	1.1	<b>19.1</b>	<b>800</b>								3011	03
168	<b>8.33</b>	15	784	1.0	<b>14.7</b>	<b>800</b>								2015	04
140	<b>9.99</b>	15	940	1.0	<b>13.8</b>	<b>900</b>								2013	05
124	<b>11.26</b>	15	1060	1.0	<b>14.9</b>	<b>1100</b>								1615	06
116	<b>12.03</b>	15	1132	1.1	<b>15.2</b>	<b>1200</b>								2011	07
104	<b>13.50</b>	15	1271	1.1	<b>15.8</b>	<b>1400</b>								1613	08
96	<b>14.65</b>	15	1378	1.1	<b>15.6</b>	<b>1500</b>								1315	09
86	<b>16.26</b>	15	1531	1.0	<b>14.1</b>	<b>1500</b>								1611	10
80	<b>17.56</b>	11	1214	1.2	<b>13.0</b>	<b>1500</b>								1313	11
65	<b>21.50</b>	11	1486	1.1	<b>11.4</b>	<b>1600</b>								1113	12
54	<b>25.88</b>	9	1526	1.0	<b>9.4</b>	<b>1600</b>								1111	13
45.0	<b>31.09</b>	7.5	1475	1.0	<b>7.2</b>	<b>1460</b>								813	14
37.4	<b>37.43</b>	5.5	1312	1.2	<b>6.5</b>	<b>1600</b>								811	15

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

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

**EN** Unit **852C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **852C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **852C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **852C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **852C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
5.40 LT	3.60 LT	3.60 LT	2.80 LT	5.90 LT	4.20 LT	Ask
AGIP 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

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

$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$

$F_{eq} (N)$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	1800	9000	140	2400	12000	70	3000	15000
250	2000	10000	120	2600	13000	40	3200	16000
200	2200	11000	85	2800	14000	15	4000	20000

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

**Input shaft**  
Albero in entrata

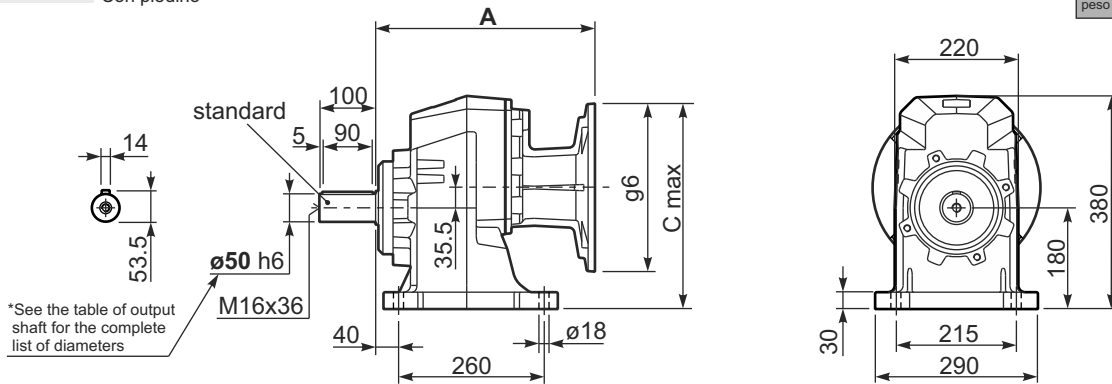
$F_R (N)$   
 $F_A (N)$

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

**tab. 2**

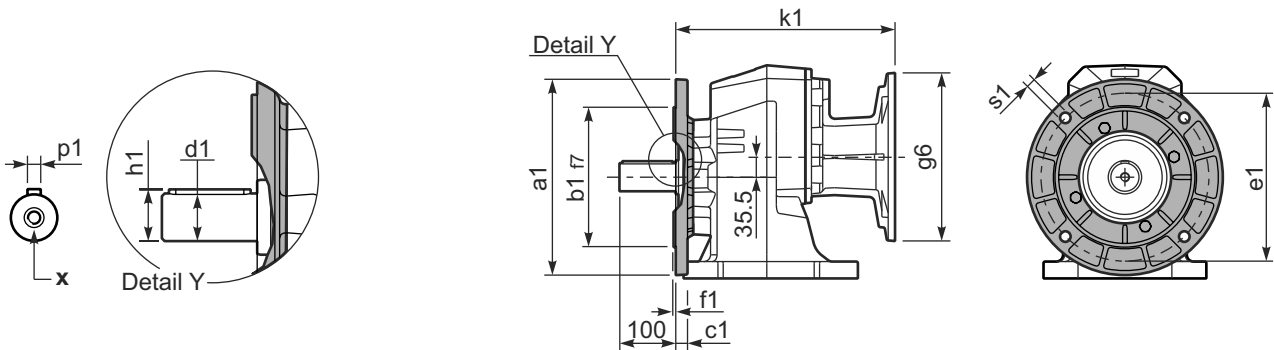
P852C**S8**... With foot  
Con piedino

Gearbox weight With flange **86.0 kg**  
peso riduttore With feet **76.5 kg**



\*See the table of output shaft for the complete list of diameters

P852C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

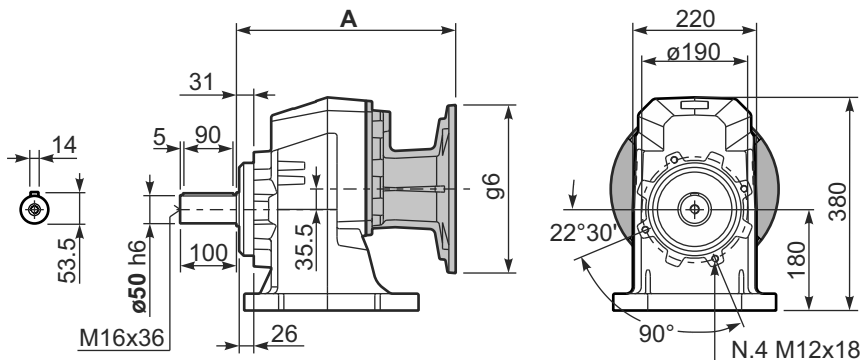
	Shaft - d1	p1	h1	x
Standard	∅ 50x100	14	53.5	M16x36
On request A richiesta	∅ 60x120	18	64	M20x42
	-	-	-	-

Available output flanges / flange di uscita

a1 ∅	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-

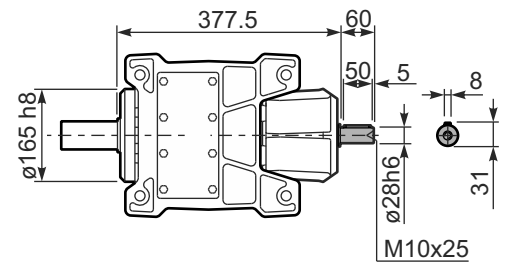
All flanges are compatible with the foot

P852C**S8**... Basic gearbox  
Riduttore base



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
132 B5	391	365.5	300	391	-
160/180 B5	402	390.5	350	402	-

R852C**S8**... Input Shaft  
Albero in entrata





#### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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					
32.5	<b>43.03</b>	5.5	1478	1.1	5.8	1600	B										201313	standard ø50	01	
28.9	<b>48.52</b>	5.5	1667	0.9	5.0	1550	B										161315		02	
27.0	<b>51.81</b>	4	1302	1.2	4.8	1600	B										201311		03	
24.1	<b>58.17</b>	4	1462	1.1	4.3	1600	B										161313		04	
22.2	<b>63.09</b>	4	1585	1.0	3.8	1550	B										131315		05	
20.0	<b>70.05</b>	4	1760	1.0	4.0	1800	B										161311		06	
18.5	<b>75.65</b>	4	1901	0.9	3.7	1800	B										131313		ø60	07
15.4	<b>91.09</b>	3	1723	1.0	3.1	1800	B										131311		On request	08
12.6	<b>111.50</b>	2.2	1553	1.2	2.5	1800	B										111311		09	
10.5	<b>133.91</b>	2.2	1865	1.0	2.1	1800	B										81313		10	
8.7	<b>161.24</b>	1.5	1548	1.2	1.7	1800	B										81311		11	
7.6	<b>184.40</b>	1.1	1293	1.1	1.2	1450	B										61313		12	
6.3	<b>222.04</b>	1.1	1557	1.1	1.2	1750	B										61311		13	

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **853C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.  
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **853C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.  
Tab.1 per oli e quantità consigliati.  
Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **853C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben  
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **853C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.  
Voir tableau 1 concernant les huiles et les quantités conseillées.  
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **853C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.  
Ver tabla 1, para cantidades y aceites recomendados.  
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
5.50 LT	3.80 LT	3.80 LT	3.20 LT	7.00 LT	4.60 LT	Ask

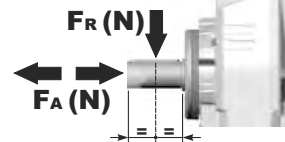
**AGIP Blasias 460**

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

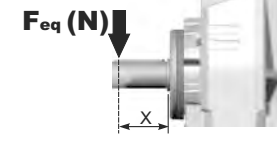
#### RADIAL AND AXIAL LOADS

##### Output shaft

Albero di uscita



$$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$$



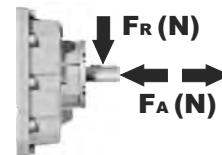
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	1800	9000	140	2400	12000	70	3000	15000
250	2000	10000	120	2600	13000	40	3200	16000
200	2200	11000	85	2800	14000	15	4000	20000

**On request reinforced bearings to increase loads.**

A richiesta cuscinetti rinforzati per aumentare i carichi.

##### Input shaft

Albero in entrata

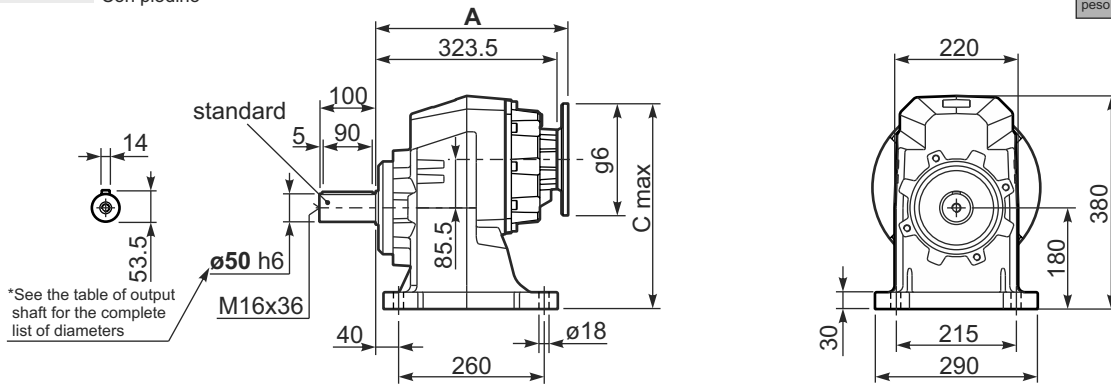


$n_1$	FA	FR
1400	450	2250
900	500	2500
500	600	3000

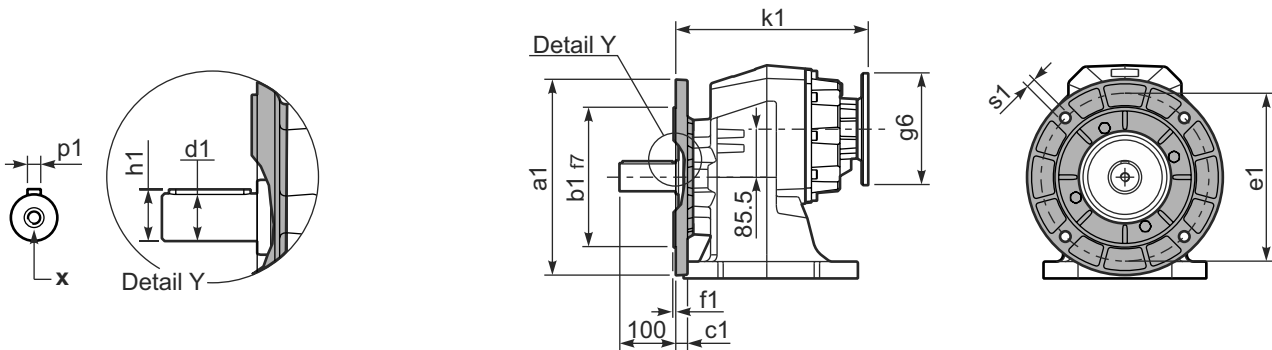
tab. 2

P853C**S8**... With foot  
Con piedino

Gearbox weight With flange **80.5 kg**  
peso riduttore With feet **71.0 kg**



P853C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

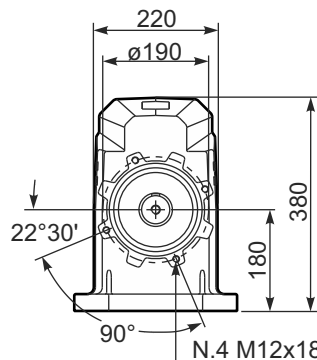
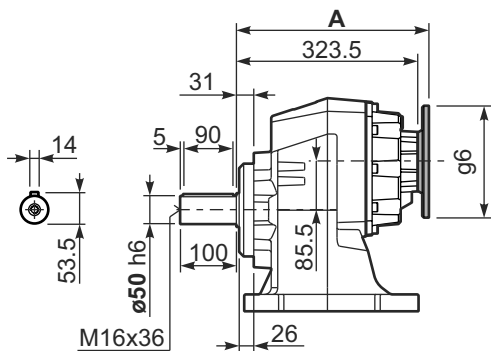
	Shaft - d1	p1	h1	x
Standard	ø 50x100	14	53.5	M16x36
On request A richiesta	ø 60x120	18	64	M20x42
	-	-	-	-

Available output flanges / flange di uscita

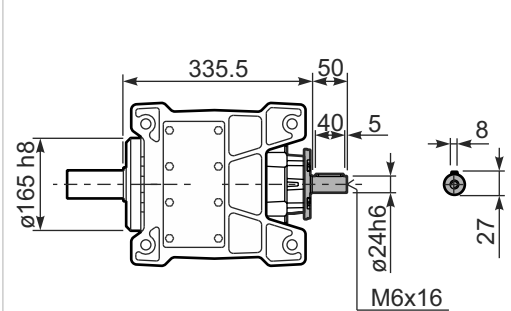
a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-

All flanges are compatible with the foot

P853C**S8**... Basic gearbox  
Riduttore base



R853C**S8**... Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B5	342	345.5	160	342	KC023.4.041
80/90 B5	344	365.5	200	344	KC023.4.042
100/112 B5	350	390.5	250	350	KC023.4.043
132 B5	371.5	415.5	300	371	KC50.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
80 B14	342	325.5	120	342	KC085.4.046
90 B14	342	335.5	140	342	KC085.4.045
100/112 B14	353	345.5	160	353	KC085.4.047
132 B14	371.5	365.5	200	371.5	KC50.4.041



#### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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 	
							H	I	-	-	-	-			
							160	180	-	-	-	-			
528	<b>2.65</b>	22	374	1.7	<b>36.7</b>	<b>650</b>			<b>not available</b>				2361	<b>standard</b>	01
409	<b>3.42</b>	22	483	1.6	<b>32.8</b>	<b>750</b>							1965	<b>ø60</b>	02
304	<b>4.60</b>	22	649	1.5	<b>30.9</b>	<b>950</b>							1569		03
256	<b>5.46</b>	22	771	1.3	<b>27.4</b>	<b>1000</b>							1371	ø50	04
211	<b>6.64</b>	22	937	1.3	<b>26.5</b>	<b>1175</b>							1173	On request	05

The dynamic efficiency is **0.98** 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 **901C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.  
See table 1 for lubrication and recommended quantity.  
In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **901C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.  
Tab.1 per oli e quantità consigliati.  
Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **901C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben  
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **901C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.  
Voir tableau 1 concernant les huiles et les quantités conseillées.  
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **901C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.  
Ver tabla 1, para cantidades y aceites recomendados.  
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

<b>B3</b>	<b>B6</b>	<b>B7</b>	<b>B8</b>	<b>V5</b>	<b>V6</b>	<b>V8</b>
5.90 LT	3.80 LT	3.80 LT	3.50 LT	6.80 LT	4.50 LT	Ask

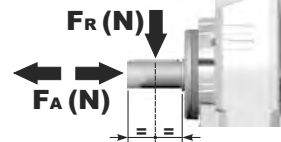
AGIP Blasias 460

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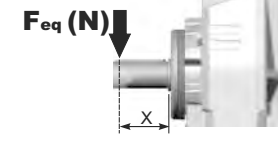
tab. 1

#### RADIAL AND AXIAL LOADS

Output shaft  
Albero di uscita



$$F_{eq} = FR \cdot \frac{88.5}{X+38.5}$$



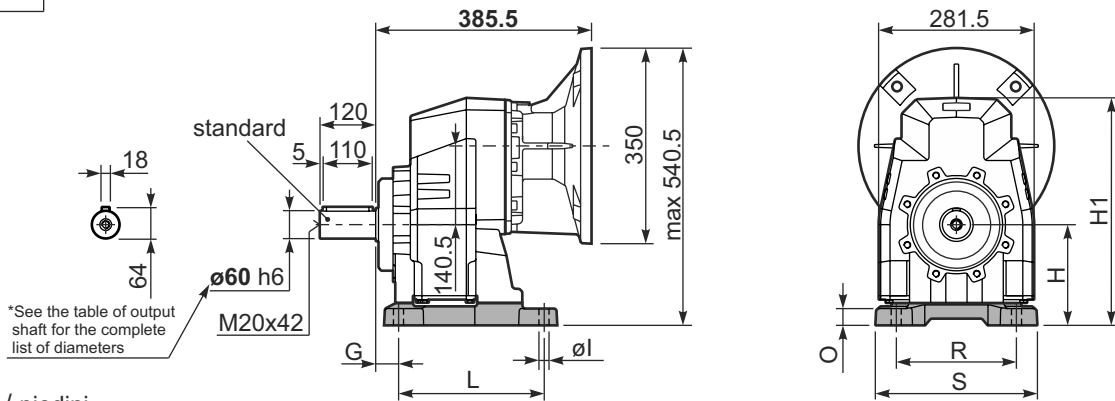
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
<b>300</b>	2070	10350	<b>140</b>	2760	13800	<b>70</b>	3450	17250
<b>250</b>	2300	11500	<b>120</b>	2990	14950	<b>40</b>	3680	18400
<b>200</b>	2530	12650	<b>85</b>	3220	16100	<b>15</b>	4600	23000

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

tab. 2

P901C**S8**... With feet  
Con piedini

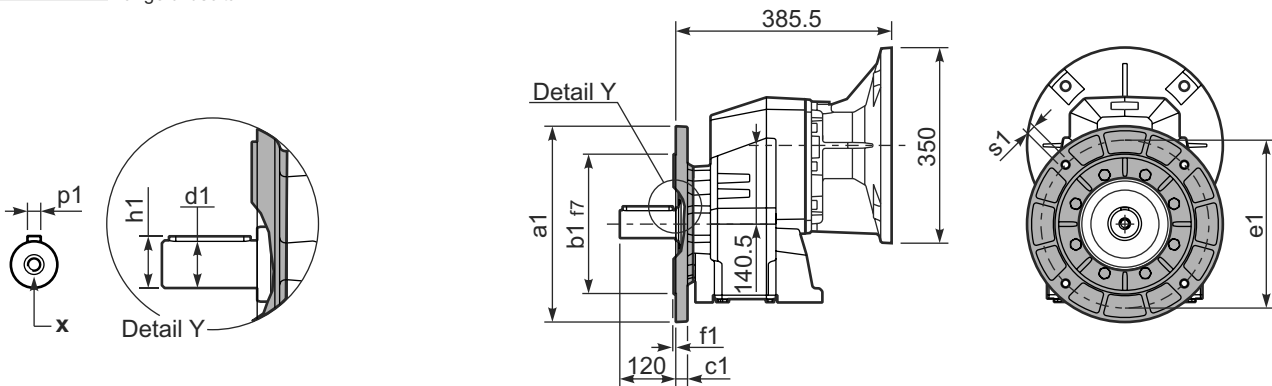
Gearbox weight  
peso riduttore With flange **102 kg**  
With feet **110.5 kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B6	612/3	25	195	250	180	300	422	25	18	-	KC90.9.022
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
H7	027/273	40	225	250	245	300	452	55	22	-	KC90.9.023
HS	-	40	175	215	260	290	402	25	18	-	KC90.9.025
-	-	-	-	-	-	-	-	-	-	-	-

P901C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

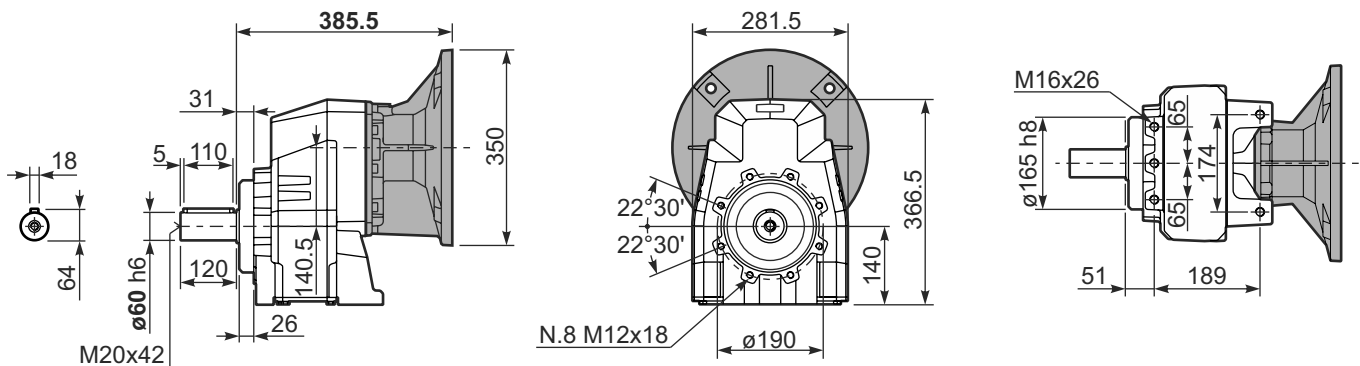
	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	ø 50x100	14	53.5	M16x36
-	-	-	-	-

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-

With flange and feet only on request. Ask for compatibility

P901C-**N**... Basic gearbox  
Riduttore base





### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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 
							G	H	I	-	-	-	-		
							132	160	180	-	-	-	-		
234	<b>5.98</b>	22	827	1.2	<b>25.5</b>	<b>1000</b>								3015	01
197	<b>7.10</b>	22	982	1.2	<b>25.3</b>	<b>1175</b>								3013	02
162	<b>8.63</b>	22	1193	1.1	<b>23.9</b>	<b>1350</b>								3011	03
124	<b>11.27</b>	18.5	1310	1.1	<b>20.3</b>	<b>1500</b>								2015	04
105	<b>13.38</b>	18.5	1555	1.1	<b>19.4</b>	<b>1700</b>								2013	05
92	<b>15.24</b>	18.5	1771	1.1	<b>19.0</b>	<b>1900</b>								1615	06
86	<b>16.26</b>	18.5	1889	1.1	<b>19.7</b>	<b>2100</b>								2011	07
77	<b>18.09</b>	18.5	2102	1.0	<b>17.7</b>	<b>2100</b>								1613	08
71	<b>19.82</b>	15	1865	1.1	<b>15.9</b>	<b>2060</b>								1315	09
64	<b>21.98</b>	15	2069	1.0	<b>14.6</b>	<b>2100</b>								1611	10
60	<b>23.53</b>	15	2214	0.9	<b>13.6</b>	<b>2100</b>								1313	11
58	<b>24.25</b>	11	1677	1.2	<b>12.2</b>	<b>1940</b>								1115	12
48.6	<b>28.80</b>	11	1991	1.1	<b>11.1</b>	<b>2100</b>								1113	13
40.0	<b>34.99</b>	9	2063	1.0	<b>9.2</b>	<b>2100</b>								1111	14
33.6	<b>41.64</b>	7.5	1976	1.0	<b>7.2</b>	<b>1960</b>								813	15
27.7	<b>50.60</b>	5.5	1774	1.2	<b>6.3</b>	<b>2100</b>								811	16

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

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

**EN** Unit **902C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **902C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **902C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **902C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **902C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
5.90 LT	3.80 LT	3.80 LT	3.40 LT	6.70 LT	4.40 LT	Ask
AGIP Blasia 460						

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$   
 $F_{eq}$  (N)

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	2070	10350	140	2760	13800	70	3450	17250
250	2300	11500	120	2990	14950	40	3680	18400
200	2530	12650	85	3220	16100	15	4600	23000

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

**Input shaft**  
Albero in entrata

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

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

**tab. 2**

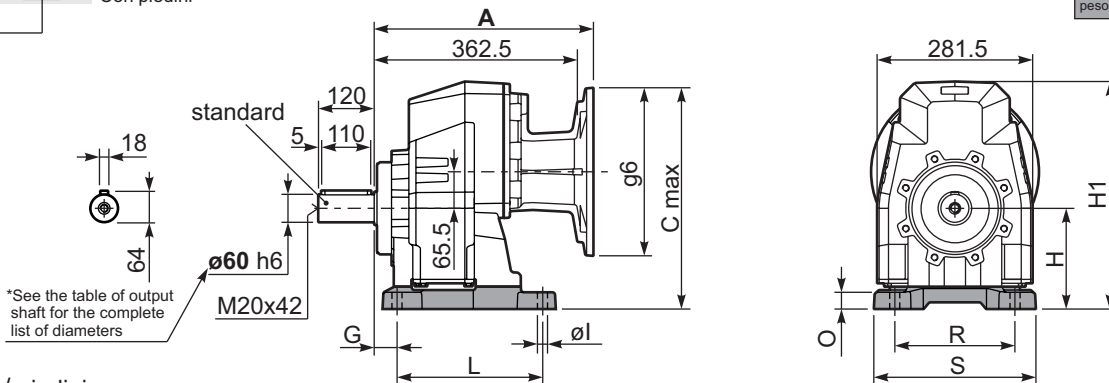


P902C**S8**...

With feet  
Con piedini

Gearbox weight  
peso riduttore

With flange **98.5 kg**  
With feet **107.0 kg**

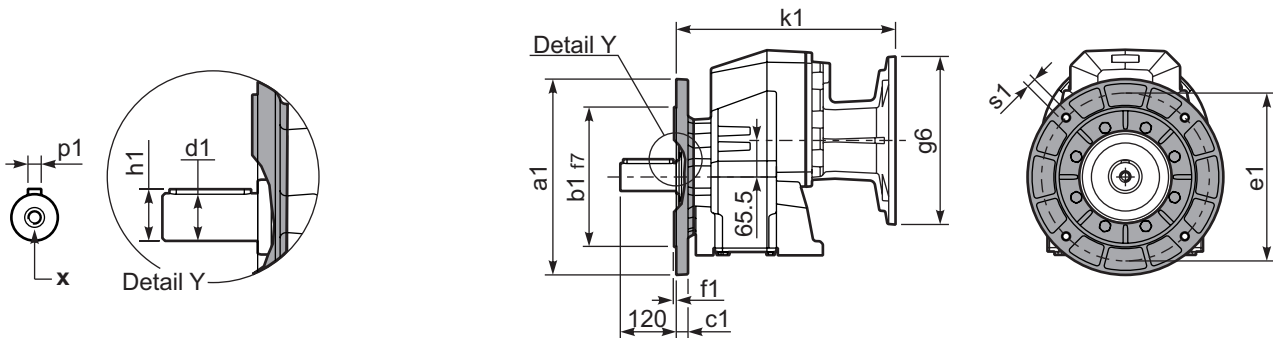


Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B6	612/3	25	195	250	180	300	422	25	18	-	KC90.9.022
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
H7	027/273	40	225	250	245	300	452	55	22	-	KC90.9.023
HS	-	40	175	215	260	290	402	25	18	-	KC90.9.025
-	-	-	-	-	-	-	-	-	-	-	-

P902C-**F**...

Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	ø 50x100	14	53.5	M16x36
	-	-	-	-

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-

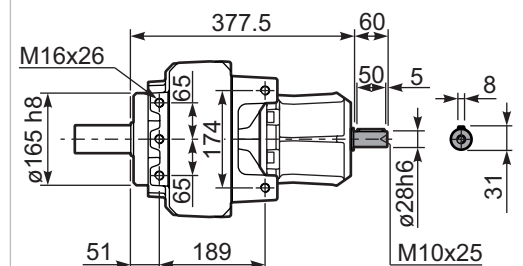
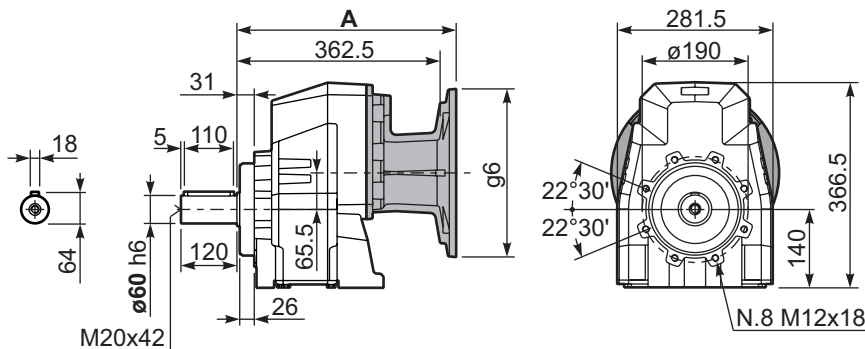
With flange and feet only on request. Ask for compatibility

P902C-**N**...

Basic gearbox  
Riduttore base

R902C-**N**...

Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
132 B5	391	440.5	300	391	-
160/180 B5	402	465.5	350	402	-



### 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			
28.8	<b>48.55</b>	7.5	2257	0.9	6.7	2100	B										201315	01
24.3	<b>57.64</b>	5.5	1980	1.1	5.7	2100	B										201313	02
21.3	<b>65.64</b>	5.5	2255	0.9	5.0	2100	B										161315	03
20.0	<b>70.04</b>	4	1760	1.2	4.7	2100	B										201311	04
18.0	<b>77.93</b>	4	1958	1.1	4.2	2100	B										161313	05
16.4	<b>85.36</b>	4	2145	1.0	3.8	2100	B										131315	06
14.8	<b>94.70</b>	4	2380	0.9	3.5	2100	B										161311	07
13.8	<b>101.35</b>	3	1917	1.1	3.2	2100	B										131313	08
11.4	<b>123.15</b>	3	2330	0.9	2.7	2100	B										131311	09
9.3	<b>150.73</b>	2.2	2100	1.0	2.2	2100	B										111311	10
7.8	<b>179.39</b>	1.5	1722	1.2	1.8	2100	B										81313	11
6.4	<b>217.98</b>	1.5	2093	1.0	1.5	2100	B										81311	12
5.7	<b>247.03</b>	1.1	1732	1.1	1.2	1950	B										61313	13
4.7	<b>300.17</b>	1.1	2105	1.0	1.1	2100	B										61311	14

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

Motor Flanges Available  
Flange Motore Disponibili

B) Supplied with Reduction Bushing  
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position  
Posizione Fori Flangia Motore

**EN** Unit **903C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.  
See table 1 for lubrication and recommended quantity.  
In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **903C** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.  
Tab.1 per oli e quantità consigliati.  
Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **903C** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben  
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **903C** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.  
Voir tableau 1 concernant les huiles et les quantités conseillées.  
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **903C** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.  
Ver tabla 1, para cantidades y aceites recomendados.  
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
6.00 LT	4.10 LT	4.10 LT	3.70 LT	7.30 LT	4.90 LT	Ask

**AGIP 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

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

$F_{eq} = F_R \cdot \frac{88.5}{X+38.5}$

$F_{eq} (N)$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	2070	10350	140	2760	13800	70	3450	17250
250	2300	11500	120	2990	14950	40	3680	18400
200	2530	12650	85	3220	16100	15	4600	23000

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

**Input shaft**  
Albero in entrata

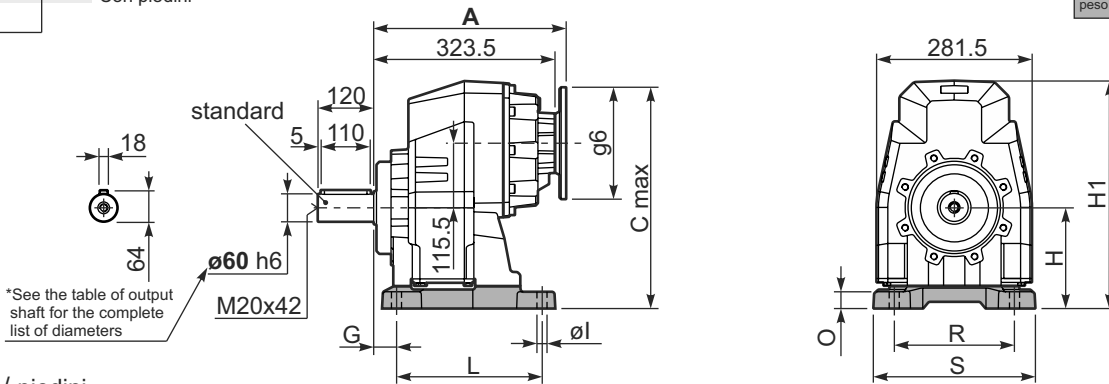
$F_R (N)$   
 $F_A (N)$

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

**tab. 2**

P903C**S8**... With feet  
Con piedini

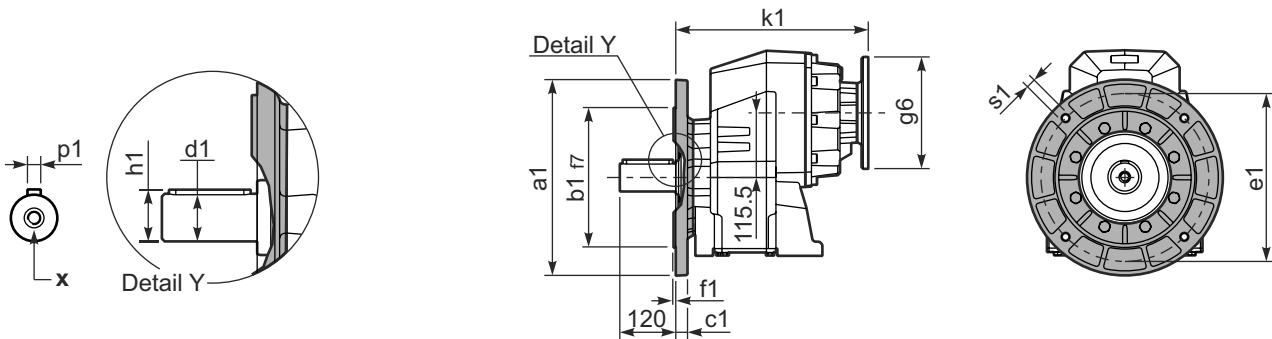
Gearbox weight With flange **86.0 kg**  
peso riduttore With feet **94.5 Kg**



Feet / piedini

Feet Code	Market reference	G	H	R	L	S	H1	O	øl	B5 max. Flange	kit code
B6	612/3	25	195	250	180	300	422	25	18	-	KC90.9.022
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
H7	027/273	40	225	250	245	300	452	55	22	-	KC90.9.023
HS	-	40	175	215	260	290	402	25	18	-	KC90.9.025
-	-	-	-	-	-	-	-	-	-	-	-

P903C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	ø 50x100	14	53.5	M16x36
	-	-	-	-

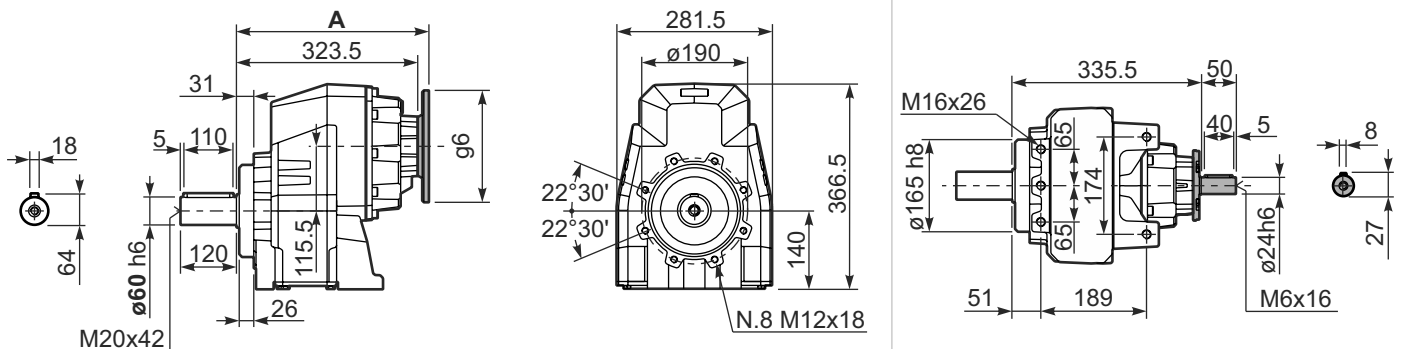
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-

With flange and feet only on request. Ask for compatibility

P903C-**N**... Basic gearbox  
Riduttore base

R903C-**N**... Input Shaft  
Albero in entrata

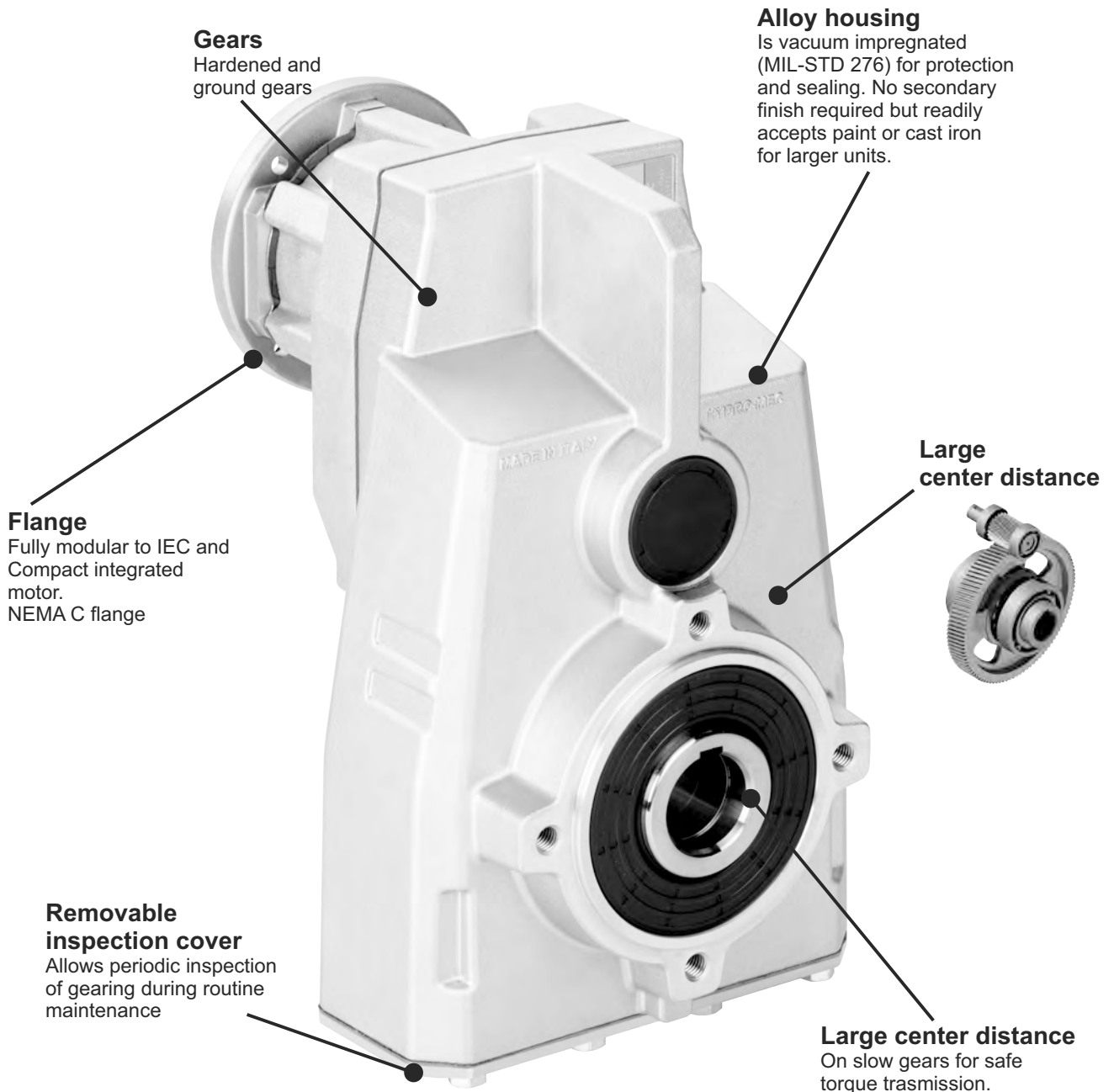


B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B5	342	420.5	160	342	KC023.4.041
80/90 B5	344	440.5	200	344	KC023.4.042
100/112 B5	350	465.5	250	350	KC023.4.043
132 B5	371.5	490.5	300	371.5	KC50.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
80 B14	342	400.5	120	342	KC085.4.046
90 B14	342	410.5	140	342	KC085.4.045
100/112 B14	353	420.5	160	353	KC085.4.047
132 B14	371.5	440.5	200	371.5	KC50.4.041

# Aluminum & cast iron shaft mounted gearboxes

## A modular and compact product



### Single-piece aluminum / Cast Iron housing

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



World wide sales network.

# Specific type datasheet on page...

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

1 Stage



Types / Tipi / Tipen / Types / Tipos

8-7	8-17	8-27
FA41 225Nm	FC61 380Nm	FC81 1175Nm

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

2 and 3 Stage



Types / Tipi / Tipen / Types / Tipos

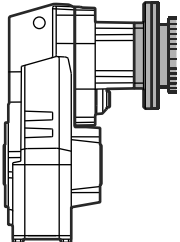
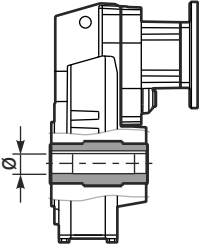
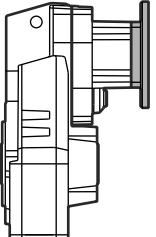
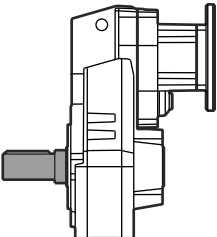
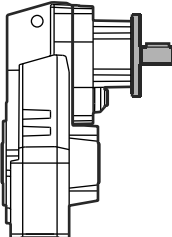
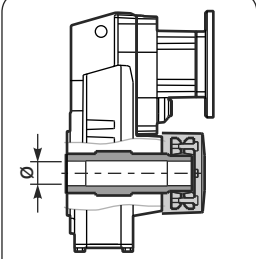
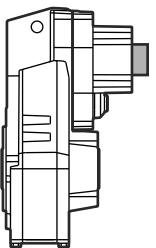
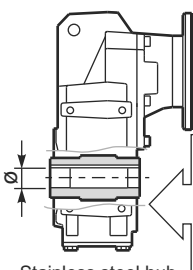
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FS20 90Nm	FA42 320Nm	FA43 320Nm	FA52 490Nm	FA53 510Nm	FC62 675Nm	FC63 675Nm	FC72 900Nm	FC73 900Nm	FC82 2100Nm	FC83 2100Nm	FS50 480Nm

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

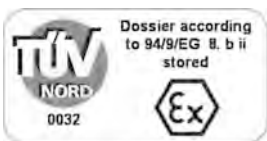


Types / Tipi / Tipen / Types / Tipos

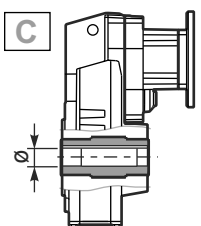
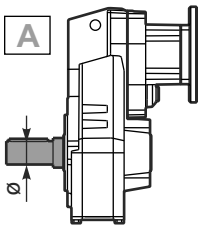
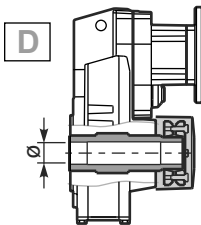
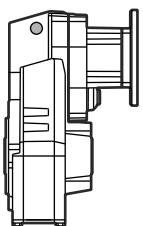
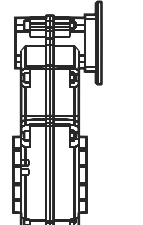
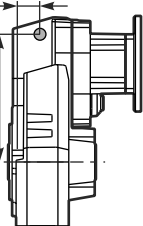
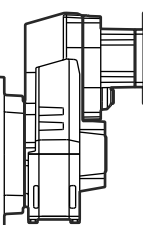
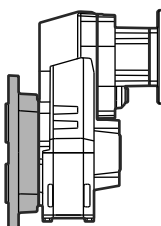
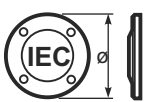




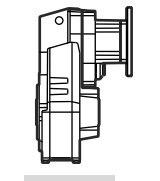
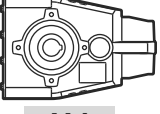
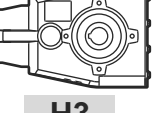
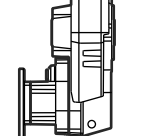
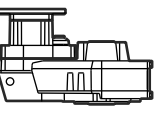
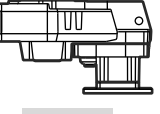
M-1										
56A 56B	63A 63B	71A 71B	80A 80B	90S 90L	100LA 100LB	112M	132S 132M	160M 160L	180M 180L	

Type - Tipo - Typ Type - Tipo	Size - Grandezza - Grösse Taille - Tomaño	Mounting - Montaggio Montage - Fixation Tipo de montaje	Rapporto - Ratio Untersetzung Reduction - Relacion
<b>M</b>	<b>FA42</b>	<b>C</b>	<b>10.04</b>
<p>Shaft mounted helical Riduttori ad assi paralleli</p> 	<p>1 Stage Riduzione Stufe Trains Etapa</p> <p>2 Stages Riduzioni Stufen Trains Etapas</p> <p>3 Stages Riduzioni Stufen Trains Etapas</p>	 <p>Hollow output shaft</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>With IEC motor</p> <p style="text-align: center;"><b>M</b></p>	<p>Aluminum/Alluminio/Aluminium/Aluminio</p> <p style="text-align: center;"><b>FA41</b></p> <p style="text-align: center;"><b>FS20</b></p>	<p style="text-align: center;"><b>C</b></p>	
 <p>With motor flange</p> <p style="text-align: center;"><b>P</b></p>	<p style="text-align: center;"><b>FA42</b> <b>FA52</b></p> <p style="text-align: center;"><b>FA43</b> <b>FA53</b></p> <p style="text-align: center;"><b>FS50</b></p>	 <p>Single output shaft</p> <p style="text-align: center;"><b>A</b></p>	
 <p>With male input shaft</p> <p style="text-align: center;"><b>R</b></p>	<p>Cast Iron/Ghisa/Grauguss/Fonfe/Fundicion</p> <p style="text-align: center;"><b>FC61</b> <b>FC81</b></p> <p style="text-align: center;"><b>FC62</b> <b>FC72</b> <b>FC82</b></p>	 <p>Shrink Disk</p> <p style="text-align: center;"><b>D</b></p> <p>Only on request for Q.ty A richiesta per quantità</p>	
 <p>Modular base</p> <p style="text-align: center;"><b>B</b></p>	<p style="text-align: center;"><b>FC63</b> <b>FC73</b> <b>FC83</b></p>	 <p>Stainless steel hub</p> <p style="text-align: center;"><b>I</b></p> <div style="border: 1px solid black; padding: 5px; width: fit-content;"> <p>On request for q.ty</p> <p>Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Nucleo corona de acero Inox</p> </div>	

8



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

Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida	Type - Tipo - Typ Types - Tipo	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Terminal box position Posizione morsetiera Klemmkastenlage Position boîte à bornes Posición caja de bornes	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje																																												
<p><b>D</b></p>  <p><b>C</b></p> <p>→ <b>STANDARD</b> Only on request for Q.ty A richiesta per quantità</p> <p>FS20</p> <p><b>B</b> → <math>\varnothing 20</math></p> <p>FA41 FA42 FA43 FS50</p> <p><b>D</b> → <math>\varnothing 30</math></p> <p><b>E</b> → <math>\varnothing 35</math></p> <p>FA52 FA53 FC61 FC62 FC63</p> <p><b>E</b> → <math>\varnothing 35</math></p> <p><b>F</b> → <math>\varnothing 40</math></p> <p>FC72 FC73</p> <p><b>F</b> → <math>\varnothing 40</math></p> <p><b>G</b> → <math>\varnothing 45</math></p> <p>FC81 FC82 FC83</p> <p><b>H</b> → <math>\varnothing 50</math></p> <p><b>I</b> → <math>\varnothing 55</math></p> <p><b>A</b></p>  <p>Single output shaft</p> <p><b>M</b> FA41/2/3 → <math>\varnothing 30</math></p> <p><b>N</b> FA52/3 FC61/2/3 → <math>\varnothing 35</math></p> <p><b>O</b> FC72/3 → <math>\varnothing 40</math></p> <p><b>K</b> FC81/2/3 → <math>\varnothing 50</math></p> <p><b>D</b></p>  <p>Shrink disk</p> <p><b>Q</b> FA42/3 → <math>\varnothing 30</math></p> <p><b>T</b> FA52/3 FC62/3 → <math>\varnothing 35</math></p> <p><b>U</b> FC72/3 → <math>\varnothing 40</math></p> <p><b>V</b> FC82/3 → <math>\varnothing 50</math></p>	<p><b>ST</b></p>  <p><b>ST</b></p> <p>Foro standard Standard bore</p>  <p><b>ST</b></p> <p>only for FS20</p> <p>Senza braccio di reazione Without reaction arm</p>  <p>Available torque arms, see our web site. Bracci di reazione disponibili, vedi il nostro sito web.</p> <p><b>S..</b></p>  <p><b>-F</b></p> <p>Whit output flange con flangia uscita</p>	<p><b>N</b></p>  <p><b>N</b> Senza flangia Without flange</p> <p>FS20</p> <p><b>1</b> → <math>\varnothing 140</math></p> <p>FA41 FA42 FA43</p> <p><b>2</b> → <math>\varnothing 160</math></p> <p><b>3</b> → <math>\varnothing 200</math></p> <p><b>4</b> → <math>\varnothing 250</math></p> <p>FA52 FA53 FC61 FC62 FC63</p> <p><b>4</b> → <math>\varnothing 250</math></p> <p><b>5</b> → <math>\varnothing 300</math></p> <p>FC72 FC73</p> <p><b>4</b> → <math>\varnothing 250</math></p> <p><b>5</b> → <math>\varnothing 300</math></p> <p><b>6</b> → <math>\varnothing 350</math></p> <p>FC81 FC82 FC83</p> <p><b>5</b> → <math>\varnothing 300</math></p> <p><b>6</b> → <math>\varnothing 350</math></p> <p><b>7</b> → <math>\varnothing 400</math></p>	<p><b>-C</b></p> <p>Standard Flange Flangia Standard</p>  <table border="1"> <tr> <td><b>B5</b></td> <td><b>B14</b></td> </tr> <tr> <td><b>-A</b>=56 (<math>\varnothing 120</math>)</td> <td><b>-O</b>=56 (<math>\varnothing 80</math>)</td> </tr> <tr> <td><b>-B</b>=63 (<math>\varnothing 140</math>)</td> <td><b>-P</b>=63 (<math>\varnothing 90</math>)</td> </tr> <tr> <td><b>-C</b>=71 (<math>\varnothing 160</math>)</td> <td><b>-Q</b>=71 (<math>\varnothing 105</math>)</td> </tr> <tr> <td><b>-D</b>=80 (<math>\varnothing 200</math>)</td> <td><b>-R</b>=80 (<math>\varnothing 120</math>)</td> </tr> <tr> <td><b>-E</b>=90 (<math>\varnothing 200</math>)</td> <td><b>-T</b>=90 (<math>\varnothing 140</math>)</td> </tr> <tr> <td><b>-F</b>=100+112 (<math>\varnothing 250</math>)</td> <td><b>-U</b>=100+112 (<math>\varnothing 160</math>)</td> </tr> <tr> <td><b>-G</b>=132 (<math>\varnothing 300</math>)</td> <td><b>-V</b>=132 (<math>\varnothing 200</math>)</td> </tr> <tr> <td><b>-H</b>=160 (<math>\varnothing 350</math>)</td> <td></td> </tr> <tr> <td><b>-I</b>=180 (<math>\varnothing 350</math>)</td> <td></td> </tr> </table> <p>Type R / Tipo R</p> <table border="1"> <tr> <td>FA43 FS20 FS50</td> <td>FA42 FA53 FC63 FC73</td> </tr> <tr> <td><b>-1</b> → <math>\varnothing 14</math></td> <td><b>-2</b> → <math>\varnothing 19</math></td> </tr> <tr> <td>FA52 FC62 FC72 FC83</td> <td>FC82</td> </tr> <tr> <td><b>-3</b> → <math>\varnothing 24</math></td> <td><b>-4</b> → <math>\varnothing 28</math></td> </tr> </table> <p>Without flange / Senza flangia</p> <table border="1"> <tr> <td>FA43 FS20 FS50</td> <td>FA42 FA53 FC63 FC73</td> </tr> <tr> <td><b>-Z</b> → <math>\varnothing 9</math> (56B5)</td> <td><b>-1</b> → <math>\varnothing 14</math> (71B5)</td> </tr> <tr> <td><b>-0</b> → <math>\varnothing 11</math> (63B5)</td> <td><b>-2</b> → <math>\varnothing 19</math> (80B5)</td> </tr> <tr> <td><b>-1</b> → <math>\varnothing 14</math> (71B5)</td> <td><b>-3</b> → <math>\varnothing 24</math> (90B5)</td> </tr> <tr> <td>FA52 FC62 FC72 FC83</td> <td></td> </tr> <tr> <td><b>-2</b> → <math>\varnothing 19</math> (80B5)</td> <td></td> </tr> <tr> <td><b>-3</b> → <math>\varnothing 24</math> (90B5)</td> <td></td> </tr> <tr> <td><b>-4</b> → <math>\varnothing 28</math> (100B5)</td> <td></td> </tr> </table> <p>→ <b>STANDARD</b></p>	<b>B5</b>	<b>B14</b>	<b>-A</b> =56 ( $\varnothing 120$ )	<b>-O</b> =56 ( $\varnothing 80$ )	<b>-B</b> =63 ( $\varnothing 140$ )	<b>-P</b> =63 ( $\varnothing 90$ )	<b>-C</b> =71 ( $\varnothing 160$ )	<b>-Q</b> =71 ( $\varnothing 105$ )	<b>-D</b> =80 ( $\varnothing 200$ )	<b>-R</b> =80 ( $\varnothing 120$ )	<b>-E</b> =90 ( $\varnothing 200$ )	<b>-T</b> =90 ( $\varnothing 140$ )	<b>-F</b> =100+112 ( $\varnothing 250$ )	<b>-U</b> =100+112 ( $\varnothing 160$ )	<b>-G</b> =132 ( $\varnothing 300$ )	<b>-V</b> =132 ( $\varnothing 200$ )	<b>-H</b> =160 ( $\varnothing 350$ )		<b>-I</b> =180 ( $\varnothing 350$ )		FA43 FS20 FS50	FA42 FA53 FC63 FC73	<b>-1</b> → $\varnothing 14$	<b>-2</b> → $\varnothing 19$	FA52 FC62 FC72 FC83	FC82	<b>-3</b> → $\varnothing 24$	<b>-4</b> → $\varnothing 28$	FA43 FS20 FS50	FA42 FA53 FC63 FC73	<b>-Z</b> → $\varnothing 9$ (56B5)	<b>-1</b> → $\varnothing 14$ (71B5)	<b>-0</b> → $\varnothing 11$ (63B5)	<b>-2</b> → $\varnothing 19$ (80B5)	<b>-1</b> → $\varnothing 14$ (71B5)	<b>-3</b> → $\varnothing 24$ (90B5)	FA52 FC62 FC72 FC83		<b>-2</b> → $\varnothing 19$ (80B5)		<b>-3</b> → $\varnothing 24$ (90B5)		<b>-4</b> → $\varnothing 28$ (100B5)		<p><b>B</b></p>  <p><b>A</b></p>  <p><b>B</b></p> <p>STANDARD</p>  <p><b>C</b></p>  <p><b>D</b></p>	<p><b>H1</b></p>  <p><b>H1</b></p> <p>STANDARD</p>  <p><b>H4</b></p>  <p><b>H3</b></p>  <p><b>H2</b></p>  <p><b>H5</b></p>  <p><b>H6</b></p> <p>Specify only for vertical positions Specificare solo per posizione verticale</p>
<b>B5</b>	<b>B14</b>																																																
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POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / PUISSANCE NECESSAIRE / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / levage / elevación

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

Rotation / rotazione / drehung / rotation / rotacion

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

Linear movement / traslazione / linearbewegung / translation / translacion

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

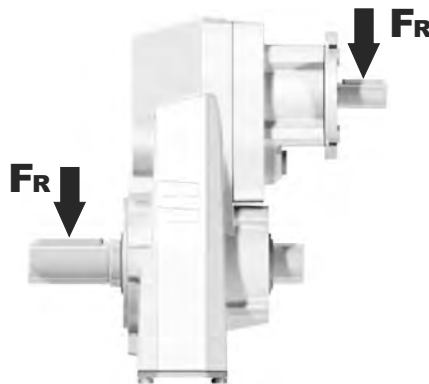
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

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



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

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

<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 sprochets / 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

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

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

Gear size  
Grandezza riduttore  
Getriebegröße  
Taille réducteur  
Tamaño reductor

Motor power  
Potenza motore  
Motorleistung  
Puissance moteur  
Potencia motor




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

Flange code  
Codice flangia  
Flanschtype  
Code bride  
Código bridas

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

**FA42 Compact-Gear 320Nm** Rating - Aluminum  
SHAFT MOUNTED HELICAL

**QUICK SELECTION / Selezione veloce** input speed ( $n_1$ ) = 1400 min<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 	Output Shaft 	Ratios code 
							B	C	D	E	F	Q	R	T	U			
167	<b>8.38</b>	4	215	1.0	4.1	225	B					C	C			2821		01
139	<b>10.04</b>	3	194	1.2	3.7	240	B					C	C			2818		02
114	<b>12.33</b>	3	238	1.1	3.2	260	B					C	C			2813		03
92	<b>15.16</b>	2.2	216	1.2	2.6	260	B					C	C			1921		04

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

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

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

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

Notes  
Note  
Anmerkungen  
Note  
Notas

**fs**

Type of load and starts per hour Tipo di carico e avviamenti per ora		Oper. hours per day Ore di funz. giorn.		
		3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	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

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

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

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

**B)** Available without reduction bushes  
Disponibile anche senza boccolla  
Auch ohne Reduzierbuchse verfügbar  
Disponible aussi sans douille de réduction  
Disponible tambien 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

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			Hollow Shaft 	Ratios code
							B	C	O	P	Q		
24.2	<b>57.95</b>	0.25	93	1.0	<b>0.24</b>	<b>90</b>			C	C		2844	01
13.4	<b>104.80</b>	0.12	83	1.1	<b>0.13</b>	<b>90</b>			C	C		1954	02
11.5	<b>121.47</b>	0.12	96	0.9	<b>0.12</b>	<b>90</b>			C	C		1756	03
9.8	<b>142.59</b>	0.09	90	1.0	<b>0.10</b>	<b>90</b>			C	C		1558	04
8.2	<b>170.20</b>	0.06	70	1.3	<b>0.08</b>	<b>90</b>			C	C		1360	05
6.0	<b>232.32</b>	0.06	96	0.9	<b>0.06</b>	<b>90</b>			C	C		1063	06
4.6	<b>303.20</b>	0.06	126	*	<b>0.05</b>	<b>90</b>			C	C		974	07
3.5	<b>400.37</b>	0.06	166	*	<b>0.04</b>	<b>90</b>			C	C		776	08

The dynamic efficiency is **0.93** 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

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

**EN** Unit **FS20** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **FS20** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **FS20** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **FS20** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **FS20** se suministra, lubricado de por vida con aceite sintético y no 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.

#### LUBRICATION FS20 Oil Quantity 0.50 Lt.

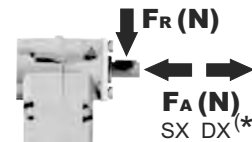
**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

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

#### RADIAL LOADS

Input shaft  
Albero in entrata



$n_1$	$F_A$	$F_R$
1400	140	700
900	160	800

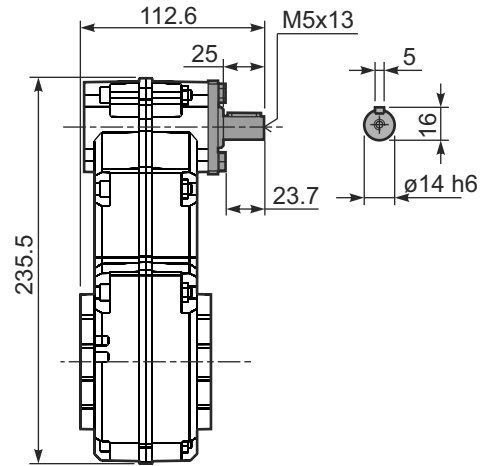
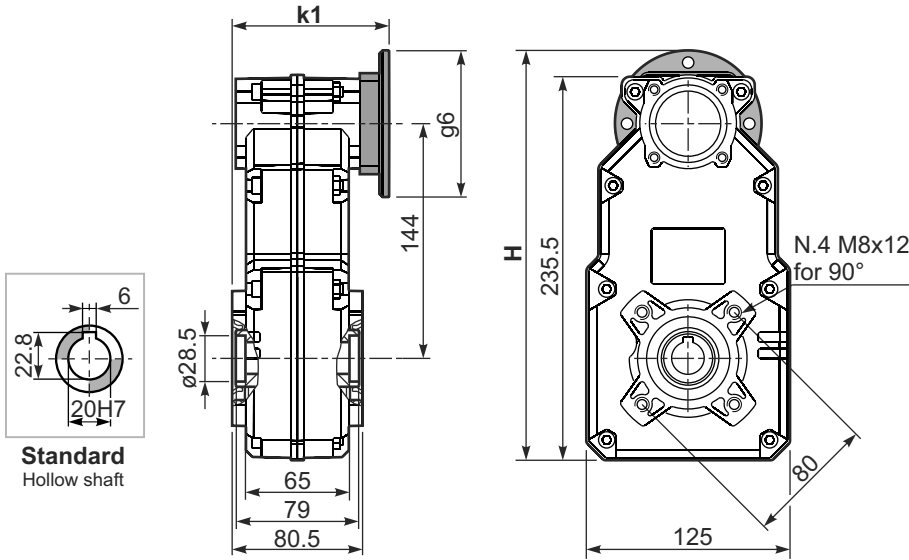
\*Strong axial loads in the DX direction are not allowed.  
Non sono consentiti forti carichi assiali con direzione DX

**tab. 2**

**PFS20...** Basic gearbox  
Riduttore base

Gearbox weight  
peso riduttore **4.3 kg**

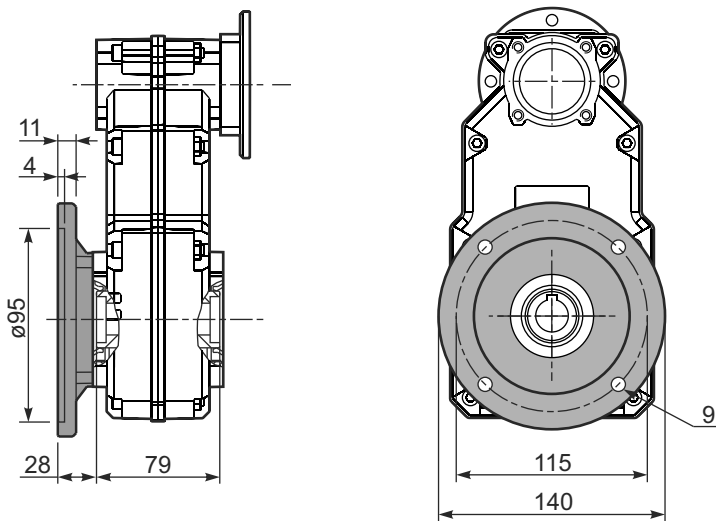
**RFS20...** Input Shaft  
Albero in entrata



B14 Motor Flanges	H	g6	k1	kit code
56 B14	245.5	80	94.2	KC40.4.049
63 B14	251.5	90	96.7	K050.4.047
71 B14	259	105	94.2	K050.4.045

B5 Motor Flanges	H	g6	k1	kit code
63 B5	276.5	138	94.7	K050.4.041
71 B5	286.5	160	92.7	K050.4.042

**PFS20-F** Output flange  
flangia di 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 	Output Shaft $\varnothing$	Ratios code
							D	E	F	R	T	U			
							80	90	100 112	80	90	100 112			
481	<b>2.91</b>	4	76	1.8	7.2	140	B	B		B	B		3499	standard	01
373	<b>3.75</b>	4	98	1.6	6.4	160	B	B		B	B		28105	<b><math>\varnothing 30</math></b>	02
263	<b>5.33</b>	4	140	1.2	4.8	170	B	B		B	B		21112		03
219	<b>6.39</b>	4	167	1.0	4.0	170	B	B		B	B		18115	$\varnothing 35$	04
178	<b>7.85</b>	4	205	1.1	4.3	225	B	B		B	B		13102	On request	05

The dynamic efficiency is **0.98** for all ratios

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **FA41** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **FA41** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **FA41** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **FA41** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **FA41** se suministra, lubricado de por vida con aceite sintético y no 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				
1.10 LT	0.65 LT	0.65 LT	0.65 LT	1.15 LT	0.80 LT
AGIP Telium VSF 320			SHELL Omala S4 WE 320		

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$F_{eq} = F_R \cdot \frac{127.5}{X+97.5}$

$n_2$ [min <sup>-1</sup> ]	FA	FR	$n_2$ [min <sup>-1</sup> ]	FA	FR	$n_2$ [min <sup>-1</sup> ]	FA	FR
300	300	1500	140	390	1950	70	490	2450
250	320	1600	120	410	2050	40	590	2950
200	350	1750	85	460	2300	15	800	4000

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

tab. 2

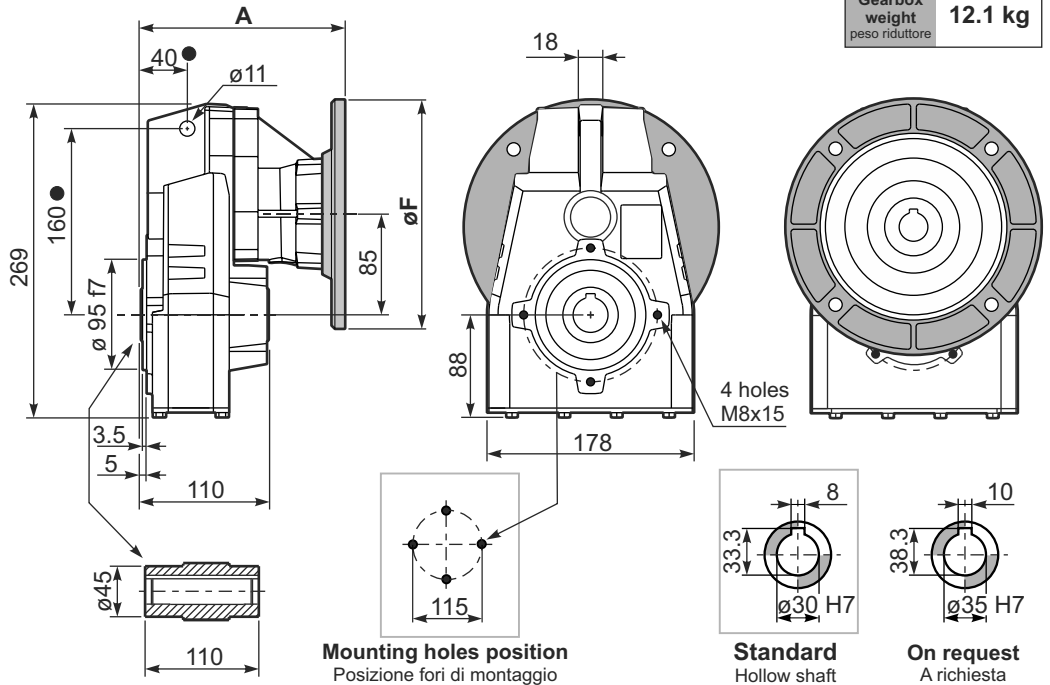
**PFA41C...**

Basic gearbox  
Riduttore base

Gearbox weight  
peso riduttore **12.1 kg**

M. flanges	Kit code	øF	A
<b>80/90B5</b>	KC023.4.042	200	179.5
<b>100/112B5</b>	KC023.4.043	250	185.5
<b>80B14</b>	KC085.4.046	120	177.5
<b>90B14</b>	KC085.4.045	140	177.5
<b>100/112B14</b>	KC085.4.047	160	188.5

● Available torque arms, see our web site  
Bracci di reazione disponibili, consulta il nostro sito web



Mounting holes position  
Posizione fori di montaggio

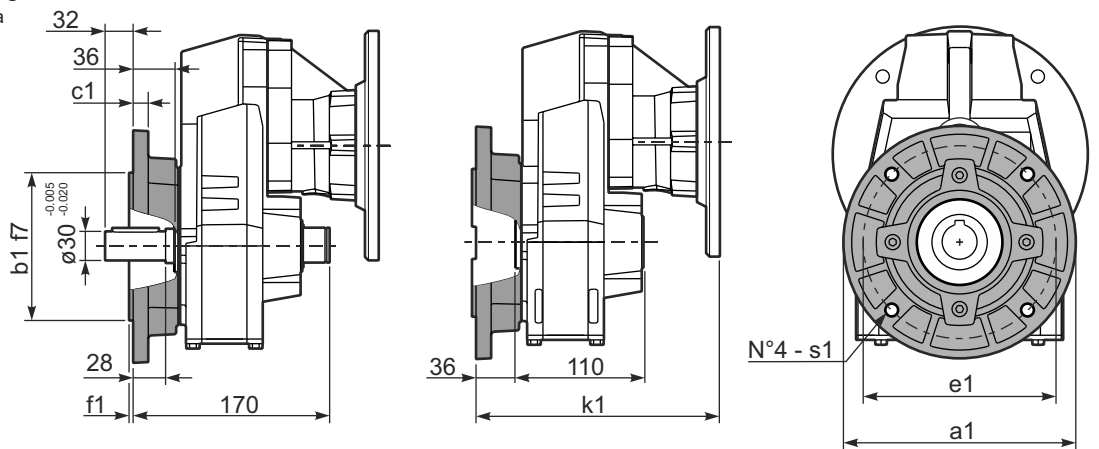
Standard  
Hollow shaft

On request  
A richiesta

**PFA41...-F...**

Output flange  
Flangia uscita

M. flanges	k1
<b>80/90B5</b>	215.5
<b>100/112B5</b>	221.5
<b>80B14</b>	213.5
<b>90B14</b>	213.5
<b>100/112B14</b>	224.5

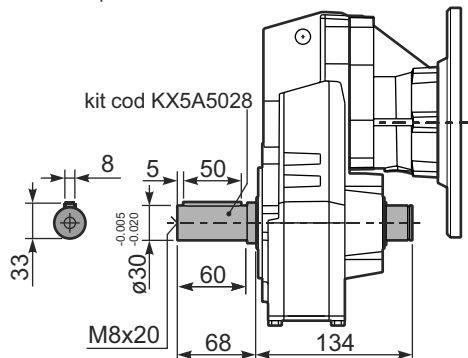


Available output flanges  
Flange di uscita

a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX5A.9.010
200	130	13	165	3.5	11	KX5A.9.011
250	180	14	215	4	14	KX5A.9.012

**PFA41 A...**

Single output shaft  
Albero uscita semplice





### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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	F	Q	R	T	U		
							63	71	80	90	100	112	71	80	90		
167	<b>8.38</b>	4	215	1.0	4.1	225	B					C	C			2821	01
139	<b>10.04</b>	3	194	1.2	3.7	240	B					C	C			2818	02
114	<b>12.33</b>	3	238	1.1	3.2	260	B					C	C			2813	03
92	<b>15.16</b>	2.2	215	1.2	2.6	260	B					C	C			1921	04
80	<b>17.57</b>	2.2	250	1.1	2.3	270	B					C	C			1721	05
77	<b>18.16</b>	2.2	258	1.1	2.4	290	B					C	C			1918	06
67	<b>21.05</b>	2.2	299	1.1	2.3	320	B					C	C			1718	07
63	<b>22.30</b>	2.2	317	1.0	2.2	320	B					C	C			1913	08
57	<b>24.70</b>	2.2	351	0.9	2.0	320	B					C	C			1518	09
54	<b>25.85</b>	2.2	367	0.9	1.9	320	B					C	C			1713	10
47.5	<b>29.49</b>	1.5	289	1.1	1.7	320	B					C	C			1318	11
46.1	<b>30.34</b>	1.5	297	1.1	1.6	320	B					C	C			1513	12
41.7	<b>33.60</b>	1.1	240	1.0	1.1	250	B					C	C			1021	13
38.7	<b>36.21</b>	1.1	259	1.2	1.3	320	B					C	C			1313	14
34.8	<b>40.25</b>	1.1	288	1.0	1.1	300	B					C	C			1018	15
28.3	<b>49.43</b>	1.1	354	0.9	0.99	320	B					C	C			1013	16
26.7	<b>52.53</b>	0.75	258	1.0	0.76	260	B					C	C			918	17
21.7	<b>64.51</b>	0.75	317	1.0	0.75	315	B					C	C			913	18
20.2	<b>69.37</b>	0.37	168	1.1	0.42	190	B					C	C			718	19
16.4	<b>85.19</b>	0.37	206	1.1	0.41	230	B					C	C			713	20

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

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

**EN** Unit **FA42** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **FA42** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **FA42** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **FA42** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **FA42** se suministra, lubricado de por vida con aceite sintético y no 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				
H1	H4	H3	H2	H5	H6
1.15 LT	0.70 LT	0.70 LT	0.70 LT	1.20 LT	0.8 LT
AGIP Telium VSF 320			SHELL Omala S4 WE 320		

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$Feq = FR \cdot \frac{127.5}{X+97.5}$

$n_2$ [min <sup>-1</sup> ]	FA	FR	$n_2$ [min <sup>-1</sup> ]	FA	FR	$n_2$ [min <sup>-1</sup> ]	FA	FR
300	300	1500	140	390	1950	70	490	2450
250	320	1600	120	410	2050	40	590	2950
200	350	1750	85	460	2300	15	800	4000

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

**Input shaft**  
Albero in entrata

$n_1$	FA	FR
1400	240	1200
900	280	1400
500	340	1700

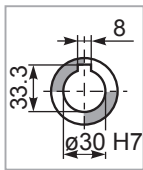
**tab. 2**

**PFA42C...** Basic gearbox  
Riduttore base

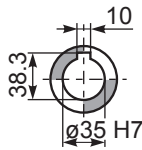
Gearbox weight **9.0 kg**  
peso riduttore

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	169.5
71B5	K063.4.042	160	167.5
80/90B5	K063.4.043	200	169.5
100/112B5	KC40.4.043	250	185
71B14	K063.4.047	105	167.5
80B14	K063.4.046	120	168.5
90B14	K063.4.041	140	169.5
100/112B14	KC40.4.041	160	185

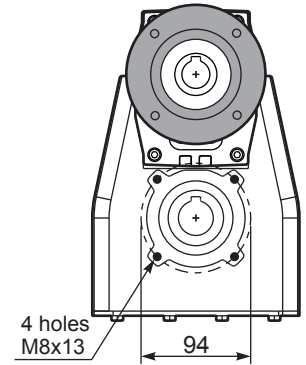
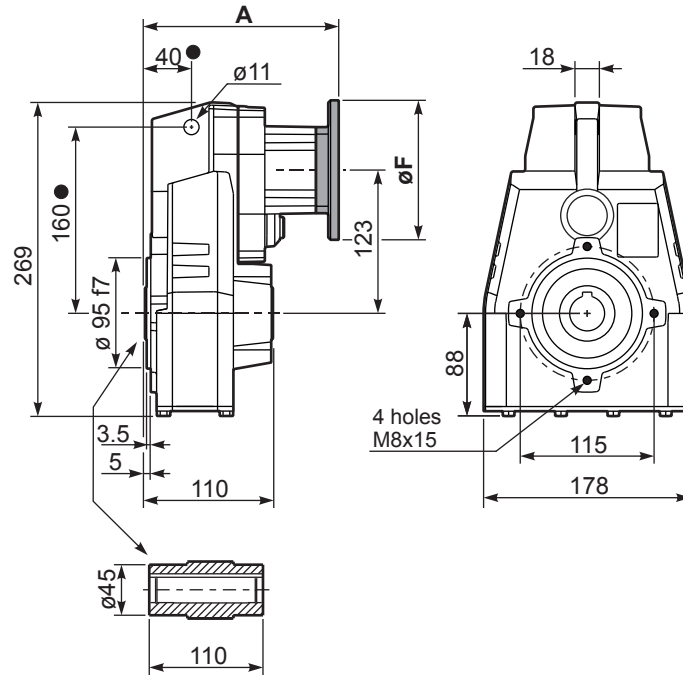
● Available torque arms, see our web site  
Bracci di reazione disponibili, consulta il nostro sito web



**Standard**  
Hollow shaft



**On request**  
A richiesta

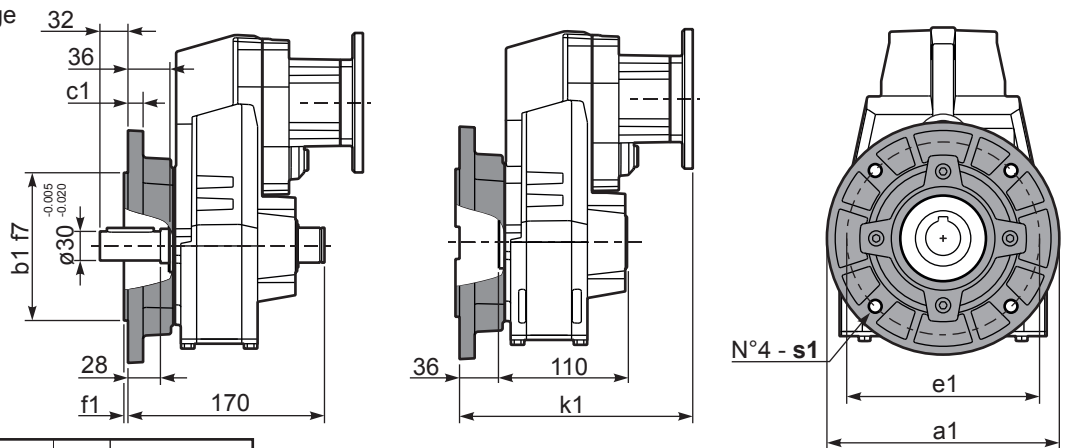


**PFA42...-F...** Output flange  
Flangia uscita

Motor Flange	k1
63B5	205.5
71B5	203.5
80/90B5	205.5
100/112B5	221
71B14	203.5
80B14	204.5
90B14	205.5
100/112B14	221

Available output flanges  
Flange di uscita

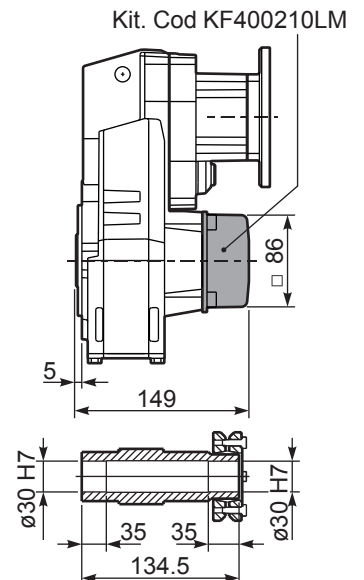
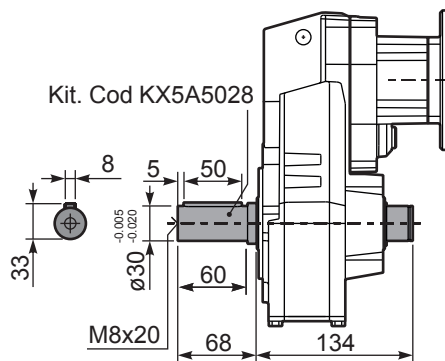
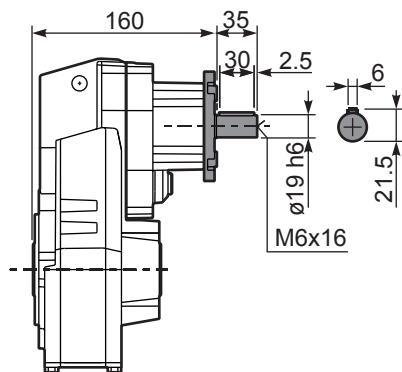
a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX5A.9.010
200	130	13	165	3.5	11	KX5A.9.011
250	180	14	215	4	14	KX5A.9.012



**RFA42C...** Input Shaft  
Albero in entrata

**PFA42 A...** Single output shaft  
Albero uscita semplice

**PFA42D...** Shrink disk  
Calettatore





### 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	O	P	Q		
							63	71	56	63	71		
18.8	<b>74.33</b>	0.37	176	1.8	<b>0.67</b>	<b>320</b>			C	C		191313	01
17.0	<b>82.56</b>	0.37	196	1.6	<b>0.60</b>	<b>320</b>			C	C		151318	02
16.0	<b>87.48</b>	0.37	207	1.5	<b>0.57</b>	<b>320</b>			C	C		131713	03
13.8	<b>101.40</b>	0.37	240	1.3	<b>0.49</b>	<b>320</b>			C	C		151313	04
11.4	<b>122.57</b>	0.37	291	1.1	<b>0.41</b>	<b>320</b>			C	C		131313	05
10.1	<b>138.59</b>	0.37	329	1.0	<b>0.36</b>	<b>320</b>			C	C		101318	06
8.7	<b>160.82</b>	0.25	257	1.2	<b>0.31</b>	<b>320</b>			C	C		91713	07
8.2	<b>170.20</b>	0.25	272	1.2	<b>0.29</b>	<b>320</b>			C	C		101313	08
7.6	<b>183.48</b>	0.25	294	1.1	<b>0.27</b>	<b>320</b>			C	C		91318	09
6.5	<b>214.15</b>	0.18	262	1.2	<b>0.23</b>	<b>320</b>			C	C		71713	10
6.2	<b>225.33</b>	0.18	276	1.2	<b>0.22</b>	<b>320</b>			C	C		91313	11
5.7	<b>244.32</b>	0.18	299	1.1	<b>0.20</b>	<b>320</b>			C	C		71318	12
5.5	<b>254.15</b>	0.18	311	1.0	<b>0.20</b>	<b>320</b>			C	C		61713	13
4.8	<b>289.96</b>	0.18	355	0.9	<b>0.17</b>	<b>320</b>			C	C		61318	14
4.7	<b>300.05</b>	0.18	367	0.9	<b>0.17</b>	<b>320</b>			C	C		71313	15
3.9	<b>356.09</b>	0.12	282	1.1	<b>0.14</b>	<b>320</b>			C	C		61313	16

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **FA43** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **FA43** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **FA43** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **FA43** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **FA43** se suministra, lubricado de por vida con aceite sintético y no 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				
H1	H4	H3	H2	H5	H6
1.30 LT	0.70 LT	0.70 LT	0.70 LT	1.35 LT	0.90 LT
AGIP Telium VSF 320			SHELL Omala S4 WE 320		

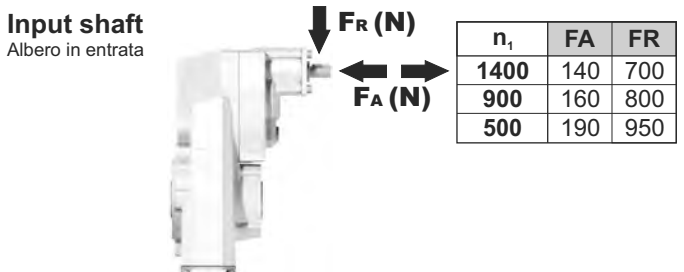
For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

### RADIAL AND AXIAL LOADS



$n_2$ [min <sup>-1</sup> ]	FA	FR	$n_2$ [min <sup>-1</sup> ]	FA	FR	$n_2$ [min <sup>-1</sup> ]	FA	FR
<b>300</b>	300	1500	<b>140</b>	390	1950	<b>70</b>	490	2450
<b>250</b>	320	1600	<b>120</b>	410	2050	<b>40</b>	590	2950
<b>200</b>	350	1750	<b>85</b>	460	2300	<b>15</b>	800	4000

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



tab. 2

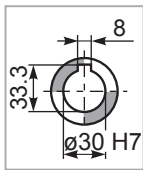


**PFA43C...** Basic gearbox  
Riduttore base

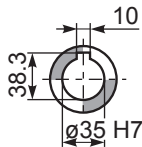
Gearbox weight **8.9 kg**  
peso riduttore

M. flanges	Kit code	øF	A
63B5	K050.4.041	138	173
71B5	K050.4.042	160	171
56B14	KC40.4.049	80	172.5
63B14	K050.4.047	90	175
71B14	K050.4.045	105	172.5

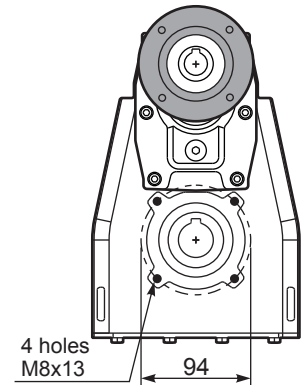
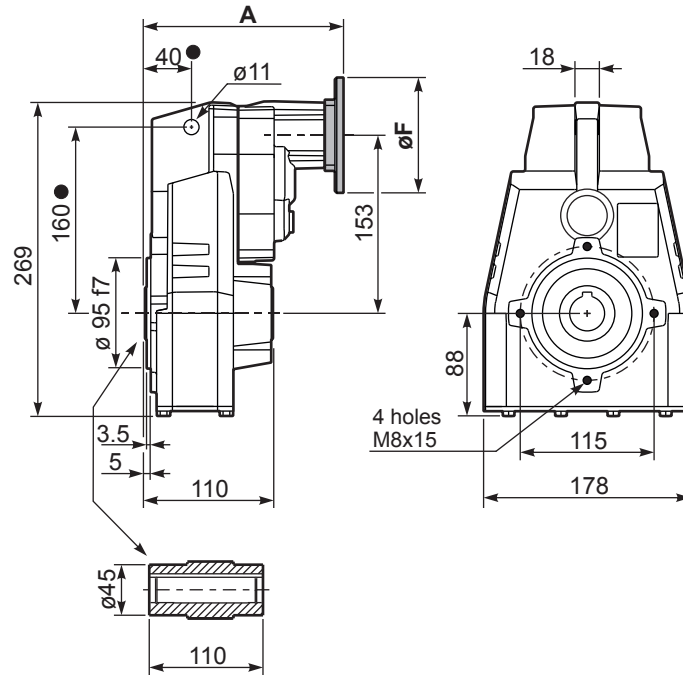
● Available torque arms, see our web site  
Bracci di reazione disponibili, consulta il nostro sito web



**Standard**  
Hollow shaft



**On request**  
A richiesta

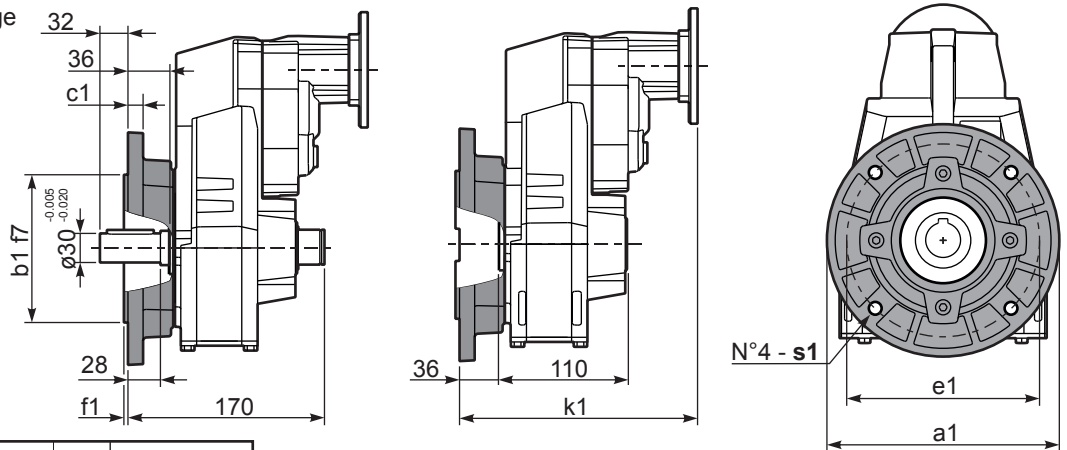


**PFA43...-F...** Output flange  
Flangia uscita

Motor Flange	k1
63B5	209
71B5	207
56B14	208.5
63B14	211
71B14	208.5

Available output flanges  
Flange di uscita

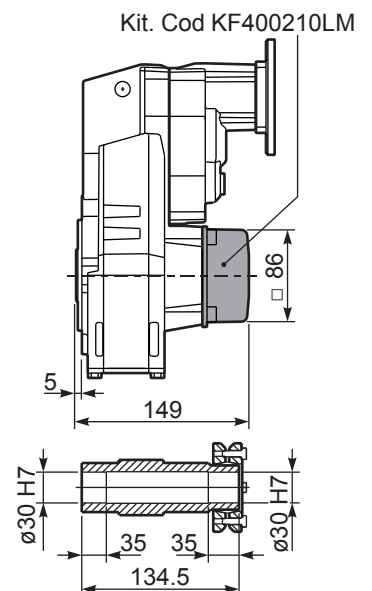
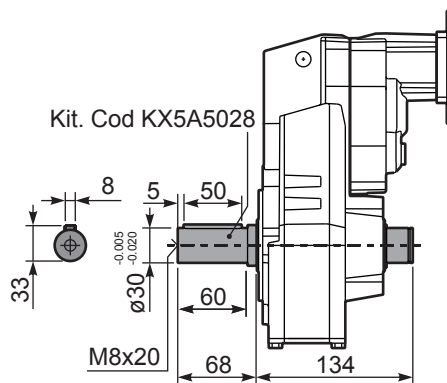
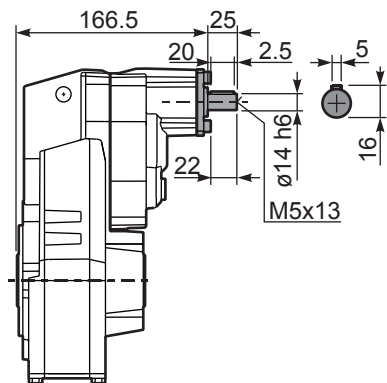
a1 ø	b1	c1	e1	f1	s1	Kit code
160	110	10	130	3	9	KX5A.9.010
200	130	13	165	3.5	11	KX5A.9.011
250	180	14	215	4	14	KX5A.9.012



**RFA43C...** Input Shaft  
Albero in entrata

**PFA43 A...** Single output shaft  
Albero uscita semplice

**PFA43D...** Shrink disk  
Calettatore





#### 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			
213	<b>6.57</b>	5.5	230	1.2	6.5	280	B										3018	01
185	<b>7.56</b>	5.5	265	1.1	5.9	290	B										3016	02
159	<b>8.82</b>	5.5	309	1.0	5.5	320	B										3014	03
113	<b>12.39</b>	5.5	434	1.0	5.5	450	B										2018	04
98	<b>14.24</b>	5.5	499	0.9	4.8	450	B										2016	05
84	<b>16.75</b>	4	429	1.1	4.3	470	B										1618	06
73	<b>19.25</b>	4	494	1.0	3.9	490	B										1616	07
64	<b>21.78</b>	4	558	0.9	3.4	490	B										1318	08
56	<b>25.04</b>	3	483	1.0	3.0	490	B										1316	09
47.9	<b>29.23</b>	3	564	0.9	2.6	490	B										1314	10
45.7	<b>30.65</b>	2.2	436	1.1	2.4	490	B										1116	11
39.1	<b>35.78</b>	2.2	509	1.0	2.1	490	B										1114	12
36.3	<b>38.55</b>	2.2	548	0.9	1.9	490	B										818	13
31.6	<b>44.32</b>	1.5	434	1.1	1.7	490	B										816	14
27.1	<b>51.74</b>	1.5	507	1.0	1.4	490	B										814	15
22.9	<b>61.03</b>	1.1	437	1.1	1.2	480	B										616	16
19.6	<b>71.25</b>	1.1	510	1.0	1.1	490	B										614	17

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

Motor Flanges Available  
Flange Motore Disponibili

B) Supplied with Reduction Bushing  
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position  
Posizione Fori Flangia Motore

**EN** Unit **FA52** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **FA52** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **FA52** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **FA52** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **FA52** se suministra, lubricado de por vida con aceite sintético y no 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				
1.85 LT	1.15 LT	1.15 LT	1.30 LT	2.10 LT	1.30 LT
AGIP Telium VSF 320			SHELL Omala S4 WE 320		

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

#### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$F_{eq} = FR \cdot \frac{149.5}{X+119.5}$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	400	2000	140	460	2300	70	580	2900
250	420	2100	120	500	2500	40	780	3900
200	440	2200	85	550	2750	15	1140	5700

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

**Input shaft**  
Albero in entrata

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

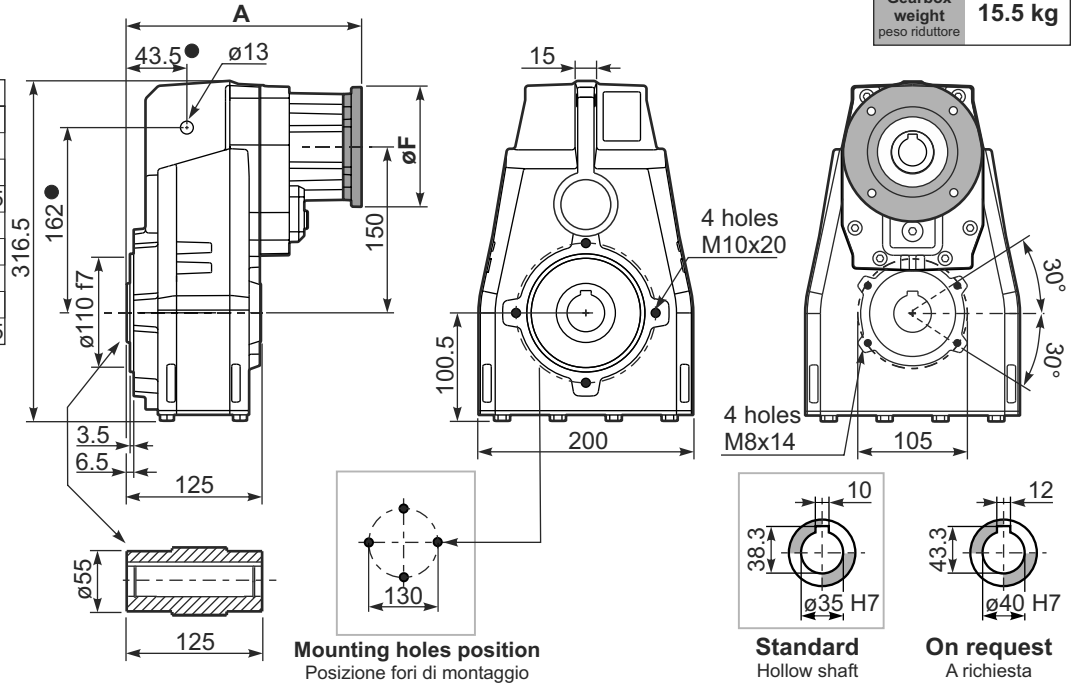
tab. 2

**PFA52C...** Basic gearbox  
Riduttore base

Gearbox weight **15.5 kg**  
peso riduttore

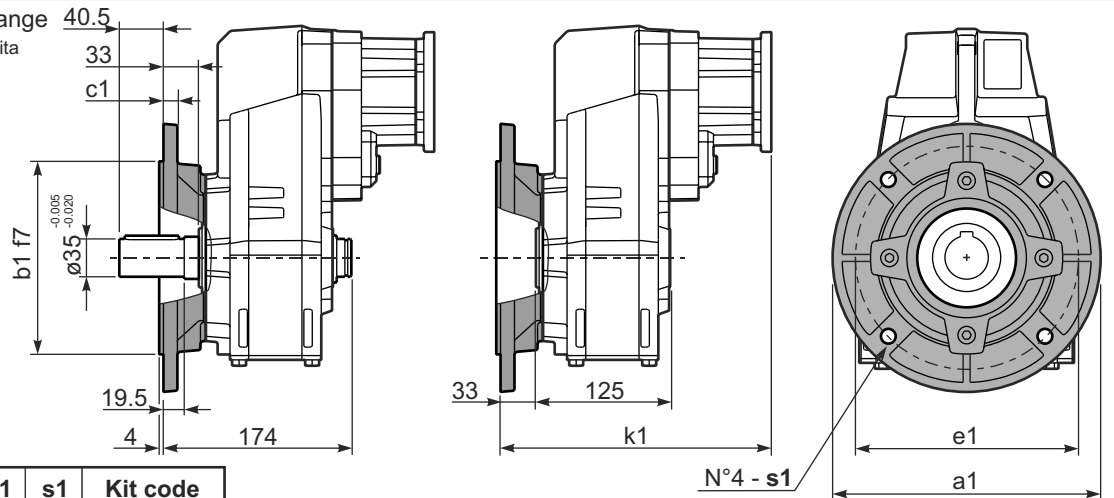
M. flanges	Kit code	øF	A
<b>71B5</b>	KC023.4.041	160	227
<b>80/90B5</b>	KC023.4.042	200	229
<b>100/112B5</b>	KC023.4.043	250	235
<b>132B5</b>	KC50.4.043	300	256.5
<b>80B14</b>	KC085.4.046	120	227
<b>90B14</b>	KC085.4.045	140	227
<b>100/112B14</b>	KC085.4.047	160	238
<b>132B14</b>	KC50.4.041	200	256.5

● Available torque arms, see our web site  
Bracci di reazione disponibili, consulta il nostro sito web



**PFA52...-F...** Output flange 40.5  
Flangia uscita

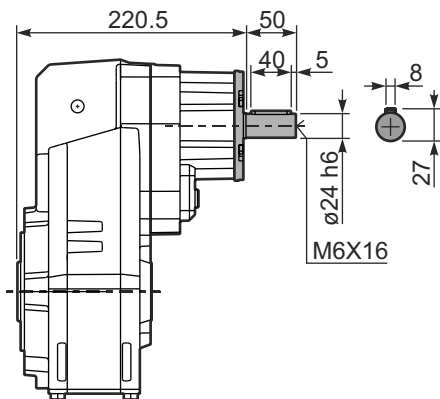
M. flanges	k1
<b>71B5</b>	260
<b>80/90B5</b>	262
<b>100/112B5</b>	268
<b>132B5</b>	289.5
<b>80B14</b>	260
<b>90B14</b>	260
<b>100/112B14</b>	271
<b>132B14</b>	289.5



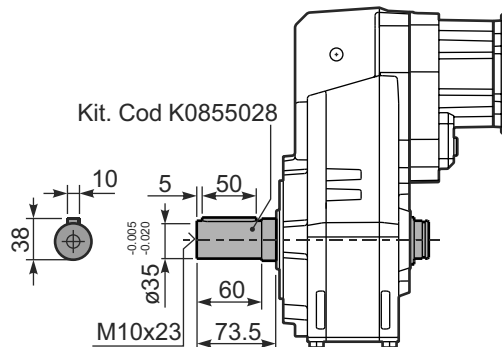
Available output flanges  
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
300	230	16	265	14	KF60.9.012

**RFA52C...** Input Shaft  
Albero in entrata

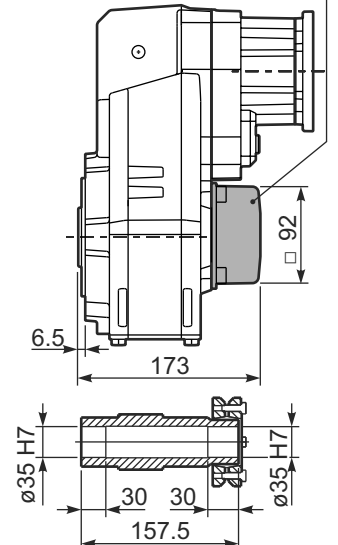


**PFA52 A...** Single output shaft  
Albero uscita semplice



**PFA52D...** Shrink disk  
Calettatore

Kit. Cod KF600210LM





### 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		
22.6	<b>61.89</b>	1.1	434	1.2	1.3	510	B				C	C		191318	01
19.7	<b>71.16</b>	1.1	499	1.0	1.1	510	B				C	C		191316	02
17.0	<b>82.48</b>	1.1	578	0.9	0.96	510	B				C	C		171316	03
14.5	<b>96.29</b>	0.75	463	1.1	0.83	510	B				C	C		171314	04
13.9	<b>100.51</b>	0.75	483	1.1	0.79	510	B				C	C		131318	05
12.1	<b>115.56</b>	0.55	410	1.2	0.69	510	B				C	C		131316	06
11.1	<b>125.96</b>	0.55	447	1.1	0.63	510	B				C	C		190816	07
10.4	<b>134.91</b>	0.55	479	1.1	0.59	510	B				C	C		131314	08
9.5	<b>147.05</b>	0.55	522	1.0	0.54	510	B				C	C		190814	09
8.2	<b>170.44</b>	0.37	404	1.3	0.47	510	B				C	C		170814	10
7.6	<b>184.15</b>	0.37	437	1.2	0.43	510	B				C	C		101314	11
6.8	<b>205.87</b>	0.37	488	1.0	0.39	510	B				C	C		91316	12
5.8	<b>240.34</b>	0.37	570	0.9	0.33	510	B				C	C		91314	13
5.0	<b>279.22</b>	0.25	447	1.1	0.28	510	B				C	C		100816	14
4.3	<b>325.97</b>	0.25	522	1.0	0.24	510	B				C	C		100814	15
3.8	<b>364.41</b>	0.18	446	1.1	0.22	510	B				C	C		90816	16
3.3	<b>425.43</b>	0.18	521	1.0	0.19	510	B				C	C		90814	17
2.9	<b>481.19</b>	0.18	589	0.9	0.17	510	B				C	C		70816	18
2.5	<b>561.76</b>	0.12	444	1.1	0.14	510	B				C	C		70814	19

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **FA53** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **FA53** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **FA53** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

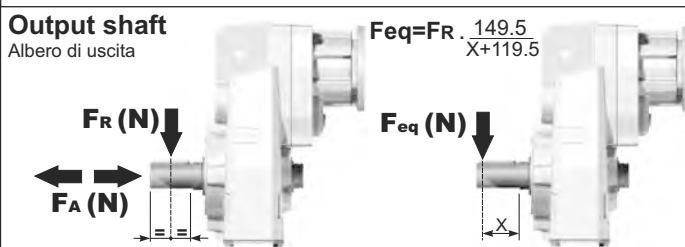
**F** Le réducteur **FA53** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **FA53** se suministra, lubricado de por vida con aceite sintético y no 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				
2.15 LT	1.25 LT	1.25 LT	1.45 LT	2.35 LT	1.45 LT
AGIP Telium VSF 320			SHELL Omala S4 WE 320		

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

### RADIAL AND AXIAL LOADS



$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	400	2000	140	460	2300	70	580	2900
250	420	2100	120	500	2500	40	780	3900
200	440	2200	85	550	2750	15	1140	5700

**On request reinforced bearings to increase loads.**

A richiesta cuscinetti rinforzati per aumentare i carichi.

$n_1$	FA	FR
1400	240	1200
900	280	1400
500	340	1700



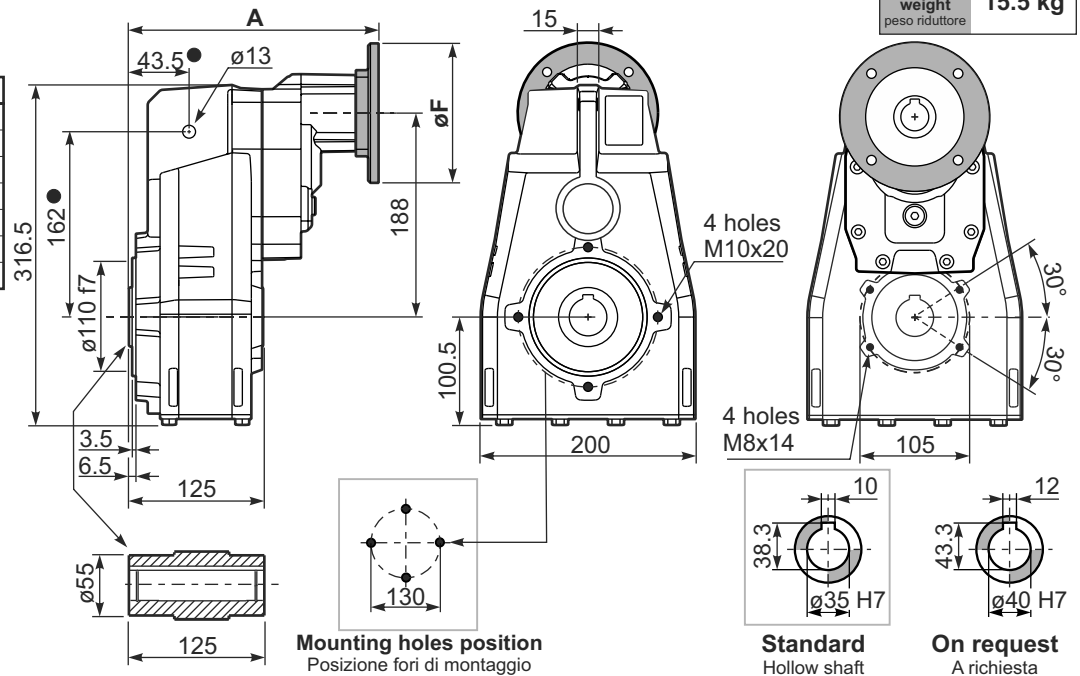
tab. 2

**PFA53C...** Basic gearbox  
Riduttore base

Gearbox weight  
peso riduttore **15.5 kg**

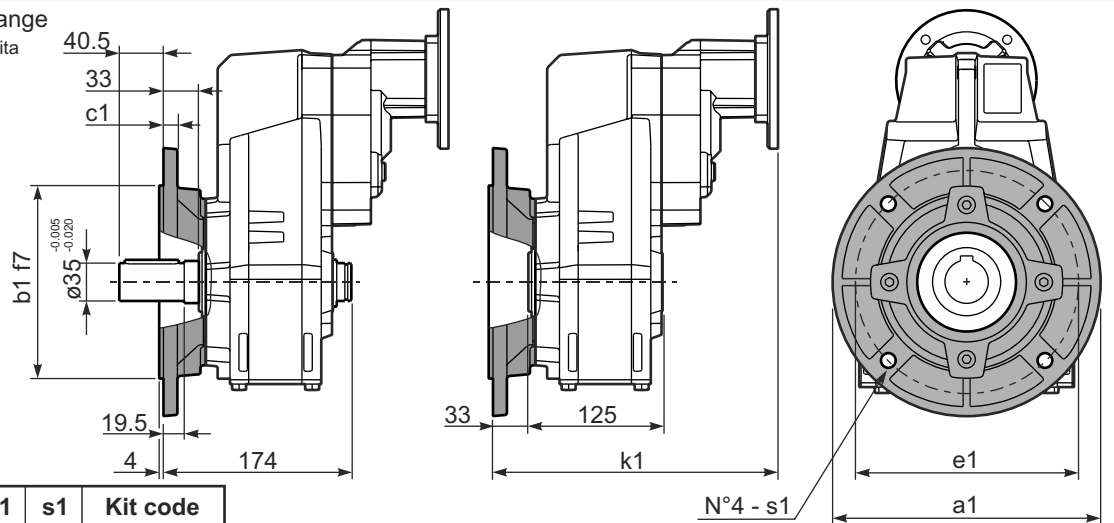
M. flanges	Kit code	øF	A
<b>63B5</b>	K063.4.041	140	239
<b>71B5</b>	K063.4.042	160	237
<b>80/90B5</b>	K063.4.043	200	239
<b>71B14</b>	K063.4.047	105	237
<b>80B14</b>	K063.4.046	120	238
<b>90B14</b>	K063.4.041	140	239

● Available torque arms,  
see our web site  
Bracci di reazione disponibili,  
consulta il nostro sito web



**PFA53...-F...** Output flange  
Flangia uscita

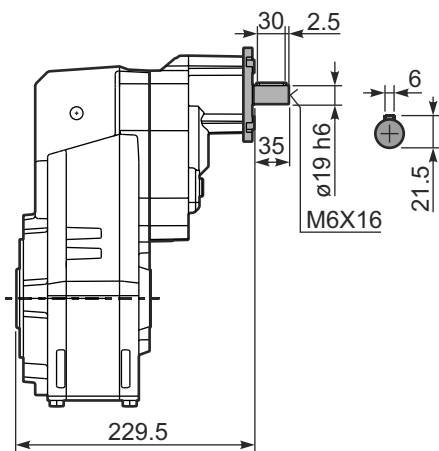
Motor Flange	k1
63B5	272
71B5	270
80/90B5	272
71B14	270
80B14	271
90B14	272



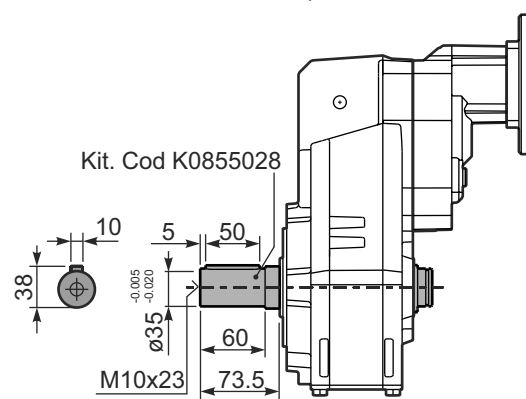
Available output flanges  
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
300	230	16	265	14	KF60.9.012

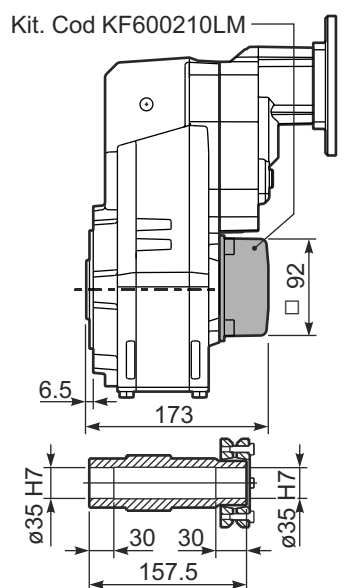
**RFA53C...** Input Shaft  
Albero in entrata



**PFA53 A...** Single output shaft  
Albero uscita semplice



**PFA53D...** Shrink disk  
Calettatore





### 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	
							G				-						
507	<b>2.76</b>	9	166	1.6	<b>14.4</b>	<b>265</b>	<b>not available</b>				<b>not available</b>				2980	<b>standard</b>	01
395	<b>3.54</b>	9	213	1.3	<b>11.6</b>	<b>275</b>									2485	<b>ø35</b>	02
277	<b>5.06</b>	9	304	1.0	<b>8.6</b>	<b>290</b>									1891		03
241	<b>5.81</b>	7.5	281	1.2	<b>8.5</b>	<b>330</b>									1693	<b>ø40</b>	04
206	<b>6.79</b>	7.5	329	1.2	<b>8.4</b>	<b>380</b>									1495	On request	05

The dynamic efficiency is **0.98** 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 **FC61** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **FC61** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **FC61** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **FC61** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **FC61** se suministra, lubricado de por vida con aceite sintético y no 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				
1.85 LT	1.15 LT	1.15 LT	1.30 LT	1.95 LT	1.30 LT
AGIP Telium VSF 320			SHELL Omala S4 WE 320		

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$F_{eq} = F_R \cdot \frac{149.5}{X + 119.5}$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	600	3000	140	720	3600	70	940	4700
250	640	3200	120	740	3700	40	1220	6100
200	690	3460	85	860	4300	15	1300	6500

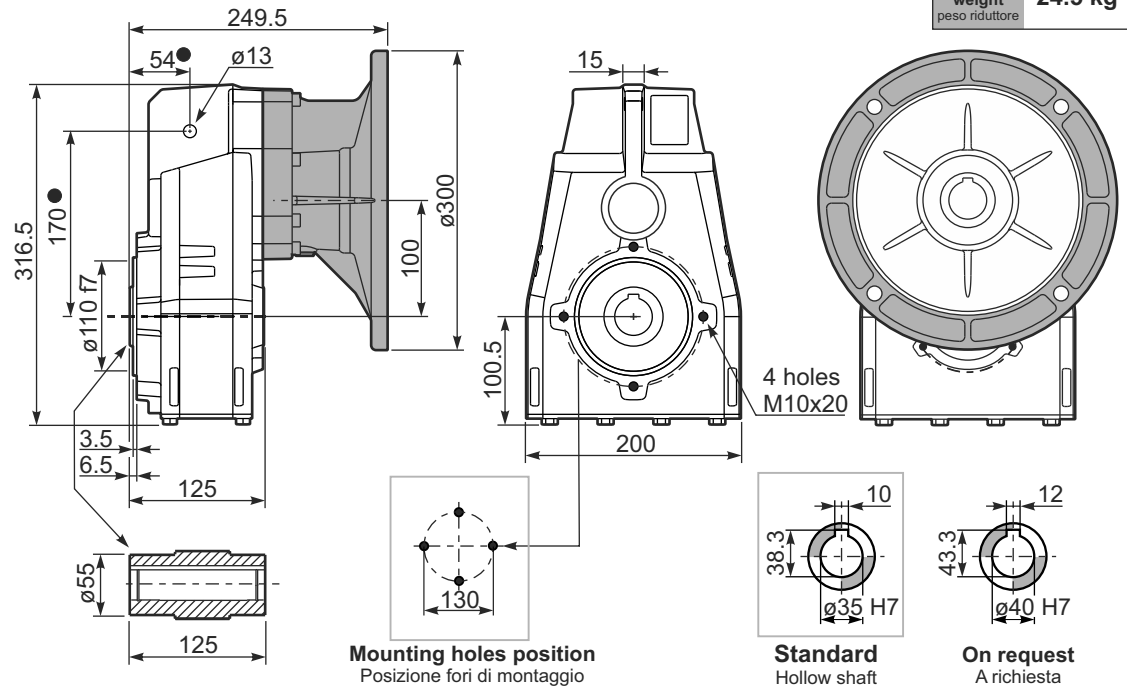
**On request reinforced bearings to increase loads.**  
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

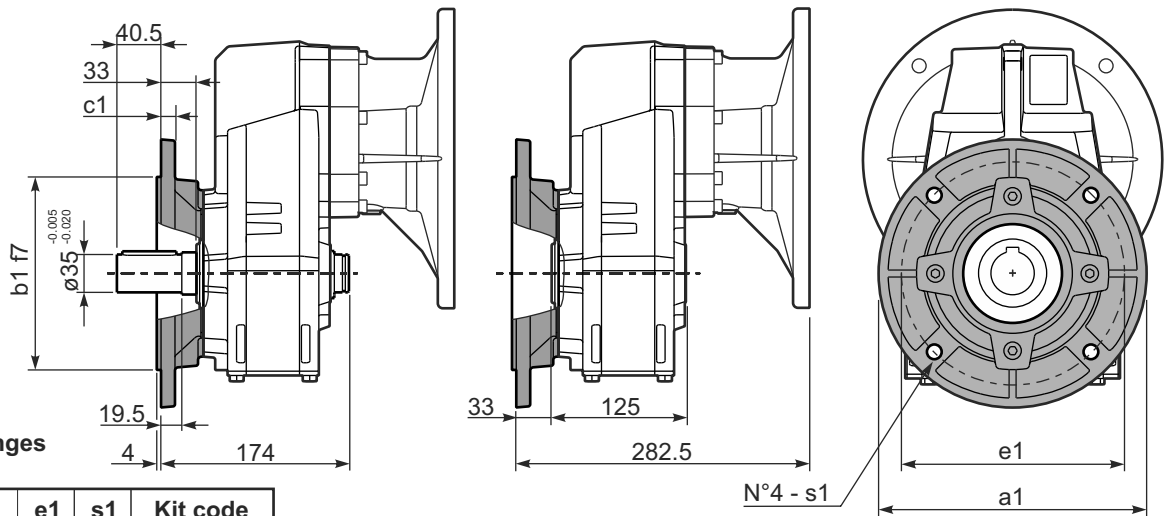
**PFC61C...** Basic gearbox  
Riduttore base

Gearbox weight  
peso riduttore **24.5 kg**

● Available torque arms,  
see our web site  
Bracci di reazione disponibili,  
consulta il nostro sito web



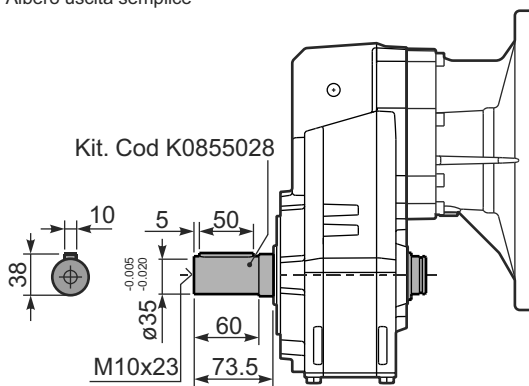
**PFC61...-F...** Output flange  
Flangia uscita



**Available output flanges**  
Flange di uscita

a1 $\phi$	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
300	230	16	265	14	KF60.9.012

**PFC61 A...** Single output shaft  
Albero uscita semplice





### 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			
213	<b>6.57</b>	7.5	312	1.2	8.8	380	B										3018	01
185	<b>7.56</b>	7.5	358	1.1	7.9	390	B										3016	02
159	<b>8.82</b>	7.5	419	1.0	7.1	410	B										3014	03
113	<b>12.39</b>	7.5	588	1.0	7.2	580	B										2018	04
98	<b>14.24</b>	5.5	499	1.2	6.4	600	B										2016	05
84	<b>16.75</b>	5.5	587	1.1	6.1	665	B										1618	06
73	<b>19.25</b>	5.5	675	1.0	5.4	675	B										1616	07
64	<b>21.78</b>	4	558	1.2	4.7	675	B										1318	08
56	<b>25.04</b>	4	642	1.1	4.1	675	B										1316	09
47.9	<b>29.23</b>	4	750	0.9	3.5	675	B										1314	10
45.7	<b>30.65</b>	3	592	1.1	3.4	675	B										1116	11
39.1	<b>35.78</b>	3	691	1.0	2.9	675	B										1114	12
36.3	<b>38.55</b>	2.2	548	1.1	2.3	580	B										818	13
31.6	<b>44.32</b>	2.2	630	1.1	2.3	665	B										816	14
27.1	<b>51.74</b>	2.2	735	0.9	2.0	675	B										814	15
22.9	<b>61.03</b>	1.1	437	1.1	1.2	480	B										616	16
19.6	<b>71.25</b>	1.1	510	1.1	1.2	560	B										614	17

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **FC62** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **FC62** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **FC62** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **FC62** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **FC62** se suministra, lubricado de por vida con aceite sintético y no 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				
1.85 LT	1.15 LT	1.15 LT	1.30 LT	2.10 LT	1.30 LT
AGIP Telium VSF 320			SHELL Omala S4 WE 320		

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	600	3000	140	720	3600	70	940	4700
250	640	3200	120	740	3700	40	1220	6100
200	690	3460	85	860	4300	15	1300	6500

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

**Input shaft**  
Albero in entrata

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

tab. 2



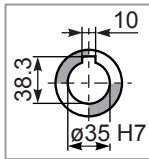
## PFC62C...

Basic gearbox  
Riduttore base

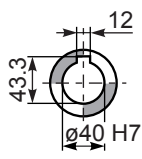
Gearbox weight  
peso riduttore **20.8 kg**

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	227
80/90B5	KC023.4.042	200	229
100/112B5	KC023.4.043	250	235
132B5	KC50.4.043	300	256.5
80B14	KC085.4.046	120	227
90B14	KC085.4.045	140	227
100/112B14	KC085.4.047	160	238
132B14	KC50.4.041	200	256.5

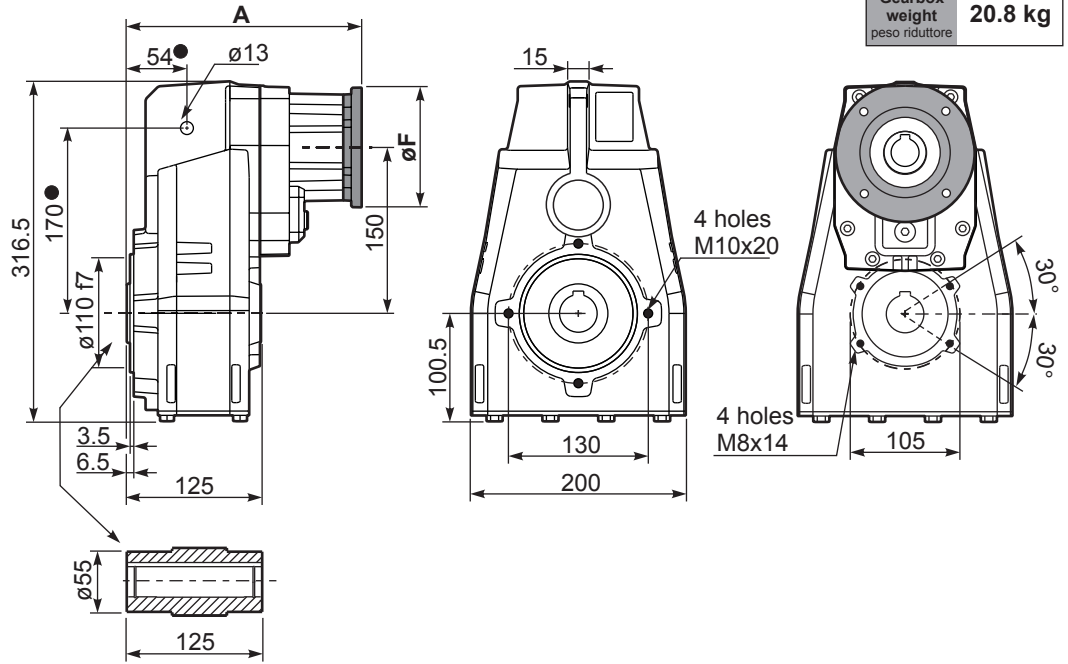
- Available torque arms, see our web site  
Bracci di reazione disponibili, consulta il nostro sito web



**Standard**  
Hollow shaft



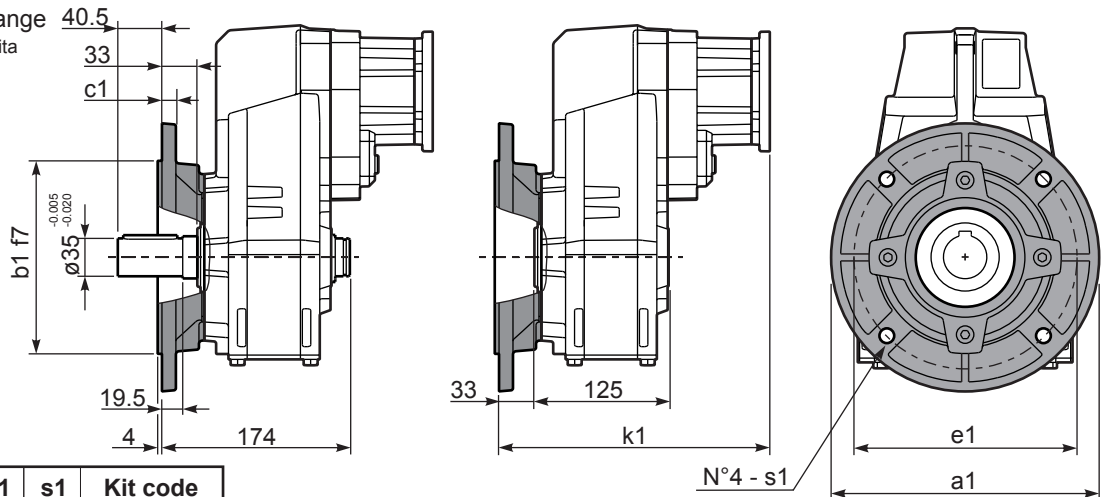
**On request**  
A richiesta



## PFC62...-F...

Output flange  
Flangia uscita

M. flanges	k1
71B5	260
80/90B5	262
100/112B5	268
132B5	289.5
80B14	260
90B14	260
100/112B14	271
132B14	289.5

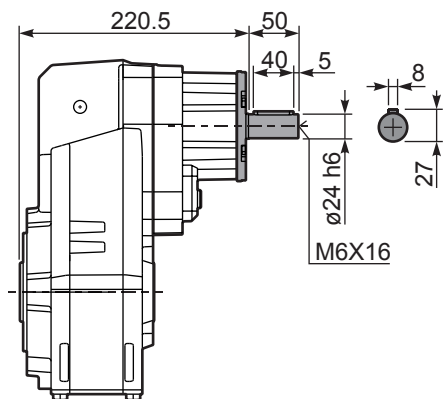


Available output flanges  
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
300	230	16	265	14	KF60.9.012

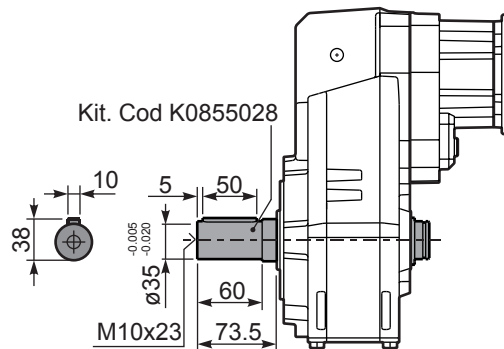
## RFC62C...

Input Shaft  
Albero in entrata



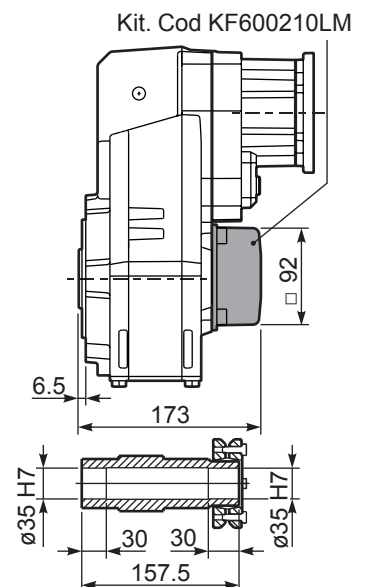
## PFC62 A...

Single output shaft  
Albero uscita semplice



## PFC62D...

Shrink disk  
Calettatore





### 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		
22.6	<b>61.89</b>	1.5	594	1.1	1.7	675	B				C	C		191318	01
19.7	<b>71.16</b>	1.5	683	1.0	1.5	675	B				C	C		191316	02
17.0	<b>82.48</b>	1.5	792	0.9	1.3	675	B				C	C		171316	03
14.5	<b>96.29</b>	1.1	675	1.0	1.1	675	B				C	C		171314	04
13.9	<b>100.51</b>	1.1	705	1.0	1.0	675	B				C	C		131318	05
12.1	<b>115.56</b>	0.75	556	1.2	0.91	675	B				C	C		131316	06
11.1	<b>125.96</b>	0.75	606	1.1	0.82	665	B				C	C		190816	07
10.4	<b>134.91</b>	0.75	649	1.0	0.78	675	B				C	C		131314	08
9.5	<b>147.05</b>	0.75	707	1.0	0.72	675	B				C	C		190814	09
8.2	<b>170.44</b>	0.55	605	1.1	0.62	675	B				C	C		170814	10
7.6	<b>184.15</b>	0.55	653	1.0	0.57	675	B				C	C		101314	11
6.8	<b>205.87</b>	0.55	730	0.9	0.51	675	B				C	C		91316	12
5.8	<b>240.34</b>	0.37	570	1.2	0.44	675	B				C	C		91314	13
5.0	<b>279.22</b>	0.37	662	1.0	0.37	665	B				C	C		100816	14
4.3	<b>325.97</b>	0.37	773	0.9	0.32	675	B				C	C		100814	15
3.8	<b>364.41</b>	0.25	583	1.1	0.28	665	B				C	C		90816	16
3.3	<b>425.43</b>	0.25	681	1.0	0.25	675	B				C	C		90814	17
2.9	<b>481.19</b>	0.18	589	1.1	0.22	665	B				C	C		70816	18
2.5	<b>561.76</b>	0.18	687	1.0	0.19	675	B				C	C		70814	19

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

- Motor Flanges Available Flange Motore Disponibili
- 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 **FC63** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **FC63** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **FC63** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

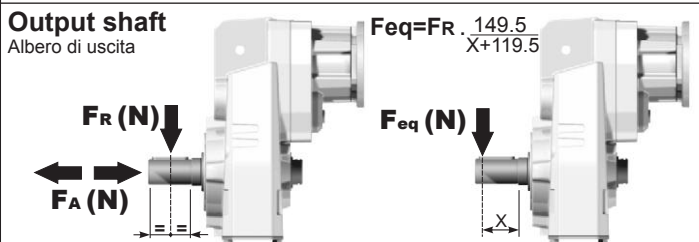
**F** Le réducteur **FC63** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **FC63** se suministra, lubricado de por vida con aceite sintético y no 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				
2.15 LT	1.25 LT	1.25 LT	1.45 LT	2.35 LT	1.45 LT
AGIP Telium VSF 320			SHELL Omala S4 WE 320		

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

### RADIAL AND AXIAL LOADS



$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	600	3000	140	720	3600	70	940	4700
250	640	3200	120	740	3700	40	1220	6100
200	690	3460	85	860	4300	15	1300	6500

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

$n_1$	FA	FR
1400	240	1200
900	280	1400
500	340	1700

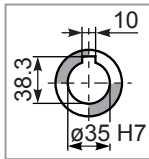
tab. 2

**PFC63C...** Basic gearbox  
Riduttore base

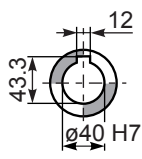
Gearbox weight **20.8 kg**  
peso riduttore

M. flanges	Kit code	øF	A
<b>63B5</b>	K063.4.041	140	239
<b>71B5</b>	K063.4.042	160	237
<b>80/90B5</b>	K063.4.043	200	239
<b>71B14</b>	K063.4.047	105	237
<b>80B14</b>	K063.4.046	120	238
<b>90B14</b>	K063.4.041	140	239

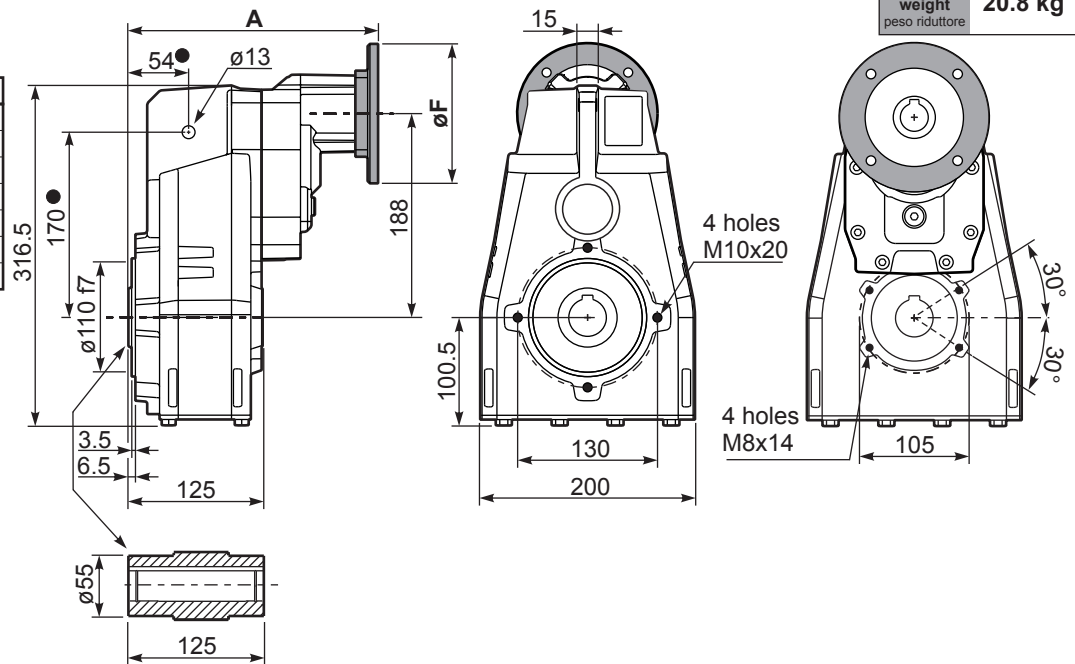
● Available torque arms,  
see our web site  
Bracci di reazione disponibili,  
consulta il nostro sito web



**Standard**  
Hollow shaft

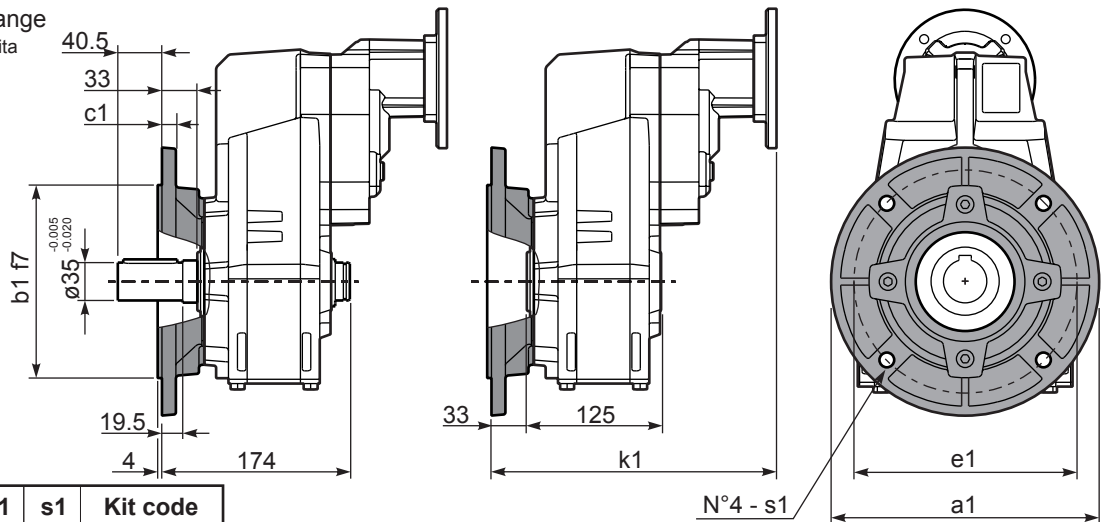


**On request**  
A richiesta



**PFC63...-F...** Output flange  
Flangia uscita

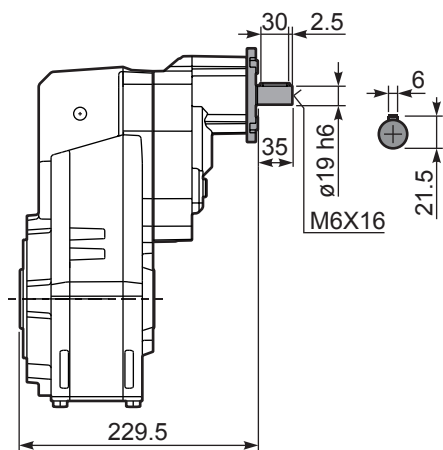
Motor Flange	k1
63B5	272
71B5	270
80/90B5	272
71B14	270
80B14	271
90B14	272



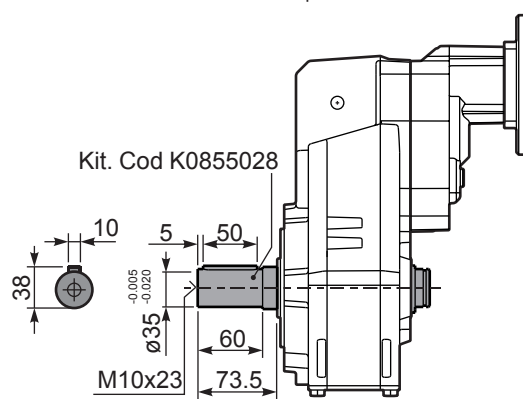
**Available output flanges**  
Flange di uscita

a1 ø	b1	c1	e1	s1	Kit code
250	180	13	215	14	KF60.9.011
300	230	16	265	14	KF60.9.012

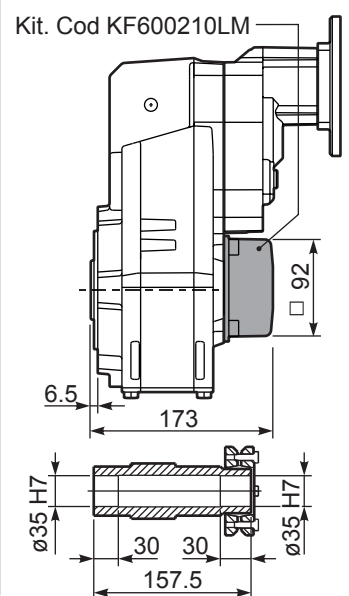
**RFC63C...** Input Shaft  
Albero in entrata



**PFC63 A...** Single output shaft  
Albero uscita semplice



**PFC63D...** Shrink disk  
Calettatore





### 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 	Ratios code 	
							C	D	E	F	G	R	T	U	V			
							71	80	90	100 112	132	80	90	100 112	132			
175	8.02	9	473	1.1	9.9	520	B										3018	01
152	9.18	9	541	1.1	9.8	590	B										3016	02
131	10.68	9	630	1.1	9.7	680	B										3014	03
93	15.11	7.5	717	1.1	7.8	775	B										2018	04
81	17.30	7.5	821	1.1	7.8	885	B										2016	05
70	20.13	7.5	955	0.9	6.8	900	B										2014	06
60	23.39	5.5	820	1.1	5.9	900	B										1616	07
51	27.21	5.5	954	0.9	5.1	900	B										1614	08
46.0	30.42	4	780	1.2	4.5	900	B										1316	09
39.6	35.38	4	907	1.0	3.9	900	B										1314	10
37.6	37.24	3	719	1.2	3.7	895	B										1116	11
32.3	43.31	3	836	1.1	3.2	900	B										1114	12
29.8	47.02	2.2	668	1.1	2.3	705	B										818	13
26.0	53.85	2.2	765	1.1	2.3	810	B										816	14
22.4	62.63	2.2	890	1.0	2.2	900	B										814	15
18.9	74.16	1.1	531	1.1	1.2	585	B										616	16
16.2	86.25	1.1	617	1.1	1.2	680	B										614	17

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

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

**EN** Unit **FC72** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

H1	H4	H3	H2	H5	H6
3.50 LT	1.90 LT	1.90 LT	1.80 LT	3.60 LT	1.90 LT
<b>AGIP</b> 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 **FC72** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **FC72** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **FC72** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **FC72** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$F_{eq} = F_R \cdot \frac{174.5}{X+134.5}$

**Input shaft**  
Albero in entrata

n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	740	3700	140	860	4300	70	1020	5100
250	800	4000	120	900	4500	40	1300	6500
200	830	4150	85	970	4850	15	1700	8500

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

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

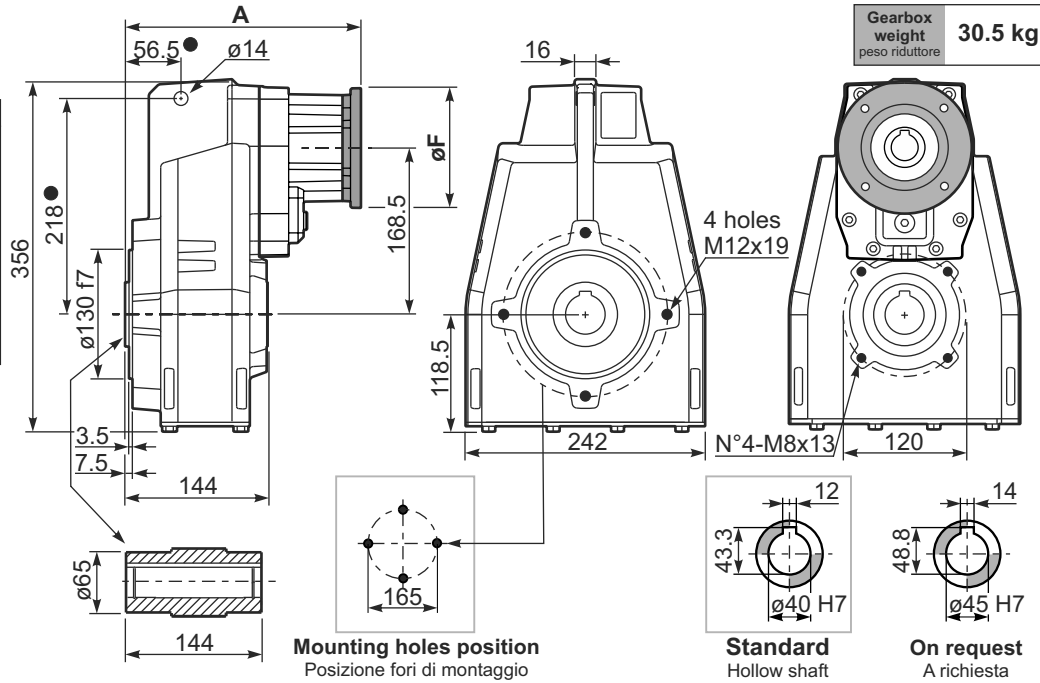
tab. 2

**PFC72C...** Basic gearbox  
Riduttore base

Gearbox weight  
peso riduttore **30.5 kg**

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	238.5
80/90B5	KC023.4.042	200	240.5
100/112B5	KC023.4.043	250	246.5
132B5	KC50.4.043	300	268
80B14	KC085.4.046	120	238.5
90B14	KC085.4.045	140	238.5
100/112B14	KC085.4.047	160	249.5
132B14	KC50.4.041	200	268

● Available torque arms,  
see our web site  
Bracci di reazione disponibili,  
consulta il nostro sito web

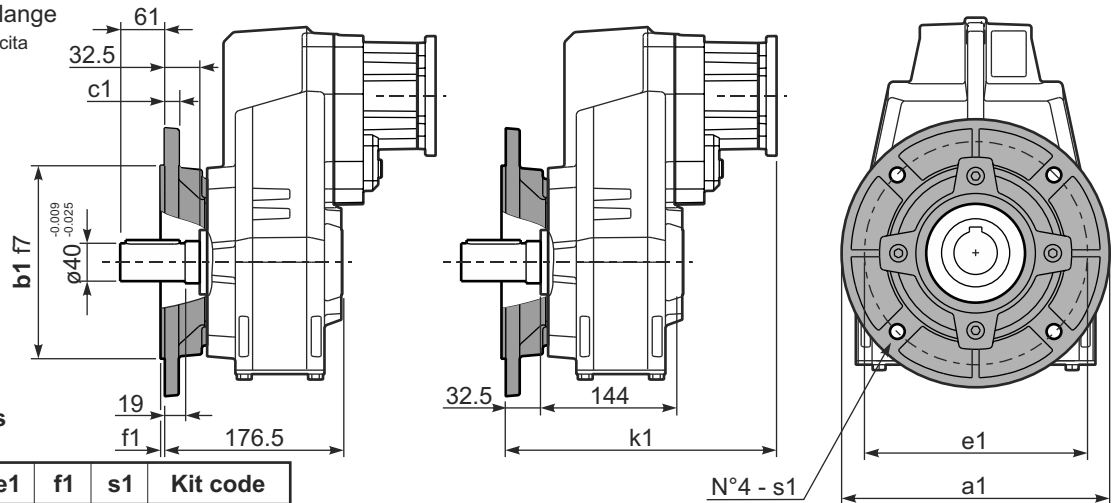


**PFC72...-F...** Output flange  
Flangia uscita

M. flanges	k1
71B5	271
80/90B5	273
100/112B5	279
132B5	300.5
80B14	271
90B14	271
100/112B14	282
132B14	300.5

Available output flanges  
Flange di uscita

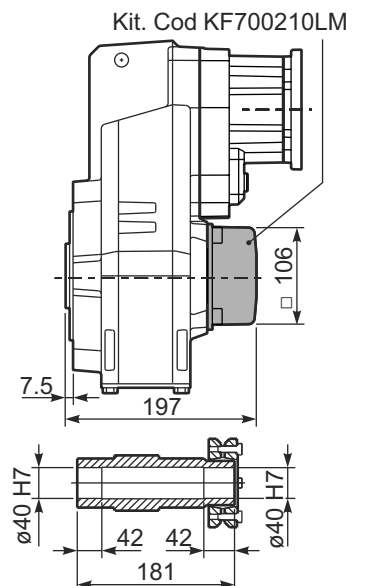
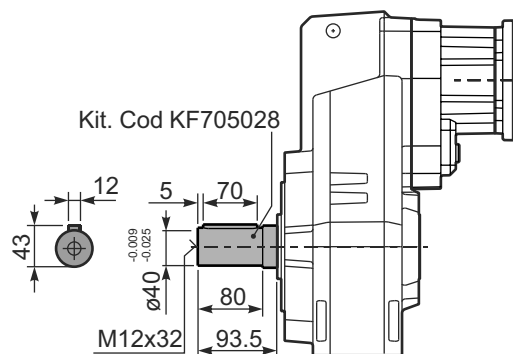
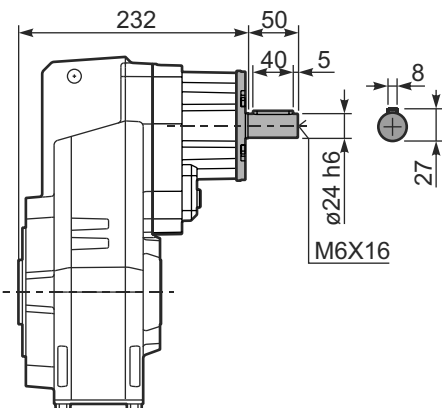
a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012
350	250	18	300	4	18	KF70.9.013



**RFC72C...** Input Shaft  
Albero in entrata

**PFC72 A...** Single output shaft  
Albero uscita semplice

**PFC72D...** Shrink disk  
Calettatore





**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		
18.5	<b>75.50</b>	1.5	725	1.1	1.7	825	B				C	C		191318	01
16.2	<b>86.47</b>	1.5	830	1.1	1.6	900	B				C	C		191316	02
14.0	<b>100.22</b>	1.5	962	0.9	1.4	900	B				C	C		171316	03
12.0	<b>116.56</b>	1.1	817	1.1	1.2	900	B				C	C		171314	04
10.2	<b>136.82</b>	1.1	959	0.9	1.0	900	B				C	C		151314	05
9.1	<b>153.05</b>	0.75	736	1.1	0.83	810	B				C	C		190816	06
8.6	<b>163.31</b>	0.75	785	1.1	0.86	900	B				C	C		131314	07
7.9	<b>178.01</b>	0.75	856	1.1	0.79	900	B				C	C		190814	08
7.3	<b>191.67</b>	0.75	922	1.0	0.73	900	B				C	C		101316	09
6.8	<b>206.32</b>	0.75	992	0.9	0.68	900	B				C	C		170814	10
6.3	<b>222.92</b>	0.55	791	1.1	0.63	900	B				C	C		101314	11
5.8	<b>242.18</b>	0.55	859	1.0	0.58	900	B				C	C		150814	12
5.6	<b>250.15</b>	0.55	888	1.0	0.56	900	B				C	C		91316	13
4.8	<b>289.08</b>	0.55	1026	0.9	0.49	900	B				C	C		130814	14
4.2	<b>330.31</b>	0.37	783	1.1	0.42	890	B				C	C		71316	15
3.5	<b>394.59</b>	0.37	936	1.0	0.36	900	B				C	C		100814	16
2.7	<b>514.99</b>	0.25	824	1.1	0.27	900	B				C	C		90814	17
2.1	<b>680.03</b>	0.18	832	1.1	0.21	900	B				C	C		70814	18

The dynamic efficiency is **0.94** 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 FC73 is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

3.55 LT	1.95 LT	1.95 LT	1.95 LT	3.75 LT	2.00 LT
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 FC73 è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße FC73 wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablaßschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

$F_{eq} = F_R \cdot \frac{174.5}{X+134.5}$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	740	3700	140	860	4300	70	1020	5100
250	800	4000	120	900	4500	40	1300	6500
200	830	4150	85	970	4850	15	1700	8500

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

**Input shaft**  
Albero in entrata

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

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

tab. 2

**F** Le réducteur de type FC73 est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

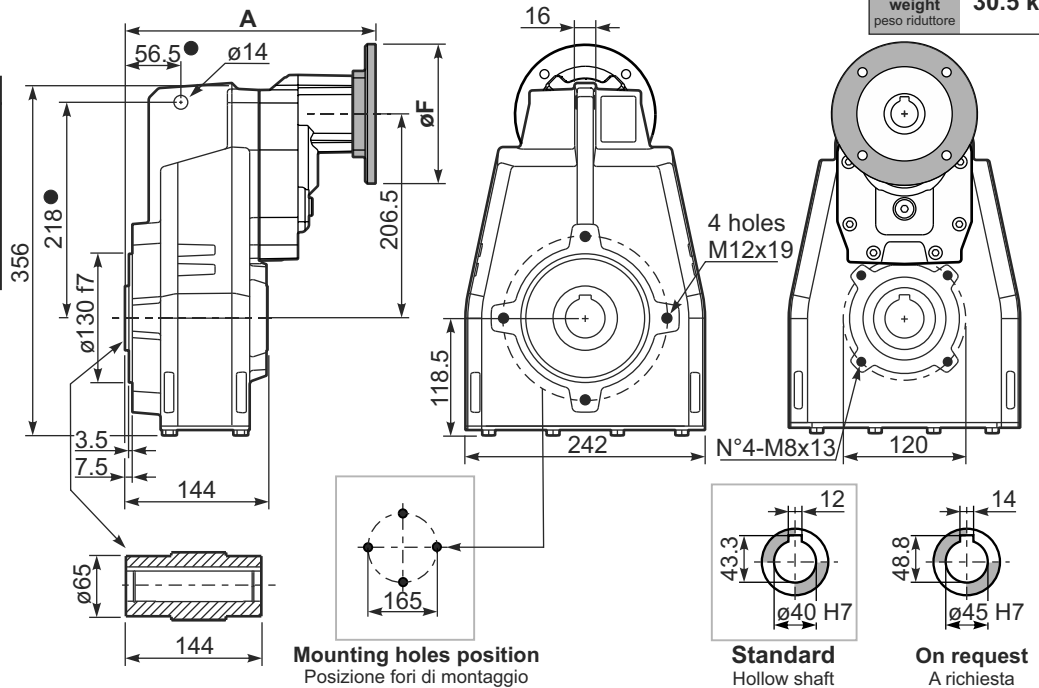
**E** El reductor tamaño FC73 se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

**PFC73C...** Basic gearbox  
Riduttore base

Gearbox weight  
peso riduttore **30.5 kg**

M. flanges	Kit code	øF	A
63B5	K063.4.041	140	250.5
71B5	K063.4.042	160	248.5
80/90B5	K063.4.043	200	250.5
71B14	K063.4.047	105	248.5
80B14	K063.4.046	120	249.5
90B14	K063.4.041	140	250.5

● Available torque arms,  
see our web site  
Bracci di reazione disponibili,  
consulta il nostro sito web

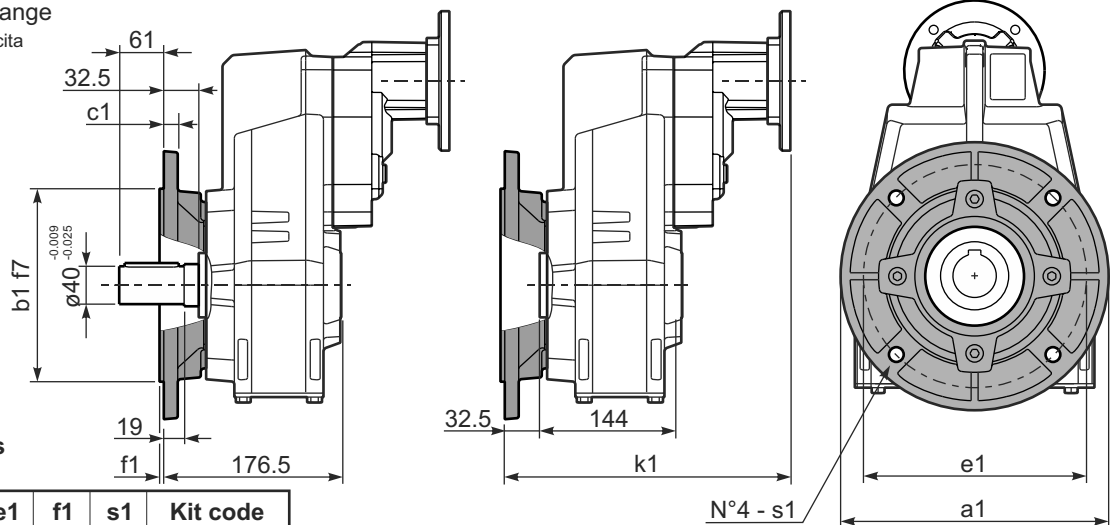


**PFC73...-F...** Output flange  
Flangia uscita

M. flanges	k1
63B5	283
71B5	281
80/90B5	283
71B14	281
80B14	282
90B14	283

Available output flanges  
Flange di uscita

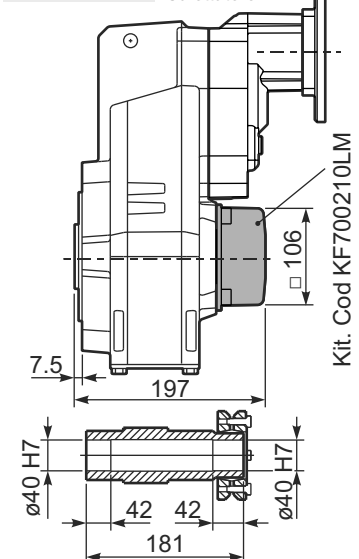
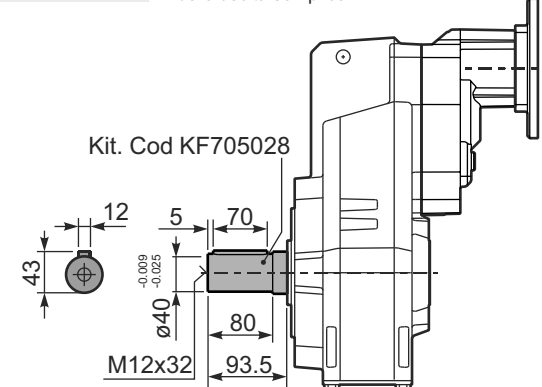
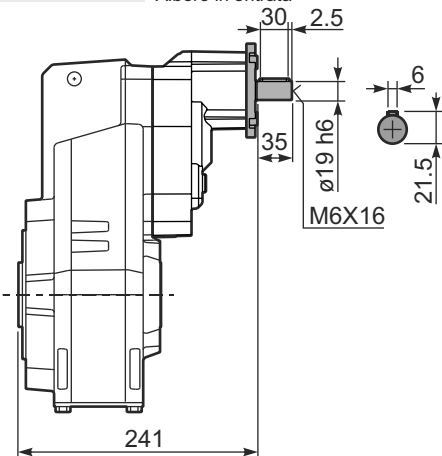
a1 ø	b1	c1	e1	f1	s1	Kit code
250	180	13	215	3	14	KF70.9.011
300	230	16	265	4	14	KF70.9.012
350	250	18	300	4	18	KF70.9.013



**RFC73C...** Input Shaft  
Albero in entrata

**PFC73 A...** Single output shaft  
Albero uscita semplice

**PFC73D...** Shrink disk  
Calettatore





### 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	
							H	I	-	-	-	-			-
528	<b>2.65</b>	22	374	1.7	<b>36.7</b>	<b>650</b>			<b>not available</b>				2361	standard	01
409	<b>3.42</b>	22	483	1.6	<b>32.8</b>	<b>750</b>							1965	<b>ø50</b>	02
304	<b>4.60</b>	22	649	1.5	<b>30.9</b>	<b>950</b>							1569		03
256	<b>5.46</b>	22	771	1.3	<b>27.4</b>	<b>1000</b>							1371	ø55	04
211	<b>6.64</b>	22	937	1.3	<b>26.5</b>	<b>1175</b>							1173	On request	05

The dynamic efficiency is **0.98** for all ratios

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **FC81** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **FC81** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **FC81** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

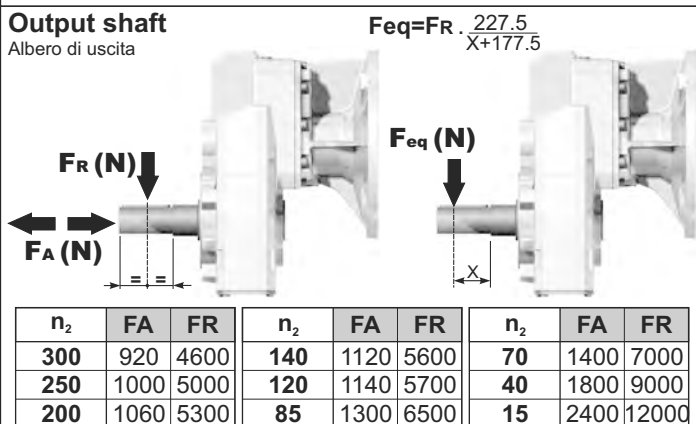
**F** Le réducteur de type **FC81** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **FC81** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
5.50 LT	3.50 LT	3.50 LT	3.50 LT	6.20 LT	4.40 LT
<b>AGIP Blasias 460</b>					

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



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

**tab. 2**

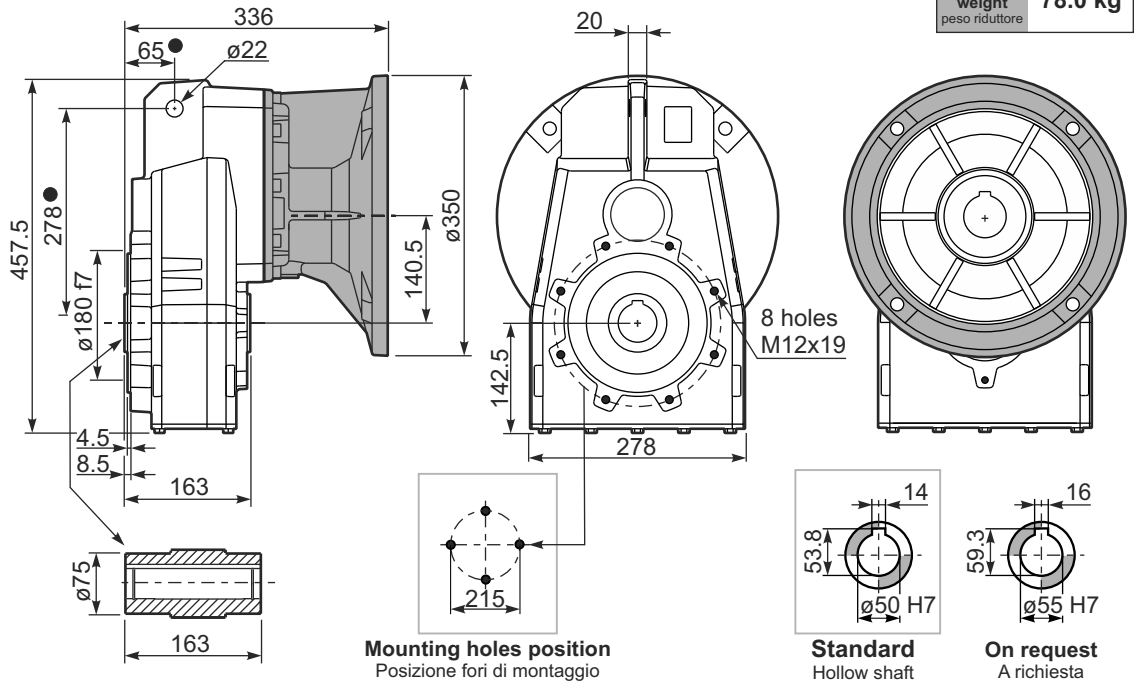


**PFC81C...**

Basic gearbox  
Riduttore base

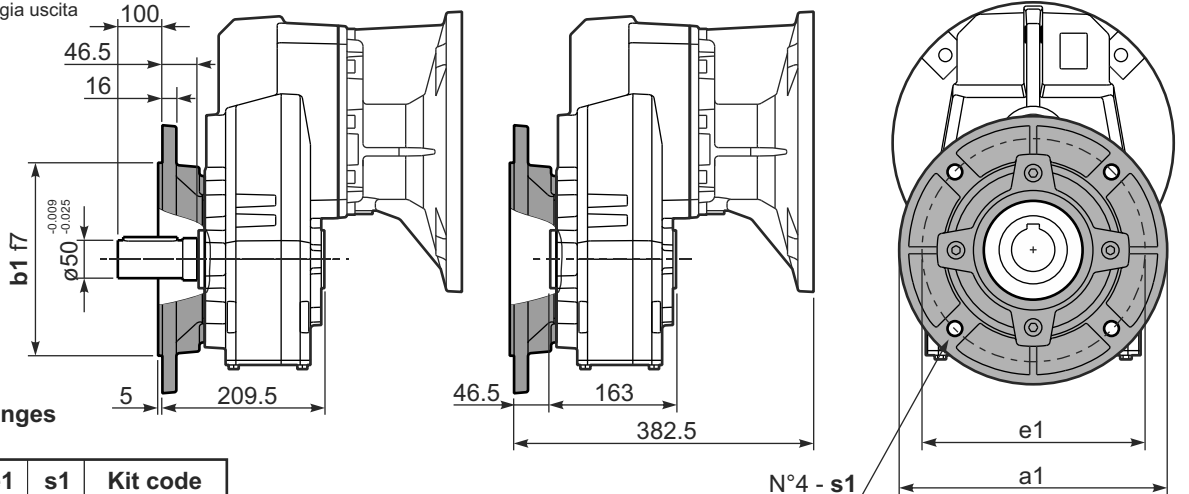
Gearbox weight  
peso riduttore **78.0 kg**

- Available torque arms, see our web site  
Bracci di reazione disponibili, consulta il nostro sito web



**PFC81...-F...**

Output flange  
Flangia uscita



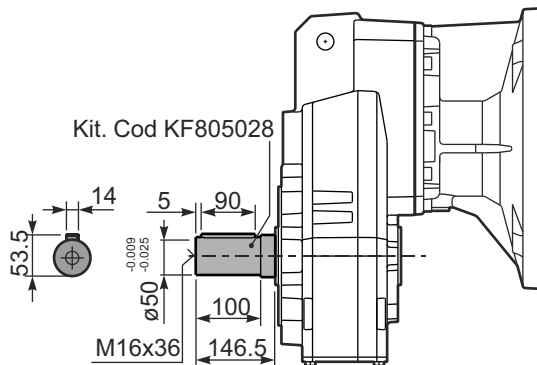
**Available output flanges**

Flange di uscita

a1 $\phi$	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012
400	300	350	18	KF80.9.013

**PFC81A...**

Single output shaft  
Albero uscita semplice





### 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 
							G	H	I	-	-	-	-		
							132	160	180	-	-	-	-		
234	<b>5.98</b>	22	827	1.2	<b>25.5</b>	<b>1000</b>								3015	01
197	<b>7.10</b>	22	982	1.2	<b>25.3</b>	<b>1175</b>								3013	02
162	<b>8.63</b>	22	1193	1.1	<b>23.9</b>	<b>1350</b>								3011	03
124	<b>11.27</b>	18.5	1310	1.1	<b>20.3</b>	<b>1500</b>								2015	04
105	<b>13.38</b>	18.5	1555	1.1	<b>19.4</b>	<b>1700</b>								2013	05
92	<b>15.24</b>	18.5	1771	1.1	<b>19.0</b>	<b>1900</b>								1615	06
86	<b>16.26</b>	18.5	1889	1.1	<b>19.7</b>	<b>2100</b>								2011	07
77	<b>18.09</b>	18.5	2102	1.0	<b>17.7</b>	<b>2100</b>								1613	08
71	<b>19.82</b>	15	1865	1.1	<b>15.9</b>	<b>2060</b>								1315	09
64	<b>21.98</b>	15	2069	1.0	<b>14.6</b>	<b>2100</b>								1611	10
60	<b>23.53</b>	15	2214	0.9	<b>13.6</b>	<b>2100</b>								1313	11
58	<b>24.25</b>	11	1677	1.2	<b>12.2</b>	<b>1940</b>								1115	12
48.6	<b>28.80</b>	11	1991	1.1	<b>11.1</b>	<b>2100</b>								1113	13
40.0	<b>34.99</b>	9	2063	1.0	<b>9.2</b>	<b>2100</b>								1111	14
33.6	<b>41.64</b>	7.5	1976	1.0	<b>7.2</b>	<b>1960</b>								813	15
27.7	<b>50.60</b>	5.5	1774	1.2	<b>6.3</b>	<b>2100</b>								811	16

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

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

**EN** Unit **FC82** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **FC82** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **FC82** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **FC82** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur.

**E** El reductor tamaño **FC82** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
5.70 LT	3.60 LT	3.60 LT	3.60 LT	6.60 LT	4.50 LT

**AGIP** 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

$F_{eq} = FR \cdot \frac{227.5}{X+177.5}$

**Input shaft**  
Albero in entrata

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	920	4600	140	1120	5600	70	1400	7000
250	1000	5000	120	1140	5700	40	1800	9000
200	1060	5300	85	1300	6500	15	2400	12000

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

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

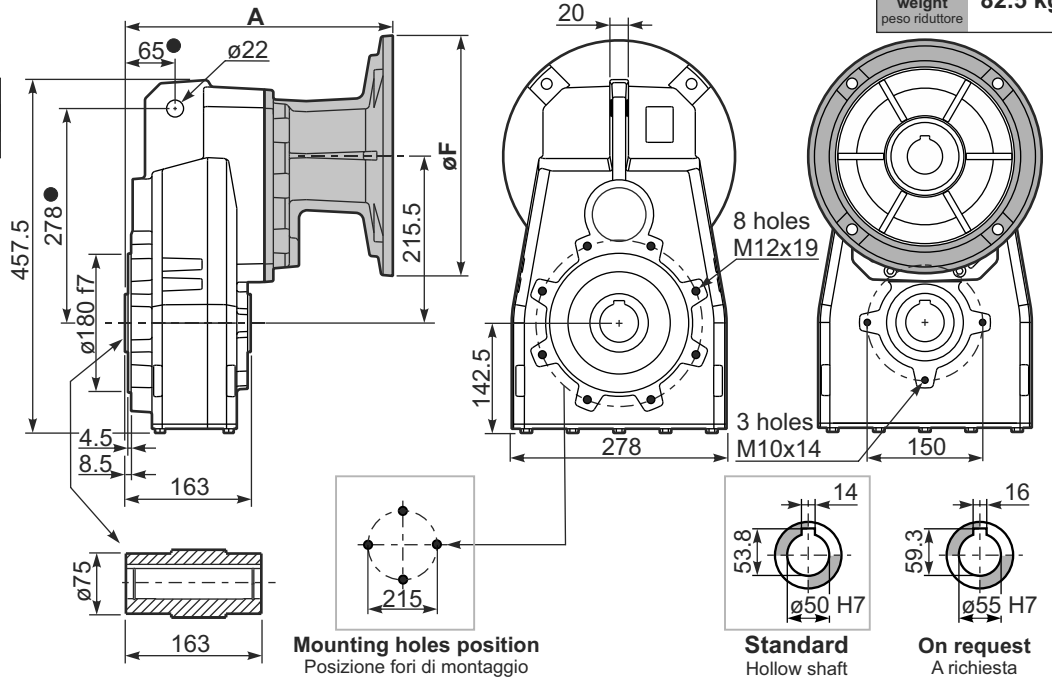
tab. 2

**PFC82C...** Basic gearbox  
Riduttore base

Gearbox weight **82.5 kg**  
peso riduttore

M. flanges	Kit code	øF	A
132B5	-	300	341.5
160/180B5	-	350	352.5

● Available torque arms, see our web site  
Bracci di reazione disponibili, consulta il nostro sito web

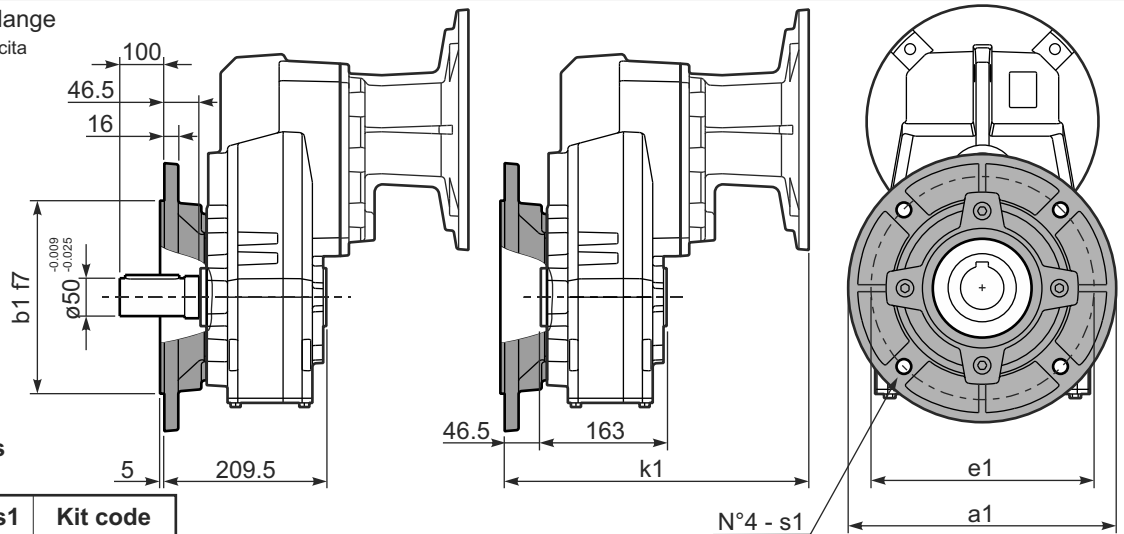


**PFC82...-F...** Output flange  
Flangia uscita

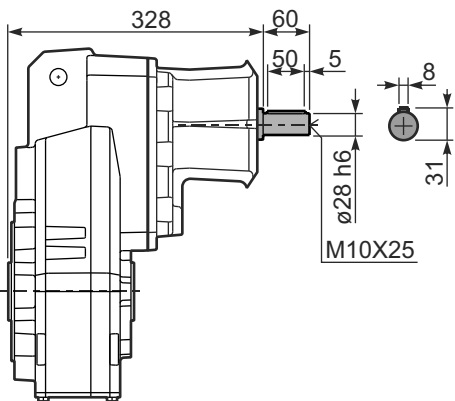
M. flanges	k1
132B5	388
160/180B5	399

Available output flanges  
Flange di uscita

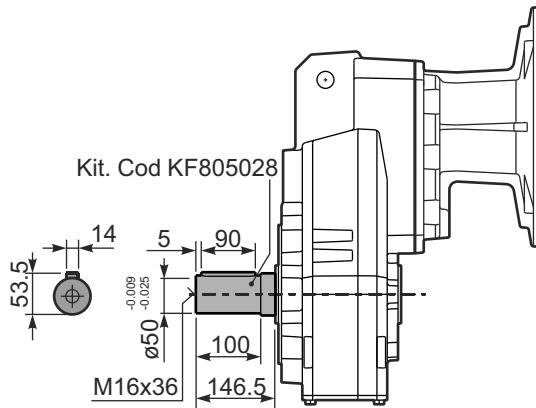
a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012
400	300	350	18	KF80.9.013



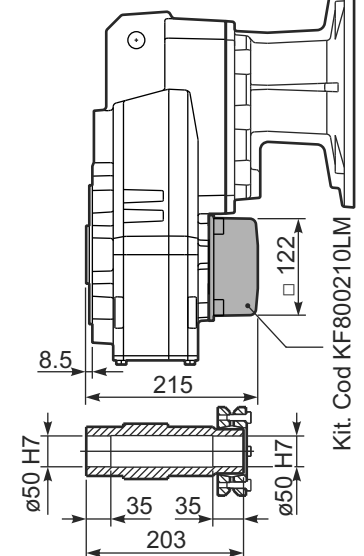
**RFC82C...** Input Shaft  
Albero in entrata



**PFC82 A...** Single output shaft  
Albero uscita semplice



**PFC82 D...** Shrink disk  
Calettatore





### 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			
28.8	<b>48.55</b>	7.5	2257	0.9	6.7	2100	B										201315	01
24.3	<b>57.64</b>	5.5	1980	1.1	5.7	2100	B										201313	02
21.3	<b>65.64</b>	5.5	2255	0.9	5.0	2100	B										161315	03
20.0	<b>70.04</b>	4	1760	1.2	4.7	2100	B										201311	04
18.0	<b>77.93</b>	4	1958	1.1	4.2	2100	B										161313	05
16.4	<b>85.36</b>	4	2145	1.0	3.8	2100	B										131315	06
14.8	<b>94.70</b>	4	2380	0.9	3.5	2100	B										161311	07
13.8	<b>101.35</b>	3	1917	1.1	3.2	2100	B										131313	08
11.4	<b>123.15</b>	3	2330	0.9	2.7	2100	B										131311	09
9.3	<b>150.73</b>	2.2	2100	1.0	2.2	2100	B										111311	10
7.8	<b>179.39</b>	1.5	1722	1.2	1.8	2100	B										81313	11
6.4	<b>217.98</b>	1.5	2093	1.0	1.5	2100	B										81311	12
5.7	<b>247.03</b>	1.1	1732	1.1	1.2	1950	B										61313	13
4.7	<b>300.17</b>	1.1	2105	1.0	1.1	2100	B										61311	14

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

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

**EN** Unit **FC83** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **FC83** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **FC83** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **FC83** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **FC83** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

H1	H4	H3	H2	H5	H6
5.80 LT	3.90 LT	3.90 LT	3.90 LT	6.80 LT	4.90 LT

**AGIP** 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

$F_{eq} = F_R \cdot \frac{227.5}{X+177.5}$

**Input shaft**  
Albero in entrata

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	920	4600	140	1120	5600	70	1400	7000
250	1000	5000	120	1140	5700	40	1800	9000
200	1060	5300	85	1300	6500	15	2400	12000

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

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

tab. 2

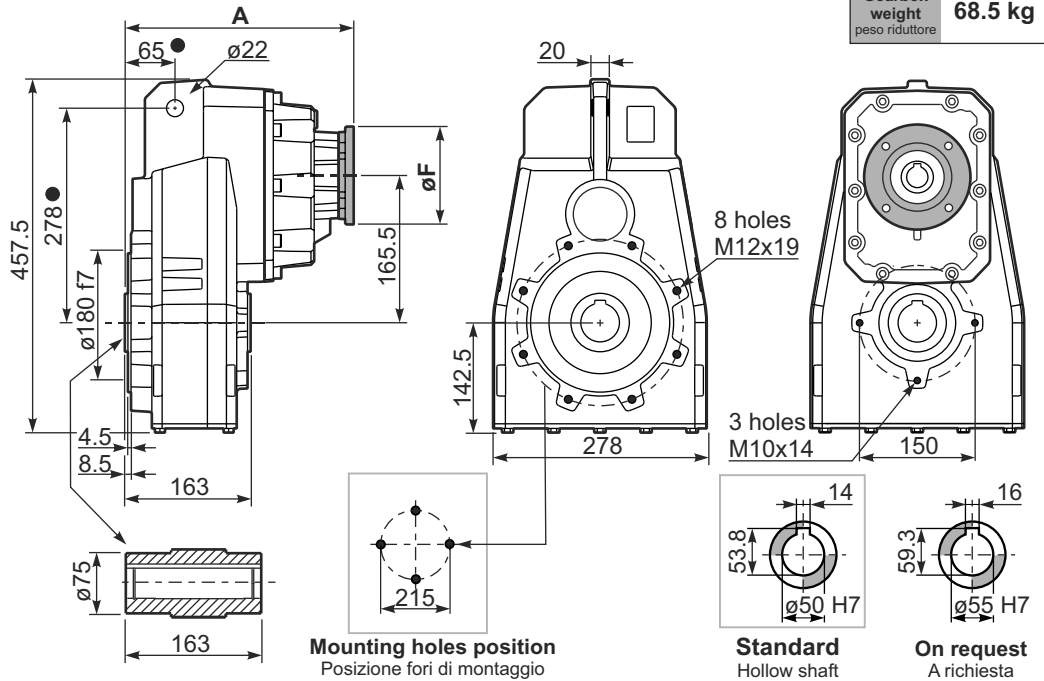
**PFC83C...**

Basic gearbox  
Riduttore base

Gearbox weight  
peso riduttore **68.5 kg**

M. flanges	Kit code	øF	A
71B5	KC023.4.041	160	292.5
80/90B5	KC023.4.042	200	294.5
100/112B5	KC023.4.043	250	300.5
132B5	KC50.4.043	300	322
80B14	KC085.4.046	120	292.5
90B14	KC085.4.045	140	292.5
100/112B14	KC085.4.047	160	303.5
132B14	KC50.4.041	200	322

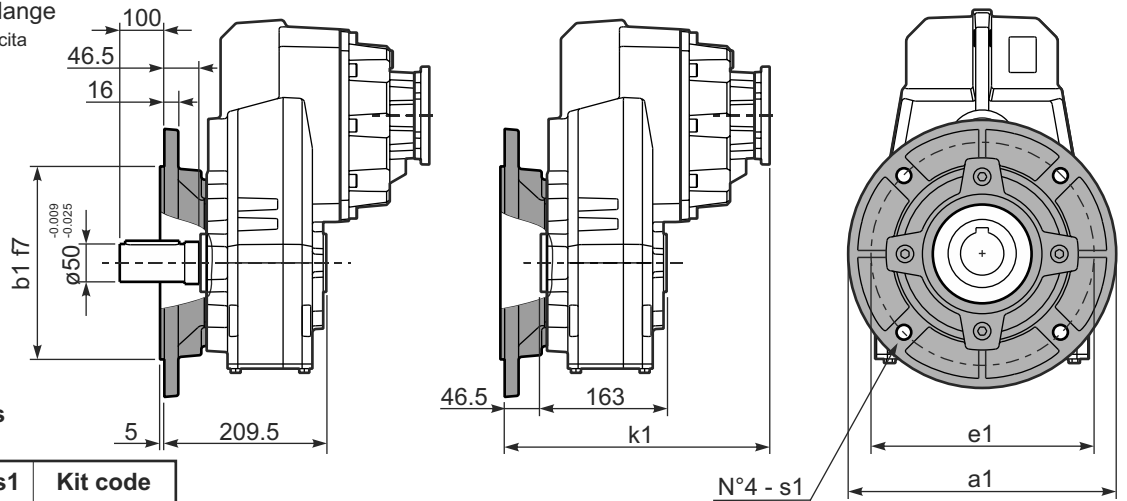
● Available torque arms,  
see our web site  
Bracci di reazione disponibili,  
consulta il nostro sito web



**PFC83...-F...**

Output flange  
Flangia uscita

M. flanges	k1
71B5	339
80/90B5	341
100/112B5	347
132B5	368.5
80B14	339
90B14	339
100/112B14	350
132B14	368.5

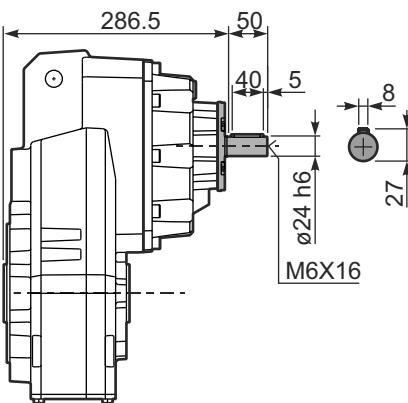


Available output flanges  
Flange di uscita

a1 ø	b1	e1	s1	Kit code
300	230	265	14	KF80.9.011
350	250	300	18	KF80.9.012
400	300	350	18	KF80.9.013

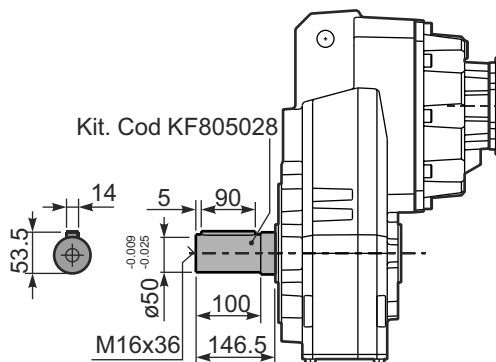
**RFC83C...**

Input Shaft  
Albero in entrata



**PFC83 A...**

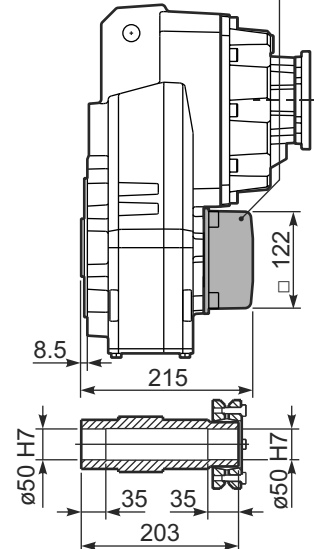
Single output shaft  
Albero uscita semplice



**PFC83D...**

Shrink disk  
Calettatore

Kit. Cod KF800210LM





### 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	O	P	Q				
							63	71	56	63	71				
29.3	<b>47.70</b>	1.1	334	1.4	1.6	480			C	C		281316	standard ø30	01	
16.2	<b>86.27</b>	0.75	415	1.2	0.87	480			C	C		191316		02	
14.0	<b>100.00</b>	0.75	481	1.0	0.75	480			C	C		171316		03	
11.9	<b>117.38</b>	0.55	416	1.2	0.64	480			C	C		151316		04	
10.0	<b>140.10</b>	0.55	497	1.0	0.53	480			C	C		131316		On request ø35	05
7.3	<b>191.24</b>	0.37	454	1.1	0.39	480			C	C		101316		06	
5.6	<b>249.59</b>	0.25	399	1.2	0.30	480			C	C		91316		07	
4.2	<b>329.58</b>	0.25	527	0.9	0.23	480			C	C		71316		08	

The dynamic efficiency is **0.94** 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 **FS50** 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 **FS50** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **FS50** ist mit synthetischem Öl gefüllt und ist 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 **FS50** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **FS50** se suministra, lubricado de por vida con aceite sintético y no 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				
H1	H4	H3	H2	H5	H6
0.95 LT	0.50 LT	0.50 LT	0.70 LT	0.95 LT	0.95 LT
AGIP Telium VSF 320			SHELL Omala S4 WE 320		

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

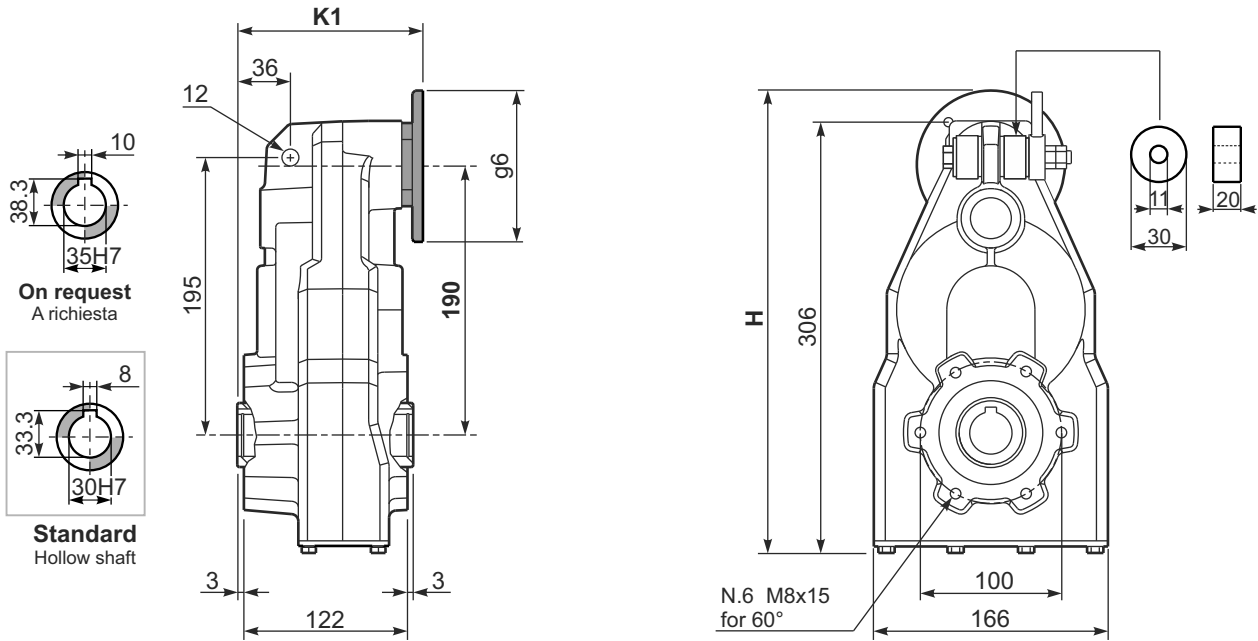
RADIAL AND AXIAL LOADS				
Input shaft Albero in entrata		$n_1$	$F_A$	$F_R$
		1400	140	700
		900	160	800
*Strong axial loads in the DX direction are not allowed. Non sono consentiti forti carichi assiali con direzione DX				

**tab. 2**

# Compact gear 480Nm FS50

**P**FS50C... Basic gearbox  
Riduttore base

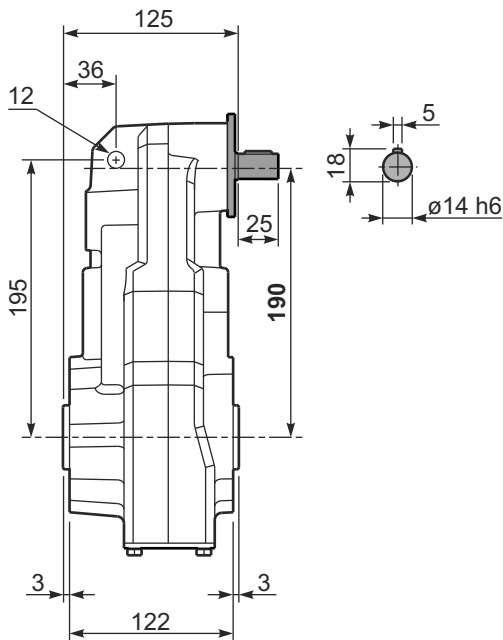
Gearbox weight  
peso riduttore **11.5 kg**



B14 Motor Flanges	H	g6	k1	kit code
56 B14	314	80	130.5	KC40.4.049
63 B14	320	90	133	K050.4.047
71 B14	328	105	130.5	K050.4.045

B5 Motor Flanges	H	g6	k1	kit code
63 B5	345	140	131	K050.4.041
71 B5	355	160	129	K050.4.042

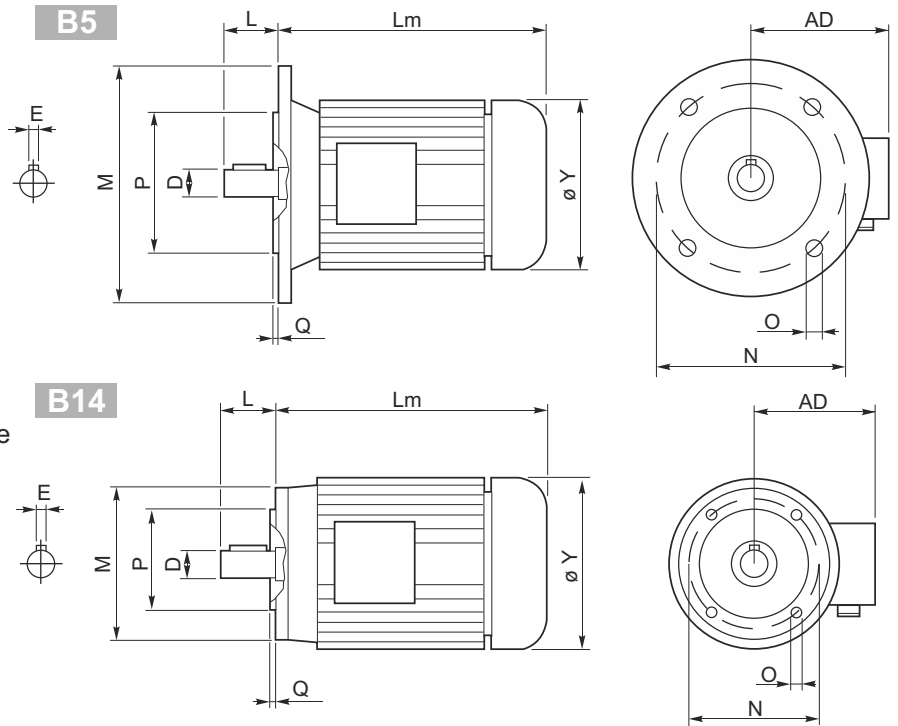
**R**FS50C... Input shaft  
Albero in entrata





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

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



Outside dimensions may be different according to manufacturers.

Le dimensioni esterne sono indicative, possono variare tra i vari costruttori.

	2 poli / poles			4 poli / poles			6 poli / poles			B5-B14						B5					B14					Kg
	kW	Nm	A <sub>(400V)</sub>	kW	Nm	A <sub>(400V)</sub>	kW	Nm	A <sub>(400V)</sub>	D	E	L	Lm	Y	AD	P	N	M	O	Q	P	N	M	O	Q	
56 A	0.09	0.32	0.38	0.06	0.44	0.27	—	—	—	9	3	20	179	108	96	80	100	120	7	2.5	50	65	80	M5	2.5	2.7
56 B	0.12	0.42	0.46	0.09	0.67	0.37	—	—	—	9	3	20	179	108	96	80	100	120	7	2.5	50	65	80	M5	2.5	2.9
63 A	0.18	0.63	0.60	0.12	0.84	0.50	0.09	0.99	0.57	11	4	23	185	120	99	95	115	140	9.5	3	60	75	90	M5	2.5	3.8
63 B	0.25	0.87	0.76	0.18	1.30	0.69	0.12	1.32	0.74	11	4	23	185	120	99	95	115	140	9.5	3	60	75	90	M5	2.5	4.2
71 A	0.37	1.30	1.00	0.25	1.70	0.91	0.18	1.90	0.80	14	5	30	-	130	104	110	130	160	9.5	3.5	70	85	105	M6	2.5	5.9
71 B	0.55	1.90	1.54	0.37	2.52	1.14	0.25	2.72	1.10	14	5	30	225	141	107	110	130	160	9.5	3.5	70	85	105	M6	2.5	6.5
80 A	0.75	2.60	1.85	0.55	3.77	1.51	0.37	3.84	1.18	19	6	40	256	159	127	130	165	200	11.5	3.5	80	100	120	M6	3	8.5
80 B	1.1	3.90	2.64	0.75	5.11	2.57	0.55	5.84	1.80	19	6	40	256	159	127	130	165	200	11.5	3.5	80	100	120	M6	3	10
90 S	1.5	5.00	3.31	1.1	7.45	2.78	0.75	7.92	2.32	24	8	50	-	170	135	130	165	200	11.5	3.5	95	115	140	M8	3	12.5
90 L	2.2	7.50	4.46	1.5	10.2	3.61	1.1	11.6	3.45	24	8	50	280	170	135	130	165	200	11.5	3.5	95	115	140	M8	3	15
100 LA	3.0	10.0	6.28	2.2	14.8	5.07	1.5	15.4	3.88	28	8	60	-	190	148	180	215	250	13	4	110	130	160	M8	3.5	20
100 LB	—	—	—	3.0	20.1	6.66	—	—	—	28	8	60	-	190	148	180	215	250	13	4	110	130	160	M8	3.5	22
112 M	4.0	13.4	8.10	4.0	26.7	8.55	2.2	22.6	5.30	28	8	60	321	210	164	180	215	250	13	4	110	130	160	M8	3.5	35
132 S	5.5	18.3	11.2	5.5	36.5	11.4	3.0	30.2	7.20	38	10	80	375	—	—	—	—	—	—	—	—	—	—	—	—	41
	7.5	24.9	15.3	7.5	49.4	15.0	4.0	40.0	9.13	38	10	80	420	244	180	230	265	300	14	4	130	165	200	M10	4	51
132 M	—	—	—	7.5	61.4	18.5	—	—	—	38	10	80	420	244	180	230	265	300	14	4	130	165	200	M10	4	51
160 M	—	—	—	11	72	21.5	—	—	—	42	12	110	503	335	246	250	300	350	18	5	—	—	—	—	—	79.2
160 L	—	—	—	15	98	29	—	—	—	42	12	110	547	335	246	250	300	350	18	5	—	—	—	—	—	97.5
180 M	—	—	—	18.5	121	35.5	—	—	—	48	14	110	602	366	266	250	300	350	19	5	—	—	—	—	—	170
180 L	—	—	—	22	144	42	—	—	—	48	14	110	602	366	266	250	300	350	19	5	—	—	—	—	—	170



**Metric electric motors are in aluminum. On request they can be supplied with different Level of protection and painted with 2 or 3 level of anticorrosive paint.**

*I motori metrici sono in alluminio, su richiesta possono essere forniti con differenti livelli di protezione e verniciati con vernice anticorrosiva.*





**Protection**

Standard IP55  
Please specify on purchase orders if you need a higher IP protection class.

**Grado di protezione**

IP55 Standard  
Specificare in sede di ordinazione per IP superiore.

**Schutzart**

IP55 Standard.  
Höheren IP Grad bitte im Auftrag angeben.

**Degré de protection**

IP55 standard.  
Au moment de la commande, spécifiez si vous souhaitez IP supérieur.

**Grado de protección**  
IP55 standard.  
Especificar en el pedido cuando necesiten protección IP superior.

**Insulation**

Standard Cl.F  
To be specified upon placing the order if different insulation is required.

**Isolamento**

Cl.F Standard  
Specificare in sede di ordinazione classe di isolamento diversa.

**Isolierung**

Cl.F Standard.  
Davon abweichende Isolierungsklas se im Auftrag angeben.

**Isolement**

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

**Aislamiento**

Cl.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**

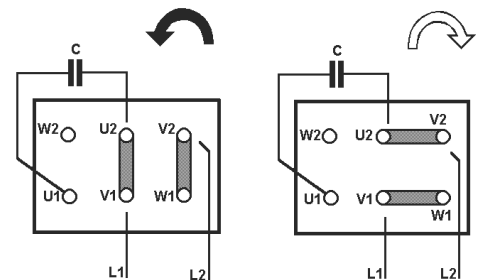
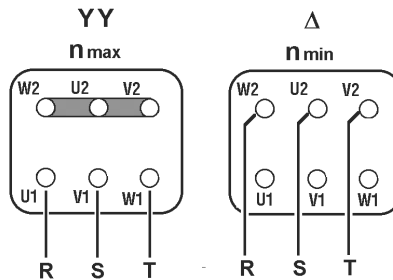
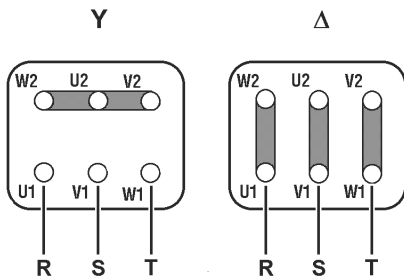
**Branchements**

**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.
- 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.
- 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.

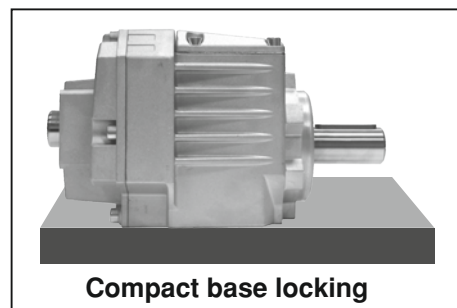
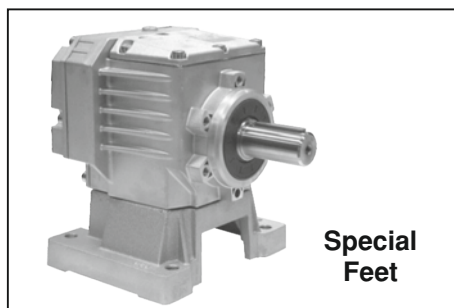
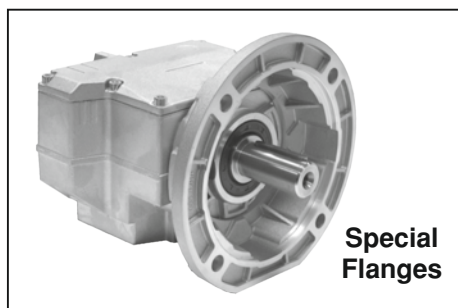
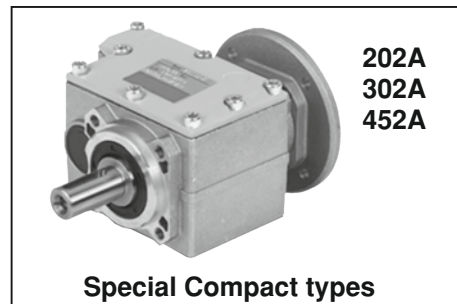
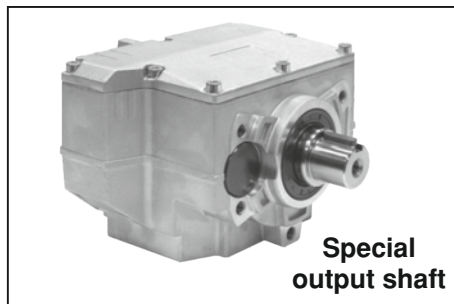
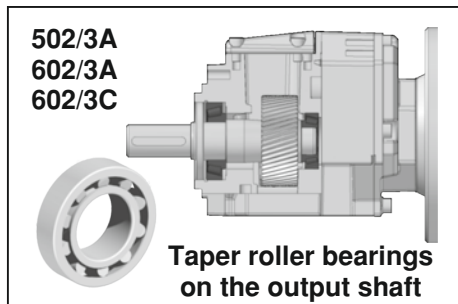
**CONDIZIONI DI VENDITA**

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..**

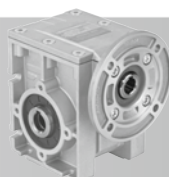
# New options available



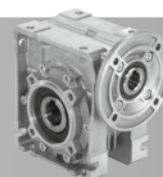
## Others HYDRO-MEC products



Worm gearboxes  
Rid. a vite senza fine



S series square worm gearboxes  
Rid. a vite senza fine quadro serie S



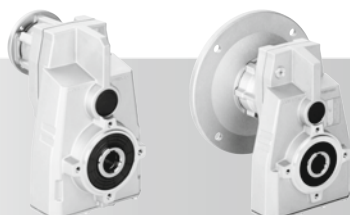
Square worm gearboxes  
Rid. a vite senza fine quadro



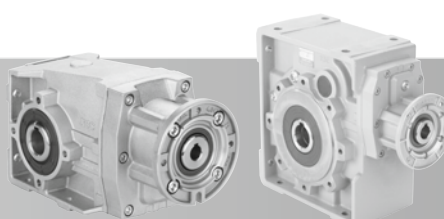
Stainless steel worm gearboxes  
Rid. a vite senza fine Inox



Stainless steel coaxial gearboxes  
Riduttori coassiali Inox



Shaft mounted gearboxes  
Riduttori pendolari

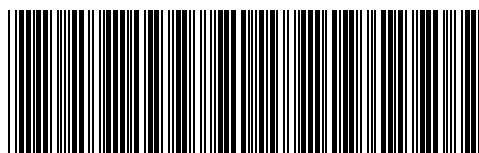


Helical bevel gearboxes  
Rid. a coppia conica

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\* CT- RCM- WO- HM013\*