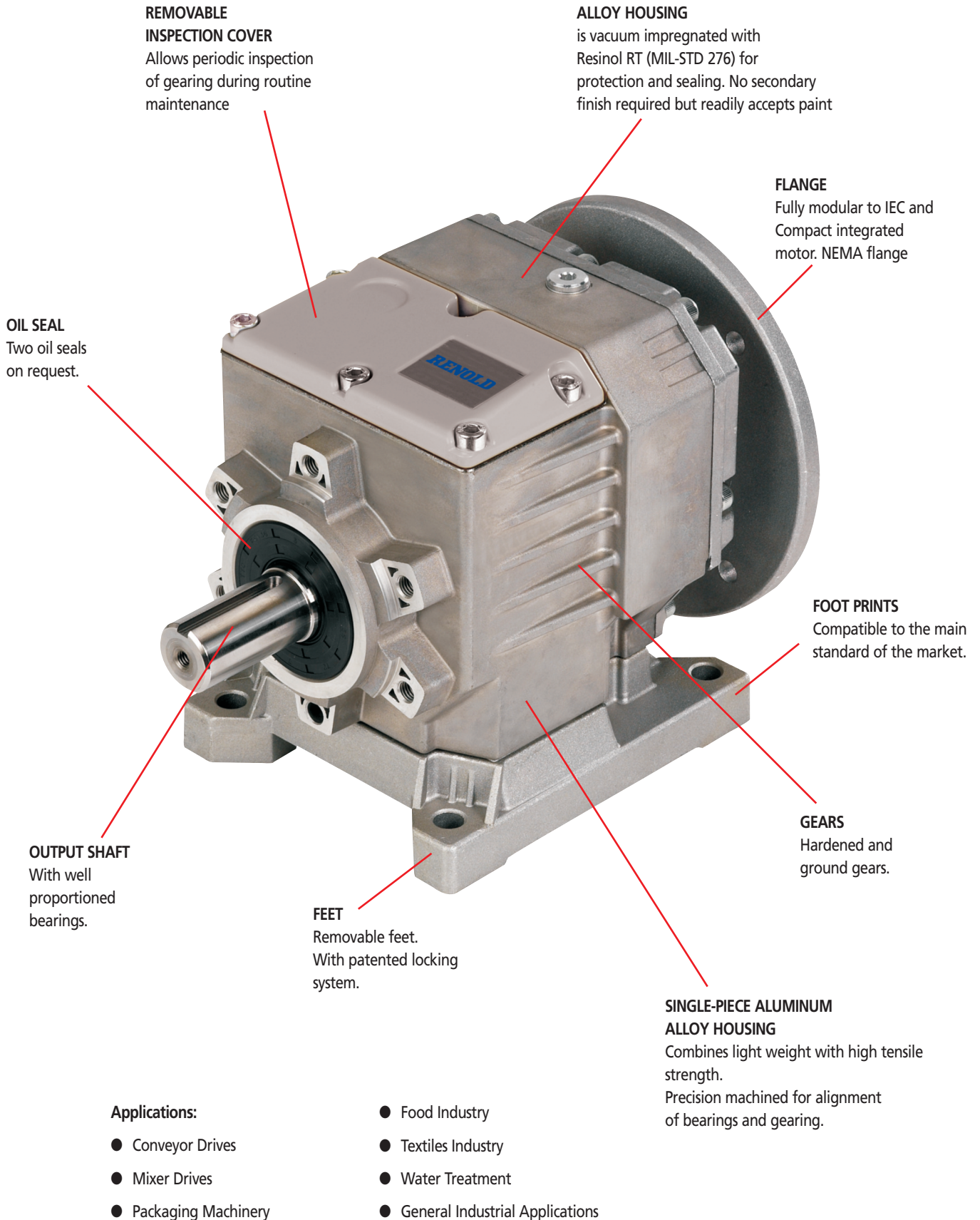


# RP Series Inline Helical Gear Units



**RENOLD**  
Superior Gear Technology

**RENOLD RP Inline Geared Motors - Gear Units**

# IN THIS CATALOGUE

## One Step-Gear



**Compact aluminum in line gearboxes with one stage of reduction.**

Riduttori coassiali in alluminio con uno stadio di riduzione.

**See technical data table.**

*Vedi tabelle dati tecnici.*

**Paragraph 5**

## Coaxial-Gear



**Compact aluminum in line gearboxes with two or three stages of reduction.**

Riduttori coassiali in alluminio con due o tre stadi di riduzione.

**See technical data table.**

*Vedi tabelle dati tecnici.*

**Paragraph 6**

## Coaxial-Gear



**Cast iron gearboxes with one stage of reduction.**

Riduttori in ghisa ad uno stadio di riduzione.

**See technical data table.**

*Vedi tabelle dati tecnici.*

**Paragraph 7**

## Coaxial-Gear



**Cast iron gearboxes with two or three stages of reduction.**

Riduttori in ghisa con due o tre stadi di riduzione.

**See technical data table.**

*Vedi tabelle dati tecnici.*

**Paragraph 7**

## Aluminum electric motors



**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.*

**See technical data table.**

*Vedi tabelle dati tecnici.*

**Pag. M-1 ÷ M-2**

# Aluminum one step gearboxes

A modular and compact product

## Alloy housing

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

## Flange

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

## Gears

Hardened and ground gears.

## Removable inspection cover

Allows periodic inspection of gearing during routine maintenance

## Output shaft

With well proportioned bearings

## Feet

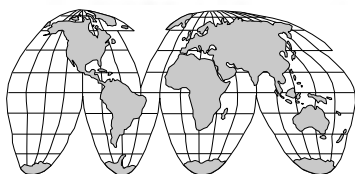
Removable feet.

## Single-piece aluminum alloy housing

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

Ideal for use as first step with wormgearboxes.

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 / En la página



Types / Tipi /  
Arten / Tipos →

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

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



Types / Tipi /  
Arten / Tipos →

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

## ● Get on our web for the selected type/size the detailed informations

For : / Per : / Für : / Para :

**Selection guide - fs**  
Guida alla selezione

**Mounting pos. - Lubrication**  
Pos. di montaggio - lubrificazione

**2 - 6 poles selection**  
Selezione 2 - 6 poli

**Radial - axial loads**  
Carichi radiali e assiali

**Reversibility**  
Reversibilità

**Thermal limit**  
Limite termico

**Atex certification**  
Certificazione Atex

**Accessories**  
Accessori

**Download 3D drawings**  
Download disegni 3D

**Interchangeability**  
Intercambiabilità

**Installation and maintenance**  
Installazione, uso e manutenzione

**Spare parts list**  
Liste parti di ricambio

Type - Tipo - Typ - Tipo

Size - Grandezza  
Grösse - Tomaño

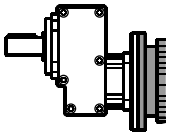
Mounting - Montaggio - Montage - Tipo de montaje

**P**

**311A**

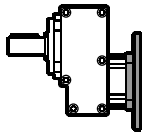
**H1**

Aluminum one step gear  
Riduttori in alluminio a uno stadio



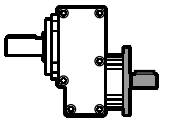
With IEC motor

**M**



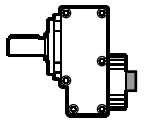
With motor flange

**P**



With male input shaft

**R**

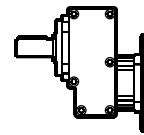


Modular Base

**B**

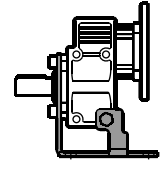
**1** Stages  
Riduzioni  
Stufen  
Etapas

**211A**  
**311A**  
**411A**  
**511A**



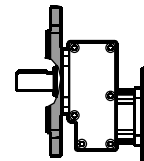
Without flange / feet

**-N**



Mounted feet

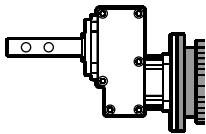
**H1**



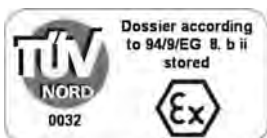
Output flange mounted

**-F**

Special output shaft  
Albero uscita speciale



Only on request for Q.ty  
A richiesta per quantità

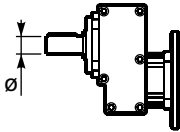
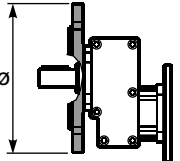
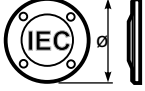






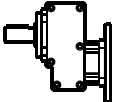

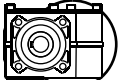
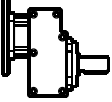
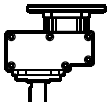
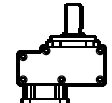


A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX

On request we can deliver our products according to the ATEX

Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern

A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Ratio - Rapporto Untersetzung Relación	Output shaft Albero uscita Abtriebswelle Eje en salida	Output flange Flangia uscita Ausgangsflansch Brida en salida	Motor size Grandezza motore Motor Grösse Tamaño motor	Terminal box position Posizione morsettiere Klemmkastenlage Posición caja de bornes	Mounting position Posizione montaggio Einbaulage Position 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 tabelle dati tecnici.</p> <p>Technisches Datenblatt beachten.</p> <p>Ver tabla datos técnicos</p>	 <p>→ STANDARD</p> <p>211A</p> <p><b>S</b> → <b>∅14</b></p> <p>311A</p> <p><b>S</b> → <b>∅14</b></p> <p><b>C</b> → <b>∅19</b></p> <p><b>E</b> → <b>∅24</b></p> <p>411A</p> <p><b>S</b> → <b>∅14</b></p> <p><b>C</b> → <b>∅19</b></p> <p><b>E</b> → <b>∅24</b></p> <p>511A</p> <p><b>C</b> → <b>∅19</b></p> <p><b>E</b> → <b>∅24</b></p> <p><b>G</b> → <b>∅28</b></p>	 <p><b>N</b> Senza flangia Without flange</p> <p>311A</p> <p><b>1</b> → <b>∅120</b></p> <p><b>2</b> → <b>∅140</b></p> <p><b>3</b> → <b>∅160</b></p> <p><b>4</b> → <b>∅200</b></p> <p>411A</p> <p><b>1</b> → <b>∅120</b></p> <p><b>2</b> → <b>∅140</b></p> <p><b>3</b> → <b>∅160</b></p> <p><b>4</b> → <b>∅200</b></p> <p>511A</p> <p><b>1</b> → <b>∅120</b></p> <p><b>2</b> → <b>∅140</b></p> <p><b>3</b> → <b>∅160</b></p> <p><b>4</b> → <b>∅200</b></p> <p><b>5</b> → <b>∅250</b></p>	<p>Standard Flange Flangia Standard</p>  <table border="1"> <tr> <td>B5</td> <td>B14</td> </tr> <tr> <td><b>A</b>=56 (∅120)</td> <td><b>O</b>=56 (∅80)</td> </tr> <tr> <td><b>B</b>=63 (∅140)</td> <td><b>P</b>=63 (∅90)</td> </tr> <tr> <td><b>C</b>=71 (∅160)</td> <td><b>Q</b>=71 (∅105)</td> </tr> <tr> <td><b>D</b>=80 (∅200)</td> <td><b>R</b>=80 (∅120)</td> </tr> <tr> <td><b>E</b>=90 (∅200)</td> <td><b>T</b>=90 (∅140)</td> </tr> <tr> <td><b>F</b>=100+112 (∅250)</td> <td><b>U</b>=100+112 (∅160)</td> </tr> <tr> <td></td> <td><b>V</b>=132 (∅200)</td> </tr> </table> <p>Type R / Tipo R</p>  <table border="1"> <tr> <td>211A 311A</td> <td>511A</td> </tr> <tr> <td><b>1</b> → <b>∅14</b></td> <td><b>3</b> → <b>∅24</b></td> </tr> <tr> <td>411A</td> <td></td> </tr> <tr> <td><b>2</b> → <b>∅19</b></td> <td></td> </tr> </table> <p>Without flange / Senza flangia</p>  <table border="1"> <tr> <td>211A 311A</td> <td>411A</td> </tr> <tr> <td><b>Z</b> → <b>∅9</b> (56B5)</td> <td><b>1</b> → <b>∅14</b> (71B5)</td> </tr> <tr> <td><b>0</b> → <b>∅11</b> (63B5)</td> <td><b>2</b> → <b>∅19</b> (80B5)</td> </tr> <tr> <td><b>1</b> → <b>∅14</b> (71B5)</td> <td><b>3</b> → <b>∅24</b> (90B5)</td> </tr> <tr> <td>511A</td> <td></td> </tr> <tr> <td><b>2</b> → <b>∅19</b> (80B5)</td> <td></td> </tr> <tr> <td><b>3</b> → <b>∅24</b> (90B5)</td> <td></td> </tr> <tr> <td><b>4</b> → <b>∅28</b> (100B5)</td> <td></td> </tr> </table> <p>→ STANDARD</p>	B5	B14	<b>A</b> =56 (∅120)	<b>O</b> =56 (∅80)	<b>B</b> =63 (∅140)	<b>P</b> =63 (∅90)	<b>C</b> =71 (∅160)	<b>Q</b> =71 (∅105)	<b>D</b> =80 (∅200)	<b>R</b> =80 (∅120)	<b>E</b> =90 (∅200)	<b>T</b> =90 (∅140)	<b>F</b> =100+112 (∅250)	<b>U</b> =100+112 (∅160)		<b>V</b> =132 (∅200)	211A 311A	511A	<b>1</b> → <b>∅14</b>	<b>3</b> → <b>∅24</b>	411A		<b>2</b> → <b>∅19</b>		211A 311A	411A	<b>Z</b> → <b>∅9</b> (56B5)	<b>1</b> → <b>∅14</b> (71B5)	<b>0</b> → <b>∅11</b> (63B5)	<b>2</b> → <b>∅19</b> (80B5)	<b>1</b> → <b>∅14</b> (71B5)	<b>3</b> → <b>∅24</b> (90B5)	511A		<b>2</b> → <b>∅19</b> (80B5)		<b>3</b> → <b>∅24</b> (90B5)		<b>4</b> → <b>∅28</b> (100B5)		 <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>B3/B5</b></p> <p>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></p> <p>Specify only for vertical positions</p> <p>Specificare solo per posizione verticale</p>
B5	B14																																												
<b>A</b> =56 (∅120)	<b>O</b> =56 (∅80)																																												
<b>B</b> =63 (∅140)	<b>P</b> =63 (∅90)																																												
<b>C</b> =71 (∅160)	<b>Q</b> =71 (∅105)																																												
<b>D</b> =80 (∅200)	<b>R</b> =80 (∅120)																																												
<b>E</b> =90 (∅200)	<b>T</b> =90 (∅140)																																												
<b>F</b> =100+112 (∅250)	<b>U</b> =100+112 (∅160)																																												
	<b>V</b> =132 (∅200)																																												
211A 311A	511A																																												
<b>1</b> → <b>∅14</b>	<b>3</b> → <b>∅24</b>																																												
411A																																													
<b>2</b> → <b>∅19</b>																																													
211A 311A	411A																																												
<b>Z</b> → <b>∅9</b> (56B5)	<b>1</b> → <b>∅14</b> (71B5)																																												
<b>0</b> → <b>∅11</b> (63B5)	<b>2</b> → <b>∅19</b> (80B5)																																												
<b>1</b> → <b>∅14</b> (71B5)	<b>3</b> → <b>∅24</b> (90B5)																																												
511A																																													
<b>2</b> → <b>∅19</b> (80B5)																																													
<b>3</b> → <b>∅24</b> (90B5)																																													
<b>4</b> → <b>∅28</b> (100B5)																																													

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / elevación

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

Rotation / rotazione / drehung / rotation

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

Linear movement / traslazione / linearbewegung / translacion

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

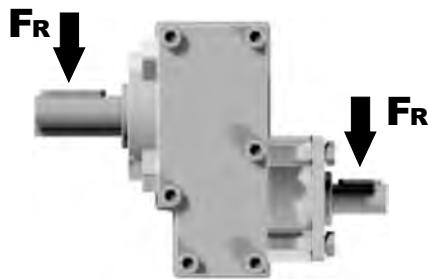
TORQUE / COPPIA / DREHMOMENT / PAR

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

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

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / 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.
- 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 / Par torsion	
<b>d</b>	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diámetro primitivo	
<b>f<sub>k</sub></b>	Coefficiente di trasformazione / Factor / Faktor / Coefficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engranaje 1.25 Catena / Chain sprockets / Antriebskette / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / 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.
- 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 / Cómo seleccionar un reductor

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

Nominal power  
Potenza nominale  
Max. mögliche Leistung  
Potencia nominal

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

Flange code  
Codice flangia  
Flanschtype  
Código bridas

Input speed  
Velocità in entrata  
Eintriebsdrehzahl  
Velocidad de entrada

Gear size  
Grandezza riduttore  
Getriebegröße  
Tamaño reductor

Motor power  
Potenza motore  
Motorleistung  
Potencia motor

# 311A

## One step 30Nm

Rating - Aluminum ONE STEP GEARBOXES

**QUICK SELECTION / Selezione velocità** 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  Ø	Ratios code 	
							B	C	O	P	Q			
892	1.57	0.37	3.9	3.3	1.24	13	63	71	56	63	71	2844	standard Ø14	-
493	2.84	0.37	7.0	3.3	1.21	23			C	C		1954		
426	3.29	0.37	8.1	3.2	1.18	26			C	C		1756		
362	3.87	0.37	9.6	2.9	1.08	28			C	C		1558		

**C** Ratio  
Rapporto  
Untersetzung  
Relación

Transmitted torque  
Momento torcente trasmesso  
Mögliche Drehmomente  
Par transmitido

Service factor  
Fattore di servizio  
Betriebsfaktor  
Factor de servicio

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

Notes  
Note  
Anmerkungen  
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  
Bridas disponibles

<b>B)</b>	Mounting with reduction ring Montaggio con boccola di riduzione Reduzierhülsen Montaje con casquillo de reducción	
<b>C)</b>	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Posición agujeros brida / base motor	
<b>B)</b>	Available without reduction bushes Disponibile anche senza boccola Auch ohne Reduzierbuchse verfügbar Disponible también 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	Seleccionar el par deseado (incluyendo el factor de servicio)
B	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	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	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)	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		
							63	71	80	90	56	63	71	80		
682.1	<b>2.05</b>	0.37	5.1	2.0	<b>0.73</b>	<b>10</b>				C	C			1939	01	
595.0	<b>2.35</b>	0.37	5.8	2.1	<b>0.76</b>	<b>12</b>				C	C			1740	02	
500.0	<b>2.80</b>	0.37	6.9	2.0	<b>0.75</b>	<b>14</b>				C	C			1542	03	
413.6	<b>3.38</b>	0.37	8.4	2.0	<b>0.75</b>	<b>17</b>				C	C			1344	04	
297.9	<b>4.70</b>	0.37	11.6	1.7	<b>0.64</b>	<b>20</b>				C	C			1047	05	
225.0	<b>6.22</b>	0.37	15.4	1.5	<b>0.54</b>	<b>23</b>				C	C			956	06	
169.0	<b>8.28</b>	0.37	20.5	1.0	<b>0.37</b>	<b>20</b>				C	C			758	07	
142.4	<b>9.83</b>	0.25	16.4	1.0	<b>0.25</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. For complete documentation please visit our web site.

**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. Per la documentazione completa consulta il nostro sito.

**D** Das Getriebe **211A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt. Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

#### LUBRICATION 211A Oil Quantity 0.05 Lt.

**AGIP** Telium VSF 320

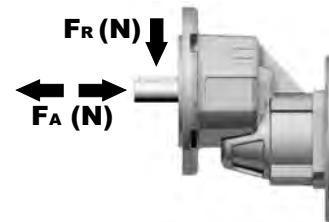
**SHELL** Omala S4 WE 320

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

#### RADIAL AND AXIAL LOADS

##### Output shaft

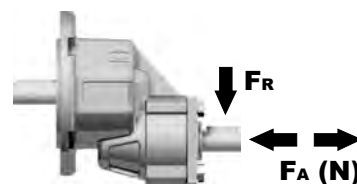
Albero di uscita



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

##### Input shaft

albero in entrata



$n_2$	FA	FR
1400	168	840
900	192	960

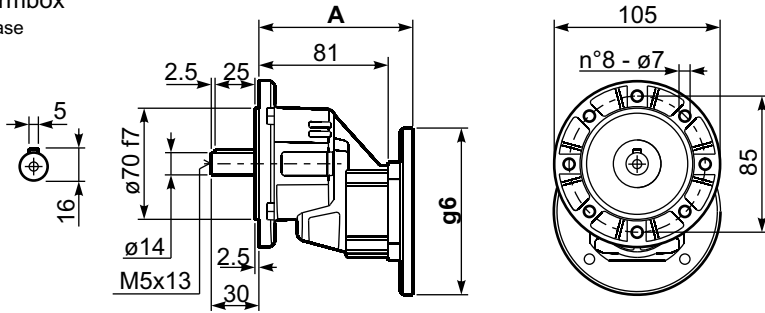
\*Strong axial loads in the DX direction are not allowed.  
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

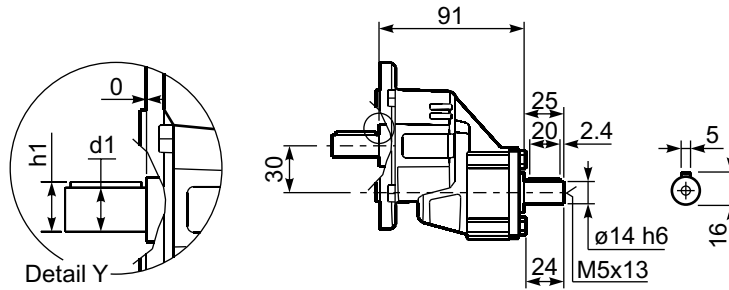
Gearbox weight  
peso riduttore **1.40 kg**



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			
892	<b>1.57</b>	0.37	3.9	3.3	<b>1.24</b>	<b>13</b>			C	C		2844	standard ø14	01
493	<b>2.84</b>	0.37	7.0	3.3	<b>1.21</b>	<b>23</b>			C	C		1954		02
426	<b>3.29</b>	0.37	8.1	3.2	<b>1.18</b>	<b>26</b>			C	C		1756		03
362	<b>3.87</b>	0.37	9.6	2.9	<b>1.08</b>	<b>28</b>			C	C		1558		04
303	<b>4.62</b>	0.37	11.4	2.6	<b>0.97</b>	<b>30</b>			C	C		1360		05
222	<b>6.30</b>	0.37	15.6	2.2	<b>0.83</b>	<b>35</b>			C	C		1063		06
170	<b>8.22</b>	0.37	20.3	1.9	<b>0.69</b>	<b>38</b>			C	C		974		07
130	<b>10.86</b>	0.37	26.8	1.0	<b>0.38</b>	<b>28</b>			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.  
For complete documentation please visit our web site.

**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.  
Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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.  
Para documentación completa, consultar nuestra Web.

### 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

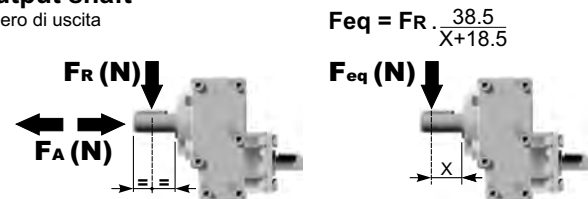
tab. 1

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

### RADIAL AND AXIAL LOADS

#### Output shaft

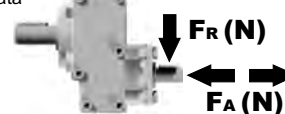
Albero di uscita



$n_2$	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



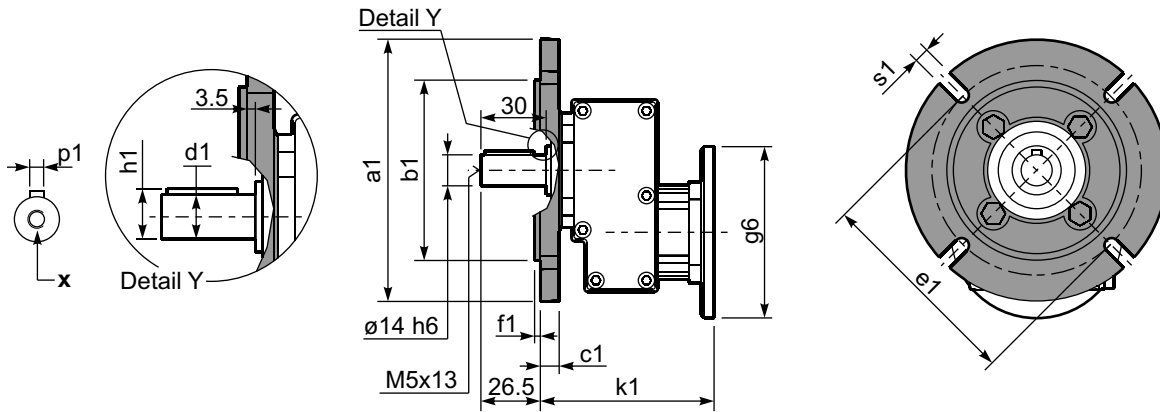
$n_1$	FA	FR
1400	180	860
900	200	980

tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

Gearbox weight  
peso riduttore **2.50 kg**



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

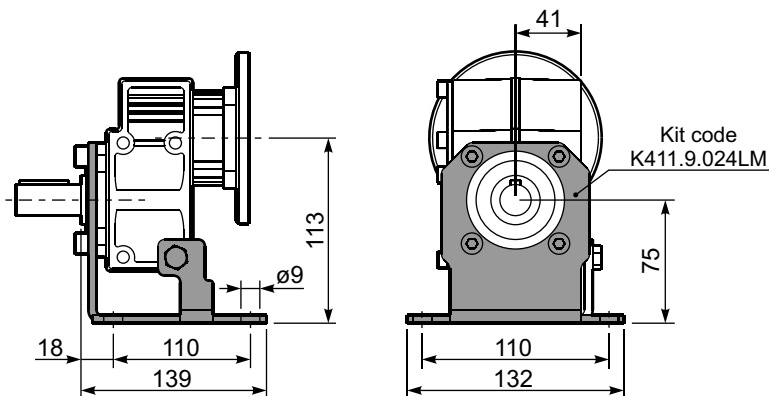
	Shaft - d1	p1	h1	x
Standard	∅ 14x30	5	16	M5x13
On request A richiesta	∅ 19x40 ∅ 24x40	6 8	21.5 27	M6x16 M6x16

**Available output flanges / flange di uscita**

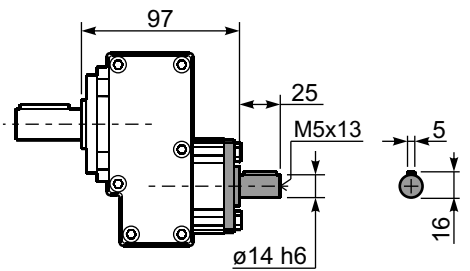
a1 ∅	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

\*Holes position  
posizione fori

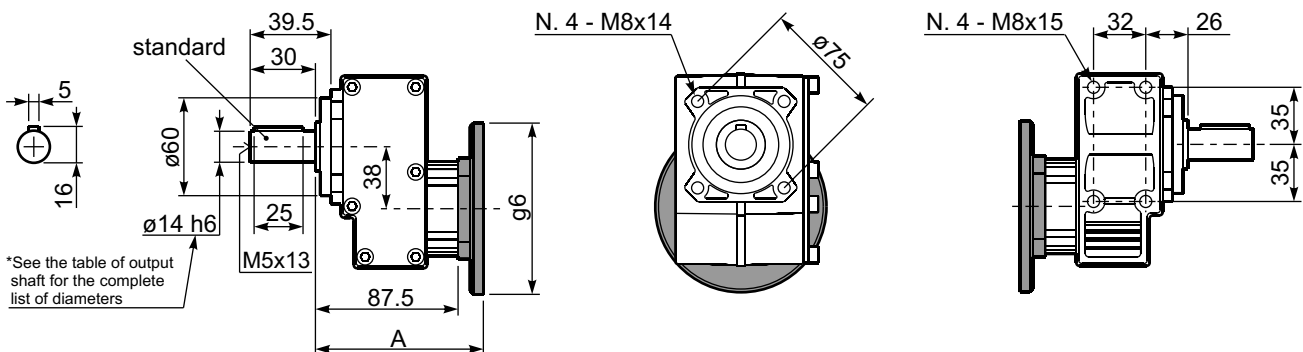
**P311-H1...** With feet  
Con piedini



**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			
892	<b>1.57</b>	1.5	15.7	1.3	<b>1.90</b>	<b>20</b>	B				C	C		2844	standard ø19  On request ø14 ø24	01
493	<b>2.84</b>	1.5	28.4	1.2	<b>1.84</b>	<b>35</b>	B				C	C		1954		02
426	<b>3.29</b>	1.5	32.9	1.2	<b>1.73</b>	<b>38</b>	B				C	C		1756		03
362	<b>3.87</b>	1.5	38.7	1.0	<b>1.54</b>	<b>40</b>	B				C	C		1558		04
303	<b>4.62</b>	1.5	46.1	1.0	<b>1.54</b>	<b>47</b>	B				C	C		1360		05
222	<b>6.30</b>	1.1	46.0	1.0	<b>1.10</b>	<b>46</b>	B				C	C		1063		06
170	<b>8.22</b>	0.55	30.4	1.2	<b>0.69</b>	<b>38</b>	B				C	C		974		07
130	<b>10.86</b>	0.37	26.8	1.0	<b>0.38</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.  
For complete documentation please visit our web site.

**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.  
Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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.  
Para documentación completa, consultar nuestra Web.

▪ **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

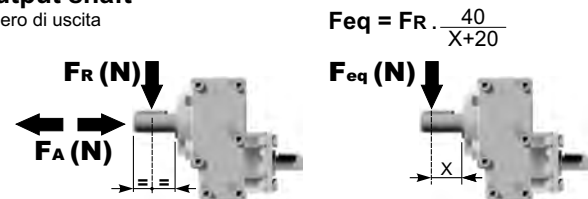
tab. 1

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

**RADIAL AND AXIAL LOADS**

**Output shaft**

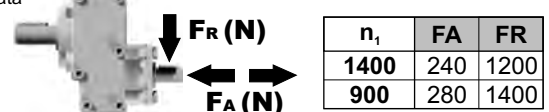
Albero di uscita



$n_2$	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

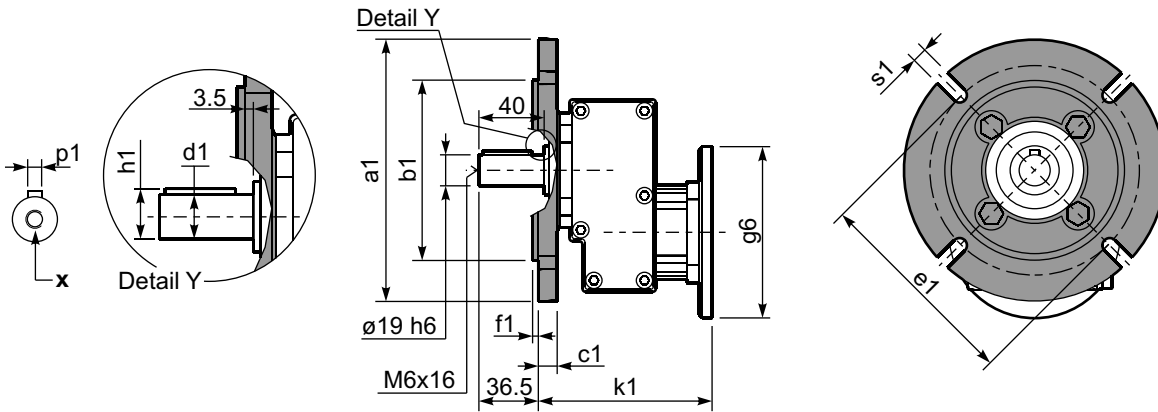


tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

Gearbox weight  
peso riduttore **3.20 kg**



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

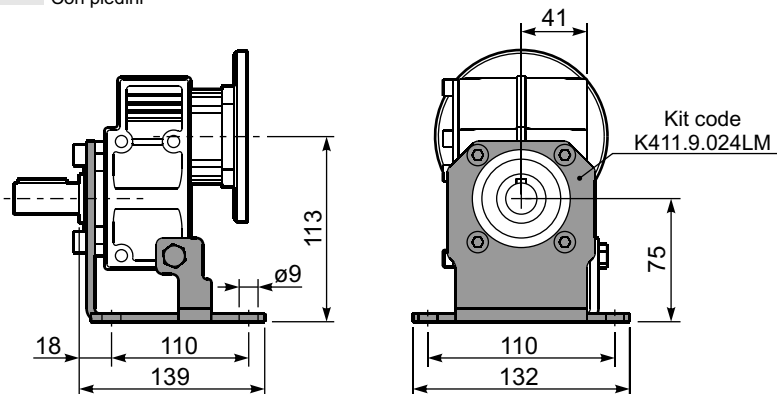
	Shaft - d1	p1	h1	x
Standard	∅ 19x40	6	21.5	M6x16
On request A richiesta	∅ 14x30 ∅ 24x40	5 8	16 27	M5x13 M6x16

**Available output flanges / flange di uscita**

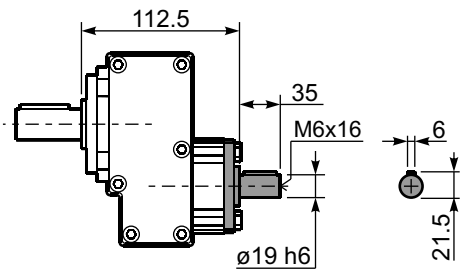
a1 ∅	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

\*Holes position  
posizione fori

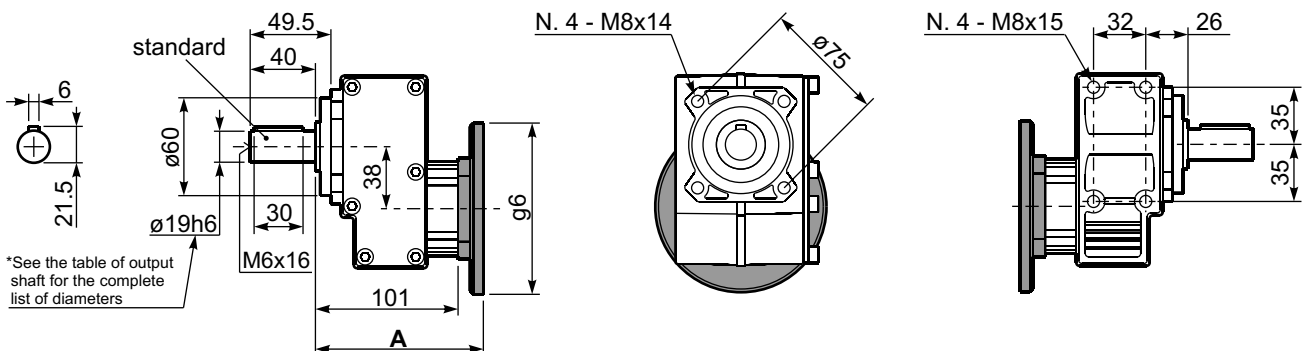
**P411-H1...** With feet  
Con piedini



**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
100/112 B14	119.5	160	123	KC40.4.041



**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	
							C	D	E	F	R	T	U	V			
1077	<b>1.30</b>	4	34	1.2	4.6	40	B								3039	standard ø28  On request ø19 ø24	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	05		
184	<b>7.63</b>	2.2	111	1.0	2.2	110	B							861	06		
133	<b>10.50</b>	1.1	77	1.0	1.1	80	B							663	07		

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

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

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

**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. Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

**LUBRICATION 511A Oil Quantity 0.29 Lt.**

<b>AGIP</b> Telium VSF 320	<b>SHELL</b> Omala S4 WE 320
----------------------------	------------------------------

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

**RADIAL AND AXIAL LOADS**

**Output shaft** Albero di uscita

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

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

$F_{eq}$  (N)

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

**Input shaft** Albero in entrata

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

$n_1$	FA	FR
1400	400	2000
900	440	2200

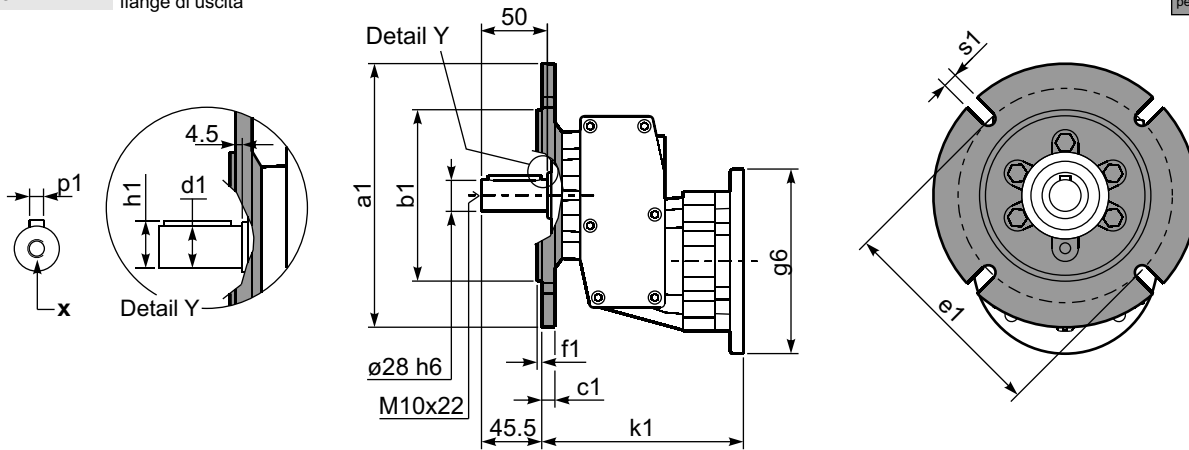
tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.



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

Gearbox weight  
peso riduttore **5.00 kg**



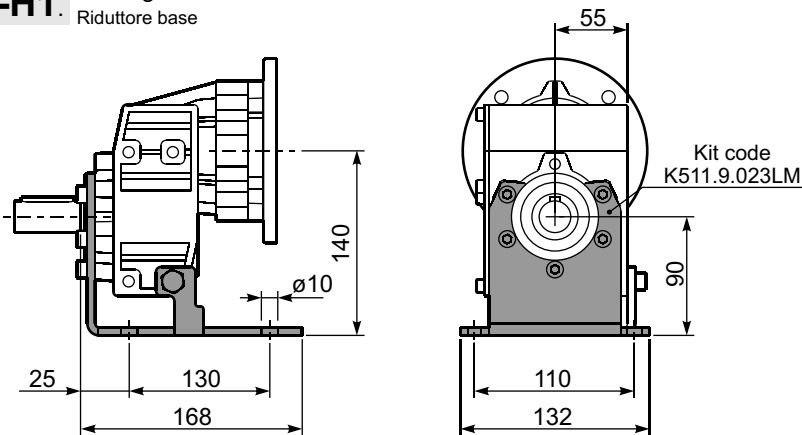
**\*Available output shaft / Albero di uscita**

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

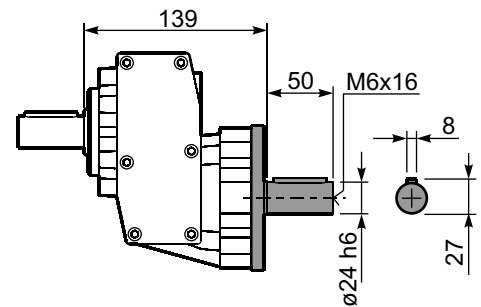
**Available output flanges / flange di uscita**

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

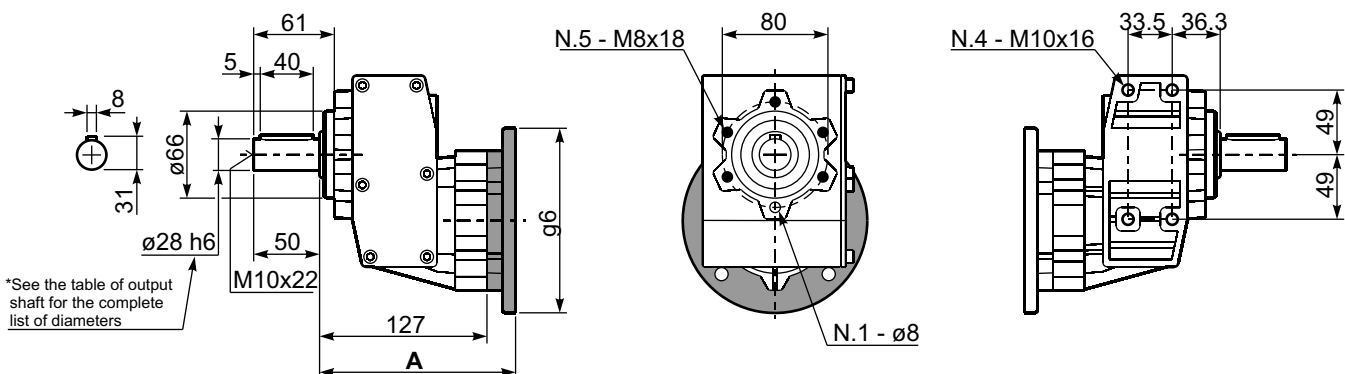
**P511A-H1.** Basic gearbox  
Riduttore base



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



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



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

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

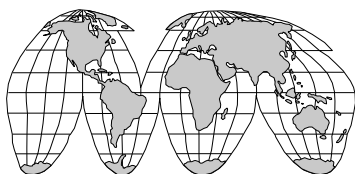
Compatible to the main standard of the market.

Lubricated for life with synthetic oil with operative range from  $-15^{\circ}$  to  $+130^{\circ}\text{C}$



### 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 / En la página



Types / Tipi /  
Arten / Tipos →

6-5	6-7	6-9	6-11	6-13	6-15	6-17	6-19	6-21
202A 70Nm	302A 120Nm	402A 150Nm	403A 150Nm	452A 300Nm	502A 320Nm	503A 320Nm	602A 460Nm	603A 460Nm

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



Types / Tipi /  
Arten / Tipos →

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

## ● Get on our web for the selected type/size the detailed informations

For : / Per : / Für : / Para :

**Selection guide - fs**  
Guida alla selezione

**Mounting pos. - Lubrication**  
Pos. di montaggio - lubrificazione

**2 - 6 poles selection**  
Selezione 2 - 6 poli

**Radial - axial loads**  
Carichi radiali e assiali

**Reversibility**  
Reversibilità

**Thermal limit**  
Limite termico

**Atex certification**  
Certificazione Atex

**Accessories**  
Accessori

**Download 3D drawings**  
Download disegni 3D

**Interchangeability**  
Intercambiabilità

**Installation and maintenance**  
Installazione, uso e manutenzione

**Spare parts list**  
Liste parti di ricambio

Type - Tipo - Typ - Tipo

Size - Grandezza  
Grösse - Tomaño

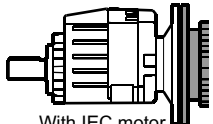
Mounting - Montaggio - Montage - Tipo de montaje

**P**

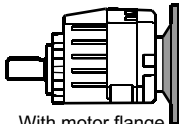
**402A**

**B2**

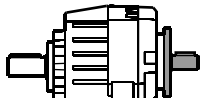
Aluminum coaxial gear boxes  
Riduttori coassiali in alluminio



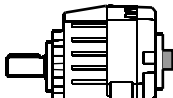
With IEC motor  
**M**



With motor flange  
**P**



With male input shaft  
**R**



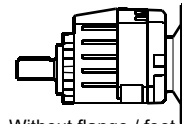
Modular base  
**B**

**2** Stages  
Riduzioni  
Stufen  
Etapas

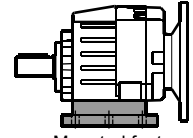
**202A**  
**302A**  
**402A**  
**452A**  
**502A**  
**602A**

**3** Stages  
Riduzioni  
Stufen  
Etapas

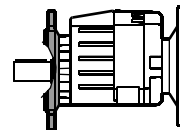
**403A**  
**503A**  
**603A**



Without flange / feet  
**-N**



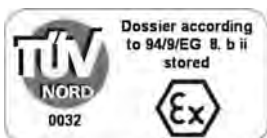
Mounted feet  
**B..**



Output flange mounted  
**-F**

Feet / piedini	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

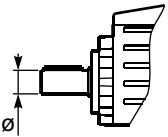
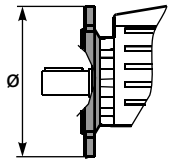
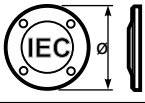




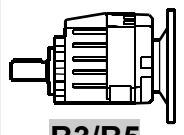
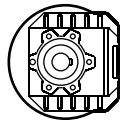
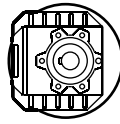
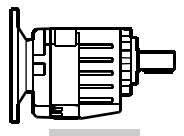
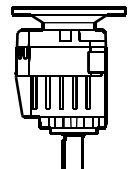
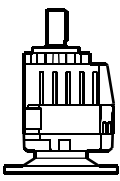
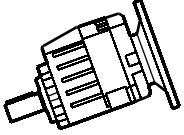


A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX

On request we can deliver our products according to the ATEX

Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern

A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Ratio - Rapporto Untersetzung Relación	Output shaft Albero lento Abtriebswelle Eje en solida	Output flange Flangia uscita Ausgangsflansch Brida en salida	Motor size Grandezza motore Motor Größe Tamaño motor	Terminal box position Posizione morsettiere Klemmkastenlage Posición caja de bornes	Mounting position Posizione montaggio Einbaulage Position de montaje																												
<b>7.33</b>	<b>V</b>	<b>2</b>	<b>C</b>	<b>B</b>	<b>B3</b>																												
<p>See technical data table</p> <p>Vedi tabelle dati tecnici.</p> <p>Technisches Datenblatt beachten.</p> <p>Ver tabla datos técnicos</p>	 <p>→ STANDARD</p> <p>202A</p> <p><b>S</b> ⇒ Ø14 <b>B</b> ⇒ <b>Ø16</b> <b>D</b> ⇒ Ø20 <b>V</b> ⇒ Ø25</p> <p>302A</p> <p><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</p> <p>402A 403A</p> <p><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></p> <p>452A 502A 503A</p> <p><b>E</b> ⇒ Ø24 <b>V</b> ⇒ Ø25 <b>G</b> ⇒ Ø28 <b>H</b> ⇒ <b>Ø30</b> <b>I</b> ⇒ Ø35</p> <p>602A 603A</p> <p><b>G</b> ⇒ Ø28 <b>H</b> ⇒ Ø30 <b>I</b> ⇒ <b>Ø35</b> <b>L</b> ⇒ Ø38 <b>M</b> ⇒ Ø40</p>	 <p><b>N</b> Senza flangia Without flange</p> <p>202A 302A</p> <p><b>1</b> ⇒ Ø120 <b>2</b> ⇒ <b>Ø140</b> <b>3</b> ⇒ Ø160 <b>4</b> ⇒ Ø200</p> <p>402A 403A</p> <p><b>1</b> ⇒ Ø120 <b>2</b> ⇒ <b>Ø140</b> <b>3</b> ⇒ Ø160 <b>4</b> ⇒ Ø200 <b>5</b> ⇒ Ø250</p> <p>452A 502A 503A</p> <p><b>3</b> ⇒ Ø160 <b>4</b> ⇒ <b>Ø200</b> <b>5</b> ⇒ Ø250</p> <p>602A 603A</p> <p><b>3</b> ⇒ Ø160 <b>4</b> ⇒ Ø200 <b>5</b> ⇒ <b>Ø250</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 (Ø120)</td> <td><b>O</b>=56 (Ø80)</td> </tr> <tr> <td><b>B</b>=63 (Ø140)</td> <td><b>P</b>=63 (Ø90)</td> </tr> <tr> <td><b>C</b>=71 (Ø160)</td> <td><b>Q</b>=71 (Ø105)</td> </tr> <tr> <td><b>D</b>=80 (Ø200)</td> <td><b>R</b>=80 (Ø120)</td> </tr> <tr> <td><b>E</b>=90 (Ø200)</td> <td><b>T</b>=90 (Ø140)</td> </tr> <tr> <td><b>F</b>=100+112 (Ø250)</td> <td><b>U</b>=100+112 (Ø160)</td> </tr> <tr> <td></td> <td><b>V</b>=132 (Ø200)</td> </tr> </table> <p>Type R / Tipo R</p> <table border="1"> <tr> <td>202A 403A</td> <td>302A 402A 503A 603A</td> </tr> <tr> <td><b>1</b> ⇒ Ø14</td> <td><b>2</b> ⇒ Ø19</td> </tr> </table> <p>452A 502A 602A</p> <p><b>3</b> ⇒ Ø24</p> <p>Without flange / Senza flangia</p> <table border="1"> <tr> <td>202A 403A</td> <td>302A 402A 503A 603A</td> </tr> <tr> <td><b>Z</b> ⇒ Ø9 (56B5)</td> <td><b>1</b> ⇒ Ø14 (71B5)</td> </tr> <tr> <td><b>0</b> ⇒ Ø11 (63B5)</td> <td><b>2</b> ⇒ Ø19 (80B5)</td> </tr> <tr> <td><b>1</b> ⇒ Ø14 (71B5)</td> <td><b>3</b> ⇒ Ø24 (90B5)</td> </tr> </table> <p>452A 502A 602A</p> <p><b>2</b> ⇒ Ø19 (80B5) <b>3</b> ⇒ Ø24 (90B5) <b>4</b> ⇒ <b>Ø28</b> (100B5)</p> <p>→ STANDARD</p>	<b>B5</b>	<b>B14</b>	<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>V</b> =132 (Ø200)	202A 403A	302A 402A 503A 603A	<b>1</b> ⇒ Ø14	<b>2</b> ⇒ Ø19	202A 403A	302A 402A 503A 603A	<b>Z</b> ⇒ Ø9 (56B5)	<b>1</b> ⇒ Ø14 (71B5)	<b>0</b> ⇒ Ø11 (63B5)	<b>2</b> ⇒ Ø19 (80B5)	<b>1</b> ⇒ Ø14 (71B5)	<b>3</b> ⇒ Ø24 (90B5)	 <p><b>A</b></p>  <p><b>B</b> STANDARD</p>  <p><b>C</b></p>  <p><b>D</b></p>	 <p><b>B3/B5</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></p>  <p><b>V8</b></p> <p>Specify only for vertical positions</p> <p>Specificare solo per posizione verticale</p>
<b>B5</b>	<b>B14</b>																																
<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>V</b> =132 (Ø200)																																
202A 403A	302A 402A 503A 603A																																
<b>1</b> ⇒ Ø14	<b>2</b> ⇒ Ø19																																
202A 403A	302A 402A 503A 603A																																
<b>Z</b> ⇒ Ø9 (56B5)	<b>1</b> ⇒ Ø14 (71B5)																																
<b>0</b> ⇒ Ø11 (63B5)	<b>2</b> ⇒ Ø19 (80B5)																																
<b>1</b> ⇒ Ø14 (71B5)	<b>3</b> ⇒ Ø24 (90B5)																																

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / elevación

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

Rotation / rotazione / drehung / rotation

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

Linear movement / traslazione / linearbewegung / translacion

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

TORQUE / COPPIA / DREHMOMENT / 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 / 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.
- 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 / Par torsion	
<b>d</b>	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diámetro primitivo	
<b>f<sub>k</sub></b>	Coefficiente di trasformazione / Factor / Faktor / Coefficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engranaje 1.25 Catena / Chain sprochets / Antriebskette / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / 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.
- 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 / Cómo seleccionar un reductor

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

Nominal power  
Potenza nominale  
Max. mögliche Leistung  
Potencia nominal

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

Flange code  
Codice flangia  
Flanschttype  
Código bridas

Input speed  
Velocità in entrata  
Eintriebsdrehzahl  
Velocidad de entrada

Gear size  
Grandezza riduttore  
Getriebegröße  
Tamaño reductor

Motor power  
Potenza motore  
Motorleistung  
Potencia motor

# 402A

## Coaxial - Gear 150Nm

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

**C** Ratio  
Rapporto  
Untersetzung  
Relación

Transmitted torque  
Momento torcente trasmesso  
Mögliche Drehmomente  
Par transmitido

Service factor  
Fattore di servizio  
Betriebsfaktor  
Factor de servicio

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

Notes  
Note  
Anmerkungen  
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  
Bridas disponibles

<b>B)</b>	Mounting with reduction ring Montaggio con boccia di riduzione Reduzierhülsen Montaje con casquillo de reducción	
<b>C)</b>	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Posición agujeros brida / base motor	
<b>B)</b>	Available without reduction bushes Disponibile anche senza boccia Auch ohne Reduzierbuchse verfügbar 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	Seleccionar el par deseado (incluyendo el factor de servicio)
<b>B</b>	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	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	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)	Seleccionar la brida disponible (sobre pedido)



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

Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code 
							B	C	O	P	Q		
							63	71*	56	63	71		
407	<b>3.44</b>	0.55**	12	2.0	<b>1.11</b>	25			C	C		2821	01
327	<b>4.28</b>	0.55**	15	1.9	<b>1.07</b>	30			C	C		2818	02
257	<b>5.45</b>	0.55**	20	2.0	<b>1.12</b>	40			C	C		2815	03
225	<b>6.23</b>	0.55**	22	2.0	<b>1.10</b>	45			C	C		1921	04
194	<b>7.20</b>	0.55**	26	1.9	<b>1.06</b>	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	On request	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

**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. [For complete documentation please visit our web site.](#)

**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. [Per la documentazione completa consulta il nostro sito.](#)

**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. [Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.](#)

**E** El reductor tamaño **202A** se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor. [Para documentación completa, consultar nuestra Web.](#)

### 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



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

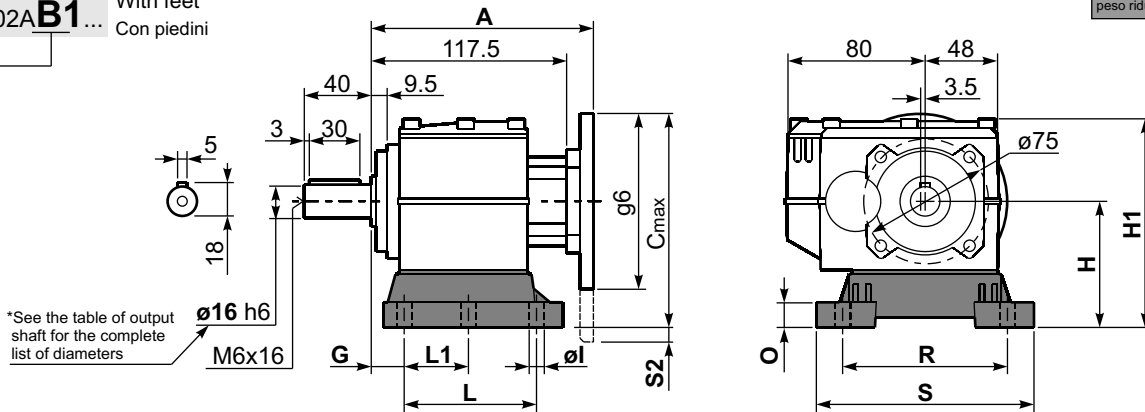
**tab. 2**

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e grandezza specifica nel sito web per la documentazione completa.



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

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



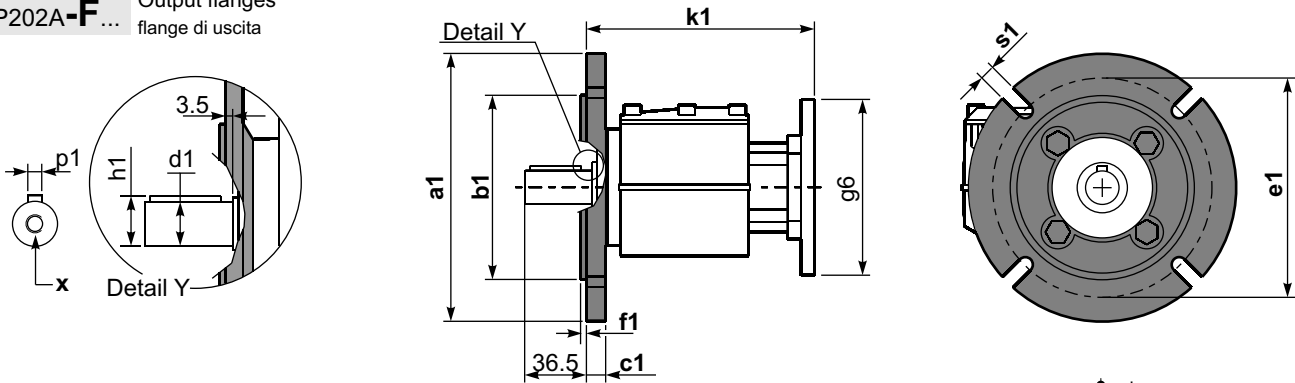
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	ø1	S2 only with motor flange	B5 max. Flange	kit code
<b>B1</b>	112	18	85	110	87	50	130	125	15	9	5	71B5	KC30.9.022
<b>B2</b>	212/3	18	100	130	107.5	60	155	145	5	11			KC30.9.023LM
<b>S1</b>	17-32	18	75	110	110	50	130	115.5	15	9		63B5	KC30.9.024
<b>L3</b>	03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

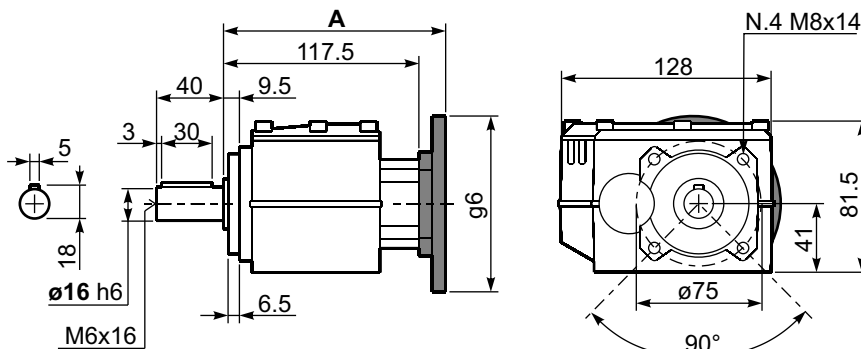
	Shaft - d1	p1	h1	x
Standard	ø 16x40	5	18	M6x16
On request A richiesta	ø 14x30	5	16	M6x16
	ø 20x40	6	22.5	M8x19
	ø 25x50	8	28	M8x19

Available output flanges / flange di uscita

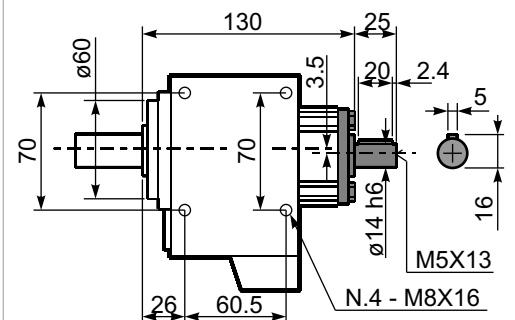
a1 ø	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC40.9.013

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

**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.  
For complete documentation please visit our web site.

**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.  
Per la documentazione completa consulta il nostro sito.

**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.  
Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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.  
Para documentación completa, consultar nuestra Web.

### 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

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



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

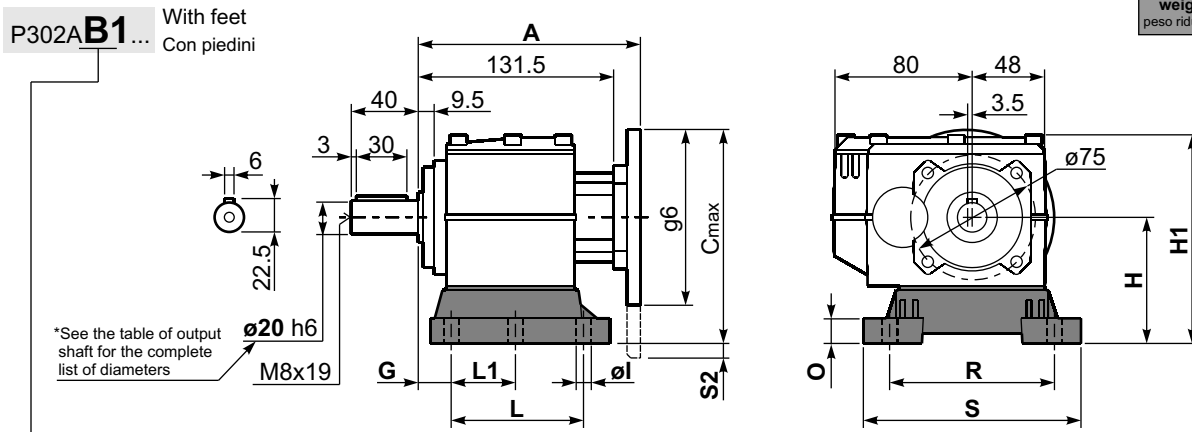


n <sub>1</sub>	FA	FR
1400	226	1130
900	264	1320
500	322	1610

tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

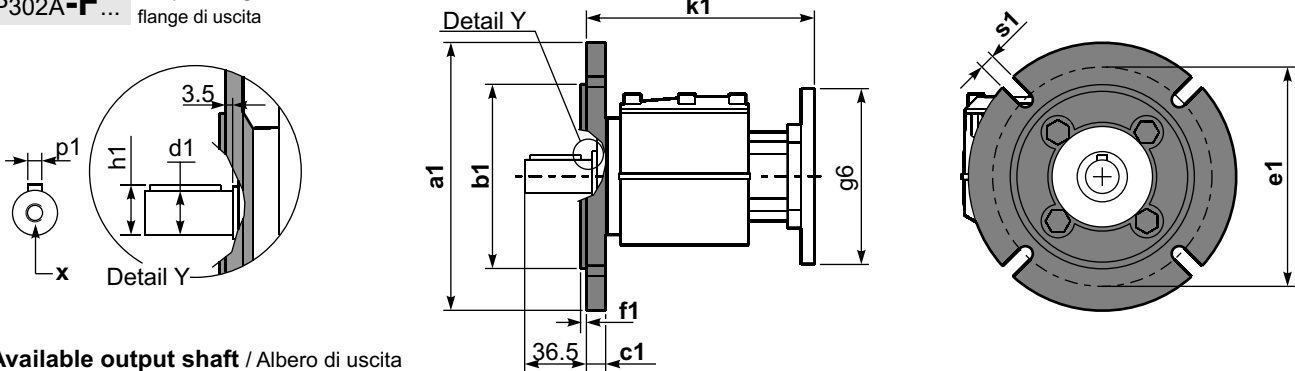
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	$\phi 1$	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	125	15	9	15 80/90B5		KC30.9.022
B2	212/3	18	100	130	107.5	60	155	145	5	11	3.5 80/90B5		KC30.9.023LM
S1	17-32	18	75	110	110	50	130	115.5	15	9	5 71B5	71B5	KC30.9.024
S2	27	25	90	110	130	-	130	135	5	9			KC30.9.025LM
L3	03	12.5	65	91	60	-	105	149	5	9	31.5 80/90B5		KC30.9.026LM
L4	04	13	80	105	76	-	132	165	5	9	16.5 80/90B5		KC30.9.027LM

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

**A see on page bottom**

Most popular types  
 Tipi più diffusi

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



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	$\phi 20 \times 40$	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

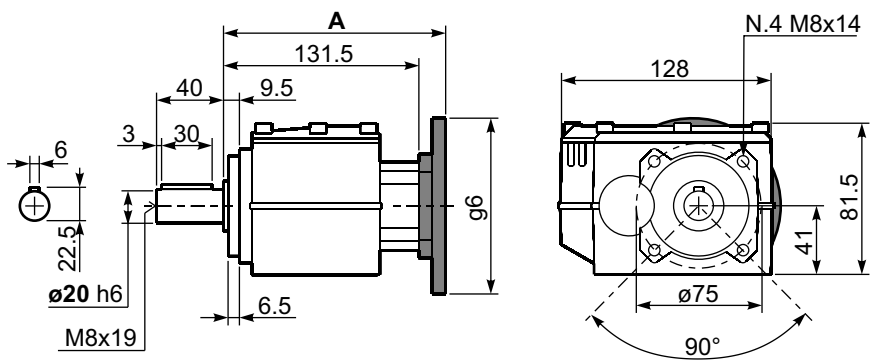
Available output flanges / flange di uscita

a1 $\phi$	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	KC40.9.013

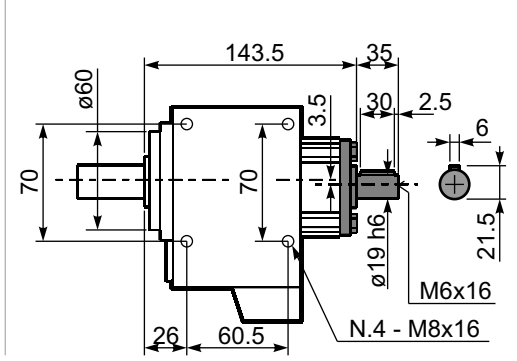
\* Holes position  
 Posizione fori

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 $\varnothing$	Ratios code 
							B	C	D	E	Q	R	T	U		
							63	71	80*	90*	71	80	90	100 112		
398	3.52	3	69	1.2	3.5	80	B				C	C			2821	01
320	4.37	3	86	1.0	3.1	90	B				C	C			2818	02
252	5.55	3	109	0.9	2.8	100	B				C	C			2813	03
220	6.36	2.2	92	1.0	2.3	95	B				C	C			1921	04
191	7.33	2.2	106	1.1	2.5	120	B				C	C			2812	05
177	7.89	2.2	114	1.1	2.3	120	B				C	C			1918	06
139	10.06	2.2	145	1.0	2.3	150	B				C	C			1913	07
120	11.66	1.5	114	1.5	2.3	174	B				C	C			1713	08
106	13.26	1.5	130	1.2	1.8	160	B				C	C			1912	09
102	13.68	1.5	134	1.1	1.6	144	B				C	C			1513	10
91	15.37	1.5	151	1.1	1.6	160	B				C	C			1712	11
86	16.20	1.5	159	0.9	1.3	138	B				C	C			1910	12
78	18.04	1.5	177	0.9	1.4	160	B				C	C			1512	13
74	18.80	1.1	135	1.0	1.1	138	B				C	C			1710	14
65	21.54	1.1	155	1.0	1.1	160	B				C	C			1312	15
63	22.29	1.1	161	1.0	1.1	167	B				C	C			1013	16
53	26.30	0.75	129	1.1	0.80	138	B				C	C			1310	17
47.6	29.40	0.75	144	1.1	0.83	160	B				C	C			1012	18
39	35.91	0.55	129	1.1	0.59	138	B				C	C			1010	19
36.5	38.37	0.55	138	1.2	0.64	160	B				C	C			912	20
29.9	46.86	0.55	169	0.8	0.45	138	B				C	C			910	21
27.6	50.67	0.37	123	1.1	0.40	132	B				C	C			712	22
22.6	61.88	0.37	150	0.9	0.34	138	B				C	C			710	23

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.  
For complete documentation please visit our web site.

**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.  
Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

Standard supplied	For these mounting position specify in the order or add oil					
	Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
0.25 LT	0.30 LT	0.40 LT	0.40 LT	0.40 LT	0.50 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

n <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

**Input shaft**  
Albero di entrata

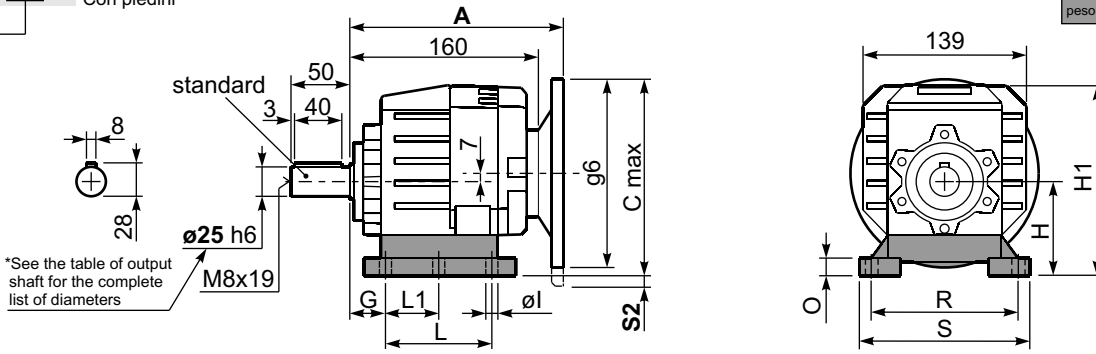
n <sub>1</sub>	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

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



**Feet / piedini**

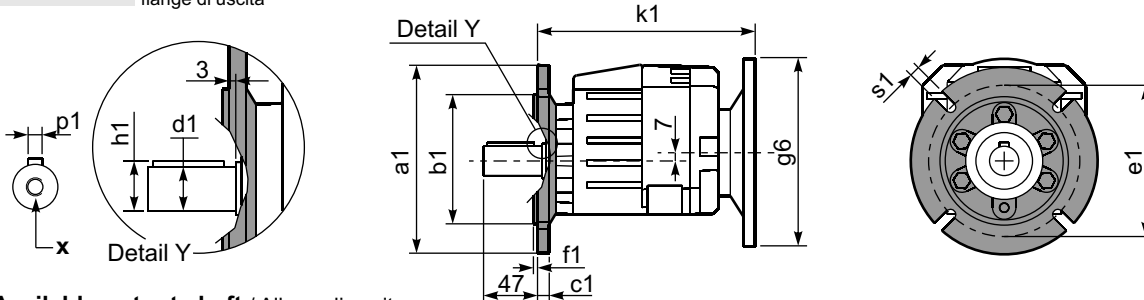
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167	15	-	8 80/90B5	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182	17	11	-	-	KC40.9.025
S1	17	18	75	110	90+110	50	145	155	15	9	18 80/90B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172	20	9	3 80/90B5	-	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	13 80/90B5	-	KC40.9.023
L4	04	13	80	105	76	-	132	162	5	10	13 80/90B5	-	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

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

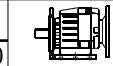


**\*Available output shaft / Albero di uscita**

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

**Available output flanges / flange di uscita**

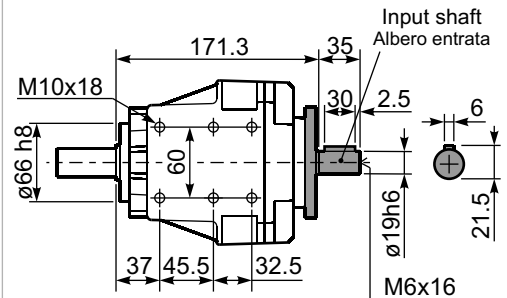
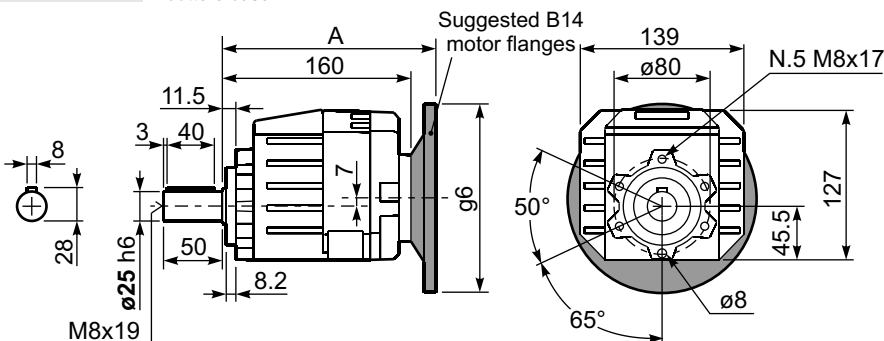
a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	9	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3	9	KC40.9.012
200	130	11	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014



With flange and feet only on request. Ask for compatibility

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

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



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
63 B5	180.5	162	140	183.5	K063.4.041
71 B5	178.5	170	160	181.5	K063.4.042
80/90 B5	180.5	190	200	183.5	K063.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B14	178.5	142.5	105	181.5	K063.4.047
80 B14	179.5	150	120	182.5	K063.4.046
90 B14	180.5	160	140	183.5	K063.4.041
100/112 B14	196.5	170	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		
36.5	<b>38.40</b>	0.37	90	1.9	<b>0.72</b>	<b>175</b>			C	C		171713	01
32.0	<b>43.69</b>	0.37	103	1.5	<b>0.54</b>	<b>149</b>			C	C		191712	02
27.6	<b>50.64</b>	0.37	119	1.3	<b>0.50</b>	<b>160</b>			C	C		171712	03
26.2	<b>53.36</b>	0.37	125	1.1	<b>0.41</b>	<b>138</b>			C	C		191710	04
22.9	<b>61.22</b>	0.37	144	1.1	<b>0.41</b>	<b>160</b>			C	C		191312	05
22.6	<b>61.90</b>	0.37	146	0.9	<b>0.35</b>	<b>138</b>			C	C		171710	06
19.7	<b>70.95</b>	0.37	167	1.0	<b>0.36</b>	<b>160</b>			C	C		131712	07
19.1	<b>73.43</b>	0.37	172	1.0	<b>0.38</b>	<b>175</b>			C	C		101713	08
18.8	<b>74.77</b>	0.25	118	1.2	<b>0.29</b>	<b>138</b>			C	C		191310	09
16.1	<b>86.66</b>	0.25	138	1.0	<b>0.25</b>	<b>138</b>			C	C		131710	10
14.5	<b>96.85</b>	0.25	154	1.0	<b>0.26</b>	<b>160</b>			C	C		101712	11
13.6	<b>102.89</b>	0.25	163	1.1	<b>0.28</b>	<b>180</b>			C	C		101313	12
11.1	<b>126.40</b>	0.25	200	0.8	<b>0.20</b>	<b>160</b>			C	C		91712	13
10.3	<b>135.69</b>	0.25	215	0.7	<b>0.19</b>	<b>160</b>			C	C		101312	14
8.5	<b>165.70</b>	0.12	126	1.1	<b>0.13</b>	<b>138</b>			C	C		101310	15
7.9	<b>177.09</b>	0.12	135	1.2	<b>0.14</b>	<b>160</b>			C	C		91312	16
6.5	<b>216.30</b>	0.12	164	0.8	<b>0.10</b>	<b>138</b>			C	C		91310	17

The dynamic efficiency is **0.93** for all ratios

**Motor Flanges Available**  
Flange Motore Disponibili

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

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



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

**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. For complete documentation please visit our web site.

**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. Per la documentazione completa consulta il nostro sito.

**D** Das Getriebe **403A** 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. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

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

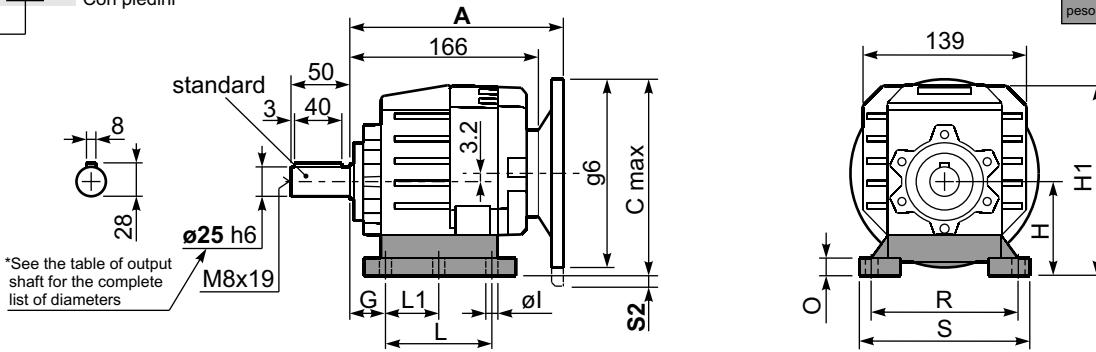
RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = F_R \cdot \frac{46}{X+21}$					
n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	310	1550	140	406	2030	70	540	2700
250	330	1650	120	448	2240	40	600	3000
200	360	1800	85	480	2400	15	600	3000
<b>Input shaft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

**tab. 2**

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P403A **B1** ... With feet  
Con piedini

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



**Feet / piedini**

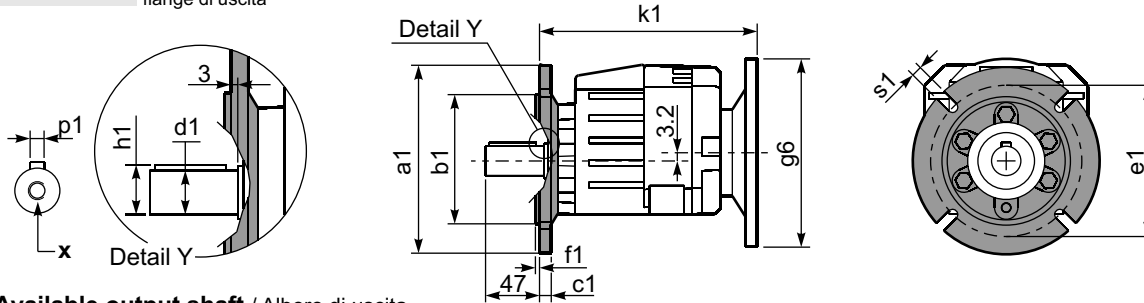
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167	15	-	8 80/90B5	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182	17	11	-	-	KC40.9.025
S1	17	18	75	110	90+110	50	145	155	15	9	18 80/90B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172	20	9	3 80/90B5	-	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	13 80/90B5	-	KC40.9.023
L4	04	13	80	105	76	-	132	162	5	10	13 80/90B5	-	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

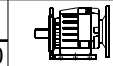


**\*Available output shaft / Albero di uscita**

	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**

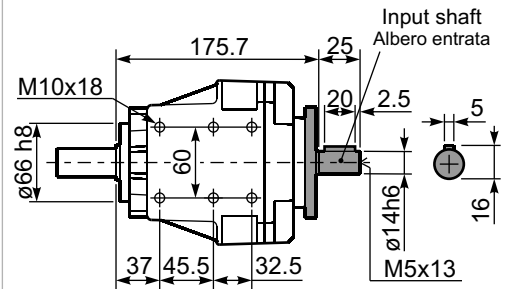
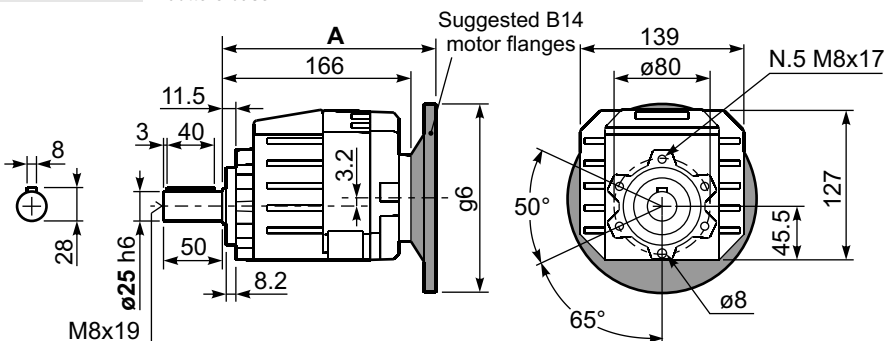
a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	9	KC40.9.010
140	95	10	115	3	9	KC40.9.011
160	110	10	130	3	9	KC40.9.012
200	130	11	165	3.5	11	KC40.9.013
250	180	11.5	215	3.5	14	KC40.9.014



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	201.2	140	185.5	K050.4.041
71 B5	180.5	211.2	160	183.5	K050.4.042

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
56 B14	186.5	170.2	80	189.5	KC40.4.049
63 B14	181.5	176.2	90	184.5	K050.4.047
71 B14	182	183.7	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	R	T	U	V		
							71	80	90	100* 112	80	90	100 112	132		
388	<b>3.61</b>	4	95	1.6	<b>6.3</b>	<b>150</b>	B								3018	01
331	<b>4.23</b>	4	111	1.5	<b>6.1</b>	<b>170</b>	B								3016	02
279	<b>5.01</b>	4	131	1.5	<b>6.1</b>	<b>200</b>	B								3014	03
231	<b>6.07</b>	4	159	1.6	<b>6.3</b>	<b>250</b>	B								3012	04
206	<b>6.81</b>	4	178	1.6	<b>6.2</b>	<b>277</b>	B								2018	05
176	<b>7.96</b>	4	209	1.4	<b>5.8</b>	<b>300</b>	B								2016	06
148	<b>9.45</b>	4	248	1.2	<b>4.9</b>	<b>304</b>	B								2014	07
122	<b>11.43</b>	4	299	1.0	<b>4.0</b>	<b>300</b>	B								2012	08
99	<b>14.21</b>	3	279	0.9	<b>2.8</b>	<b>265</b>	B								2010	09
84	<b>16.62</b>	3	327	0.9	<b>2.8</b>	<b>304</b>	B								1314	10
70	<b>20.10</b>	2.2	290	1.0	<b>2.3</b>	<b>300</b>	B								1312	11
56	<b>24.98</b>	1.85	303	0.9	<b>1.6</b>	<b>265</b>	B								1310	12
47.6	<b>29.41</b>	1.5	289	1.1	<b>1.6</b>	<b>304</b>	B								814	13
39.3	<b>35.58</b>	1.5	349	0.9	<b>1.3</b>	<b>300</b>	B								812	14
34.6	<b>40.50</b>	1.1	292	1.0	<b>1.1</b>	<b>290</b>	B								614	15
31.7	<b>44.22</b>	1.1	319	0.8	<b>0.92</b>	<b>265</b>	B								810	16
28.6	<b>49.00</b>	0.75	241	1.2	<b>0.93</b>	<b>300</b>	B								612	17
23.0	<b>60.90</b>	0.75	299	0.9	<b>0.66</b>	<b>265</b>	B								610	18

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

\*Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14

\* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

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

**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. Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

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

**Output shaft / Albero di uscita**

$F_{eq} = FR \cdot \frac{51}{X+21}$

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

**Input shaft / Albero in entrata**

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

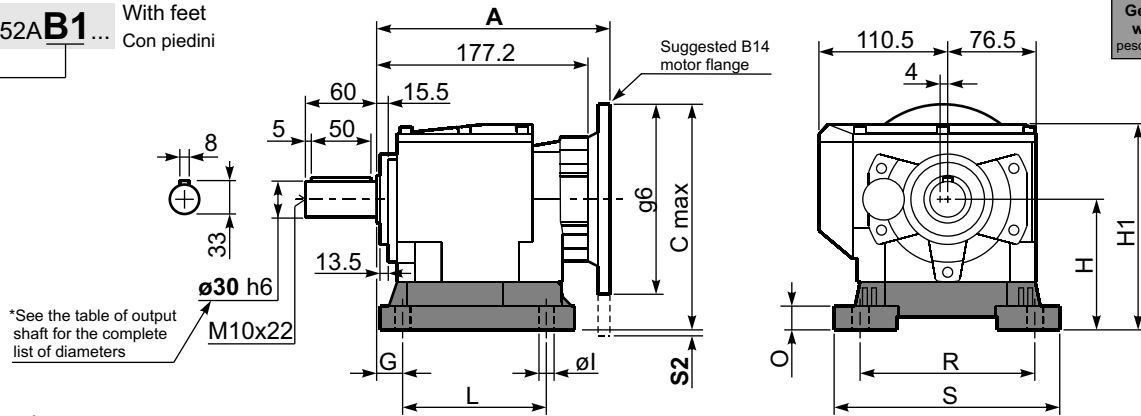
tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.



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

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



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

**Feet / piedini**

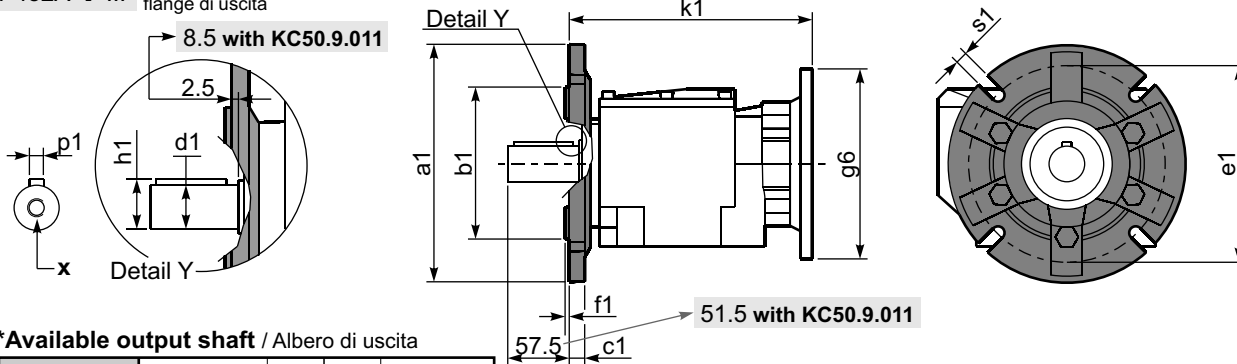
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
<b>B3</b>	312/3	18	110	160	130	190	162	20	11	15 100/112B5		KC50.9.024
<b>B4</b>	30/35	20	130	180	149.5	216	182	18	14			KC60.9.024
<b>S4</b>	47-57	30	115	135	165	170	167	24	13.5		80/90B5	KC50.9.022
<b>H3</b>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

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

**A see on page bottom**

Most popular types  
Tipi più diffusi

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



\*Available output shaft / Albero di uscita

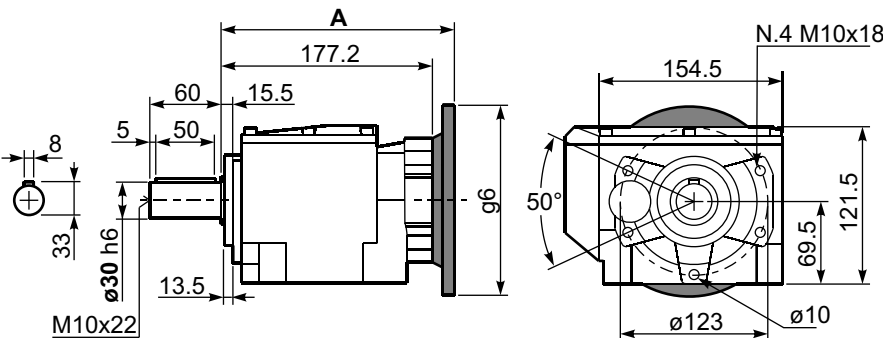
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x60	8	31	M8x19
	ø 35x60	10	38	M10x22

Available output flanges / flange di uscita

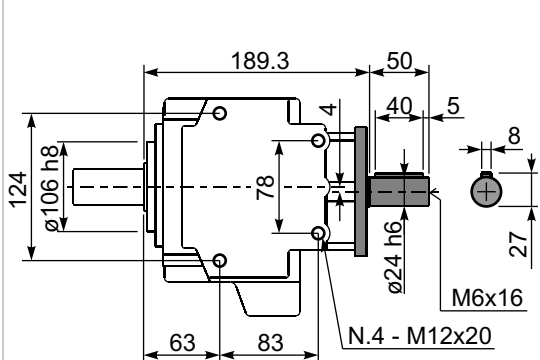
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

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
71 B5	195.7	222	160	198.2	KC023.4.041	204.2
80/90 B5	197.7	242	200	200.2	KC023.4.042	206.2
100/112 B5	203.7	267	250	206.2	KC023.4.043	212.2

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
80 B14	195.7	202	120	198.2	KC085.4.046	204.2
90 B14	195.7	212	140	198.2	KC085.4.045	204.2
100/112 B14	206.7	222	160	209.2	KC085.4.047	215.2
132 B14	225.2	242	200	227.7	KC50.4.041	233.7



#### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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 
							C	D	E	F	R	T	U	V			
							71	80	90	100* 112	80	90	100 112	132			
388	<b>3.61</b>	5.5	130	1.2	6.3	150	B								3018		01
331	<b>4.23</b>	5.5	152	1.1	6.1	170	B								3016		02
279	<b>5.01</b>	5.5	180	1.1	6.1	200	B								3014		03
231	<b>6.07</b>	5.5	219	1.1	6.3	250	B								3012		04
206	<b>6.81</b>	5.5	245	1.2	6.7	300	B								2018		05
176	<b>7.96</b>	5.5	287	1.2	6.3	330	B								2016		06
148	<b>9.45</b>	5.5	340	1.0	5.7	354	B								2014	standard	07
122	<b>11.43</b>	4	299	1.1	4.4	326	B								2012	ø30	08
99	<b>14.21</b>	3	279	0.9	2.7	250	B								2010		09
84	<b>16.62</b>	3	327	1.1	3.3	354	B								1314	ø24	10
70	<b>20.10</b>	2.2	290	1.1	2.5	326	B								1312	ø25	11
57	<b>24.61</b>	2.2	354	0.9	2.0	326	B								1112	ø28	12
56	<b>24.98</b>	1.5	245	1.0	1.5	250	B								1310	ø35	13
47.6	<b>29.41</b>	1.5	289	1.2	1.8	354	B								814	On request	14
39.3	<b>35.58</b>	1.5	349	0.9	1.4	326	B								812		15
34.6	<b>40.50</b>	1.1	292	1.0	1.1	295	B								614		16
31.7	<b>44.23</b>	1.1	319	0.8	0.86	250	B								810		17
28.6	<b>49.00</b>	1.1	353	0.9	1.0	326	B								612		18
23.0	<b>60.90</b>	0.75	299	0.8	0.63	250	B								610		19
																	20

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

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **502A** is supplied with synthetic oil for lifetime 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.  
For complete documentation please visit our web site.

**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.  
Per la documentazione completa consulta il nostro sito.

**D** Das Getriebe **502A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

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

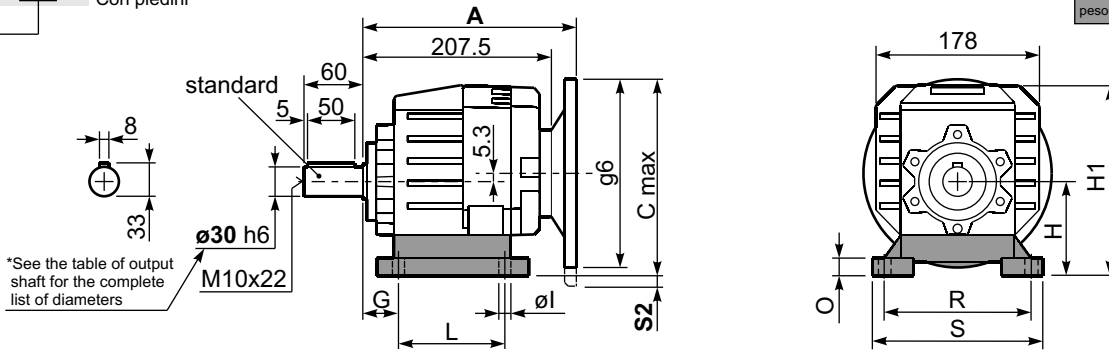
RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = F_R \cdot \frac{54}{X+24}$					
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	460	2300	140	600	3000	70	780	3900
250	480	2400	120	620	3100	40	900	4500
200	520	2600	85	700	3500	15	1000	5000
<b>Input shaft</b> Albero in entrata								
$n_1$	FA	FR						
1400	400	2000						
900	440	2200						
500	440	2200						

tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

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



**Feet / piedini**

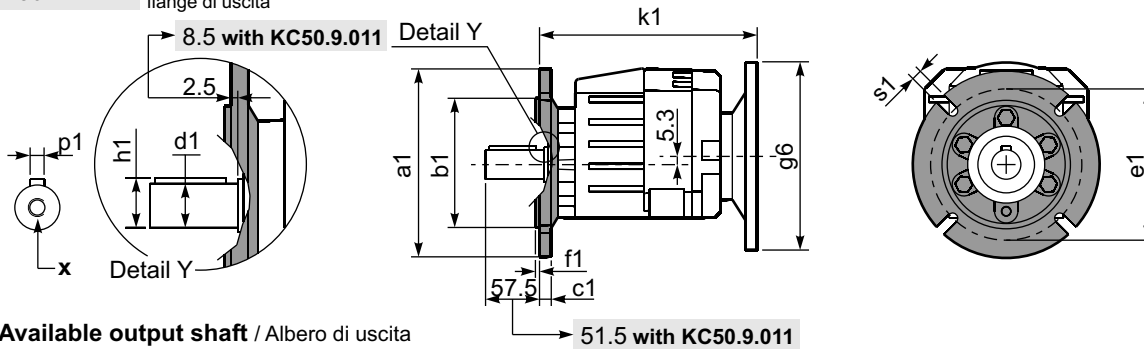
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B3	312/3	18	110	160	130	190	211.5	20	11	10	100/112B5	KC50.9.024
B4	30/35	20	130	180	149.5	216	231.5	18	14			KC60.9.024
S4	47-57	30	115	135	165	170	216.5	24	13.5	5	100/112B5	KC50.9.022
H3	023-233	30	130	135	135	185	231.5	25	14			KC50.9.025
M2	52/3	30	110	135-150	100	190	226.5	18	11			KC50.9.023
L6	06	19	125	160	106	205	201.5	8	14		80/90B5	KC50.9.026LM
E2	2202/3	13	100	135	192	164	201.5	6	14	10	100/112B5	KC50.9.027LM
P4	142	35	142	130	145	160	243.5	8	14			KC50.9.028LM

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

**A see on page bottom**

Most popular types  
Tipi più diffusi

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



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

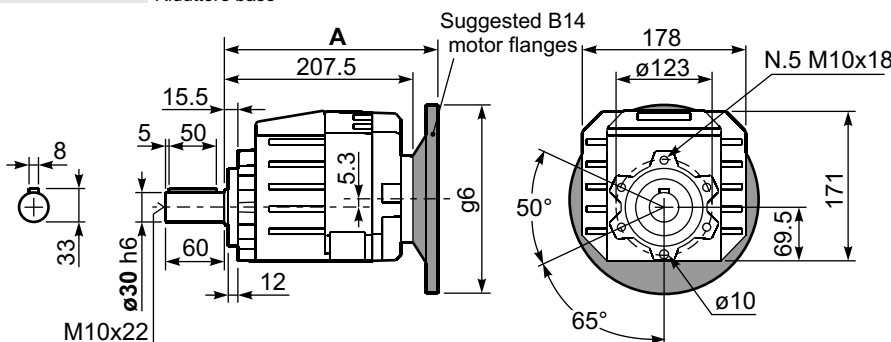
	Shaft - d1	p1	h1	x
Standard	ø 30x60	8	33	M10x22
On request A richiesta	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x60	8	31	M8x19
	ø 35x60	10	38	M10x22

**Available output flanges / flange di uscita**

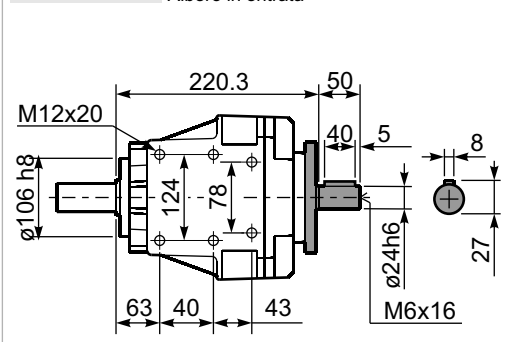
a1 ø	b1	c1	e1	f1	s1	kit code
160	110	14	130	3.5	9	KC50.9.011
200	130	13	165	3.5	11	KC50.9.012
250	180	15.5	215	4	14	KC50.9.013

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 B14	261.5	247	200	264	KC50.4.041	270



■ 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 **0.93** for all ratios

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

**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. For complete documentation please visit our web site.

**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. Per la documentazione completa consulta il nostro sito.

**D** Das Getriebe **503A** 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. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

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

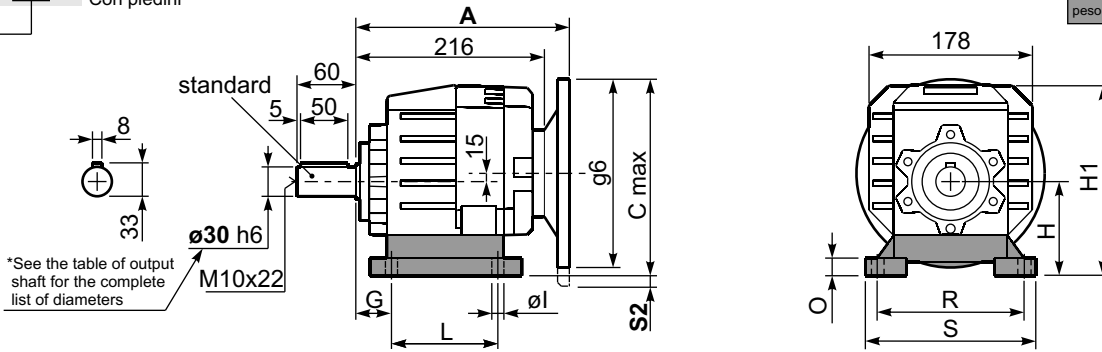
RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = F_R \cdot \frac{54}{X+24}$					
n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	460	2300	140	600	3000	70	780	3900
250	480	2400	120	620	3100	40	900	4500
200	520	2600	85	700	3500	15	1000	5000
<b>Input shaft</b> Albero di entrata								
n <sub>1</sub>	FA	FR						
1400	400	2000						
900	440	2200						
500	440	2200						

**tab. 2**

■ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P503A **B1** ... With feet  
Con piedini

Gearbox weight **11.9 kg**  
peso riduttore With feet **12.1 Kg**



**Feet / piedini**

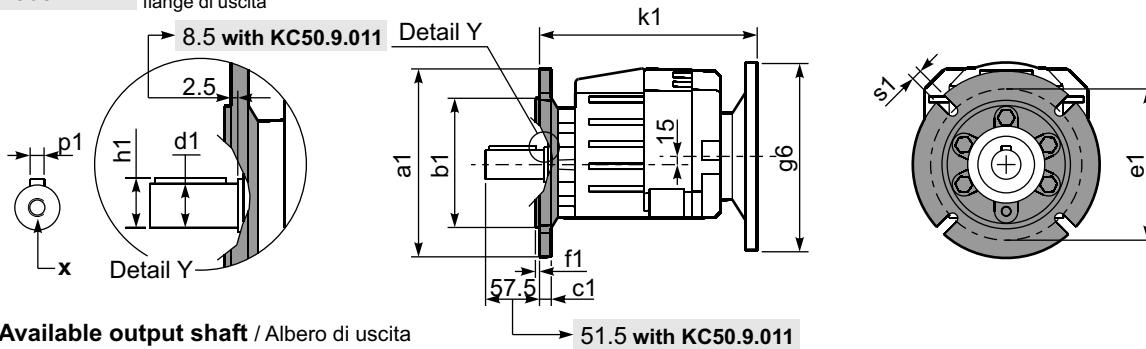
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
<b>B3</b>	312/3	18	110	160	130	190	211.5	20	11	10 100/112B5		KC50.9.024
<b>B4</b>	30/35	20	130	180	149.5	216	231.5	18	14			KC60.9.024
<b>S4</b>	47-57	30	115	135	165	170	216.5	24	13.5	5 100/112B5		KC50.9.022
<b>H3</b>	023-233	30	130	135	135	185	231.5	25	14			KC50.9.025
<b>M2</b>	52/3	30	110	135-150	100	190	226.5	18	11			KC50.9.023
<b>L6</b>	06	19	125	160	106	205	201.5	8	14		80/90B5	KC50.9.026LM
<b>E2</b>	2202/3	13	100	135	192	164	201.5	6	14	10 100/112B5		KC50.9.027LM
<b>P4</b>	142	35	142	130	145	160	243.5	8	14			KC50.9.028LM

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

**A see on page bottom**

Most popular types  
Tipi più diffusi

P503A **-F** ... Output flanges  
flange di uscita



**\*Available output shaft / 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

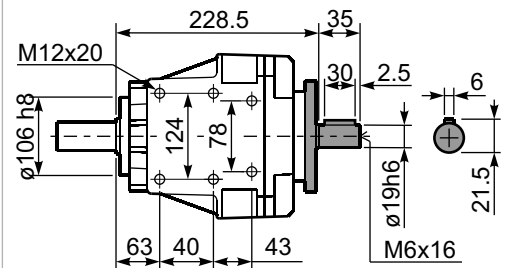
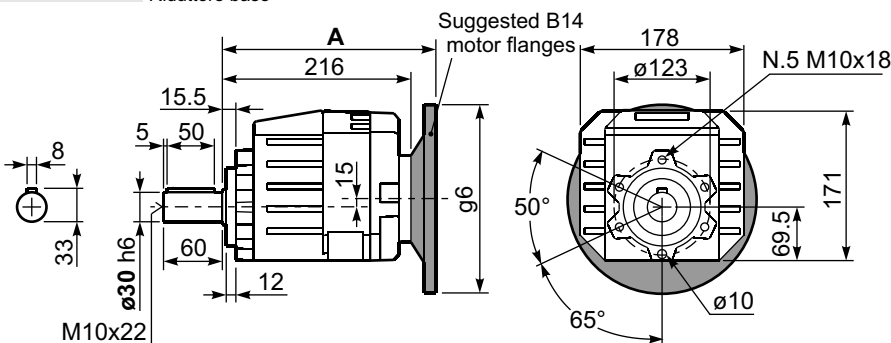
**Available output flanges / flange di uscita**

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

P503A **-N** ... Basic gearbox  
Riduttore base

**R503A-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	236.5	227	140	239	K063.4.041	245
71 B5	234.5	237	160	237	K063.4.042	243
80/90 B5	236.5	257	200	239	K063.4.043	245

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
71 B14	234.5	209.5	105	237	K063.4.047	243
80 B14	235.5	217	120	238	K063.4.046	244
90 B14	236.5	227	140	239	K063.4.041	245



#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft 	Ratios code
							C	D	E	F	R	T	U	V		
							71	80	90	100 112	80	90	100 112	132		
388	3.61	7.5	177	0.9	7.0	165	B								3018	01
331	4.23	7.5	208	1.0	7.2	200	B								3016	02
279	5.01	7.5	246	1.0	7.3	240	B								3014	03
231	6.07	7.5	298	0.9	6.8	270	B								3012	04
206	6.81	5.5	245	1.4	7.6	340	B								2018	05
176	7.96	5.5	287	1.3	7.1	370	B								2016	06
148	9.45	5.5	340	1.2	6.5	400	B								2014	07
122	11.43	5.5	412	1.0	5.3	400	B								2012	08
99	14.21	4	372	1.1	4.3	400	B								2010	09
84	16.62	4	435	1.2	4.6	501	B								1314	10
70	20.10	4	527	0.9	3.8	499	B								1112	11
57	24.61	3	483	1.0	3.1	492	B								1312	12
56	24.98	3	491	0.8	2.4	400	B								1310	13
47.6	29.41	2.2	424	1.0	2.3	440	B								814	14
39.3	35.58	1.85	431	1.2	2.1	499	B								812	15
34.6	40.50	1.1	292	1.1	1.2	310	B								614	16
31.7	44.23	1.5	434	0.9	1.4	400	B								810	17
28.6	49.00	1.1	353	1.0	1.1	368	B								612	18
23.0	60.90	1.1	439	0.9	1.0	400	B								610	19

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 **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. For complete documentation please visit our web site.

**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. Per la documentazione completa consulta il nostro sito.

**D** Das Getriebe **602A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

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

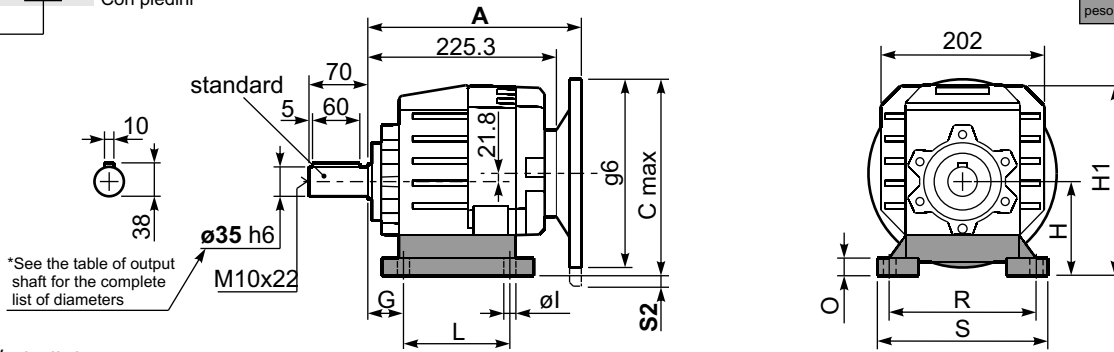
RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = FR \cdot \frac{60.5}{X+25.5}$					
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	560	2800	140	740	3700	70	890	4200
250	600	3000	120	760	3800	40	1160	5800
200	640	3200	85	840	4000	15	1300	6500
<b>Input shaft</b> Albero in entrata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

tab. 2

SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

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



**Feet / piedini**

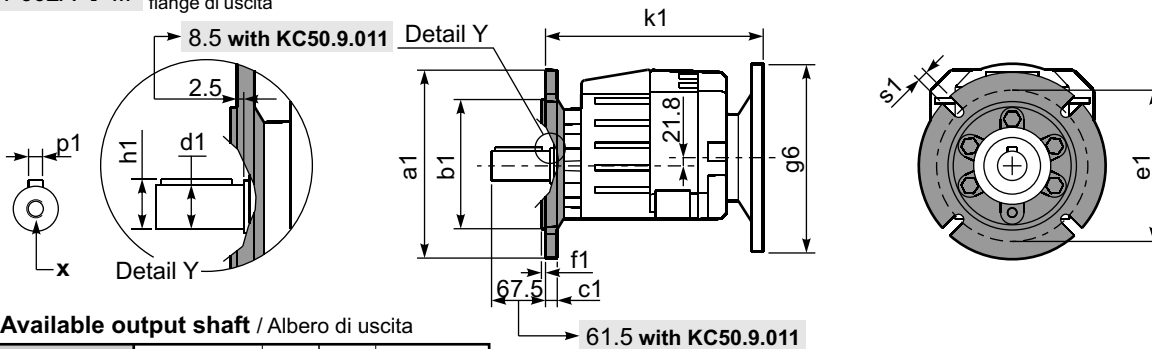
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B4	412/3	20	130	180	149.5	216	233	18	14	-		KC60.9.024
S4	47-57	30	115	135	165	170	218	24	13.5	-		KC50.9.022
M3	62/3	35	120	170-185	110	230	223	20	14	-		KC60.9.023
S7	77	35	140	170	205	204	243	8	14	-		KC60.9.029LM
H4	024-243	35	155	170	150	225	258	30	14	-	100/112 B5	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

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

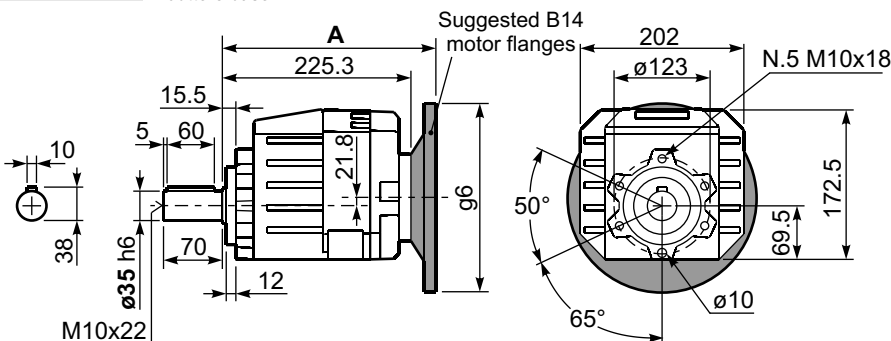
Available output flanges / flange di uscita

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
71 B5	243.8	263.8	160	246.3	KC023.4.041	252.3
80/90 B5	245.8	283.8	200	248.3	KC023.4.042	254.3
100/112 B5	251.8	308.8	250	254.3	KC023.4.043	260.3

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
80 B14	243.8	243.8	120	246.3	KC085.4.046	252.3
90 B14	243.8	253.8	140	246.3	KC085.4.045	252.3
100/112 B14	258.5	263.8	160	261	KC085.4.047	267
132 B14	279.5	283.8	200	282	KC50.4.041	288

# 603A Coaxial - Gear

## 460Nm

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 	Ratios code
							B	C	D	E	Q	R	T		
							63	71	80	90	71	80	90		
35.2	<b>39.79</b>	1.5	379	1.1	1.7	434	B				C	C		191316	01
29.6	<b>47.22</b>	1.5	449	1.1	1.7	501	B				C	C		191314	02
25.6	<b>54.73</b>	1.5	521	1.0	1.4	501	B				C	C		171314	03
24.5	<b>57.13</b>	1.1	399	1.3	1.4	500	B				C	C		191312	04
21.1	<b>66.22</b>	1.1	462	1.1	1.2	500	B				C	C		171312	05
19.7	<b>71.01</b>	1.1	496	0.9	0.97	435	B				C	C		191310	06
18.3	<b>76.69</b>	1.1	535	0.9	1.0	501	B				C	C		131314	07
17.0	<b>82.30</b>	0.75	392	1.1	0.83	435	B				C	C		171310	08
16.7	<b>83.59</b>	0.75	398	1.1	0.83	441	B				C	C		190814	09
15.1	<b>92.78</b>	0.75	441	1.1	0.85	500	B				C	C		131312	10
13.4	<b>104.68</b>	0.75	498	1.0	0.75	501	B				C	C		101314	11
11.9	<b>117.22</b>	0.55	409	1.2	0.67	500	B				C	C		170812	12
11.1	<b>126.65</b>	0.55	442	1.1	0.62	500	B				C	C		101312	13
10.3	<b>135.74</b>	0.37	319	1.4	0.51	441	B				C	C		130814	14
9.6	<b>145.68</b>	0.37	342	1.3	0.47	435	B				C	C		170810	15
8.9	<b>157.40</b>	0.37	369	1.2	0.44	435	B				C	C		101310	16
8.5	<b>165.29</b>	0.37	388	1.3	0.48	500	B				C	C		91312	17
7.6	<b>185.29</b>	0.37	435	1.0	0.38	441	B				C	C		100814	18
6.8	<b>205.43</b>	0.37	482	0.9	0.33	435	B				C	C		91310	19
6.2	<b>224.18</b>	0.37	526	1.0	0.35	500	B				C	C		100812	20
5.8	<b>241.82</b>	0.25	384	1.1	0.29	441	B				C	C		90814	21
5.0	<b>278.62</b>	0.25	442	1.0	0.25	435	B				C	C		100810	22
4.8	<b>292.57</b>	0.25	464	1.1	0.27	500	B				C	C		90812	23
3.9	<b>363.63</b>	0.18	415	1.0	0.19	435	B				C	C		90810	24

The dynamic efficiency is **0.93** for all ratios

Motor Flanges Available  
Flange Motore Disponibili

B) Supplied with Reduction Bushing  
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position  
Posizione Fori Flangia Motore

**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.

For complete documentation please visit our web site.

**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.

Per la documentazione completa consulta il nostro sito.

**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.

Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

**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.

Para documentación completa, consultar nuestra Web.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
0.75 LT	0.90 LT	1.15 LT	1.25 LT	1.30 LT	1.35 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

For all details on lubrication and plugs check our website

tab. 1

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

### RADIAL AND AXIAL LOADS

#### Output shaft

Albero di uscita

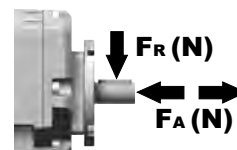


$$F_{eq} = F_R \cdot \frac{60.5}{X+25.5}$$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	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

#### Input shaft

Albero in entrata



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

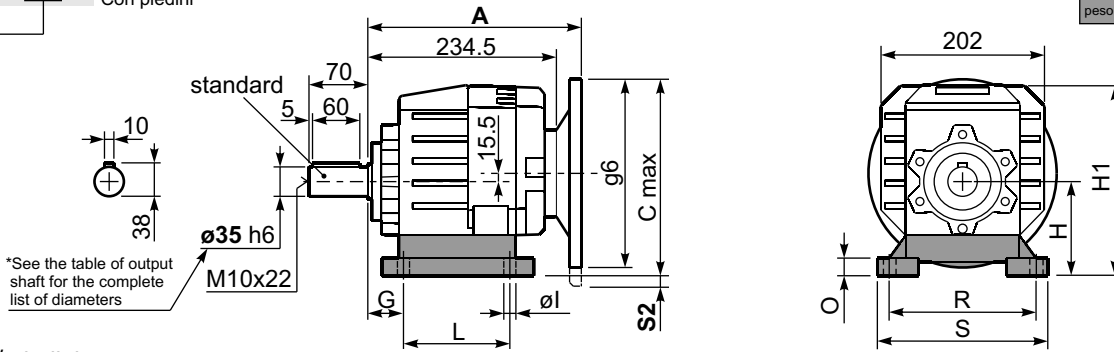
tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.



P603A-B1... With feet  
Con piedini

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



Feet / piedini

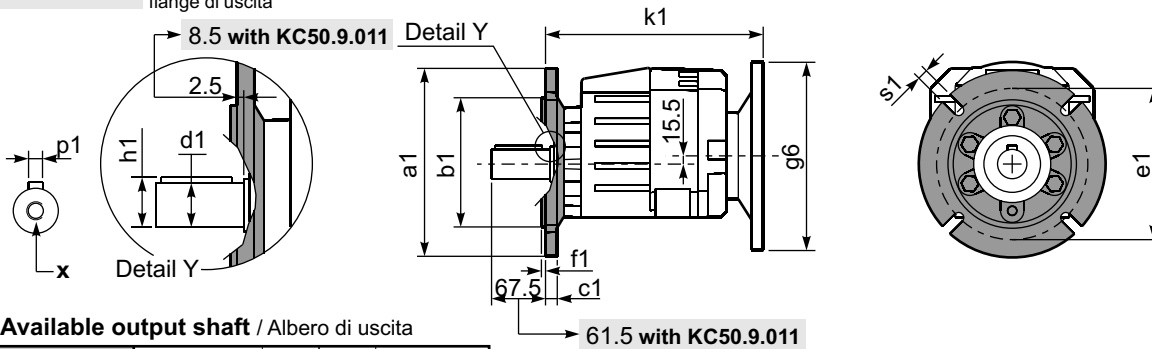
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B4	412/3	20	130	180	149.5	216	233	18	14	-		KC60.9.024
S4	47-57	30	115	135	165	170	218	24	13.5	-		KC50.9.022
M3	62/3	35	120	170-185	110	230	223	20	14	-		KC60.9.023
S7	77	35	140	170	205	204	243	8	14	-		KC60.9.029LM
H4	024-243	35	155	170	150	225	258	30	14	-	100/112 B5	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 / 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

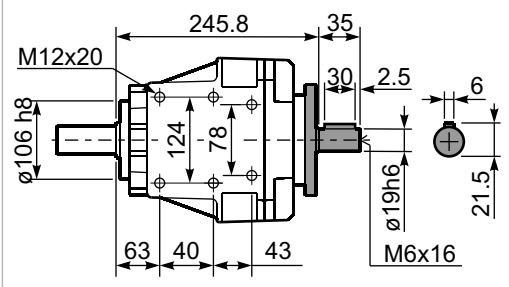
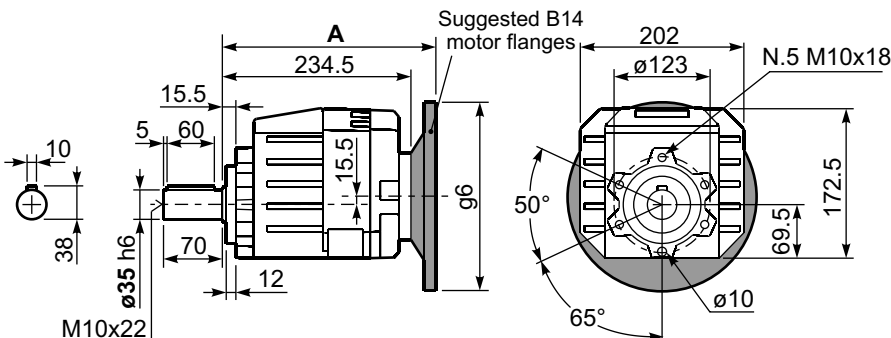
Available output flanges / flange di uscita

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

P603A-N... Basic gearbox  
Riduttore base

R603A-N... Input Shaft  
Albero in entrata

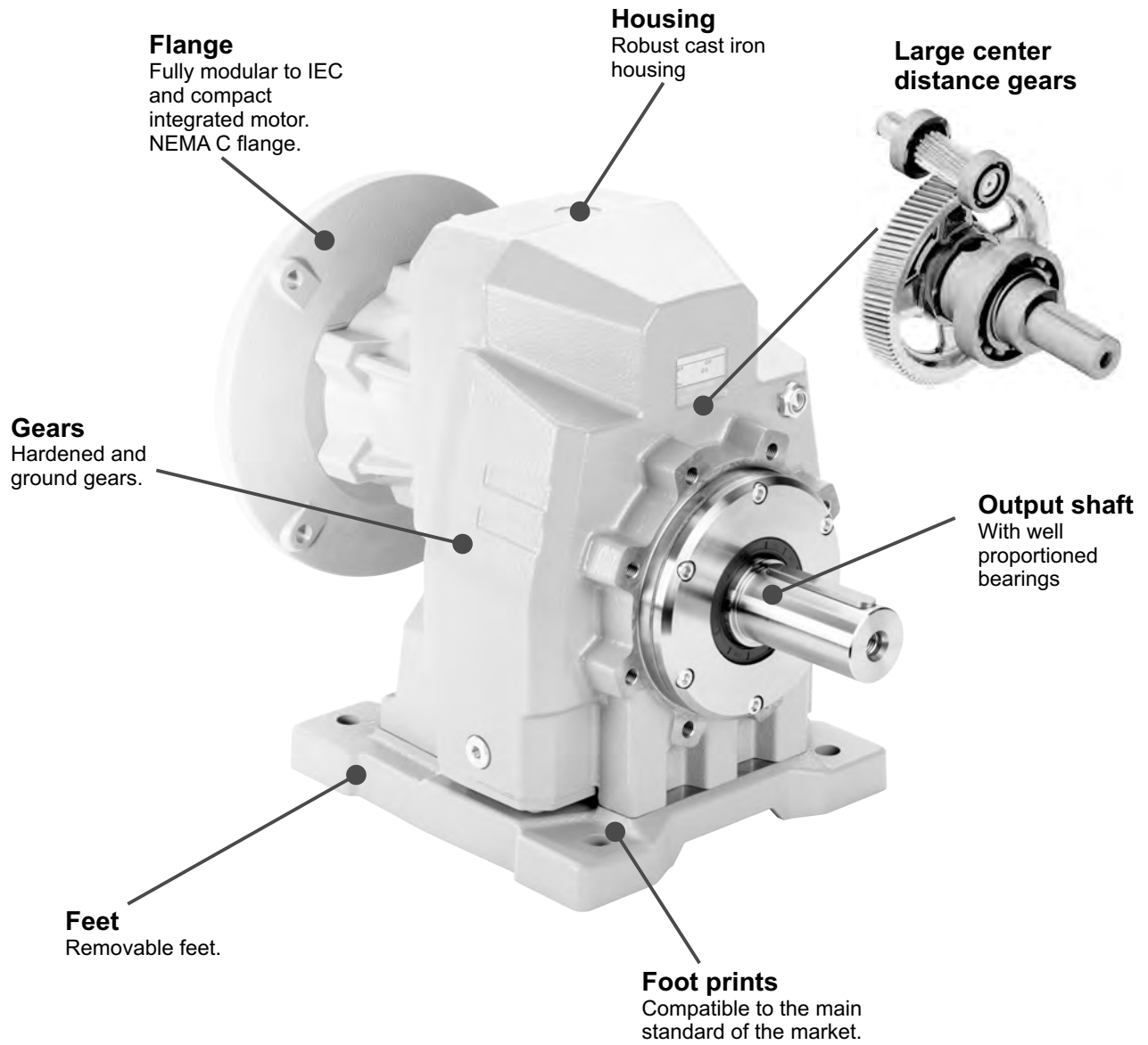


B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
63 B5	255	247.5	140	257.5	K063.4.041	263.5
71 B5	253	257.5	160	255.5	K063.4.042	261.5
80/90 B5	255	277.5	200	257.5	K063.4.043	263.5

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

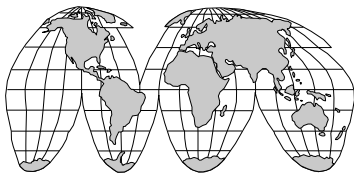
# Cast iron gearboxes

A modular and compact product



## Single-piece Cast Iron housing

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



World wide sales network.

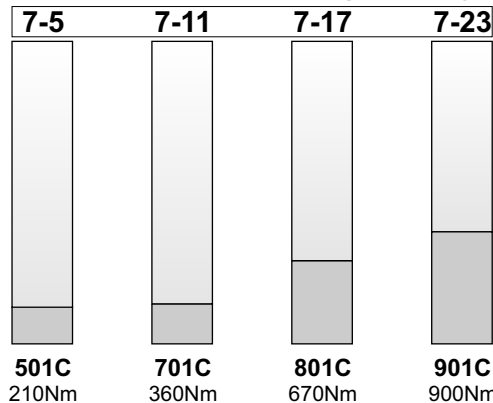
# Specific type datasheet on page...

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

1 Stage



Types / Tipi /  
Arten / Tipos →

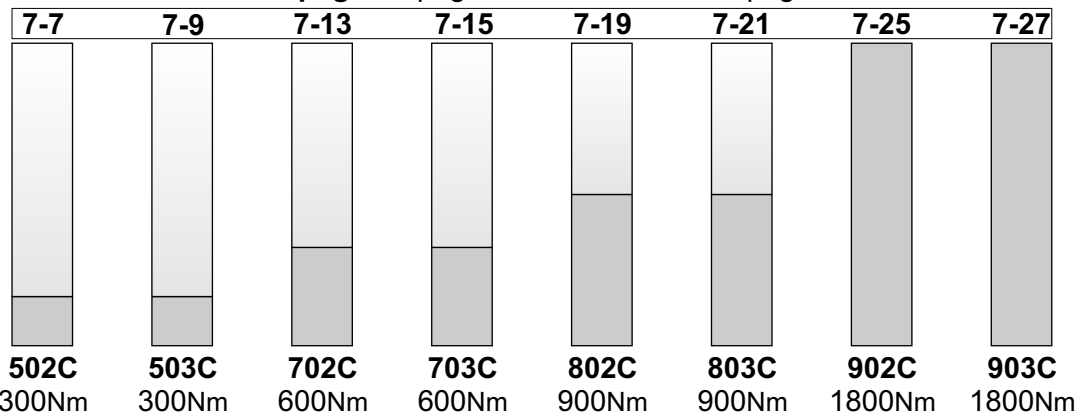


On page / A pagina / Auf Seite / En la página

2 and 3 Stages



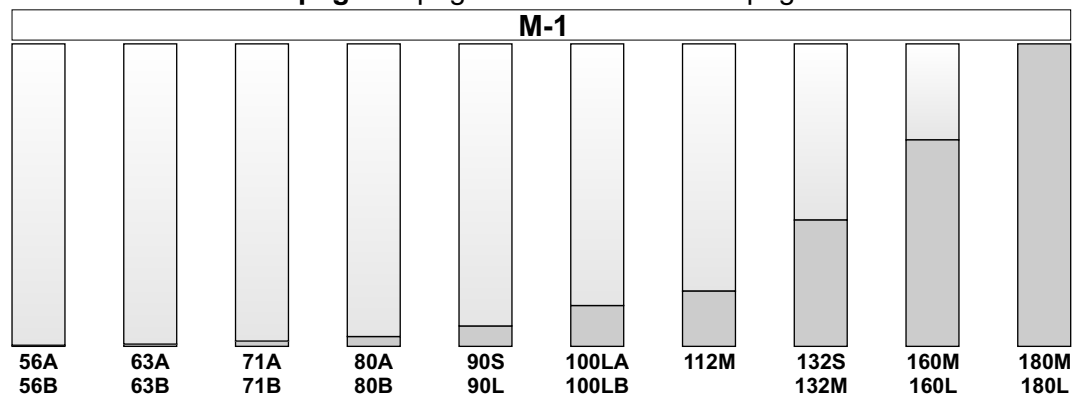
Types / Tipi /  
Arten / Tipos →



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



Types / Tipi /  
Arten / Tipos →



## • Get on our web for the selected type/size the detailed informations

For : / Per : / Für : / Para :

**Selection guide - fs**  
Guida alla selezione

**Reversibility**  
Reversibilità

**Download 3D drawings**  
Download disegni 3D

**Mounting pos. - Lubrication**  
Pos. di montaggio - lubrificazione

**Thermal limit**  
Limite termico

**Interchangeability**  
Intercambiabilità

**2 - 6 poles selection**  
Selezione 2 - 6 poli

**Atex certification**  
Certificazione Atex

**Installation and maintenance**  
Installazione, uso e manutenzione

**Radial - axial loads**  
Carichi radiali e assiali

**Accessories**  
Accessori

**Spare parts list**  
Liste parti di ricambio

Type - Tipo - Typ - Tipo

Size - Grandezza  
Grösse - Tomaño

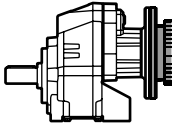
Mounting - Montaggio - Montage - Tipo de montaje

**P**

**702C**

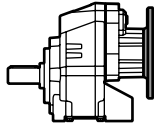
**B4**

Cast iron coaxial gear boxes  
Riduttori coassiali in Ghisa



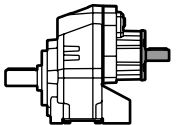
With IEC motor

**M**



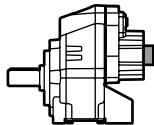
With motor flange

**P**



With male input shaft

**R**



Modular base

**B**

**1** Stage  
Riduzione  
Stufe  
Etapa

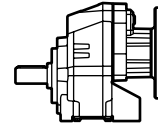
**501C**  
**701C**  
**801C**  
**901C**

**3** Stages  
Riduzioni  
Stufen  
Etapas

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

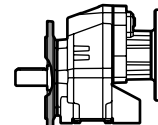
**2** Stages  
Riduzioni  
Stufen  
Etapas

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



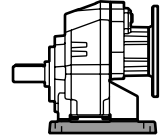
Without flange / feet

**-N**



Output flange mounted

**-F**



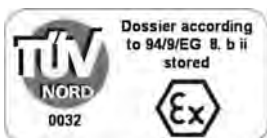
Mounted feet

**B..**

Feet / piedini

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

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



A richiesta possiamo fornire i nostri prodotti secondo le normative ATEX

On request we can deliver our products according to the ATEX

Auf Anfrage können wir unsere Produkte den Richtlinien ATEX entsprechend liefern

A pedido, se pueden enviar nuestros productos de acuerdo con las normas ATEX.

Ratio - Rapporto  
Untersetzung  
Relación

Output shaft  
Albero lento  
Abtriebswelle  
Eje en solida

Output flange  
Flangia uscita  
Ausgangsflansch  
Brida en salida

Motor size  
Grandezza motore  
Motor Grösse  
Tamaño motor

Terminal box position  
Posizione morsettiere  
Klemmkastenlage  
Posición caja de bornes

Mounting position  
Posizione montaggio  
Einbaulage  
Position de montaje

**6.57**

**H**

**4**

**F**

**B**

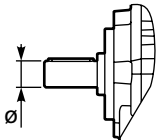
**B3**

See technical  
data table

Vedi tabelle dati  
tecnici.

Technisches  
Datenblatt  
beachten.

Ver tabla datos  
técnicos



→ STANDARD

501C 502C  
503C

**H** → **∅30**

**I** → **∅35**

701C 702C  
703C

**I** → **∅35**

**L** → **∅38**

**M** → **∅40**

801C  
802C 803C

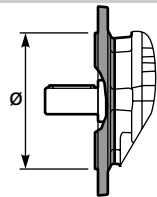
**M** → **∅40**

**P** → **∅50**

901C 902C  
903C

**P** → **∅50**

**J** → **∅60**



**N** Senza flangia  
Without flange

501C 502C  
503C

**3** → **∅160**

**4** → **∅200**

**5** → **∅250**

701C 702C  
703C

**4** → **∅200**

**5** → **∅250**

801C  
802C 803C

**5** → **∅250**

**6** → **∅300**

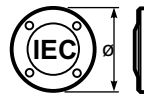
901C 902C  
903C

**6** → **∅300**

**7** → **∅350**

→ STANDARD

Standard Flange  
Flangia Standard



**B5**

**A**=56  
(∅120)

**B**=63  
(∅140)

**C**=71  
(∅160)

**D**=80  
(∅200)

**E**=90  
(∅200)

**F**=100+112  
(∅250)

**G**=132  
(∅300)

**H**=160  
(∅350)

**I**=180  
(∅350)

**B14**

**O**=56  
(∅80)

**P**=63  
(∅90)

**Q**=71  
(∅105)

**R**=80  
(∅120)

**T**=90  
(∅140)

**U**=100+112  
(∅160)

**V**=132  
(∅200)

Type R / Tipo R

503C

**1** → **∅14**

702C 802C  
903C

**3** → **∅24**

502C 703C  
803C

**2** → **∅19**

902C

**4** → **∅28**

Without flange / Senza flangia

503A

**Z** → **∅9**  
(56B5)

**0** → **∅11**  
(63B5)

**1** → **∅14**  
(71B5)

702C 802C  
903C

**2** → **∅19**  
(80B5)

**3** → **∅24**  
(90B5)

**4** → **∅28**  
(100B5)

501C

**4** → **∅28**  
(100B5)

502C 703C  
803C

**1** → **∅14**  
(71B5)

**2** → **∅19**  
(80B5)

**3** → **∅24**  
(90B5)

902C

**5** → **∅38**  
(132B5)

**6** → **∅42**  
(160B5)

**7** → **∅48**  
(180B5)

→ STANDARD



**A**



**B**

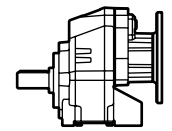
STANDARD



**C**

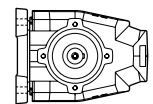


**D**

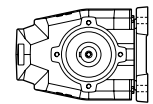


**B3/B5**

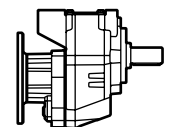
STANDARD



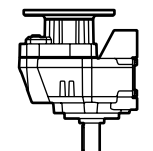
**B6**



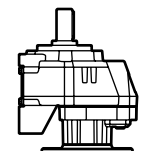
**B7**



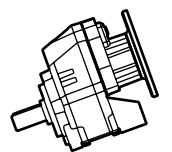
**B8**



**V5**



**V6**



**V8**

POTENZA RICHIESTA / REQUIRED POWER / ERFORDERLICHE LEISTUNG / POTENCIA NECESARIA

Lifting / sollevamento / hubantriebe / elevación

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

Rotation / rotazione / drehung / rotation

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

Linear movement / traslazione / linearbewegung / translacion

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

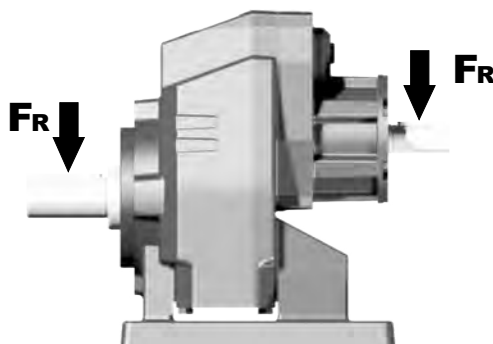
TORQUE / COPPIA / DREHMOMENT / PAR

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

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

RADIAL LOADS / CARICHI RADIALI / RADIALE - UND AXIALLASTEN / 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.
- 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 / Par torsion	
<b>d</b>	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diámetro primitivo	
<b>f<sub>k</sub></b>	Coefficiente di trasformazione / Factor / Faktor / Coefficiente de transmisión 1.15 Ingranaggi / Gearwheels / Zahnrad / Engranaje 1.25 Catena / Chain sprockets / Antriebskette / Cadena 1.75 Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Correa trapezoidal 2.50 Cinghia piatta / Flat-belt pulley / Flachzahnriem. / 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.
- 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 / Cómo seleccionar un reductor

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

Nominal power  
Potenza nominale  
Max. mögliche Leistung  
Potencia nominal

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

Flange code  
Codice flangia  
Flanschtype  
Código bridas

Input speed  
Velocità in entrata  
Eintriebsdrehzahl  
Velocidad de entrada

Gear size  
Grandezza riduttore  
Getriebegröße  
Tamaño reductor

Motor power  
Potenza motore  
Motorleistung  
Potencia motor

# 702C

## Coaxial - Gear 600Nm

Rating - Cast Iron 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 	Ratios code 
							C	D	E	F	R	T	U	V		
213	<b>6.57</b>	7.5	312	1.2	8.4	360	B								3018	-
185	<b>7.56</b>	7.5	359	1.0	7.5	370	B								3016	-
159	<b>8.82</b>	7.5	419	0.9	6.7	385	B								3014	-
113	<b>12.39</b>	7.5	588	0.9	6.8	550	B								2018	-
98	<b>14.24</b>	5.5	499	1.1	6.1	570	B								2016	-

**C** Ratio  
Rapporto  
Untersetzung  
Relación

Transmitted torque  
Momento torcente trasmesso  
Mögliche Drehmomente  
Par transmitido

Service factor  
Fattore di servizio  
Betriebsfaktor  
Factor de servicio

Output shaft diam.  
Diam. albero uscita  
Durchmesser abtriebswelle  
Diámetro eje de salida

Notes  
Note  
Anmerkungen  
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  
Bridas disponibles

<b>B)</b>	Mounting with reduction ring Montaggio con boccia di riduzione Reduzierhülsen Montaje con casquillo de reducción	
<b>C)</b>	Motor flangeholes position/terminal box position Posizione fori flangia/basetta motore Bohrungsposition am Motorflansch/-sockel Posición agujeros brida / base motor	
<b>B)</b>	Available without reduction bushes Disponibile anche senza boccia Auch ohne Reduzierbuchse verfügbar Disponible también sin casquillo	

<b>A</b>	Select required torque (according to service factor)	Seleziona la coppia desiderata (comprensiva del fattore di servizio)	Max. Drehmoment in Bezug zum Betriebsfaktor	Seleccionar el par deseado (incluyendo el factor de servicio)
<b>B</b>	Select output speed	Seleziona la velocità in uscita	Ausgewählte Abtriebsdrehzahl	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	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)	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 	Ratios code 	
							D	E	F	R	T	U			
							80	90	100 112	80	90	100 112			
481	<b>2.91</b>	4	76	1.7	<b>6.7</b>	<b>130</b>	B	B		B	B		3499	<b>standard</b>	01
373	<b>3.75</b>	4	98	1.5	<b>6.0</b>	<b>150</b>	B	B		B	B		28105	<b>ø30</b>	02
263	<b>5.33</b>	4	140	1.1	<b>4.4</b>	<b>155</b>	B	B		B	B		21112		03
219	<b>6.39</b>	4	167	0.9	<b>3.6</b>	<b>155</b>	B	B		B	B		18115	ø35	04
178	<b>7.85</b>	4	205	1.0	<b>4.0</b>	<b>210</b>	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.  
For complete documentation please visit our web site.

**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.  
Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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.  
Para documentación completa, consultar nuestra Web.

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**

SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

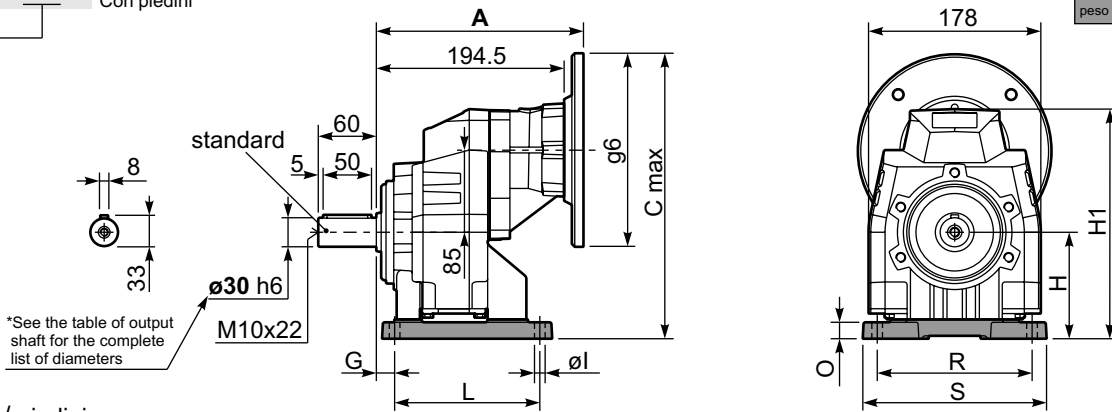


**P501C-S4...**

With feet  
Con piedini

Gearbox weight  
peso riduttore

With flange **20.0 kg**  
With feet **22.0 kg**

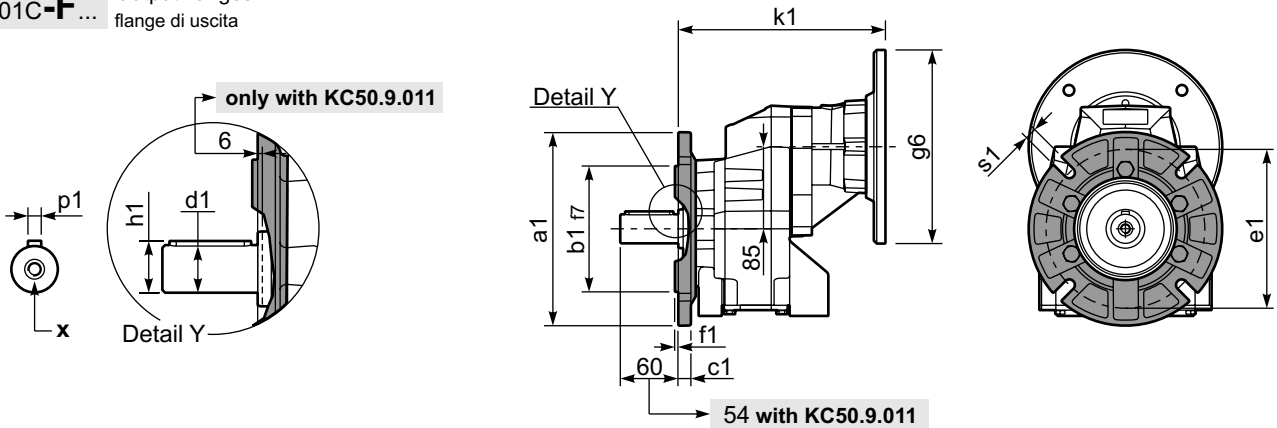


**Feet / piedini**

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
	-	-	-	-

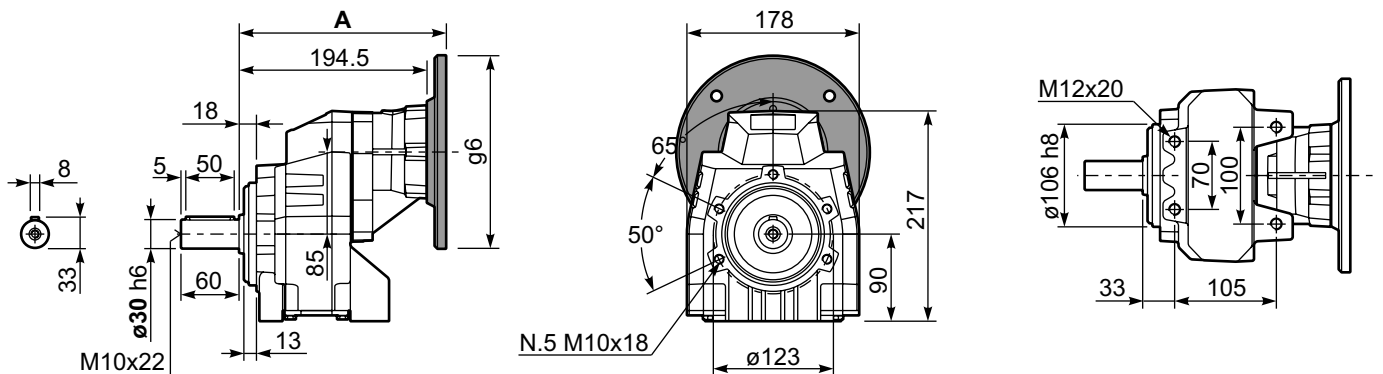
Available output flanges / flange di uscita

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 <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	D	E	Q	R	T	U		
							63	71	80	90	71	80	90	100 112		
167	8.38	4	215	1.0	4.0	220	B				C	C			2821	01
139	10.04	3	194	1.1	3.4	220	B				C	C			2818	02
114	12.33	3	238	1.0	3.0	240	B				C	C			2813	03
92	15.16	2.2	216	1.1	2.4	240	B				C	C			1921	04
80	17.57	2.2	250	1.0	2.2	250	B				C	C			1721	05
77	18.16	2.2	258	1.0	2.3	270	B				C	C			1918	06
67	21.05	2.2	299	1.0	2.2	300	B				C	C			1718	07
63	22.30	2.2	317	0.9	2.1	300	B				C	C			1913	08
57	24.70	1.5	242	1.2	1.9	300	B				C	C			1518	09
54	25.85	1.5	253	1.2	1.8	300	B				C	C			1713	10
47.5	29.49	1.5	289	1.0	1.6	300	B				C	C			1318	11
46.1	30.34	1.5	297	1.0	1.5	300	B				C	C			1513	12
41.7	33.60	1.1	240	1.0	1.1	250	B				C	C			1021	13
38.7	36.21	1.1	259	1.2	1.3	300	B				C	C			1313	14
34.8	40.25	1.1	288	1.0	1.1	300	B				C	C			1018	15
28.3	49.43	0.75	243	1.2	0.93	300	B				C	C			1013	16
26.7	52.53	0.75	258	1.0	0.73	250	B				C	C			918	17
21.7	64.51	0.55	234	1.3	0.71	300	B				C	C			913	18
20.2	69.37	0.37	168	1.1	0.40	180	B				C	C			718	19
16.4	85.19	0.37	206	1.1	0.39	220	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. For complete documentation please visit our web site.

**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. Per la documentazione completa consulta il nostro sito.

**D** Das Getriebe 502C ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt. Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

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

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

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

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

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

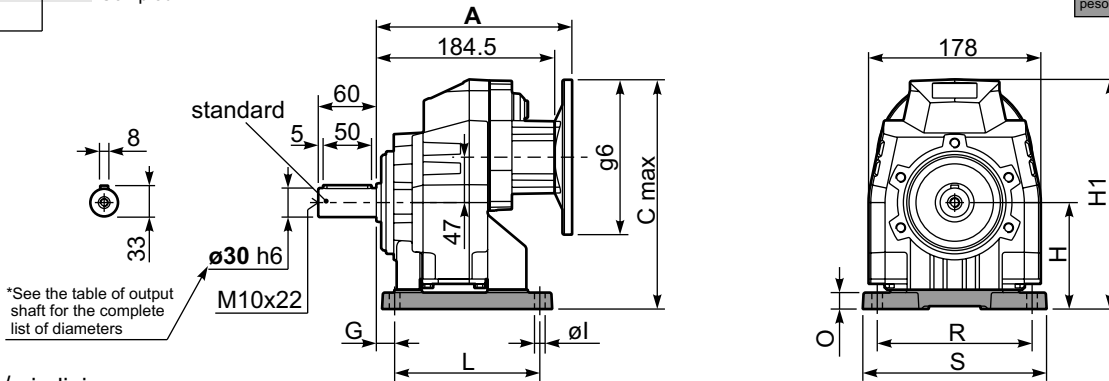
n <sub>1</sub>	FA	FR
1400	240	1200
900	280	1400
500	340	1700

tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

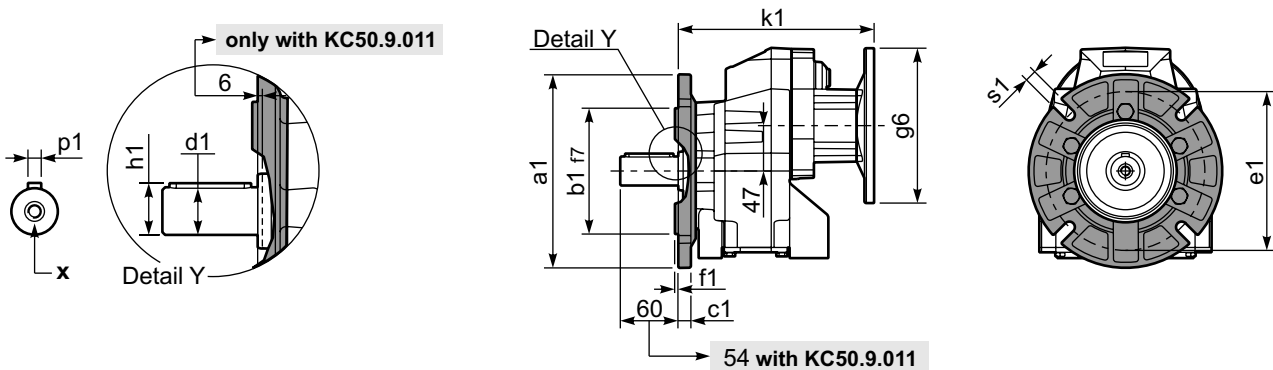
Gearbox weight **15.0 kg**  
peso riduttore With flange  
With feet **17.0 kg**



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
	-	-	-	-

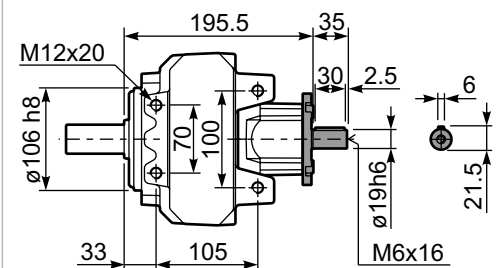
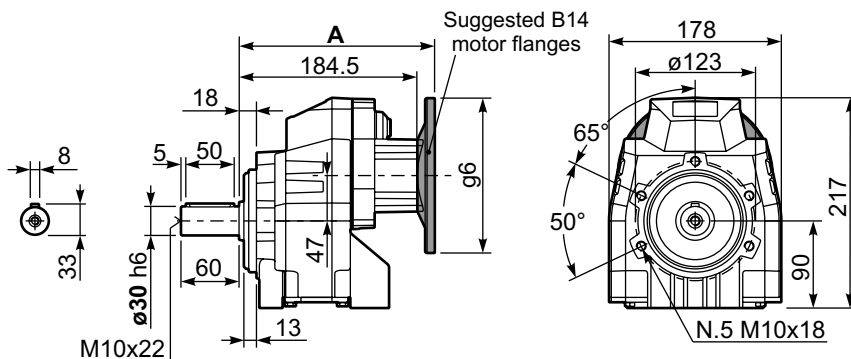
Available output flanges / flange di uscita

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

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 ( $n_1$ ) = 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	1.7	<b>0.63</b>	<b>300</b>			C	C		191313	01
17.0	<b>82.56</b>	0.37	196	1.5	<b>0.57</b>	<b>300</b>			C	C		151318	02
16.0	<b>87.48</b>	0.37	208	1.4	<b>0.53</b>	<b>300</b>			C	C		131713	03
13.8	<b>101.40</b>	0.37	241	1.2	<b>0.46</b>	<b>300</b>			C	C		151313	04
11.4	<b>122.57</b>	0.37	291	1.0	<b>0.38</b>	<b>300</b>			C	C		131313	05
10.1	<b>138.59</b>	0.37	329	0.9	<b>0.34</b>	<b>300</b>			C	C		101318	06
8.7	<b>160.82</b>	0.25	257	1.2	<b>0.29</b>	<b>300</b>			C	C		91713	07
8.2	<b>170.20</b>	0.25	272	1.1	<b>0.27</b>	<b>300</b>			C	C		101313	08
7.6	<b>183.48</b>	0.25	294	1.0	<b>0.25</b>	<b>300</b>			C	C		91318	09
6.5	<b>214.15</b>	0.18	262	1.1	<b>0.22</b>	<b>300</b>			C	C		71713	10
6.2	<b>225.33</b>	0.18	276	1.1	<b>0.21</b>	<b>300</b>			C	C		91313	11
5.7	<b>244.32</b>	0.18	299	1.0	<b>0.19</b>	<b>300</b>			C	C		71318	12
5.5	<b>254.15</b>	0.18	311	1.0	<b>0.18</b>	<b>300</b>			C	C		61713	13
4.8	<b>289.96</b>	0.12	229	1.3	<b>0.16</b>	<b>300</b>			C	C		61318	14
4.7	<b>300.05</b>	0.12	237	1.3	<b>0.16</b>	<b>300</b>			C	C		71313	15
3.9	<b>356.09</b>	0.12	282	1.1	<b>0.13</b>	<b>300</b>			C	C		61313	16

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 **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. For complete documentation please visit our web site.

**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. Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
1.35 LT	0.80 LT	0.80 LT	0.70 LT	1.50 LT	0.85 LT	Ask
AGIP Telium VSF 320				SHELL Omala S4 WE 320		

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

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

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

**Input shaft**  
Albero in entrata

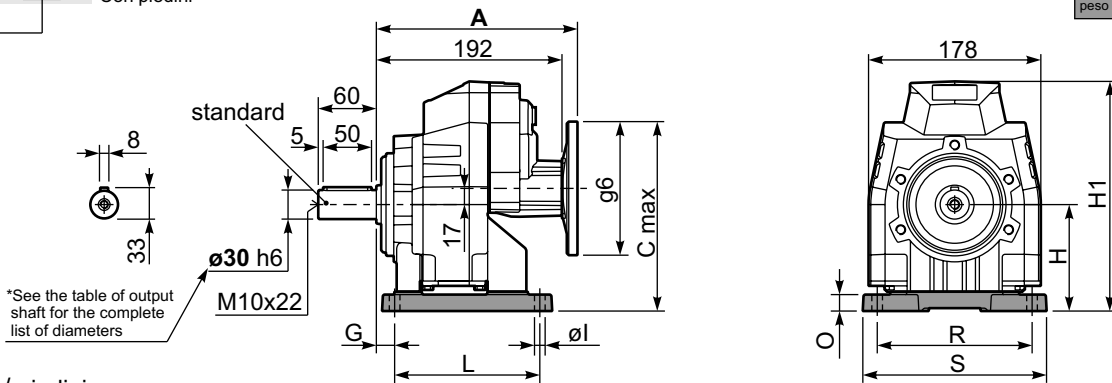
$n_1$	FA	FR
1400	140	700
900	160	800
500	190	950

tab. 2

SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

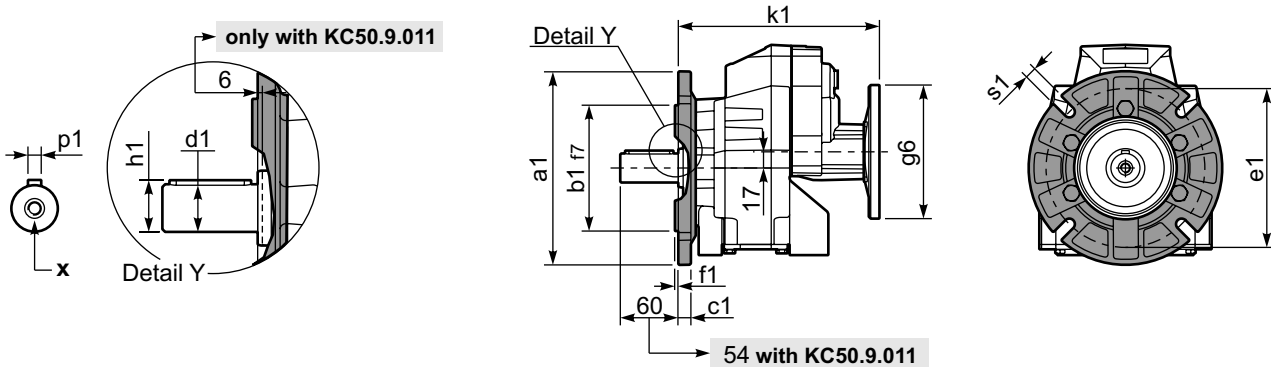
Gearbox weight With flange **15.0 kg**  
peso riduttore With feet **17.0 Kg**



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
	-	-	-	-

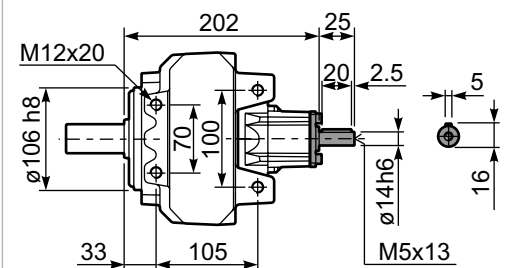
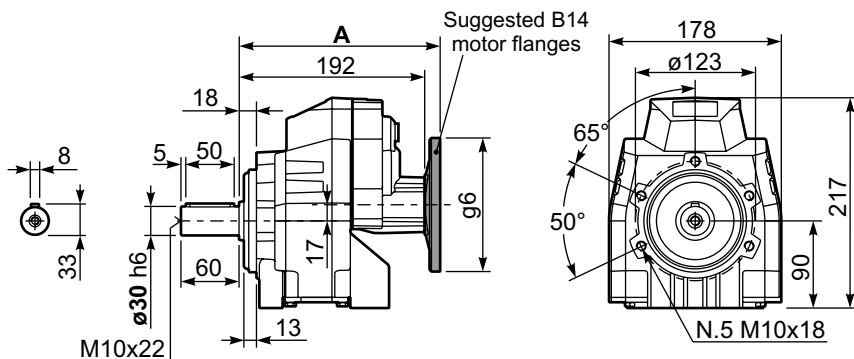
Available output flanges / flange di uscita

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		
							G		-	-	-	-			Ratios code
508	<b>2.76</b>	9	166	1.5	<b>13.3</b>	<b>245</b>			<b>not available</b>						
395	<b>3.54</b>	9	213	1.2	<b>10.8</b>	<b>255</b>							2485	<b>ø35</b>	02
277	<b>5.06</b>	7.5	245	1.1	<b>7.7</b>	<b>260</b>							1891	ø38	03
241	<b>5.81</b>	7.5	281	1.1	<b>7.7</b>	<b>300</b>							1693	ø40	04
206	<b>6.79</b>	7.5	329	1.1	<b>8.0</b>	<b>360</b>							1495	On request	05

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **701C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.  
For complete documentation please visit our web site.

**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.  
Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

**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.  
Para documentación completa, consultar nuestra Web.

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			$F_{eq} = FR \cdot \frac{70}{X+35}$		
	$F_R$ (N)	$F_A$ (N)		$F_{eq}$ (N)	$X$
$n_2$	FA	FR	$n_2$	FA	FR
300	680	3400	140	960	4800
250	760	3800	120	1040	5200
200	900	4500	85	1120	5600
$n_2$	FA	FR	$n_2$	FA	FR
70	1300	6500	40	1460	7300
15	1800	9000			

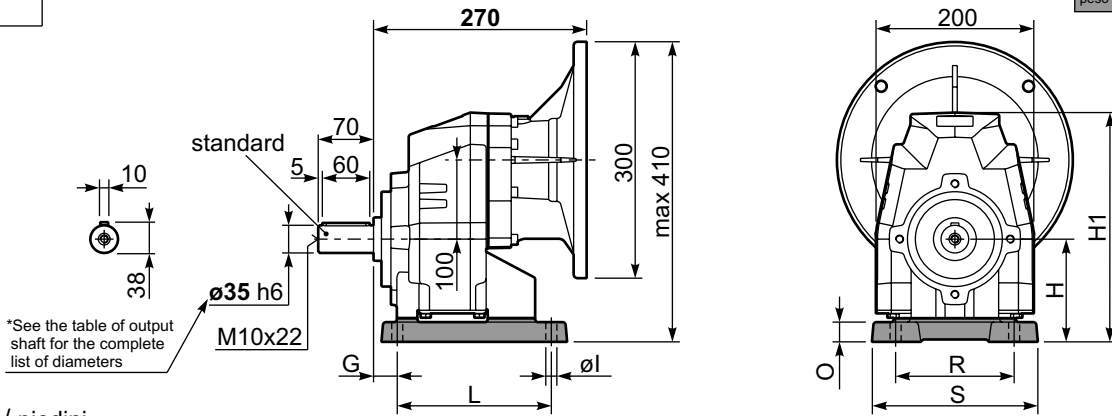
**On request reinforced bearings to increase loads.**  
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

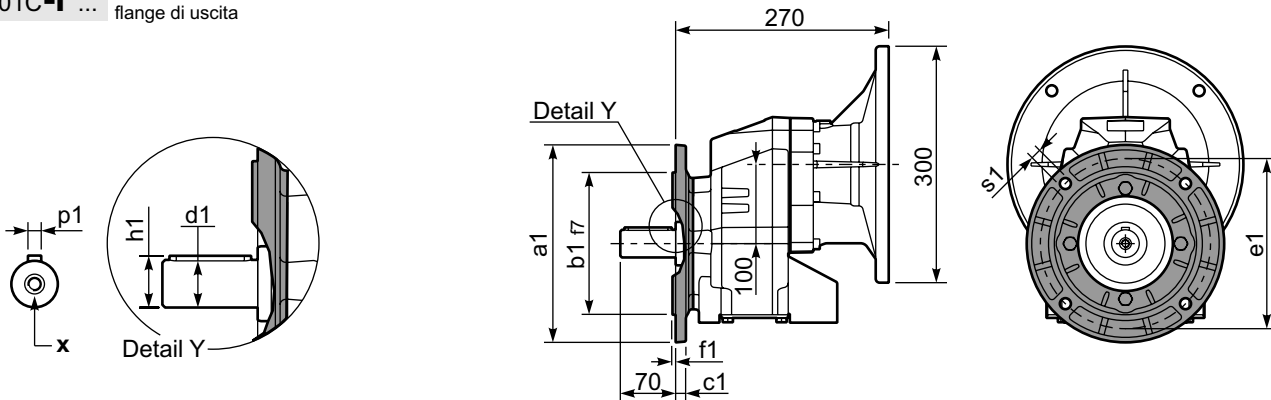
Gearbox weight  
peso riduttore With flange **36.0 kg**  
With feet **39.5 kg**



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 / Albero di uscita

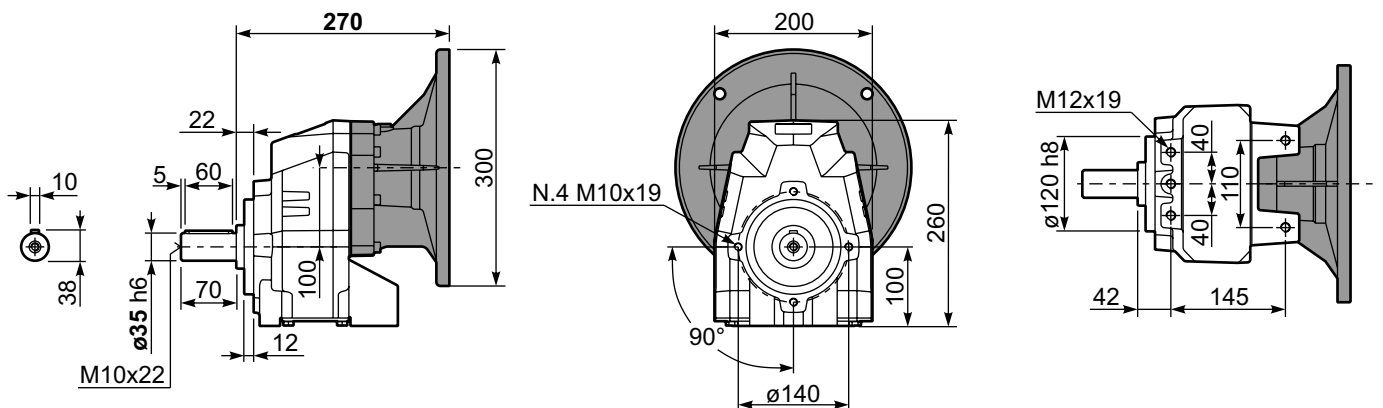
	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M10x28

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 	Output Shaft 	Ratios code 
							C	D	E	F	R	T	U	V			
							71	80	90	100 112	80	90	100 112	132			
213	<b>6.57</b>	7.5	312	1.2	<b>8.4</b>	<b>360</b>	B								3018		01
185	<b>7.56</b>	7.5	359	1.0	<b>7.5</b>	<b>370</b>	B								3016		02
159	<b>8.82</b>	7.5	419	0.9	<b>6.7</b>	<b>385</b>	B								3014		03
113	<b>12.39</b>	7.5	588	0.9	<b>6.8</b>	<b>550</b>	B								2018		04
98	<b>14.24</b>	5.5	499	1.1	<b>6.1</b>	<b>570</b>	B								2016	<b>standard</b>	05
84	<b>16.75</b>	5.5	587	1.0	<b>5.5</b>	<b>600</b>	B								1618	<b>ø35</b>	06
73	<b>19.25</b>	4	494	1.2	<b>4.8</b>	<b>600</b>	B								1616		07
64	<b>21.78</b>	4	558	1.1	<b>4.2</b>	<b>600</b>	B								1318	<b>ø38</b>	08
56	<b>25.04</b>	4	642	0.9	<b>3.7</b>	<b>600</b>	B								1316	<b>ø40</b>	09
47.9	<b>29.23</b>	3	564	1.1	<b>3.1</b>	<b>600</b>	B								1314	On request	10
45.7	<b>30.65</b>	3	592	1.0	<b>3.0</b>	<b>600</b>	B								1116		11
39.1	<b>35.78</b>	2.2	509	1.2	<b>2.6</b>	<b>600</b>	B								1114		12
36.3	<b>38.55</b>	2.2	548	1.1	<b>2.3</b>	<b>580</b>	B								818		13
31.6	<b>44.32</b>	2.2	630	1.0	<b>2.1</b>	<b>600</b>	B								816		14
27.1	<b>51.74</b>	1.5	507	1.2	<b>1.8</b>	<b>600</b>	B								814		15
22.9	<b>61.03</b>	1.1	437	1.1	<b>1.2</b>	<b>460</b>	B								616		16
19.6	<b>71.25</b>	1.1	510	1.0	<b>1.2</b>	<b>535</b>	B								614		17

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

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

**EN** Unit **702C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox. For complete documentation please visit our web site.

**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. Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
2.10 LT	1.40 LT	1.40 LT	1.30 LT	2.25 LT	1.60 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

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

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

**Input shaft**  
Albero in entrata

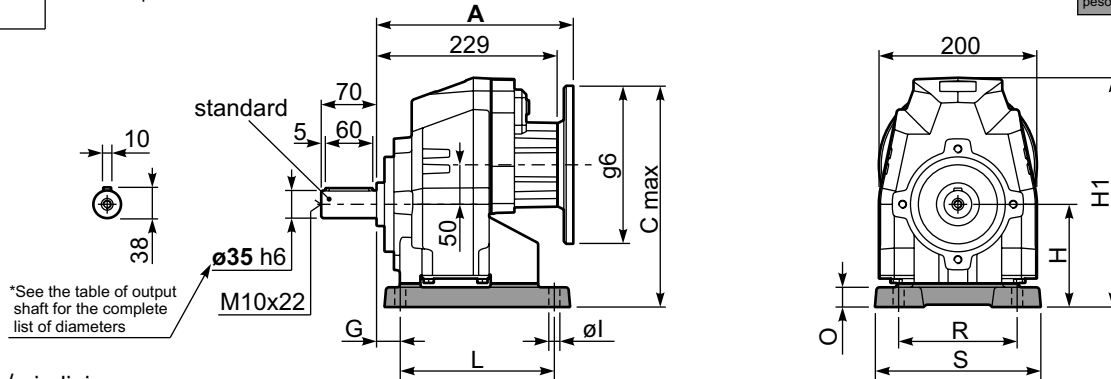
$n_1$	FA	FR
1400	400	2000
900	440	2200
500	440	2200

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.



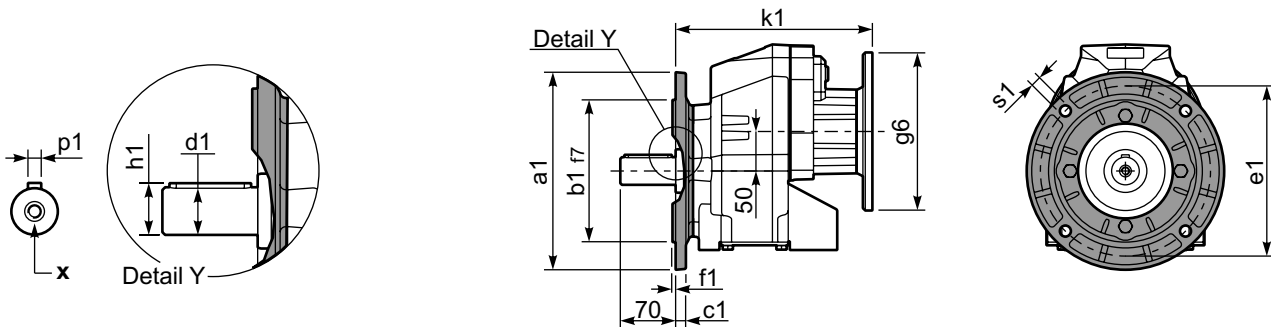
## P702C-S6...

With feet  
Con piediniGearbox  
weight  
peso riduttoreWith flange 30.0 kg  
With feet 33.5 kg

## Feet / piedini

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


## P702C-F...

Output flanges  
flange di uscita

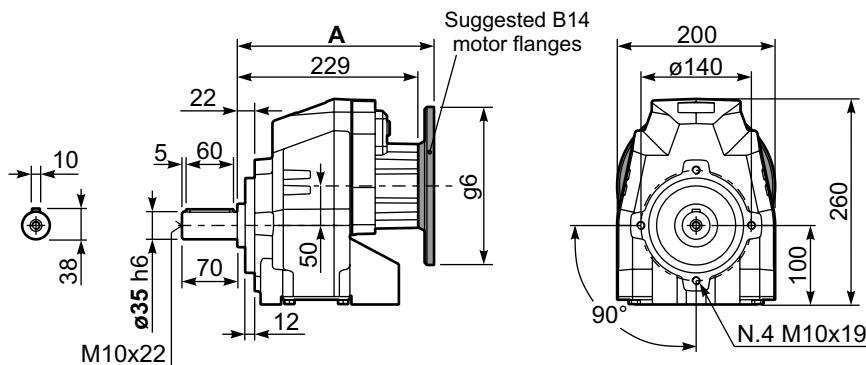
## \*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M10x28

## Available output flanges / flange di uscita

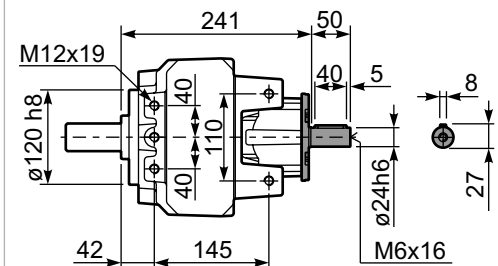
a1 ø	b1	c1	e1	f1	s1	kit code	 With flange and feet only on request. Ask for compatibility
200	130	11	165	3.5	11	KC70.9.012	
250	180	13	215	4	14	KC70.9.013	
-	-	-	-	-	-	-	

## P702C-N...

Basic gearbox  
Riduttore base

B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B5	247.5	290	160	247.5	KC023.4.041
80/90 B5	249.5	310	200	249.5	KC023.4.042
100/112 B5	255.5	335	250	255.5	KC023.4.043

## R702C-N...

Input Shaft  
Albero in entrata

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
80 B14	247.5	270	120	247.5	KC085.4.046
90 B14	247.5	280	140	247.5	KC085.4.045
100/112 B14	258.5	290	160	258.5	KC085.4.047
132 B14	277	310	200	277	KC50.4.041



### QUICK SELECTION / Selezione veloce

input speed ( $n_1$ ) = 1400 min<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  $\varnothing$	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	1.0	1.5	600	B				C	C		191318	01
19.7	<b>71.16</b>	1.5	683	0.9	1.3	600	B				C	C		191316	02
17.0	<b>82.48</b>	1.1	578	1.0	1.1	600	B				C	C		171316	03
14.5	<b>96.29</b>	1.1	675	0.9	0.97	600	B				C	C		171314	04
13.9	<b>100.51</b>	0.75	483	1.2	0.93	600	B				C	C		131318	05
12.1	<b>115.56</b>	0.75	556	1.1	0.81	600	B				C	C		131316	06
11.1	<b>125.96</b>	0.75	606	1.0	0.74	600	B				C	C		190816	07
10.4	<b>134.91</b>	0.75	649	0.9	0.69	600	B				C	C		131314	08
9.5	<b>147.05</b>	0.55	522	1.1	0.64	600	B				C	C		190814	09
8.2	<b>170.44</b>	0.55	605	1.0	0.55	600	B				C	C		170814	10
7.6	<b>184.15</b>	0.55	653	0.9	0.51	600	B				C	C		101314	11
6.8	<b>205.87</b>	0.37	488	1.2	0.45	600	B				C	C		91316	12
5.8	<b>240.34</b>	0.37	570	1.1	0.39	600	B				C	C		91314	13
5.0	<b>279.22</b>	0.37	662	0.9	0.34	600	B				C	C		100816	14
4.3	<b>325.97</b>	0.25	522	1.2	0.29	600	B				C	C		100814	15
3.8	<b>364.41</b>	0.25	583	1.0	0.26	600	B				C	C		90816	16
3.3	<b>425.43</b>	0.18	521	1.2	0.22	600	B				C	C		90814	17
2.9	<b>481.19</b>	0.18	589	1.0	0.19	600	B				C	C		70816	18
2.5	<b>561.76</b>	0.18	687	0.9	0.17	600	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.  
For complete documentation please visit our web site.

**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.  
Per la documentazione completa consulta il nostro sito.

**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.  
Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

**E** El reductor tamaño 703C se suministra, lubricado de por vida con aceite sintético y no requiren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.  
Para documentación completa, consultar nuestra Web.

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

$F_R$  (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 in entrata

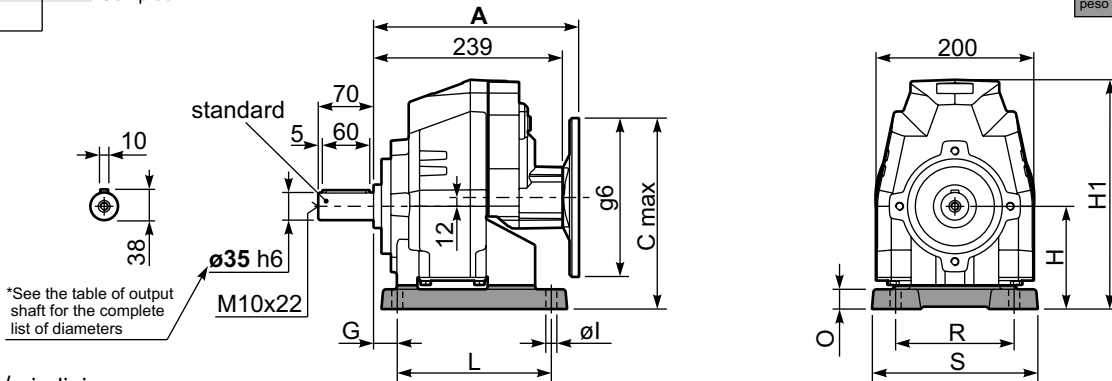
$n_1$	FA	FR
1400	240	1200
900	280	1400
500	310	1700

tab. 2

SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

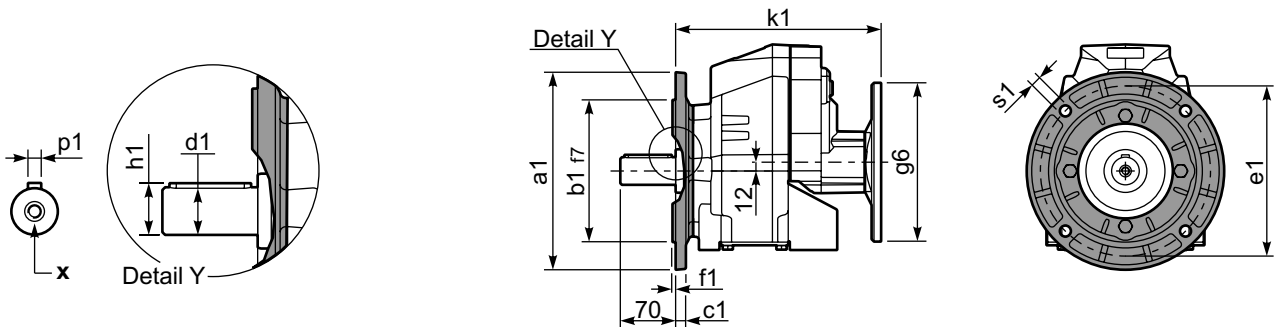
Gearbox weight **30.0 kg**  
peso riduttore With feet **33.5 kg**



Feet / piedini

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

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



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 35x70	10	38	M10x22
On request A richiesta	ø 38x70	10	41	M10x25
	ø 40x80	12	43	M10x28

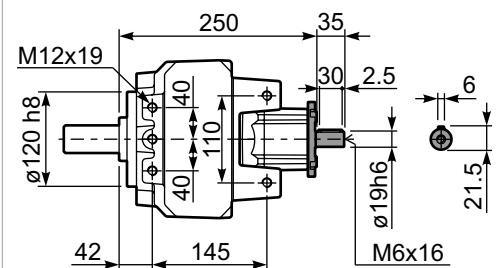
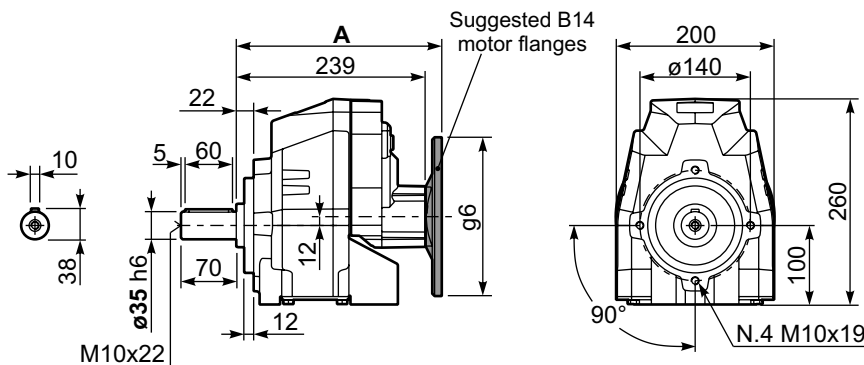
Available output flanges / flange di uscita

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

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 <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		B14 motor flanges		Output Shaft		
							G	132	-	-	-	-	
227	<b>6.17</b>	9	371	1.2	<b>10.9</b>	<b>450</b>					18111	<b>standard</b>	01
198	<b>7.06</b>	9	425	1.4	<b>12.7</b>	<b>600</b>					16113	<b>ø40</b>	02
170	<b>8.21</b>	9	494	1.4	<b>12.2</b>	<b>670</b>					14115	<b>ø45</b>	03
							<b>not available</b>				On request		

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.

For complete documentation please visit our web site.

**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.

Per la documentazione completa consulta il nostro sito.

**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.

Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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.

Para documentación completa, consultar nuestra Web.

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

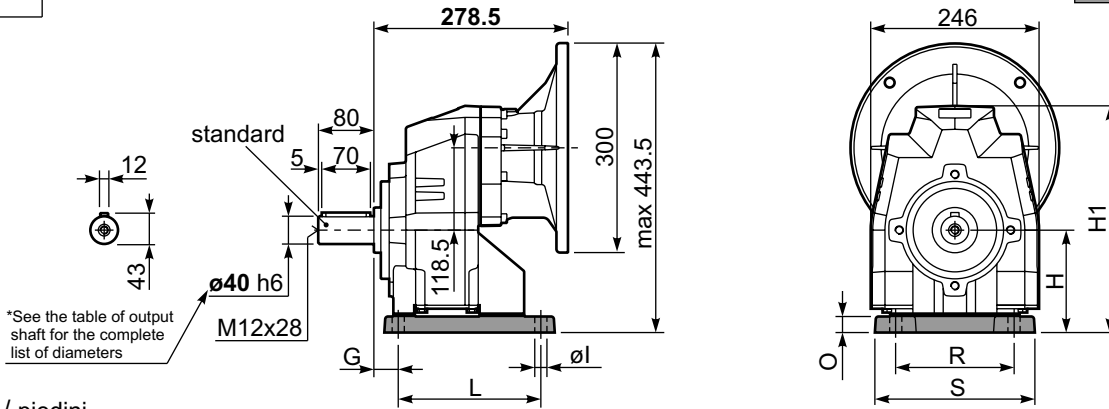
RADIAL AND AXIAL LOADS								
Output shaft Albero di uscita			$F_{eq} = FR \cdot \frac{80.5}{X+40.5}$					
n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	1200	6000	140	1600	8000	70	2200	11000
250	1400	7000	120	1800	9000	40	2600	13000
200	1500	7500	85	2000	10000	15	3000	15000
<b>On request reinforced bearings to increase loads.</b> A richiesta cuscinetti rinforzati per aumentare i carichi.								

tab. 2

▪ **SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

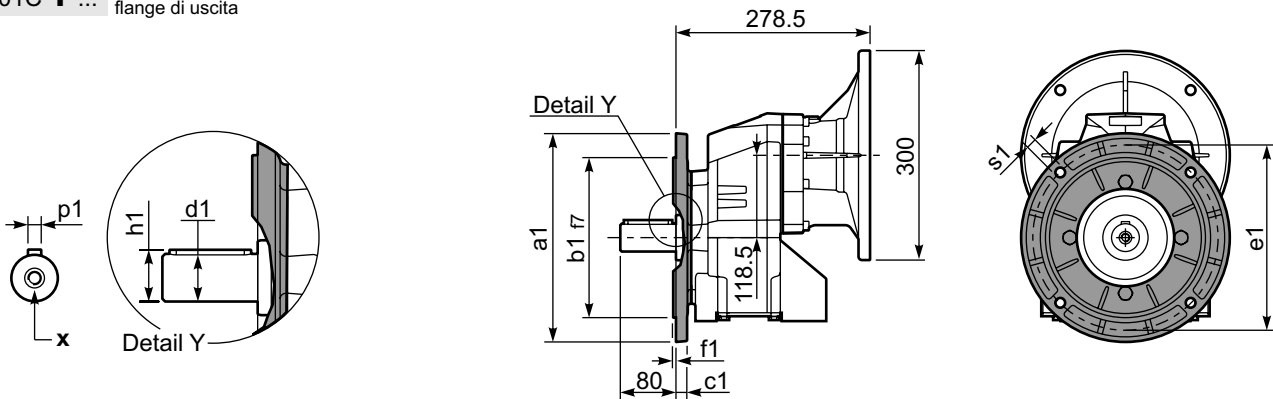
Gearbox weight **45.5 kg**  
peso riduttore With feet **49.5 kg**



**Feet / piedini**

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

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



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

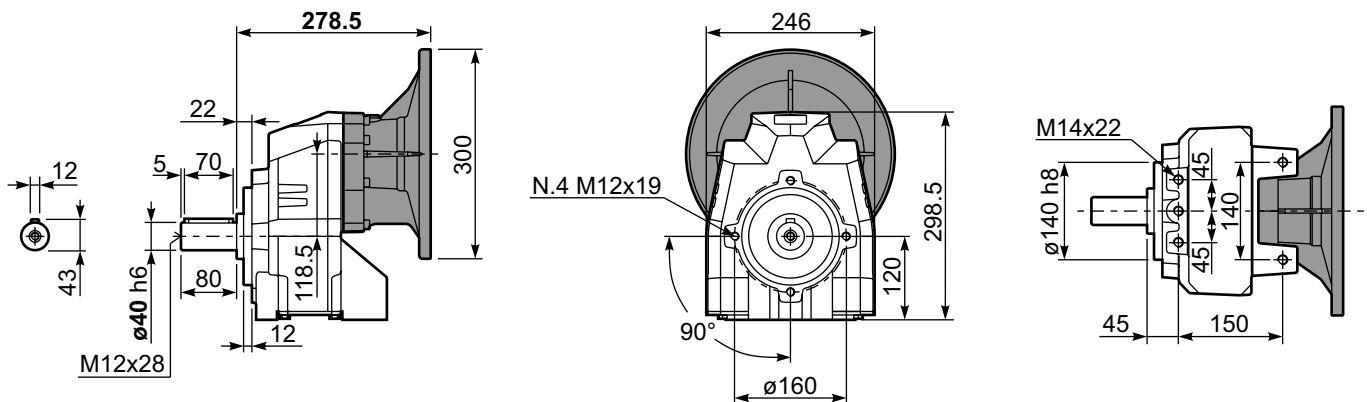
	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100	14	53.5	M16x36
-	-	-	-	-

**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	R	T	U	V		
							71	80	90	100 112	80	90	100 112	132		
175	<b>8.02</b>	9	473	1.0	9.3	490	B								3018	01
153	<b>9.18</b>	9	541	1.0	9.3	560	B								3016	02
131	<b>10.68</b>	9	630	1.0	9.3	650	B								3014	03
93	<b>15.11</b>	7.5	717	1.1	7.6	755	B								2018	04
81	<b>17.30</b>	7.5	821	1.1	7.6	865	B								2016	05
70	<b>20.13</b>	7.5	955	0.9	6.8	900	B								2014	06
60	<b>23.39</b>	5.5	820	1.1	5.9	900	B								1616	07
52	<b>27.21</b>	5.5	954	0.9	5.1	900	B								1614	08
46.0	<b>30.42</b>	4	780	1.2	4.5	900	B								1316	09
39.6	<b>35.38</b>	4	907	1.0	3.9	900	B								1314	10
37.6	<b>37.24</b>	3	719	1.0	3.1	750	B								1116	11
32.3	<b>43.31</b>	3	836	1.0	3.1	870	B								1114	12
29.8	<b>47.02</b>	2.2	668	1.1	2.3	705	B								818	13
26.0	<b>53.85</b>	2.2	765	1.1	2.3	810	B								816	14
22.4	<b>62.63</b>	2.2	890	1.0	2.2	900	B								814	15
18.9	<b>74.16</b>	1.1	531	1.0	1.2	556	B								616	16
16.2	<b>86.25</b>	1.1	617	1.0	1.2	647	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 **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. For complete documentation please visit our web site.

**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. Per la documentazione completa consulta il nostro sito.

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

**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. Para documentación completa, consultar nuestra Web.

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

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

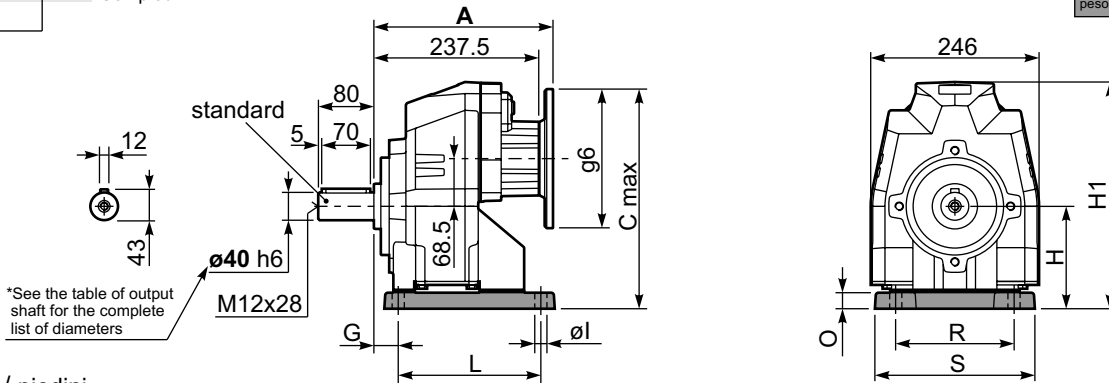
$n_1$	FA	FR
1400	450	2250
900	500	2500
500	600	3000

**tab. 2**

SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

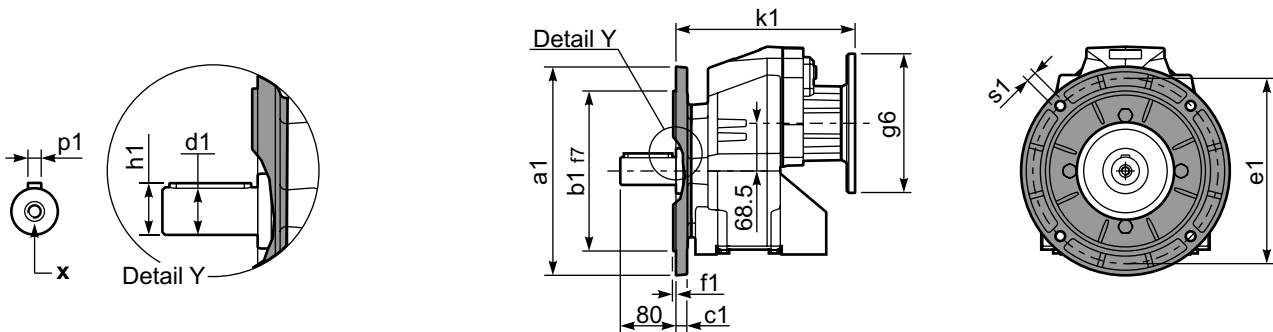
Gearbox weight **39.5 kg**  
peso riduttore With flange  
With feet **43.5 kg**



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
	-	-	-	-

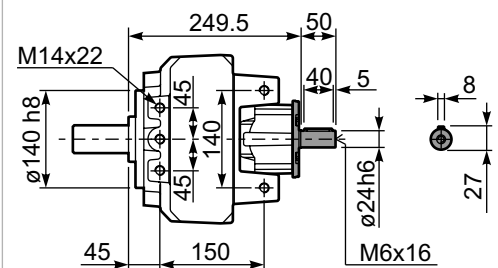
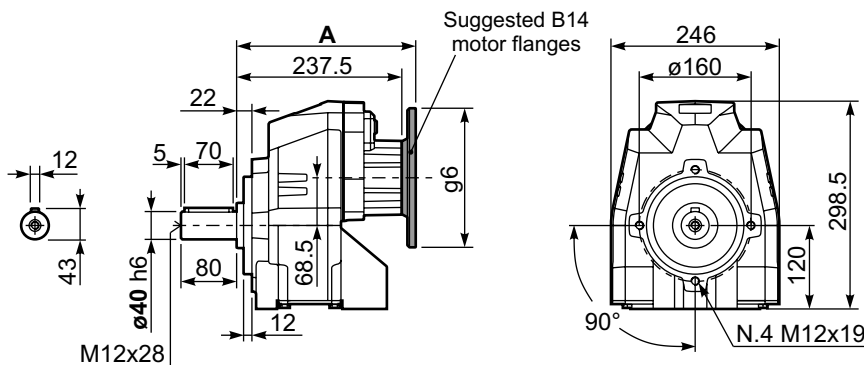
Available output flanges / flange di uscita

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

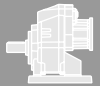
P802C-**N** ... Basic gearbox  
Riduttore base

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

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 $\varnothing$	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	786	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	0.41	860	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.  
For complete documentation please visit our web site.

**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.  
Per la documentazione completa consulta il nostro sito.

**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.  
Die komplette Dokumentation, Wartungs- und Inbetriebnahmeanleitungen finden Sie unter.

**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.  
Para documentación completa, consultar nuestra Web.

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 di entrata

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

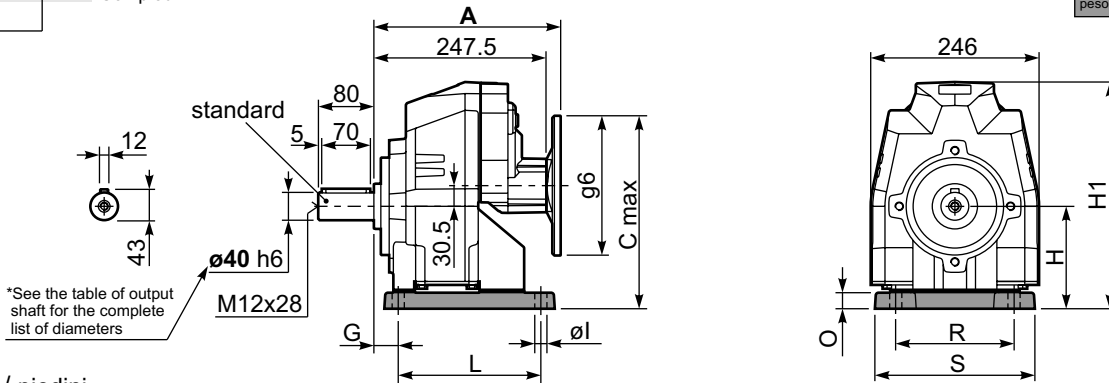
**tab. 2**

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.



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

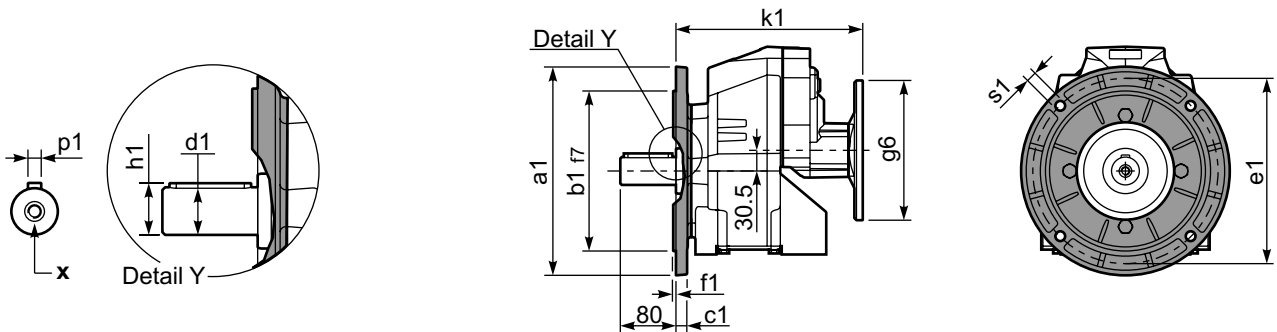
Gearbox weight **39.5 kg**  
peso riduttore With feet **43.5 kg**



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
-	-	-	-	-

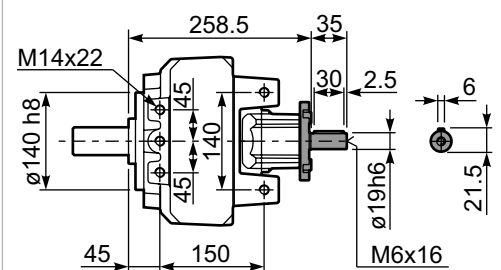
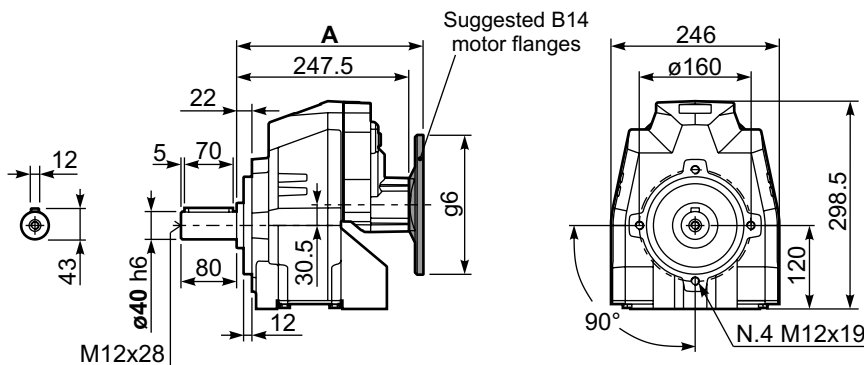
Available output flanges / flange di uscita

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		
							H	I	-	-	-	-	-	-	Ø
528	<b>2.65</b>	22	374	1.5	<b>31</b>	<b>550</b>			<b>not available</b>				2361	<b>standard</b>	01
409	<b>3.42</b>	22	483	1.2	<b>25</b>	<b>570</b>							1965	<b>Ø50</b>	02
304	<b>4.60</b>	22	649	1.0	<b>21.5</b>	<b>660</b>							1569		03
256	<b>5.46</b>	22	771	1.0	<b>20.5</b>	<b>750</b>							1371	Ø60	04
211	<b>6.64</b>	22	937	1.0	<b>20.3</b>	<b>900</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 **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. For complete documentation please visit our web site.

**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. Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

B3	B6	B7	B8	V5	V6	V8
5.90 LT	3.80 LT	3.80 LT	3.50 LT	6.80 LT	4.50 LT	Ask
AGIP 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

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

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

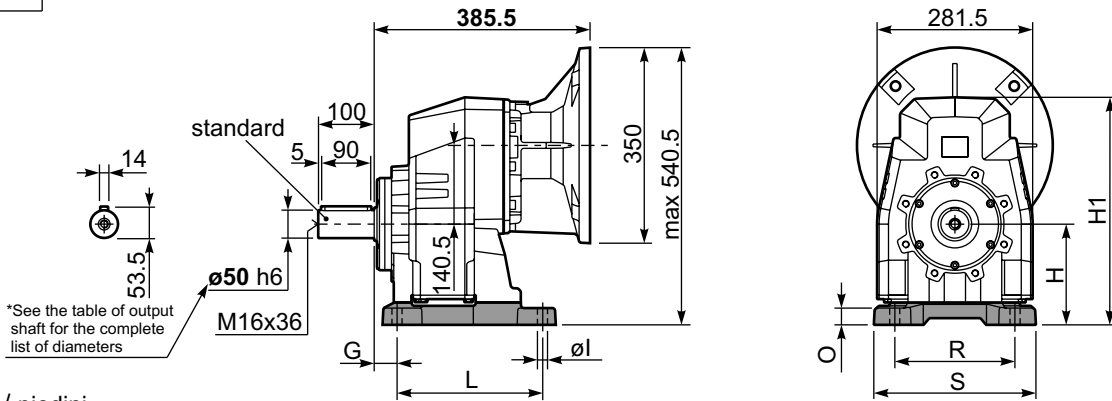
**On request reinforced bearings to increase loads.**  
A richiesta cuscinetti rinforzati per aumentare i carichi.

tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

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

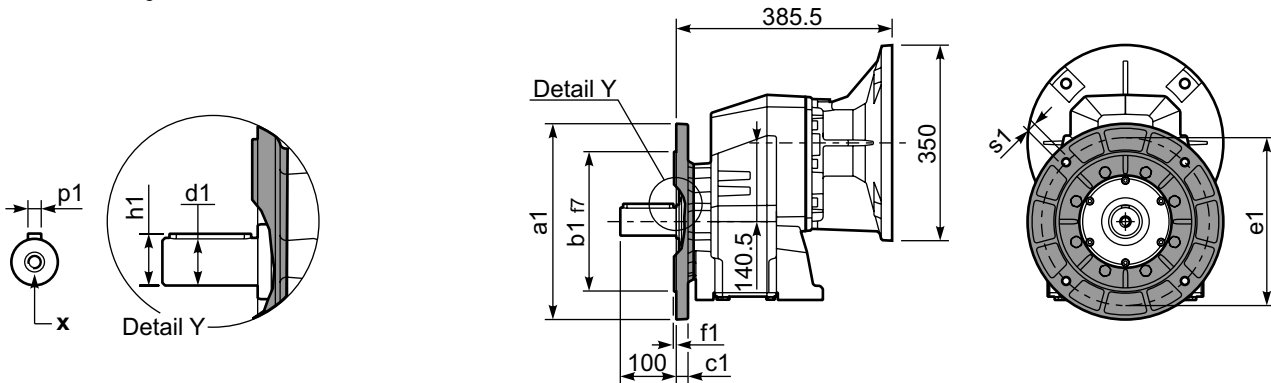
Gearbox weight  
peso riduttore With flange **102 kg**  
With feet **110.5 kg**



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

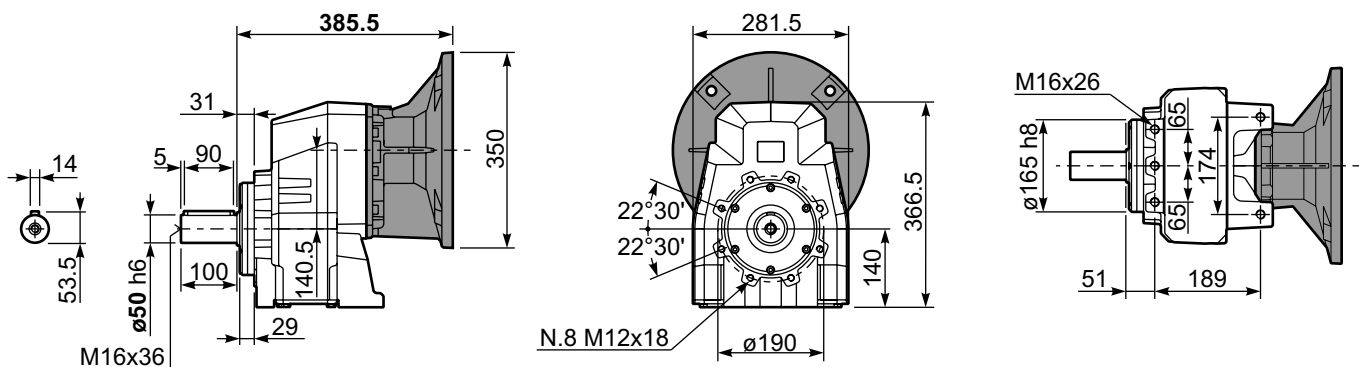
	Shaft - d1	p1	h1	x
Standard	ø 50x100	14	53.5	M16x36
On request A richiesta	ø 60x120	18	64	M20x42
-	-	-	-	-

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
-	-	-	-	-	-	-

  
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	1.1	<b>23.0</b>	<b>900</b>							3015	01	
197	<b>7.10</b>	22	982	1.0	<b>21.0</b>	<b>975</b>							3013	02	
162	<b>8.63</b>	18.5	1003	1.1	<b>19.5</b>	<b>1100</b>							3011	03	
124	<b>11.27</b>	18.5	1310	1.0	<b>18.0</b>	<b>1330</b>							2015	04	
105	<b>13.38</b>	15	1259	1.1	<b>16.2</b>	<b>1420</b>							2013	05	
92	<b>15.24</b>	15	1434	1.0	<b>15.0</b>	<b>1500</b>							1615	06	
86	<b>16.26</b>	15	1530	1.0	<b>14.5</b>	<b>1545</b>							2011	07	
77	<b>18.09</b>	11	1251	1.2	<b>13.0</b>	<b>1545</b>							1613	08	
71	<b>19.82</b>	11	1370	1.2	<b>12.3</b>	<b>1600</b>							1315	09	
64	<b>21.98</b>	11	1520	1.1	<b>11.5</b>	<b>1650</b>							1611	10	
60	<b>23.53</b>	11	1627	1.0	<b>10.7</b>	<b>1650</b>							1313	11	
58	<b>24.25</b>	9	1430	1.2	<b>10.4</b>	<b>1650</b>							1115	12	
48.6	<b>28.80</b>	9	1698	1.0	<b>9.0</b>	<b>1700</b>							1113	13	
40.0	<b>34.99</b>	7.5	1660	1.0	<b>7.4</b>	<b>1700</b>							1111	14	
33.6	<b>41.64</b>	7.5	1976	0.9	<b>6.2</b>	<b>1700</b>							813	15	
27.7	<b>50.60</b>	5.5	1774	1.0	<b>5.1</b>	<b>1700</b>							811	16	

The dynamic efficiency is **0.96** 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 **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.  
For complete documentation please visit our web site.

**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.  
Per la documentazione completa consulta il nostro sito.

**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.  
Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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.  
Para documentación completa, consultar nuestra Web.

5.90 LT	3.80 LT	3.80 LT	3.40 LT	6.70 LT	4.40 LT	Ask
<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

**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)

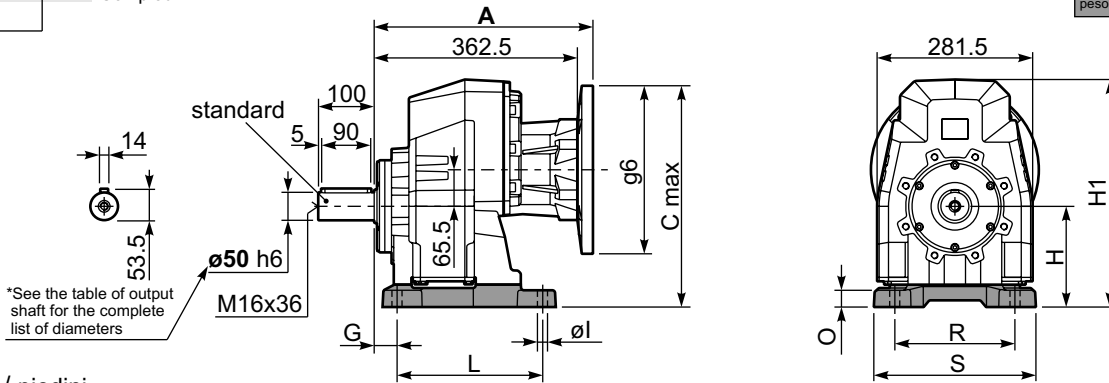
$n_1$	FA	FR
1400	700	3500
900	840	4200
500	900	4500

**tab. 2**

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e gandezza specifica nel sito web per la documentazione completa.

P902C**S8**... With feet  
Con piedini

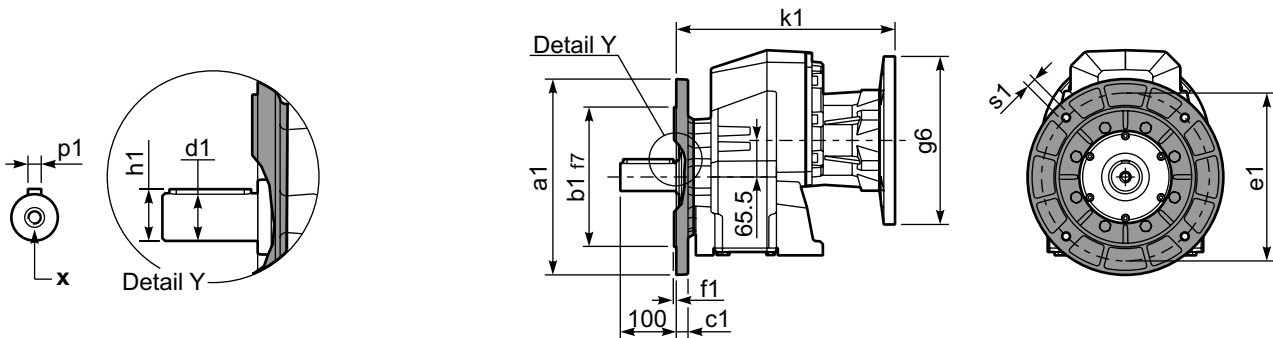
Gearbox weight **98.5 kg**  
peso riduttore With flange  
With feet **107.0 kg**



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 50x100	14	53.5	M16x36
On request A richiesta	ø 60x120	18	64	M20x42
	-	-	-	-

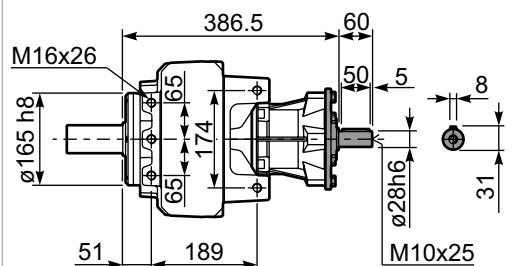
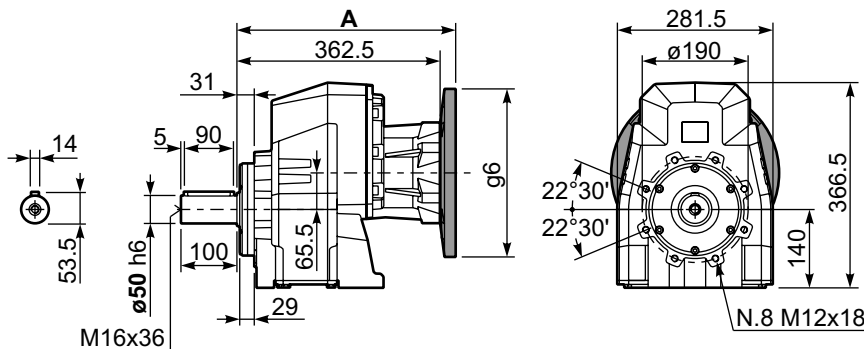
Available output flanges / flange di uscita

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
-	-	-	-	-	-	-

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	KC90.4.042
160/180 B5	402	465.5	350	402	KC90.4.043



**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  $\varnothing$	Ratios code 
							C	D	E	F	R	T	U	V		
							71	80	90	100 112	80	90	100 112	132		
28.8	<b>48.55</b>	5.5	1668	1.0	5.6	1750	B								201315	01
24.3	<b>57.64</b>	4	1449	1.2	4.9	1800	B								201313	02
21.3	<b>65.64</b>	4	1650	1.1	4.2	1750	B								161315	03
20.0	<b>70.04</b>	4	1760	1.0	4.0	1800	B								201311	04
18.0	<b>77.93</b>	3	1474	1.2	3.6	1800	B								161313	05
16.4	<b>85.36</b>	3	1615	1.1	3.2	1750	B								131315	06
14.8	<b>94.70</b>	3	1792	1.0	3.0	1800	B								161311	07
13.8	<b>101.35</b>	3	1917	0.9	2.8	1800	B								131313	08
11.4	<b>123.15</b>	2.2	1715	1.0	2.3	1800	B								111311	09
9.3	<b>150.73</b>	1.5	1447	1.2	1.9	1800	B								111311	10
7.8	<b>179.39</b>	1.5	1722	1.0	1.6	1800	B								81313	11
6.4	<b>217.98</b>	1.1	1528	1.2	1.3	1800	B								81311	12
5.7	<b>247.03</b>	1.1	1732	1.0	1.1	1800	B								61313	13
4.7	<b>300.17</b>	1.1	2105	0.9	0.94	1800	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. For complete documentation please visit our web site.

**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. Per la documentazione completa consulta il nostro sito.

**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. Die komplette Dokumentation, Wartungs - und Inbetriebnahmeanleitungen finden Sie unter.

**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. Para documentación completa, consultar nuestra Web.

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

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

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

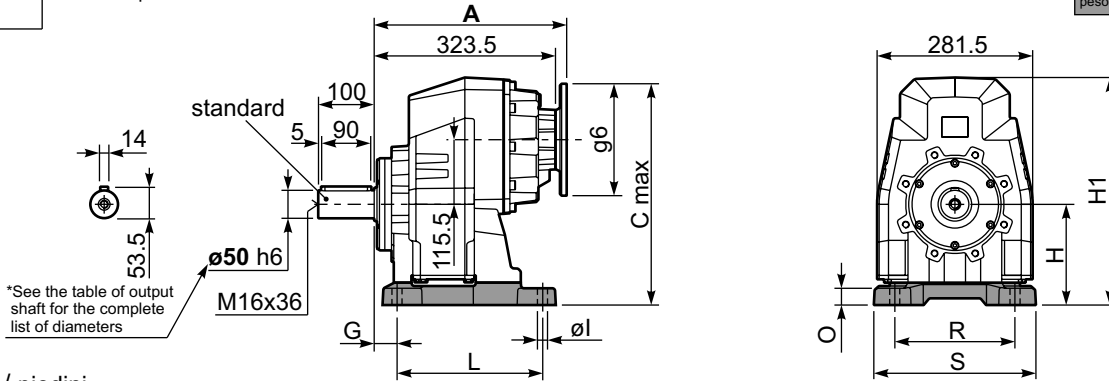
$n_1$	FA	FR
1400	450	2250
900	500	2500
500	600	3000

tab. 2

**SELECT THIS TYPE AND THIS SPECIFIC SIZE ON THE WEB PAGES TO GET COMPLETE TECHNICAL DATA.**  
Selezionare tipo e grandezza specifica nel sito web per la documentazione completa.

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

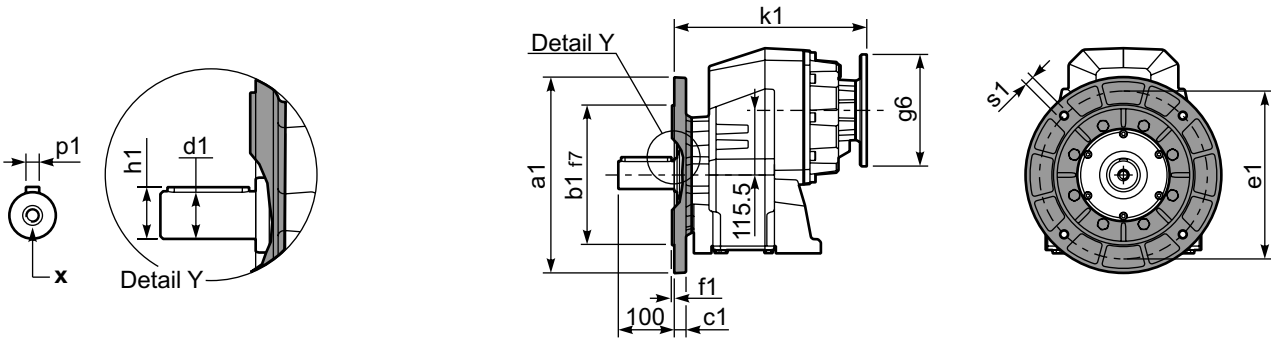
Gearbox weight  
peso riduttore With flange **86.0 kg**  
With feet **94.5 Kg**



Feet / piedini

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

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




\*Available output shaft / Albero di uscita

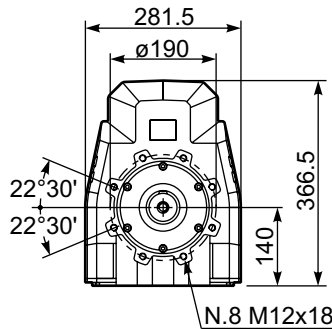
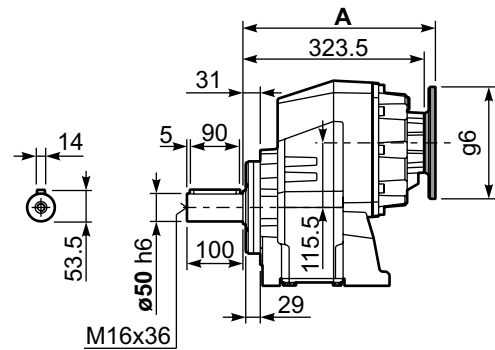
	Shaft - d1	p1	h1	x
Standard	Ø 50x100	14	53.5	M16x36
On request A richiesta	Ø 60x120	18	64	M20x42
	-	-	-	-

Available output flanges / flange di uscita

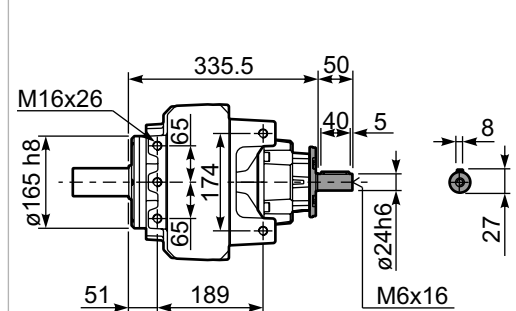
a1 Ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-

  
With flange and feet only on request.  
Ask for compatibility

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



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



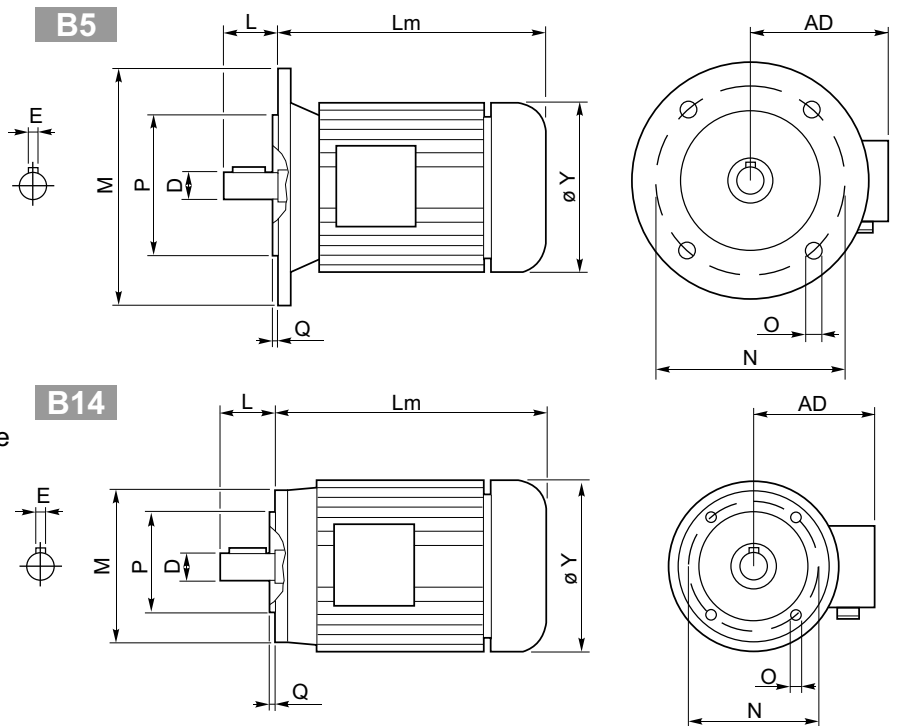
B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B5	342	420.5	160	342.5	KC023.4.041
80/90 B5	344	440.5	200	344.5	KC023.4.042
100/112 B5	350	465.5	250	350.5	KC023.4.043

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



- 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 (400V)	kW	Nm	A (400V)	kW	Nm	A (400V)	D	E	L	Lm	Y	AD	P	N	M	O	Q	P	N	M	O	Q		
56 A	0.09	0.32	0.38	0.06	0.44	0.27	—	—	—	9	3	20	179	108	96	80	100	120	7	2.5	50	65	80	M5	2.5	2.7	
56 B	0.12	0.42	0.46	0.09	0.67	0.37	—	—	—	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	—	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	—	—	—	—	—	—	—	—	—	—	—	—	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.

**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

**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**

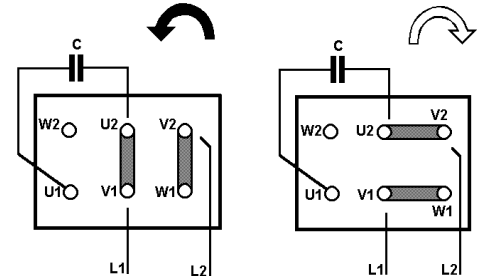
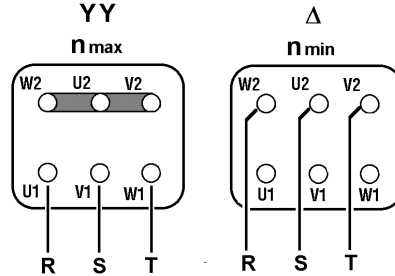
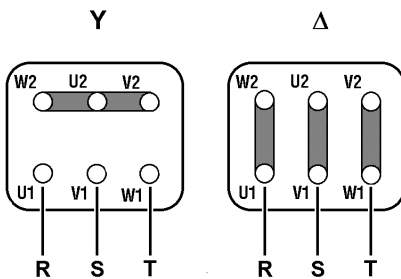
**Verbindungselemente**

**Conexiones**

Threephase asynchronous single polarity  
Asincrono trifase singola polarità  
Asynchronmotor 3-ph eine Drehzahl  
Asincrono trifasico de una velocidad

Threephase asynchronous double polarity  
Asincrono trifase doppia polarità  
Asynchronmotor 3-ph doppelte Drehzahl  
Asincrono trifasico de dos velocidades

Single phase asynchronous  
Asincrono monofase  
Einphasen-Asynchronmotor  
Asincrono monofasico





---

## Terms and Conditions

- In the interests of safety, customers are reminded that when purchasing any technical product for use at work (or otherwise), any additional or up-to-date information and guidance, which it has not been possible to include in the publication, should be obtained by you from your local sales office in relation to the suitability and the safe and proper use of the product. All relevant information and guidance must be passed on by you to the person engaged in, or likely to be affected by or responsible for the use of the product
- The performance levels and tolerances of our product stated in this catalogue (including without limitation, serviceability, wearlife, resistance to fatigue, corrosion protection) have been verified in a programme of testing and quality control in accordance with Renold, independent and/or international standard recommendations. No representations or warranties are given that our product shall meet the stated performance levels or tolerances for any given application outside the performance levels and tolerances for the product's own specific application and environment.

- Whilst all reasonable care in compiling the information contained in this catalogue is taken, no responsibility is accepted for errors.
  - All information contained in this catalogue is subject to change without notice.
  - The illustrations used in this catalogue represent the type of product described but the goods supplied may vary in some detail from those illustrated.
  - The right is reserved to make modifications to the product to meet manufacturing conditions and/or developments (for example in design or materials).
  - Product can be supplied by Renold companies or representatives around the world on the standard terms and conditions of sale of the company or representative from which the product is purchased.
  - Copyright Renold Power Transmission Limited 2001. All rights reserved.
- Nothing contained in this publication shall constitute a part of any contract, express or implied.

## RENOLD

A global power transmission group serving global markets through an international network.

For your local Renold sales and service location visit [www.renold.com](http://www.renold.com)

**Superior Technology. Global Expertise.**

[www.renold.com](http://www.renold.com)

[gears.sales@renold.com](mailto:gears.sales@renold.com)



REN54/CATRP/12.15/E  
A Business of Renold Power Transmission Ltd.

**RENOLD**  
*Superior Gear Technology*