

RK-C  
RK-A

Motoriduttori e riduttori coassiali

Coaxial gearmotors and reduction gears



# Aluminum one step gearboxes

A modular and compact product

3

## 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

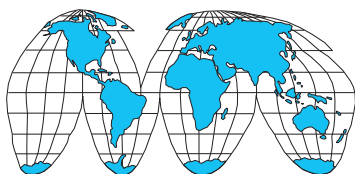
Removable feet.

## Single-piece aluminum alloy housing

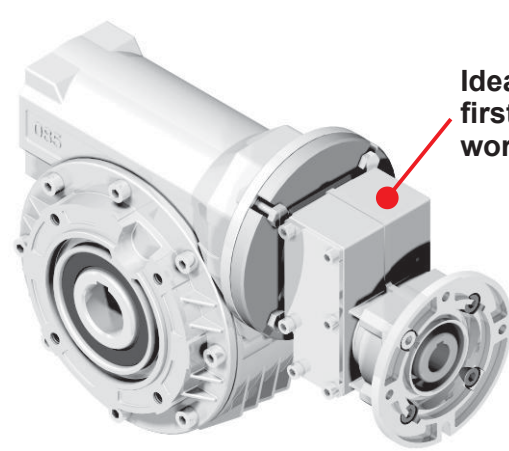
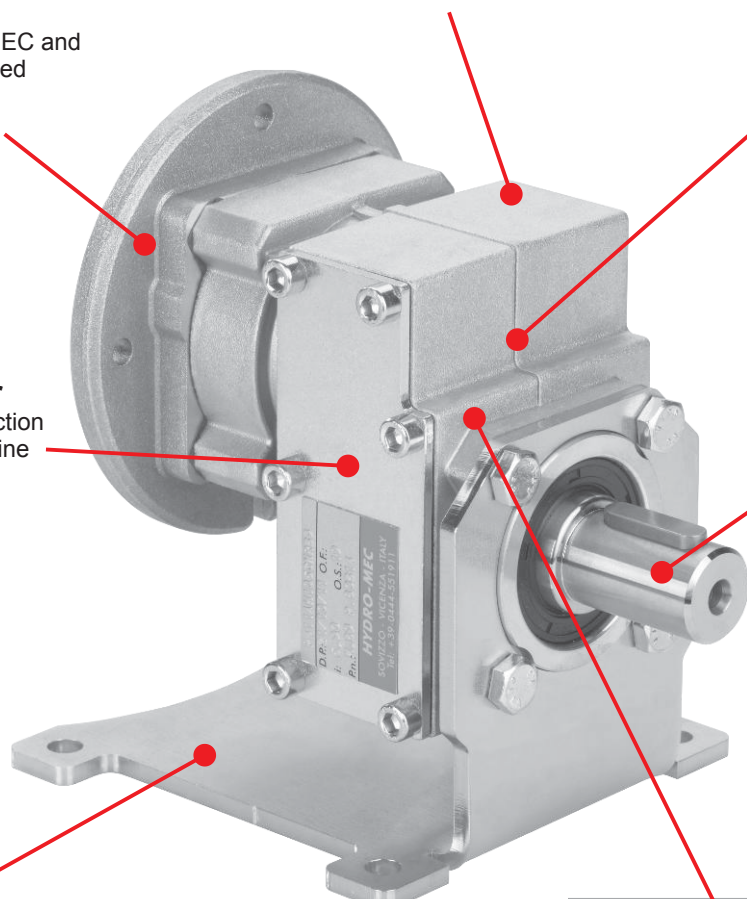
Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing

Ideal for use as first step with wormgearboxes.

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

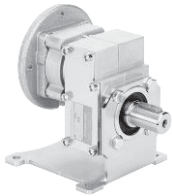


World wide sales network.



# Specific type datasheet on page...

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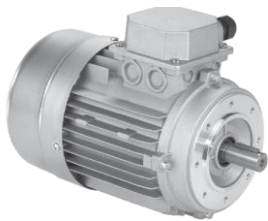


Types / Tipi  
Tipen / Types  
Tipos



3-5	3-7	3-9	3-11
211A 20Nm	311A 30Nm	411A 38Nm	511A 110Nm

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



Types / Tipi  
Tipen / Types  
Tipos



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

Type - Tipo - Typ  
Type - Tipo

Size - Grandezza - Grösse  
Taille - Tomafío

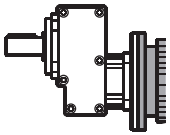
Mounting - Montaggio  
Montage - Fixation  
Tipo de montaje

**P**

**311A**

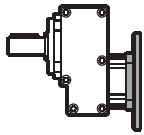
**-F**

Aluminum one step gear  
Riduttori in alluminio a uno stadio



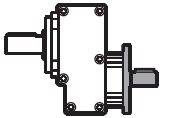
With IEC motor

**M**



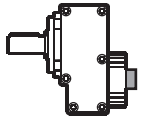
With motor flange

**P**



With male input shaft

**R**

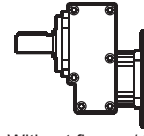


Modular Base

**B**

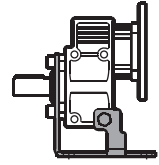
**1** Stages  
Riduzioni  
Stufen  
Trains  
Etapas

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



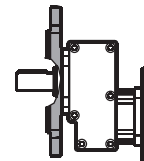
Without flange / feet

**-N**



Mounted feet

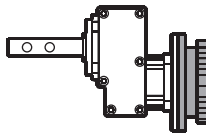
**H1**



Output flange mounted

**-F**

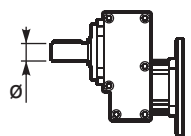
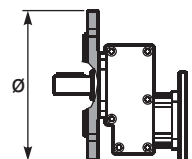







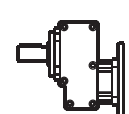
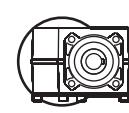
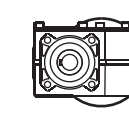
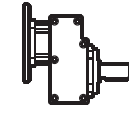
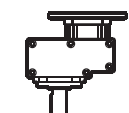
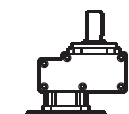
Special output shaft  
Albero uscita speciale



Only on request for Q.ty  
A richiesta per quantità



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

Ratio - Rapporto Untersetzung Reduction Relación	Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Terminal box position Posizione morsettieria Klemmkastenlage Position boîte à bornes Posición caja de bornes	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje
<b>2.84</b>	<b>S</b>	<b>2</b>	<b>-C</b>	<b>B</b>	<b>B3</b>
<p>See technical data table</p> <p>Vedi tabella dati tecnici.</p> <p>Technisches Datenblatt beachten</p> <p>Voir Tableau données techniques</p> <p>Ver tabla datos técnicos</p>	 <p>→ <b>STANDARD</b></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>211A</p> <p><b>I</b> → <b>∅105</b></p> <p>Flangia integrata Integrated 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>Flange Flangia</p>  <p>B5</p> <p><b>-A</b>=56 (∅120)</p> <p><b>-B</b>=63 (∅140)</p> <p><b>-C</b>=71 (∅160)</p> <p><b>-D</b>=80 (∅200)</p> <p><b>-E</b>=90 (∅200)</p> <p><b>-F</b>=100÷112 (∅250)</p> <p><b>-G</b>=132 (∅300)</p> <p>B14</p> <p><b>-O</b>=56 (∅80)</p> <p><b>-P</b>=63 (∅90)</p> <p><b>-Q</b>=71 (∅105)</p> <p><b>-R</b>=80 (∅120)</p> <p><b>-T</b>=90 (∅140)</p> <p><b>-U</b>=100÷112 (∅160)</p> <p><b>-V</b>=132 (∅200)</p> <p>Type R Tipo R</p>  <p>211A 311A</p> <p><b>-1</b> → <b>∅14</b></p> <p>411A</p> <p><b>-2</b> → <b>∅19</b></p> <p>511A</p> <p><b>-3</b> → <b>∅24</b></p> <p>Without flange Senza flangia</p>  <p>211A 311A</p> <p><b>-Z</b> → <b>∅9</b> (56B5)</p> <p><b>-0</b> → <b>∅11</b> (63B5)</p> <p><b>-1</b> → <b>∅14</b> (71B5)</p> <p>411A</p> <p><b>-1</b> → <b>∅14</b> (71B5)</p> <p><b>-2</b> → <b>∅19</b> (80B5)</p> <p><b>-3</b> → <b>∅24</b> (90B5)</p> <p>511A</p> <p><b>-2</b> → <b>∅19</b> (80B5)</p> <p><b>-3</b> → <b>∅24</b> (90B5)</p> <p><b>-4</b> → <b>∅28</b> (100B5)</p>	 <p><b>A</b></p>  <p><b>B</b></p> <p>STANDARD</p>  <p><b>C</b></p>  <p><b>D</b></p>	 <p><b>B3</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>

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

Lifting / sollevamento / hubantriebe / levage / elevación

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

Rotation / rotazione / drehung / rotation / rotation

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

Linear movement / traslazione / linearbewegung / translation / translacion

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

3

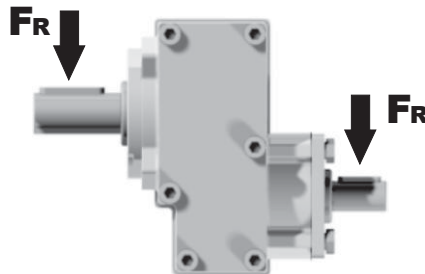
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

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

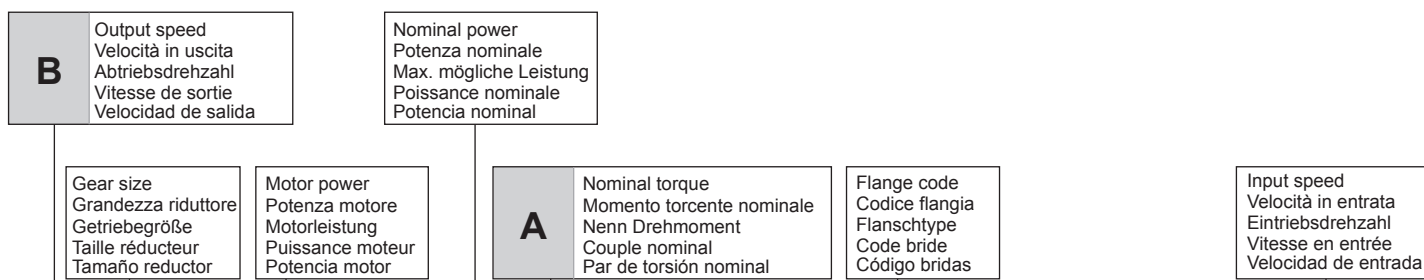
- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée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



	$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$	$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$
<b>M</b>	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion	
<b>d</b>	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo	
<b>f<sub>k</sub></b>	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión <b>1.15</b> Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje <b>1.25</b> Catena / Chain sprockets / Antriebskette / Chaîne / Cadena <b>1.75</b> Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal <b>2.50</b> Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana	

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

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



# 311A One step 30Nm

## Rating - Aluminum ONE STEP GEARBOXES

**QUICK SELECTION / Selezione veloce** input speed (n<sub>1</sub>) = 1400 min<sup>-1</sup>

Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft Ø	Ratios code
							-B	-C	-O	-P	-Q		
892	1.57	0.37	3.9	3.3	1.24	13	63	71	C	C		2844	01
493	2.84	0.37	7.0	3.3	1.21	23			C	C		1954	02
426	3.29	0.37	8.1	3.2	1.18	26			C	C		1756	03
362	3.87	0.37	9.6	2.9	1.08	28			C	C		1558	04



**fs**

Type of load and starts per hour Tipo di carico e avviamenti per ora		Oper. hours per day Ore di funz. giorn.		
		3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

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

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

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

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

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



#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges				Available B14 motor flanges				Output Shaft $\varnothing$ standard $\varnothing 14$	Ratios code 
							-B	-C	-D	-E	-O	-P	-Q	-R		
							63	71	80	90	56	63	71	80		
682	<b>2.05</b>	0.37	5	2.0	<b>0.73</b>	<b>10</b>					C	C			1939	01
595	<b>2.35</b>	0.37	6	2.1	<b>0.76</b>	<b>12</b>					C	C			1740	02
500	<b>2.80</b>	0.37	7	2.0	<b>0.75</b>	<b>14</b>					C	C			1542	03
414	<b>3.38</b>	0.37	8	2.0	<b>0.75</b>	<b>17</b>					C	C			1344	04
298	<b>4.70</b>	0.37	12	1.7	<b>0.64</b>	<b>20</b>					C	C			1047	05
225	<b>6.22</b>	0.37	15	1.5	<b>0.55</b>	<b>23</b>					C	C			956	06
169	<b>8.29</b>	0.37	20	1.0	<b>0.36</b>	<b>20</b>					C	C			758	07
142	<b>9.83</b>	0.25	16	1.0	<b>0.24</b>	<b>16</b>					C	C			659	08

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

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

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

**D** Das Getriebe **211A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **211A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **211A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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

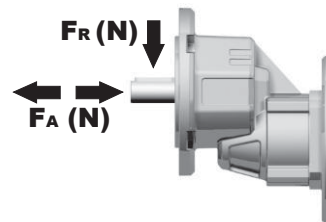
**AGIP** Telium VSF 320

**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

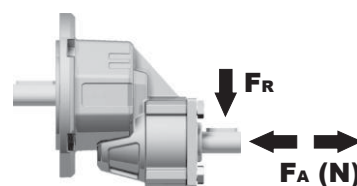
#### RADIAL AND AXIAL LOADS

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



$n_1$	FA	FR
1400	168	840
900	192	960

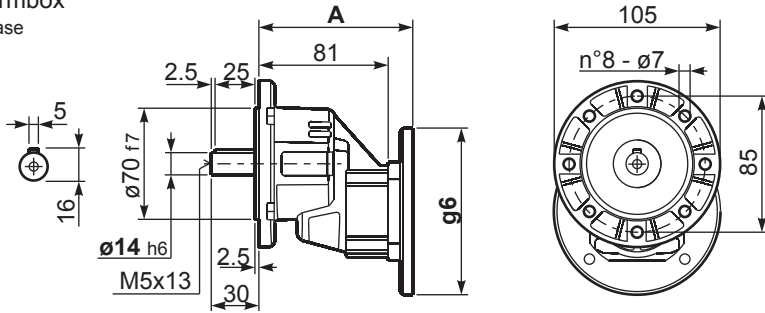
\*Strong axial loads in the DX direction are not allowed.  
Non sono consentiti forti carichi assiali con direzione DX

tab. 2



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

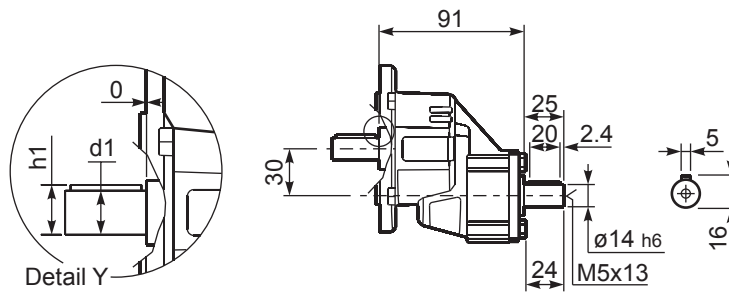
Gearbox weight  
peso riduttore **1.40 kg**



B5 Motor Flanges	A	g6	kit code
63 B5	99.5	138	K050.4.041
71 B5	97	160	K050.4.042

B14 Motor Flanges	A	g6	kit code
56 B14	97	80	KC40.4.049
63 B14	99.5	90	K050.4.047
71 B14	97	105	K050.4.045

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



\*Available output shaft / Albero di uscita

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



### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft 	Ratios code		
							-B	-C	-O	-P	-Q				
891	<b>1.57</b>	0.37	4	3.3	1.2	13			C	C		2844	standard ø14	01	
493	<b>2.84</b>	0.37	7	3.3	1.2	23			C	C		1954		02	
425	<b>3.29</b>	0.37	8	3.2	1.2	26			C	C		1756		03	
362	<b>3.87</b>	0.37	10	2.9	1.1	28			C	C		1558		04	
303	<b>4.62</b>	0.37	11	2.6	0.97	30			C	C		1360		On request	05
222	<b>6.30</b>	0.37	16	2.2	0.83	35			C	C		1063		ø19	06
170	<b>8.22</b>	0.37	20	1.9	0.69	38			C	C		974		ø24	07
129	<b>10.86</b>	0.37	27	1.0	0.39	28			C	C		776			08

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

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

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

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

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

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

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

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

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

**E** El reductor tamaño **311A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

### LUBRICATION 311A Oil Quantity 0.10 Lt.

**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website

tab. 1

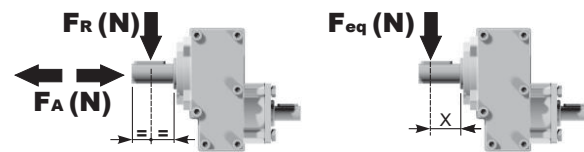
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

### RADIAL AND AXIAL LOADS

#### Output shaft

Albero di uscita

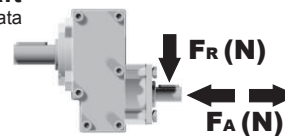
$$F_{eq} = F_R \cdot \frac{38.5}{X+18.5}$$



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

#### Input shaft

Albero in entrata

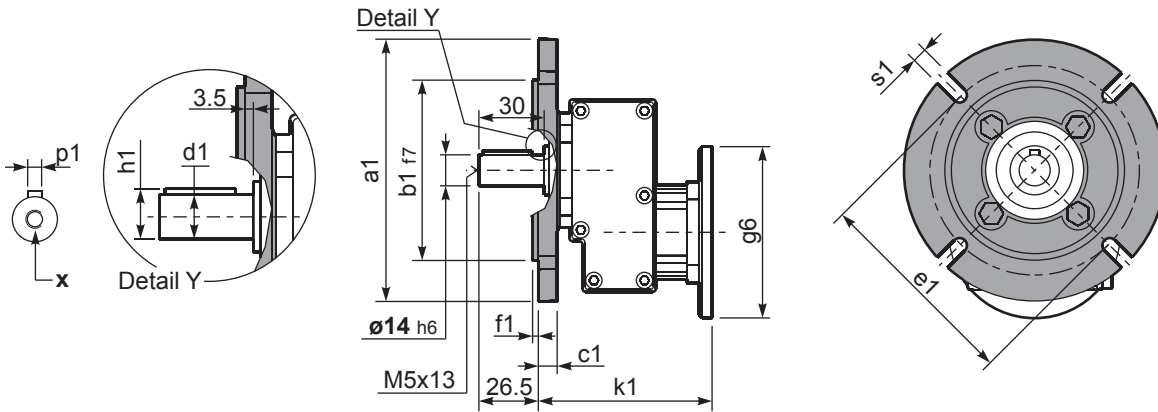


$n_1$	FA	FR
1400	180	860
900	200	980

tab. 2

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

Gearbox weight **2.50 kg**  
peso riduttore



**\*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

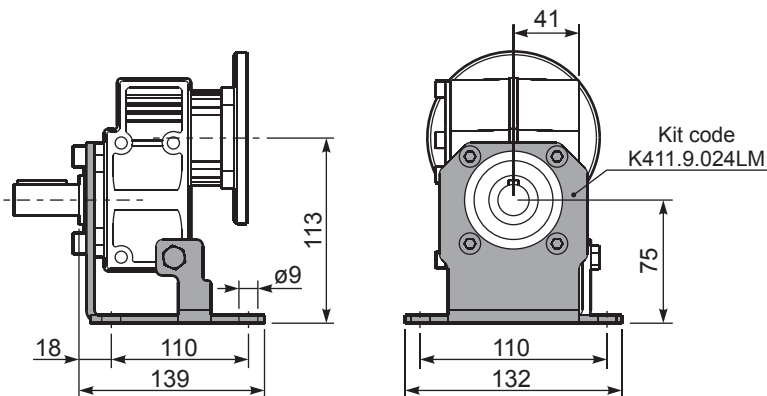
**Available output flanges / flange di uscita**

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

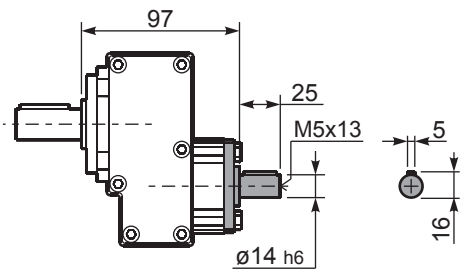
\*Holes position  
posizione fori



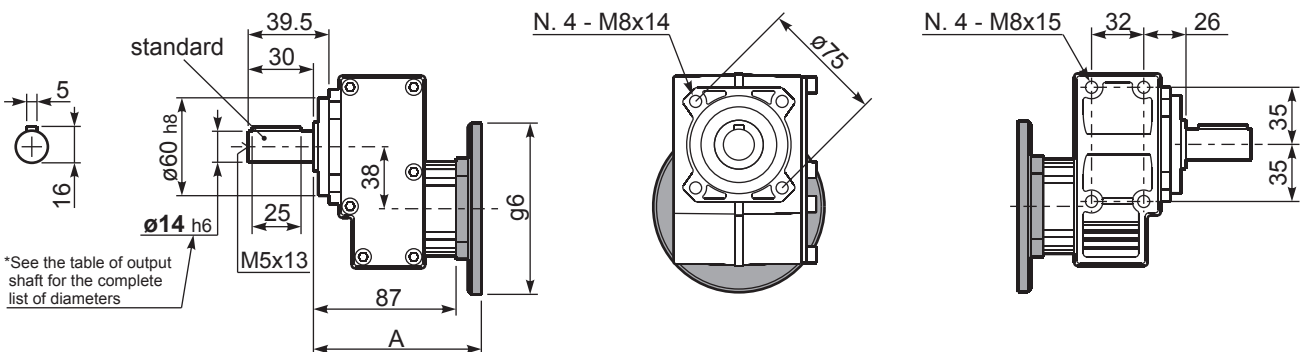
**P311-H1...** With feet  
Con piedini



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



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



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

B14 Motor Flanges	A	g6	k1	kit code
56 B14	103	80	106.5	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	105.5	138	109	K050.4.041
71 B5	103	160	106.5	K050.4.042



**QUICK SELECTION / Selezione veloce**

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft 	Ratios code	
							-B	-C	-D	-E	-Q	-R	-T			
							63	71	80	90	71	80	90			
891	<b>1.57</b>	1.5	16	1.3	<b>1.9</b>	<b>20</b>	B				C	C		2844	standard ø19  On request ø14 ø24	01
493	<b>2.84</b>	1.5	28	1.2	<b>1.8</b>	<b>35</b>	B				C	C		1954		02
425	<b>3.29</b>	1.5	33	1.2	<b>1.7</b>	<b>38</b>	B				C	C		1756		03
362	<b>3.87</b>	1.5	39	1.0	<b>1.5</b>	<b>40</b>	B				C	C		1558		04
303	<b>4.62</b>	1.5	46	1.0	<b>1.5</b>	<b>47</b>	B				C	C		1360		05
222	<b>6.30</b>	1.1	46	1.0	<b>1.1</b>	<b>46</b>	B				C	C		1063		06
170	<b>8.22</b>	0.55	30	1.3	<b>0.69</b>	<b>38</b>	B				C	C		974		07
129	<b>10.86</b>	0.37	27	1.0	<b>0.39</b>	<b>28</b>	B				C	C		776		08

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

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

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

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

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

**E** El reductor tamaño **411A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

**LUBRICATION 411A Oil Quantity 0.10 Lt.**

**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website

tab. 1

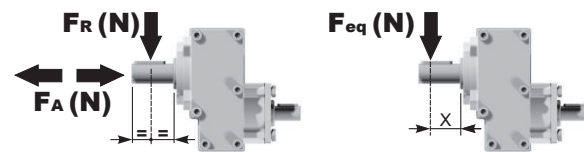
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

**RADIAL AND AXIAL LOADS**

**Output shaft**

Albero di uscita

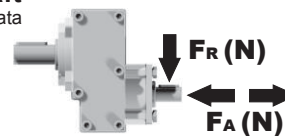
$$F_{eq} = F_R \cdot \frac{40}{X+20}$$



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

**Input shaft**

Albero in entrata

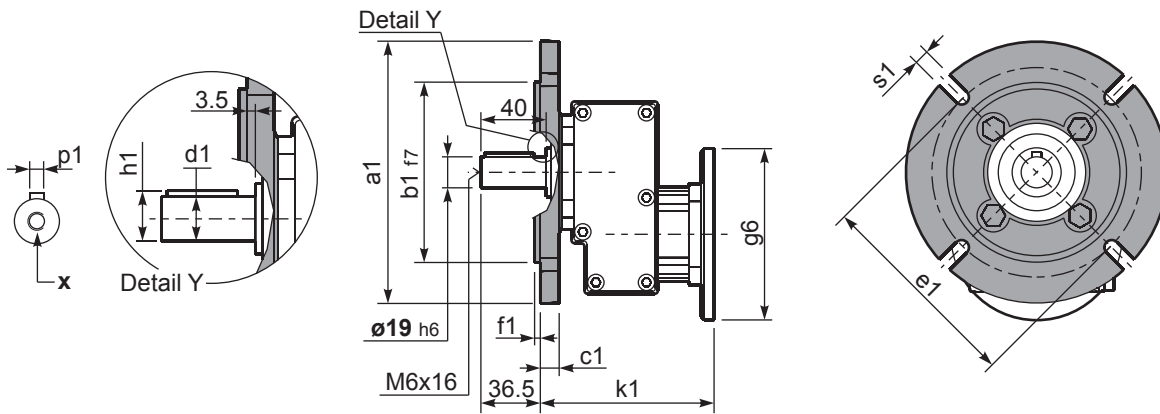


$n_1$	FA	FR
<b>1400</b>	240	1200
<b>900</b>	280	1400

tab. 2

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

Gearbox weight  
peso riduttore **3.20 kg**



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

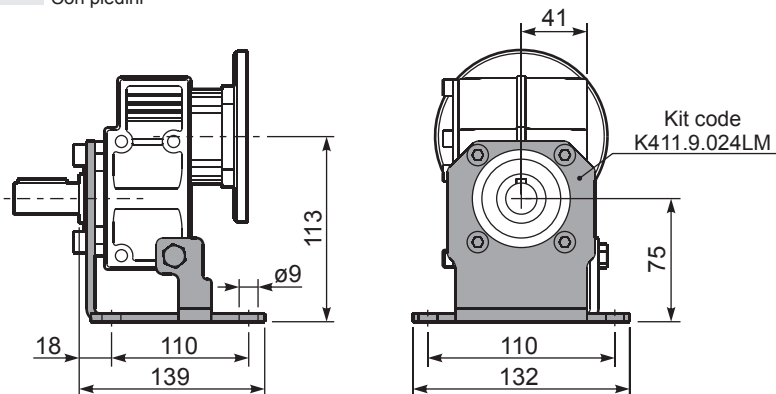
	Shaft - d1	p1	h1	x
Standard	∅ 19x40	6	21.5	M6x16
On request A richiesta	∅ 14x30 ∅ 24x40	5 8	16 27	M5x13 M6x16

**Available output flanges / flange di uscita**

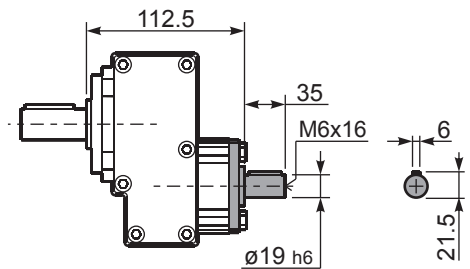
a1 ∅	b1	c1	e1	f1	s1	kit code
120	80	11.5	100	3	9*	KC30.9.010
140	95	11.5	115	3	9	KC30.9.011
160	110	11.5	130	3.5	9	KC30.9.012
200	130	11.5	165	3.5	11	KC30.9.013

\*Holes position  
posizione fori

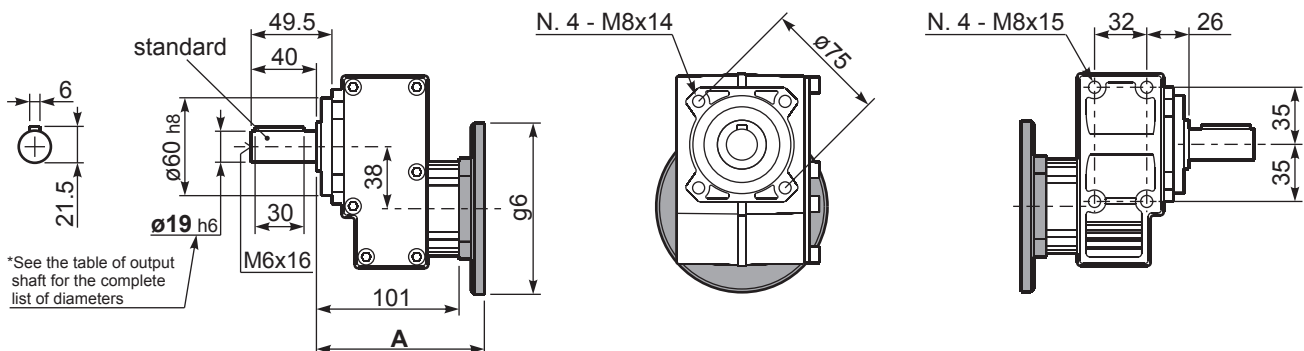
**P411-H1...** With feet  
Con piedini



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



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



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

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



### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code			
							-C	-D	-E	-F	-G	-R	-T	-U	-V					
							71	80	90	100 112	132	80	90	100 112	132					
1077	<b>1.30</b>	4	34	1.2	4.6	40	B										3039	standard ø28	01	
571	<b>2.45</b>	4	64	1.1	4.3	70	B										2049		02	
423	<b>3.31</b>	4	87	1.0	4.1	90	B										1653		03	
325	<b>4.31</b>	4	113	1.0	3.8	110	B										1356		04	
266	<b>5.27</b>	3	104	1.1	3.1	110	B										1158		On request	05
184	<b>7.63</b>	2.2	111	1.0	2.2	110	B										861		ø19	06
133	<b>10.50</b>	1.1	77	1.0	1.1	80	B										663		ø24	07

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

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

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

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

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

**E** El reductor tamaño **511A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

### LUBRICATION 511A Oil Quantity 0.29 Lt.

**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website

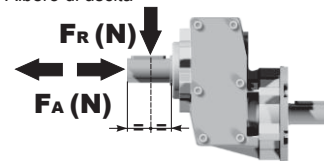
tab. 1

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

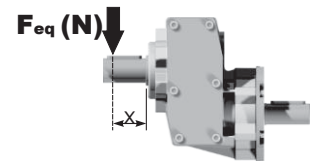
### RADIAL AND AXIAL LOADS

#### Output shaft

Albero di uscita



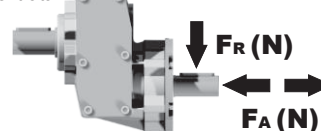
$$F_{eq} = F_R \cdot \frac{52.5}{X+22.5}$$



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

#### Input shaft

Albero in entrata

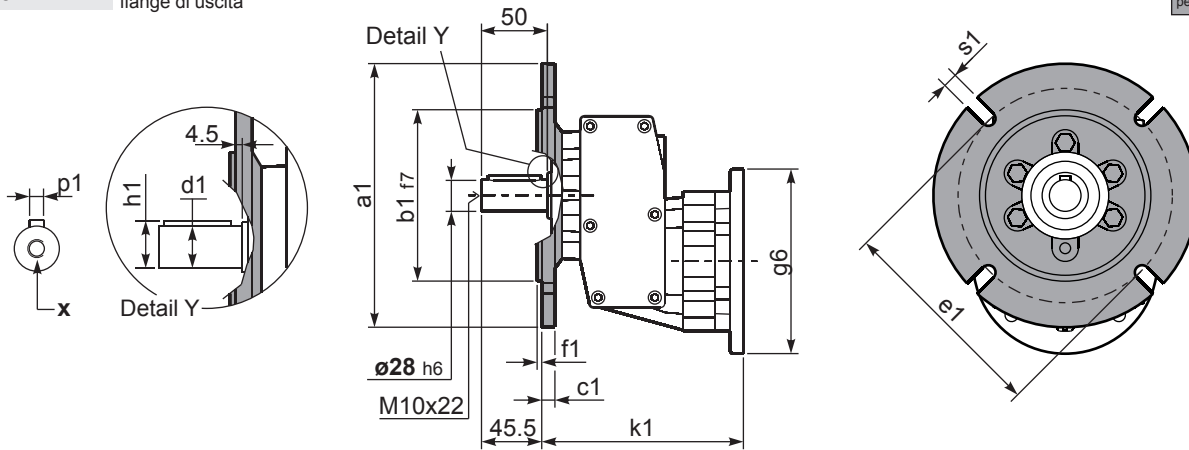


$n_1$	FA	FR
1400	400	2000
900	440	2200

tab. 2

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

Gearbox weight  
peso riduttore **5.00 kg**



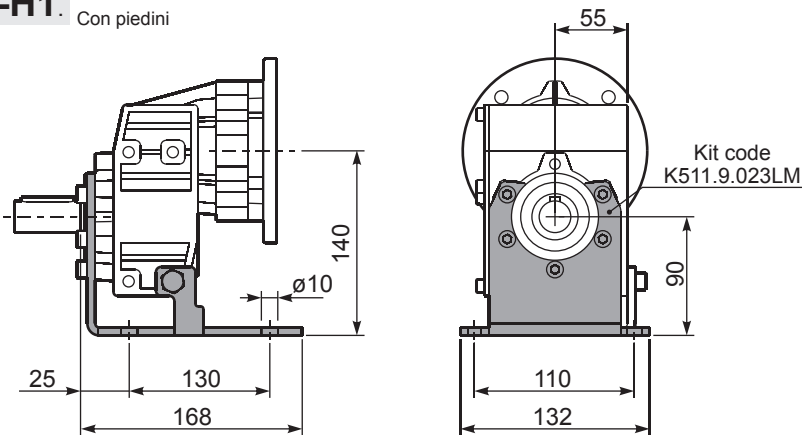
**\*Available output shaft / Albero di uscita**

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

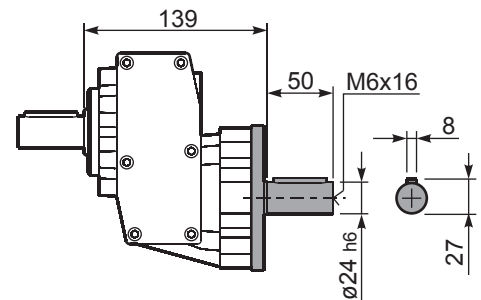
**Available output flanges / flange di uscita**

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

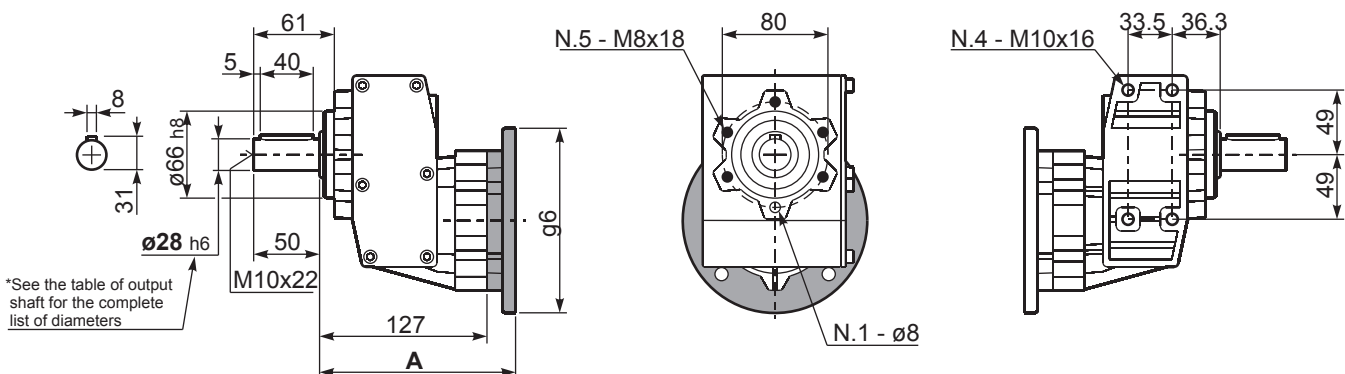
**P511A-H1.** With feet  
Con piedini



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



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



B5 Motor Flanges	A	g6	k1	kit code
71 B5	145.5	160	150	KC023.4.041
80/90 B5	147.5	200	152	KC023.4.042
100/112 B5	156.5	250	161	KC023.4.043
132 B5	174.5	300	179	KC50.4.043

B14 Motor Flanges	A	g6	k1	kit code
80 B14	147.5	120	152	KC085.4.046
90 B14	147.5	140	152	KC085.4.045
100/112 B14	156.5	160	161	KC085.4.047
132 B14	174.5	200	179	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

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



### Foot prints

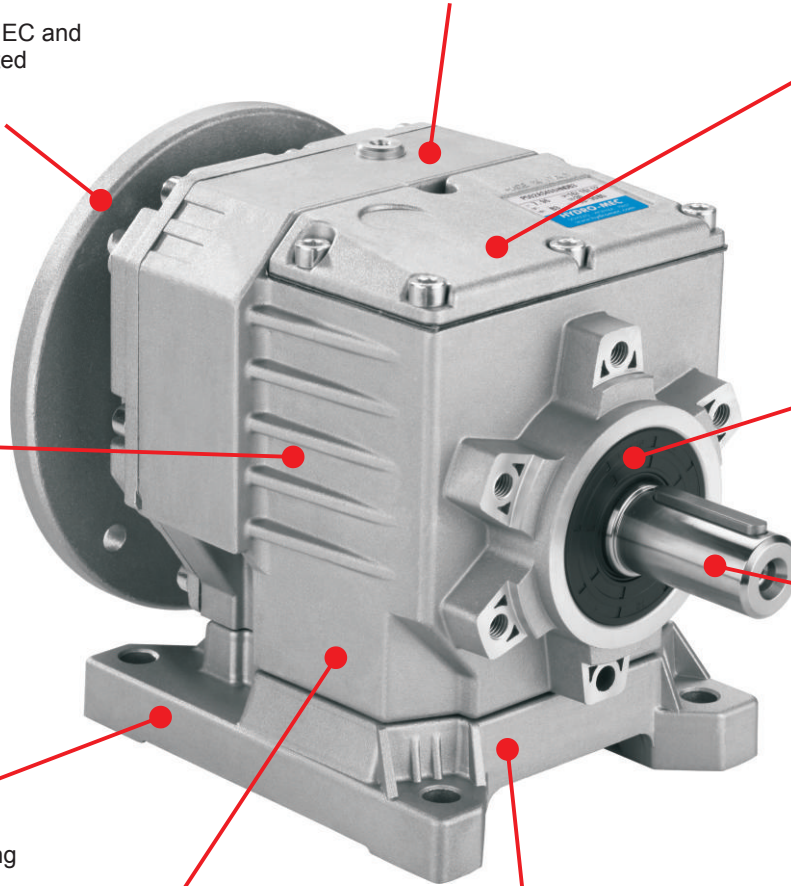
Compatible to the main standard of the market.

### Feet

Removable feet. With patented locking system.

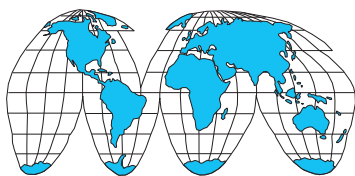
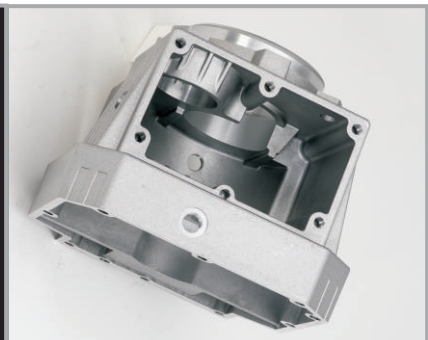
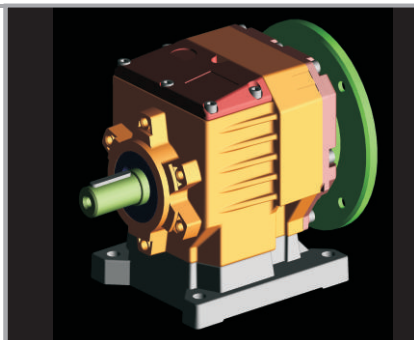
### Gears

Hardened and ground gears.

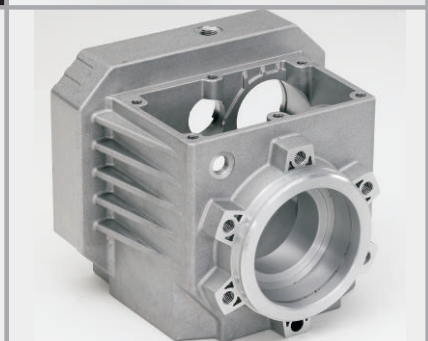
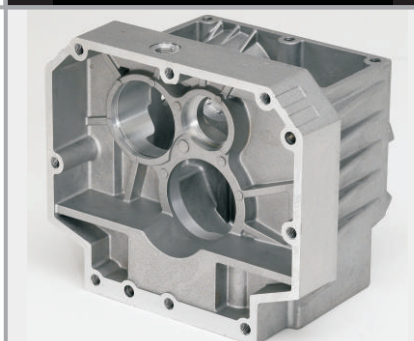


### Single-piece aluminum alloy housing

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



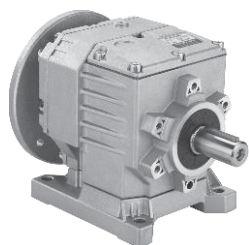
World wide sales network.





# Specific type datasheet on page...

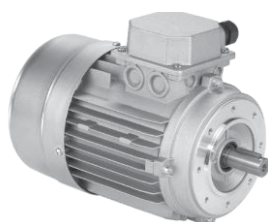
On page / A pagina / Auf Seite / À la page / En la página



Types / Tipi  
Tipen / Types  
Tipos

4-5	4-7	4-9	4-11	4-13	4-15	4-17	4-19	4-21
202A 70Nm	302A 120Nm	402A 160Nm	403A 160Nm	452A 300Nm	502A 350Nm	503A 350Nm	602A 520Nm	603A 520Nm

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



Types / Tipi  
Tipen / Types  
Tipos

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

Type - Tipo - Typ  
Type - Tipo

Size - Grandezza - Grösse  
Taille - Tomaño

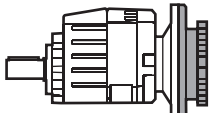
Mounting - Montaggio  
Montage - Fixation  
Tipo de montaje

**P**

**402A**

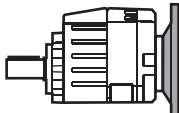
**-F**

Aluminum coaxial gear boxes  
Riduttori coassiali in alluminio



With IEC motor

**M**



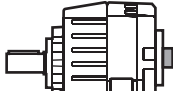
With motor flange

**P**



With male input shaft

**R**



Modular base

**B**

**2** Stages  
Riduzioni  
Stufen  
Trains  
Etapas

**3** Stages  
Riduzioni  
Stufen  
Trains  
Etapas

**202A**

**302A**

**402A**

**452A**

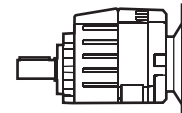
**502A**

**602A**

**403A**

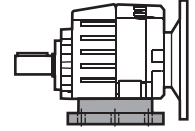
**503A**

**603A**



Without flange / feet

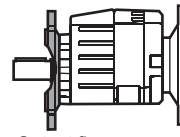
**-N**



Mounted feet

**B..**

Feet / piedini		G	H	R	L	L1	S
Feet Code	Market reference						
B1	112	18	85	110	87	50	
B2	212/3	18	100	130	107.5		
S4	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			



Output flange mounted

**-F**

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



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

Ratio - Rapporto  
Untersetzung  
Reduction  
Relación

Output shaft  
Albero uscita  
Abtriebswelle  
Arbre de sortie  
Eje en salida

Output flange  
Flangia uscita  
Ausgangsflansch  
Bride de sortie  
Brida en salida

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

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

Mounting position  
Posizione montaggio  
Einbaulage  
Position de montage  
Posición de montaje

**7.33**

**V**

**2**

**-C**

**B**

**B3**

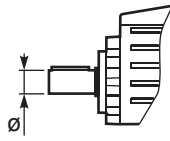
See technical data table

Vedi tabella dati tecnici

Technisches Datenblatt beachten

Voir Tableau données techniques

Ver tabla datos técnicos



→ STANDARD

202A

**S** ⇒ Ø14

**B** ⇒ Ø16

**D** ⇒ Ø20

**V** ⇒ Ø25

302A

**S** ⇒ Ø14

**B** ⇒ Ø16

**C** ⇒ Ø19

**D** ⇒ Ø20

**E** ⇒ Ø24

**V** ⇒ Ø25

**G** ⇒ Ø28

402A 403A

**B** ⇒ Ø16

**C** ⇒ Ø19

**D** ⇒ Ø20

**E** ⇒ Ø24

**V** ⇒ Ø25

452A  
502A 503A

**E** ⇒ Ø24

**V** ⇒ Ø25

**G** ⇒ Ø28

**H** ⇒ Ø30

**I** ⇒ Ø35

602A 603A

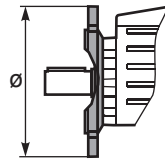
**G** ⇒ Ø28

**H** ⇒ Ø30

**I** ⇒ Ø35

**L** ⇒ Ø38

**M** ⇒ Ø40



**N** Senza flangia  
Without flange

202A 302A

**1** ⇒ Ø120

**2** ⇒ Ø140

**3** ⇒ Ø160

**4** ⇒ Ø200

402A 403A

**1** ⇒ Ø120

**2** ⇒ Ø140

**3** ⇒ Ø160

**4** ⇒ Ø200

**5** ⇒ Ø250

452A  
502A 503A

**3** ⇒ Ø160

**4** ⇒ Ø200

**5** ⇒ Ø250

602A 603A

**3** ⇒ Ø160

**4** ⇒ Ø200

**5** ⇒ Ø250

Flange  
Flangia



B5

**-A**=56  
(Ø120)

**-B**=63  
(Ø140)

**-C**=71  
(Ø160)

**-D**=80  
(Ø200)

**-E**=90  
(Ø200)

**-F**=100+112  
(Ø250)

**-G**=132  
(Ø300)

B14

**-O**=56  
(Ø80)

**-P**=63  
(Ø90)

**-Q**=71  
(Ø105)

**-R**=80  
(Ø120)

**-T**=90  
(Ø140)

**-U**=100+112  
(Ø160)

**-V**=132  
(Ø200)

Type R  
Tipo R



202A 403A

**-1** ⇒ Ø14

302A 402A  
503A 603A

**-2** ⇒ Ø19

452A 502A  
602A

**-3** ⇒ Ø24

Without flange  
Senza flangia



202A 403A

**-Z** ⇒ Ø9  
(56B5)

**-0** ⇒ Ø11  
(63B5)

**-1** ⇒ Ø14  
(71B5)

302A 402A  
503A 603A

**-1** ⇒ Ø14  
(71B5)

**-2** ⇒ Ø19  
(80B5)

**-3** ⇒ Ø24  
(90B5)

452A 502A  
602A

**-2** ⇒ Ø19  
(80B5)

**-3** ⇒ Ø24  
(90B5)

**-4** ⇒ Ø28  
(100B5)



**A**



**B**

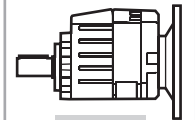
STANDARD



**C**

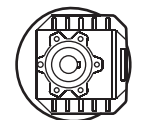


**D**

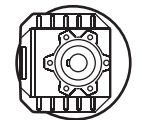


**B3**

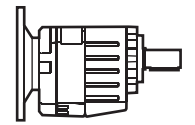
STANDARD



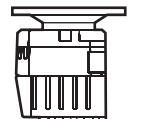
**B6**



**B7**



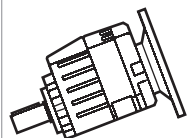
**B8**



**V5**



**V6**



**V8**

Specify only for vertical positions

Specificare solo per posizione verticale

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

Lifting / sollevamento / hubantriebe / levage / elevación

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

Rotation / rotazione / drehung / rotation / rotation

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

Linear movement / traslazione / linearbewegung / translation / translacion

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

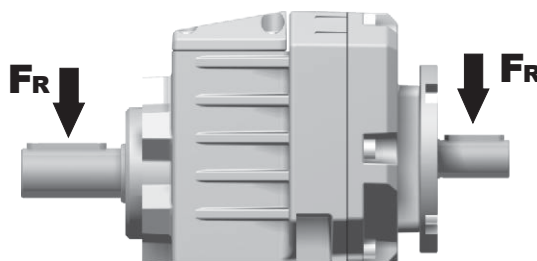
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

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

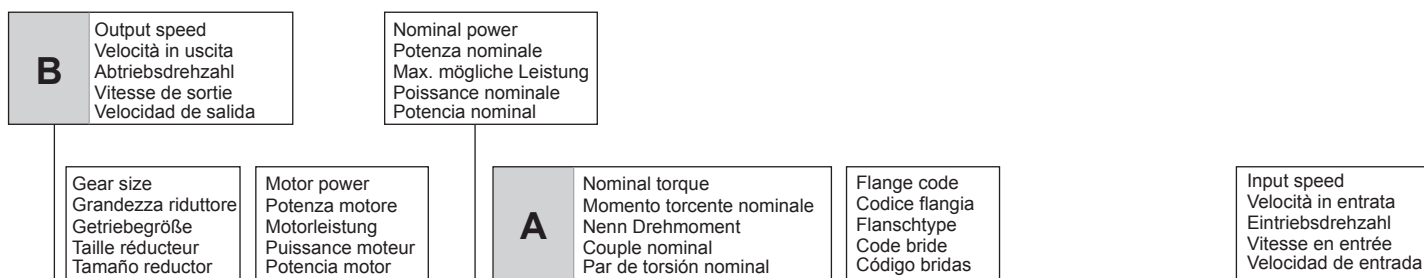
- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée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



	$F_R \text{ [N]} = \frac{M \text{ [Nm]} \cdot 2000}{d \text{ [mm]}} \cdot f_k$	$F_R \text{ [N]} = \frac{M \text{ [lb in]} \cdot 8.9}{d \text{ [in]}} \cdot f_k$
<b>M</b>	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion	
<b>d</b>	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo	
<b>f<sub>k</sub></b>	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión <b>1.15</b> Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje <b>1.25</b> Catena / Chain sprockets / Antriebskette / Chaîne / Cadena <b>1.75</b> Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal <b>2.50</b> Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana	

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

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



**402A**

Coaxial - Gear  
**160Nm**

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		01
320	4.37	3	86	1.0	3.1	90	B				C	C			2818		02
252	5.55	3	109	0.9	2.8	100	B				C	C			2813		03
220	6.36	2.2	92	1.0	2.3	95	B				C	C			1921		04
191	7.33	2.2	106	1.1	2.5	120	B				C	C			2812		05

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

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

Notes  
Note  
Anmerkungen  
Note  
Notas

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

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

Type of load and starts per hour Tipo di carico e avviamenti per ora		Oper. hours per day Ore di funz. giorn.		
		3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

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

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



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

Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges		Available B14 motor flanges			Output Shaft $\varnothing$ Ratios code	
							-B	-C	-O	-P	-Q		
							63	71*	56	63	71		
407	<b>3.44</b>	0.55**	12	2.0	1.1	25			C	C		2821	01
327	<b>4.28</b>	0.55**	15	1.9	1.1	30			C	C		2818	02
257	<b>5.45</b>	0.55**	20	2.0	1.1	40			C	C		2815	03
225	<b>6.23</b>	0.55**	23	2.0	1.1	45			C	C		1921	04
194	<b>7.20</b>	0.55**	26	1.9	1.1	50			C	C		2812	05
181	<b>7.74</b>	0.55**	28	1.8	<b>0.99</b>	50			C	C		1918	06
142	<b>9.85</b>	0.55**	36	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	45	1.3	<b>0.49</b>	60			C	C		1710	12
66	<b>21.15</b>	0.37	51	1.2	<b>0.43</b>	60			C	C		1312	13
64	<b>21.84</b>	0.37	53	1.1	<b>0.42</b>	60			C	C		1015	14
53	<b>26.31</b>	0.37	64	0.9	<b>0.35</b>	60			C	C		1310	15
48.5	<b>28.88</b>	0.37	70	1.0	<b>0.37</b>	70			C	C		1012	16
39	<b>35.91</b>	0.37	87	0.8	<b>0.30</b>	70			C	C		1010	17
37.1	<b>37.69</b>	0.25	62	1.1	<b>0.28</b>	70			C	C		912	18
29.9	<b>46.87</b>	0.25	77	0.9	<b>0.23</b>	70			C	C		910	19
28.1	<b>49.76</b>	0.25	81	0.9	<b>0.21</b>	70			C	C		712	20
22.6	<b>61.89</b>	0.18	77	0.9	<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.

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

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

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

**E** El reductor tamaño **202A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

### LUBRICATION 202A Oil Quantity 0.15 Lt.

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

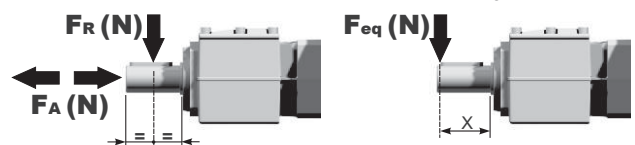
For all details on lubrication and plugs check our website **tab. 1**  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

### RADIAL AND AXIAL LOADS

#### Output shaft

Albero di uscita

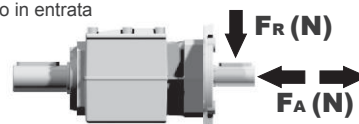
$$F_{eq} = FR \cdot \frac{35.7}{X+20.7}$$



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

#### Input shaft

Albero in entrata



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

**tab. 2**





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	1.6	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	53	1.0	1.5	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	93	1.2	1.3	114	B				C	C		1912	09
93	<b>15.10</b>	1.1	108	1.1	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	105	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	113	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.

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

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

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

**E** El reductor tamaño **302A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

### LUBRICATION 302A Oil Quantity 0.15 Lt.

**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website

tab. 1

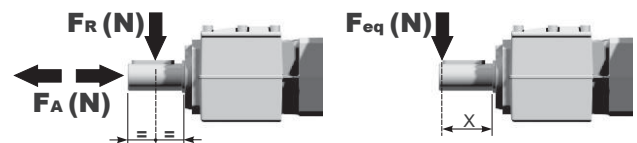
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

### RADIAL AND AXIAL LOADS

#### Output shaft

Albero di uscita

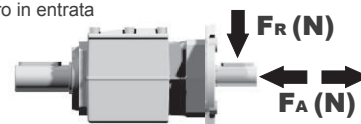
$$F_{eq} = F_R \cdot \frac{35.7}{X+20.7}$$



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



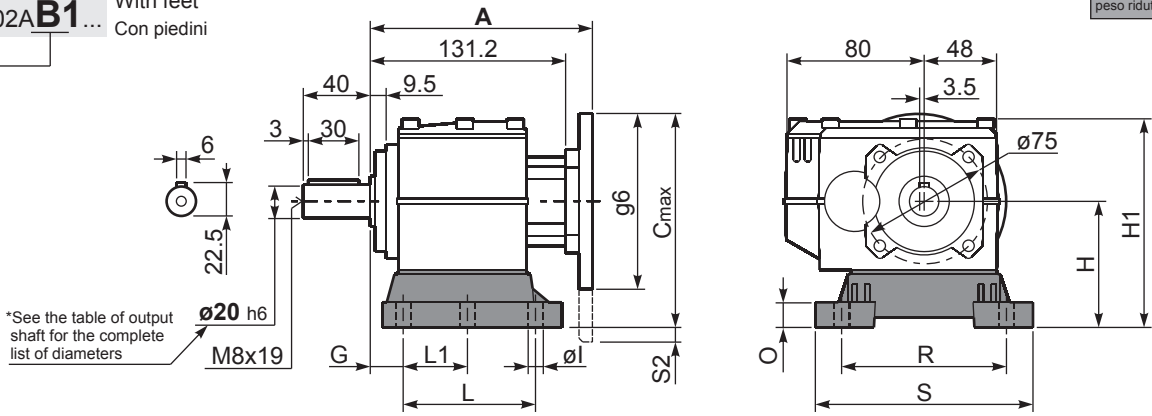
n <sub>1</sub>	FA	FR
1400	226	1130
900	264	1320
500	322	1610

tab. 2



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

**P302A-B1...** With feet  
 Con piedini



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

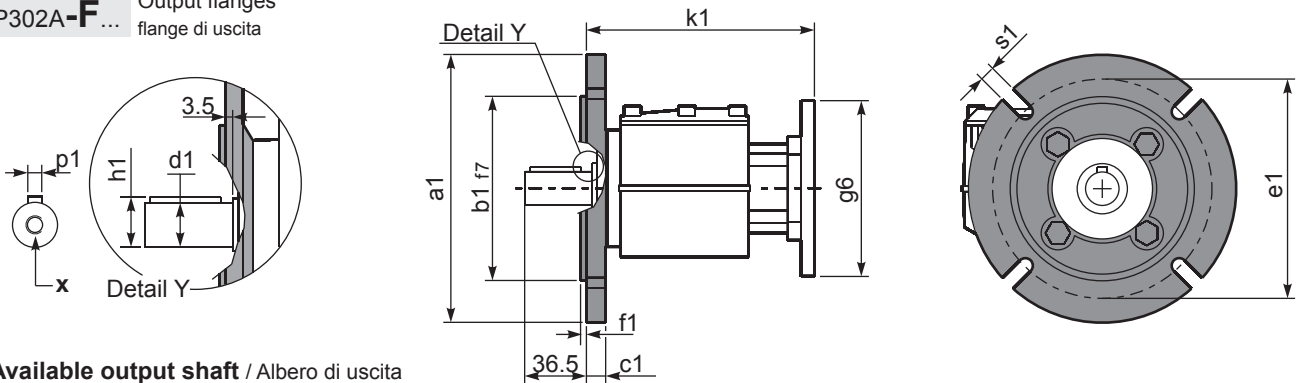
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	φ	S2 only with motor flange	B5 max. Flange	kit code
<b>B1</b>	112	18	85	110	87	50	130	125	15	9	15 80/90B5	-	KC30.9.022
<b>B2</b>	212/3	18	100	130	107.5	60	155	145	5	11	3.5 80/90B5	-	KC30.9.023LM
<b>S1</b>	17-32	18	75	110	110	50	130	115.5	15	9	5 71B5	71B5	KC30.9.024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

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

**A see on page bottom**

Most popular types  
 Tipi più diffusi

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



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	ø 20x40	6	22.5	M8x19
On request A richiesta	ø 14x30	5	16	M6x16
	ø 16x40	5	18	M6x16
	ø 19x40	6	21.5	M6x16
	ø 24x50	8	27	M8x19
	ø 25x50	8	28	M8x19
	ø 28x50	8	31	M8x19

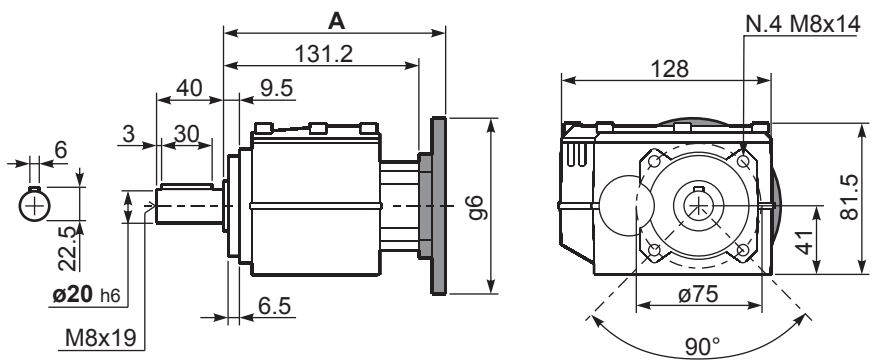
Available output flanges / flange di uscita

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

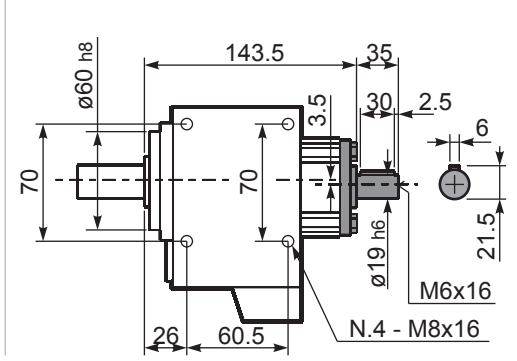
\* Holes position  
 Posizione fori

With flange and feet only on request. Ask for compatibility

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



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



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
63 B5	151.7	170	140	155.2	K063.4.041
71 B5	149.7	180	160	153.2	K063.4.042
80/90 B5	151.7	200	200	155.2	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	151.7	160	120	155.2	K063.4.046
90 B14	151.7	170	140	155.2	K063.4.041



#### QUICK SELECTION / Selezione veloce

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

Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft		
							-B	-C	-D	-E	-F	-Q	-R	-T	-U			Ratios code
							63	71	80*	90*	100*	71	80	90	100			
398	3.52	3	68	1.2	3.5	80	B					C	C			2821		01
321	4.37	3	84	1.1	3.1	90	B					C	C			2818		02
252	5.56	3	107	0.9	2.7	100	B					C	C			2813		03
220	6.36	2.2	90	1.1	2.3	95	B					C	C			1921		04
191	7.33	2.2	104	1.2	2.5	120	B					C	C			2812		05
177	7.89	2.2	112	1.1	2.3	120	B					C	C			1918		06
139	10.06	2.2	143	1.0	2.3	150	B					C	C			1913		08
120	11.66	1.5	114	1.5	2.3	174	B					C	C			1713	standard	09
106	13.26	1.5	130	1.2	1.8	160	B					C	C			1912	ø25	10
102	13.68	1.5	134	1.1	1.6	144	B					C	C			1513		25
91	15.37	1.5	151	1.1	1.6	160	B					C	C			1712	ø16	11
86	16.20	1.5	159	0.9	1.3	138	B					C	C			1910	ø19	12
78	18.04	1.5	177	0.9	1.4	160	B					C	C			1512	ø20	23
75	18.78	1.1	134	1.0	1.1	138	B					C	C			1710	ø24	24
65	21.54	1.1	154	1.0	1.1	160	B					C	C			1312	On request	14
63	22.29	1.1	160	1.0	1.1	167	B					C	C			1013		15
53	26.31	0.75	129	1.1	0.80	138	B					C	C			1310		16
47.6	29.40	0.75	144	1.1	0.83	160	B					C	C			1012		17
39	35.91	0.55	130	1.1	0.59	138	B					C	C			1010		18
36.5	38.37	0.55	139	1.2	0.64	160	B					C	C			912		19
29.9	46.87	0.55	170	0.8	0.45	138	B					C	C			910		20
27.6	50.67	0.37	123	1.1	0.40	132	B					C	C			712		21
22.6	61.89	0.37	150	0.9	0.34	138	B					C	C			710		22

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

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

**A** Motor Flanges Available  
Flange Motore Disponibili

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

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

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

**EN** Unit **402A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

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

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

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

**E** El reductor tamaño **402A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil					
	Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
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

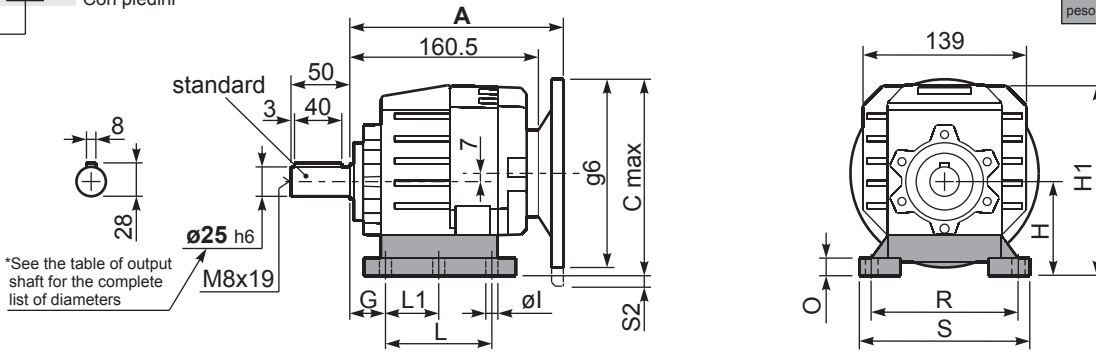
**Input shaft**  
Albero in entrata

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

**tab. 2**

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

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



**Feet / piedini**

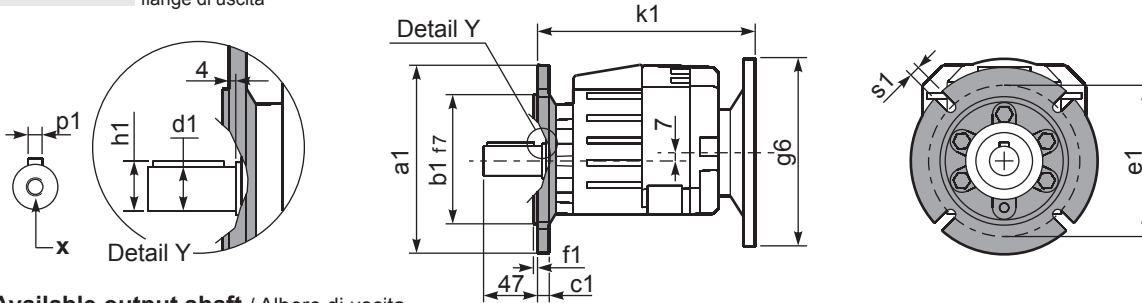
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167	15	-	8/33 80/90B5 100/112B5	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182	17	11	18 100/112B5	-	KC40.9.025
S1	17	18	75	110	90÷110	50	145	155	15	9	18/43 80/90B5 100/112B5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

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

**A see on page bottom**

Most popular types  
Tipi più diffusi

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



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

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

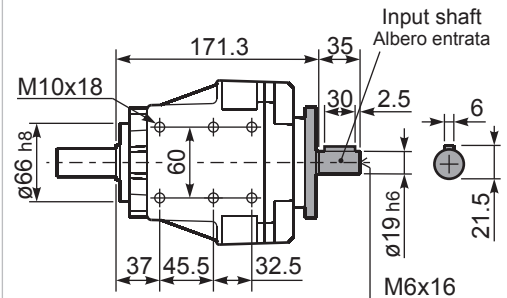
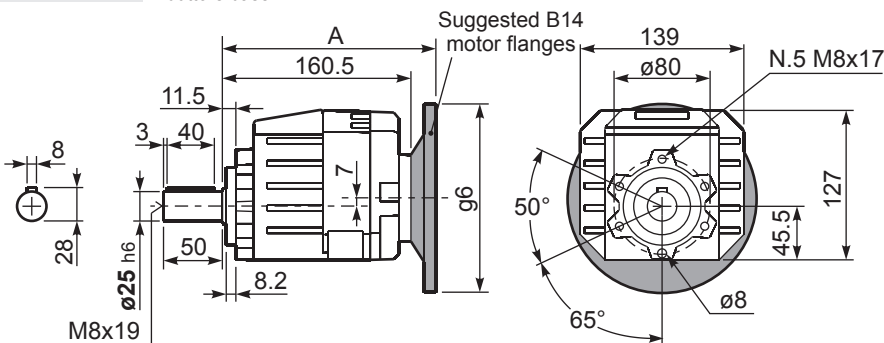
**Available output flanges / flange di uscita**

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	7	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	181	177	140	185	K063.4.041
71 B5	179	187	160	183	K063.4.042
80/90 B5	181	207	200	185	K063.4.043
100/112 B5	195.8	232	250	199.8	KC40.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B14	179	159.5	105	183	K063.4.047
80 B14	181	167	120	185	K063.4.046
90 B14	181	177	140	185	K063.4.041
100/112 B14	195.8	187	160	199.8	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
							-B	-C	-O	-P	-Q		
							63	71	56	63	71		
36.5	<b>38.40</b>	0.37	91	1.9	<b>0.71</b>	<b>175</b>			C	C		171713	02
32.0	<b>43.69</b>	0.37	104	1.4	<b>0.53</b>	<b>149</b>			C	C		191712	03
27.6	<b>50.64</b>	0.37	120	1.3	<b>0.49</b>	<b>160</b>			C	C		171712	04
26.2	<b>53.36</b>	0.37	127	1.1	<b>0.40</b>	<b>138</b>			C	C		191710	05
22.9	<b>61.21</b>	0.37	145	1.1	<b>0.41</b>	<b>160</b>			C	C		191312	06
22.6	<b>61.85</b>	0.37	147	0.9	<b>0.35</b>	<b>138</b>			C	C		171710	07
19.7	<b>70.95</b>	0.37	168	1.0	<b>0.35</b>	<b>160</b>			C	C		131712	08
19.1	<b>73.43</b>	0.37	174	1.0	<b>0.37</b>	<b>175</b>			C	C		101713	09
18.7	<b>74.77</b>	0.25	120	1.2	<b>0.29</b>	<b>138</b>			C	C		191310	10
16.2	<b>86.66</b>	0.25	139	1.0	<b>0.25</b>	<b>138</b>			C	C		131710	11
14.5	<b>96.85</b>	0.25	155	1.0	<b>0.26</b>	<b>160</b>			C	C		101712	12
13.6	<b>102.89</b>	0.25	165	1.1	<b>0.27</b>	<b>180</b>			C	C		101313	13
11.1	<b>126.40</b>	0.18	155	1.0	<b>0.20</b>	<b>160</b>			C	C		91712	17
10.3	<b>135.69</b>	0.18	166	1.0	<b>0.18</b>	<b>160</b>			C	C		101312	15
8.4	<b>165.74</b>	0.12	131	1.1	<b>0.13</b>	<b>138</b>			C	C		101310	16
7.9	<b>177.09</b>	0.12	140	1.1	<b>0.14</b>	<b>160</b>			C	C		91312	18
6.5	<b>216.31</b>	0.09	136	1.0	<b>0.10</b>	<b>138</b>			C	C		91310	19

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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



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

**EN** Unit **403A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **403A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

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

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

**E** El reductor tamaño **403A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
0.30 LT	0.35 LT	0.45 LT	0.45 LT	0.45 LT	0.55 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

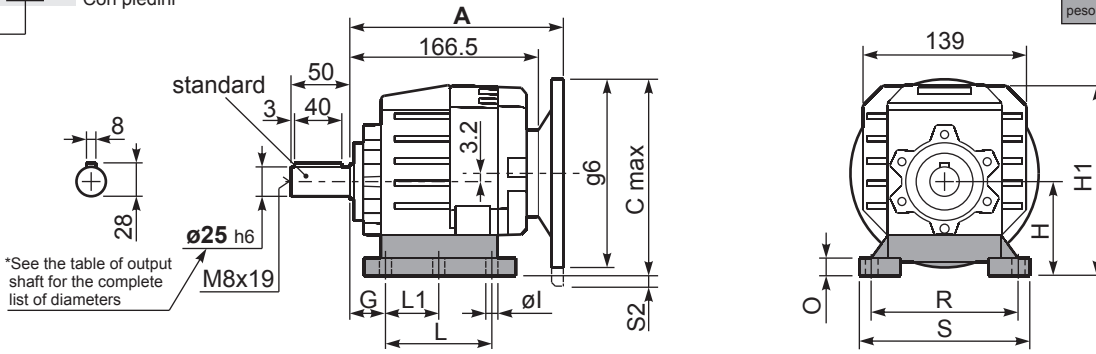
RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = F_r \cdot \frac{46}{X+21}$					
$n_2$	$F_A$	$F_R$	$n_2$	$F_A$	$F_R$	$n_2$	$F_A$	$F_R$
300	310	1550	140	406	2030	70	540	2700
250	330	1650	120	448	2240	40	600	3000
200	360	1800	85	480	2400	15	600	3000
<b>Input shaft</b> Albero di entrata								
$n_1$	$F_A$	$F_R$						
1400	140	700						
900	160	800						
500	190	950						

**tab. 2**

3D dimensions on the Web

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

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



Feet / piedini

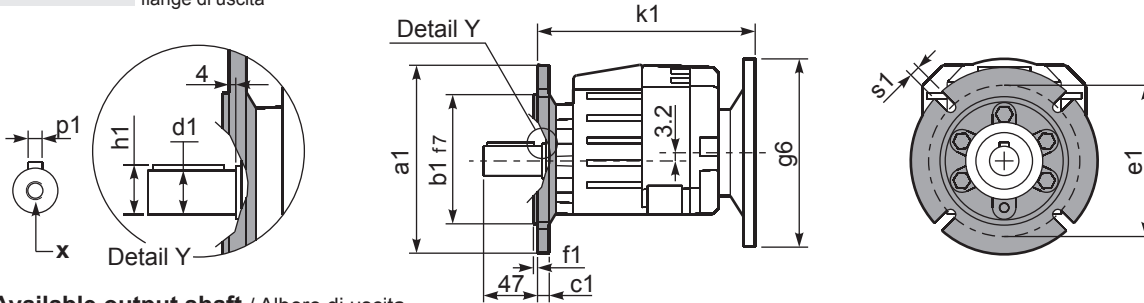
Feet Code	Market reference	G	H	R	L	L1	S	H1	O	øI	S2 only with motor flange	B5 max. Flange	kit code
B1	112	18	85	110	87	50	130	167	15	-	-	-	KC35.9.021
B2	212/3	18	100	130	107.5	60	155	182	17	11	-	-	KC40.9.025
S1	17	18	75	110	90÷110	50	145	155	15	9	2 80/90B5	-	KC40.9.022
S2	27	25	90	110	130	-	145	172	20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

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

**A see on page bottom**

Most popular types  
Tipi più diffusi

P403A-**F** ... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

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

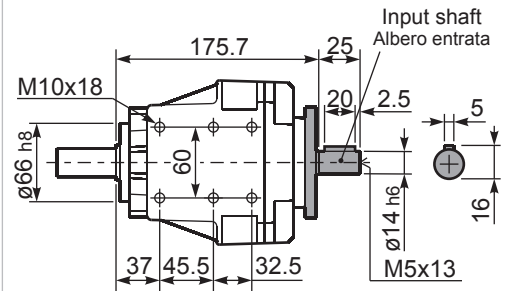
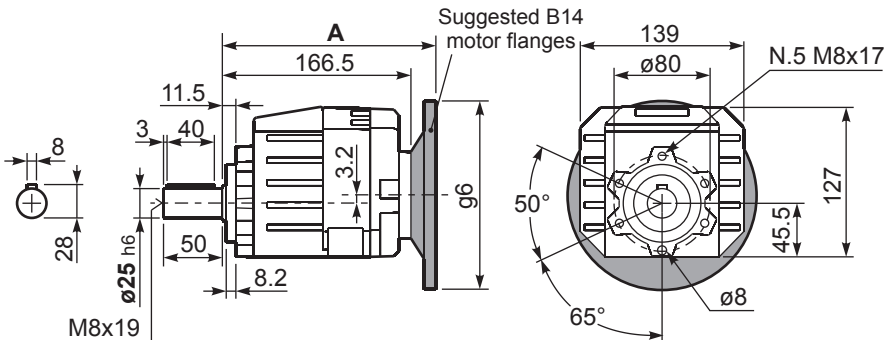
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
120	80	10	100	3	7	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	185	173.2	140	189	K050.4.041
71 B5	182.5	183.2	160	186.5	K050.4.042

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
56 B14	182.5	143.2	80	186.5	KC40.4.049
63 B14	185	148.2	90	189	K050.4.047
71 B14	182.5	155.7	105	186.5	K050.4.045



**QUICK SELECTION / Selezione veloce** input speed (n<sub>1</sub>) = 1400 min<sup>-1</sup>

Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100* 112	132*	80	90	100 112	132		
388	<b>3.61</b>	4	93	1.6	<b>6.3</b>	<b>150</b>	B									3018	01
331	<b>4.23</b>	4	108	1.6	<b>6.1</b>	<b>170</b>	B									3016	02
279	<b>5.01</b>	4	129	1.6	<b>6.1</b>	<b>200</b>	B									3014	03
231	<b>6.07</b>	4	156	1.6	<b>6.3</b>	<b>250</b>	B									3012	04
206	<b>6.81</b>	4	175	1.6	<b>6.2</b>	<b>277</b>	B									2018	05
176	<b>7.96</b>	4	204	1.5	<b>5.8</b>	<b>300</b>	B									2016	06
148	<b>9.45</b>	4	242	1.3	<b>4.9</b>	<b>304</b>	B									2014	07
122	<b>11.43</b>	4	293	1.0	<b>4.0</b>	<b>300</b>	B									2012	08
99	<b>14.21</b>	3	274	1.0	<b>2.8</b>	<b>265</b>	B									2010	09
84	<b>16.62</b>	3	321	0.9	<b>2.8</b>	<b>304</b>	B									1314	10
70	<b>20.10</b>	2.2	286	1.0	<b>2.3</b>	<b>300</b>	B									1312	11
56	<b>24.98</b>	1.85	302	0.9	<b>1.6</b>	<b>265</b>	B									1310	12
47.6	<b>29.41</b>	1.5	288	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	290	1.0	<b>1.1</b>	<b>290</b>	B									614	15
31.7	<b>44.23</b>	1.1	316	0.8	<b>0.92</b>	<b>265</b>	B									810	16
28.6	<b>49.00</b>	0.75	240	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.

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

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

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

**E** El reductor tamaño **452A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil					
	Per queste posizioni specificare in fase d'ordine o aggiungere olio					
0.31 LT	0.31 LT	0.31 LT	0.31 LT	0.31 LT	0.31 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

**Output shaft / Albero di uscita**

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

$F_{eq} (N)$   
 $F_{eq} = F_R \cdot \frac{51}{X+21}$

n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
300	415	2070	140	540	2700	70	700	3510
250	430	2160	120	560	2790	40	810	4050
200	470	2340	85	630	3150	15	900	4500

**Input shaft / Albero in entrata**

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

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

**tab. 2**





#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft  $\varnothing$	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100* 112	132*	80	90	100 112	132		
388	<b>3.61</b>	5.5	127	1.2	<b>6.3</b>	<b>150</b>	B									3018	01
331	<b>4.23</b>	5.5	148	1.1	<b>6.1</b>	<b>170</b>	B									3016	02
279	<b>5.01</b>	5.5	176	1.1	<b>6.1</b>	<b>200</b>	B									3014	03
231	<b>6.07</b>	5.5	213	1.2	<b>6.3</b>	<b>250</b>	B									3012	04
206	<b>6.81</b>	5.5	239	1.3	<b>6.7</b>	<b>300</b>	B									2018	05
176	<b>7.96</b>	5.5	279	1.2	<b>6.3</b>	<b>330</b>	B									2016	07
148	<b>9.45</b>	5.5	331	1.1	<b>5.7</b>	<b>354</b>	B									2014	08
122	<b>11.43</b>	4	293	1.1	<b>4.4</b>	<b>326</b>	B									2012	09
99	<b>14.21</b>	3	274	0.9	<b>2.7</b>	<b>250</b>	B									2010	10
84	<b>16.62</b>	3	321	1.1	<b>3.3</b>	<b>354</b>	B									1314	11
70	<b>20.10</b>	2.2	286	1.1	<b>2.5</b>	<b>326</b>	B									1312	12
57	<b>24.61</b>	2.2	350	0.9	<b>2.0</b>	<b>326</b>	B									1112	20
56	<b>24.98</b>	1.5	245	1.0	<b>1.5</b>	<b>250</b>	B									1310	13
47.6	<b>29.41</b>	1.5	288	1.2	<b>1.8</b>	<b>354</b>	B									814	14
39.3	<b>35.58</b>	1.5	349	0.9	<b>1.4</b>	<b>326</b>	B									812	15
34.6	<b>40.50</b>	1.1	290	1.0	<b>1.1</b>	<b>295</b>	B									614	16
31.7	<b>44.23</b>	1.1	316	0.8	<b>0.86</b>	<b>250</b>	B									810	17
28.6	<b>49.00</b>	1.1	351	0.9	<b>1.0</b>	<b>326</b>	B									612	18
23.0	<b>60.90</b>	0.75	299	0.8	<b>0.63</b>	<b>250</b>	B									610	19

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

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

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

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

**D** Das Getriebe **502A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **502A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **502A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
0.45 LT	0.55 LT	1.00 LT	1.10 LT	1.10 LT	1.15 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

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

$F_{eq} (N)$   
 $X$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	460	2300	140	600	3000	70	780	3900
250	480	2400	120	620	3100	40	900	4500
200	520	2600	85	700	3500	15	1000	5000

**Input shaft**  
Albero in entrata

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

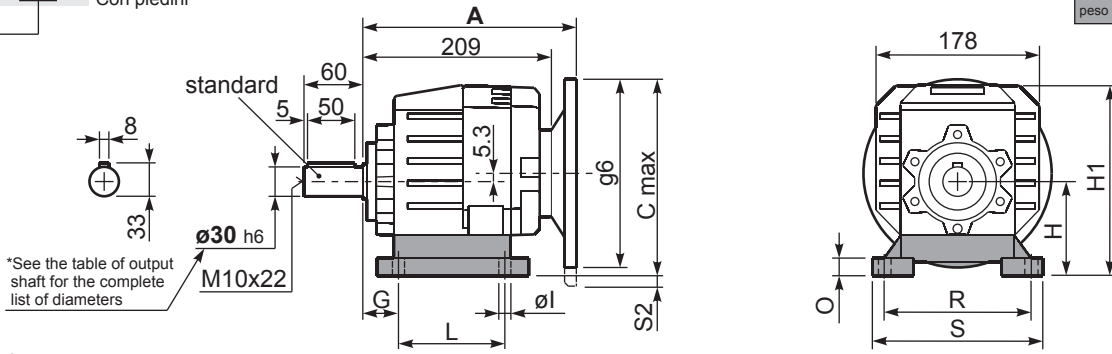
$n_1$	FA	FR
1400	450	2250
900	500	2500
500	600	3000

**tab. 2**



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

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



**Feet / piedini**

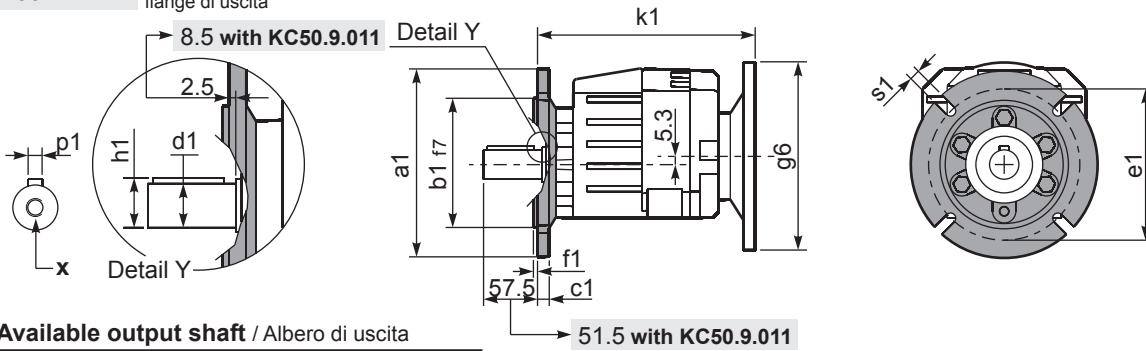
Feet Code	Market reference	G	H	R	L	S	H1	O	øl	S2 only with motor flange	B5 max. Flange	kit code
<b>B3</b>	312/3	18	110	160	130	190	211.5	20	11	10 100/112B5 35 132B5	-	KC50.9.024
<b>B4</b>	30/35	20	130	180	149.5	216	231.5	18	14	15 132B5	-	KC60.9.024
<b>S4</b>	47-57	30	115	135	165	170	216.5	24	13.5	5 100/112B5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

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

**A see on page bottom**

Most popular types  
Tipi più diffusi

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



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

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

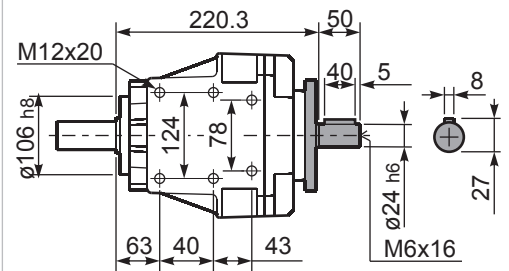
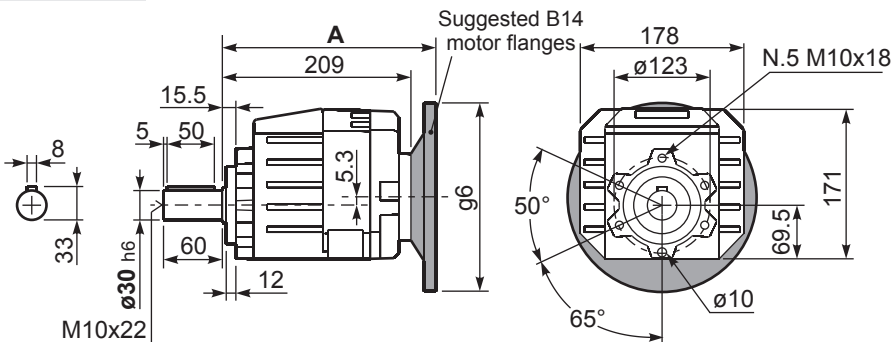
**Available output flanges / flange di uscita**

a1	ø	b1	c1	e1	f1	s1	kit code
160		110	14	130	3.5	11	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	227.5	227.3	160	230	KC023.4.041	236	80 B14	229.5	207.3	120	232	KC085.4.046	238
80/90 B5	229.5	247.3	200	232	KC023.4.042	238	90 B14	229.5	217.3	140	232	KC085.4.045	238
100/112 B5	238.5	272.3	250	241	KC023.4.043	247	100/112 B14	238.5	227.3	160	241	KC085.4.047	247
132 B5	256.5	297.3	300	259	KC50.4.043	265	132 B14	256.5	247	200	259	KC50.4.041	265



QUICK SELECTION / Selezione veloce							input speed (n <sub>1</sub> ) = 1400 min <sup>-1</sup>								
Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft	Ratios code
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
35.2	<b>39.79</b>	1.5	382	1.0	1.5	373	B				C	C		191316	01
29.6	<b>47.22</b>	1.1	331	1.1	1.2	354	B				C	C		191314	02
25.6	<b>54.73</b>	1.1	384	0.9	1.0	354	B				C	C		171314	03
21.1	<b>66.22</b>	0.75	318	1.0	0.77	326	B				C	C		171312	04
18.3	<b>76.69</b>	0.75	369	1.0	0.72	354	B				C	C		131314	05
16.7	<b>83.59</b>	0.55	297	1.2	0.66	354	B				C	C		190814	06
15.1	<b>92.78</b>	0.55	329	1.0	0.55	326	B				C	C		131312	07
13.4	<b>104.68</b>	0.55	371	1.0	0.53	354	B				C	C		101314	08
11.9	<b>117.22</b>	0.37	278	1.2	0.43	326	B				C	C		170812	09
11.1	<b>126.65</b>	0.37	300	1.1	0.40	326	B				C	C		101312	10
10.2	<b>136.62</b>	0.37	324	1.1	0.40	354	B				C	C		91314	11
8.5	<b>165.29</b>	0.25	264	1.2	0.31	326	B				C	C		91312	12
7.8	<b>180.40</b>	0.25	289	1.2	0.31	354	B				C	C		71314	13
6.4	<b>218.26</b>	0.25	349	0.9	0.23	326	B				C	C		71312	14
5.8	<b>241.82</b>	0.25	387	0.9	0.23	354	B				C	C		90814	15
4.8	<b>292.57</b>	0.18	358	0.9	0.17	326	B				C	C		90812	16
4.4	<b>319.32</b>	0.18	391	0.9	0.17	354	B				C	C		70814	17
3.6	<b>386.33</b>	0.12	305	1.1	0.13	326	B				C	C		70812	18
2.9	<b>480.16</b>	0.12	380	0.7	0.08	250	B				C	C		70810	19

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

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

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

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

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

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

**E** El reductor tamaño **503A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil					
	Per queste posizioni specificare in fase d'ordine o aggiungere olio					
0.75 LT	0.75 LT	1.05 LT	1.15 LT	1.20 LT	1.20 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

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

**tab. 2**



# 602A Coaxial - Gear

## 520Nm

Rating - Aluminum COAXIAL GEARBOXES



### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor $f.s.$	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft			
							-C	-D	-E	-F	-G	-R	-T	-U	-V			Ratios code	
							71	80	90	100 112	132*	80	90	100 112	132				
388	<b>3.61</b>	7.5	171	1.1	7.6	180	B										3018		01
331	<b>4.23</b>	7.5	200	1.1	8.0	220	B										3016		02
279	<b>5.01</b>	7.5	238	1.1	7.9	260	B										3014		03
231	<b>6.07</b>	7.5	288	1.0	7.6	300	B										3012		04
206	<b>6.81</b>	7.5	323	1.1	7.9	350	B										2018		05
176	<b>7.96</b>	7.5	378	1.0	7.1	370	B										2016		07
148	<b>9.45</b>	5.5	331	1.2	6.5	400	B										2014	standard	08
122	<b>11.43</b>	5.5	401	1.0	5.5	415	B										2012	ø35	09
100	<b>14.00</b>	4	359	1.2	4.7	435	B										1316		10
84	<b>16.62</b>	4	426	1.2	4.7	515	B										1314	ø28	11
70	<b>20.10</b>	4	515	1.0	4.0	520	B										1312	ø30	12
57	<b>24.61</b>	3	475	1.1	3.2	520	B										1112	ø38	20
47.6	<b>29.41</b>	2.2	418	1.1	2.3	450	B										814	ø40	14
39.3	<b>35.58</b>	1.85	431	1.2	2.2	520	B										812	On request	15
34.6	<b>40.50</b>	1.1	290	1.1	1.2	320	B										614		16
31.7	<b>44.23</b>	1.5	433	0.9	1.4	400	B										810		17
28.6	<b>49.00</b>	1.1	351	1.1	1.2	400	B										612		18
23.0	<b>60.90</b>	1.1	436	0.9	1.0	400	B										610		19

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

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

**EN** Unit **602A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary.  
See table 1 for lubrication and recommended quantity.  
In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore **602A** viene fornito completo di olio sintetico per la lubrificazione permanente e non necessita di alcuna manutenzione.  
Vedi tab.1 per oli e quantità consigliati.  
In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe **602A** ist mit synthetischem Öl gefüllt und ist lebensdauergeschmiert.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.  
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **602A** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien.  
Voir tableau 1 concernant les huiles et les quantités conseillées.  
Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **602A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna.  
Ver tabla 1, para cantidades y aceites recomendados.  
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil Per queste posizioni specificare in fase d'ordine o aggiungere olio					
0.55 LT	0.85 LT	1.10 LT	1.20 LT	1.20 LT	1.25 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

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

**tab. 2**





#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges				Available B14 motor flanges			Output Shaft 	Ratios code
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
35.2	<b>39.79</b>	1.5	382	1.1	1.7	434	B				C	C		191316	05
29.6	<b>47.22</b>	1.5	453	1.1	1.7	515	B				C	C		191314	06
25.6	<b>54.73</b>	1.5	525	1.0	1.5	515	B				C	C		171314	07
24.5	<b>57.13</b>	1.5	548	0.9	1.4	520	B				C	C		191312	08
21.1	<b>66.22</b>	1.1	464	1.1	1.2	520	B				C	C		171312	09
19.7	<b>71.01</b>	1.1	498	0.9	0.96	435	B				C	C		191310	10
18.3	<b>76.69</b>	1.1	538	1.0	1.0	515	B				C	C		131314	11
17.0	<b>82.30</b>	0.75	396	1.1	0.82	435	B				C	C		171310	12
16.7	<b>83.59</b>	0.75	402	1.1	0.82	440	B				C	C		190814	13
15.1	<b>92.78</b>	0.75	446	1.2	0.87	520	B				C	C		131312	14
13.4	<b>104.68</b>	0.75	503	1.0	0.77	515	B				C	C		101314	15
11.9	<b>117.22</b>	0.75	564	0.9	0.69	520	B				C	C		170812	16
11.1	<b>126.65</b>	0.55	449	1.2	0.64	520	B				C	C		101312	17
10.3	<b>135.74</b>	0.55	482	0.9	0.51	440	B				C	C		130814	18
9.6	<b>145.68</b>	0.37	346	1.3	0.47	435	B				C	C		170810	19
8.9	<b>157.40</b>	0.37	373	1.2	0.43	435	B				C	C		101310	20
8.5	<b>165.29</b>	0.37	392	1.3	0.49	520	B				C	C		91312	21
7.6	<b>185.29</b>	0.37	439	1.0	0.37	440	B				C	C		100814	22
6.8	<b>205.43</b>	0.37	487	0.9	0.33	435	B				C	C		91310	23
6.2	<b>224.18</b>	0.37	532	1.0	0.36	520	B				C	C		100812	24
5.8	<b>241.82</b>	0.25	387	1.1	0.28	440	B				C	C		90814	25
5.0	<b>278.62</b>	0.25	446	1.0	0.24	435	B				C	C		100810	26
4.8	<b>292.57</b>	0.25	468	1.1	0.28	520	B				C	C		90812	27
3.9	<b>363.63</b>	0.18	445	1.0	0.19	435	B				C	C		90810	28

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

**A** Motor Flanges Available  
Flange Motore Disponibili

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

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

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

**EN** Unit **603A** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

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

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

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

**E** El reductor tamaño **603A** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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

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

RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = F_R \cdot \frac{60.5}{X+25.5}$					
$n_2$	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	400	2000						
900	440	2200						
500	440	2200						

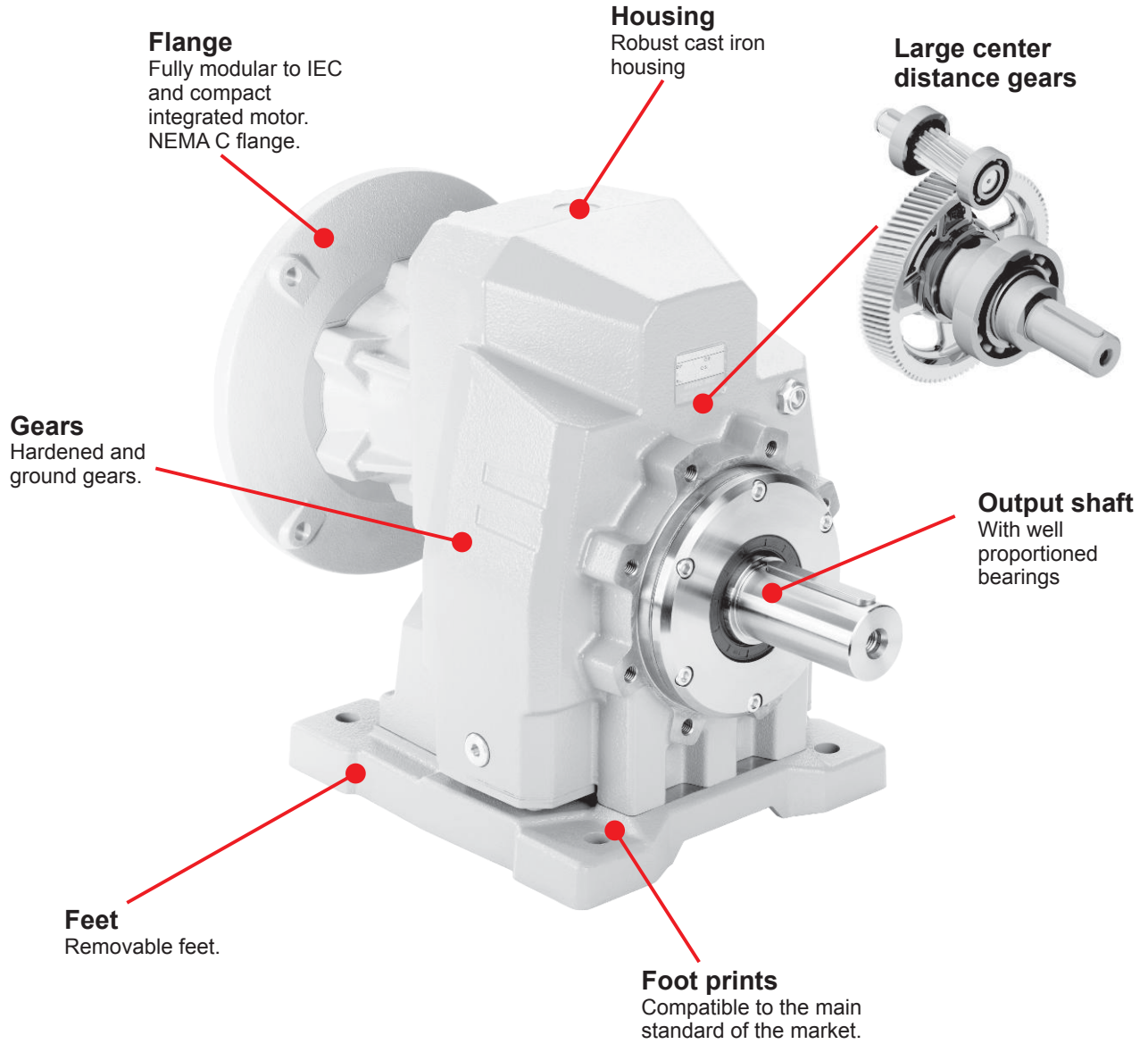
**tab. 2**



# Cast iron in line gearboxes

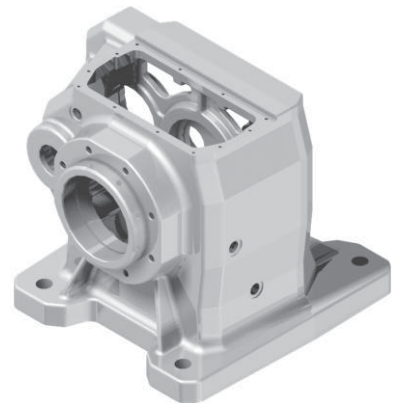
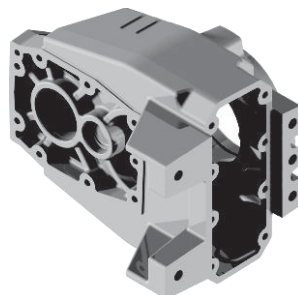
A modular and compact product

5



## Single-piece Cast Iron housing

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



World wide sales network.



# Specific type datasheet on page...

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

1 Stage



Types / Tipi  
Tipen / Tipos  
Tipos

5-5	5-11	5-17	5-23	5-29
<b>501C</b> 225Nm	<b>701C</b> 380Nm	<b>801C</b> 670Nm	<b>851C</b> 700Nm	<b>901C</b> 1175Nm

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2 and 3 Stages

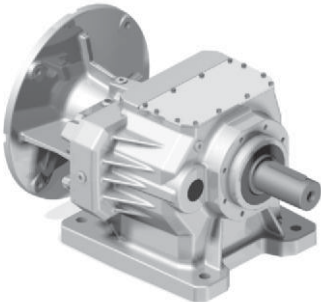


Types / Tipi  
Tipen / Tipos  
Tipos

5-7	5-9	5-13	5-15	5-19	5-21	5-25	5-27	5-31	5-33
<b>502C</b> 320Nm	<b>503C</b> 320Nm	<b>702C</b> 675Nm	<b>703C</b> 675Nm	<b>802C</b> 900Nm	<b>803C</b> 900Nm	<b>852C</b> 1600Nm	<b>853C</b> 1800Nm	<b>902C</b> 2100Nm	<b>903C</b> 2100Nm

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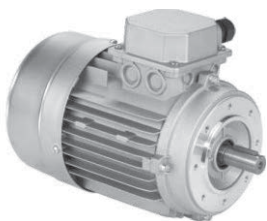
2 and 3 Stages



Types / Tipi  
Tipen / Tipos  
Tipos

5-35	5-37	5-39	5-41
<b>1002</b> 2900Nm	<b>1003</b> 3000Nm	<b>1102</b> 4500Nm	<b>1103</b> 4600Nm

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Types / Tipi  
Tipen / Tipos  
Tipos

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

Type - Tipo - Typ  
Type - Tipo

Size - Grandezza - Grösse  
Taille - Tomafío

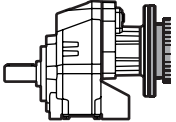
Mounting - Montaggio  
Montage - Fixation  
Tipo de montaje

**P**

**702C**

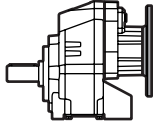
**-F**

Cast iron coaxial gear boxes  
Riduttori coassiali in Ghisa



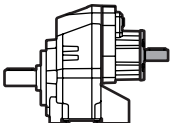
With IEC motor

**M**



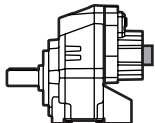
With motor flange

**P**



With male input shaft

**R**



Modular base

**B**

Not available for:  
701C, 801C,  
851C, 901C,  
852C, 902C,  
1002, 1102,  
1003, 1103.

**1** Stage  
Riduzione  
Stufe  
Trains  
Etapas

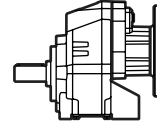
**501C**  
**701C**  
**801C**  
**851C**  
**901C**

**2** Stages  
Riduzioni  
Stufen  
Trains  
Etapas

**502C**  
**702C**  
**802C**  
**852C**  
**902C**  
**1002**  
**1102**

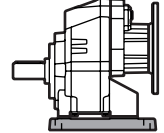
**3** Stages  
Riduzioni  
Stufen  
Trains  
Etapas

**503C**  
**703C**  
**803C**  
**853C**  
**903C**  
**1003**  
**1103**



Without flange / feet

**-N**

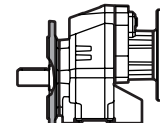


Mounted feet

**B..**

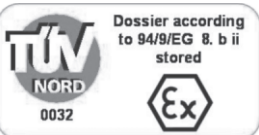
Feet / piedini		G	H	R	L	L1	S
Feet Code	Market reference						
B1	112	18	85	110	87	50	
B2	212/3	18	100	130	107.5		
S1	17	18	75	110	90+20		
S2	27	25	90	110	130		
M1	42/3	25	80	110+120	85		
L4	04	13	80	105			
L5	05	16	100	125			

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

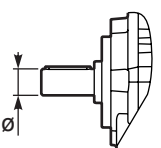
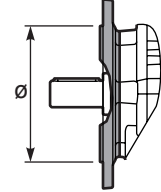
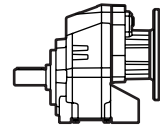
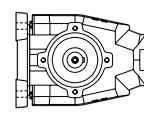
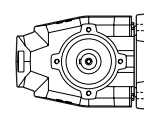
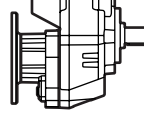
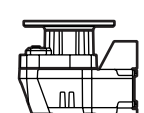
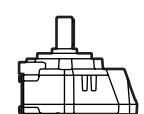
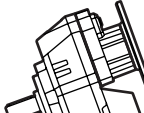


Output flange mounted

**-F**



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

Ratio - Rapporto Untersetzung Reduction Relación	Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida	Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida	Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor	Terminal box position Posizione morsettiera Klemmkastenlage Position boîte à bornes Posición caja de bornes	Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje
<b>6.57</b>	<b>H</b>	<b>4</b>	<b>-F</b>	<b>B</b>	<b>B3</b>
<p>See technical data table</p> <p>Vedi tabella dati tecnici.</p> <p>Technisches Datenblatt beachten</p> <p>Voir Tableau données techniques</p> <p>Ver tabla datos técnicos</p>	 <p><b>STANDARD</b></p> <p>501C 502C 503C</p> <p><b>H</b> → <b>∅30</b></p> <p><b>I</b> → <b>∅35</b></p> <p>701C 702C 703C</p> <p><b>I</b> → <b>∅35</b></p> <p><b>L</b> → <b>∅38</b></p> <p><b>M</b> → <b>∅40</b></p> <p>801C 802C 803C</p> <p><b>M</b> → <b>∅40</b></p> <p><b>P</b> → <b>∅50</b></p> <p>851C 852C 853C</p> <p><b>P</b> → <b>∅50</b></p> <p><b>J</b> → <b>∅60</b></p> <p>901C 902C 903C</p> <p><b>P</b> → <b>∅50</b></p> <p><b>J</b> → <b>∅60</b></p> <p>1002 1003</p> <p><b>J</b> → <b>∅60</b></p> <p>1102 1103</p> <p><b>A</b> → <b>∅70</b></p>	 <p><b>STANDARD</b></p> <p><b>N</b> Senza flangia Without flange</p> <p>501C 502C 503C</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>701C 702C 703C</p> <p><b>4</b> → <b>∅200</b></p> <p><b>5</b> → <b>∅250</b></p> <p>801C 802C 803C</p> <p><b>5</b> → <b>∅250</b></p> <p><b>6</b> → <b>∅300</b></p> <p>851C 852C 853C</p> <p><b>6</b> → <b>∅300</b></p> <p><b>7</b> → <b>∅350</b></p> <p>901C 902C 903C 1002 1003</p> <p><b>6</b> → <b>∅300</b></p> <p><b>7</b> → <b>∅350</b></p> <p><b>8</b> → <b>∅450</b></p> <p>1102 1103</p> <p><b>7</b> → <b>∅350</b></p> <p><b>8</b> → <b>∅450</b></p>	<p><b>Flange Flangia</b></p> <p><b>B5</b></p> <p><b>-A</b>=56 (∅120)</p> <p><b>-B</b>=63 (∅140)</p> <p><b>-C</b>=71 (∅160)</p> <p><b>-D</b>=80 (∅200)</p> <p><b>-E</b>=90 (∅200)</p> <p><b>-F</b>=100+112 (∅250)</p> <p><b>-G</b>=132 (∅300)</p> <p><b>-H</b>=160 (∅350)</p> <p><b>-I</b>=180 (∅350)</p> <p><b>-L</b>=200 (∅400)</p> <p><b>CA</b>=225 (∅450)</p> <p><b>B14</b></p> <p><b>-O</b>=56 (∅80)</p> <p><b>-P</b>=63 (∅90)</p> <p><b>-Q</b>=71 (∅105)</p> <p><b>-R</b>=80 (∅120)</p> <p><b>-T</b>=90 (∅140)</p> <p><b>-U</b>=100+112 (∅160)</p> <p><b>-V</b>=132 (∅200)</p> <p><b>Type R Tipo R</b></p> <p>503C</p> <p><b>-1</b> → <b>∅14</b></p> <p>502C 703C 803C</p> <p><b>-2</b> → <b>∅19</b></p> <p>702C 802C 853C 903C</p> <p><b>-3</b> → <b>∅24</b></p> <p>852C 902C 1003 1103</p> <p><b>-4</b> → <b>∅28</b></p> <p>1002 1102</p> <p><b>-6</b> → <b>∅42</b></p>	<p><b>Without flange Senza flangia</b></p> <p>503C</p> <p><b>-Z</b> → <b>∅9</b> (56B5)</p> <p><b>-0</b> → <b>∅11</b> (63B5)</p> <p><b>-1</b> → <b>∅14</b> (71B5)</p> <p>502C 703C 803C</p> <p><b>-1</b> → <b>∅14</b> (71B5)</p> <p><b>-2</b> → <b>∅19</b> (80B5)</p> <p><b>-3</b> → <b>∅24</b> (90B5)</p> <p>702C 802C 853C 903C</p> <p><b>-2</b> → <b>∅19</b> (80B5)</p> <p><b>-3</b> → <b>∅24</b> (90B5)</p> <p><b>-4</b> → <b>∅28</b> (100B5)</p> <p>501C</p> <p><b>-4</b> → <b>∅28</b> (100B5)</p> <p><b>A</b></p> <p><b>B</b></p> <p><b>STANDARD</b></p> <p><b>C</b></p> <p><b>D</b></p>	 <p><b>B3</b></p> <p><b>STANDARD</b></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>

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

Lifting / sollevamento / hubantriebe / levage / elevación

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

Rotation / rotazione / drehung / rotation / rotação

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

Linear movement / traslazione / linearbewegung / translation / translación

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

TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

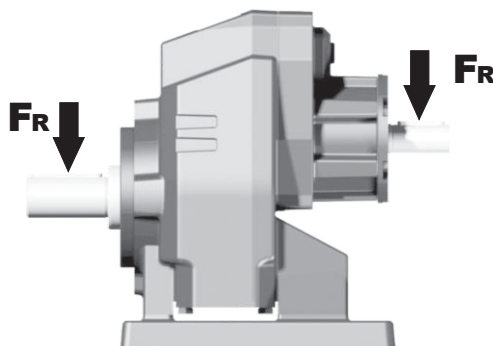
$$M [Nm] = \frac{9550 \cdot P[KW]}{n [rpm]}$$

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

5

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

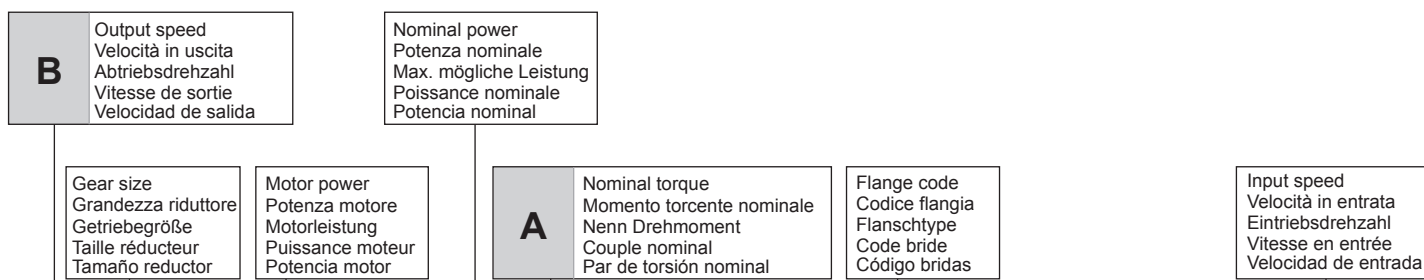
- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée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



	$F_R [N] = \frac{M [Nm] \cdot 2000}{d [mm]} \cdot f_k$	$F_R [N] = \frac{M [lb in] \cdot 8.9}{d [in]} \cdot f_k$
<b>M</b>	Momento torcente / Output torque / Abtriebsdrehmoment / Couple / Par torsion	
<b>d</b>	Diametro primitivo / Diam. of driving element / Durchmesser der Abtriebseinheit / Diamètre primitif / Diámetro primitivo	
<b>f<sub>k</sub></b>	Coefficiente di trasformazione / Factor / Faktor / Coefficient de transmission / Coeficiente de transmisión <b>1.15</b> Ingranaggi / Gearwheels / Zahnrad / Engrenage / Engranaje <b>1.25</b> Catena / Chain sprochets / Antriebskette / Chaîne / Cadena <b>1.75</b> Cinghia Trapezoidale / Narrow v-belt pulley / Keilriemen / Courroie trap. / Correa trapezoidal <b>2.50</b> Cinghia piatta / Flat-belt pulley / Flachzahnriem. / Courroie crantée / Correa plana	

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technischen Büro.
- Si votre application demande des charges radiales supérieures, s'adresser à notre bureau technique.
- En el caso en que una aplicación exija una carga radial superior a la especificada en el catálogo, consultar a nuestra oficinas técnica.

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



**702C** Coaxial - Gear **675Nm** 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	-G	-R	-T	-U	-V			
							71	80	90	100	112	132	80	90	100			112
213	<b>6.57</b>	7.5	312	1.2	8.8	380	B										3018	01
185	<b>7.56</b>	7.5	359	1.1	7.9	390	B										3016	02
159	<b>8.82</b>	7.5	419	1.0	7.1	410	B										3014	03
113	<b>12.39</b>	7.5	588	1.0	7.2	580	B										2018	04
98	<b>14.24</b>	5.5	499	1.2	6.4	600	B										2016	05



**fs**

Type of load and starts per hour Tipo di carico e avviamenti per ora		Oper. hours per day Ore di funz. giorn.		
		3 h	10 h	24 h
Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora	Uniform / Uniforme	0.8	1	1.25
	Moderate / Moderato	1	1.25	1.5
	Heavy / Forte	1.25	1.5	1.75
Intermittent application with start / hour Applicazione intermittente con n.ro operazioni/ora	Uniform / Uniforme	1	1.25	1.5
	Moderate / Moderato	1.25	1.5	1.75
	Heavy / Forte	1.5	1.75	2.15

**D**

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

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



#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor $f.s.$	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges			Available B14 motor flanges			Output Shaft 	Ratios code	
							-D	-E	-F	-R	-T	-U			
							80	90	100 112	80	90	100 112			
481	<b>2.91</b>	4	76	1.8	7.2	140	B	B		B	B		3499	standard	01
373	<b>3.75</b>	4	98	1.6	6.4	160	B	B		B	B		28105	ø30	02
263	<b>5.33</b>	4	140	1.2	4.8	170	B	B		B	B		21112		03
219	<b>6.39</b>	4	167	1.0	4.0	170	B	B		B	B		18115	ø35	04
178	<b>7.85</b>	4	205	1.1	4.3	225	B	B		B	B		13102	On request	05

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

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

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

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

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

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

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

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

#### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

$F_{eq} (N)$

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

$n_2$	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**





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	-F	-Q	-R	-T	-U				
							63	71	80	90	100	112	71	80	90	100	112		
167	8.38	4	215	1.0	4.1	225	B						C	C			2821	01	
139	10.04	3	194	1.2	3.7	240	B						C	C			2818	02	
114	12.33	3	238	1.1	3.2	260	B						C	C			2813	03	
92	15.16	2.2	215	1.2	2.6	260	B						C	C			1921	04	
80	17.57	2.2	250	1.1	2.3	270	B						C	C			1721	05	
77	18.16	2.2	258	1.1	2.4	290	B						C	C			1918	06	
67	21.05	2.2	299	1.1	2.3	320	B						C	C			1718	07	
63	22.30	2.2	317	1.0	2.2	320	B						C	C			1913	08	
57	24.70	1.5	242	1.3	2.0	320	B						C	C			1518	09	
54	25.85	1.5	253	1.3	1.9	320	B						C	C			1713	10	
47.5	29.49	1.5	289	1.1	1.7	320	B						C	C			1318	11	
46.1	30.34	1.5	297	1.1	1.6	320	B						C	C			1513	12	
41.7	33.60	1.1	240	1.0	1.1	250	B						C	C			1021	13	
38.7	36.21	1.1	259	1.2	1.3	320	B						C	C			1313	14	
34.8	40.25	1.1	288	1.0	1.1	300	B						C	C			1018	15	
28.3	49.43	1.1	354	0.9	0.99	320	B						C	C			1013	16	
26.7	52.53	0.75	258	1.0	0.76	260	B						C	C			918	17	
21.7	64.51	0.75	317	1.0	0.75	315	B						C	C			913	18	
20.2	69.37	0.37	168	1.1	0.42	190	B						C	C			718	19	
16.4	85.19	0.37	206	1.1	0.41	230	B						C	C			713	20	

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

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

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

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

**D** Das Getriebe **502C** ist mit synthetischem Öl gefüllt und ist lebensdauer geschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur **502C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **502C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

Standard supplied	For these mounting position specify in the order or add oil					
	Per queste posizioni specificare in fase d'ordine o aggiungere olio					
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

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

$F_{eq} (N)$

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

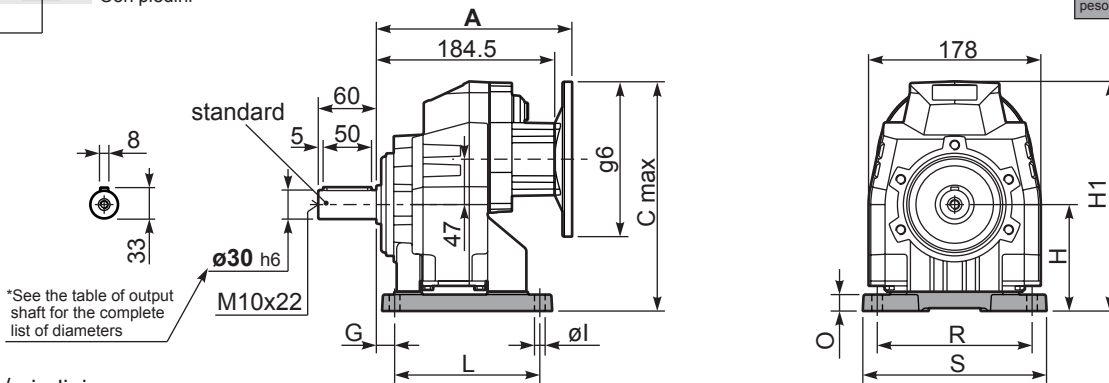
n <sub>1</sub>	FA	FR
1400	240	1200
900	280	1400
500	340	1700

**tab. 2**



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

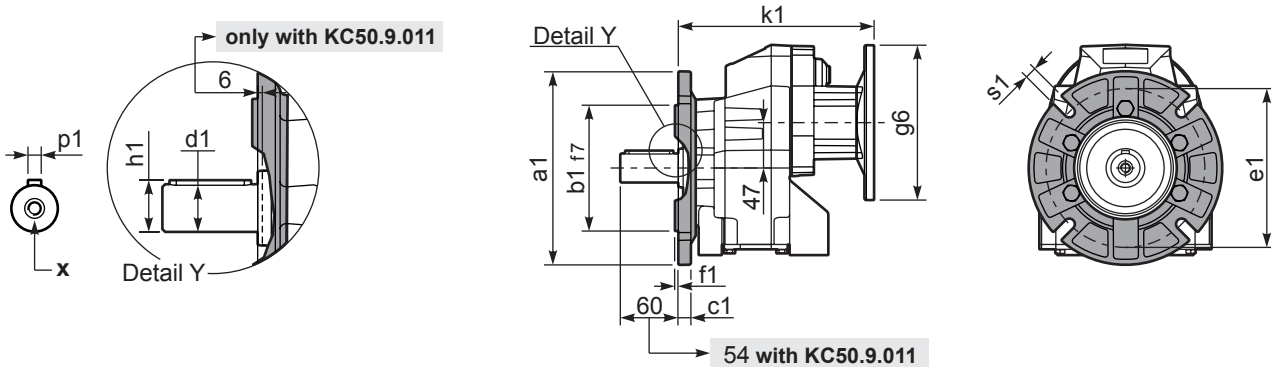
Gearbox weight **15.0 kg**  
peso riduttore With flange  
With feet **17.0 kg**



Feet / piedini

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

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



\*Available output shaft / Albero di uscita

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

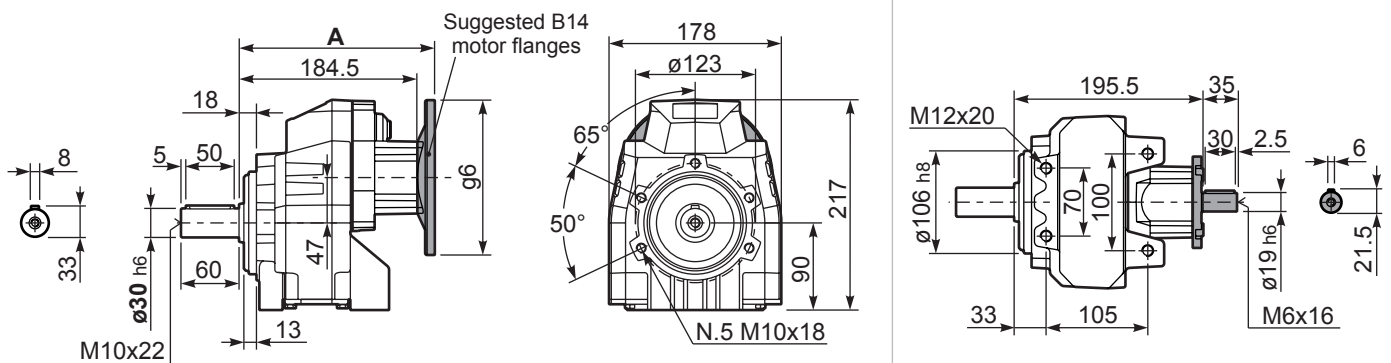
Available output flanges / flange di uscita

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

With flange and feet only on request. Ask for compatibility

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

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



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code	k1 with KC50.9.011
63 B5	205	232	140	205	K063.4.041	211
71 B5	203	242	160	203	K063.4.042	209
80/90 B5	205	262	200	205	K063.4.043	211
100/112 B5	220.3	287	250	220.3	KC40.4.043	226.3

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	205	222	120	205	K063.4.046	211
90 B14	205	232	140	205	K063.4.041	211
100/112 B14	220.3	242	160	220.3	KC40.4.041	226.3



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

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

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

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

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

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

**E** El reductor tamaño **503C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

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

$F_{eq} (N)$

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

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

**Input shaft**  
Albero in entrata

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

$n_1$	FA	FR
<b>1400</b>	140	700
<b>900</b>	160	800
<b>500</b>	190	950

**tab. 2**





#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges		B14 motor flanges				Output Shaft		
							-G	132	-	-	-	-	-	-	-
507	<b>2.76</b>	9	166	1.6	<b>14.4</b>	<b>265</b>			<b>not available</b>				2980	<b>standard</b>	01
395	<b>3.54</b>	9	213	1.3	<b>11.6</b>	<b>275</b>							2485	<b>Ø35</b>	02
277	<b>5.06</b>	9	304	1.0	<b>8.6</b>	<b>290</b>							1891		03
241	<b>5.81</b>	7.5	281	1.2	<b>8.5</b>	<b>330</b>							1693	Ø38	04
206	<b>6.79</b>	7.5	329	1.2	<b>8.4</b>	<b>380</b>							1495	Ø40	05

On request

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

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

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

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

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

**E** El reductor tamaño **701C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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

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

RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = F_R \cdot \frac{70}{X+35}$					
$n_2$	$F_A$	$F_R$	$n_2$	$F_A$	$F_R$	$n_2$	$F_A$	$F_R$
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
<b>On request reinforced bearings to increase loads.</b> A richiesta cuscinetti rinforzati per aumentare i carichi.								

**tab. 2**





#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor $f.s.$	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
213	<b>6.57</b>	7.5	312	1.2	8.8	380	B									3018	01
185	<b>7.56</b>	7.5	358	1.1	7.9	390	B									3016	02
159	<b>8.82</b>	7.5	419	1.0	7.1	410	B									3014	03
113	<b>12.39</b>	7.5	588	1.0	7.2	580	B									2018	04
98	<b>14.24</b>	5.5	499	1.2	6.4	600	B									2016	05
84	<b>16.75</b>	5.5	587	1.1	6.1	665	B									1618	06
73	<b>19.25</b>	5.5	675	1.0	5.4	675	B									1616	07
64	<b>21.78</b>	4	558	1.2	4.7	675	B									1318	08
56	<b>25.04</b>	4	642	1.1	4.1	675	B									1316	09
47.9	<b>29.23</b>	4	750	0.9	3.5	675	B									1314	10
45.7	<b>30.65</b>	3	592	1.1	3.4	675	B									1116	11
39.1	<b>35.78</b>	3	691	1.0	2.9	675	B									1114	12
36.3	<b>38.55</b>	2.2	548	1.1	2.3	580	B									818	13
31.6	<b>44.32</b>	2.2	630	1.1	2.3	665	B									816	14
27.1	<b>51.74</b>	2.2	735	0.9	2.0	675	B									814	15
22.9	<b>61.03</b>	1.1	437	1.1	1.2	480	B									616	16
19.6	<b>71.25</b>	1.1	510	1.1	1.2	560	B									614	17

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

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

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

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

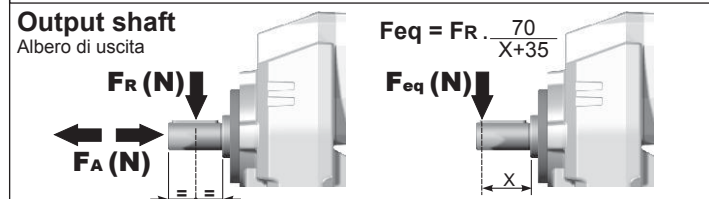
**F** Le réducteur **702C** est fourni complet avec de l'huile synthétique pour la lubrification permanente et ne nécessite aucun entretien. Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **702C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

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

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

#### RADIAL AND AXIAL LOADS



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

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

**Input shaft**  
Albero di entrata

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

tab. 2





**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  Ø	Ratios code 
							-B	-C	-D	-E	-Q	-R	-T		
							63	71	80	90	71	80	90		
22.6	<b>61.89</b>	1.5	594	1.1	1.7	675	B				C	C		191318	01
19.7	<b>71.16</b>	1.5	683	1.0	1.5	675	B				C	C		191316	02
17.0	<b>82.48</b>	1.5	792	0.9	1.3	675	B				C	C		171316	03
14.5	<b>96.29</b>	1.1	675	1.0	1.1	675	B				C	C		171314	04
13.9	<b>100.51</b>	1.1	705	1.0	1.0	675	B				C	C		131318	05
12.1	<b>115.56</b>	0.75	556	1.2	0.91	675	B				C	C		131316	06
11.1	<b>125.96</b>	0.75	606	1.1	0.82	665	B				C	C		190816	07
10.4	<b>134.91</b>	0.75	649	1.0	0.78	675	B				C	C		131314	08
9.5	<b>147.05</b>	0.75	707	1.0	0.72	675	B				C	C		190814	09
8.2	<b>170.44</b>	0.55	605	1.1	0.62	675	B				C	C		170814	10
7.6	<b>184.15</b>	0.55	653	1.0	0.57	675	B				C	C		101314	11
6.8	<b>205.87</b>	0.55	730	0.9	0.51	675	B				C	C		91316	12
5.8	<b>240.34</b>	0.37	570	1.2	0.44	675	B				C	C		91314	13
5.0	<b>279.22</b>	0.37	662	1.0	0.37	665	B				C	C		100816	14
4.3	<b>325.97</b>	0.37	773	0.9	0.32	675	B				C	C		100814	15
3.8	<b>364.41</b>	0.25	583	1.1	0.28	665	B				C	C		90816	16
3.3	<b>425.43</b>	0.25	681	1.0	0.25	675	B				C	C		90814	17
2.9	<b>481.19</b>	0.18	589	1.1	0.22	665	B				C	C		70816	18
2.5	<b>561.76</b>	0.18	687	1.0	0.19	675	B				C	C		70814	19

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

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

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

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

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

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

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

Standard supplied	For these mounting position specify in the order or add oil					
	Per queste posizioni specificare in fase d'ordine o aggiungere olio					
B3	B6	B7	B8	V5	V6	V8
2.20 LT	1.40 LT	1.40 LT	1.30 LT	2.40 LT	1.70 LT	Ask
AGIP Telium VSF 320			SHELL Omala S4 WE 320			

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

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

$F_{eq} (N)$

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

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

n <sub>1</sub>	FA	FR
1400	240	1200
900	280	1400
500	310	1700

**tab. 2**







#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges				B14 motor flanges				Output Shaft		
							-G				-						
227	<b>6.17</b>	9	371	1.2	<b>10.9</b>	<b>450</b>	not available				not available				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>ø50</b>	03
The dynamic efficiency is <b>0.98</b> for all ratios										On request							

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

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

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

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

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

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

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

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

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

B3	B6	B7	B8	V5	V6	V8
3.20 LT	1.90 LT	1.90 LT	1.55 LT	3.20 LT	2.20 LT	Ask
AGIP Blasias 460						

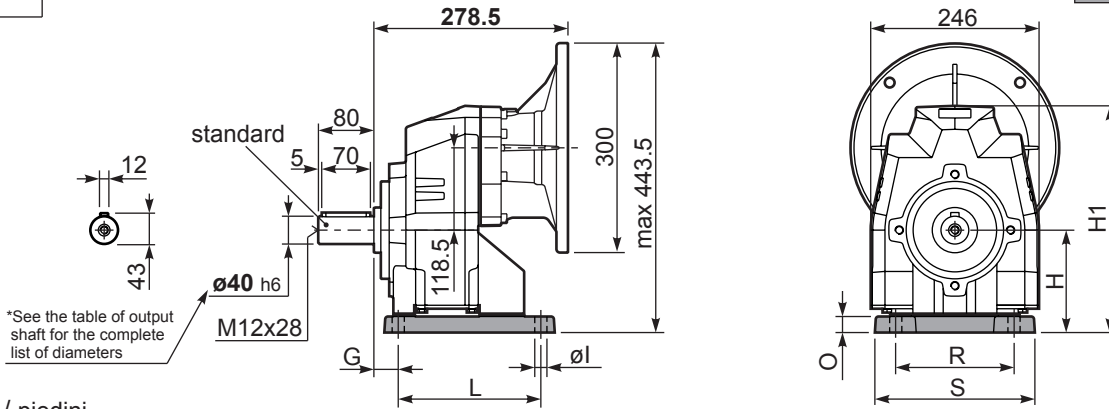
For all details on lubrication and plugs check our website [tab. 1](#)  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS								
Output shaft Albero di uscita			$F_{eq} = F_R \cdot \frac{80.5}{X+40.5}$					
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
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

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

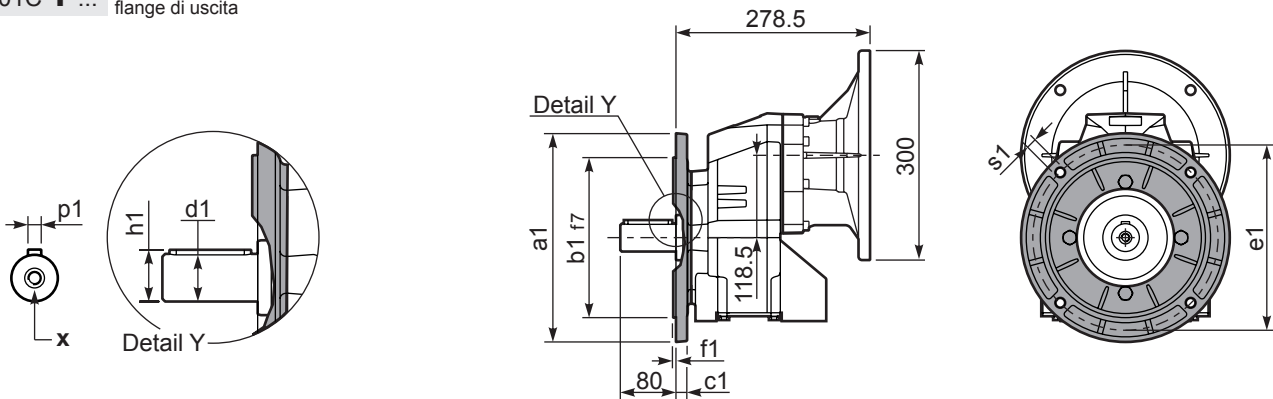
Gearbox weight **45.5 kg**  
peso riduttore With feet **49.5 kg**



**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**

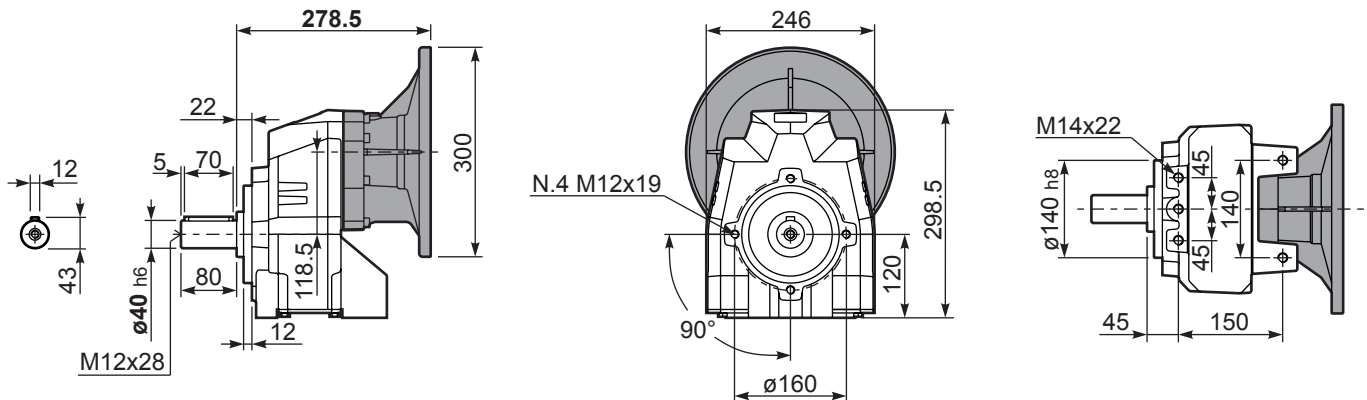
	Shaft - d1	p1	h1	x
Standard	ø 40x80	12	43	M12x28
On request A richiesta	ø 50x100	14	53.5	M16x36
-	-	-	-	-

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

Output Speed n <sub>2</sub> [min <sup>-1</sup> ]	Ratio i	Motor power P <sub>1M</sub> [kW]	Output torque M <sub>2M</sub> [Nm]	Service factor f.s.	Nominal power P <sub>1R</sub> [kW]	Nominal torque M <sub>2R</sub> [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft 	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
175	<b>8.02</b>	9	473	1.1	<b>9.9</b>	<b>520</b>	B									3018	01
152	<b>9.18</b>	9	541	1.1	<b>9.8</b>	<b>590</b>	B									3016	02
131	<b>10.68</b>	9	630	1.1	<b>9.7</b>	<b>680</b>	B									3014	03
93	<b>15.11</b>	7.5	717	1.1	<b>7.8</b>	<b>775</b>	B									2018	04
81	<b>17.30</b>	7.5	821	1.1	<b>7.8</b>	<b>885</b>	B									2016	05
70	<b>20.13</b>	7.5	955	0.9	<b>6.8</b>	<b>900</b>	B									2014	06
60	<b>23.39</b>	5.5	820	1.1	<b>5.9</b>	<b>900</b>	B									1616	07
51	<b>27.21</b>	5.5	954	0.9	<b>5.1</b>	<b>900</b>	B									1614	08
46.0	<b>30.42</b>	4	780	1.2	<b>4.5</b>	<b>900</b>	B									1316	09
39.6	<b>35.38</b>	4	907	1.0	<b>3.9</b>	<b>900</b>	B									1314	10
37.6	<b>37.24</b>	3	719	1.2	<b>3.7</b>	<b>895</b>	B									1116	11
32.3	<b>43.31</b>	3	836	1.1	<b>3.2</b>	<b>900</b>	B									1114	12
29.8	<b>47.02</b>	2.2	668	1.1	<b>2.3</b>	<b>705</b>	B									818	13
26.0	<b>53.85</b>	2.2	765	1.1	<b>2.3</b>	<b>810</b>	B									816	14
22.4	<b>62.63</b>	2.2	890	1.0	<b>2.2</b>	<b>900</b>	B									814	15
18.9	<b>74.16</b>	1.1	531	1.1	<b>1.2</b>	<b>585</b>	B									616	16
16.2	<b>86.25</b>	1.1	617	1.1	<b>1.2</b>	<b>680</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 **802C** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.  
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

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

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

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

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

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

**AGIP Blasias 460**

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

$F_{eq} (N)$

n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR	n <sub>2</sub>	FA	FR
<b>300</b>	1200	6000	<b>140</b>	1600	8000	<b>70</b>	2200	11000
<b>250</b>	1400	7000	<b>120</b>	1800	9000	<b>40</b>	2600	13000
<b>200</b>	1500	7500	<b>85</b>	2000	10000	<b>15</b>	3000	15000

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

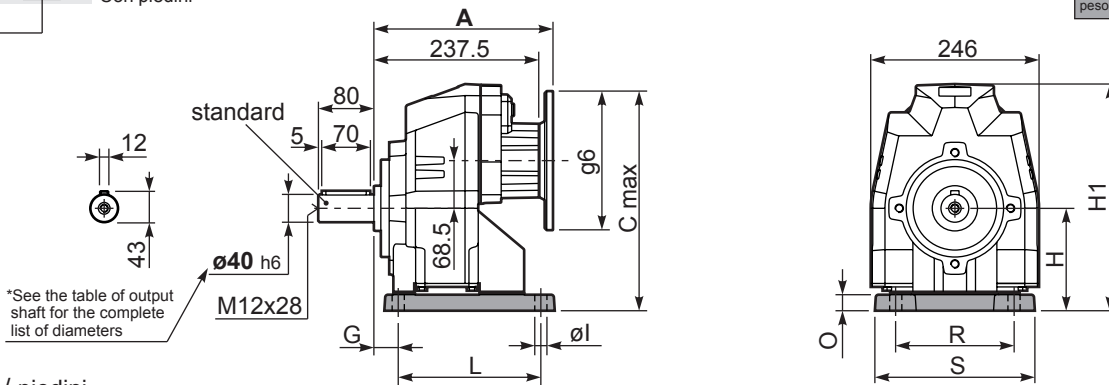
**Input shaft**  
Albero in entrata

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

**tab. 2**

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

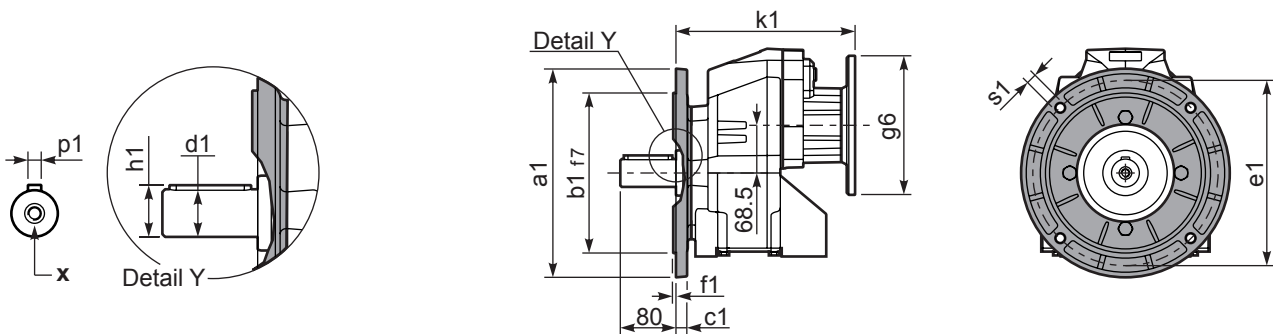
Gearbox weight **39.5 kg**  
peso riduttore With flange  
With feet **43.5 kg**



Feet / piedini

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

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



\*Available output shaft / Albero di uscita

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

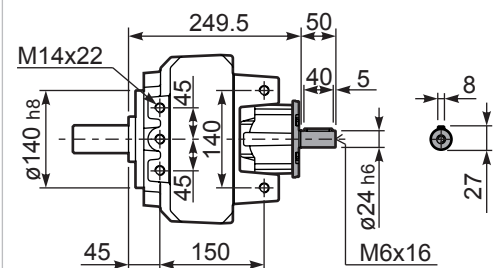
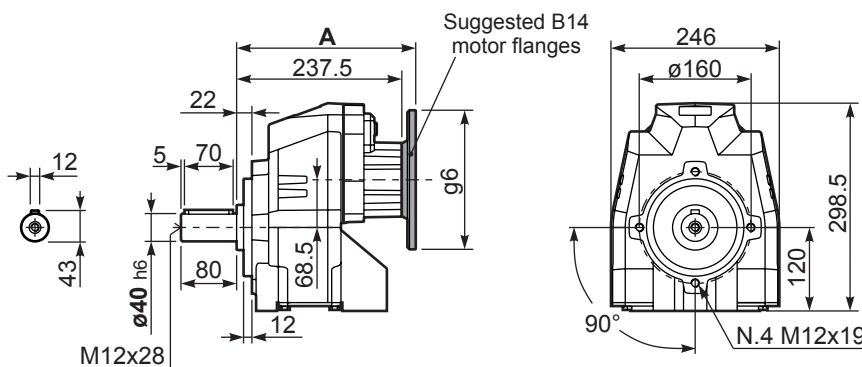
Available output flanges / flange di uscita

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

With flange and feet only on request. Ask for compatibility

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

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



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B5	256	323.5	160	256	KC023.4.041
80/90 B5	258	343.5	200	258	KC023.4.042
100/112 B5	267	368.5	250	267	KC023.4.043
132 B5	285	393.5	300	285	KC50.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
80 B14	258	303.5	120	258	KC085.4.046
90 B14	258	313.5	140	258	KC085.4.045
100/112 B14	267	323.5	160	267	KC085.4.047
132 B14	285	343.5	200	285	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	785	1.1	0.86	900	B				C	C		131314	07
7.9	<b>178.01</b>	0.75	856	1.1	0.79	900	B				C	C		190814	08
7.3	<b>191.67</b>	0.75	922	1.0	0.73	900	B				C	C		101316	09
6.8	<b>206.32</b>	0.75	992	0.9	0.68	900	B				C	C		170814	10
6.3	<b>222.92</b>	0.55	791	1.1	0.63	900	B				C	C		101314	11
5.8	<b>242.18</b>	0.55	859	1.0	0.58	900	B				C	C		150814	12
5.6	<b>250.15</b>	0.55	888	1.0	0.56	900	B				C	C		91316	13
4.8	<b>289.08</b>	0.55	1026	0.9	0.49	900	B				C	C		130814	14
4.2	<b>330.31</b>	0.37	783	1.1	0.42	890	B				C	C		71316	15
3.5	<b>394.59</b>	0.37	936	1.0	0.36	900	B				C	C		100814	16
2.7	<b>514.99</b>	0.25	824	1.1	0.27	900	B				C	C		90814	17
2.1	<b>680.03</b>	0.18	832	1.1	0.21	900	B				C	C		70814	18

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

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

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

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

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

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

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

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

**AGIP Blasia 460**

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

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

$F_{eq}$  (N)

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

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

**Input shaft**  
Albero in entrata

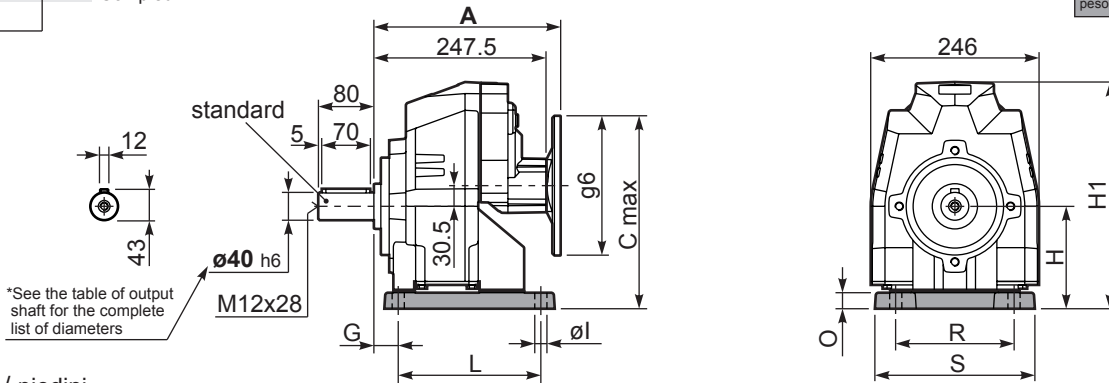
$F_R$  (N)  
 $F_A$  (N)

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

tab. 2

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

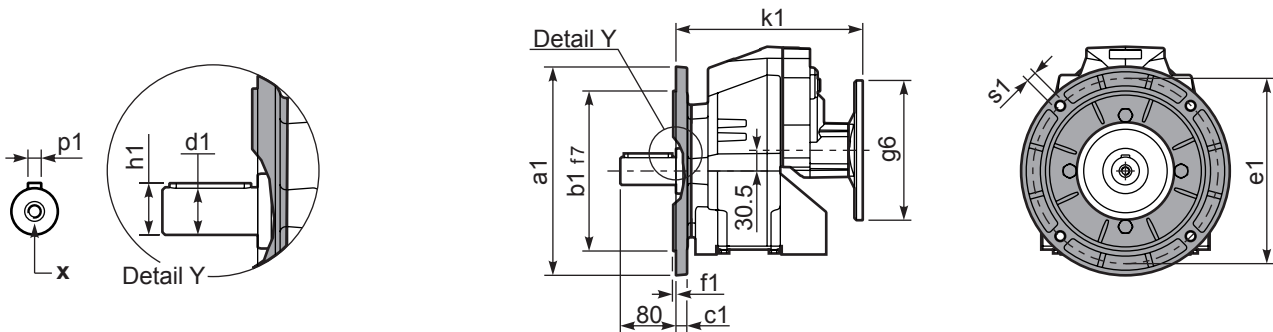
Gearbox weight **39.5 kg**  
peso riduttore With flange  
With feet **43.5 kg**



Feet / piedini

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

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



\*Available output shaft / Albero di uscita

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

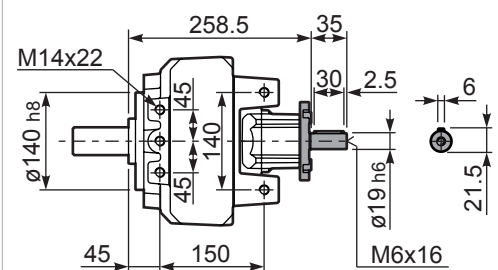
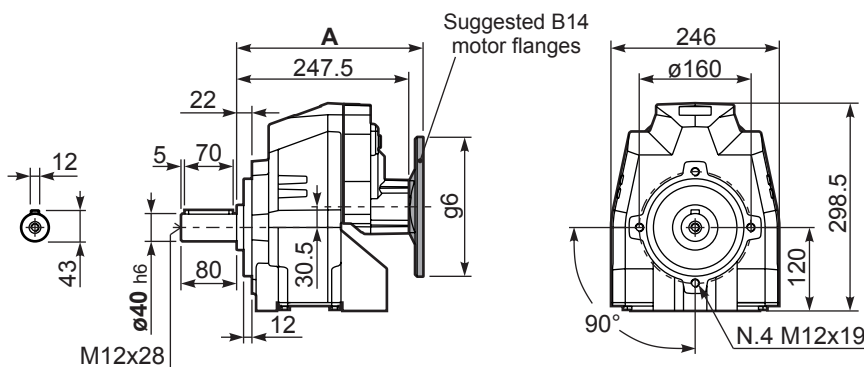
Available output flanges / flange di uscita

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

With flange and feet only on request. Ask for compatibility

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

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



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

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



### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor $f.s.$	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges		B14 motor flanges				Output Shaft 	Ratios code 		
							-H	-I	-	-	-	-			-	-
							160	180	-	-	-	-			-	-
412	<b>3.40</b>	22	480	1.3	<b>26.4</b>	<b>600</b>			<b>not available</b>				1551	<b>standard</b>	01	
343	<b>4.08</b>	22	575	1.2	<b>25.7</b>	<b>700</b>			<b>not available</b>				1353	<b>ø50</b>	02	
285	<b>4.91</b>	22	693	1.0	<b>21.3</b>	<b>700</b>			<b>not available</b>				1154	<b>ø60</b>	03	
The dynamic efficiency is <b>0.98</b> for all ratios													On request			

**A** Motor Flanges Available  
Flange Motore Disponibili

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

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

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

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

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

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

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

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

B3	B6	B7	B8	V5	V6	V8
5.30 LT	3.60 LT	3.60 LT	2.80 LT	5.80 LT	4.10 LT	Ask
AGIP Blasias 460						

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

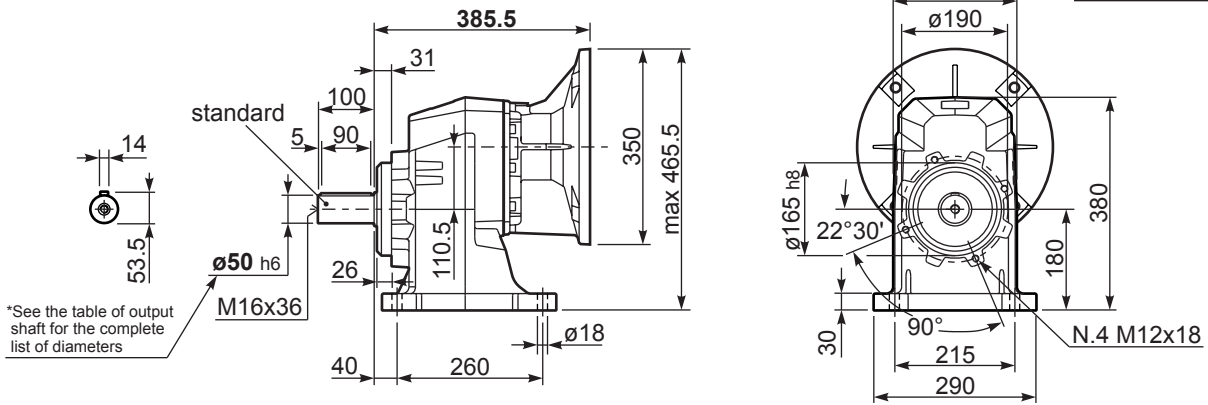
**On request reinforced bearings to increase loads.**  
A richiesta cuscinetti rinforzati per aumentare i carichi.

**tab. 2**

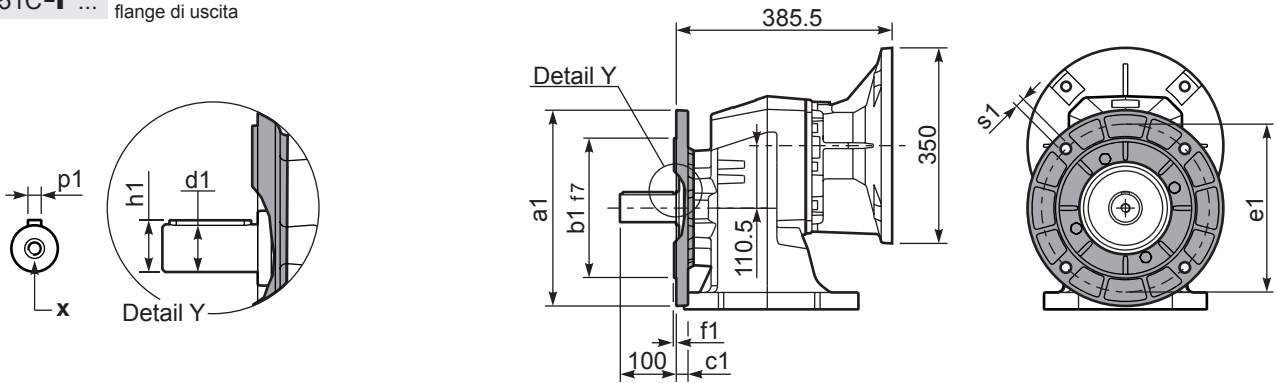


P851C**S8**... With foot  
Con piedine

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



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




\*Available output shaft / Albero di uscita

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

Available output flanges / flange di uscita

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

  
All flanges are compatible with the foot



#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	B5 motor flanges				B14 motor flanges				Output Shaft 	Ratios code 
							-F	-G	-H	-I	-	-	-	-		
							100 112	132	160	180	-	-	-	-		
317	<b>4.42</b>	22	611	1.1	<b>24.2</b>	<b>700</b>	B							3015		01
264	<b>5.30</b>	22	733	1.0	<b>20.2</b>	<b>700</b>	B							3013		02
219	<b>6.38</b>	18.5	742	1.1	<b>19.1</b>	<b>800</b>	B							3011		03
168	<b>8.33</b>	15	784	1.0	<b>14.7</b>	<b>800</b>	B							2015		04
140	<b>9.99</b>	15	940	1.0	<b>13.8</b>	<b>900</b>	B							2013	<b>standard</b> <b>ø50</b>	05
124	<b>11.26</b>	15	1060	1.0	<b>14.9</b>	<b>1100</b>	B						1615			06
116	<b>12.03</b>	15	1132	1.1	<b>15.2</b>	<b>1200</b>	B							2011		07
104	<b>13.50</b>	15	1271	1.1	<b>15.8</b>	<b>1400</b>	B							1613	On request <b>ø60</b>	08
96	<b>14.65</b>	15	1378	1.1	<b>15.6</b>	<b>1500</b>	B						1315			09
86	<b>16.26</b>	15	1531	1.0	<b>14.1</b>	<b>1500</b>	B							1611		10
80	<b>17.56</b>	11	1214	1.2	<b>13.0</b>	<b>1500</b>	B							1313		11
65	<b>21.50</b>	11	1486	1.1	<b>11.4</b>	<b>1600</b>	B							1113		12
54	<b>25.88</b>	9	1526	1.0	<b>9.4</b>	<b>1600</b>	B							1111		13
45.0	<b>31.09</b>	7.5	1475	1.0	<b>7.2</b>	<b>1460</b>	B							813		14
37.4	<b>37.43</b>	5.5	1312	1.2	<b>6.5</b>	<b>1600</b>	B							811		15

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

5

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

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

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

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

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

5.40 LT	3.60 LT	3.60 LT	2.80 LT	5.90 LT	4.20 LT	Ask
AGIP Blasias 460						

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

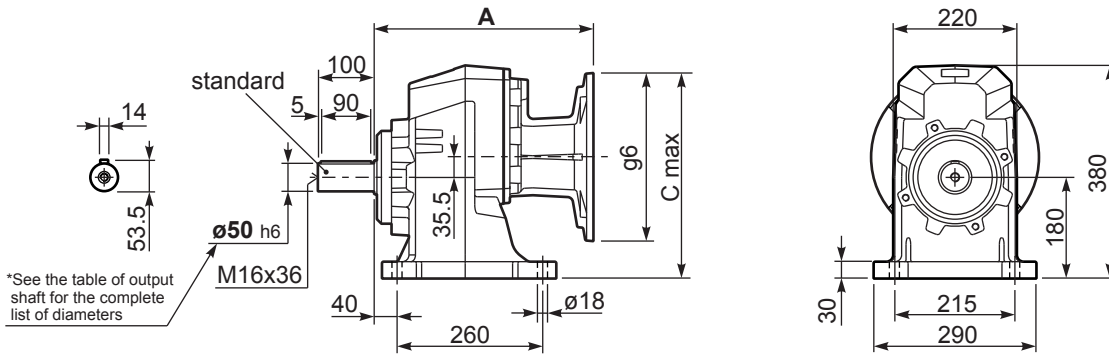
$F_R (N)$   
 $F_A (N)$

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

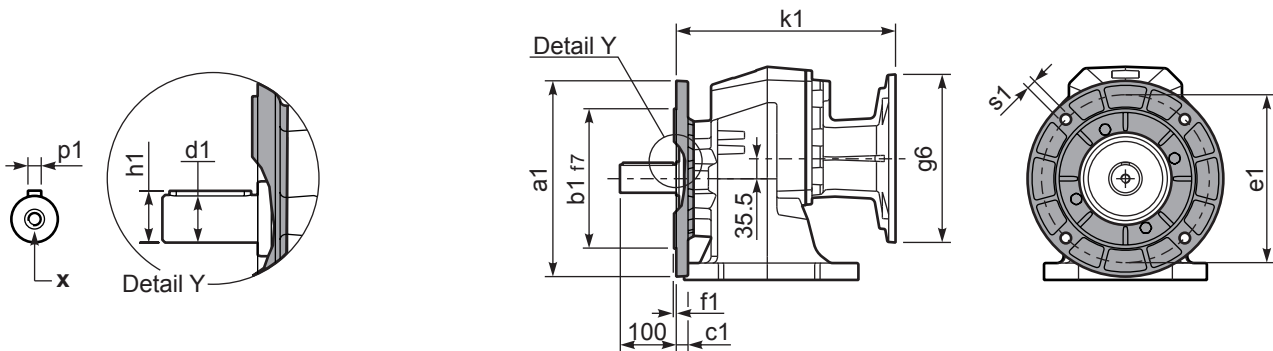
**tab. 2**

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

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



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



\*Available output shaft / Albero di uscita

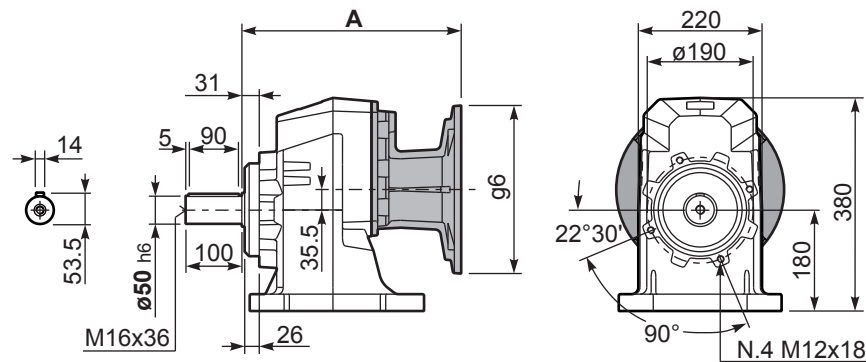
	Shaft - d1	p1	h1	x
Standard	∅ 50x100	14	53.5	M16x36
On request A richiesta	∅ 60x120	18	64	M20x42
	-	-	-	-

Available output flanges / flange di uscita

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

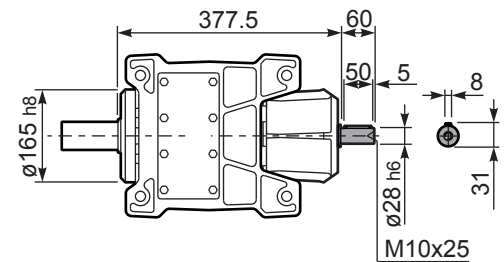
All flanges are compatible with the foot

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



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
100/112 B5	387	340.5	250	387	-
132 B5	391	365.5	300	391	-
160/180 B5	402	390.5	350	402	-

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





#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor $f.s.$	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft  $\varnothing$	Ratios code	
							-C	-D	-E	-F	-G	-R	-T	-U	-V			
							71	80	90	100 112	132	80	90	100 112	132			
32.5	<b>43.03</b>	5.5	1478	1.1	5.8	1600	B									201313	standard $\varnothing 50$  $\varnothing 60$ On request	01
28.9	<b>48.52</b>	5.5	1667	0.9	5.0	1550	B									161315		02
27.0	<b>51.81</b>	4	1302	1.2	4.8	1600	B									201311		03
24.1	<b>58.17</b>	4	1462	1.1	4.3	1600	B									161313		04
22.2	<b>63.09</b>	4	1585	1.0	3.8	1550	B									131315		05
20.0	<b>70.05</b>	4	1760	1.0	4.0	1800	B									161311		06
18.5	<b>75.65</b>	4	1901	0.9	3.7	1800	B									131313		07
15.4	<b>91.09</b>	3	1723	1.0	3.1	1800	B									131311		08
12.6	<b>111.50</b>	2.2	1553	1.2	2.5	1800	B									111311		09
10.5	<b>133.91</b>	2.2	1865	1.0	2.1	1800	B									81313		10
8.7	<b>161.24</b>	1.5	1548	1.2	1.7	1800	B									81311		11
7.6	<b>184.40</b>	1.1	1293	1.1	1.2	1450	B									61313		12
6.3	<b>222.04</b>	1.1	1557	1.1	1.2	1750	B									61311		13

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

**Motor Flanges Available**  
Flange Motore Disponibili

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

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

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

5

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

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

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

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

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

<b>B3</b>	<b>B6</b>	<b>B7</b>	<b>B8</b>	<b>V5</b>	<b>V6</b>	<b>V8</b>
5.50 LT	3.80 LT	3.80 LT	3.20 LT	7.00 LT	4.60 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

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

$n_2$	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.

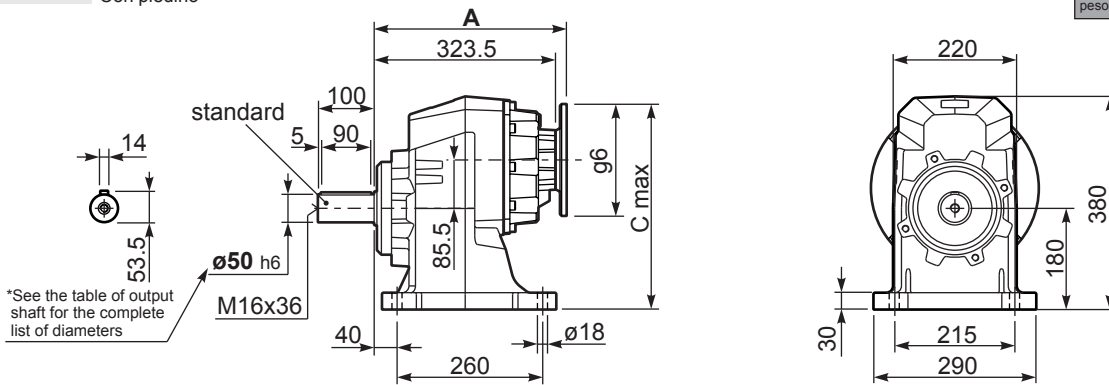
**Input shaft**  
Albero in entrata

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

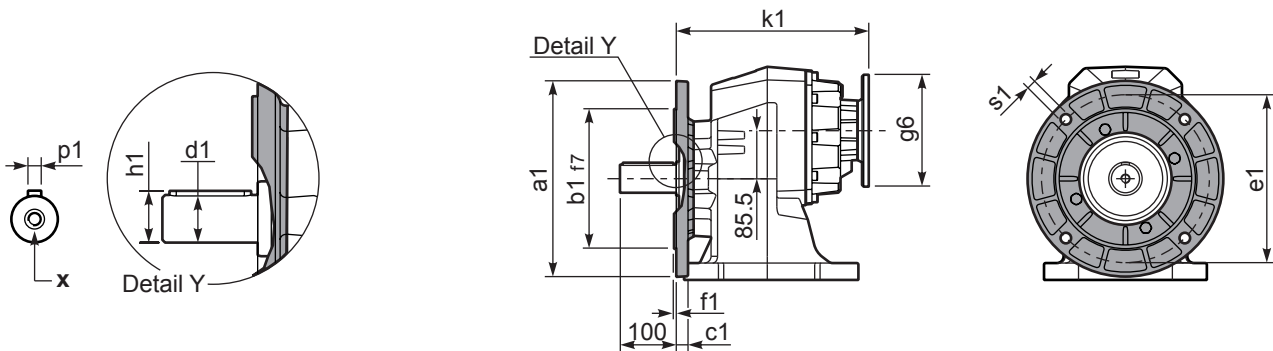
tab. 2

**P853CS8...** With foot  
Con piedino

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



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



\*Available output shaft / Albero di uscita

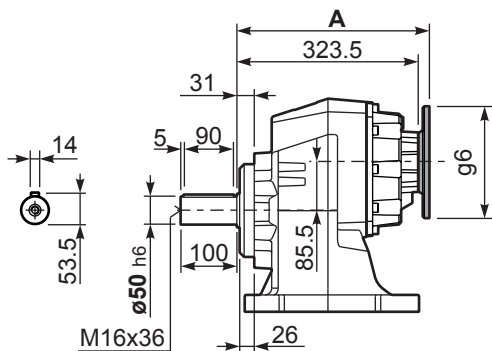
	Shaft - d1	p1	h1	x
Standard	ø 50x100	14	53.5	M16x36
On request A richiesta	ø 60x120	18	64	M20x42
	-	-	-	-

Available output flanges / flange di uscita

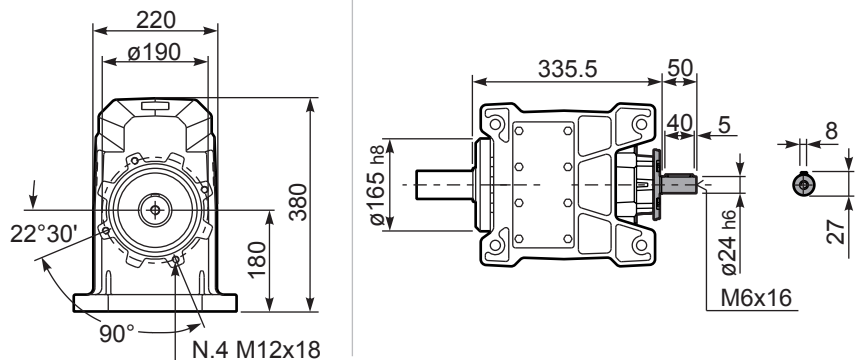
a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
-	-	-	-	-	-	-

All flanges are compatible with the foot

**P853CS8...** Basic gearbox  
Riduttore base



**R853CS8...** Input Shaft  
Albero in entrata



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B5	342	345.5	160	342	KC023.4.041
80/90 B5	344	365.5	200	344	KC023.4.042
100/112 B5	353	390.5	250	353	KC023.4.043
132 B5	371	415.5	300	371	KC50.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
80 B14	344	325.5	120	344	KC085.4.046
90 B14	344	335.5	140	344	KC085.4.045
100/112 B14	353	345.5	160	353	KC085.4.047
132 B14	371	365.5	200	371	KC50.4.041



#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges		B14 motor flanges				Output Shaft		
							-H	-I	-	-	-	-			Ratios code
							160	180	-	-	-	-			
528	<b>2.65</b>	22	374	1.7	<b>36.7</b>	<b>650</b>			<b>not available</b>				2361	<b>standard</b>	01
409	<b>3.42</b>	22	483	1.6	<b>32.8</b>	<b>750</b>			<b>not available</b>				1965	<b>ø60</b>	02
304	<b>4.60</b>	22	649	1.5	<b>30.9</b>	<b>950</b>			<b>not available</b>				1569		03
256	<b>5.46</b>	22	771	1.3	<b>27.4</b>	<b>1000</b>			<b>not available</b>				1371	ø50	04
211	<b>6.64</b>	22	937	1.3	<b>26.5</b>	<b>1175</b>			<b>not available</b>				1173	On request	05

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

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

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

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

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

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

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

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

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

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

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

tab. 1

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

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

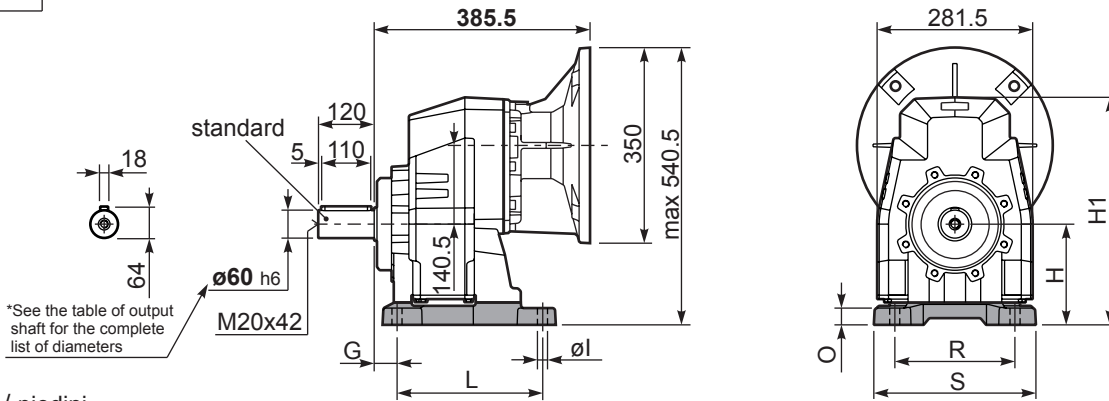
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	2070	10350	140	2760	13800	70	3450	17250
250	2300	11500	120	2990	14950	40	3680	18400
200	2530	12650	85	3220	16100	15	4600	23000

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

tab. 2

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

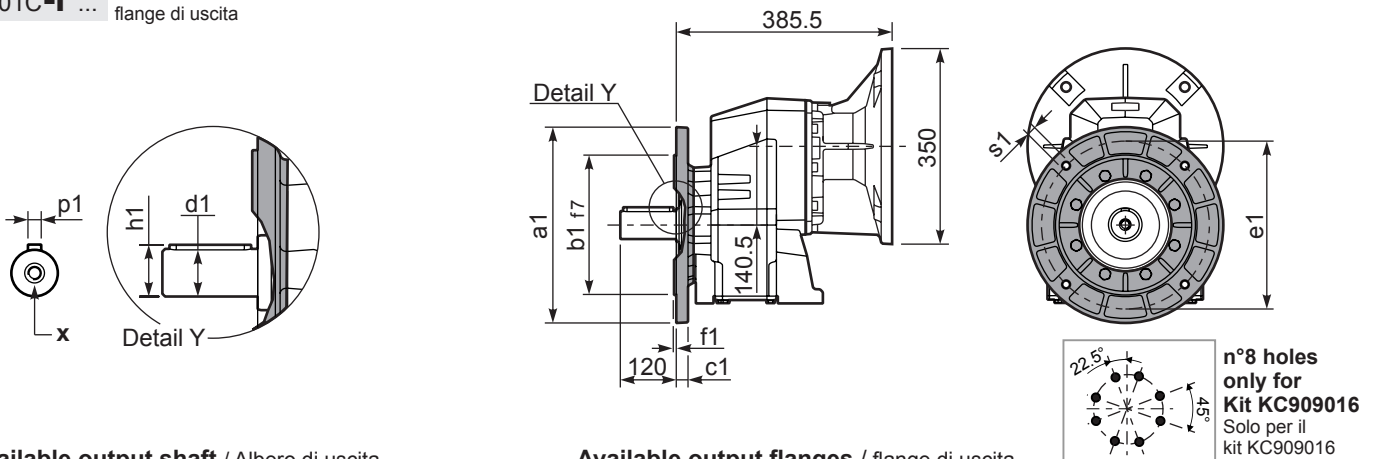
Gearbox weight **102 kg**  
peso riduttore With feet **110.5 kg**



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
B7	702/3	25	210	300	165	350	437	30	22	-	KC90.9.027
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
S9	97	40	225	250	310	340	452	45	22	-	KC90.9.026
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 / Alberi di uscita

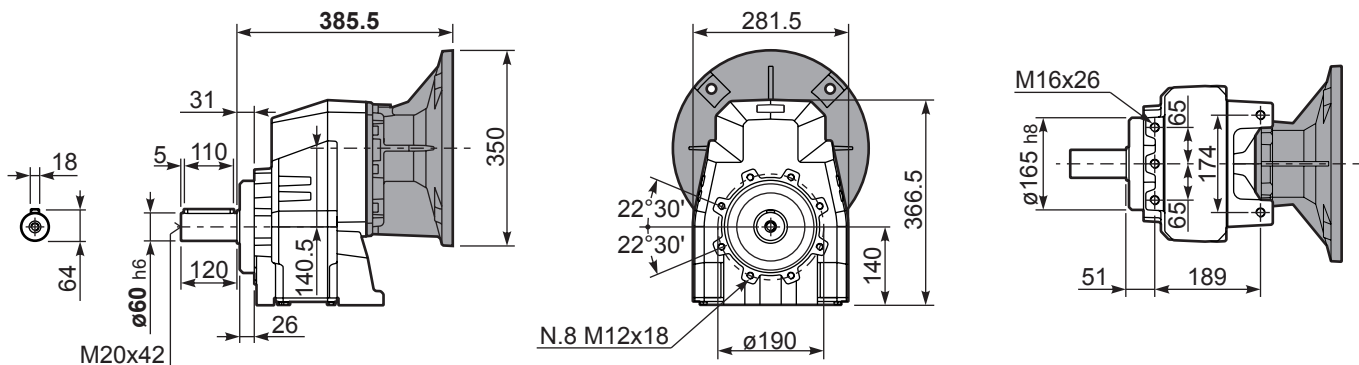
	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	ø 50x100	14	53.5	M16x36
	-	-	-	-

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
450	350	22	400	5	18	KC90.9.016

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]	B5 motor flanges				B14 motor flanges				Output Shaft 	Ratios code
							-F	-G	-H	-I	-	-	-	-		
							100 112	132	160	180	-	-	-	-		
234	<b>5.98</b>	22	827	1.2	<b>25.5</b>	<b>1000</b>	B							3015	01	
197	<b>7.10</b>	22	982	1.2	<b>25.3</b>	<b>1175</b>	B							3013	02	
162	<b>8.63</b>	22	1193	1.1	<b>23.9</b>	<b>1350</b>	B							3011	03	
124	<b>11.27</b>	18.5	1310	1.1	<b>20.3</b>	<b>1500</b>	B							2015	04	
105	<b>13.38</b>	18.5	1555	1.1	<b>19.4</b>	<b>1700</b>	B							2013	05	
92	<b>15.24</b>	18.5	1771	1.1	<b>19.0</b>	<b>1900</b>	B							1615	06	
86	<b>16.26</b>	18.5	1889	1.1	<b>19.7</b>	<b>2100</b>	B							2011	07	
77	<b>18.09</b>	18.5	2102	1.0	<b>17.7</b>	<b>2100</b>	B							1613	08	
71	<b>19.82</b>	15	1865	1.1	<b>15.9</b>	<b>2060</b>	B							1315	09	
64	<b>21.98</b>	15	2069	1.0	<b>14.6</b>	<b>2100</b>	B							1611	10	
60	<b>23.53</b>	15	2214	0.9	<b>13.6</b>	<b>2100</b>	B							1313	11	
58	<b>24.25</b>	11	1677	1.2	<b>12.2</b>	<b>1940</b>	B							1115	12	
48.6	<b>28.80</b>	11	1991	1.1	<b>11.1</b>	<b>2100</b>	B							1113	13	
40.0	<b>34.99</b>	9	2063	1.0	<b>9.2</b>	<b>2100</b>	B							1111	14	
33.6	<b>41.64</b>	7.5	1976	1.0	<b>7.2</b>	<b>1960</b>	B							813	15	
27.7	<b>50.60</b>	5.5	1774	1.2	<b>6.3</b>	<b>2100</b>	B							811	16	

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

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

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

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

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

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

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

5.90 LT	3.80 LT	3.80 LT	3.40 LT	6.70 LT	4.40 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

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

**Input shaft**  
Albero in entrata

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

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

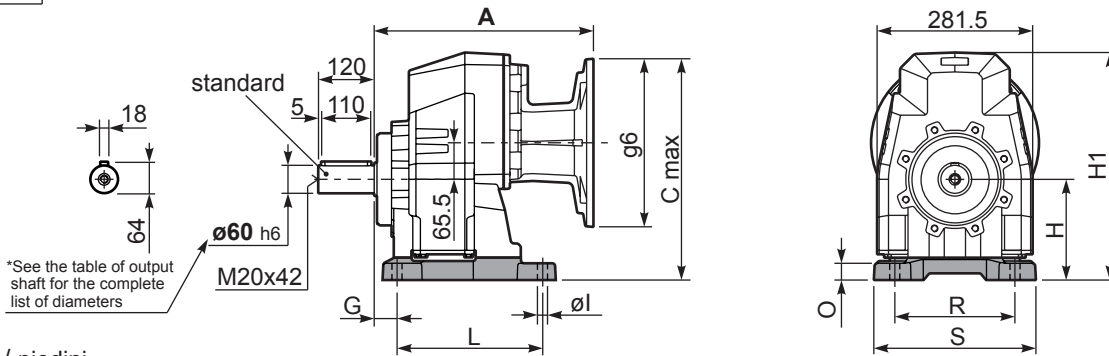
$n_1$	FA	FR
<b>1400</b>	700	3500
<b>900</b>	840	4200
<b>500</b>	900	4500

**tab. 2**



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

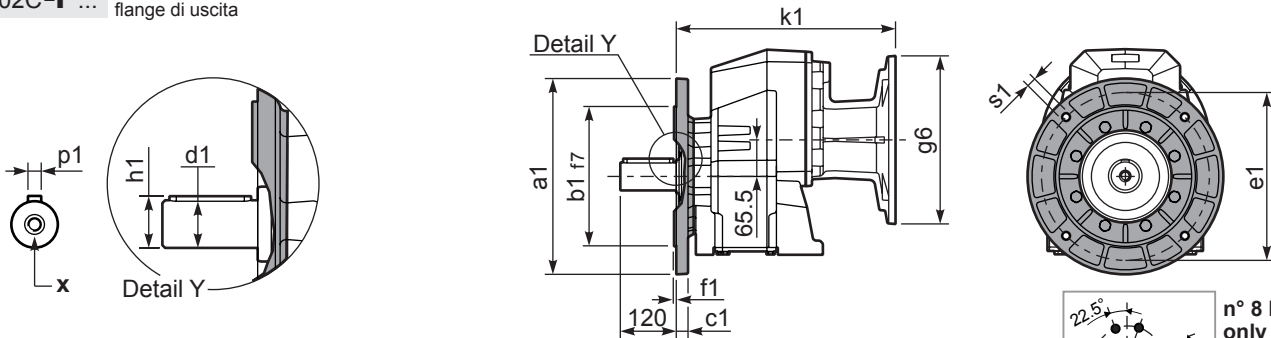
Gearbox weight **98.5 kg**  
peso riduttore With flange  
With feet **107.0 kg**



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
B7	702/3	25	210	300	165	350	437	30	22	-	KC90.9.027
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
S9	97	40	225	250	310	340	452	45	22	-	KC90.9.026
H7	027/273	40	225	250	245	300	452	55	22	-	KC90.9.023
HS	-	40	175	215	260	290	402	25	18	-	KC90.9.025

P902C-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

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

Available output flanges / flange di uscita

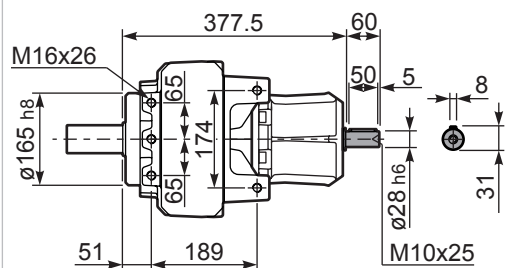
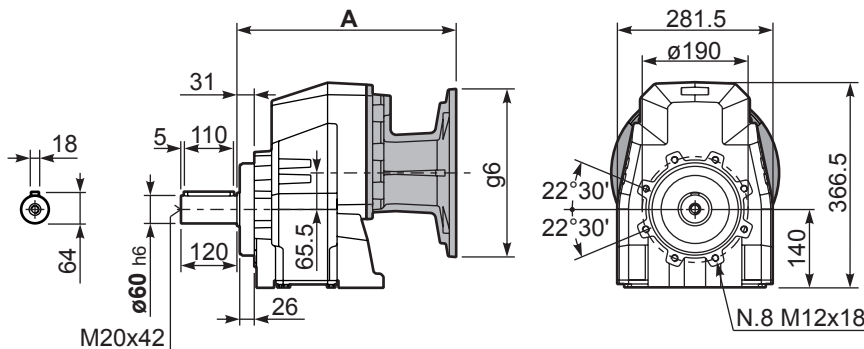
a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
450	350	22	400	5	18	KC90.9.016

n° 8 holes only for Kit KC909016  
Solo per il kit KC909016

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
100/112 B5	387	415.5	250	387	-
132 B5	391	440.5	300	391	-
160/180 B5	402	465.5	350	402	-



#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges					Available B14 motor flanges				Output Shaft  $\varnothing$	Ratios code 
							-C	-D	-E	-F	-G	-R	-T	-U	-V		
							71	80	90	100 112	132	80	90	100 112	132		
28.8	<b>48.55</b>	7.5	2257	0.9	6.7	2100	B									201315	01
24.3	<b>57.64</b>	5.5	1980	1.1	5.7	2100	B									201313	02
21.3	<b>65.64</b>	5.5	2255	0.9	5.0	2100	B									161315	03
20.0	<b>70.04</b>	4	1760	1.2	4.7	2100	B									201311	04
18.0	<b>77.93</b>	4	1958	1.1	4.2	2100	B									161313	05
16.4	<b>85.36</b>	4	2145	1.0	3.8	2100	B									131315	06
14.8	<b>94.70</b>	4	2380	0.9	3.5	2100	B									161311	07
13.8	<b>101.35</b>	3	1917	1.1	3.2	2100	B									131313	08
11.4	<b>123.15</b>	3	2330	0.9	2.7	2100	B									131311	09
9.3	<b>150.73</b>	2.2	2100	1.0	2.2	2100	B									111311	10
7.8	<b>179.39</b>	1.5	1722	1.2	1.8	2100	B									81313	11
6.4	<b>217.98</b>	1.5	2093	1.0	1.5	2100	B									81311	12
5.7	<b>247.03</b>	1.1	1732	1.1	1.2	1950	B									61313	13
4.7	<b>300.17</b>	1.1	2105	1.0	1.1	2100	B									61311	14

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

Motor Flanges Available  
Flange Motore Disponibili

B) Supplied with Reduction Bushing  
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position  
Posizione Fori Flangia Motore

5

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

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

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

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

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

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

AGIP Blasias 460

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

#### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

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

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

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

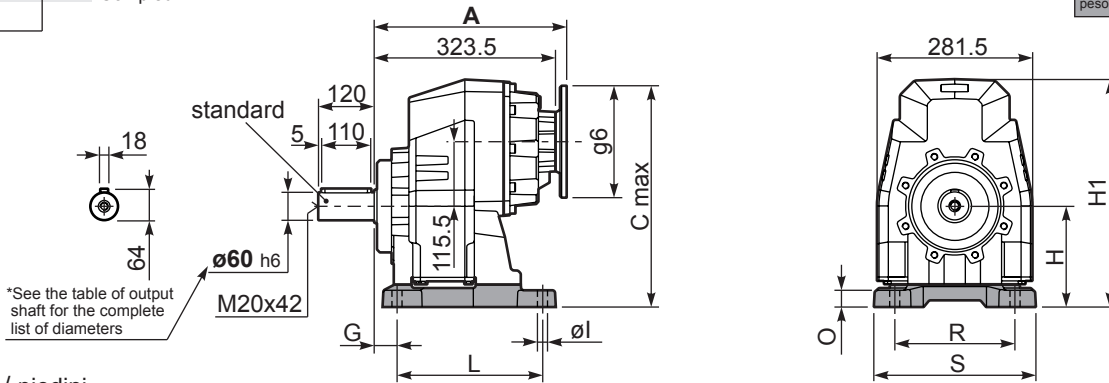
**Input shaft**  
Albero di entrata

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

tab. 2

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

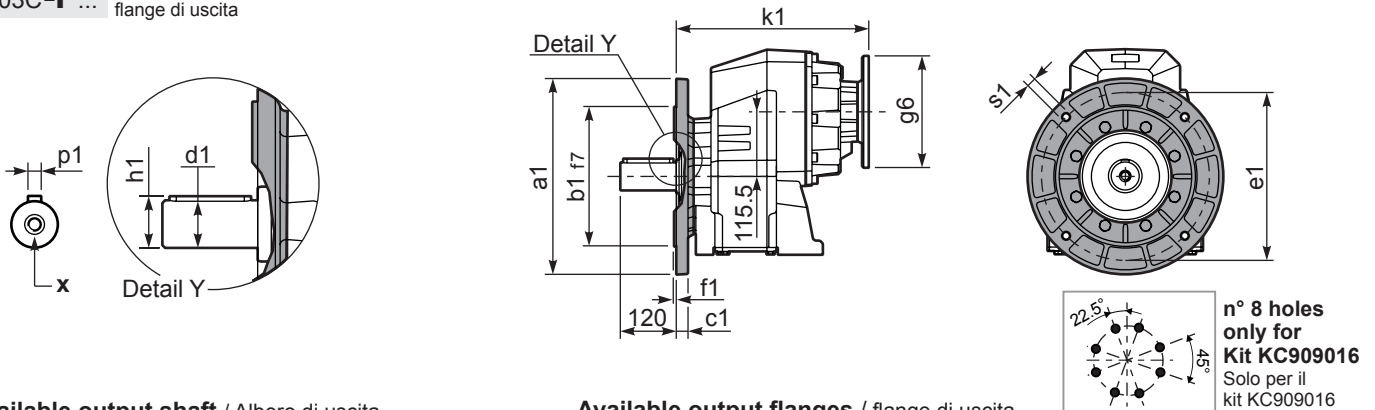
Gearbox weight **86.0 kg**  
peso riduttore With flange  
With feet **94.5 Kg**



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
B7	702/3	25	210	300	165	350	437	30	22	-	KC90.9.027
S8	87	40	180	215	260	290	407	30	18	-	KC90.9.024
S9	97	40	225	250	310	340	452	45	22	-	KC90.9.026
H7	027/273	40	225	250	245	300	452	55	22	-	KC90.9.023
HS	-	40	175	215	260	290	402	25	18	-	KC90.9.025

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



\*Available output shaft / Albero di uscita

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

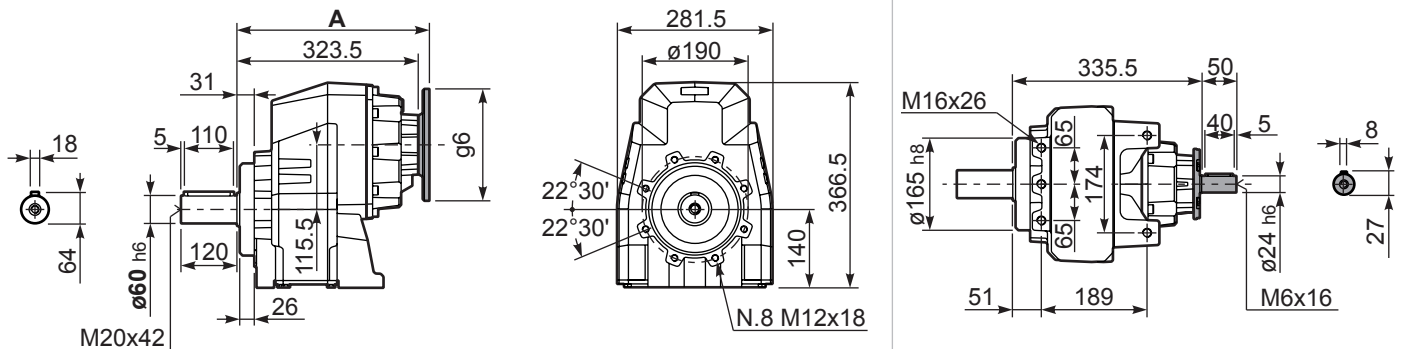
Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
300	230	21	265	4	14	KC90.9.014
350	250	21	300	5	18	KC90.9.015
450	350	22	400	5	18	KC90.9.016

With flange and feet only on request. Ask for compatibility

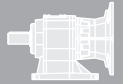
P903C-**N**... Basic gearbox  
Riduttore base

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



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
71 B5	342	420.5	160	342	KC023.4.041
80/90 B5	344	440.5	200	344	KC023.4.042
100/112 B5	353	465.5	250	353	KC023.4.043
132 B5	371	490.5	300	371	KC50.4.043

B14 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
80 B14	344	400.5	120	344	KC085.4.046
90 B14	344	410.5	140	344	KC085.4.045
100/112 B14	353	420.5	160	353	KC085.4.047
132 B14	371	440.5	200	371	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]	B5 motor flanges				B14 motor flanges				Output Shaft 	Ratios code 
							-G	-H	-I	-L	-	-	-	-		
							132	160	180	200	-	-	-	-		
294	<b>4.75</b>	30	895	1.8	<b>53.0</b>	<b>1650</b>								3914	01	
269	<b>5.21</b>	30	980	1.8	<b>51.3</b>	<b>1750</b>								3913	02	
220	<b>6.36</b>	30	1197	1.6	<b>45.6</b>	<b>1900</b>								3911	03	
188	<b>7.45</b>	30	1401	1.5	<b>43.1</b>	<b>2100</b>								3014	04	
172	<b>8.15</b>	30	1535	1.4	<b>39.3</b>	<b>2100</b>								3013	05	
141	<b>9.96</b>	30	1874	1.2	<b>33.7</b>	<b>2200</b>								3011	06	
120	<b>11.69</b>	30	2200	1.0	<b>30.1</b>	<b>2300</b>								2214	07	
109	<b>12.80</b>	30	2409	1.0	<b>27.4</b>	<b>2300</b>								2213	08	
90	<b>15.63</b>	22	2161	1.1	<b>23.5</b>	<b>2400</b>								2211	09	
79	<b>17.65</b>	22	2441	1.1	<b>22.5</b>	<b>2600</b>								1614	10	
72	<b>19.33</b>	22	2673	1.1	<b>22.9</b>	<b>2900</b>								1613	11	
67	<b>20.77</b>	22	2872	1.0	<b>21.3</b>	<b>2900</b>								1414	12	
62	<b>22.75</b>	18.5	2643	1.1	<b>19.5</b>	<b>2900</b>								1413	13	
59	<b>23.60</b>	18.5	2743	1.1	<b>18.8</b>	<b>2900</b>								1611	14	
50	<b>27.78</b>	15	2615	1.1	<b>15.9</b>	<b>2900</b>								1411	15	
45.5	<b>30.76</b>	15	2896	1.0	<b>14.4</b>	<b>2900</b>								1014	16	
41.6	<b>33.69</b>	11	2330	1.2	<b>13.1</b>	<b>2900</b>								1013	17	
34.0	<b>41.15</b>	11	2845	1.0	<b>10.8</b>	<b>2900</b>								1011	18	

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

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

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

**EN** Unit **1002** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.  
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **1002** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.  
Tab.1 per oli e quantità consigliati.  
Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **1002** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben  
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **1002** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.  
Voir tableau 1 concernant les huiles et les quantités conseillées.  
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **1002** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
4.50 LT	8.00 LT	5.50 LT	6.00 LT	10.00 LT	7.50 LT	Ask

**AGIP Blasias 460**

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$F_{eq} = FR \cdot \frac{117}{X+57}$

$F_{eq} (N)$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	2300	11500	140	2980	14900	70	3660	18300
250	2480	12400	120	3180	15900	40	4220	21100
200	2680	13400	85	3440	17200	15	4820	24100

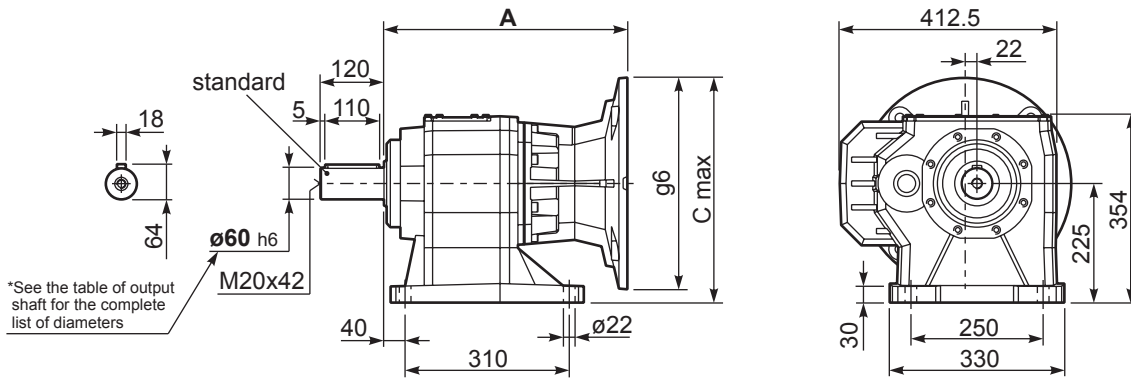
**Input shaft**  
Albero in entrata

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

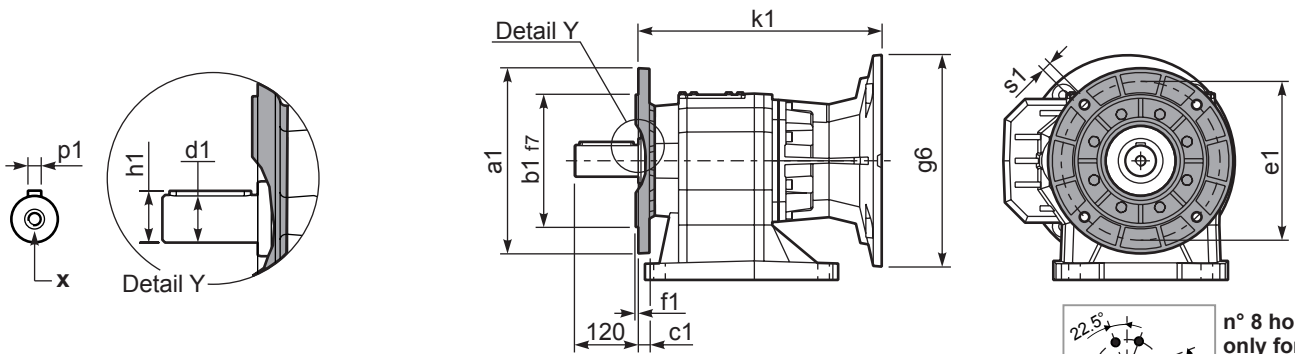
**tab. 2**

P1002**S9**... With foot  
Con piedino

Gearbox weight **120.0 kg**  
peso riduttore



P1002-**F**... Output flanges  
flange di uscita



n° 8 holes  
only for  
Kit **KC909016**  
Solo per il  
kit KC909016

\*Available output shaft / Albero di uscita

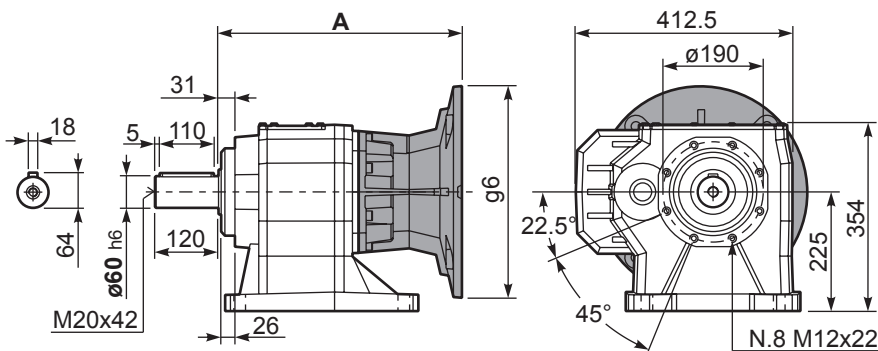
	Shaft - d1	p1	h1	x
Standard	ø 60x120	18	64	M20x42
On request A richiesta	-	-	-	-

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
450	350	22	400	5	18	KC90.9.016

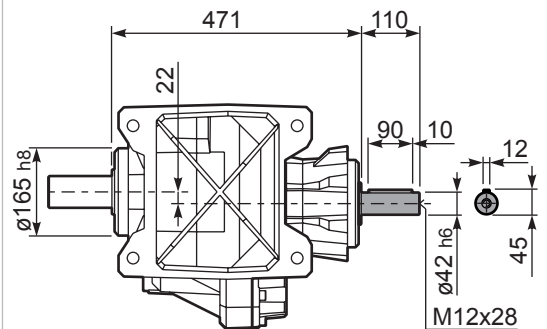
All flanges are compatible with the foot

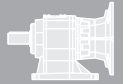
P1002**S9**... Basic gearbox  
Riduttore base



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
132 B5	435	375	300	435	KC1109052
160 B5	460	400	350	460	KC1109053
180 B5	460	400	350	460	KC1109053_B
200 B5	460	425	400	460	KC1109054

P1002**S9**... Input Shaft  
Albero in entrata





#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	B5 motor flanges			B14 motor flanges			Output Shaft 	Ratios code
							-F	-G	-H	-	-	-		
							100	132	160	-	-	-		
38.8	<b>36.11</b>	11	2447	1.2	12.5	2900	B					301411	01	
27.5	<b>50.89</b>	9	2941	1.0	9.2	3000	B					201414	02	
25.1	<b>55.73</b>	7.5	2591	1.2	8.4	3000	B					201413	03	
20.3	<b>68.80</b>	7.5	3199	0.9	6.8	3000	B					161414	04	
18.6	<b>75.35</b>	5.5	2589	1.2	6.2	3000	B					161413	05	
15.6	<b>89.47</b>	5.5	3074	1.0	5.2	3000	B					131414	06	
15.2	<b>92.02</b>	5.5	3161	0.9	5.1	3000	B					161411	07	
14.3	<b>97.99</b>	4	2462	1.2	4.8	3000	B					131413	08	
12.8	<b>109.52</b>	4	2752	1.1	4.3	3000	B					111414	09	
11.7	<b>119.94</b>	4	3014	1.0	3.9	3000	B					111413	10	
9.6	<b>146.47</b>	3	2771	1.1	3.2	3000	B					111411	11	
8.8	<b>158.37</b>	3	2996	1.0	3.0	3000	B					81414	12	
8.1	<b>173.45</b>	2.2	2416	1.2	2.7	3000	B					81413	13	
6.6	<b>211.82</b>	2.2	2951	1.0	2.2	3000	B					81411	14	

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

Motor Flanges Available  
Flange Motore Disponibili

Supplied with Reduction Bushing  
Fornito con Bussola di Riduzione

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

Motor Flange Holes Position  
Posizione Fori Flangia Motore

**EN** Unit **1003** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **1003** è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße **1003** wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **1003** est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. Voir tableau 1 concernant les huiles et les quantités conseillées. Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño **1003** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
5.00 LT	9.00 LT	6.50 LT	6.50 LT	11.00 LT	9.00 LT	Ask

**AGIP Blasias 460**

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

### RADIAL AND AXIAL LOADS

**Output shaft**  
Albero di uscita

$$F_{eq} = F_R \cdot \frac{117}{X+57}$$

**Input shaft**  
Albero in entrata

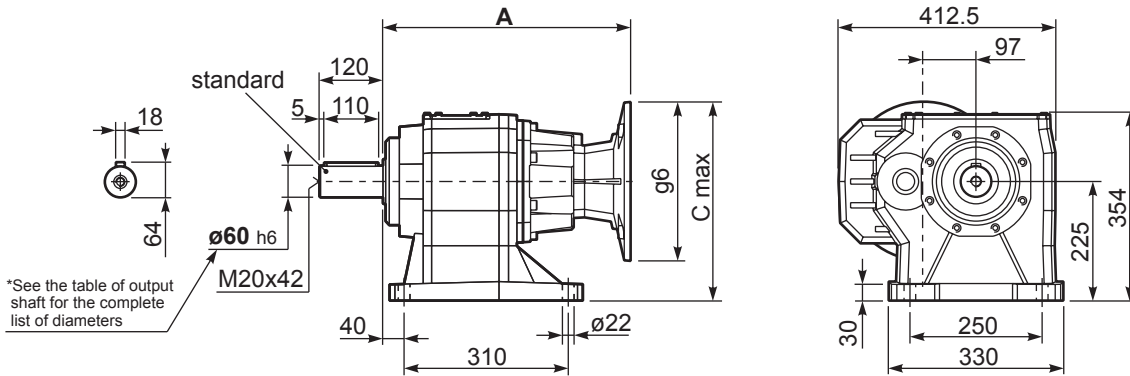
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	2300	11500	140	2980	14900	70	3660	18300
250	2480	12400	120	3180	15900	40	4220	21100
200	2680	13400	85	3440	17200	15	4820	24100

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

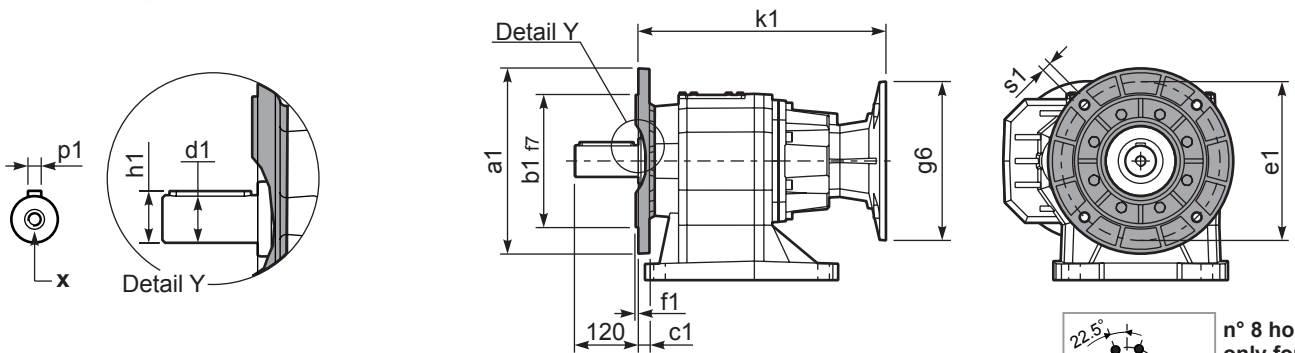
tab. 2

P1003**S9**... With foot  
Con piedino

Gearbox weight  
peso riduttore **116 kg**



P1003-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

	Shaft - d1	p1	h1	x
Standard	Ø 60x120	18	64	M20x42
On request A richiesta	-	-	-	-

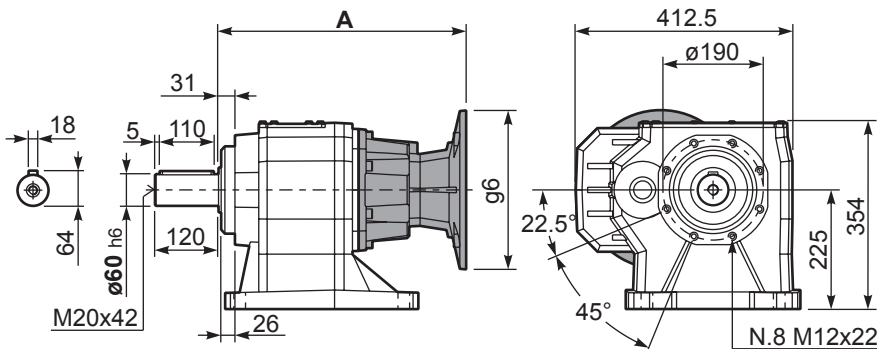
Available output flanges / flange di uscita

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
450	350	22	400	5	18	KC90.9.016

n° 8 holes only for Kit KC909016  
Solo per il kit KC909016

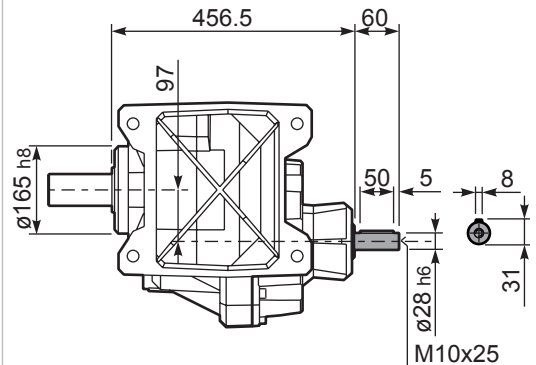
All flanges are compatible with the foot

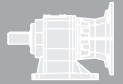
P1003**S9**... Basic gearbox  
Riduttore base



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
100/112 B5	468	350	250	468	KC1109056
132 B5	468	375	300	468	KC1109057
160 B5	483	400	350	483	KC1109058

R1003**S9**... Input Shaft  
Albero in entrata





#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor $f.s.$	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	B5 motor flanges					B14 motor flanges			Output Shaft 	Ratios code 
							-G	-H	-I	-L	CA	-	-	-		
							132	160	180	200	225	-	-	-		
294	<b>4.75</b>	45	1333	2.0	<b>86.7</b>	<b>2700</b>									3914	01
269	<b>5.21</b>	45	1460	1.9	<b>82.1</b>	<b>2800</b>									3913	02
220	<b>6.36</b>	45	1783	1.7	<b>72.0</b>	<b>3000</b>									3911	03
188	<b>7.45</b>	45	2088	1.6	<b>67.7</b>	<b>3300</b>									3014	04
172	<b>8.15</b>	45	2287	1.5	<b>63.7</b>	<b>3400</b>									3013	05
141	<b>9.96</b>	45	2792	1.3	<b>55.2</b>	<b>3600</b>									3011	06
120	<b>11.69</b>	45	3277	1.2	<b>49.7</b>	<b>3800</b>									2214	07
109	<b>12.80</b>	45	3589	1.1	<b>47.7</b>	<b>4000</b>									2213	08
90	<b>15.63</b>	45	4383	1.0	<b>42.0</b>	<b>4300</b>									2211	09
79	<b>17.65</b>	37	4068	1.1	<b>38.9</b>	<b>4500</b>									1614	10
72	<b>19.33</b>	37	4455	1.0	<b>35.6</b>	<b>4500</b>									1613	11
67	<b>20.77</b>	30	3910	1.2	<b>33.1</b>	<b>4500</b>									1414	12
62	<b>22.75</b>	30	4282	1.1	<b>30.2</b>	<b>4500</b>									1413	13
59	<b>23.60</b>	30	4443	1.0	<b>29.1</b>	<b>4500</b>									1611	14
50	<b>27.78</b>	22	3842	1.2	<b>24.7</b>	<b>4500</b>									1411	15
45.5	<b>30.76</b>	22	4255	1.1	<b>22.3</b>	<b>4500</b>									1014	16
41.6	<b>33.69</b>	22	4660	1.0	<b>20.4</b>	<b>4500</b>									1013	17
34.0	<b>41.15</b>	18.5	4781	0.9	<b>16.7</b>	<b>4500</b>									1011	18

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 1102 is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.  
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo 1102 è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.  
Tab.1 per oli e quantità consigliati.  
Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße 1102 wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben  
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type 1102 est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.  
Voir tableau 1 concernant les huiles et les quantités conseillées.  
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño 1102 se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
6.50 LT	12.50 LT	7.50 LT	8.50 LT	14.50 LT	11.50 LT	Ask

**AGIP Blasias 460**

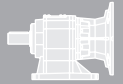
For all details on lubrication and plugs check our website  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web **tab. 1**

RADIAL AND AXIAL LOADS								
<b>Output shaft</b> Albero di uscita			$F_{eq} = FR \cdot \frac{138}{X+68}$					
$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	2600	13000	140	3300	16500	70	4300	21500
250	2700	13500	120	3500	17500	40	5000	25000
200	3000	15000	85	3900	19500	15	5900	29500
<b>Input shaft</b> Albero in entrata								
$n_1$	FA	FR						
1400	1120	5600						
900	1220	6100						
500	1300	6500						

**tab. 2**







#### QUICK SELECTION / Selezione veloce

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

Output Speed $n_2$ [min <sup>-1</sup> ]	Ratio $i$	Motor power $P_{1M}$ [kW]	Output torque $M_{2M}$ [Nm]	Service factor f.s.	Nominal power $P_{1R}$ [kW]	Nominal torque $M_{2R}$ [Nm]	Available B5 motor flanges				B14 motor flanges			Output Shaft 	Output Shaft 	Ratios code 
							-F	-G	-H	-I	-	-	-			
							100 112	132	160	180	-	-	-			
38.8	<b>36.11</b>	18.5	4113	1.1	19.4	4500	B						301411		01	
27.5	<b>50.89</b>	15	4694	1.0	14.1	4600	B						201414		02	
25.1	<b>55.73</b>	11	3777	1.2	12.9	4600	B						201413		03	
20.3	<b>68.80</b>	11	4662	1.0	10.4	4600	B						161414		04	
18.6	<b>75.35</b>	9	4354	1.1	9.5	4600	B						161413		05	
15.6	<b>89.47</b>	7.5	4160	1.1	8.0	4600	B						131414		06	
15.2	<b>92.02</b>	7.5	4278	1.1	7.6	4500	B						161411	standard ø70	07	
14.3	<b>97.99</b>	7.5	4556	1.0	7.3	4600	B						131413		08	
12.8	<b>109.52</b>	5.5	3762	1.2	6.6	4600	B						111414		09	
11.7	<b>119.94</b>	5.5	4120	1.1	6.0	4600	B						111413		10	
9.6	<b>146.47</b>	4	3681	1.2	4.8	4500	B						111411		11	
8.8	<b>158.37</b>	4	3980	1.2	4.5	4600	B						81414		12	
8.1	<b>173.45</b>	4	4359	1.1	4.1	4600	B						81413		13	
6.6	<b>211.82</b>	3	4007	1.1	3.3	4500	B						81411		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 1103 is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.  
See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo 1103 è fornito privo di lubrificazione con tappi di sfiato, livello e scarico olio. L'utente può immettere olio minerale mantenendo i tappi esistenti. Se immetterà olio sintetico, dovrà sostituire i tappi esistenti con altri tipo chiuso.  
Tab.1 per oli e quantità consigliati.  
Tab.2 carichi radiali e assiali applicabili al riduttore.

**D** Das Getriebe der Baugröße 1103 wird ohne Schmiermittel geliefert. Es ist jedoch mit Einfüllschraube, Überdruckventil und Ablassschraube ausgerüstet. Das benötigte mineralische Öl kann über die Einfüllschraube eingefüllt werden. Sollte synthetisches Öl bevorzugt werden, so ist sind das eingebaute Überdruckventil durch eine geschlossenen Schraube zu ersetzen.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben  
In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type 1103 est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut y verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé.  
Voir tableau 1 concernant les huiles et les quantités conseillées.  
Voir tableau 2 concernant les charges radiales et axiales applicables au réducteur

**E** El reductor tamaño 1103 se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

B3	B6	B7	B8	V5	V6	V8
7.00 LT	13.00 LT	8.00 LT	9.00 LT	16.00 LT	13.50 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

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

$F_{eq} = F_R \cdot \frac{138}{X+68}$

$F_{eq} (N)$

$n_2$	FA	FR	$n_2$	FA	FR	$n_2$	FA	FR
300	2600	13000	140	3300	16500	70	4300	21500
250	2700	13500	120	3500	17500	40	5000	25000
200	3000	15000	85	3900	19500	15	5900	29500

**Input shaft**  
Albero in entrata

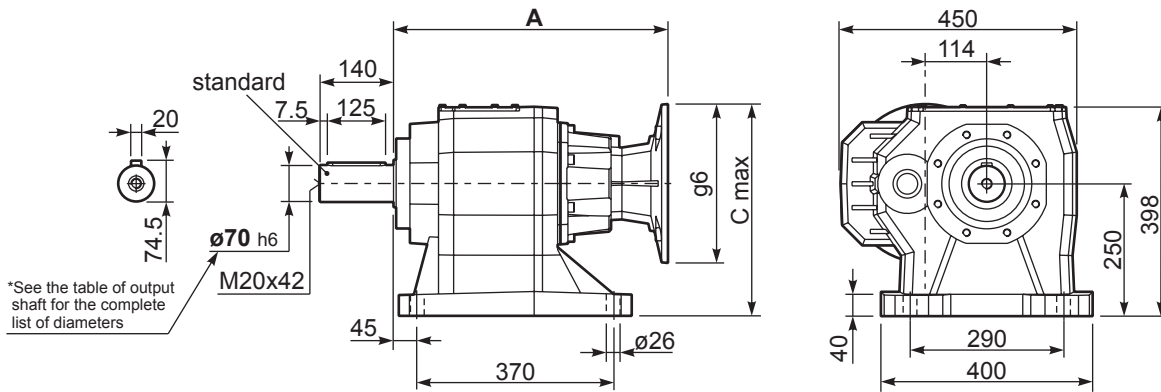
$F_R (N)$   
 $F_A (N)$

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

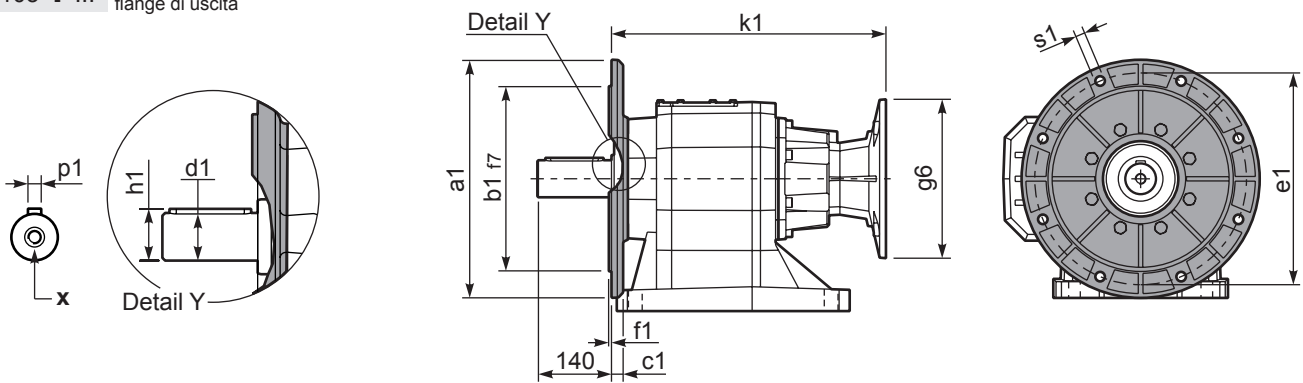
**tab. 2**

P1103**S0**... With foot  
Con piedino

Gearbox weight  
peso riduttore **156 kg**



P1103-**F**... Output flanges  
flange di uscita



\*Available output shaft / Albero di uscita

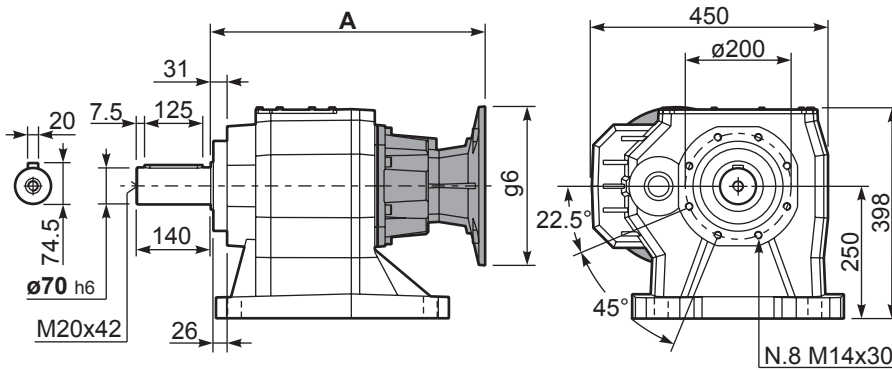
	Shaft - d1	p1	h1	x
Standard	ø 70x140	20	74.5	M20x42
On request A richiesta	-	-	-	-

Available output flanges / flange di uscita

a1 ø	b1	c1	e1	f1	s1	kit code
350	250	21	300	5	18	KC110.9.015
450	350	22	400	5	18	KC110.9.016
-	-	-	-	-	-	-

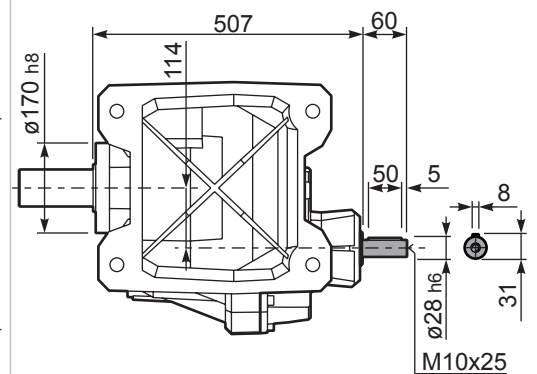
All flanges are compatible with the foot

P1103**S0**... Basic gearbox  
Riduttore base



B5 Motor Flanges	A	C <sub>max</sub>	g6	k1	kit code
100/112 B5	518.5	375	250	518.5	KC1109056
132 B5	518.5	400	300	518.5	KC1109057
160 B5	533.5	425	350	533.5	KC1109058
180 B5	533.5	425	350	533.5	KC1109058_B

R1103**S0**... Input Shaft  
Albero in entrata





**Please Read Carefully**

The following WARNING and CAUTION information is supplied to you for your protection and to provide you with many years of trouble free and safe operation of your product.

Read ALL instructions prior to operating reducer. Injury to personnel or reducer failure may be caused by improper installation, maintenance or operation.

**WARNING:**

- Written authorization is required to operate or use reducers in man lift or people moving devices.
- Check to make sure that certain applications do not exceed the allowable load capacities published in the current catalog.
- Buyer shall be solely responsible for determining the adequacy of the product for any and all uses to which Buyer shall apply the product. The application by Buyer shall not be subject to any implied warranty of fitness for a particular purpose.
- For safety, Buyer or User should provide protective guards over all shaft extensions and any moving apparatus mounted thereon. The User is responsible for checking all applicable safety codes in his area and providing suitable guards. Failure to do so may result in bodily injury and/or damage to equipment.
- Gearboxes operating in high position should have a protective shield for any possible parts falling down for casual accidents where people are moving under them.
- Hot oil and reducers can cause severe burns. Use extreme care when removing lubrication plugs and vents.
- Make certain that the power supply is disconnected before attempting to service or remove any components. Lock out the power supply and tag it to prevent unexpected application power.
- Reducers are not to be considered fail safe or self-locking devices. If these features are required, a properly sized, independent holding device should be utilized. Reducers should not be used as a brake.
- Any brakes that are used in conjunction with a reducer must be sized or positioned in such a way so as to not subject the reducer to loads beyond the catalog rating.
- Lifting supports including eyebolts are to be used for vertically lifting the gearbox only and not other associated attachments or motors.
- Use of an oil with an EP additive on units with backstops may prevent proper operation of the backstop. Injury to personnel, damage to the reducer or other equipment may result.
- Overhung loads subject shaft bearings and shafts to stress which may cause premature bearing failure and or shaft breakage from bending fatigue, if not sized properly.

**SELLING CONDITIONS**

Warranty for manufacturing defects will expire one-year the invoicing date. Hydro-Mec will replace or repair defective parts but will not accept any further changes for direct or indirect damages of any kind. The warranty will become null and void if repairs or changes are carried out without our prior written authorization.

**Our company will not be responsible for any direct or indirect damages, caused by a wrong use of the products or for not observing the catalogue/web indication**

**Leggere attentamente**

Le seguenti raccomandazioni sono fondamentali per la vostra protezione e per garantirvi molti anni di sicuro funzionamento del vostro prodotto senza alcun problema.

Leggere attentamente tutte le istruzioni prima di azionare il riduttore. L'inappropriata installazione, manutenzione o funzionamento del riduttore può causare incidenti al personale addetto e danni al riduttore stesso.

**ATTENZIONE:**

- E' richiesta autorizzazione scritta per azionare riduttori in ascensori o dispositivi per il movimento delle persone.
- Controllare che alcune applicazioni non eccedano la massima capacità di carico ammessa pubblicata in questo catalogo.
- L'acquirente è l'unico responsabile per la determinazione dell'adeguatezza del prodotto per qualcuna o tutte le utilizzazioni che l'acquirente stesso farà del riduttore. L'applicazione dell'acquirente non potrà essere soggetta ad alcuna implicita garanzia di montaggio per uno scopo particolare.
- Per ragioni di sicurezza l'acquirente dovrà provvedere a porre protezioni adeguate su tutta la lunghezza dell'albero a tutti gli organi in movimento. L'utilizzatore è responsabile del controllo di tutti i codici di sicurezza e la predisposizione di protezioni adeguate. In assenza di tali precauzioni si possono verificare incidenti alle persone e danni agli apparati.
- Su riduttori installati in posizioni elevate utilizzare protezioni adeguate per qualsiasi distacco accidentale di parti nel caso di passaggio di persone al di sotto.
- Olio e riduttori bollenti possono causare gravi ustioni. Usare estrema cautela nella rimozione dei tappi e delle ventole.
- Assicurarsi che la corrente di alimentazione sia scollegata prima di riparare o rimuovere alcun componente. Chiudere l'alimentazione e contrassegnare tale operazione per evitare accensioni accidentali.
- I riduttori non devono essere considerati esenti da guasti o a bloccaggio automatico. Se sono indispensabili queste caratteristiche, deve essere utilizzato un dispositivo indipendente della dimensione adatta. I riduttori non devono essere utilizzati come freni.
- Qualsiasi freno sia utilizzato insieme al riduttore deve essere della giusta grandezza e posizionato in modo da non causare carichi eccessivi non previsti dai dati forniti nel catalogo.
- I dispositivi di sollevamento come le golfare devono essere usati solo per sollevare verticalmente il riduttore e non altri dispositivi associati o motori.
- L'utilizzo di un olio con un additivo EP su gruppi provvisti di dispositivo di arresto possono inficiare l'uso corretto del freno e provocare danni alle persone, alle cose ed al riduttore stesso nonché ad altri apparecchi.
- I Carichi sospesi assoggettano i cuscinetti della vite e la vite stessa a sollecitazioni che possono causare, se non adeguatamente dimensionati, l'usura prematura dei cuscinetti e/o la rottura della vite a causa della resistenza alla flessione.

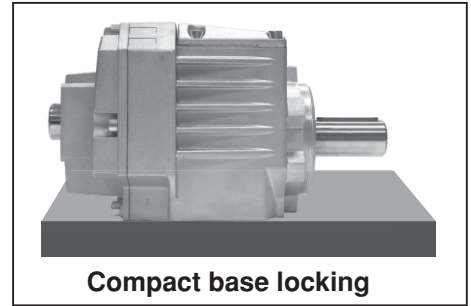
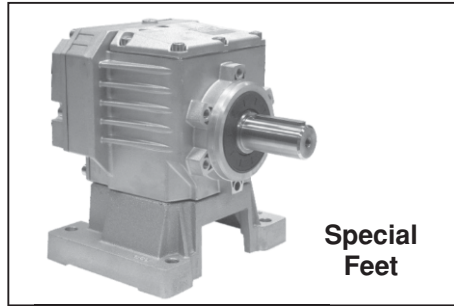
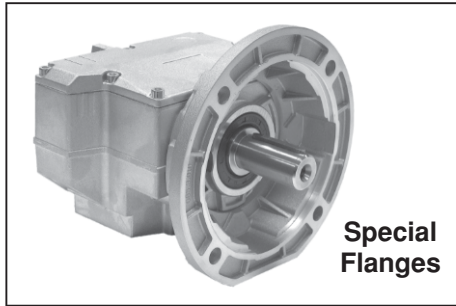
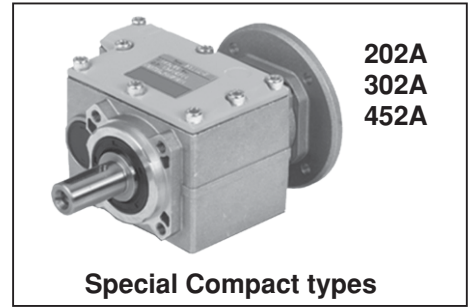
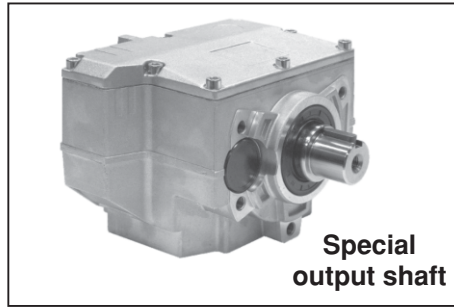
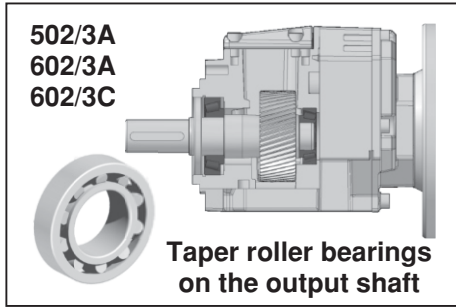
**CONDIZIONI DI VENDITA**

La garanzia relativa a difetti di costruzione ha la durata di un anno dalla data di fatturazione della merce. Tale garanzia comporta per Hydro-mec l'onere della sostituzione o riparazione delle parti difettose ma non ammette ulteriori addebiti per eventuali danni diretti o indiretti di qualsiasi natura.

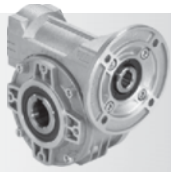
La garanzia decade nel caso in cui siano state eseguite riparazioni o apportate modifiche senza nostro consenso scritto.

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

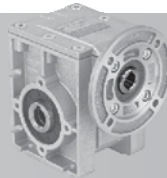
# New options available



## Others FIMET products



Worm gearboxes  
Rid. a vite senza fine



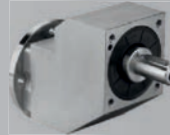
S series square worm gearboxes  
Rid. a vite senza fine quadro serie S



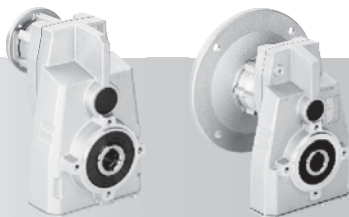
Square worm gearboxes  
Rid. a vite senza fine quadro



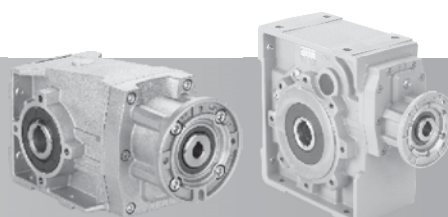
Stainless steel worm gearboxes  
Rid. a vite senza fine Inox



Stainless steel coaxial gearboxes  
Riduttori coassiali Inox



Shaft mounted gearboxes  
Riduttori pendolari



Helical bevel gearboxes  
Rid. a coppia conica

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