

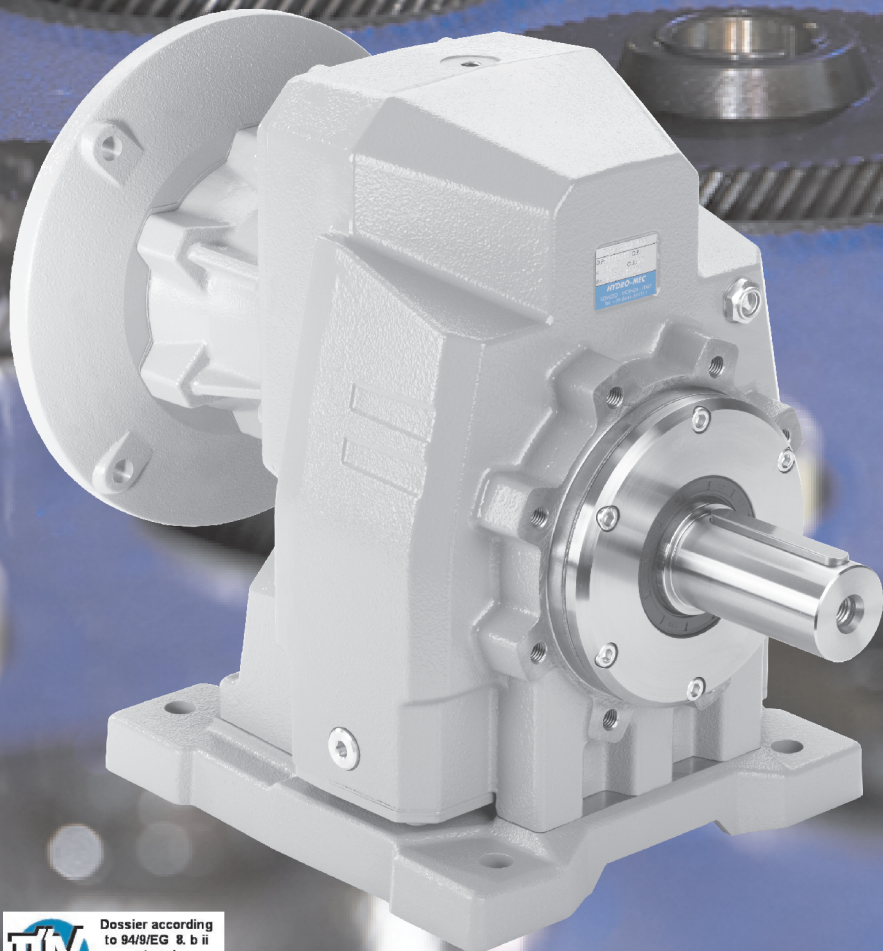
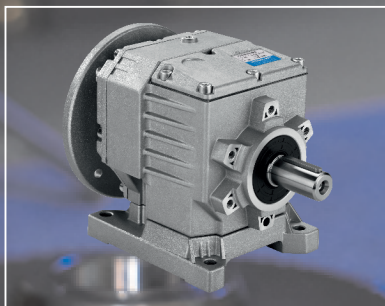
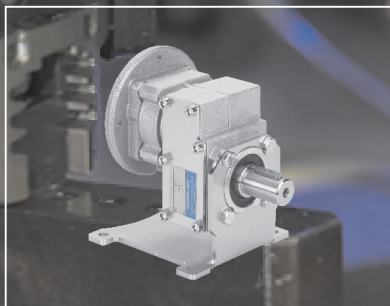
Coaxial

Gears

Cat.: CT-RCM-WO-HM017

Coaxial gearboxes

Riduttori Coassiali
0.12 ÷ 45kW



Made in Italy



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



HYDRO · MEC

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

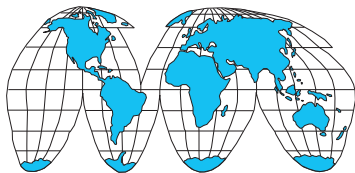
Removable feet.

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

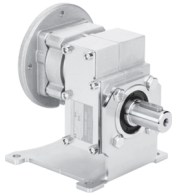


World wide sales network.



Specific type datasheet on page...

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

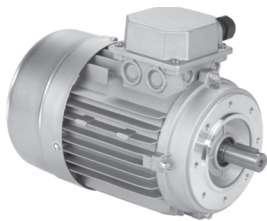


Types / Tipi
Tipen / Types
Tipos



| 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 - Tomaño

Mounting - Montaggio
Montage - Fixation
Tipo de montaje

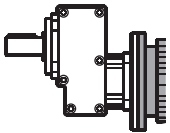
P

311A

-F

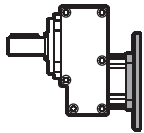
Aluminum one step gear
Riduttori in alluminio a uno stadio

1 Stages
Riduzioni
Stufen
Trains
Etapas



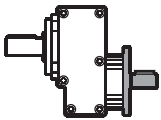
With IEC motor

M



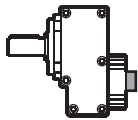
With motor flange

P



With male input shaft

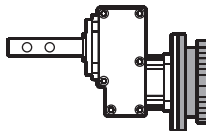
R



Modular Base

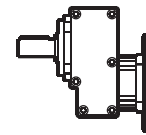
B

Special output shaft
Albero uscita speciale



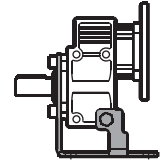
Only on request for Q.ty
A richiesta per quantità

211A
311A
411A
511A



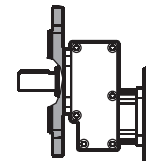
Without flange / feet

-N



Mounted feet

H1



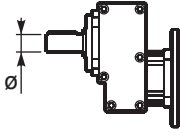
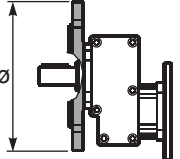





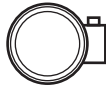

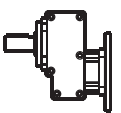



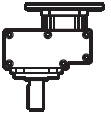
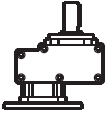
Output flange mounted

-F

3



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

| Ratio - Rapporto Untersetzung Reduction Relación | Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida | Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida | Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor | Terminal box position Posizione morsetteria Klemmkastenlage Position boîte à bornes Posición caja de bornes | Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje | |
|--|--|---|---|--|---|---|
| 2.84 | S | 2 | -C | B | B3 | |
| See technical data table Vedi tabella dati tecnici. Technisches Datenblatt beachten Voir Tableau données techniques Ver tabla datos técnicos |  → STANDARD 211A S → ∅14 311A S → ∅14 C → ∅19 E → ∅24 411A S → ∅14 C → ∅19 E → ∅24 511A C → ∅19 E → ∅24 G → ∅28 |  N Senza flangia Without flange 211A I → ∅105 Flangia integrata Integrated flange 311A 1 → ∅120 2 → ∅140 3 → ∅160 4 → ∅200 411A 1 → ∅120 2 → ∅140 3 → ∅160 4 → ∅200 511A 1 → ∅120 2 → ∅140 3 → ∅160 4 → ∅200 5 → ∅250 |  Flange Flangia B5 -A =56 (∅120) -B =63 (∅140) -C =71 (∅160) -D =80 (∅200) -E =90 (∅200) -F =100÷112 (∅250) -G =132 (∅300) B14 -O =56 (∅80) -P =63 (∅90) -Q =71 (∅105) -R =80 (∅120) -T =90 (∅140) -U =100÷112 (∅160) -V =132 (∅200) |  Type R Tipo R 211A 311A -1 → ∅14 411A -2 → ∅19 511A -3 → ∅24  Without flange Senza flangia 211A 311A -Z → ∅9 (56B5) -0 → ∅11 (63B5) -1 → ∅14 (71B5) 411A -1 → ∅14 (71B5) -2 → ∅19 (80B5) -3 → ∅24 (90B5) 511A -2 → ∅19 (80B5) -3 → ∅24 (90B5) -4 → ∅28 (100B5) |  A  B STANDARD  C  D |  B3 STANDARD  B6  B7  B8  V5  V6 |

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

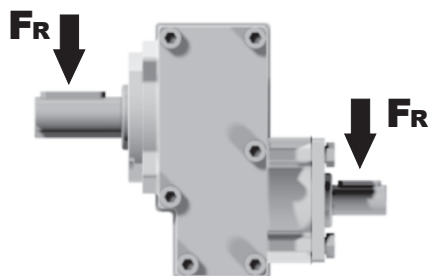
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

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

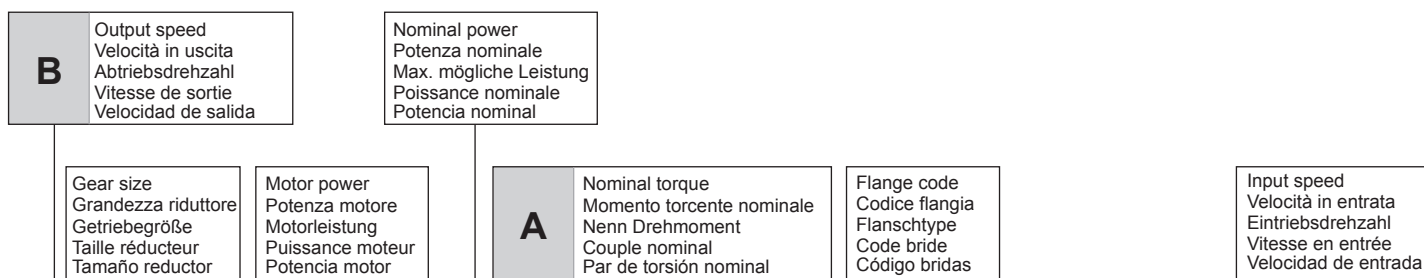
- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée 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



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

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

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 ₁) = 1400 min ⁻¹ | | | | | | | |
|--|------------|--|--|------------------------|--|---|--|----|-----------------------------|----|----|--------------|-----------------|-------------|
| Output Speed n ₂ [min ⁻¹] | Ratio i | Motor power P _{1M} [kW] | Output torque M _{2M} [Nm] | Service factor f.s. | Nominal power P _{1R} [kW] | Nominal torque M _{2R} [Nm] | Available B5 motor flanges | | Available B14 motor flanges | | | Output Shaft | | |
| | | | | | | | -B | -C | -O | -P | -Q | | | Ratios code |
| 892 | 1.57 | 0.37 | 3.9 | 3.3 | 1.24 | 13 | | | C | C | | 2844 | standard ø14 | 01 |
| 493 | 2.84 | 0.37 | 7.0 | 3.3 | 1.21 | 23 | | | C | C | | 1954 | | 02 |
| 426 | 3.29 | 0.37 | 8.1 | 3.2 | 1.18 | 26 | | | C | C | | 1756 | | 03 |
| 362 | 3.87 | 0.37 | 9.6 | 2.9 | 1.08 | 28 | | | C | C | | 1558 | | 04 |



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



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

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



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | Available B14 motor flanges | | | | Output Shaft  standard ø14 | Ratios code  |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|----|-----------------------------|----|----|----|--|--|
| | | | | | | | -B | -C | -D | -E | -O | -P | -Q | -R | | |
| | | | | | | | 63 | 71 | 80 | 90 | 56 | 63 | 71 | 80 | | |
| 682 | 2.05 | 0.37 | 5 | 2.0 | 0.73 | 10 | | | | | C | C | | | 1939 | 01 |
| 595 | 2.35 | 0.37 | 6 | 2.1 | 0.76 | 12 | | | | | C | C | | | 1740 | 02 |
| 500 | 2.80 | 0.37 | 7 | 2.0 | 0.75 | 14 | | | | | C | C | | | 1542 | 03 |
| 414 | 3.38 | 0.37 | 8 | 2.0 | 0.75 | 17 | | | | | C | C | | | 1344 | 04 |
| 298 | 4.70 | 0.37 | 12 | 1.7 | 0.64 | 20 | | | | | C | C | | | 1047 | 05 |
| 225 | 6.22 | 0.37 | 15 | 1.5 | 0.55 | 23 | | | | | C | C | | | 956 | 06 |
| 169 | 8.29 | 0.37 | 20 | 1.0 | 0.36 | 20 | | | | | C | C | | | 758 | 07 |
| 142 | 9.83 | 0.25 | 16 | 1.0 | 0.24 | 16 | | | | | 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

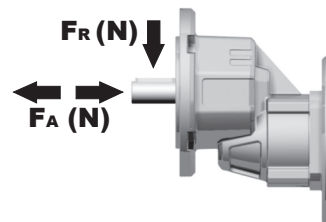
SHELL Omala S4 WE 320

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

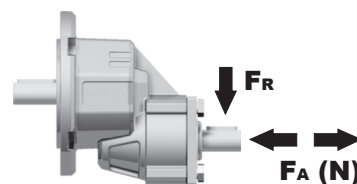
Albero di uscita



| 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



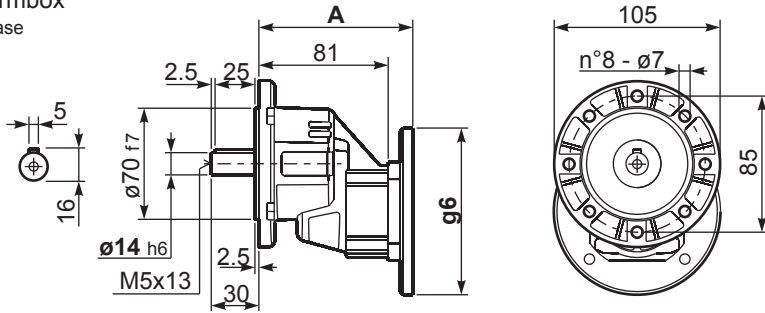
| n_1 | FA | FR |
|-------|-----|-----|
| 1400 | 168 | 840 |
| 900 | 192 | 960 |

*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

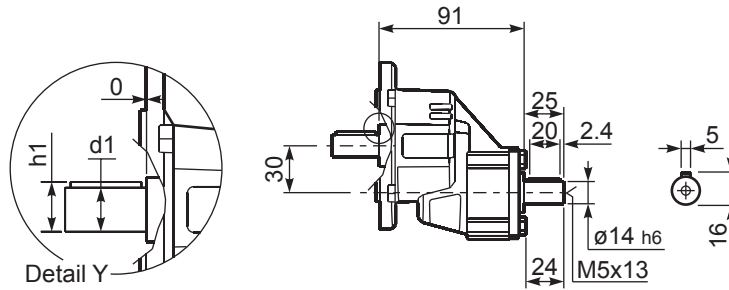
Gearbox weight
peso riduttore **1.40 kg**



| 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⁻¹

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

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

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

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

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

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

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

LUBRICATION 311A Oil Quantity 0.10 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

tab. 1

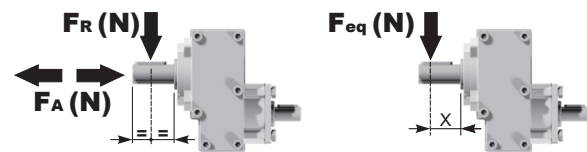
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

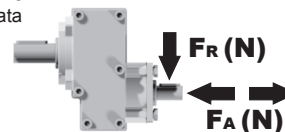
$$F_{eq} = F_R \cdot \frac{38.5}{X+18.5}$$



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

Input shaft

Albero in entrata

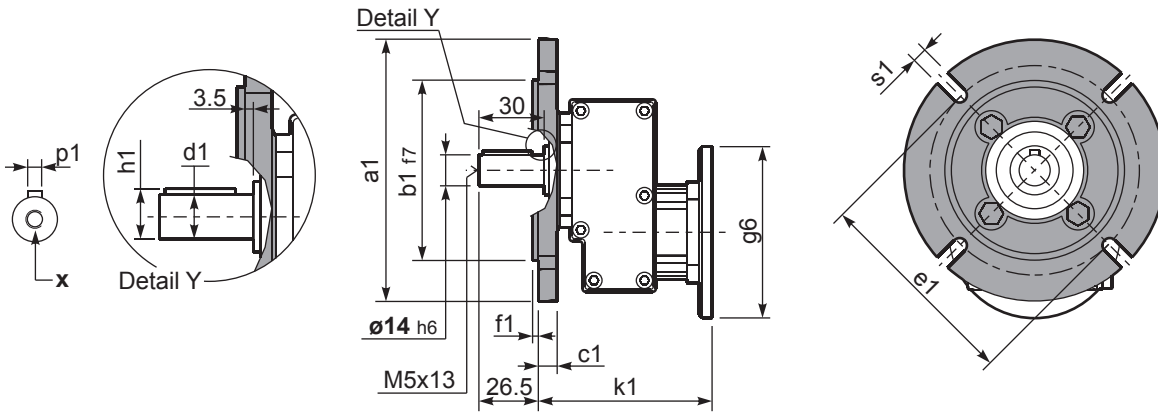


| n_1 | FA | FR |
|-------|-----|-----|
| 1400 | 180 | 860 |
| 900 | 200 | 980 |

tab. 2

P311-F... Output flange
flange di uscita

Gearbox weight **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 |

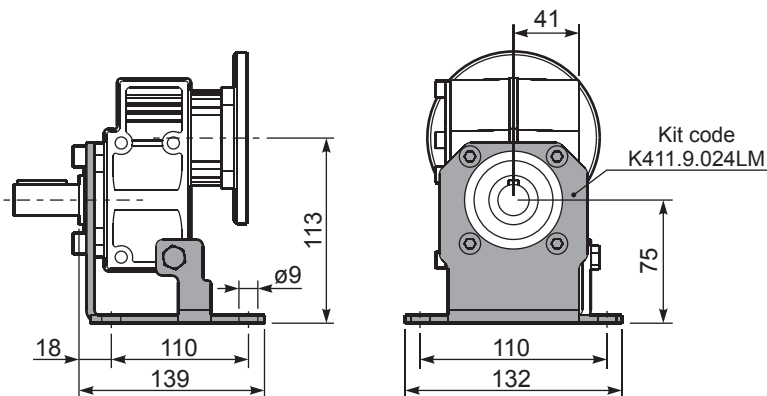
Available output flanges / flange di uscita

| 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 |

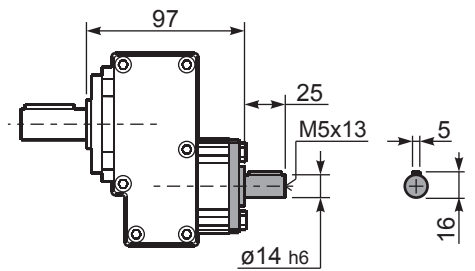
*Holes position
posizione fori



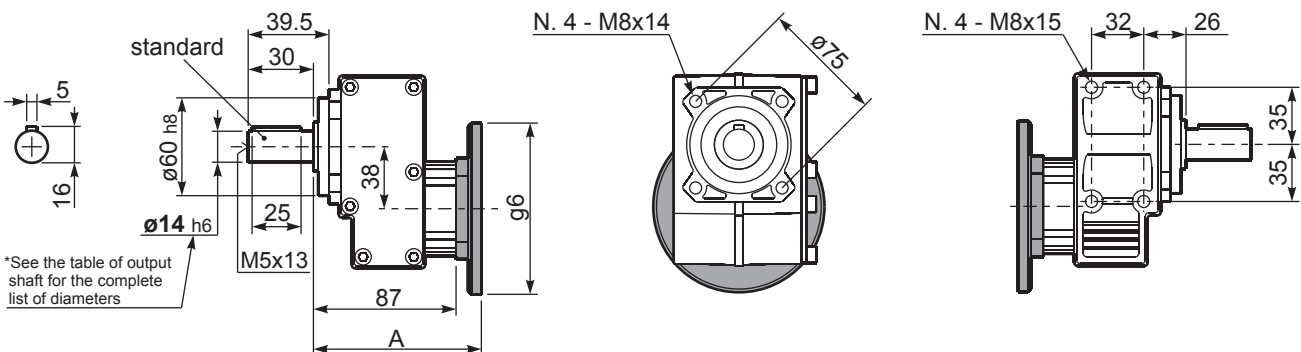
P311-H1... With feet
Con piedini



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⁻¹

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

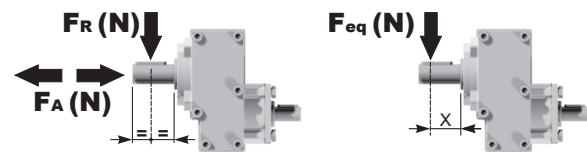
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

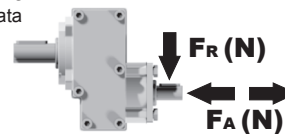
$$F_{eq} = F_R \cdot \frac{40}{X+20}$$



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

Input shaft

Albero in entrata

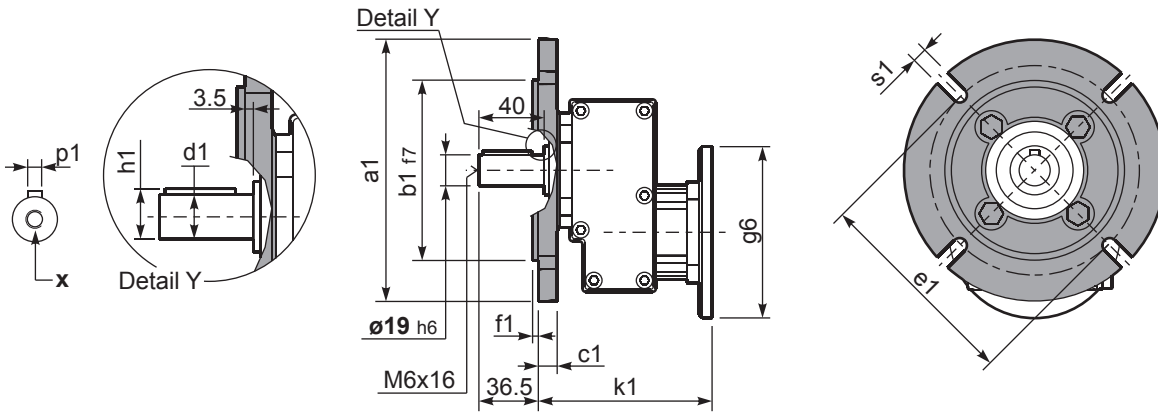


| n_1 | FA | FR |
|-------|-----|------|
| 1400 | 240 | 1200 |
| 900 | 280 | 1400 |

tab. 2

P411-F... Output flange
flange di uscita

Gearbox weight
peso riduttore **3.20 kg**



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

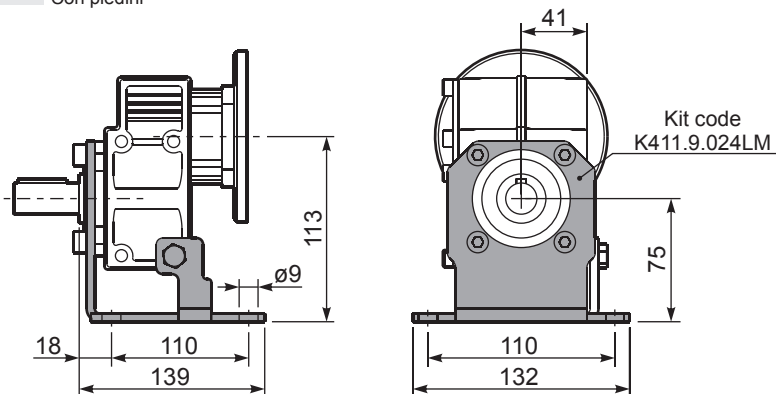
| | Shaft - d1 | p1 | h1 | x |
|---------------------------|--------------------|--------|----------|----------------|
| Standard | ∅ 19x40 | 6 | 21.5 | M6x16 |
| On request A richiesta | ∅ 14x30 ∅ 24x40 | 5 8 | 16 27 | M5x13 M6x16 |

Available output flanges / flange di uscita

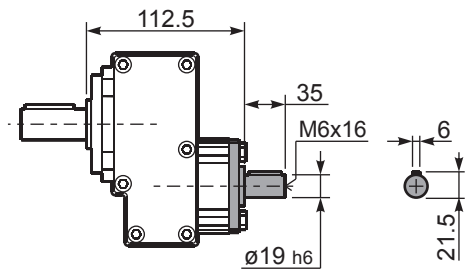
| a1 ∅ | b1 | c1 | e1 | f1 | s1 | kit code |
|------|-----|------|-----|-----|----|------------|
| 120 | 80 | 11.5 | 100 | 3 | 9* | KC30.9.010 |
| 140 | 95 | 11.5 | 115 | 3 | 9 | KC30.9.011 |
| 160 | 110 | 11.5 | 130 | 3.5 | 9 | KC30.9.012 |
| 200 | 130 | 11.5 | 165 | 3.5 | 11 | KC30.9.013 |

*Holes position
posizione fori

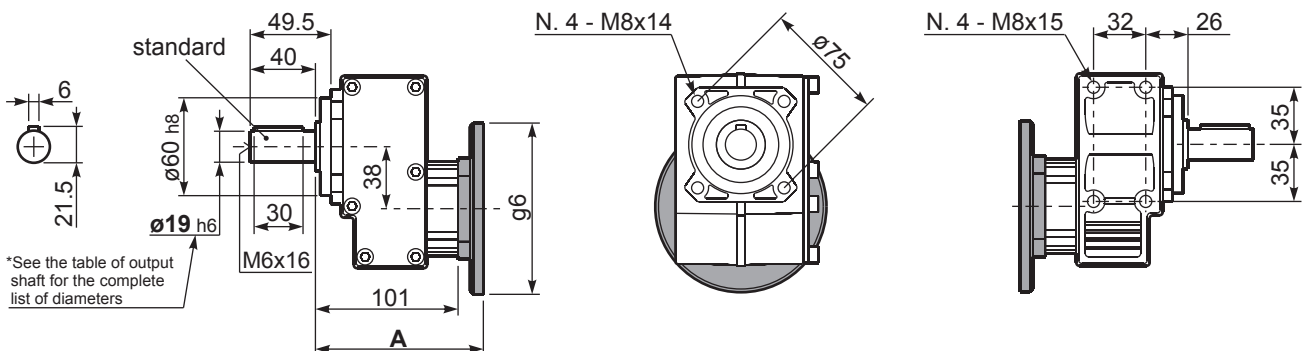
P411-H1... With feet
Con piedini



R411-N... Input Shaft
Albero in entrata



P411-N... Basic gearbox
Riduttore base



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

| 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⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | | 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 | 1.30 | 4 | 34 | 1.2 | 4.6 | 40 | B | | | | | | | | | | 3039 | standard ø28 | 01 | |
| 571 | 2.45 | 4 | 64 | 1.1 | 4.3 | 70 | B | | | | | | | | | | 2049 | | 02 | |
| 423 | 3.31 | 4 | 87 | 1.0 | 4.1 | 90 | B | | | | | | | | | | 1653 | | 03 | |
| 325 | 4.31 | 4 | 113 | 1.0 | 3.8 | 110 | B | | | | | | | | | | 1356 | | 04 | |
| 266 | 5.27 | 3 | 104 | 1.1 | 3.1 | 110 | B | | | | | | | | | | 1158 | | On request | 05 |
| 184 | 7.63 | 2.2 | 111 | 1.0 | 2.2 | 110 | B | | | | | | | | | | 861 | | ø19 | 06 |
| 133 | 10.50 | 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 lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

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

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

LUBRICATION 511A Oil Quantity 0.29 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

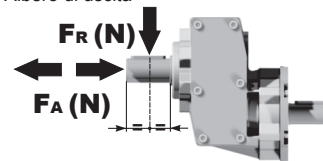
tab. 1

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

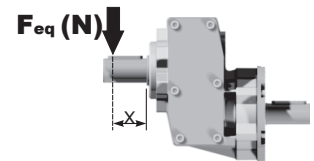
RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita



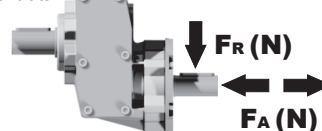
$$F_{eq} = F_R \cdot \frac{52.5}{X+22.5}$$



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

Input shaft

Albero in entrata

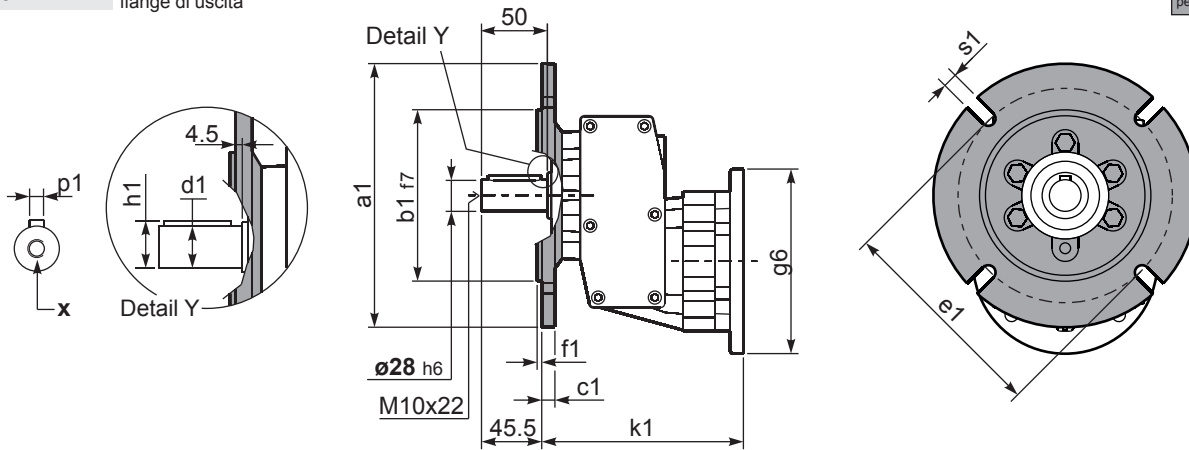


| n_1 | FA | FR |
|-------|-----|------|
| 1400 | 400 | 2000 |
| 900 | 440 | 2200 |

tab. 2

P511-F... Output flanges
flange di uscita

Gearbox weight
peso riduttore **5.00 kg**



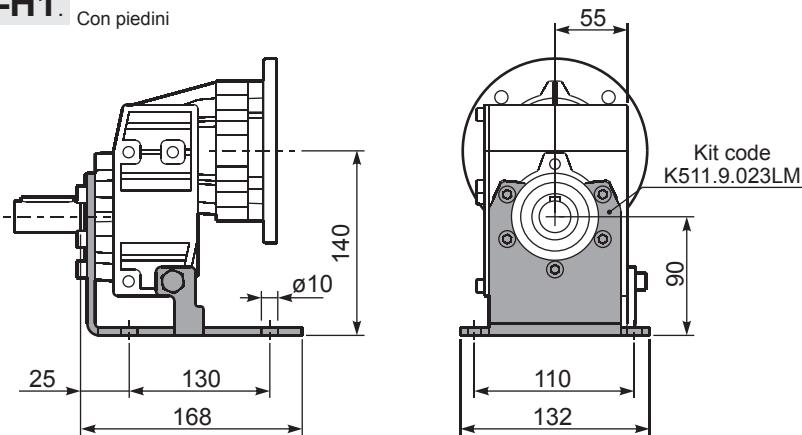
***Available output shaft / Albero di uscita**

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

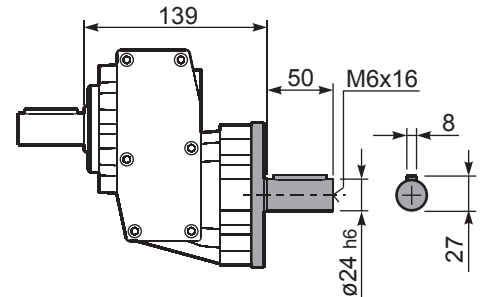
Available output flanges / flange di uscita

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

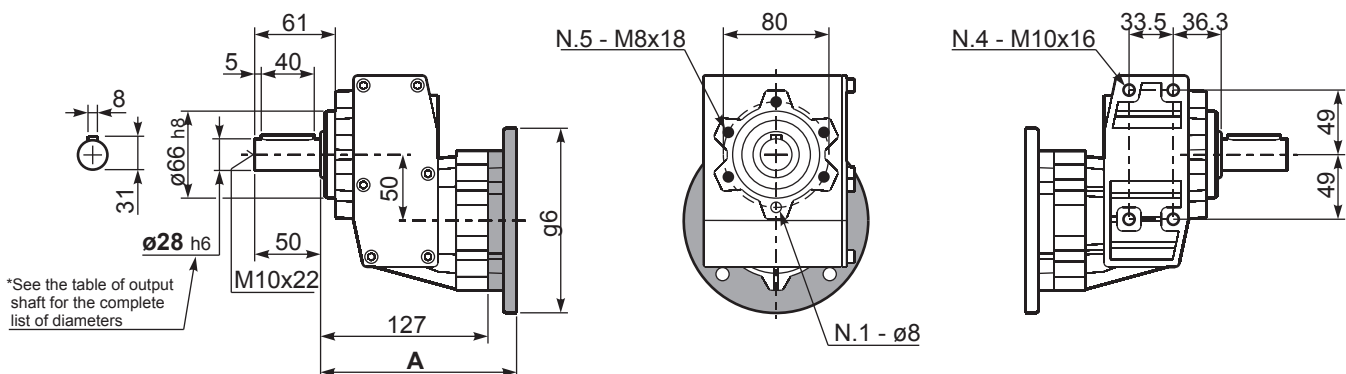
P511A-H1. With feet
Con piedini



R511A-N... Input Shaft
Albero in entrata



P511-N... Basic gearbox
Riduttore base



| 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 $+130^{\circ}\text{C}$



Foot prints

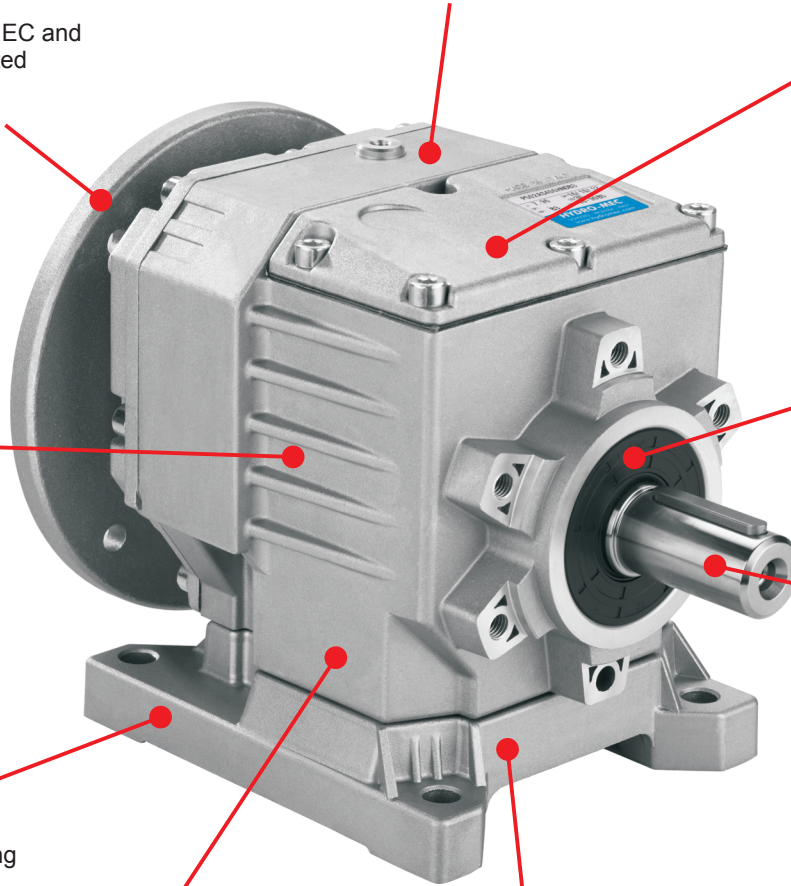
Compatible to the main standard of the market.

Feet

Removable feet. With patented locking system.

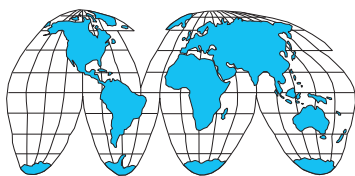
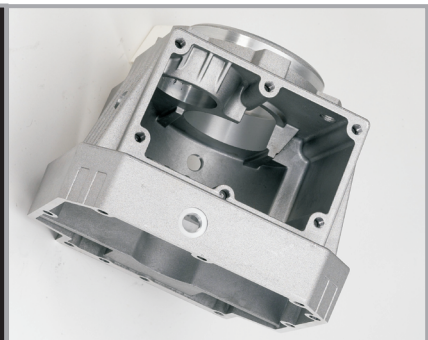
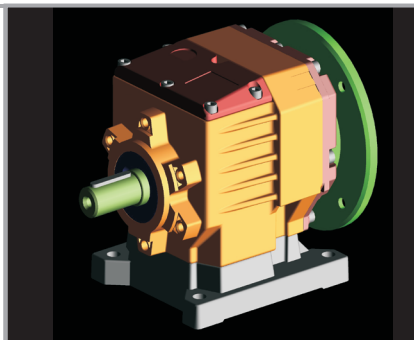
Gears

Hardened and ground gears.

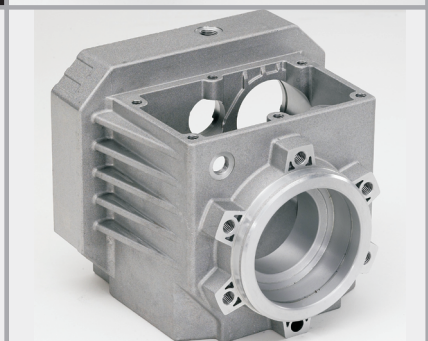
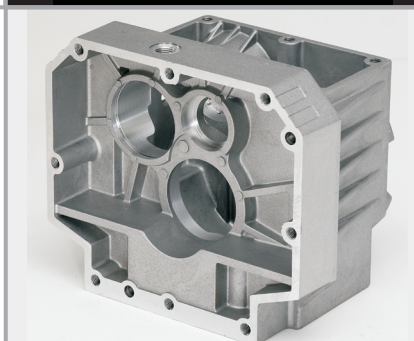


Single-piece aluminum alloy housing

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

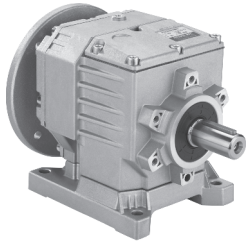


World wide sales network.



Specific type datasheet on page...

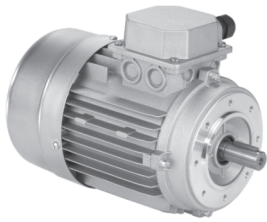
On page / A pagina / Auf Seite / À la page / En la página



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 - Tomafío

Mounting - Montaggio
Montage - Fixation
Tipo de montaje

P

402A

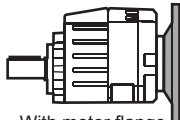
-F

Aluminum coaxial gear boxes
Riduttori coassiali in alluminio



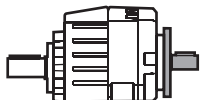
With IEC motor

M



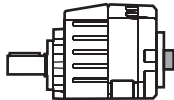
With motor flange

P



With male input shaft

R



Modular base

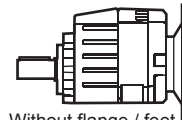
B

2 Stages
Riduzioni
Stufen
Trains
Etapas

3 Stages
Riduzioni
Stufen
Trains
Etapas

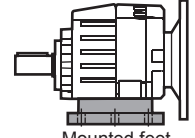
202A
302A
402A
452A
502A
602A

403A
503A
603A



Without flange / feet

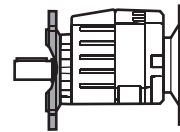
-N



Mounted feet

B..

| Feet / piedini | | G | H | R | L | L1 | S |
|---------------------|--------|----|-----|---------|-------|----|---|
| Feet Code reference | Market | | | | | | |
| 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 | | | |



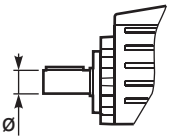
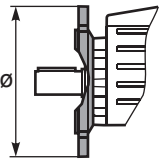






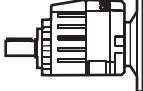
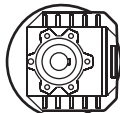
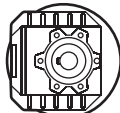
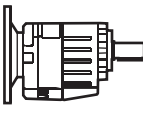
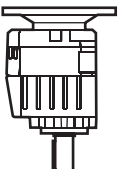
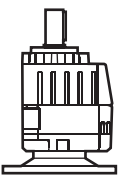
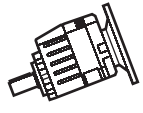
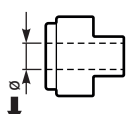

Output flange mounted

-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 Motor Grösse Grandeur moteur - Tamaño motor | Terminal box position Posizione morsetteria Klemmkastenlage Position boîte à bornes Posición caja de bornes | Mounting position Posizione montaggio Einbaulage Position de montage Position de montaje | Coupling Giunto Kupplung Joint Juntura | |
|---|---|---|--|---|---|---|--|
| 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 |  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 |  COUPLING A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm 0 Without coupling Senza giunto  |

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

Lifting / sollevamento / hubantriebe / levage / elevación

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

Rotation / rotazione / drehung / rotation / rotacion

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

Linear movement / traslazione / linearbewegung / translation / translacion

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

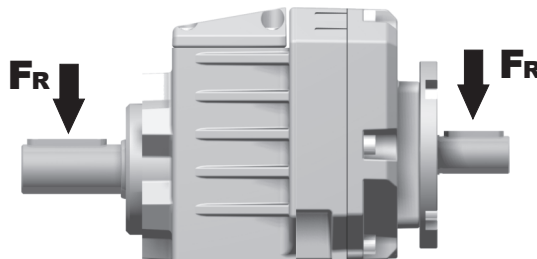
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

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

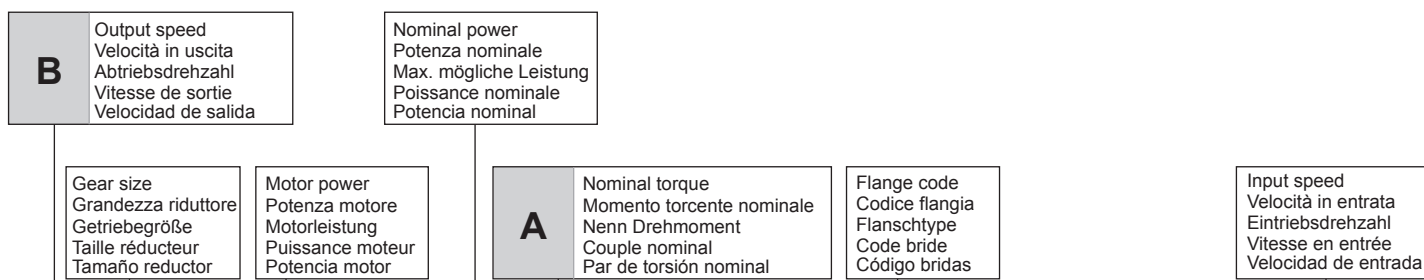
- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée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



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

- If your application requires higher radial loads, contact our technical office. Higher load may be possible.
- Nel caso la vostra applicazione richieda carichi radiali superiori consultare il nostro ufficio tecnico, valori maggiori possono essere accettati.
- Wenn Ihre Anwendung höhere Radialbelastungen erfordert, so wenden Sie sich bitte an unser technisches 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⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | 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 |

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

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



QUICK SELECTION / Selezione veloce The dynamic efficiency is **0.96** for all ratios **input speed (n₁) = 1400 min⁻¹**

| Output Speed n ₂ [min ⁻¹] | Ratio i | Motor power P _{1M} [kW] | Output torque M _{2M} [Nm] | Service factor f.s. | Nominal power P _{1R} [kW] | Nominal torque M _{2R} [Nm] | Available B5 motor flanges | | Available B14 motor flanges | | | Output Shaft | Ratios code |
|--|--------------|--|--|------------------------|--|---|----------------------------|-----|-----------------------------|----|----|------------------|-----------------|
| | | | | | | | -B | -C | -O | -P | -Q | | |
| | | | | | | | 63 | 71* | 56 | 63 | 71 | | |
| 407 | 3.44 | 0.55** | 12 | 2.0 | 1.1 | 25 | | | C | C | | 2821 | 01 |
| 327 | 4.28 | 0.55** | 15 | 1.9 | 1.1 | 30 | | | C | C | | 2818 | 02 |
| 257 | 5.45 | 0.55** | 20 | 2.0 | 1.1 | 40 | | | C | C | | 2815 | 03 |
| 225 | 6.23 | 0.55** | 23 | 2.0 | 1.1 | 45 | | | C | C | | 1921 | 04 |
| 194 | 7.20 | 0.55** | 26 | 1.9 | 1.1 | 50 | | | C | C | | 2812 | 05 |
| 181 | 7.74 | 0.55** | 28 | 1.8 | 0.99 | 50 | | | C | C | | 1918 | 06 |
| 142 | 9.85 | 0.55** | 36 | 1.7 | 0.93 | 60 | | | C | C | | 1915 | 07 |
| 123 | 11.42 | 0.55** | 41 | 1.5 | 0.80 | 60 | | | C | C | | 1715 | 08 |
| 107 | 13.03 | 0.55** | 47 | 1.3 | 0.70 | 60 | | | C | C | | 1912 | 09 |
| 93 | 15.10 | 0.37 | 37 | 1.6 | 0.61 | 60 | | | C | C | | 1712 | 10 |
| 86 | 16.20 | 0.37 | 39 | 1.5 | 0.57 | 60 | | | C | C | | 1910 | 11 |
| 75 | 18.78 | 0.37 | 45 | 1.3 | 0.49 | 60 | | | C | C | | 1710 | 12 |
| 66 | 21.15 | 0.37 | 51 | 1.2 | 0.43 | 60 | | | C | C | | 1312 | 13 |
| 64 | 21.84 | 0.37 | 53 | 1.1 | 0.42 | 60 | | | C | C | | 1015 | 14 |
| 53 | 26.31 | 0.37 | 64 | 0.9 | 0.35 | 60 | | | C | C | | 1310 | 15 |
| 48.5 | 28.88 | 0.37 | 70 | 1.0 | 0.37 | 70 | | | C | C | | 1012 | 16 |
| 39 | 35.91 | 0.37 | 87 | 0.8 | 0.30 | 70 | | | C | C | | 1010 | 17 |
| 37.1 | 37.69 | 0.25 | 62 | 1.1 | 0.28 | 70 | | | C | C | | 912 | 18 |
| 29.9 | 46.87 | 0.25 | 77 | 0.9 | 0.23 | 70 | | | C | C | | 910 | 19 |
| 28.1 | 49.76 | 0.25 | 81 | 0.9 | 0.21 | 70 | | | C | C | | 712 | 20 |
| 22.6 | 61.89 | 0.18 | 77 | 0.9 | 0.17 | 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

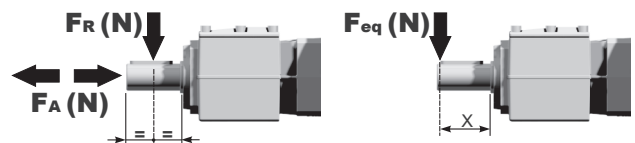
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

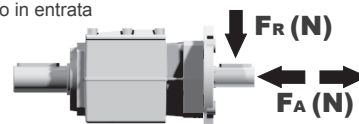
$$F_{eq} = F_R \cdot \frac{35.7}{X+20.7}$$



| n ₂ | FA | FR | n ₂ | FA | FR | n ₂ | 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 ₁ | FA | FR |
|----------------|-----|-----|
| 1400 | 140 | 700 |
| 900 | 160 | 800 |
| 500 | 190 | 950 |

tab. 2



| QUICK SELECTION / Selezione veloce | | | | | | | input speed (n ₁) = 1400 min ⁻¹ | | | | | | | | |
|--|--------------|--|--|------------------------|--|---|--|-----|-----|-----|-----------------------------|----|----|--------------|-------------|
| Output Speed n ₂ [min ⁻¹] | Ratio i | Motor power P _{1M} [kW] | Output torque M _{2M} [Nm] | Service factor f.s. | Nominal power P _{1R} [kW] | Nominal torque M _{2R} [Nm] | Available B5 motor flanges | | | | Available B14 motor flanges | | | Output Shaft | Ratios code |
| | | | | | | | -B | -C | -D | -E | -Q | -R | -T | | |
| | | | | | | | 63 | 71* | 80* | 90* | 71 | 80 | 90 | | |
| 407 | 3.44 | 1.5 | 34 | 1.0 | 1.6 | 35 | B | | | | C | C | | 2821 | 01 |
| 327 | 4.28 | 1.5 | 42 | 1.0 | 1.4 | 40 | B | | | | C | C | | 2818 | 02 |
| 257 | 5.45 | 1.5 | 53 | 1.0 | 1.5 | 52 | B | | | | C | C | | 2815 | 03 |
| 225 | 6.23 | 1.5 | 61 | 1.1 | 1.7 | 70 | B | | | | C | C | | 1921 | 04 |
| 194 | 7.20 | 1.5 | 71 | 1.0 | 1.5 | 70 | B | | | | C | C | | 2812 | 05 |
| 181 | 7.74 | 1.5 | 76 | 1.1 | 1.6 | 80 | B | | | | C | C | | 1918 | 06 |
| 142 | 9.85 | 1.5 | 97 | 1.0 | 1.5 | 95 | B | | | | C | C | | 1915 | 07 |
| 123 | 11.42 | 1.5 | 112 | 1.0 | 1.5 | 115 | B | | | | C | C | | 1715 | 08 |
| 107 | 13.03 | 1.1 | 93 | 1.2 | 1.3 | 114 | B | | | | C | C | | 1912 | 09 |
| 93 | 15.10 | 1.1 | 108 | 1.1 | 1.2 | 114 | B | | | | C | C | | 1712 | 10 |
| 86 | 16.20 | 0.75 | 80 | 1.3 | 1.0 | 107 | B | | | | C | C | | 1910 | 11 |
| 75 | 18.78 | 0.75 | 92 | 1.2 | 0.87 | 107 | B | | | | C | C | | 1710 | 12 |
| 66 | 21.15 | 0.75 | 104 | 1.1 | 0.82 | 114 | B | | | | C | C | | 1312 | 13 |
| 64 | 21.84 | 0.75 | 107 | 1.1 | 0.83 | 119 | B | | | | C | C | | 1015 | 14 |
| 53 | 26.31 | 0.55 | 95 | 1.1 | 0.62 | 107 | B | | | | C | C | | 1310 | 15 |
| 48.5 | 28.88 | 0.55 | 105 | 1.1 | 0.60 | 114 | B | | | | C | C | | 1012 | 16 |
| 39 | 35.91 | 0.37 | 87 | 1.2 | 0.46 | 107 | B | | | | C | C | | 1010 | 17 |
| 37.1 | 37.69 | 0.37 | 91 | 1.1 | 0.41 | 102 | B | | | | C | C | | 912 | 18 |
| 29.9 | 46.87 | 0.37 | 113 | 0.9 | 0.35 | 107 | B | | | | C | C | | 910 | 19 |
| 28.1 | 49.76 | 0.25 | 81 | 1.2 | 0.31 | 101 | B | | | | C | C | | 712 | 20 |
| 22.6 | 61.89 | 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

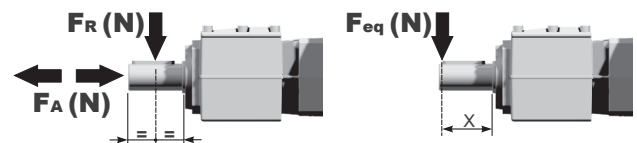
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft

Albero di uscita

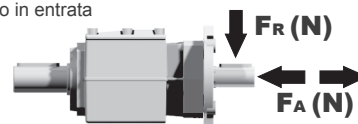
$$F_{eq} = F_R \cdot \frac{35.7}{X+20.7}$$



| n ₂ | FA | FR | n ₂ | FA | FR | n ₂ | 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

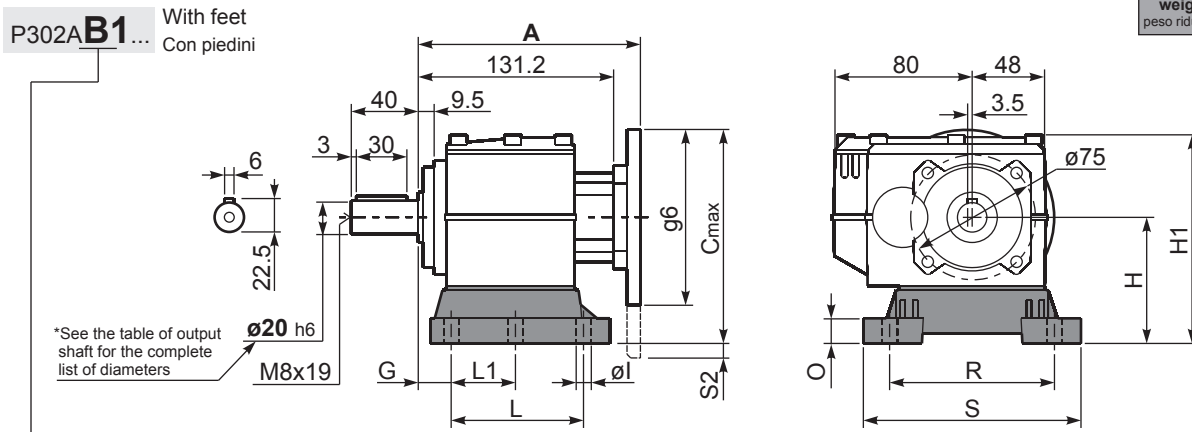
Albero in entrata



| n ₁ | FA | FR |
|----------------|-----|------|
| 1400 | 226 | 1130 |
| 900 | 264 | 1320 |
| 500 | 322 | 1610 |

tab. 2

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



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

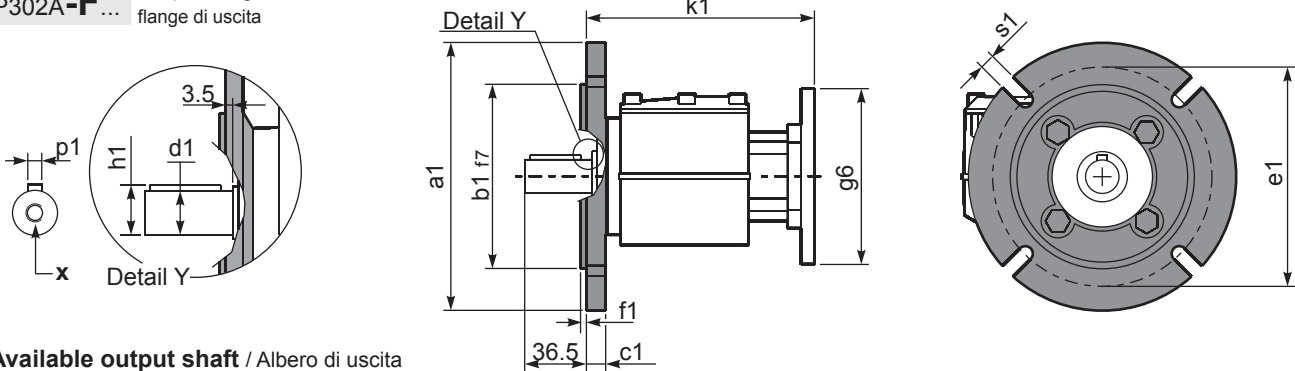
| Feet Code | Market reference | G | H | R | L | L1 | S | H1 | O | φ | S2 only with motor flange | B5 max. Flange | kit code |
|-----------|------------------|------|-----|-----|-------|----|-----|-----|----|----|---------------------------|----------------|--------------|
| B1 | 112 | 18 | 85 | 110 | 87 | 50 | 130 | 133 | 15 | 9 | 15 80/90B5 | - | KC30.9.022 |
| B2 | 212/3 | 18 | 100 | 130 | 107.5 | 60 | 155 | 145 | 5 | 11 | 3.5 80/90B5 | - | KC30.9.023LM |
| S1 | 17-32 | 18 | 75 | 110 | 110 | 50 | 130 | 123 | 15 | 9 | 5 71B5 | 71B5 | KC30.9.024 |
| S2 | 27 | 25 | 90 | 110 | 130 | - | 130 | 135 | 5 | 9 | - | 71B5 | KC30.9.025LM |
| L3 | 03 | 12.5 | 65 | 91 | 60 | - | 105 | 149 | 5 | 9 | 31.5 80/90B5 | - | KC30.9.026LM |
| L4 | 04 | 13 | 80 | 105 | 76 | - | 132 | 165 | 5 | 9 | 16.5 80/90B5 | - | KC30.9.027LM |

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

A see on page bottom

Most popular types
 Tipi più diffusi

P302A-F... Output flanges
 flange di uscita



*Available output shaft / Albero di uscita

| | Shaft - d1 | p1 | h1 | x |
|---------------------------|------------|----|------|-------|
| Standard | 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 |

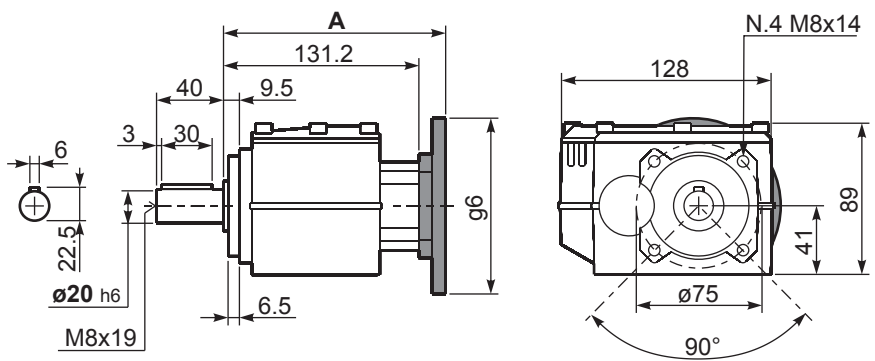
Available output flanges / flange di uscita

| 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 |

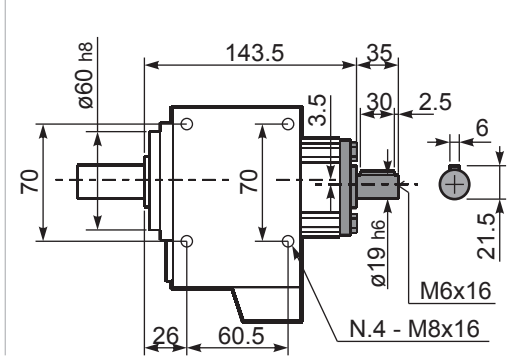
* Holes position
 Posizione fori

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 _{max} | 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 _{max} | 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 (n₁) = 1400 min⁻¹

| Output Speed n ₂ [min ⁻¹] | Ratio i | Motor power P _{1M} [kW] | Output torque M _{2M} [Nm] | Service factor f.s. | Nominal power P _{1R} [kW] | Nominal torque M _{2R} [Nm] | Available B5 motor flanges | | | | | Available B14 motor flanges | | | | Output Shaft | | |
|--|--------------|--|--|------------------------|--|---|----------------------------|----|-----|-----|------|-----------------------------|----|----|-----|--------------|-----------------|-------------|
| | | | | | | | -B | -C | -D | -E | -F | -Q | -R | -T | -U | | | Ratios code |
| | | | | | | | 63 | 71 | 80* | 90* | 100* | 71 | 80 | 90 | 100 | 112 | 100 | |
| 398 | 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 | V8 |
| 0.25 LT | 0.30 LT | 0.40 LT | 0.40 LT | 0.40 LT | 0.50 LT | Ask | Ask |
| AGIP Telium VSF 320 | | | | SHELL Omala S4 WE 320 | | | |

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

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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

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

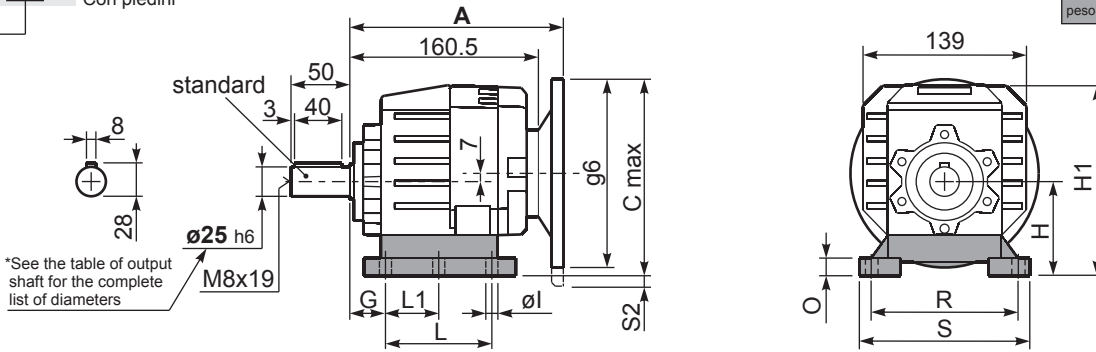
Input shaft
Albero di entrata

| n ₁ | 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 flange
With feet **5.9 Kg**



Feet / piedini

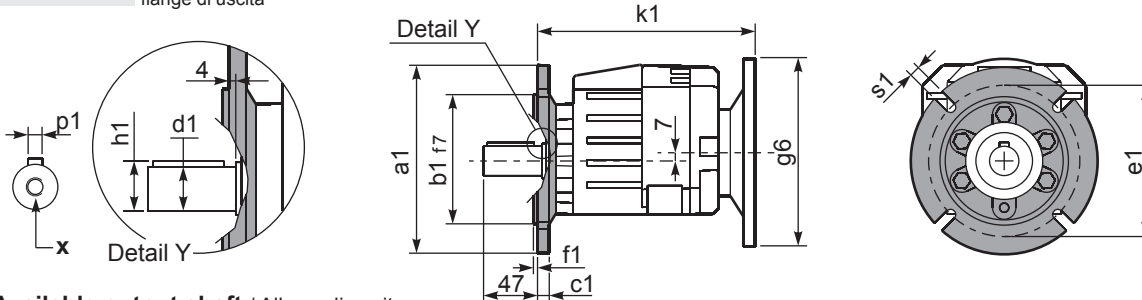
| Feet Code | Market reference | G | H | R | L | L1 | S | H1 | O | øl | S2 only with motor flange | B5 max. Flange | kit code |
|-----------|------------------|----|-----|---------|--------|----|-----|-----|----|----|----------------------------|----------------|--------------|
| B1 | 112 | 18 | 85 | 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 |

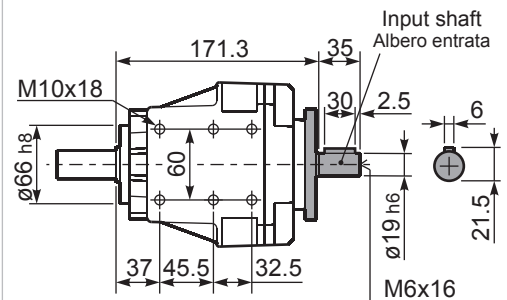
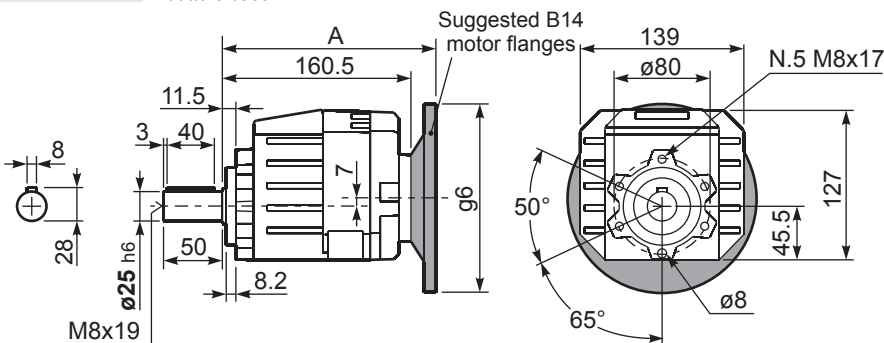
Available output flanges / flange di uscita

| 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 _{max} | 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 _{max} | 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 (n₁) = 1400 min⁻¹

| Output Speed n ₂ [min ⁻¹] | Ratio i | Motor power P _{1M} [kW] | Output torque M _{2M} [Nm] | Service factor f.s. | Nominal power P _{1R} [kW] | Nominal torque M _{2R} [Nm] | Available B5 motor flanges | | Available B14 motor flanges | | | Output Shaft \varnothing | Ratios code |
|--|---------------|--|--|------------------------|--|---|----------------------------|----|-----------------------------|----|----|-------------------------------|-------------|
| | | | | | | | -B | -C | -O | -P | -Q | | |
| | | | | | | | 63 | 71 | 56 | 63 | 71 | | |
| 36.5 | 38.40 | 0.37 | 91 | 1.9 | 0.71 | 175 | | | C | C | | 171713 | 02 |
| 32.0 | 43.69 | 0.37 | 104 | 1.4 | 0.53 | 149 | | | C | C | | 191712 | 03 |
| 27.6 | 50.64 | 0.37 | 120 | 1.3 | 0.49 | 160 | | | C | C | | 171712 | 04 |
| 26.2 | 53.36 | 0.37 | 127 | 1.1 | 0.40 | 138 | | | C | C | | 191710 | 05 |
| 22.9 | 61.21 | 0.37 | 145 | 1.1 | 0.41 | 160 | | | C | C | | 191312 | 06 |
| 22.6 | 61.85 | 0.37 | 147 | 0.9 | 0.35 | 138 | | | C | C | | 171710 | 07 |
| 19.7 | 70.95 | 0.37 | 168 | 1.0 | 0.35 | 160 | | | C | C | | 131712 | 08 |
| 19.1 | 73.43 | 0.37 | 174 | 1.0 | 0.37 | 175 | | | C | C | | 101713 | 09 |
| 18.7 | 74.77 | 0.25 | 120 | 1.2 | 0.29 | 138 | | | C | C | | 191310 | 10 |
| 16.2 | 86.66 | 0.25 | 139 | 1.0 | 0.25 | 138 | | | C | C | | 131710 | 11 |
| 14.5 | 96.85 | 0.25 | 155 | 1.0 | 0.26 | 160 | | | C | C | | 101712 | 12 |
| 13.6 | 102.89 | 0.25 | 165 | 1.1 | 0.27 | 180 | | | C | C | | 101313 | 13 |
| 11.1 | 126.40 | 0.18 | 155 | 1.0 | 0.20 | 160 | | | C | C | | 91712 | 17 |
| 10.3 | 135.69 | 0.18 | 166 | 1.0 | 0.18 | 160 | | | C | C | | 101312 | 15 |
| 8.4 | 165.74 | 0.12 | 131 | 1.1 | 0.13 | 138 | | | C | C | | 101310 | 16 |
| 7.9 | 177.09 | 0.12 | 140 | 1.1 | 0.14 | 160 | | | C | C | | 91312 | 18 |
| 6.5 | 216.31 | 0.09 | 136 | 1.0 | 0.10 | 138 | | | 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

Output shaft
Albero di uscita

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

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

$F_{eq} (N)$

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

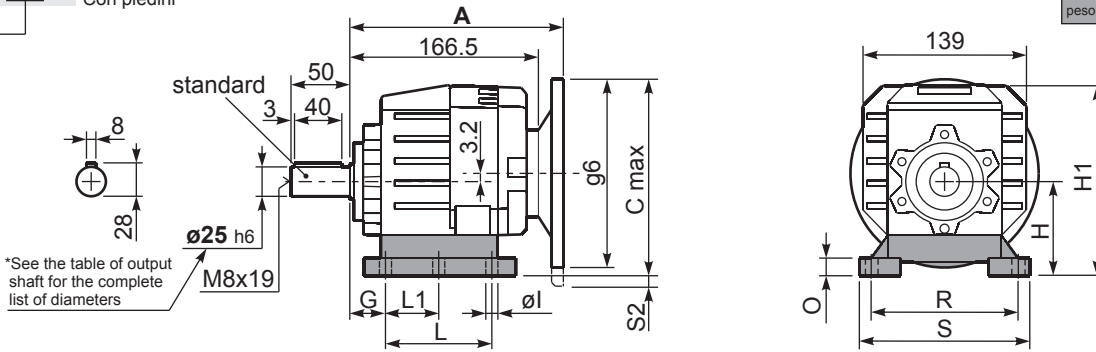
Input shaft
Albero di entrata

| n ₁ | FA | FR |
|----------------|-----|-----|
| 1400 | 140 | 700 |
| 900 | 160 | 800 |
| 500 | 190 | 950 |

tab. 2

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

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



Feet / piedini

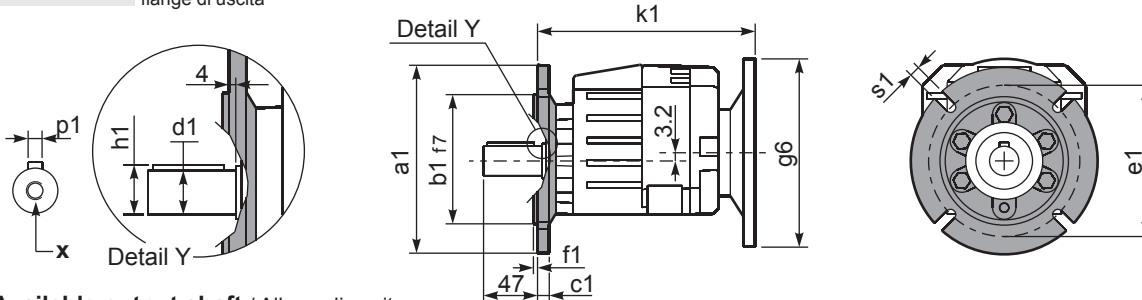
| Feet Code | Market reference | G | H | R | L | L1 | S | H1 | O | ∅l | S2 only with motor flange | B5 max. Flange | kit code |
|-----------|------------------|----|-----|---------|--------|----|-----|-----|----|----|---------------------------|----------------|--------------|
| B1 | 112 | 18 | 85 | 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 | ∅ 25x50 | 8 | 28 | M8x19 |
| On request A richiesta | ∅ 16x40 | 5 | 18 | M6x16 |
| | ∅ 19x40 | 6 | 21.5 | M6x16 |
| | ∅ 20x40 | 6 | 22.5 | M8x19 |
| | ∅ 24x50 | 8 | 27 | M8x19 |

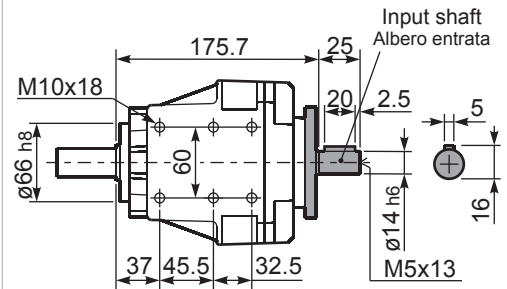
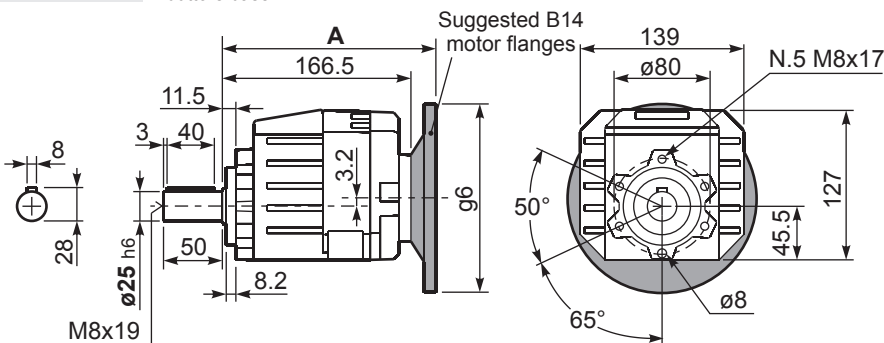
Available output flanges / flange di uscita

| a1 ∅ | b1 | c1 | e1 | f1 | s1 | kit code |
|------|-----|------|-----|-----|----|------------|
| 120 | 80 | 10 | 100 | 3 | 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 _{max} | 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 _{max} | 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_1) = 1400 min⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | | 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 | 3.61 | 4 | 93 | 1.6 | 6.3 | 150 | B | | | | | | | | | 3018 | 01 |
| 331 | 4.23 | 4 | 108 | 1.6 | 6.1 | 170 | B | | | | | | | | | 3016 | 02 |
| 279 | 5.01 | 4 | 129 | 1.6 | 6.1 | 200 | B | | | | | | | | | 3014 | 03 |
| 231 | 6.07 | 4 | 156 | 1.6 | 6.3 | 250 | B | | | | | | | | | 3012 | 04 |
| 206 | 6.81 | 4 | 175 | 1.6 | 6.2 | 277 | B | | | | | | | | | 2018 | 05 |
| 176 | 7.96 | 4 | 204 | 1.5 | 5.8 | 300 | B | | | | | | | | | 2016 | 06 |
| 148 | 9.45 | 4 | 242 | 1.3 | 4.9 | 304 | B | | | | | | | | | 2014 | 07 |
| 122 | 11.43 | 4 | 293 | 1.0 | 4.0 | 300 | B | | | | | | | | | 2012 | 08 |
| 99 | 14.21 | 3 | 274 | 1.0 | 2.8 | 265 | B | | | | | | | | | 2010 | 09 |
| 84 | 16.62 | 3 | 321 | 0.9 | 2.8 | 304 | B | | | | | | | | | 1314 | 10 |
| 70 | 20.10 | 2.2 | 286 | 1.0 | 2.3 | 300 | B | | | | | | | | | 1312 | 11 |
| 56 | 24.98 | 1.85 | 302 | 0.9 | 1.6 | 265 | B | | | | | | | | | 1310 | 12 |
| 47.6 | 29.41 | 1.5 | 288 | 1.1 | 1.6 | 304 | B | | | | | | | | | 814 | 13 |
| 39.3 | 35.58 | 1.5 | 349 | 0.9 | 1.3 | 300 | B | | | | | | | | | 812 | 14 |
| 34.6 | 40.50 | 1.1 | 290 | 1.0 | 1.1 | 290 | B | | | | | | | | | 614 | 15 |
| 31.7 | 44.23 | 1.1 | 316 | 0.8 | 0.92 | 265 | B | | | | | | | | | 810 | 16 |
| 28.6 | 49.00 | 0.75 | 240 | 1.2 | 0.93 | 300 | B | | | | | | | | | 612 | 17 |
| 23.0 | 60.90 | 0.75 | 299 | 0.9 | 0.66 | 265 | B | | | | | | | | | 610 | 18 |

The dynamic efficiency is **0.96** for all ratios *Nel montaggio P la flangia può superare l'ingombro massimo dei piedi. Eventualmente utilizzare la flangia B14
* In the P mounting the B5 motor flange can exceed the foot maximum dimensions. Possibly use the flange B14

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

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 | | | Input shaft / Albero in entrata | | | Equation | | |
| | F_R (N) | F_A (N) | | F_R (N) | F_A (N) | $F_{eq} = F_R \cdot \frac{51}{X+21}$ | | |
| n_2 | FA | FR | n_2 | FA | FR | n_2 | 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_1 | FA | FR |
| | | | | | | 1400 | 400 | 2000 |
| | | | | | | 900 | 440 | 2200 |
| | | | | | | 500 | 440 | 2200 |

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n₁) = 1400 min⁻¹

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

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

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

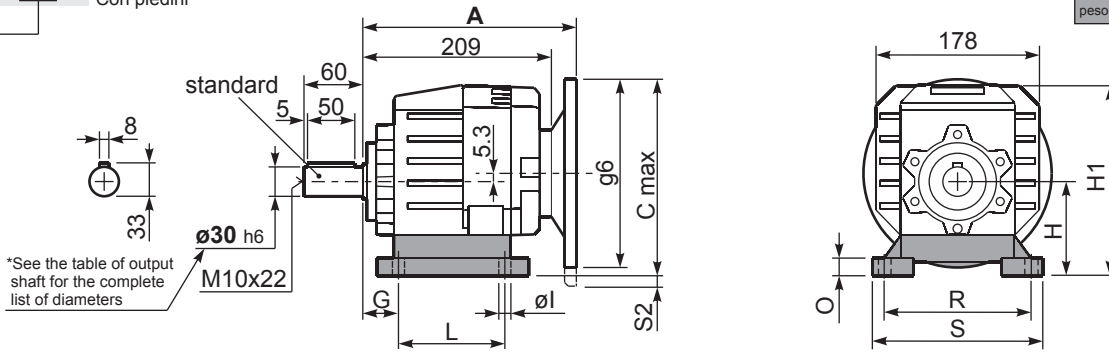
Input shaft
Albero in entrata

| 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

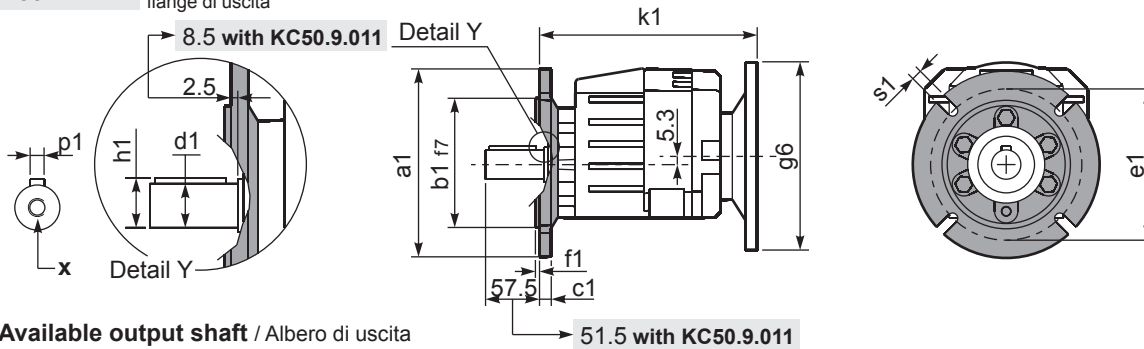
| Feet Code | Market reference | G | H | R | L | S | H1 | O | øl | S2 only with motor flange | B5 max. Flange | kit code |
|-----------|------------------|----|-----|---------|-------|-----|-------|----|------|---------------------------|----------------|--------------|
| B3 | 312/3 | 18 | 110 | 160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

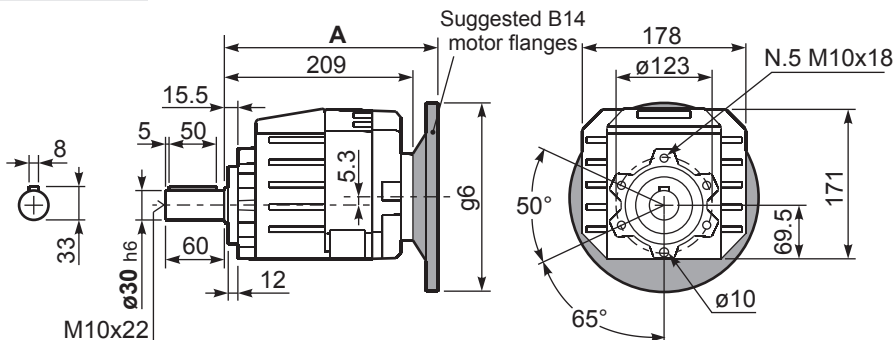
| | Shaft - d1 | p1 | h1 | x |
|---------------------------|------------|----|----|--------|
| Standard | ø 30x60 | 8 | 33 | M10x22 |
| On request A richiesta | ø 24x50 | 8 | 27 | M8x19 |
| | ø 25x50 | 8 | 28 | M8x19 |
| | ø 28x60 | 8 | 31 | M8x19 |
| | ø 35x60 | 10 | 38 | M10x22 |

Available output flanges / flange di uscita

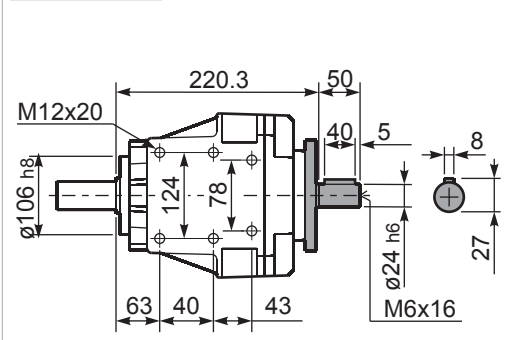
| a1 | ø | b1 | c1 | e1 | f1 | s1 | kit code |
|-----|---|-----|------|-----|-----|----|------------|
| 160 | | 110 | 14 | 130 | 3.5 | 11 | KC50.9.011 |
| 200 | | 130 | 13 | 165 | 3.5 | 11 | KC50.9.012 |
| 250 | | 180 | 15.5 | 215 | 4 | 14 | KC50.9.013 |

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 _{max} | g6 | k1 | kit code | k1 with KC50.9.011 | B14 Motor Flanges | A | C _{max} | 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 ₁) = 1400 min ⁻¹ | | | | | | | | |
|--|---------------|--|--|------------------------|--|---|--|----|----|----|-----------------------------|----|----|--------------|-------------|
| Output Speed n ₂ [min ⁻¹] | Ratio i | Motor power P _{1M} [kW] | Output torque M _{2M} [Nm] | Service factor f.s. | Nominal power P _{1R} [kW] | Nominal torque M _{2R} [Nm] | Available B5 motor flanges | | | | Available B14 motor flanges | | | Output Shaft | Ratios code |
| | | | | | | | -B | -C | -D | -E | -Q | -R | -T | | |
| | | | | | | | 63 | 71 | 80 | 90 | 71 | 80 | 90 | | |
| 35.2 | 39.79 | 1.5 | 382 | 1.0 | 1.5 | 373 | B | | | | C | C | | 191316 | 01 |
| 29.6 | 47.22 | 1.1 | 331 | 1.1 | 1.2 | 354 | B | | | | C | C | | 191314 | 02 |
| 25.6 | 54.73 | 1.1 | 384 | 0.9 | 1.0 | 354 | B | | | | C | C | | 171314 | 03 |
| 21.1 | 66.22 | 0.75 | 318 | 1.0 | 0.77 | 326 | B | | | | C | C | | 171312 | 04 |
| 18.3 | 76.69 | 0.75 | 369 | 1.0 | 0.72 | 354 | B | | | | C | C | | 131314 | 05 |
| 16.7 | 83.59 | 0.55 | 297 | 1.2 | 0.66 | 354 | B | | | | C | C | | 190814 | 06 |
| 15.1 | 92.78 | 0.55 | 329 | 1.0 | 0.55 | 326 | B | | | | C | C | | 131312 | 07 |
| 13.4 | 104.68 | 0.55 | 371 | 1.0 | 0.53 | 354 | B | | | | C | C | | 101314 | 08 |
| 11.9 | 117.22 | 0.37 | 278 | 1.2 | 0.43 | 326 | B | | | | C | C | | 170812 | 09 |
| 11.1 | 126.65 | 0.37 | 300 | 1.1 | 0.40 | 326 | B | | | | C | C | | 101312 | 10 |
| 10.2 | 136.62 | 0.37 | 324 | 1.1 | 0.40 | 354 | B | | | | C | C | | 91314 | 11 |
| 8.5 | 165.29 | 0.25 | 264 | 1.2 | 0.31 | 326 | B | | | | C | C | | 91312 | 12 |
| 7.8 | 180.40 | 0.25 | 289 | 1.2 | 0.31 | 354 | B | | | | C | C | | 71314 | 13 |
| 6.4 | 218.26 | 0.25 | 349 | 0.9 | 0.23 | 326 | B | | | | C | C | | 71312 | 14 |
| 5.8 | 241.82 | 0.25 | 387 | 0.9 | 0.23 | 354 | B | | | | C | C | | 90814 | 15 |
| 4.8 | 292.57 | 0.18 | 358 | 0.9 | 0.17 | 326 | B | | | | C | C | | 90812 | 16 |
| 4.4 | 319.32 | 0.18 | 391 | 0.9 | 0.17 | 354 | B | | | | C | C | | 70814 | 17 |
| 3.6 | 386.33 | 0.12 | 305 | 1.1 | 0.13 | 326 | B | | | | C | C | | 70812 | 18 |
| 2.9 | 480.16 | 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 | | | | | | | | |
|---|-----|------|--------------------------------------|-----|------|----------------|------|------|
| Output shaft Albero di uscita | | | $F_{eq} = F_R \cdot \frac{54}{X+24}$ | | | | | |
| | | | | | | | | |
| n ₂ | FA | FR | n ₂ | FA | FR | n ₂ | FA | FR |
| 300 | 460 | 2300 | 140 | 600 | 3000 | 70 | 780 | 3900 |
| 250 | 480 | 2400 | 120 | 620 | 3100 | 40 | 900 | 4500 |
| 200 | 520 | 2600 | 85 | 700 | 3500 | 15 | 1000 | 5000 |
| Input shaft Albero di entrata | | | | | | | | |
| n ₁ | 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⁻¹

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

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

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

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

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

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

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

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

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

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

| RADIAL AND AXIAL LOADS | | | | | | | | |
|---|-------|-------|--|-------|-------|-------|-------|-------|
| Output shaft 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 |
| Input shaft Albero in entrata | | | | | | | | |
| n_1 | F_A | F_R | | | | | | |
| 1400 | 450 | 2250 | | | | | | |
| 900 | 500 | 2500 | | | | | | |
| 500 | 600 | 3000 | | | | | | |

tab. 2

603A Coaxial - Gear

520Nm

Rating - Aluminum COAXIAL GEARBOXES



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

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

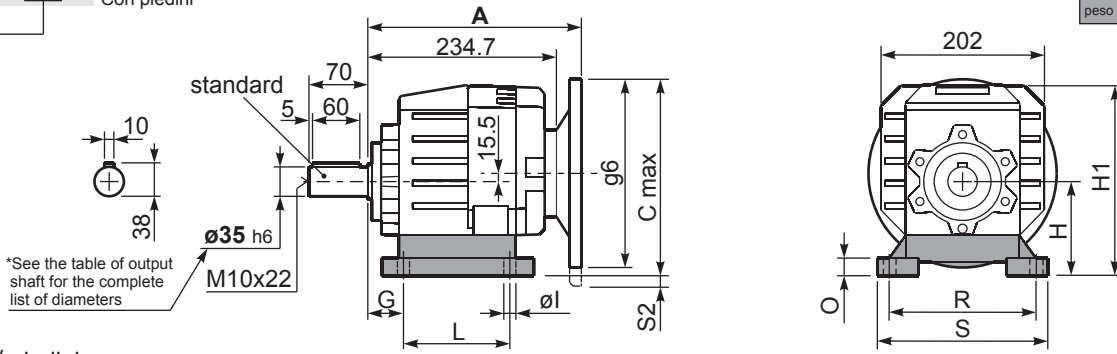
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

| RADIAL AND AXIAL LOADS | | | | | | | | |
|---|-----|------|--|-----|------|-------|------|------|
| Output shaft Albero di uscita | | | $F_{eq} = F_R \cdot \frac{60.5}{X+25.5}$ | | | | | |
| | | | | | | | | |
| n_2 | FA | FR | n_2 | FA | FR | n_2 | FA | FR |
| 300 | 560 | 2800 | 140 | 740 | 3700 | 70 | 890 | 4200 |
| 250 | 600 | 3000 | 120 | 760 | 3800 | 40 | 1160 | 5800 |
| 200 | 640 | 3200 | 85 | 840 | 4000 | 15 | 1300 | 6500 |
| Input shaft Albero in entrata | | | | | | | | |
| n_1 | FA | FR | | | | | | |
| 1400 | 400 | 2000 | | | | | | |
| 900 | 440 | 2200 | | | | | | |
| 500 | 440 | 2200 | | | | | | |

tab. 2

P603A-B1... With feet
Con piedini

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



Feet / piedini

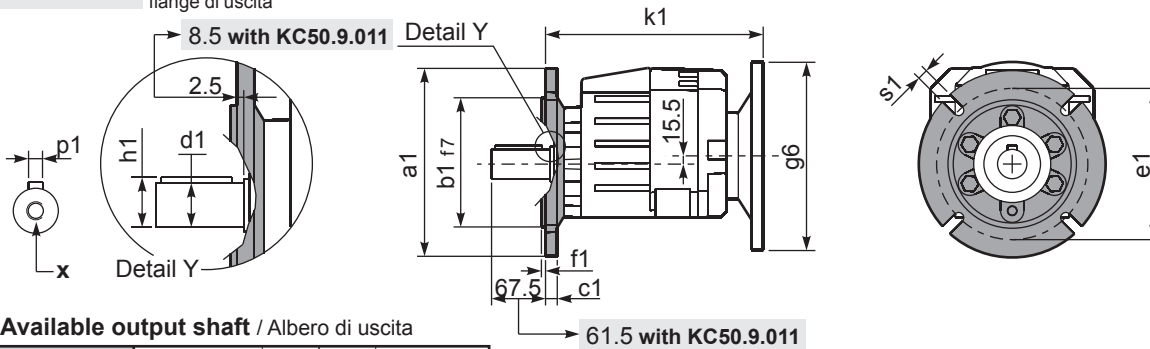
| Feet Code | Market reference | G | H | R | L | S | H1 | O | øl | S2 only with motor flange | B5 max. Flange | kit code |
|-----------|------------------|------|-----|---------|-------|-----|-----|----|------|---------------------------|----------------|--------------|
| B4 | 412/3 | 20 | 130 | 180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

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

A see on page bottom

Most popular types
Tipi più diffusi

P603A-F... Output flanges
flange di uscita



*Available output shaft / Alberi di uscita

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

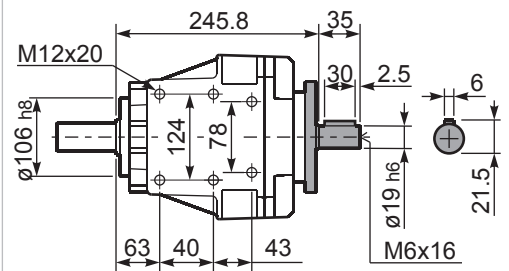
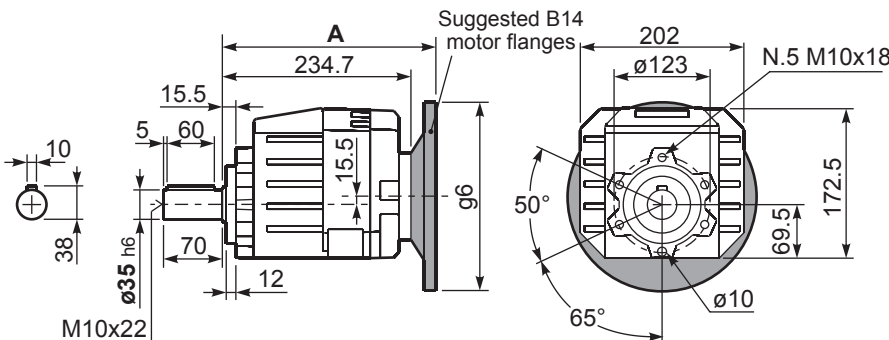
Available output flanges / flange di uscita

| a1 ø | b1 | c1 | e1 | f1 | s1 | kit code |
|------|-----|------|-----|-----|----|------------|
| 160 | 110 | 14 | 130 | 3.5 | 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

P603A-N... Basic gearbox
Riduttore base

R603A-N... Input Shaft
Albero in entrata

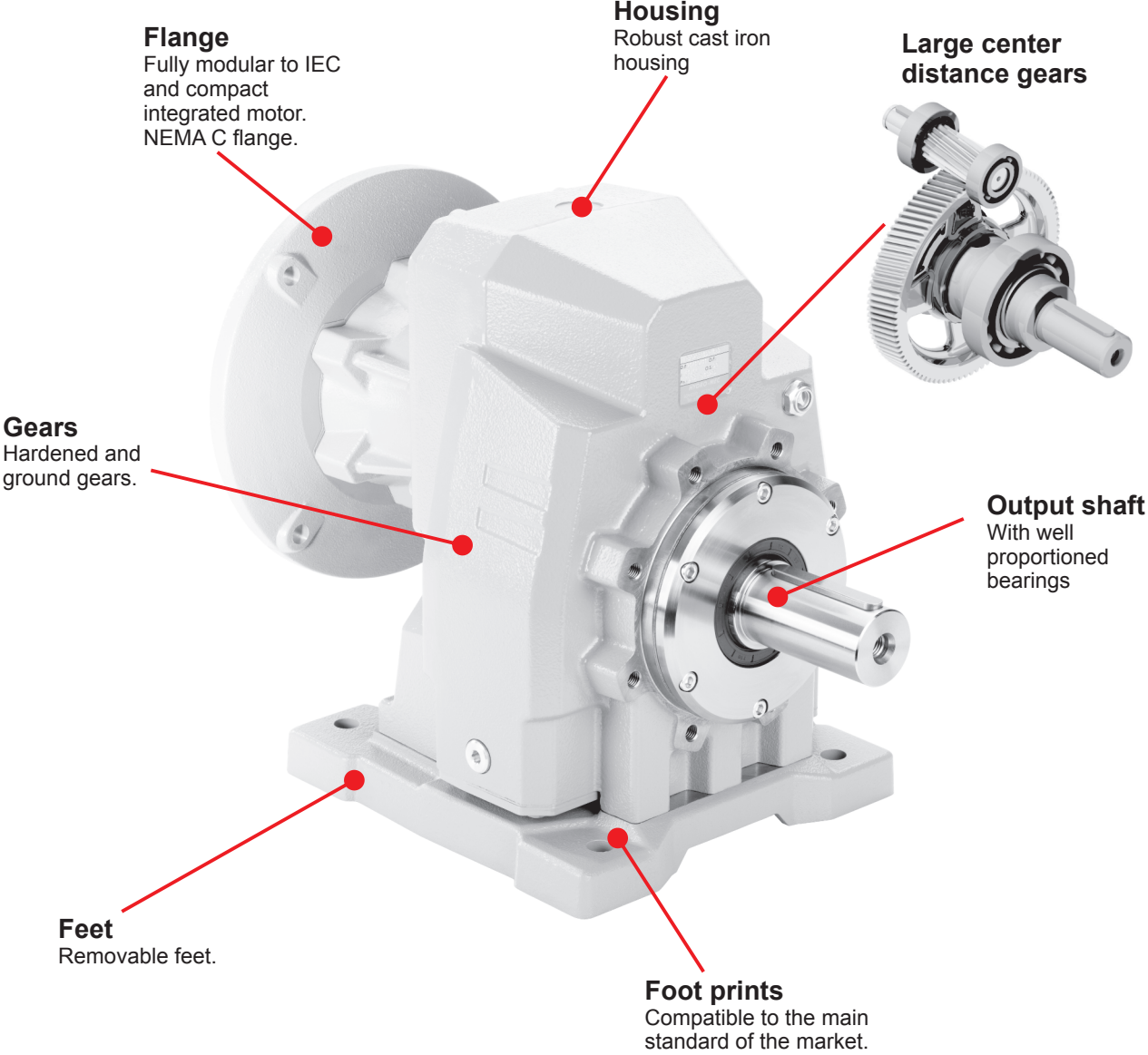


| B5 Motor Flanges | A | C _{max} | g6 | k1 | kit code | k1 with KC50.9.011 |
|------------------|-------|------------------|-----|-------|------------|--------------------|
| 63 B5 | 255.2 | 247.5 | 140 | 257.7 | K063.4.041 | 263.7 |
| 71 B5 | 253.2 | 257.5 | 160 | 255.7 | K063.4.042 | 261.7 |
| 80/90 B5 | 255.2 | 277.5 | 200 | 257.7 | K063.4.043 | 263.7 |

| B14 Motor Flanges | A | C _{max} | g6 | k1 | kit code | k1 with KC50.9.011 |
|-------------------|-------|------------------|-----|-------|------------|--------------------|
| 71 B14 | 253.2 | 230 | 105 | 255.7 | K063.4.047 | 261.7 |
| 80 B14 | 255.2 | 237.5 | 120 | 257.7 | K063.4.046 | 263.7 |
| 90 B14 | 255.2 | 247.5 | 140 | 257.7 | K063.4.041 | 263.7 |

Cast iron in line gearboxes

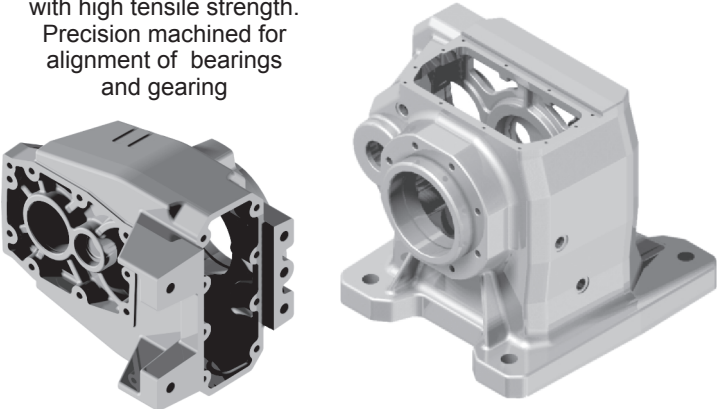
A modular and compact product



5

Single-piece Cast Iron housing

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

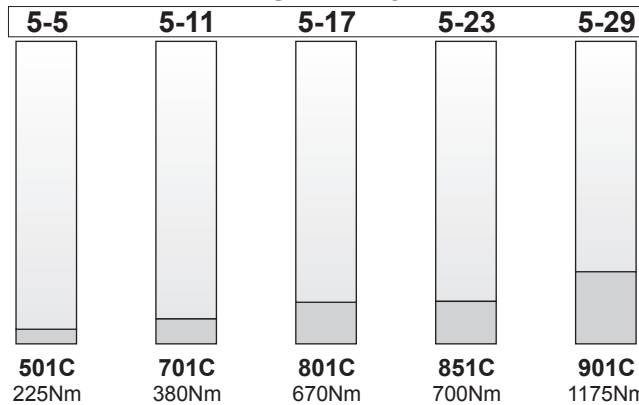
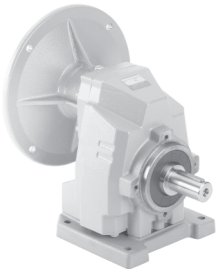


World wide sales network.

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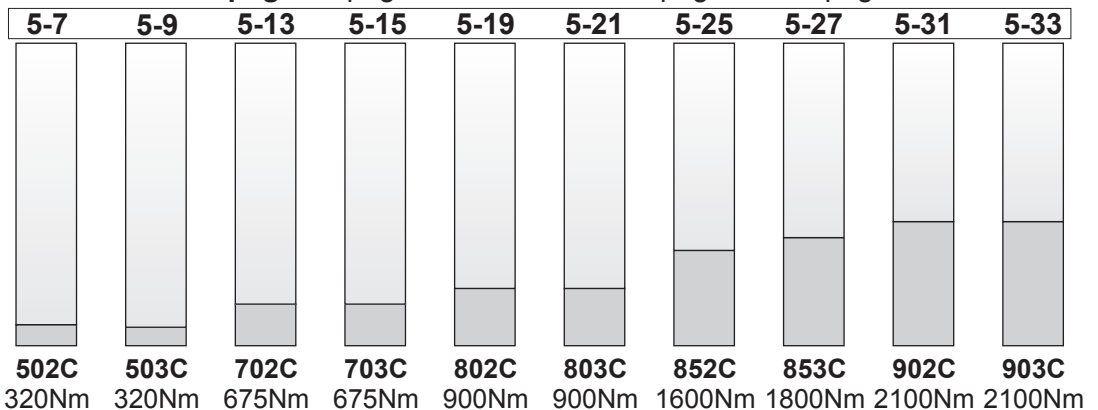
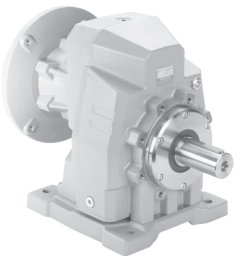
1 Stage



Types / Tipi
Tipen / Types
Tipos

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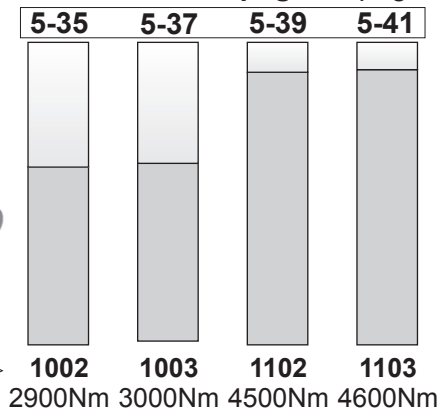
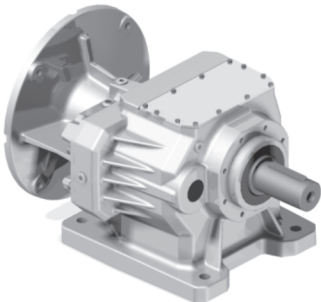
2 and 3 Stages



Types / Tipi
Tipen / Types
Tipos

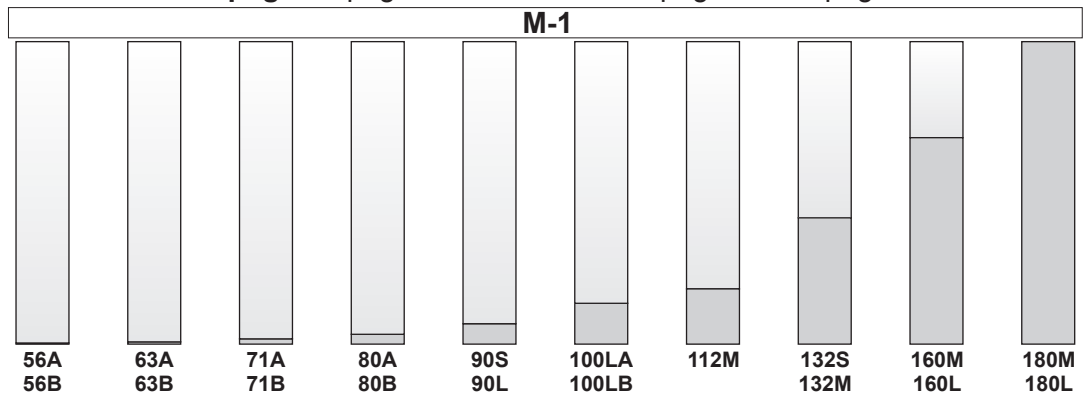
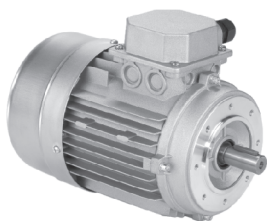
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2 and 3 Stages



Types / Tipi
Tipen / Types
Tipos

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Types / Tipi
Tipen / Types
Tipos

Type - Tipo - Typ
Type - Tipo

Size - Grandezza - Grösse
Taille - Tomafio

Mounting - Montaggio
Montage - Fixation
Tipo de montaje

Ratio - Rapporto
Untersetzung
Reduction
Relación

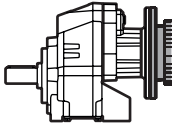
P

702C

-F

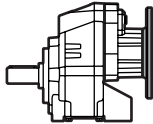
6.57

Cast iron coaxial gear boxes
Riduttori coassiali in Ghisa



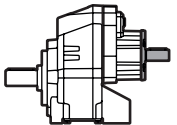
With IEC motor

M



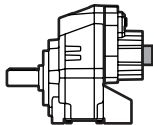
With motor flange

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

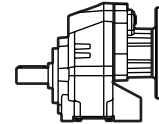
501C
701C
801C
851C
901C

2 Stages
Riduzioni
Stufen
Trains
Etapas

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

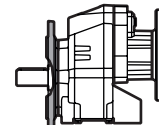
3 Stages
Riduzioni
Stufen
Trains
Etapas

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



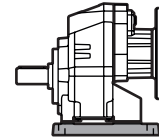
Without flange / feet

-N



Output flange mounted

-F



Mounted feet

B..

Feet / piedini

| Feet Code | Market reference | G | H | R | L |
|-----------|------------------|----|-----|-----|---|
| B1 | 112 | 18 | 85 | 110 | |
| B2 | 212/3 | 18 | 100 | 130 | |
| S4 | 17 | 18 | 75 | 110 | |
| S2 | 27 | 25 | 90 | | |
| M1 | 42/3 | 25 | 80 | | |
| L4 | 04 | 13 | 80 | | |
| L5 | 05 | 16 | 100 | | |

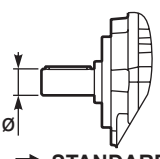
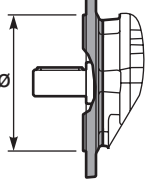







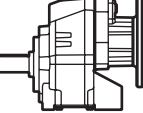
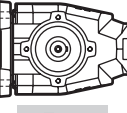
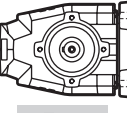
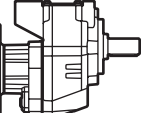
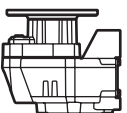
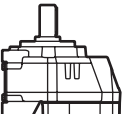

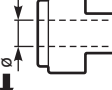
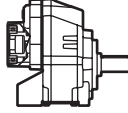
You see feet code in the chart of the dimensions
Vedi codice piede nella tabella delle dimensioni



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



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

| Output shaft Albero uscita Abtriebswelle Arbre de sortie Eje en salida | Output flange Flangia uscita Ausgangsflansch Bride de sortie Brida en salida | Motor size - Grandezza motore Motor Grösse Grandeur moteur - Tamaño motor | Terminal box position Posizione morsetteria Klemmkastenlage Position boîte à bornes Posición caja de bornes | Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje | Coupling Giunto Kupplung Joint Juntura |
|---|---|---|---|---|---|
| <p>H</p>  <p>→ STANDARD</p> <p>501C 502C 503C</p> <p>H → ∅30 I → ∅35</p> <p>701C 702C 703C</p> <p>I → ∅35 L → ∅38 M → ∅40</p> <p>801C 802C 803C</p> <p>M → ∅40 P → ∅50</p> <p>851C 852C 853C</p> <p>P → ∅50 J → ∅60</p> <p>901C 902C 903C</p> <p>P → ∅50 J → ∅60</p> <p>1002 1003</p> <p>J → ∅60</p> <p>1102 1103</p> <p>A → ∅70</p> | <p>4</p>  <p>→ STANDARD</p> <p>N Senza flangia Without flange</p> <p>501C 502C 503C</p> <p>3 → ∅160 4 → ∅200 5 → ∅250</p> <p>701C 702C 703C</p> <p>4 → ∅200 5 → ∅250</p> <p>801C 802C 803C</p> <p>5 → ∅250 6 → ∅300</p> <p>851C 852C 853C</p> <p>6 → ∅300 7 → ∅350</p> <p>901C 902C 903C 1002 1003</p> <p>6 → ∅300 7 → ∅350 8 → ∅450</p> <p>1102 1103</p> <p>7 → ∅350 8 → ∅450</p> | <p>-F</p> <p>Flange Flangia</p>  <p>B5</p> <p>-A=56 (∅120) -B=63 (∅140) -C=71 (∅160) -D=80 (∅200) -E=90 (∅200) -F=100÷112 (∅250) -G=132 (∅300) -H=160 (∅350) -I=180 (∅350) -L=200 (∅400) CA=225 (∅450)</p> <p>B14</p> <p>-O=56 (∅80) -P=63 (∅90) -Q=71 (∅105) -R=80 (∅120) -T=90 (∅140) -U=100÷112 (∅160) -V=132 (∅200)</p> <p>Type R Tipo R</p>  <p>503C</p> <p>-1 → ∅14</p> <p>502C 703C 803C</p> <p>-2 → ∅19</p> <p>702C 802C 853C 903C</p> <p>-3 → ∅24</p> <p>852C 902C 1003 1103</p> <p>-4 → ∅28</p> <p>1002 1102</p> <p>-6 → ∅42</p> <p>Without flange Senza flangia</p>  <p>503C</p> <p>-Z → ∅9 (56B5) -0 → ∅11 (63B5) -1 → ∅14 (71B5)</p> <p>502C 703C 803C</p> <p>-1 → ∅14 (71B5) -2 → ∅19 (80B5) -3 → ∅24 (90B5)</p> <p>702C 802C 853C 903C</p> <p>-2 → ∅19 (80B5) -3 → ∅24 (90B5) -4 → ∅28 (100B5)</p> <p>501C</p> <p>-4 → ∅28 (100B5)</p> | <p>B</p>  <p>A</p>  <p>B</p> <p>STANDARD</p>  <p>C</p>  <p>D</p> | <p>B3</p>  <p>B3</p> <p>STANDARD</p>  <p>B6</p>  <p>B7</p>  <p>B8</p>  <p>V5</p>  <p>V6</p>  <p>V8</p> | <p>-</p> <p>Nothing indication: standard bore</p> <p>Nessuna indicazione: foro standard</p> <p>COUPLING</p>  <p>A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm</p> <p>0</p> <p>Without coupling Senza giunto</p>  |

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 / rotação

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

Linear movement / traslazione / linearbewegung / translation / translación

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

TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

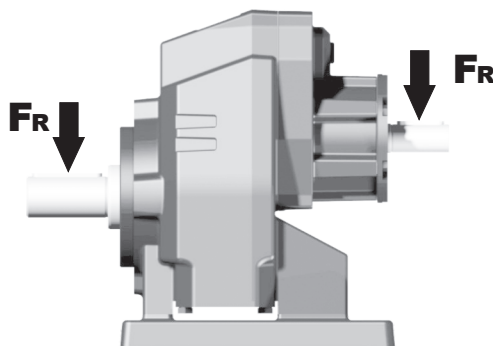
$$M \text{ [Nm]} = \frac{9550 \cdot P \text{ [KW]}}{n \text{ [rpm]}}$$

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

5

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

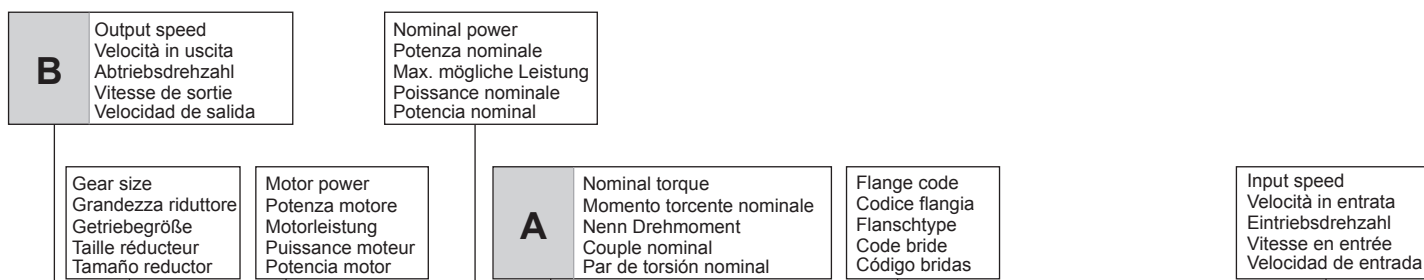
- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée 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



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

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

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⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | | Available B14 motor flanges | | | | Output Shaft | Notes Note Anmerkungen Note Notas | |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|-----|-----|-----------------------------|----|----|-----|------------------|---|-----|
| | | | | | | | -C | -D | -E | -F | -G | -R | -T | -U | -V | | | |
| | | | | | | | 71 | 80 | 90 | 100 | 112 | 132 | 80 | 90 | 100 | | | 112 |
| 213 | 6.57 | 7.5 | 312 | 1.2 | 8.8 | 380 | B | | | | | | | | | | 3018 | 01 |
| 185 | 7.56 | 7.5 | 359 | 1.1 | 7.9 | 390 | B | | | | | | | | | | 3016 | 02 |
| 159 | 8.82 | 7.5 | 419 | 1.0 | 7.1 | 410 | B | | | | | | | | | | 3014 | 03 |
| 113 | 12.39 | 7.5 | 588 | 1.0 | 7.2 | 580 | B | | | | | | | | | | 2018 | 04 |
| 98 | 14.24 | 5.5 | 499 | 1.2 | 6.4 | 600 | B | | | | | | | | | | 2016 | 05 |

C Ratio
Rapporto
Untersetzung
Rapport de réduction
Relación

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

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 |


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

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



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

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

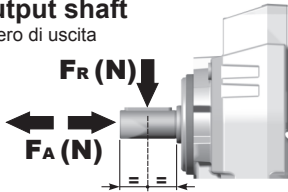
E El reductor tamaño **501C** se suministra, lubricado de por vida con aceite sintético y no requieren mantenimiento alguna. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

| 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 | | | |

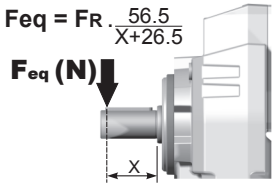
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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



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

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

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

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor $f.s.$ | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | | Available B14 motor flanges | | | | Output Shaft | Output Shaft | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|--------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|----|-----|-----------------------------|----|----|----|------------------|------------------|-----------------|
| | | | | | | | -B | -C | -D | -E | -F | -Q | -R | -T | -U | | | |
| | | | | | | | 63 | 71 | 80 | 90 | 100 | 112 | 71 | 80 | 90 | | | |
| 167 | 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 | standard | 07 |
| 63 | 22.30 | 2.2 | 317 | 1.0 | 2.2 | 320 | B | | | | | C | C | | | 1913 | ø30 | 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 | ø35 | 10 |
| 47.5 | 29.49 | 1.5 | 289 | 1.1 | 1.7 | 320 | B | | | | | C | C | | | 1318 | On request | 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 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 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

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

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

$F_{eq} (N)$

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

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

Input shaft
Albero in entrata

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

| n_1 | F_A | F_R |
|-------|-------|-------|
| 1400 | 240 | 1200 |
| 900 | 280 | 1400 |
| 500 | 340 | 1700 |

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | Available B14 motor flanges | | | Output Shaft | Ratios code |
|---|---------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|----|----|------------------|-------------|
| | | | | | | | -B | -C | -O | -P | -Q | | |
| | | | | | | | 63 | 71 | 56 | 63 | 71 | | |
| 18.8 | 74.33 | 0.37 | 176 | 1.8 | 0.67 | 320 | | | C | C | | 191313 | 01 |
| 17.0 | 82.56 | 0.37 | 196 | 1.6 | 0.60 | 320 | | | C | C | | 151318 | 02 |
| 16.0 | 87.48 | 0.37 | 207 | 1.5 | 0.57 | 320 | | | C | C | | 131713 | 03 |
| 13.8 | 101.40 | 0.37 | 240 | 1.3 | 0.49 | 320 | | | C | C | | 151313 | 04 |
| 11.4 | 122.57 | 0.37 | 291 | 1.1 | 0.41 | 320 | | | C | C | | 131313 | 05 |
| 10.1 | 138.59 | 0.37 | 329 | 1.0 | 0.36 | 320 | | | C | C | | 101318 | 06 |
| 8.7 | 160.82 | 0.25 | 257 | 1.2 | 0.31 | 320 | | | C | C | | 91713 | 07 |
| 8.2 | 170.20 | 0.25 | 272 | 1.2 | 0.29 | 320 | | | C | C | | 101313 | 08 |
| 7.6 | 183.48 | 0.25 | 294 | 1.1 | 0.27 | 320 | | | C | C | | 91318 | 09 |
| 6.5 | 214.15 | 0.18 | 262 | 1.2 | 0.23 | 320 | | | C | C | | 71713 | 10 |
| 6.2 | 225.33 | 0.18 | 276 | 1.2 | 0.22 | 320 | | | C | C | | 91313 | 11 |
| 5.7 | 244.32 | 0.18 | 299 | 1.1 | 0.20 | 320 | | | C | C | | 71318 | 12 |
| 5.5 | 254.15 | 0.18 | 311 | 1.0 | 0.20 | 320 | | | C | C | | 61713 | 13 |
| 4.8 | 289.96 | 0.18 | 355 | 0.9 | 0.17 | 320 | | | C | C | | 61318 | 14 |
| 4.7 | 300.05 | 0.18 | 367 | 0.9 | 0.17 | 320 | | | C | C | | 71313 | 15 |
| 3.9 | 356.09 | 0.12 | 282 | 1.1 | 0.14 | 320 | | | 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 |
|-------|-----|------|-------|-----|------|-------|------|------|
| 300 | 500 | 2500 | 140 | 640 | 3200 | 70 | 820 | 4100 |
| 250 | 540 | 2700 | 120 | 680 | 3400 | 40 | 1020 | 5100 |
| 200 | 580 | 2900 | 85 | 760 | 3800 | 15 | 1100 | 5500 |

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

Input shaft
Albero in entrata

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

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | B14 motor flanges | | | | Output Shaft | | |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|-----|----------------------|---|---|---|--------------|-----------------|----|
| | | | | | | | -G | 132 | - | - | - | - | - | - | - |
| 507 | 2.76 | 9 | 166 | 1.6 | 14.4 | 265 | | | not available | | | | 2980 | standard | 01 |
| 395 | 3.54 | 9 | 213 | 1.3 | 11.6 | 275 | | | | | | | 2485 | ø35 | 02 |
| 277 | 5.06 | 9 | 304 | 1.0 | 8.6 | 290 | | | | | | | 1891 | | 03 |
| 241 | 5.81 | 7.5 | 281 | 1.2 | 8.5 | 330 | | | | | | | 1693 | ø38 | 04 |
| 206 | 6.79 | 7.5 | 329 | 1.2 | 8.4 | 380 | | | | | | | 1495 | ø40 | 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 **701C** is supplied with synthetic oil for lifetime lubrication, no maintenance is necessary. See table 1 for lubrication and recommended quantity. In table 2 please see possible radial loads and axial loads on the gearbox.

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

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

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

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

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

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

| RADIAL AND AXIAL LOADS | | | | | | | | |
|---|-----|------|--------------------------------------|------|------|-------|------|------|
| Output shaft Albero di uscita | | | $F_{eq} = F_R \cdot \frac{70}{X+35}$ | | | | | |
| | | | | | | | | |
| n_2 | FA | FR | n_2 | FA | FR | n_2 | FA | FR |
| 300 | 680 | 3400 | 140 | 960 | 4800 | 70 | 1300 | 6500 |
| 250 | 760 | 3800 | 120 | 1040 | 5200 | 40 | 1460 | 7300 |
| 200 | 900 | 4500 | 85 | 1120 | 5600 | 15 | 1800 | 9000 |

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

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

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

Output shaft
Albero di uscita

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

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

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

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

Input shaft
Albero di entrata

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

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

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n₁) = 1400 min⁻¹

| Output Speed n ₂ [min ⁻¹] | Ratio i | Motor power P _{1M} [kW] | Output torque M _{2M} [Nm] | Service factor f.s. | Nominal power P _{1R} [kW] | Nominal torque M _{2R} [Nm] | Available B5 motor flanges | | | | Available B14 motor flanges | | | Output Shaft | Ratios code |
|--|---------------|--|--|------------------------|--|---|----------------------------|----|----|----|-----------------------------|----|----|------------------|-------------|
| | | | | | | | -B | -C | -D | -E | -Q | -R | -T | | |
| | | | | | | | 63 | 71 | 80 | 90 | 71 | 80 | 90 | | |
| 22.6 | 61.89 | 1.5 | 594 | 1.1 | 1.7 | 675 | B | | | | C | C | | 191318 | 01 |
| 19.7 | 71.16 | 1.5 | 683 | 1.0 | 1.5 | 675 | B | | | | C | C | | 191316 | 02 |
| 17.0 | 82.48 | 1.5 | 792 | 0.9 | 1.3 | 675 | B | | | | C | C | | 171316 | 03 |
| 14.5 | 96.29 | 1.1 | 675 | 1.0 | 1.1 | 675 | B | | | | C | C | | 171314 | 04 |
| 13.9 | 100.51 | 1.1 | 705 | 1.0 | 1.0 | 675 | B | | | | C | C | | 131318 | 05 |
| 12.1 | 115.56 | 0.75 | 556 | 1.2 | 0.91 | 675 | B | | | | C | C | | 131316 | 06 |
| 11.1 | 125.96 | 0.75 | 606 | 1.1 | 0.82 | 665 | B | | | | C | C | | 190816 | 07 |
| 10.4 | 134.91 | 0.75 | 649 | 1.0 | 0.78 | 675 | B | | | | C | C | | 131314 | 08 |
| 9.5 | 147.05 | 0.75 | 707 | 1.0 | 0.72 | 675 | B | | | | C | C | | 190814 | 09 |
| 8.2 | 170.44 | 0.55 | 605 | 1.1 | 0.62 | 675 | B | | | | C | C | | 170814 | 10 |
| 7.6 | 184.15 | 0.55 | 653 | 1.0 | 0.57 | 675 | B | | | | C | C | | 101314 | 11 |
| 6.8 | 205.87 | 0.55 | 730 | 0.9 | 0.51 | 675 | B | | | | C | C | | 91316 | 12 |
| 5.8 | 240.34 | 0.37 | 570 | 1.2 | 0.44 | 675 | B | | | | C | C | | 91314 | 13 |
| 5.0 | 279.22 | 0.37 | 662 | 1.0 | 0.37 | 665 | B | | | | C | C | | 100816 | 14 |
| 4.3 | 325.97 | 0.37 | 773 | 0.9 | 0.32 | 675 | B | | | | C | C | | 100814 | 15 |
| 3.8 | 364.41 | 0.25 | 583 | 1.1 | 0.28 | 665 | B | | | | C | C | | 90816 | 16 |
| 3.3 | 425.43 | 0.25 | 681 | 1.0 | 0.25 | 675 | B | | | | C | C | | 90814 | 17 |
| 2.9 | 481.19 | 0.18 | 589 | 1.1 | 0.22 | 665 | B | | | | C | C | | 70816 | 18 |
| 2.5 | 561.76 | 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 | | | | | |
|---------------------|---|---------|-----------------------|---------|---------|-----|
| | | | | | | |
| 2.20 LT | 1.40 LT | 1.40 LT | 1.30 LT | 2.40 LT | 1.70 LT | Ask |
| AGIP Telium VSF 320 | | | SHELL Omala S4 WE 320 | | | |

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

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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

| n ₂ | FA | FR | n ₂ | FA | FR | n ₂ | FA | FR |
|----------------|-----|------|----------------|------|------|----------------|------|------|
| 300 | 680 | 3400 | 140 | 960 | 4800 | 70 | 1300 | 6500 |
| 250 | 760 | 3800 | 120 | 1040 | 5200 | 40 | 1460 | 7300 |
| 200 | 900 | 4500 | 85 | 1120 | 5600 | 15 | 1800 | 9000 |

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

Input shaft
Albero in entrata

| n ₁ | FA | FR |
|----------------|-----|------|
| 1400 | 240 | 1200 |
| 900 | 280 | 1400 |
| 500 | 310 | 1700 |

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | B14 motor flanges | | | | Output Shaft | | |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|--|--|--|----------------------|--|--|--|--------------|-----------------|----|
| | | | | | | | -G | | | | | | | | | | |
| 227 | 6.17 | 9 | 371 | 1.2 | 10.9 | 450 | | | | | not available | | | | 18111 | standard | 01 |
| 198 | 7.06 | 9 | 425 | 1.4 | 12.7 | 600 | | | | | | | | | 16113 | ø40 | 02 |
| 170 | 8.21 | 9 | 494 | 1.4 | 12.2 | 670 | | | | | | | | | 14115 | ø50 | 03 |
| | | | | | | | | | | | On request | | | | | | |

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

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

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 | | | | | | |

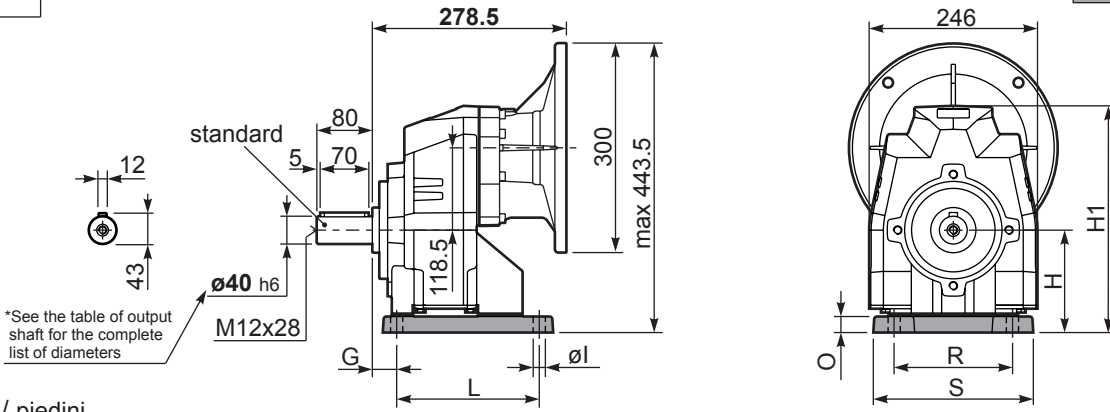
For all details on lubrication and plugs check our website **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

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

tab. 2

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

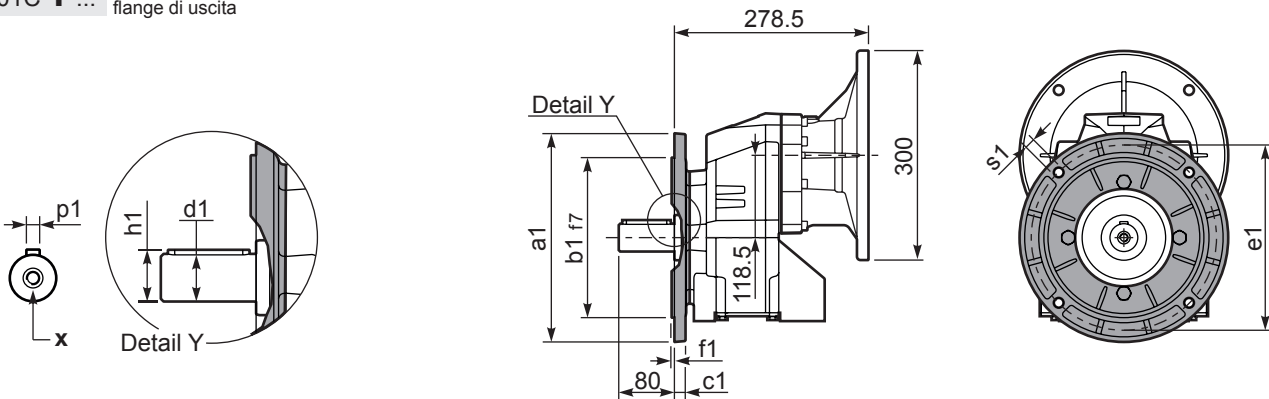
Gearbox weight
peso riduttore With flange **45.5 kg**
With feet **49.5 kg**



Feet / piedini

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

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



*Available output shaft / Alberi di uscita

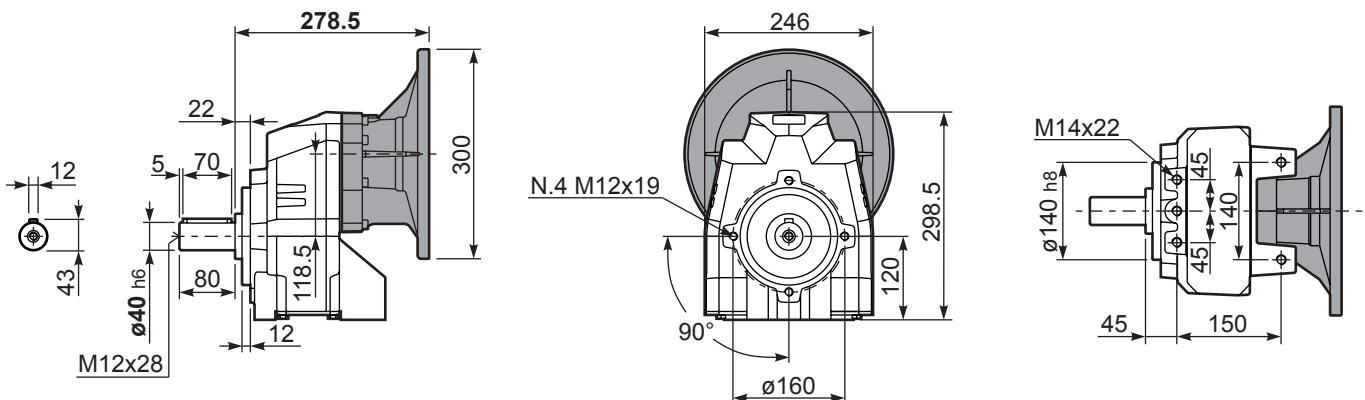
| | Shaft - d1 | p1 | h1 | x |
|---------------------------|------------|----|------|--------|
| Standard | ø 40x80 | 12 | 43 | M12x28 |
| On request A richiesta | ø 50x100 | 14 | 53.5 | M16x36 |
| - | - | - | - | - |

Available output flanges / flange di uscita

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

With flange and feet only on request. Ask for compatibility

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





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | | 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 | | | |
| 175 | 8.02 | 9 | 473 | 1.1 | 9.9 | 520 | B | | | | | | | | | | 3018 | 01 |
| 152 | 9.18 | 9 | 541 | 1.1 | 9.8 | 590 | B | | | | | | | | | | 3016 | 02 |
| 131 | 10.68 | 9 | 630 | 1.1 | 9.7 | 680 | B | | | | | | | | | | 3014 | 03 |
| 93 | 15.11 | 7.5 | 717 | 1.1 | 7.8 | 775 | B | | | | | | | | | | 2018 | 04 |
| 81 | 17.30 | 7.5 | 821 | 1.1 | 7.8 | 885 | B | | | | | | | | | | 2016 | 05 |
| 70 | 20.13 | 7.5 | 955 | 0.9 | 6.8 | 900 | B | | | | | | | | | | 2014 | 06 |
| 60 | 23.39 | 5.5 | 820 | 1.1 | 5.9 | 900 | B | | | | | | | | | | 1616 | 07 |
| 51 | 27.21 | 5.5 | 954 | 0.9 | 5.1 | 900 | B | | | | | | | | | | 1614 | 08 |
| 46.0 | 30.42 | 4 | 780 | 1.2 | 4.5 | 900 | B | | | | | | | | | | 1316 | 09 |
| 39.6 | 35.38 | 4 | 907 | 1.0 | 3.9 | 900 | B | | | | | | | | | | 1314 | 10 |
| 37.6 | 37.24 | 3 | 719 | 1.2 | 3.7 | 895 | B | | | | | | | | | | 1116 | 11 |
| 32.3 | 43.31 | 3 | 836 | 1.1 | 3.2 | 900 | B | | | | | | | | | | 1114 | 12 |
| 29.8 | 47.02 | 2.2 | 668 | 1.1 | 2.3 | 705 | B | | | | | | | | | | 818 | 13 |
| 26.0 | 53.85 | 2.2 | 765 | 1.1 | 2.3 | 810 | B | | | | | | | | | | 816 | 14 |
| 22.4 | 62.63 | 2.2 | 890 | 1.0 | 2.2 | 900 | B | | | | | | | | | | 814 | 15 |
| 18.9 | 74.16 | 1.1 | 531 | 1.1 | 1.2 | 585 | B | | | | | | | | | | 616 | 16 |
| 16.2 | 86.25 | 1.1 | 617 | 1.1 | 1.2 | 680 | B | | | | | | | | | | 614 | 17 |

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

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

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

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

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

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

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

AGIP Blasias 460

For all details on lubrication and plugs check our website **tab. 1**
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RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

F_R (N)
 F_A (N)

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

F_{eq} (N)

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

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

Input shaft
Albero in entrata

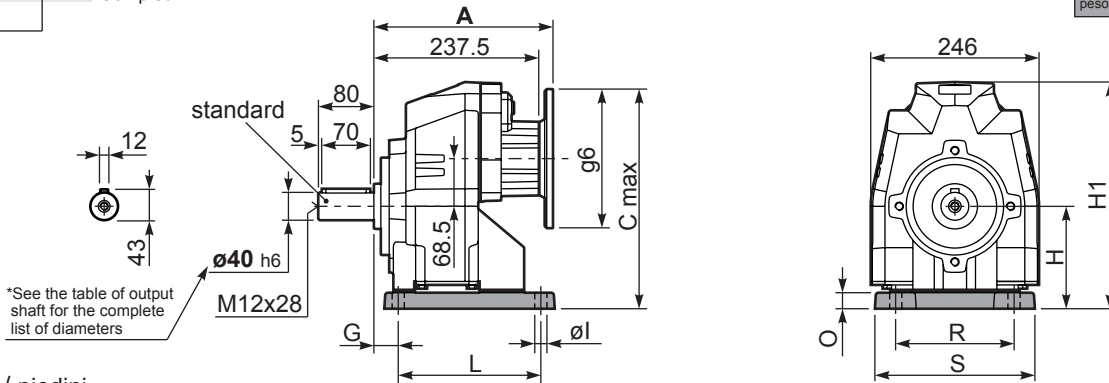
F_R (N)
 F_A (N)

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

tab. 2

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

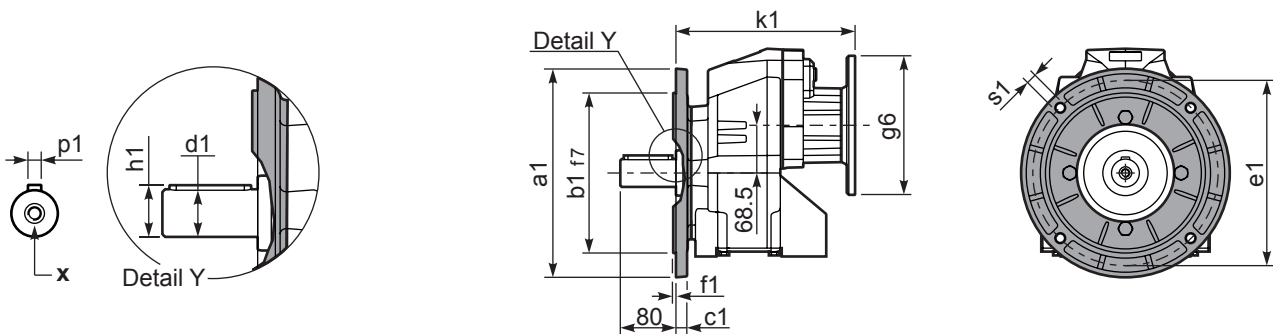
Gearbox weight **39.5 kg**
peso riduttore With flange
With feet **43.5 kg**



Feet / piedini

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

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



*Available output shaft / Albero di uscita

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

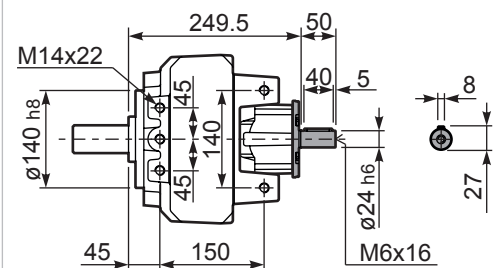
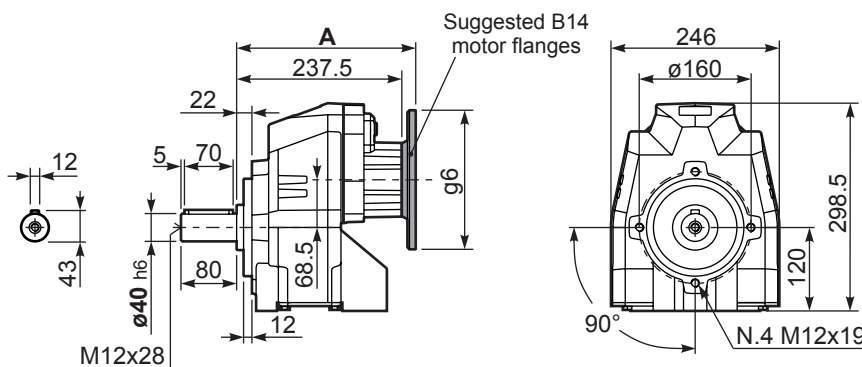
Available output flanges / flange di uscita

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

With flange and feet only on request. Ask for compatibility

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

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



| B5 Motor Flanges | A | C _{max} | 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 _{max} | 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⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | 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 | 75.50 | 1.5 | 725 | 1.1 | 1.7 | 825 | B | | | | C | C | | 191318 | 01 |
| 16.2 | 86.47 | 1.5 | 830 | 1.1 | 1.6 | 900 | B | | | | C | C | | 191316 | 02 |
| 14.0 | 100.22 | 1.5 | 962 | 0.9 | 1.4 | 900 | B | | | | C | C | | 171316 | 03 |
| 12.0 | 116.56 | 1.1 | 817 | 1.1 | 1.2 | 900 | B | | | | C | C | | 171314 | 04 |
| 10.2 | 136.82 | 1.1 | 959 | 0.9 | 1.0 | 900 | B | | | | C | C | | 151314 | 05 |
| 9.1 | 153.05 | 0.75 | 736 | 1.1 | 0.83 | 810 | B | | | | C | C | | 190816 | 06 |
| 8.6 | 163.31 | 0.75 | 785 | 1.1 | 0.86 | 900 | B | | | | C | C | | 131314 | 07 |
| 7.9 | 178.01 | 0.75 | 856 | 1.1 | 0.79 | 900 | B | | | | C | C | | 190814 | 08 |
| 7.3 | 191.67 | 0.75 | 922 | 1.0 | 0.73 | 900 | B | | | | C | C | | 101316 | 09 |
| 6.8 | 206.32 | 0.75 | 992 | 0.9 | 0.68 | 900 | B | | | | C | C | | 170814 | 10 |
| 6.3 | 222.92 | 0.55 | 791 | 1.1 | 0.63 | 900 | B | | | | C | C | | 101314 | 11 |
| 5.8 | 242.18 | 0.55 | 859 | 1.0 | 0.58 | 900 | B | | | | C | C | | 150814 | 12 |
| 5.6 | 250.15 | 0.55 | 888 | 1.0 | 0.56 | 900 | B | | | | C | C | | 91316 | 13 |
| 4.8 | 289.08 | 0.55 | 1026 | 0.9 | 0.49 | 900 | B | | | | C | C | | 130814 | 14 |
| 4.2 | 330.31 | 0.37 | 783 | 1.1 | 0.42 | 890 | B | | | | C | C | | 71316 | 15 |
| 3.5 | 394.59 | 0.37 | 936 | 1.0 | 0.36 | 900 | B | | | | C | C | | 100814 | 16 |
| 2.7 | 514.99 | 0.25 | 824 | 1.1 | 0.27 | 900 | B | | | | C | C | | 90814 | 17 |
| 2.1 | 680.03 | 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 Blasias 460

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

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

F_R (N)
 F_A (N)

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

F_{eq} (N)

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

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

Input shaft
Albero in entrata

F_R (N)
 F_A (N)

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

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

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

A Motor Flanges Available
Flange Motore Disponibili

B Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C Motor Flange Holes Position
Posizione Fori Flangia Motore

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

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

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

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

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

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

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

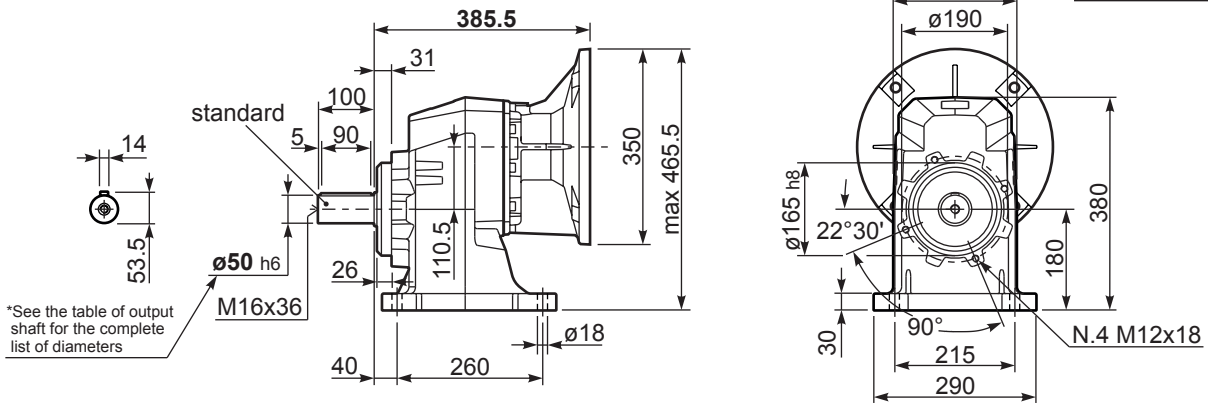
| n_2 | FA | FR | n_2 | FA | FR | n_2 | FA | FR |
|-------|------|-------|-------|------|-------|-------|------|-------|
| 300 | 1800 | 9000 | 140 | 2400 | 12000 | 70 | 3000 | 15000 |
| 250 | 2000 | 10000 | 120 | 2600 | 13000 | 40 | 3200 | 16000 |
| 200 | 2200 | 11000 | 85 | 2800 | 14000 | 15 | 4000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

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

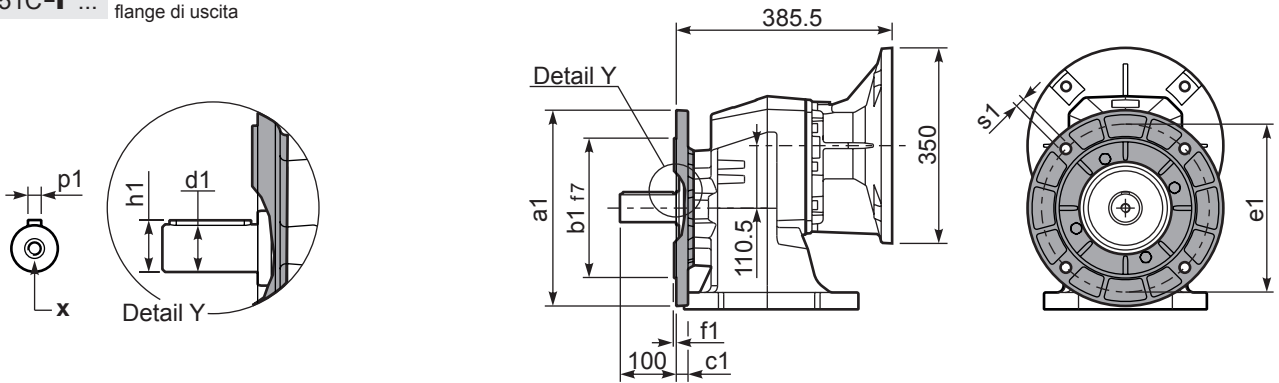
tab. 2

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

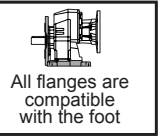


*Available output shaft / Albero di uscita

| | 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 |
| - | | - | - | - | - | - | - |





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

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

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

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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.

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

AGIP Blasias 460

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

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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

$F_{eq} (N)$

| 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.

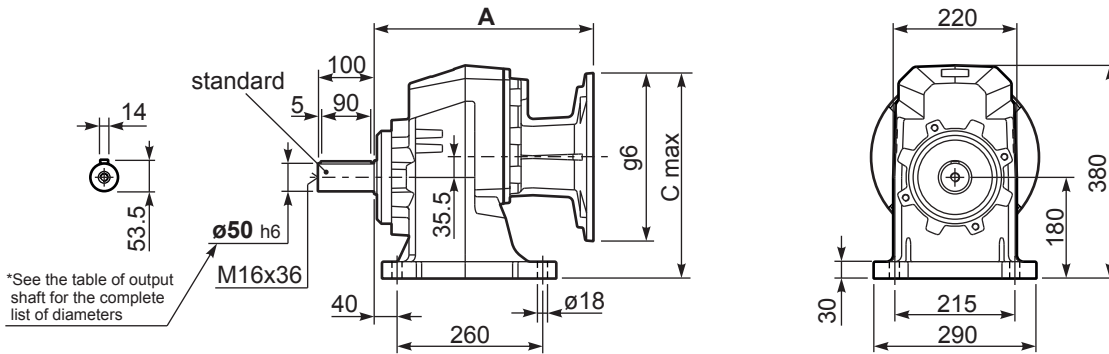
Input shaft
Albero in entrata

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

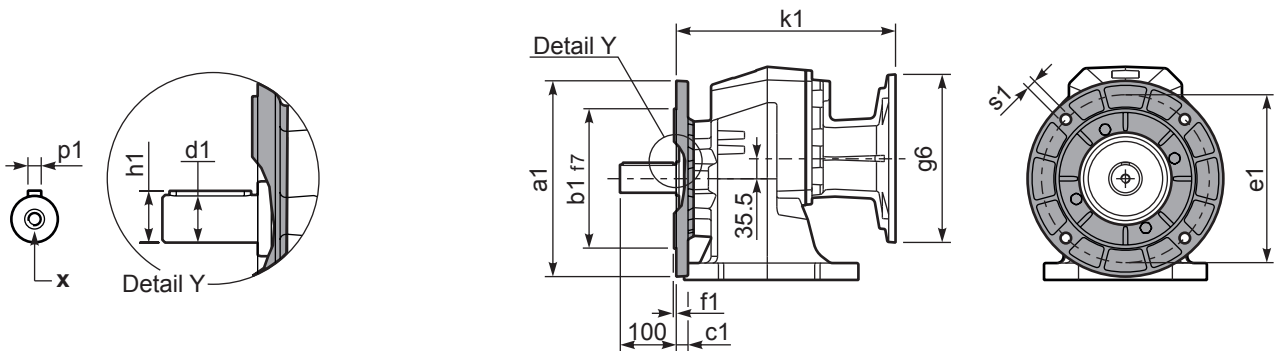
tab. 2

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

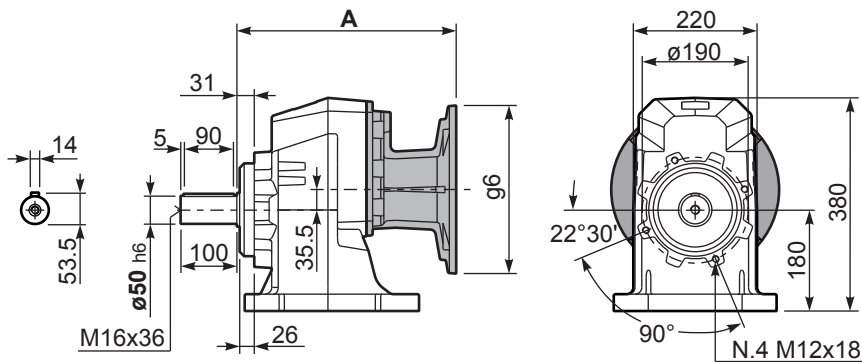
| | Shaft - d1 | p1 | h1 | x |
|---------------------------|------------|----|------|--------|
| Standard | ø 50x100 | 14 | 53.5 | M16x36 |
| On request A richiesta | ø 60x120 | 18 | 64 | M20x42 |
| | - | - | - | - |

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 |
| - | - | - | - | - | - | - |

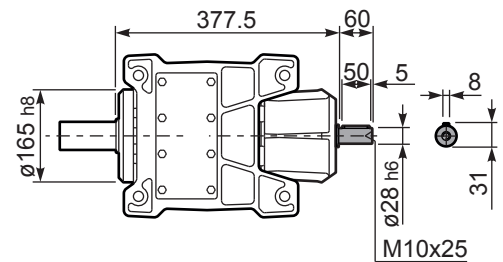
All flanges are compatible with the foot

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



| B5 Motor Flanges | A | C _{max} | 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⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor $f.s.$ | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | | Available B14 motor flanges | | | | Output Shaft | Ratios code | | |
|---|---------------|---------------------------------|-----------------------------------|--------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|------------|-----|-----------------------------|----|------------|-----|------------------|-----------------|------------|----|
| | | | | | | | -C | -D | -E | -F | -G | -R | -T | -U | -V | | | | |
| | | | | | | | 71 | 80 | 90 | 100 112 | 132 | 80 | 90 | 100 112 | 132 | | | | |
| 32.5 | 43.03 | 5.5 | 1478 | 1.1 | 5.8 | 1600 | B | | | | | | | | | 201313 | standard ø50 | 01 | |
| 28.9 | 48.52 | 5.5 | 1667 | 0.9 | 5.0 | 1550 | B | | | | | | | | | 161315 | | 02 | |
| 27.0 | 51.81 | 4 | 1302 | 1.2 | 4.8 | 1600 | B | | | | | | | | | 201311 | | 03 | |
| 24.1 | 58.17 | 4 | 1462 | 1.1 | 4.3 | 1600 | B | | | | | | | | | 161313 | | 04 | |
| 22.2 | 63.09 | 4 | 1585 | 1.0 | 3.8 | 1550 | B | | | | | | | | | 131315 | | 05 | |
| 20.0 | 70.05 | 4 | 1760 | 1.0 | 4.0 | 1800 | B | | | | | | | | | 161311 | | 06 | |
| 18.5 | 75.65 | 4 | 1901 | 0.9 | 3.7 | 1800 | B | | | | | | | | | 131313 | | ø60 | 07 |
| 15.4 | 91.09 | 3 | 1723 | 1.0 | 3.1 | 1800 | B | | | | | | | | | 131311 | | On request | 08 |
| 12.6 | 111.50 | 2.2 | 1553 | 1.2 | 2.5 | 1800 | B | | | | | | | | | 111311 | | 09 | |
| 10.5 | 133.91 | 2.2 | 1865 | 1.0 | 2.1 | 1800 | B | | | | | | | | | 81313 | | 10 | |
| 8.7 | 161.24 | 1.5 | 1548 | 1.2 | 1.7 | 1800 | B | | | | | | | | | 81311 | | 11 | |
| 7.6 | 184.40 | 1.1 | 1293 | 1.1 | 1.2 | 1450 | B | | | | | | | | | 61313 | | 12 | |
| 6.3 | 222.04 | 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.

| B3 | B6 | B7 | B8 | V5 | V6 | V8 |
|------------------|---------|---------|---------|---------|---------|-----|
| 5.50 LT | 3.80 LT | 3.80 LT | 3.20 LT | 7.00 LT | 4.60 LT | Ask |
| AGIP Blasias 460 | | | | | | |

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

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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

| 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



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | B14 motor flanges | | | | Output Shaft | | |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|-----|----------------------|---|---|---|--------------|-----------------|-------------|
| | | | | | | | -H | -I | - | - | - | - | | | Ratios code |
| | | | | | | | 160 | 180 | - | - | - | - | | | |
| 528 | 2.65 | 22 | 374 | 1.7 | 36.7 | 650 | | | not available | | | | 2361 | standard | 01 |
| 409 | 3.42 | 22 | 483 | 1.6 | 32.8 | 750 | | | | | | | 1965 | ø60 | 02 |
| 304 | 4.60 | 22 | 649 | 1.5 | 30.9 | 950 | | | | | | | 1569 | | 03 |
| 256 | 5.46 | 22 | 771 | 1.3 | 27.4 | 1000 | | | | | | | 1371 | ø50 | 04 |
| 211 | 6.64 | 22 | 937 | 1.3 | 26.5 | 1175 | | | | | | | 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 **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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

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

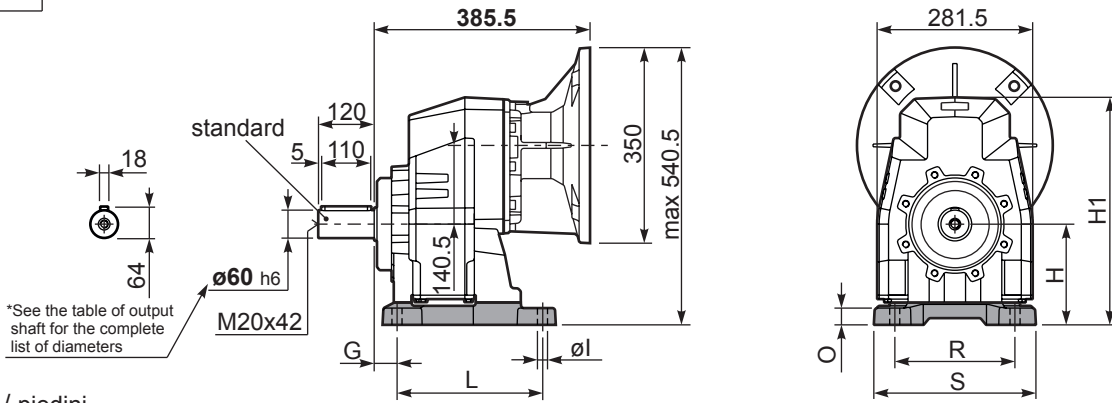
| n_2 | FA | FR | n_2 | FA | FR | n_2 | FA | FR |
|-------|------|-------|-------|------|-------|-------|------|-------|
| 300 | 2070 | 10350 | 140 | 2760 | 13800 | 70 | 3450 | 17250 |
| 250 | 2300 | 11500 | 120 | 2990 | 14950 | 40 | 3680 | 18400 |
| 200 | 2530 | 12650 | 85 | 3220 | 16100 | 15 | 4600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

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

tab. 2

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

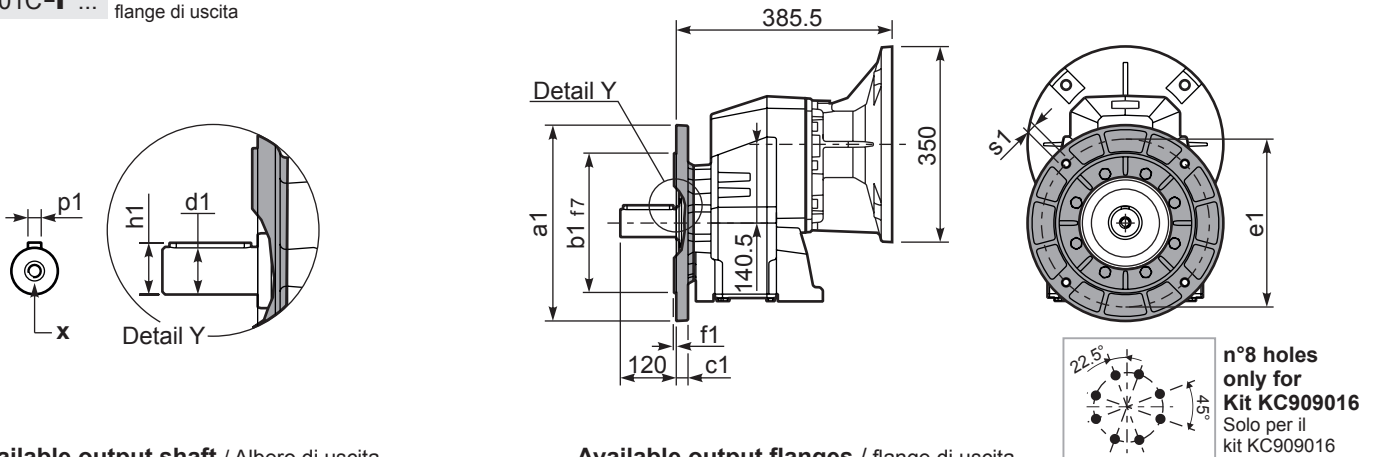
Gearbox weight **102 kg**
peso riduttore With flange
With feet **110.5 kg**



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

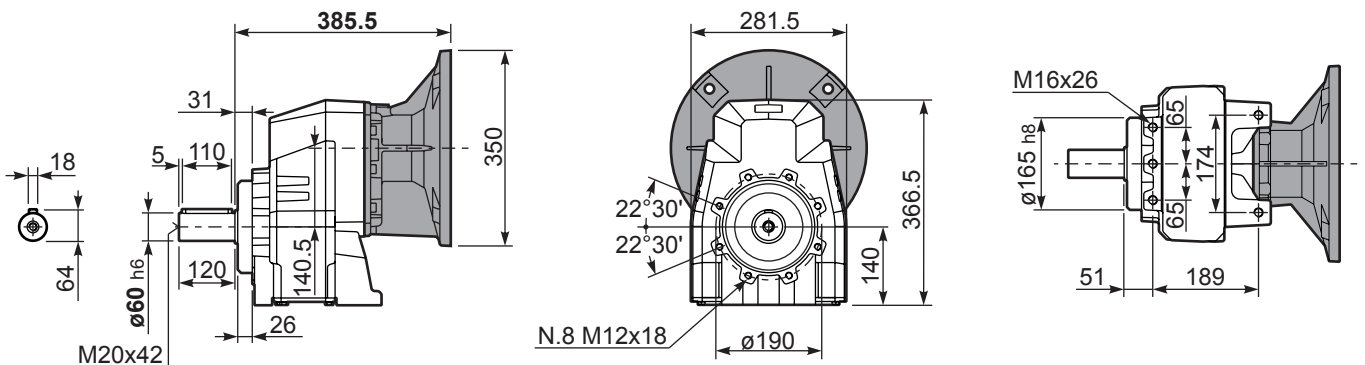
| | Shaft - d1 | p1 | h1 | x |
|---------------------------|------------|----|------|--------|
| Standard | ø 60x120 | 18 | 64 | M20x42 |
| On request A richiesta | ø 50x100 | 14 | 53.5 | M16x36 |
| | - | - | - | - |

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⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor $f.s.$ | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | B5 motor flanges | | | | B14 motor flanges | | | | Output Shaft | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|--------------------------|-----------------------------------|------------------------------------|---------------------|-----|-----|-----|----------------------|---|---|------|------------------|-------------|
| | | | | | | | -F | -G | -H | -I | - | - | - | - | | |
| | | | | | | | 100 112 | 132 | 160 | 180 | - | - | - | - | | |
| 234 | 5.98 | 22 | 827 | 1.2 | 25.5 | 1000 | B | | | | | | | 3015 | 01 | |
| 197 | 7.10 | 22 | 982 | 1.2 | 25.3 | 1175 | B | | | | | | | 3013 | 02 | |
| 162 | 8.63 | 22 | 1193 | 1.1 | 23.9 | 1350 | B | | | | | | | 3011 | 03 | |
| 124 | 11.27 | 18.5 | 1310 | 1.1 | 20.3 | 1500 | B | | | | | | | 2015 | 04 | |
| 105 | 13.38 | 18.5 | 1555 | 1.1 | 19.4 | 1700 | B | | | | | | | 2013 | 05 | |
| 92 | 15.24 | 18.5 | 1771 | 1.1 | 19.0 | 1900 | B | | | | | | | 1615 | 06 | |
| 86 | 16.26 | 18.5 | 1889 | 1.1 | 19.7 | 2100 | B | | | | | | | 2011 | 07 | |
| 77 | 18.09 | 18.5 | 2102 | 1.0 | 17.7 | 2100 | B | | | | | | | 1613 | 08 | |
| 71 | 19.82 | 15 | 1865 | 1.1 | 15.9 | 2060 | B | | | | | | | 1315 | 09 | |
| 64 | 21.98 | 15 | 2069 | 1.0 | 14.6 | 2100 | B | | | | | | | 1611 | 10 | |
| 60 | 23.53 | 15 | 2214 | 0.9 | 13.6 | 2100 | B | | | | | | | 1313 | 11 | |
| 58 | 24.25 | 11 | 1677 | 1.2 | 12.2 | 1940 | B | | | | | | | 1115 | 12 | |
| 48.6 | 28.80 | 11 | 1991 | 1.1 | 11.1 | 2100 | B | | | | | | | 1113 | 13 | |
| 40.0 | 34.99 | 9 | 2063 | 1.0 | 9.2 | 2100 | B | | | | | | | 1111 | 14 | |
| 33.6 | 41.64 | 7.5 | 1976 | 1.0 | 7.2 | 1960 | B | | | | | | | 813 | 15 | |
| 27.7 | 50.60 | 5.5 | 1774 | 1.2 | 6.3 | 2100 | B | | | | | | | 811 | 16 | |

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

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

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

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

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

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

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

| | | | | | | |
|---------|---------|---------|---------|---------|---------|-----|
| | | | | | | |
| 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
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web **tab. 1**

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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

Input shaft
Albero in entrata

| n_2 | FA | FR | n_2 | FA | FR | n_2 | FA | FR |
|------------|------|-------|------------|------|-------|-----------|------|-------|
| 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 |

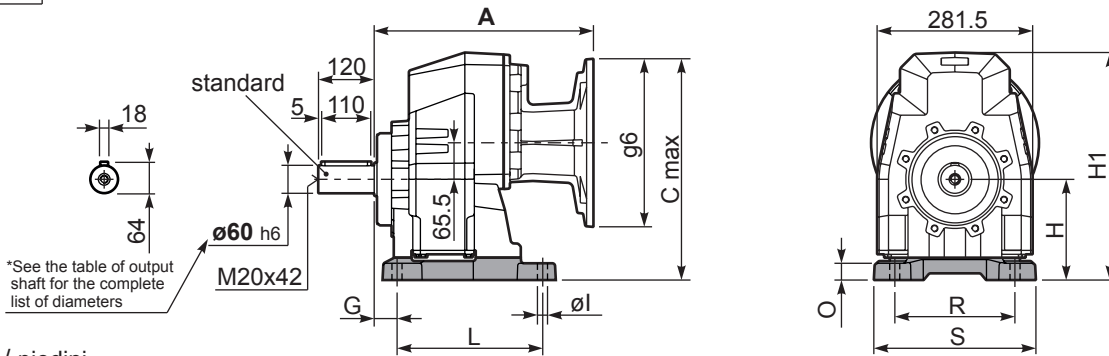
On request reinforced bearings to increase loads.
A richiesta cuscinetti rinforzati per aumentare i carichi.

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

tab. 2

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

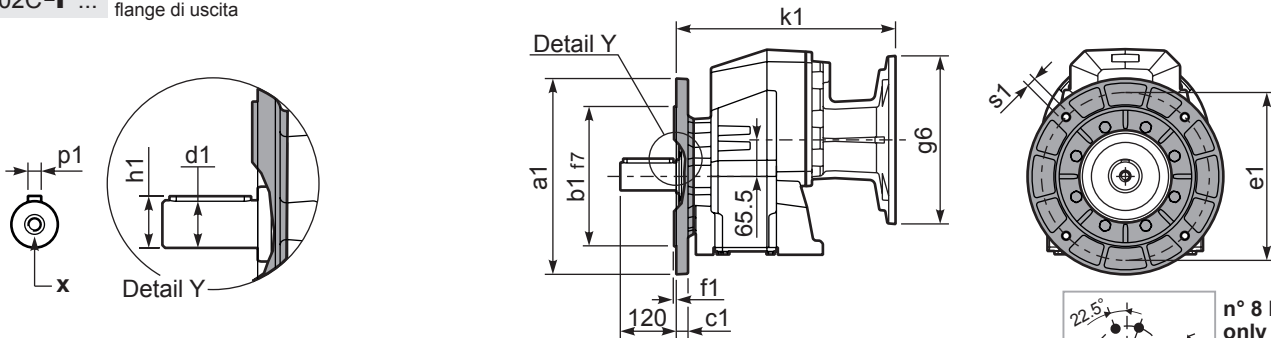
Gearbox weight **98.5 kg**
peso riduttore With flange
With feet **107.0 kg**



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 |
| | - | - | - | - |

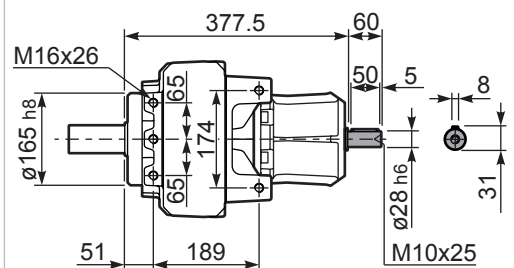
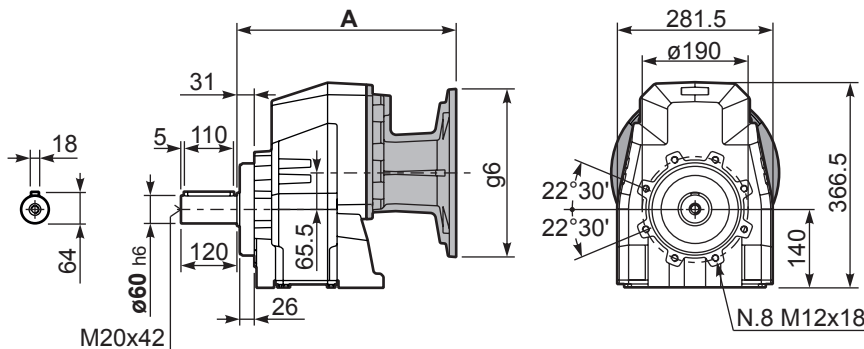
Available output flanges / flange di uscita

| 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 |

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 _{max} | 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⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | | 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 | 48.55 | 7.5 | 2257 | 0.9 | 6.7 | 2100 | B | | | | | | | | | 201315 | 01 |
| 24.3 | 57.64 | 5.5 | 1980 | 1.1 | 5.7 | 2100 | B | | | | | | | | | 201313 | 02 |
| 21.3 | 65.64 | 5.5 | 2255 | 0.9 | 5.0 | 2100 | B | | | | | | | | | 161315 | 03 |
| 20.0 | 70.04 | 4 | 1760 | 1.2 | 4.7 | 2100 | B | | | | | | | | | 201311 | 04 |
| 18.0 | 77.93 | 4 | 1958 | 1.1 | 4.2 | 2100 | B | | | | | | | | | 161313 | 05 |
| 16.4 | 85.36 | 4 | 2145 | 1.0 | 3.8 | 2100 | B | | | | | | | | | 131315 | 06 |
| 14.8 | 94.70 | 4 | 2380 | 0.9 | 3.5 | 2100 | B | | | | | | | | | 161311 | 07 |
| 13.8 | 101.35 | 3 | 1917 | 1.1 | 3.2 | 2100 | B | | | | | | | | | 131313 | 08 |
| 11.4 | 123.15 | 3 | 2330 | 0.9 | 2.7 | 2100 | B | | | | | | | | | 131311 | 09 |
| 9.3 | 150.73 | 2.2 | 2100 | 1.0 | 2.2 | 2100 | B | | | | | | | | | 111311 | 10 |
| 7.8 | 179.39 | 1.5 | 1722 | 1.2 | 1.8 | 2100 | B | | | | | | | | | 81313 | 11 |
| 6.4 | 217.98 | 1.5 | 2093 | 1.0 | 1.5 | 2100 | B | | | | | | | | | 81311 | 12 |
| 5.7 | 247.03 | 1.1 | 1732 | 1.1 | 1.2 | 1950 | B | | | | | | | | | 61313 | 13 |
| 4.7 | 300.17 | 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 |

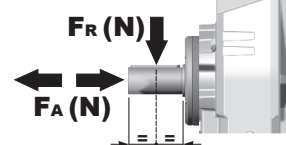
AGIP Blasias 460

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

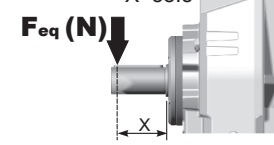
tab. 1

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



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

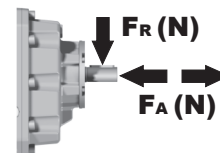


| n_2 | FA | FR | n_2 | FA | FR | n_2 | FA | FR |
|-------|------|-------|-------|------|-------|-------|------|-------|
| 300 | 2070 | 10350 | 140 | 2760 | 13800 | 70 | 3450 | 17250 |
| 250 | 2300 | 11500 | 120 | 2990 | 14950 | 40 | 3680 | 18400 |
| 200 | 2530 | 12650 | 85 | 3220 | 16100 | 15 | 4600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

On request reinforced bearings to increase loads.

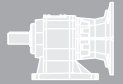
A richiesta cuscinetti rinforzati per aumentare i carichi.

Input shaft
Albero di entrata



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

tab. 2



QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor $f.s.$ | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | B5 motor flanges | | | | B14 motor flanges | | | | Output Shaft \emptyset | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|--------------------------|-----------------------------------|------------------------------------|---------------------|-----|-----|-----|----------------------|---|---|------|---------------------------------|-----------------|
| | | | | | | | -G | -H | -I | -L | - | - | - | - | | |
| | | | | | | | 132 | 160 | 180 | 200 | - | - | - | - | | |
| 294 | 4.75 | 30 | 895 | 1.8 | 53.0 | 1650 | | | | | | | | 3914 | 01 | |
| 269 | 5.21 | 30 | 980 | 1.8 | 51.3 | 1750 | | | | | | | | 3913 | 02 | |
| 220 | 6.36 | 30 | 1197 | 1.6 | 45.6 | 1900 | | | | | | | | 3911 | 03 | |
| 188 | 7.45 | 30 | 1401 | 1.5 | 43.1 | 2100 | | | | | | | | 3014 | 04 | |
| 172 | 8.15 | 30 | 1535 | 1.4 | 39.3 | 2100 | | | | | | | | 3013 | 05 | |
| 141 | 9.96 | 30 | 1874 | 1.2 | 33.7 | 2200 | | | | | | | | 3011 | 06 | |
| 120 | 11.69 | 30 | 2200 | 1.0 | 30.1 | 2300 | | | | | | | | 2214 | 07 | |
| 109 | 12.80 | 30 | 2409 | 1.0 | 27.4 | 2300 | | | | | | | | 2213 | 08 | |
| 90 | 15.63 | 22 | 2161 | 1.1 | 23.5 | 2400 | | | | | | | | 2211 | 09 | |
| 79 | 17.65 | 22 | 2441 | 1.1 | 22.5 | 2600 | | | | | | | | 1614 | 10 | |
| 72 | 19.33 | 22 | 2673 | 1.1 | 22.9 | 2900 | | | | | | | | 1613 | 11 | |
| 67 | 20.77 | 22 | 2872 | 1.0 | 21.3 | 2900 | | | | | | | | 1414 | 12 | |
| 62 | 22.75 | 18.5 | 2643 | 1.1 | 19.5 | 2900 | | | | | | | | 1413 | 13 | |
| 59 | 23.60 | 18.5 | 2743 | 1.1 | 18.8 | 2900 | | | | | | | | 1611 | 14 | |
| 50 | 27.78 | 15 | 2615 | 1.1 | 15.9 | 2900 | | | | | | | | 1411 | 15 | |
| 45.5 | 30.76 | 15 | 2896 | 1.0 | 14.4 | 2900 | | | | | | | | 1014 | 16 | |
| 41.6 | 33.69 | 11 | 2330 | 1.2 | 13.1 | 2900 | | | | | | | | 1013 | 17 | |
| 34.0 | 41.15 | 11 | 2845 | 1.0 | 10.8 | 2900 | | | | | | | | 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 **tab. 1**
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita

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

F_R (N)
 F_A (N)

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 |

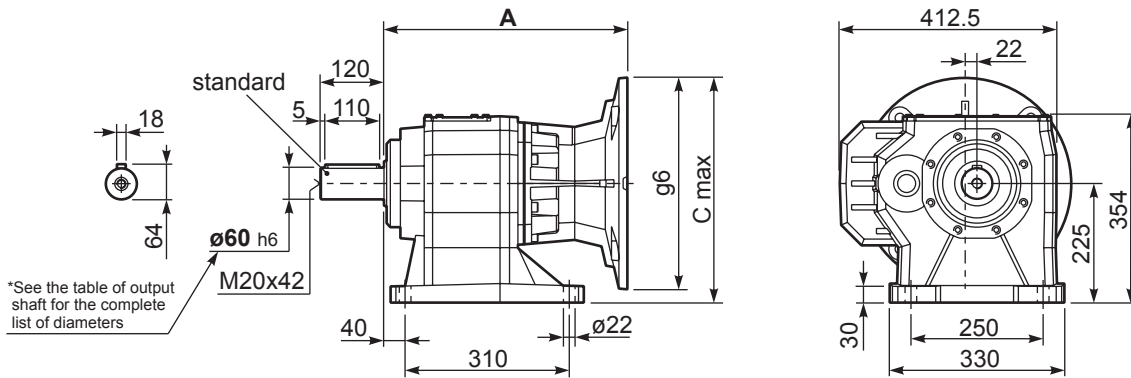
Input shaft
Albero in entrata

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

tab. 2

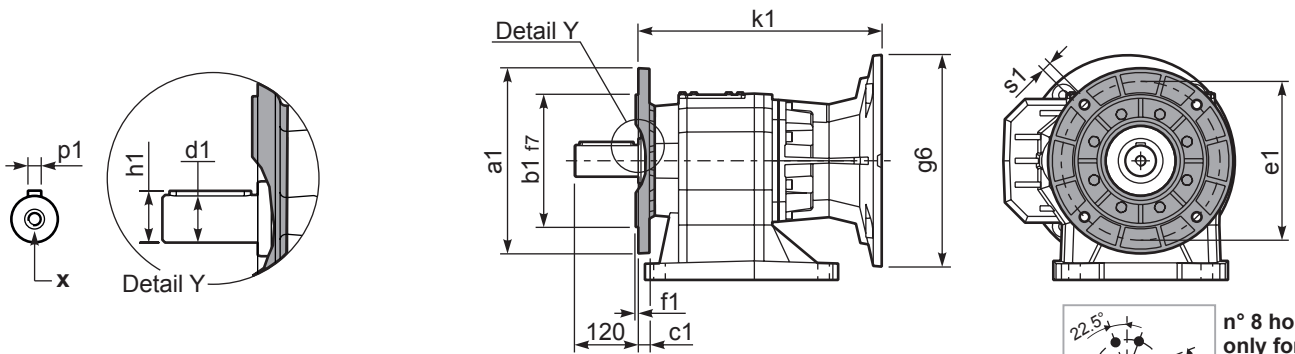
P1002**S9**... With foot
Con piedino

Gearbox weight **120.0 kg**
peso riduttore



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

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

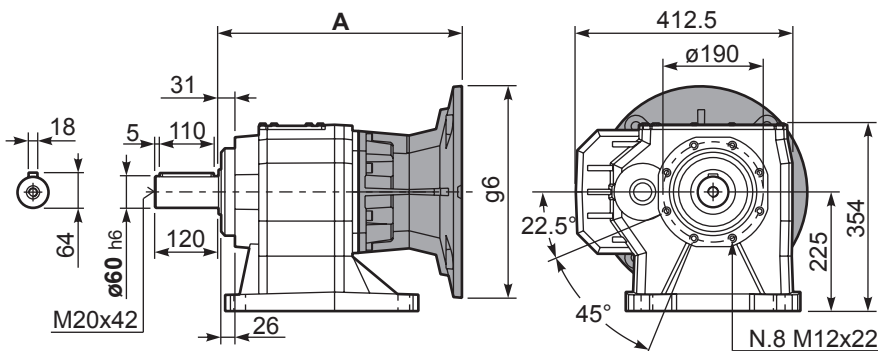
| | Shaft - d1 | p1 | h1 | x |
|---------------------------|------------|----|----|--------|
| Standard | Ø 60x120 | 18 | 64 | M20x42 |
| On request A richiesta | - | - | - | - |

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 |

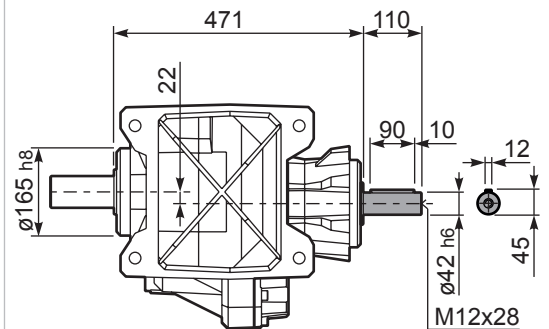
All flanges are compatible with the foot

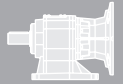
P1002**S9**... Basic gearbox
Riduttore base



| B5 Motor Flanges | A | C _{max} | 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 |

R1002**S9**... Input Shaft
Albero in entrata





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

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

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 **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

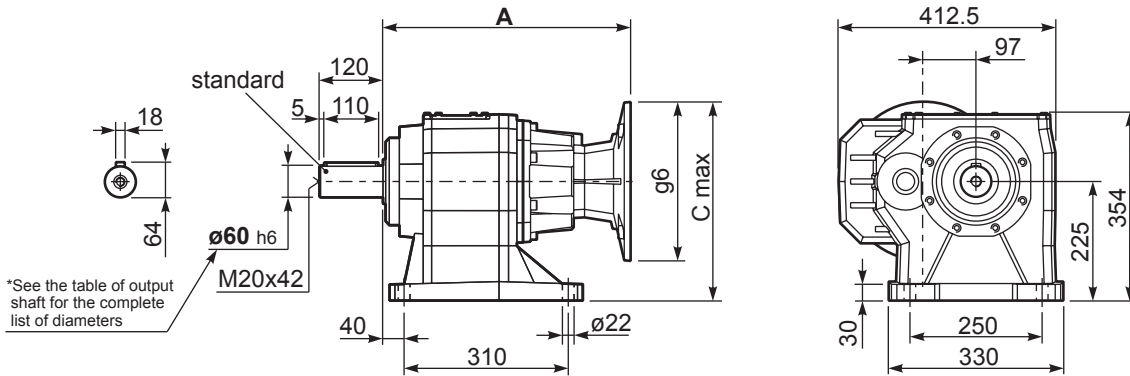
| n_2 | FA | FR | n_2 | FA | FR | n_2 | FA | FR |
|-------|------|-------|-------|------|-------|-------|------|-------|
| 300 | 2300 | 11500 | 140 | 2980 | 14900 | 70 | 3660 | 18300 |
| 250 | 2480 | 12400 | 120 | 3180 | 15900 | 40 | 4220 | 21100 |
| 200 | 2680 | 13400 | 85 | 3440 | 17200 | 15 | 4820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

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

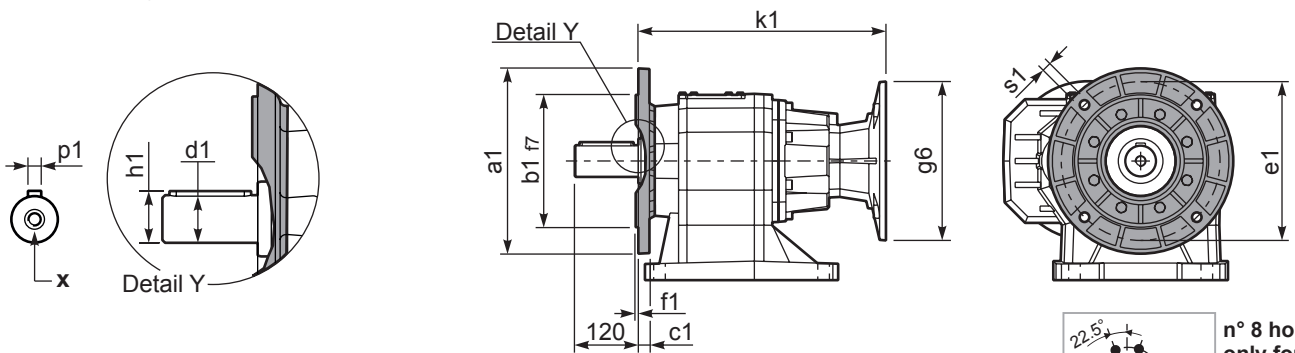
tab. 2

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

Gearbox weight **116 kg**
peso riduttore



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 | - | - | - | - |

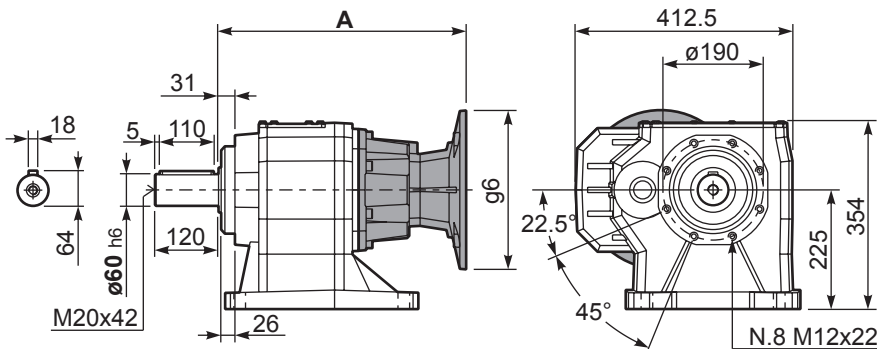
Available output flanges / flange di uscita

| 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

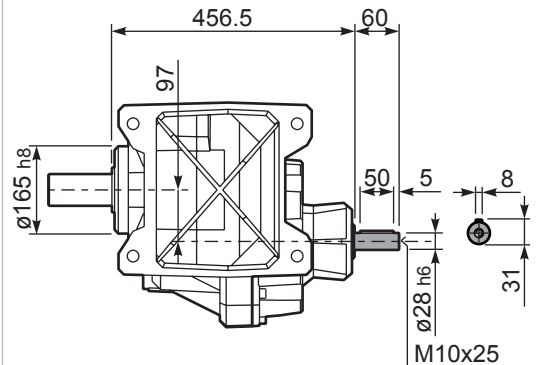
All flanges are compatible with the foot

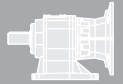
P1003**S9**... Basic gearbox
Riduttore base



| B5 Motor Flanges | A | C _{max} | 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 di entrata





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

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

Output shaft
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 |

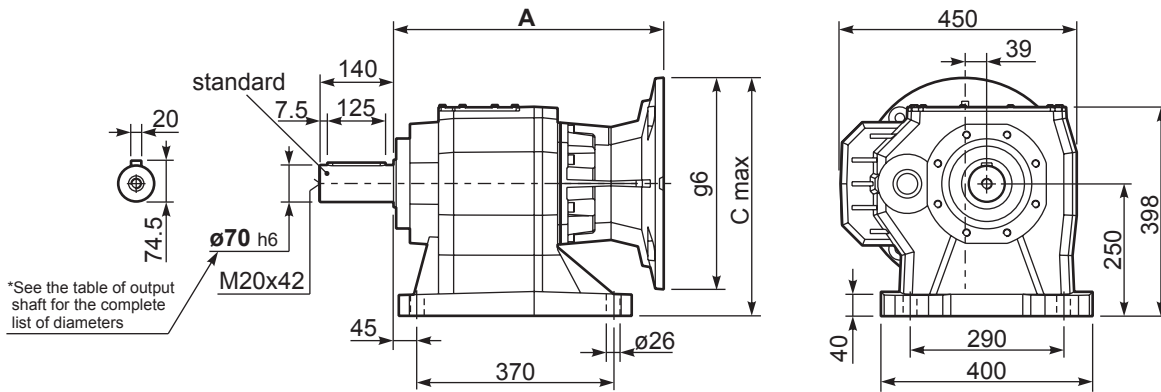
Input shaft
Albero in entrata

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

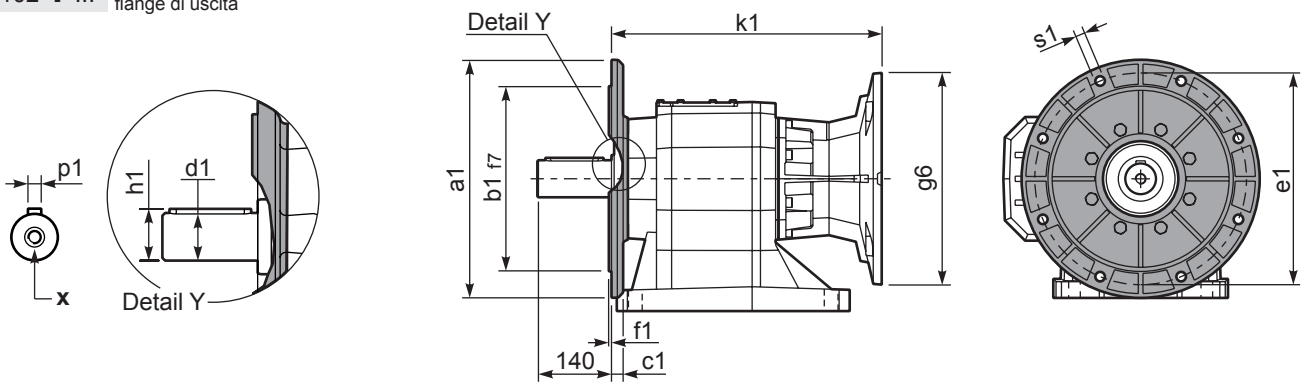
tab. 2

P1102**S0**... With foot
Con piedino

Gearbox weight
peso riduttore **165 kg**



P1102-**F**... Output flanges
flange di uscita



*Available output shaft / Albero di uscita

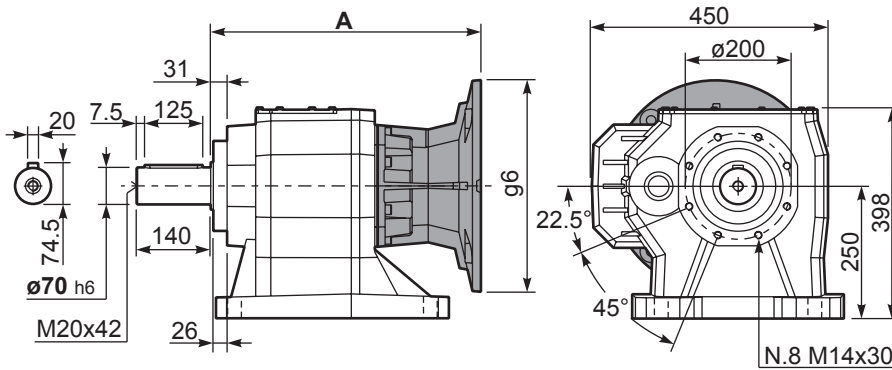
| | Shaft - d1 | p1 | h1 | x |
|---------------------------|------------|----|------|--------|
| Standard | ø 70x140 | 20 | 74.5 | M20x42 |
| On request A richiesta | - | - | - | - |

Available output flanges / flange di uscita

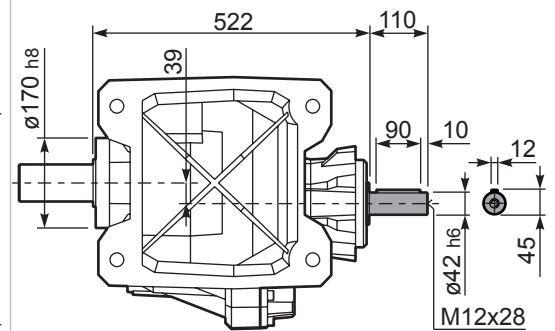
| a1 ø | b1 | c1 | e1 | f1 | s1 | kit code |
|------|-----|----|-----|----|----|-------------|
| 350 | 250 | 21 | 300 | 5 | 18 | KC110.9.015 |
| 450 | 350 | 22 | 400 | 5 | 18 | KC110.9.016 |
| - | - | - | - | - | - | - |

All flanges are compatible with the foot

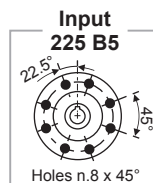
P1102**S0**... Basic gearbox
Riduttore base

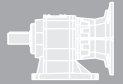


R1102**S0**... Input Shaft
Albero in entrata



| B5 Motor Flanges | A | C _{max} | g6 | k1 | kit code |
|------------------|-------|------------------|-----|-------|-------------|
| 132 B5 | 485.5 | 400 | 300 | 485.5 | KC1109052 |
| 160 B5 | 510.5 | 425 | 350 | 510.5 | KC1109053 |
| 180 B5 | 510.5 | 425 | 350 | 510.5 | KC1109053_B |
| 200 B5 | 510.5 | 450 | 400 | 510.5 | KC1109054 |
| 225 B5 | 537.5 | 475 | 450 | 537.5 | KC1109055 |





QUICK SELECTION / Selezione veloce

input speed (n_1) = 1400 min⁻¹

| Output Speed n_2 [min ⁻¹] | Ratio i | Motor power P_{1M} [kW] | Output torque M_{2M} [Nm] | Service factor f.s. | Nominal power P_{1R} [kW] | Nominal torque M_{2R} [Nm] | Available B5 motor flanges | | | | B14 motor flanges | | | Output Shaft | Ratios code |
|---|---------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|-----|-----|-----|----------------------|---|--------|------------------|----------------|
| | | | | | | | -F | -G | -H | -I | - | - | - | | |
| | | | | | | | 100 112 | 132 | 160 | 180 | - | - | - | | |
| 38.8 | 36.11 | 18.5 | 4113 | 1.1 | 19.4 | 4500 | B | | | | | | 301411 | 01 | |
| 27.5 | 50.89 | 15 | 4694 | 1.0 | 14.1 | 4600 | B | | | | | | 201414 | 02 | |
| 25.1 | 55.73 | 11 | 3777 | 1.2 | 12.9 | 4600 | B | | | | | | 201413 | 03 | |
| 20.3 | 68.80 | 11 | 4662 | 1.0 | 10.4 | 4600 | B | | | | | | 161414 | 04 | |
| 18.6 | 75.35 | 9 | 4354 | 1.1 | 9.5 | 4600 | B | | | | | | 161413 | 05 | |
| 15.6 | 89.47 | 7.5 | 4160 | 1.1 | 8.0 | 4600 | B | | | | | | 131414 | 06 | |
| 15.2 | 92.02 | 7.5 | 4278 | 1.1 | 7.6 | 4500 | B | | | | | | 161411 | 07 | |
| 14.3 | 97.99 | 7.5 | 4556 | 1.0 | 7.3 | 4600 | B | | | | | | 131413 | 08 | |
| 12.8 | 109.52 | 5.5 | 3762 | 1.2 | 6.6 | 4600 | B | | | | | | 111414 | 09 | |
| 11.7 | 119.94 | 5.5 | 4120 | 1.1 | 6.0 | 4600 | B | | | | | | 111413 | 10 | |
| 9.6 | 146.47 | 4 | 3681 | 1.2 | 4.8 | 4500 | B | | | | | | 111411 | 11 | |
| 8.8 | 158.37 | 4 | 3980 | 1.2 | 4.5 | 4600 | B | | | | | | 81414 | 12 | |
| 8.1 | 173.45 | 4 | 4359 | 1.1 | 4.1 | 4600 | B | | | | | | 81413 | 13 | |
| 6.6 | 211.82 | 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

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

$F_{eq} (N)$

| 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 |

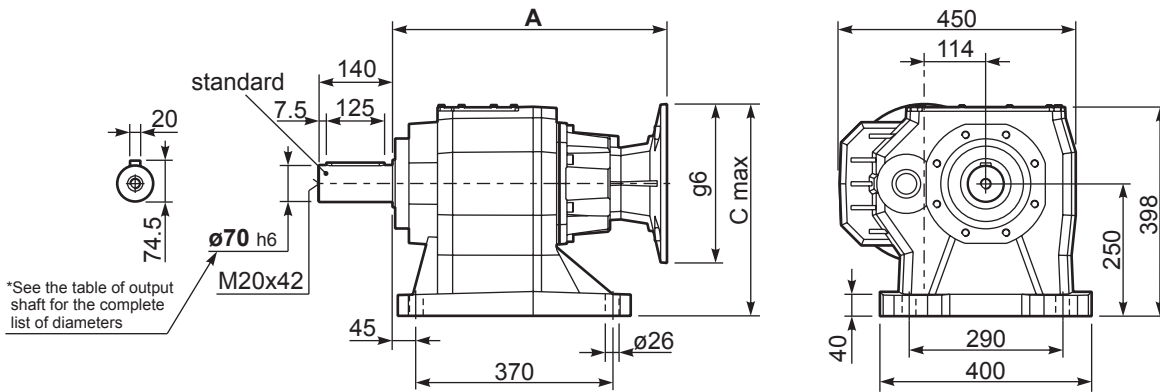
Input shaft
Albero in entrata

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

tab. 2

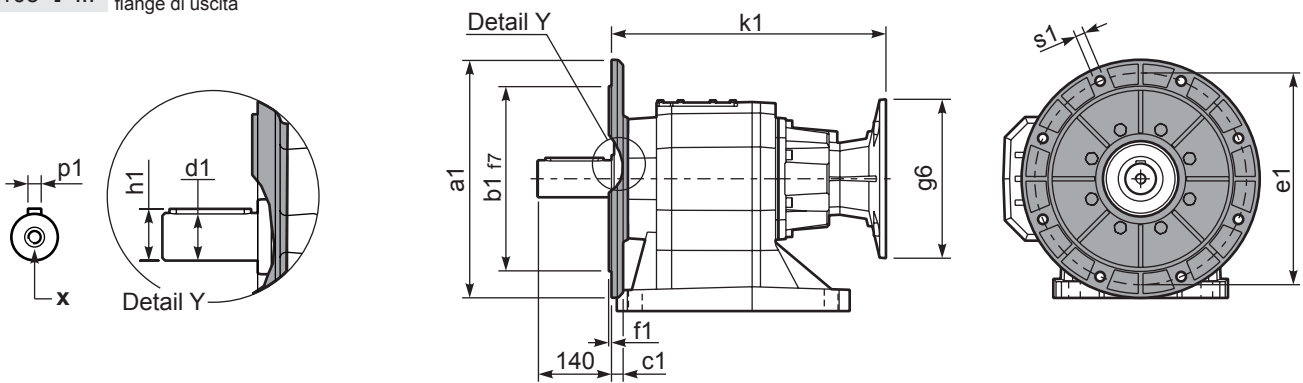
P1103**S0**... With foot
Con piedino

Gearbox weight
peso riduttore **156 kg**



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

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



*Available output shaft / Albero di uscita

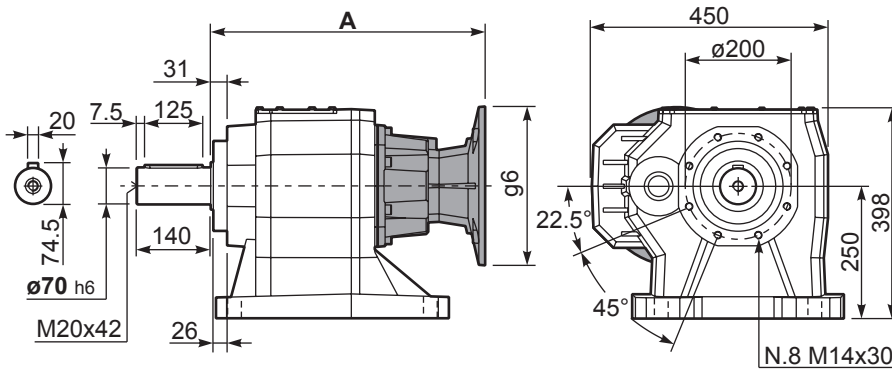
| | Shaft - d1 | p1 | h1 | x |
|---------------------------|------------|----|------|--------|
| Standard | ø 70x140 | 20 | 74.5 | M20x42 |
| On request A richiesta | - | - | - | - |

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 |
| - | - | - | - | - | - | - |

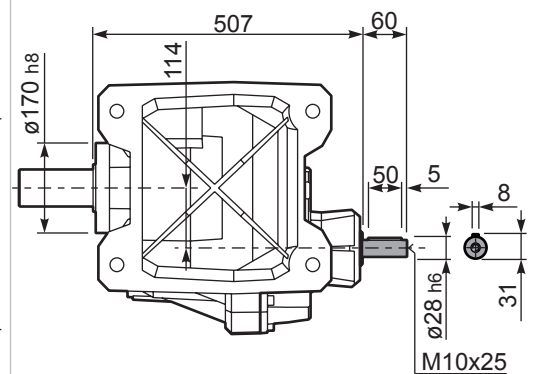
All flanges are compatible with the foot

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



| B5 Motor Flanges | A | C _{max} | 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 |

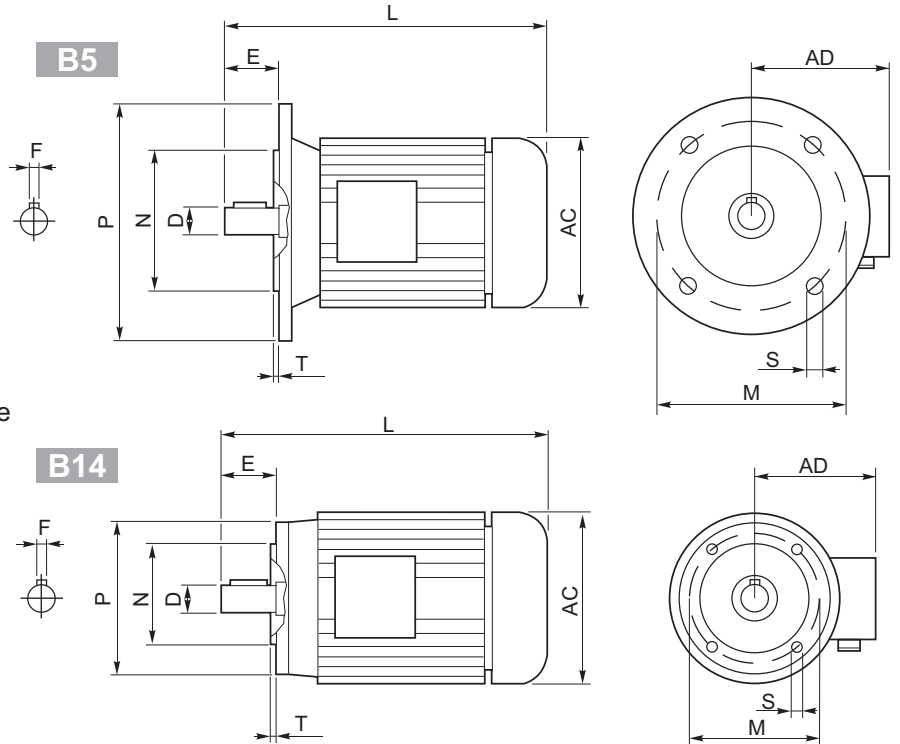
R1103**S0**... Input Shaft
Albero in entrata





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

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



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

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



Protection

Standard IP55
Please specify on purchase orders if you need a higher IP protection class.

Grado di protezione

IP55 Standard
Specificare in sede di ordinazione per IP superiore.

Schutzart

IP55 Standard.
Höheren IP Grad bitte im Auftrag angeben.

Degré de protection

IP55 standard.
Au moment de la commande, spécifiez si vous souhaitez IP supérieur.

Grado de protección
IP55 standard.
Especificar en el pedido cuando necesiten protección IP superior.

Insulation

Standard CI.F
To be specified upon placing the order if different insulation is required.

Isolamento

CI.F Standard
Specificare in sede di ordinazione classe di isolamento diversa.

Isolierung

CI.F Standard.
Davon abweichende Isolierungsklasse im Auftrag angeben.

Isolement

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

Aislamiento

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

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

Connections

Collegamenti

Verbindungselemente

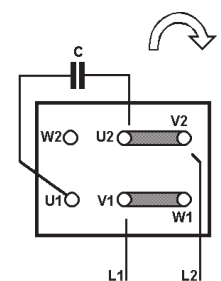
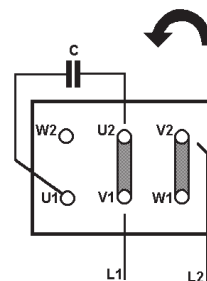
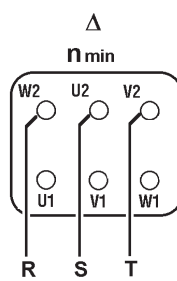
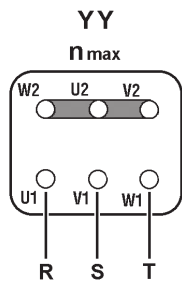
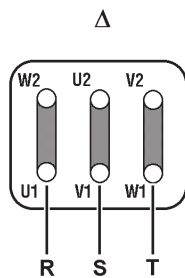
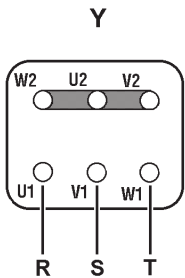
Branchements

Conexiones

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

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

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



Please Read Carefully

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

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

WARNING:

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

SELLING CONDITIONS

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

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

Leggere attentamente

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

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

ATTENZIONE:

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

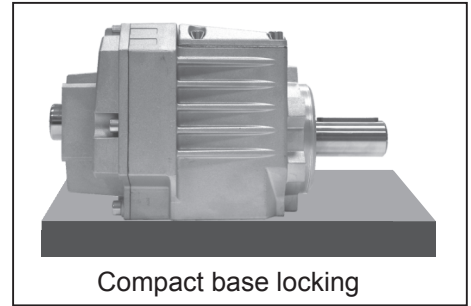
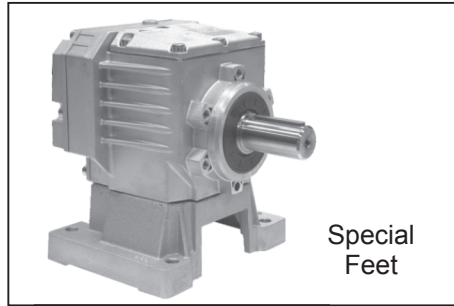
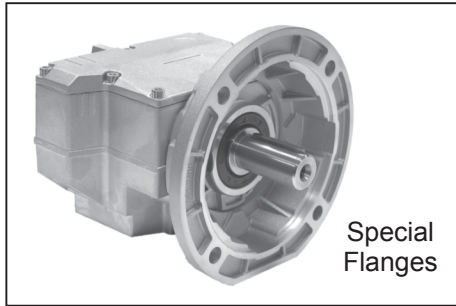
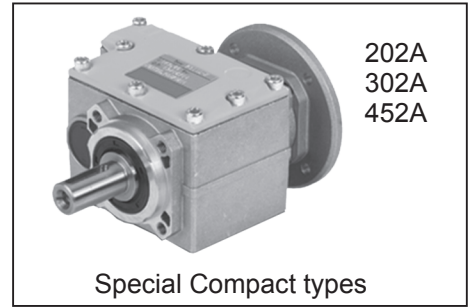
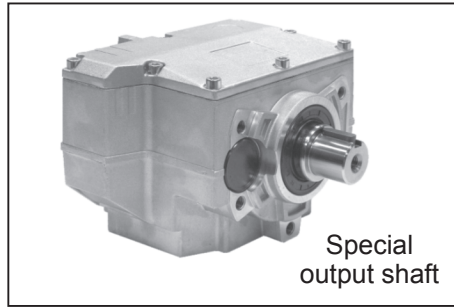
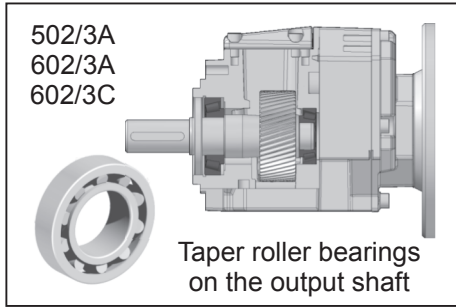
CONDIZIONI DI VENDITA

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

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

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

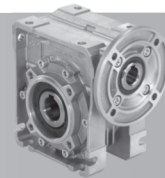
New options available



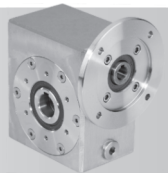
Others HYDRO-MEC products



Worm gearboxes
Rid. a vite senza fine



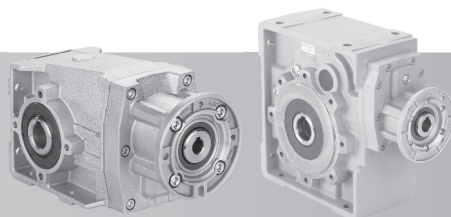
Square worm gearboxes
Rid. a vite senza fine quadro



Stainless steel worm gearboxes
Rid. a vite senza fine Inox



Stainless steel one step gearbox
Riduttore uno stadio Inox

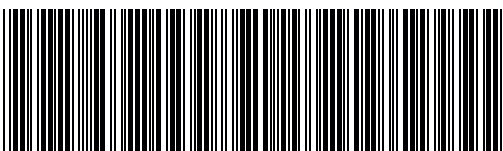


Helical bevel gearboxes
Rid. a coppia conica

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* CT - RCM - WO - HM0 1 7

