

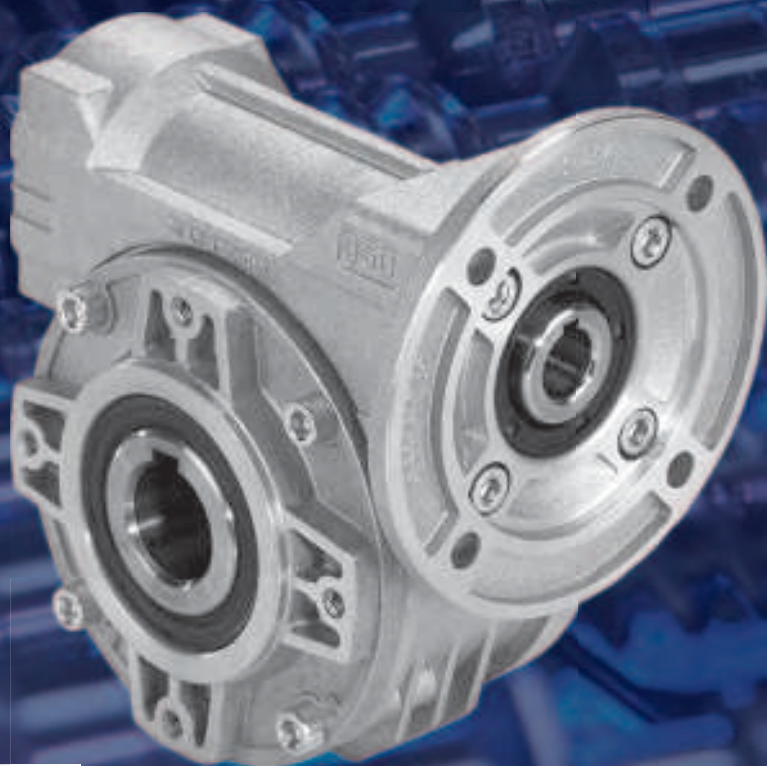
Rightangle

Gears

Cat.: CT-VFM-BS-HM015

Worm gearboxes

Riduttori a vite senza fine
0.06 ÷ 7.5 kW



Made in Italy



HYDRO · MEC

Worm gearboxes

A modular and compact product

Single-piece aluminum alloy housing

Is vacuum impregnated (MIL-STD 276) for protection and sealing. No secondary finish required but readily accepts paint. Combines light weight with high tensile strength. Precision machined for alignment of bearings and gearing.

Single piece alloy steel input shaft and worm shaft.

High helix angle worm is case-hardened (Rc 58-60), ground, teeth are profiled and radiused, for noise reduction and enhanced efficiency.

Oversized bearings

Support positively-retained, high speed shaft for higher shock load capacity - ideal for frequent starting and reversing application. Premium, Nitrile® high temperature seals each end.

Bronze alloy worm gears.

Is centrifugally cast onto an iron hub for maximum strength and superior life.

Over-size bearing

For radial load capability and maximum hollow output shaft diameter.

Impregnated and machined bearing caps

With exterior machined surfaces enable a variety of mounting accessories. Extra-deep thread engagement provided for greater support strength. Zinc plated hardware.

Flange

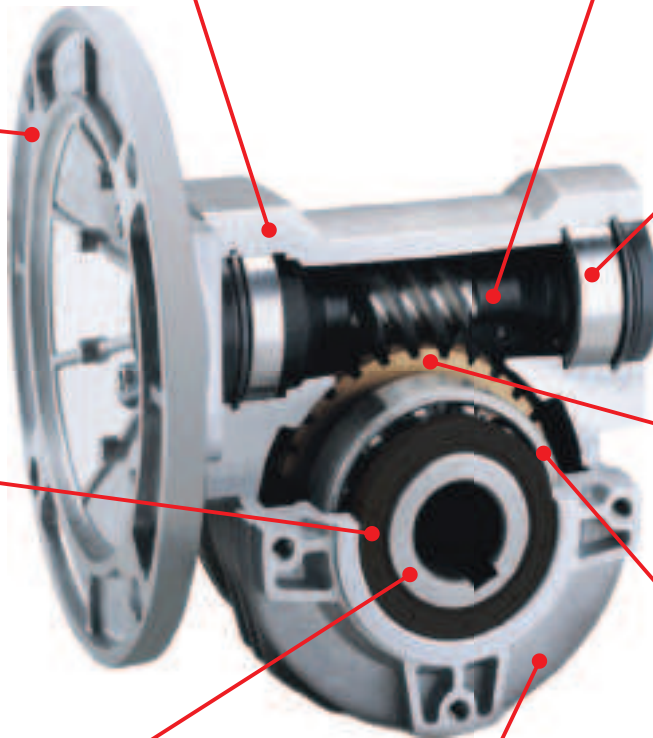
Fully modular to IEC and compact integrated motor. NEMA C flange.

Premium, high temperature

Nitrile® output seals

Standard hollow output shaft mounting

Reduces total drive envelope size, weight and cost. Single and double solid output shaft is available.



Vent Free Design.

No breather or vents to leak! Factory lubricated for life with synthetic, semi-fluid gear lubricant with an operating range of -15°C to 130°C.

oil free



vent free



Specific type datasheet on page...

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



Types / Tipi /
Tipen / Types /
Tipos →

| 1-5 | 1-7 | 1-9 | 1-11 | 1-13 | 1-15 | 1-17 |
|--------------------|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| 030 21Nm | 045 41Nm | 050 72Nm | 063 147Nm | 63A 191Nm | 085 347Nm | 110 651Nm |

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



Types / Tipi /
Tipen / Types /
Tipos →

| 1-19 | 1-21 | 1-23 | 1-25 | 1-27 | 1-29 |
|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|
| P45 55Nm | P50 88Nm | P63 187Nm | P6A 218Nm | P85 440Nm | P10 803Nm |

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Types / Tipi /
Tipen / Types /
Tipos →

| 1-31 | 1-33 | 1-35 | 1-37 | 1-39 | 1-41 | 1-43 | 1-45 | 1-47 |
|--------------------|--------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|
| 303 35Nm | 453 69Nm | 503 109Nm | 633 230Nm | 634 265Nm | 6A3 290Nm | 6A4 304Nm | 854 518Nm | 115 978Nm |

Type - Tipo - Typ
Type - Tipo

Size - Grandezza
Größe - Taille
Tamaño

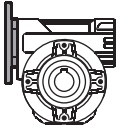
Mounting - Montaggio - Montage Fixation
Fixation - Tipo de montaje

P

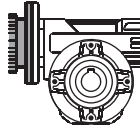
045

PA

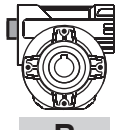
Worm gearboxes
Riduttori a vite senza fine
Schneckengetriebe
Reducteurs a vis sans fin
Reductores de corona sin fin



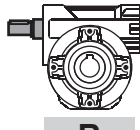
P



M

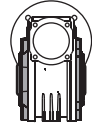


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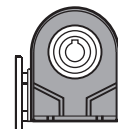


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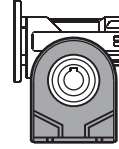
**030
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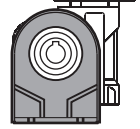
FB



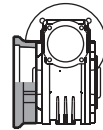
PB



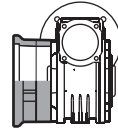
PA



PV

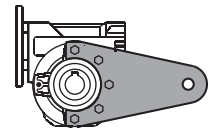


FC



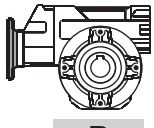
FL

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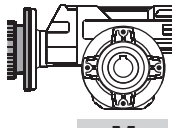


BR

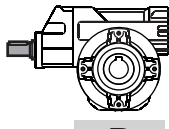
Worm gearboxes with primary reduction
Riduttori a vite senza fine con precoppia
Schneckengetriebe mit Stirradstufe am Eintrieb
Reducteurs a vis sans fin avec pré-réduction
Reductores corona sin fin con prerreductora de engranajes



P

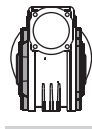


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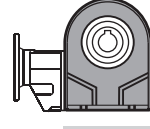


R

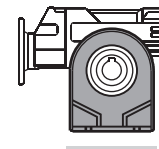
**P45
P50
P63
P6A
P85
P10**



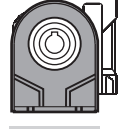
FB



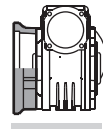
PB



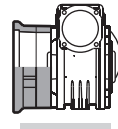
PA



PV

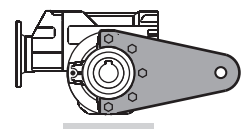


FC



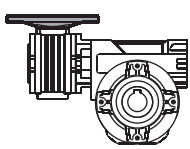
FL

**F1
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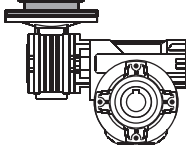


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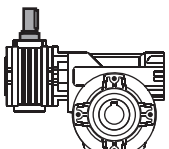
Combined worm gearboxes
Riduttori a vite senza fine combinati
Schneckengetriebekombinationen
Reducteurs a double train de vis sans fin
Reductores combinados corona sin fin



P

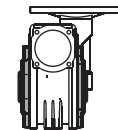


M

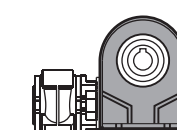


R

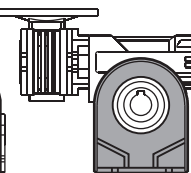
**303
453
503
633
634
6A3
6A4
854
115**



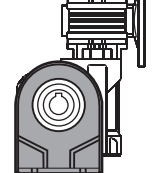
FB



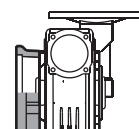
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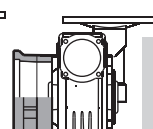
PA



PV

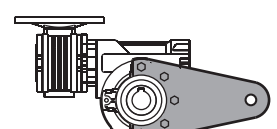


FC



FL

**F1
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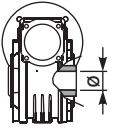
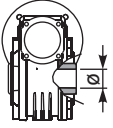
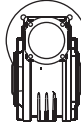
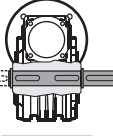
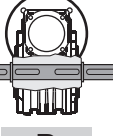
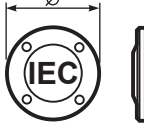




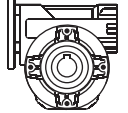
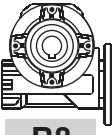
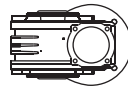
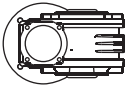

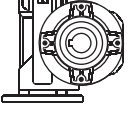
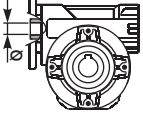
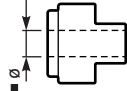
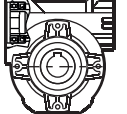


BR



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.

CODIFICA / HOW TO ORDER / TYPENBEZEICHNUNGEN / CODIFICATION / CODIFICACIÓN

| Ratio Rapporto Untersetzung Reduction Relaciòn | Hub Mozzo corona Hohlwelle Arbre creux Nucleo corona | Output shaft Albero lento Abtriebswelle Arbre de sortie Eje solida | Motor size Grandezza motore Motor Grösse Grandeur moteur Tamaño motor | Terminal box position Posizione morsettiere Klemmkastenlage Position boîte a bornes Posición caja de bornes | Mounting position Posizione montaggio Einbaulage Position de montage Posición de montaje | Reduced Input bore Foro entrata ridotto Reduzierte Eingangshohlwelle Trou d'entree de diametre reduit Eje hueco de entrada reducido | Mountin position Esecuzione montaggio Einbaulage Exécution de montage Posición de montaje |
|--|---|---|--|---|---|--|---|
| 10 | C | Ø | -Q | B | B3 | - | --- |
| See technical data table Vedi tabella dati tecnici. Technisches Datenblatt beachten Voir tableau données techniques Ver tabla datos técnicos |  STANDARD C 030 ⇨ Ø14 045 ⇨ Ø18 050 ⇨ Ø25 063 ⇨ Ø25 63A ⇨ Ø28 085 ⇨ Ø35 110 ⇨ Ø42 I Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Nucleo corona de acero Inox SPECIAL SERIES SERIE SPECIALE S 045 ⇨ Ø19 050 ⇨ Ø24 X Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Nucleo corona de acero Inox  INCH U 045 ⇨ Ø0.750" 050 ⇨ Ø1.000" 063 ⇨ Ø1.125" 085 ⇨ Ø1.500" Z Stainless steel hub Mozzo in acciaio Inox Edelstahlhohlwelle Moyeu en acier Inox Nucleo corona de acero Inox |  Ø  S  D |  -M without flange Senza flangia B5 -A=56 (Ø120) -B=63 (Ø140) -C=71 (Ø160) -D=80 (Ø200) -E=90 (Ø200) -F=100+112 (Ø250) -G=132 (Ø300) B14 -O=56 (Ø80) -P=63 (Ø90) -Q=71 (Ø105) -R=80 (Ø120) -T=90 (Ø140) -U=100+112 (Ø160) -V=132 (Ø200) -O=Type R -S=Type R S series |  A  B STANDARD  C  D |  B3  B8  B6  B7  V5  V6 |  - Nothing indication: standard bore Nessuna indicazione: foro standard P Input bore reduced one size Foro entrata ridotto di una misura Ex. Input Flange 71 B14 Standard Ø14 Reduced Ø11 Q Input bore reduced two sizes Due grandezze ridotte foro entrata Ex. Input Flange 71 B14 Standard Ø14 Reduced Ø9 COUPLING  A = 9mm B = 11mm C = 14mm D = 19mm E = 24mm F = 28mm 0 Without coupling Senza giunto  | Only for combined units See technical data table Solo per i riduttori combinati Vedi tabella dati tecnici. Ausführungen für Getriebekombinationen it Uniquement pour combinés. Voir tableau données techniques Sólo para combinados ver tabla datos técnicos |

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

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

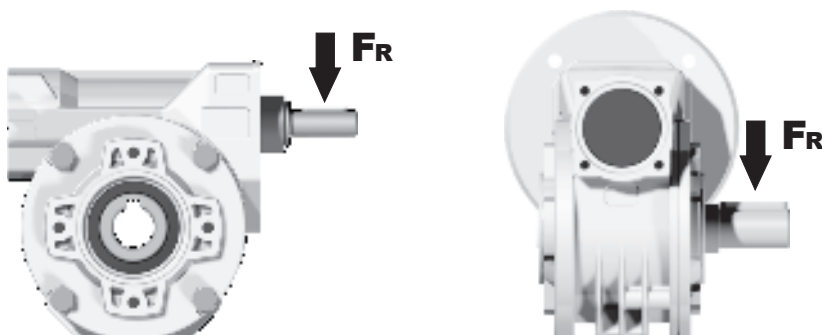
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

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

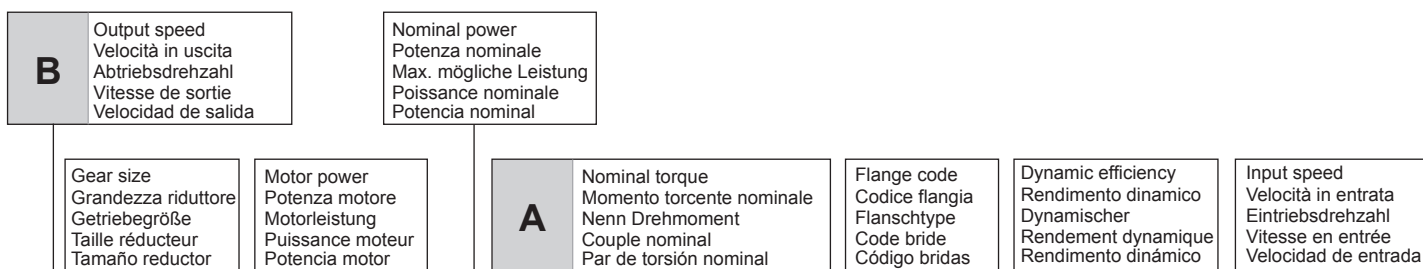
- Radial load generated by external transmissions keyed onto input and/or output shafts.
- Forza radiale generata da organi di trasmissione calettati sugli alberi di ingresso e/o uscita.
- Belastungen der Antriebs- bzw. Abtriebswellen durch von aussen eingebrachte Radiallasten.
- Charge radiale générée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



045 Rightangle - Gear
41Nm

Rating - Aluminum WORM 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 | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|-----|----|--------------------------|----------------------|-------------|
| | | | | | | | -B | -C | -O | -P | -Q | | | |
| 200 | 7 | 0.37 | 14 | 2.2 | 0.80 | 30 | B | | B-C | B-C | | 80 | 2.2 | 01 |
| 140 | 10 | 0.37 | 20 | 1.5 | 0.57 | 30 | B | | B-C | B-C | | 79 | 2.2 | 02 |
| 100 | 14 | 0.37 | 27 | 1.1 | 0.41 | 30 | B | | B-C | B-C | | 77 | 2.4 | 03 |



fs

| Type of load and starts per hour Tipo di carico e avviamenti per ora | | Oper. hours per day Ore di funz. giorn. | | |
|--|---------------------|--|---------|----------|
| | | <2 h | 2 - 8 h | 8 - 16 h |
| Continuous or intermittent appl. with start / hour Applicazione cont. o interm. con n.ro operazioni/ora | Uniform / Uniforme | 0.9 | 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 | 1.25 | 1.5 | 1.75 |
| | Moderate / Moderato | 1.5 | 1.75 | 2 |
| | Heavy / Forte | 1.75 | 2 | 2.25 |

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

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

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

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

| | | | | | |
|----------|--|--|--|---|--|
| 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 | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|----|---------------------------------|--------------------------|-----------------|
| | | | | | | | -A | -B | -O | -P | | | |
| | | | | | | | 56 | 63 | 56 | 63 | | | |
| 280 | 5 | 0.18 | 5 | 3.3 | 0.60 | 17 | B | | B-C | | 82 | 1.26 | 09 |
| 200 | 7 | 0.18 | 7 | 2.4 | 0.44 | 17 | B | | B-C | | 80 | 1.44 | 01 |
| 140 | 10 | 0.18 | 10 | 1.8 | 0.32 | 17 | B | | B-C | | 78 | 1.44 | 02 |
| 93 | 15 | 0.18 | 13 | 1.4 | 0.25 | 19 | B | | B-C | | 73 | 1.44 | 03 |
| 70 | 20 | 0.18 | 17 | 1.1 | 0.20 | 19 | B | | B-C | | 70 | 1.09 | 04 |
| 47 | 30 | 0.12 | 15 | 1.4 | 0.17 | 21 | B | | B-C | | 62 | 1.44 | 05 |
| 35 | 40 | 0.12 | 19 | 1.1 | 0.13 | 20 | B | | B-C | | 57 | 1.09 | 06 |
| 23 | 61 | 0.09 | 19 | 1.1 | 0.10 | 20 | B | | B-C | | 50 | 0.72 | 07 |
| 17.5 | 80 | 0.09 | 16 | 1.0 | 0.06 | 16 | B | | B-C | | 48 | 0.56 | 08 |

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 **030** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **030** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **030** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **030** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **030** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 030 Oil Quantity 0.03 Lt.

AGIP Telium VSF 320

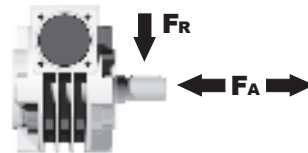
SHELL Omala S4 WE 320

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

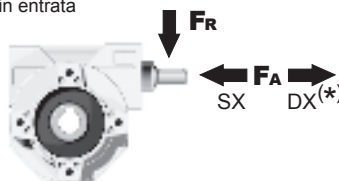
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 200 | 120 | 600 |
| 150 | 140 | 700 |
| 100 | 160 | 800 |
| 75 | 180 | 900 |
| 50 | 200 | 1000 |
| 25 | 250 | 1250 |
| 15 | 280 | 1400 |

Input shaft

albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 20 | 100 |

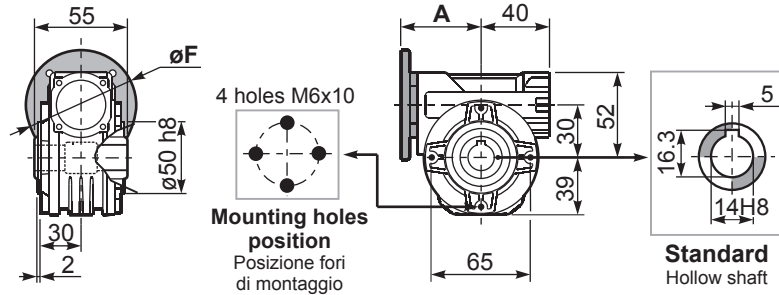
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P030FB... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **1.05 kg**

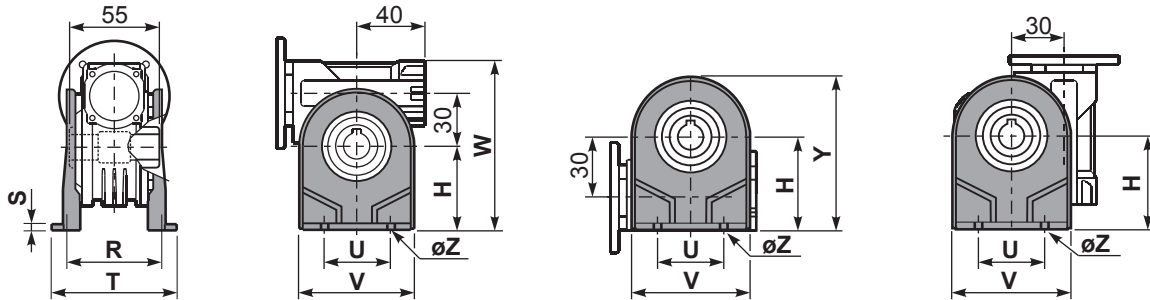
| M. flanges | Kit code | øF | A |
|--------------|------------|-----|------|
| 56B5 | K030.4.041 | 120 | 61.5 |
| 63B5 | K030.4.042 | 140 | 62.5 |
| 56B14 | K030.4.046 | 80 | 61.5 |
| 63B14 | K030.4.045 | 90 | 62.5 |



P030PA... Feet
Piedini

P030PB... Feet
Piedini

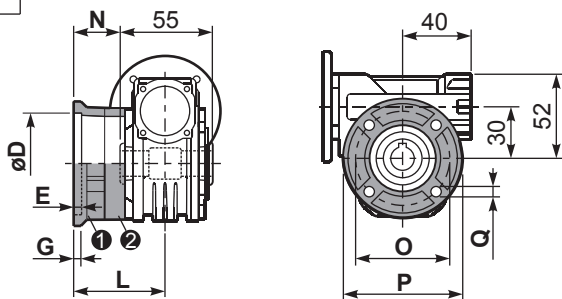
P030PV... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|----|----|---|----|----|----|----|-----|------|-------------|
| type B | 55 | 66 | 3 | 87 | 50 | 78 | 94 | 107 | ø6.5 | K030.9.022 |
| type S | 52 | 66 | 3 | 87 | 52 | 90 | 91 | 104 | ø6.5 | KS030.9.023 |

P030FC... Output flange
Flangia uscita

P030BR... Reaction arm
Braccio di reazione

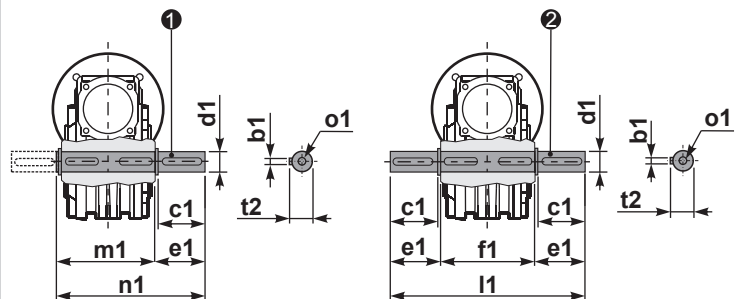


| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|--|---|---|------|----|----|-----|-----|---------------------|
| FC | 50 ^{+0.15} / _{+0.05} | 6 | 6 | 50.5 | 23 | 68 | 80 | 7 | ① K030.9.010 ② - |
| FL | 60 ^{+0.15} / _{+0.05} | 6 | 6 | 55.5 | 28 | 87 | 110 | 8.5 | ① K045.9.010 ② - |

| type S | øD | E | G | L | N | O | P | Q | kit code |
|-----------|--|-----|-----|----|------|----|----|-----|----------------------|
| F1 | 40 ^{+0.15} / _{+0.10} | 3.5 | 5.5 | 49 | 21.5 | 56 | 80 | 6.5 | ① KS030.9.012 ② - |

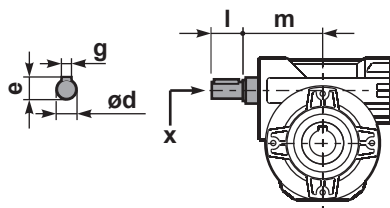
P030.....S... Single Shaft
Albero lento semplice

P030.....D... Double Shaft
Albero lento bisp.



① kit cod. K030.5.028 type B ② kit cod. K030.5.029 type B

R030FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|------|------|---|----|----|---|------------------|
| type B | 9 h6 | 10.2 | 3 | 20 | 58 | - | K030.5.006 PAM63 |
| type S | - | - | - | - | - | - | - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|----|-----|----|------|----|-------|
| type B | 5 | 25 | 14 ^{-0.005} / _{-0.020} | 35.5 | 55 | 126 | 59 | 94.5 | 16 | M5x14 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|-----|----|---------------------------------|--------------------------|-----------------|
| | | | | | | | -B | -C | -O | -P | -Q | | | |
| | | | | | | | 63 | 71 | 56 | 63 | 71 | | | |
| 200 | 7 | 0.37 | 14 | 2.2 | 0.80 | 30 | B | | B-C | B-C | | 80 | 2.2 | 01 |
| 140 | 10 | 0.37 | 20 | 1.5 | 0.57 | 30 | B | | B-C | B-C | | 79 | 2.2 | 02 |
| 100 | 14 | 0.37 | 27 | 1.1 | 0.41 | 30 | B | | B-C | B-C | | 77 | 2.4 | 03 |
| 67 | 21 | 0.37 | 36 | 1.2 | 0.43 | 41 | B | | B-C | B-C | | 67 | 1.6 | 04 |
| 50 | 28 | 0.25 | 31 | 1.3 | 0.33 | 41 | B | | B-C | B-C | | 65 | 2.5 | 05 |
| 38 | 37 | 0.25 | 40 | 1.0 | 0.26 | 41 | B | | B-C | B-C | | 63 | 1.8 | 06 |
| 30 | 46 | 0.25 | 46 | 0.9 | 0.22 | 41 | B | | B-C | B-C | | 59 | 1.5 | 07 |
| 23 | 60 | 0.18 | 41 | 1.0 | 0.18 | 41 | B | | B-C | B-C | | 56 | 1.2 | 08 |
| 20 | 70 | 0.12 | 31 | 1.0 | 0.12 | 30 | B | | B-C | B-C | | 54 | 1.0 | 09 |
| 13.7 | 102 | 0.09 | 31 | 1.0 | 0.09 | 29 | B | | B-C | B-C | | 49 | 0.72 | 10 |

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 **045** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **045** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **045** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **045** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **045** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 045 Oil Quantity 0.09 Lt.

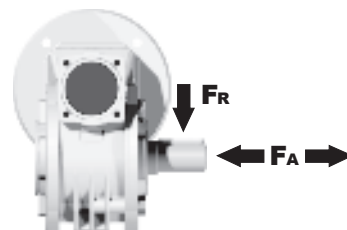
AGIP Telium VSF 320

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

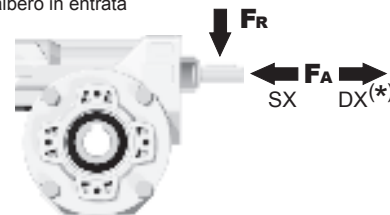
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 200 | 180 | 900 |
| 150 | 200 | 1000 |
| 100 | 220 | 1100 |
| 75 | 240 | 1200 |
| 50 | 260 | 1400 |
| 25 | 300 | 1800 |
| 15 | 400 | 2000 |

Input shaft
albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 42 | 210 |

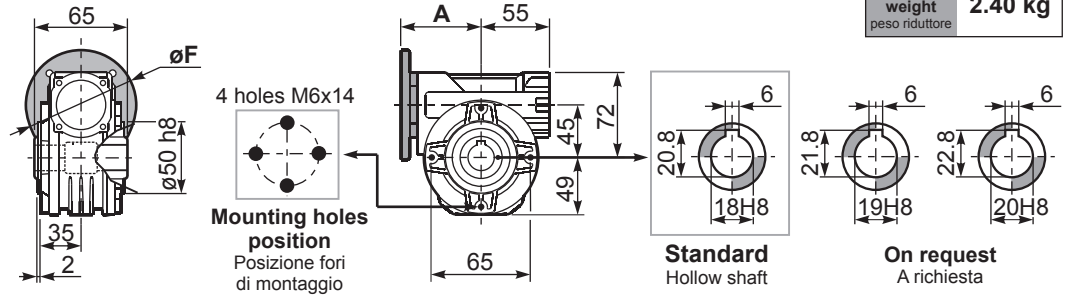
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P045FB... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **2.40 kg**

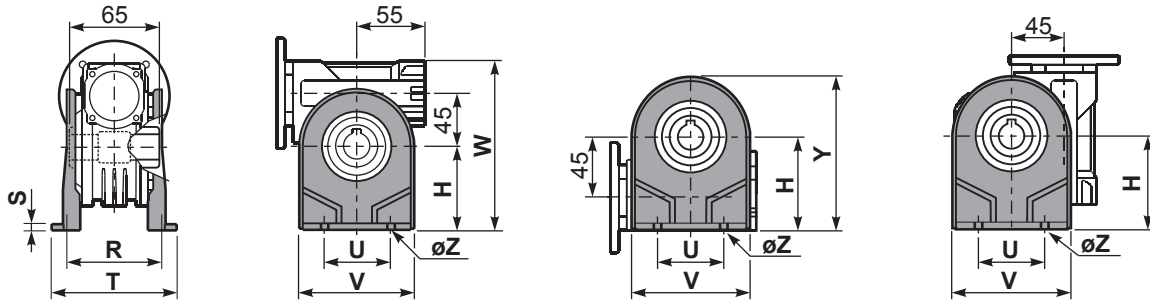
| M. flanges | Kit code | øF | A |
|--------------|------------|-----|------|
| 63B5 | K050.4.041 | 138 | 74 |
| 71B5 | K050.4.042 | 160 | 71.5 |
| 56B14 | KC40.4.049 | 80 | 71.5 |
| 63B14 | K050.4.047 | 90 | 74 |
| 71B14 | K050.4.045 | 105 | 71.5 |



P045PA... Feet
Piedini

P045PB... Feet
Piedini

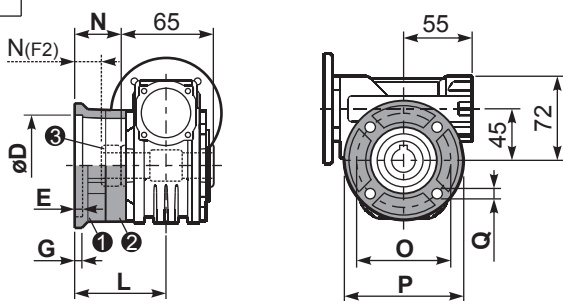
P045PV... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|----|----|---|-----|----|----|-----|-----|-------|-------------|
| type B | 72 | 81 | 3 | 100 | 52 | 98 | 121 | 144 | ø10.5 | K045.9.022 |
| type S | 71 | 84 | 8 | 100 | 70 | 90 | 120 | 143 | ø8 | KS045.9.023 |

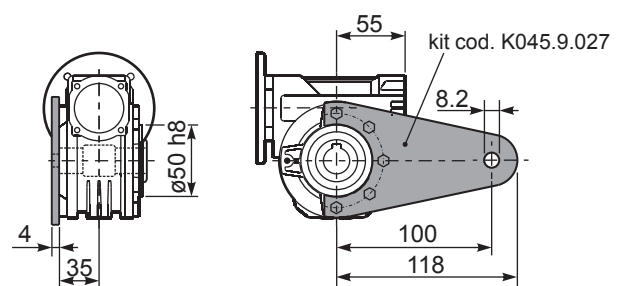
P045FC... Output flange
Flangia uscita

P045BR... Reaction arm
Braccio di reazione



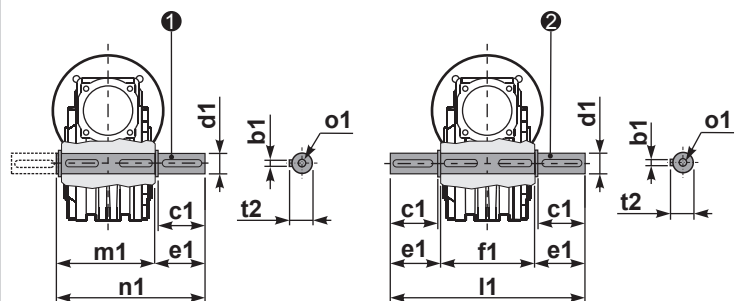
| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|--|---|---|------|----|----|-----|-----|------------------------------|
| FC | 60 ^{+0.15} / _{+0.05} | 9 | 9 | 60.5 | 28 | 87 | 110 | 8.5 | ① K045.9.010 ② - |
| FL | 60 ^{+0.15} / _{+0.05} | 9 | 9 | 90.5 | 58 | 87 | 110 | 8.5 | ① K045.9.010 ② K045.0.200 |

| type S | øD | E | G | L | N | O | P | Q | kit code |
|-----------|--|---|----|------|----|-----|-----|-----|-------------------------------|
| F1 | 95 ^{+0.20} / _{+0.15} | 4 | 11 | 73.5 | 41 | 115 | 140 | 9 | ① KS045.9.013 ② - |
| F2 | 60 ^{+0.15} / _{+0.05} | 9 | 9 | 60.5 | 19 | 87 | 110 | 8.5 | ① KS045.9.010 ② S045.0.204 |
| F3 | 80 ^{+0.15} / _{+0.10} | 3 | 8 | 51.5 | 19 | 100 | 120 | 9 | ① KS045.9.014 ② - |



P045.....S... Single Shaft
Albero lento semplice

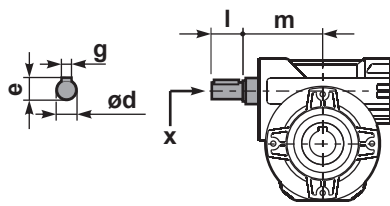
P045.....D... Double Shaft
Albero lento bisp.



① kit cod. K045.5.028 type B
kit cod. KS045.5.030 type S

② kit cod. K045.5.029 type B
kit cod. KS045.5.031 type S

R045FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|-------|------|---|----|----|---|----------------------|
| type B | 11 h6 | 12.5 | 4 | 30 | 68 | - | ① ② K045.5.006 PAM71 |
| type S | - | - | - | - | - | - | ① ② - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|----|-----|----|-------|------|-------|
| type B | 6 | 32 | 18 ^{-0.005} / _{-0.020} | 43 | 65 | 151 | 70 | 113 | 20.5 | M6x18 |
| type S | 6 | 40 | 19 ^{-0.005} / _{-0.020} | 58.8 | 65 | 182 | 70 | 128.5 | 21.5 | M8x20 |



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 | | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|-----------------------------|-----|----|----|---------------------------------|--------------------------|-----------------|
| | | | | | | | -B | -C | -D | -O | -P | -Q | -R | | | |
| | | | | | | | 63 | 71 | 80 | 56 | 63 | 71 | 80 | | | |
| 200 | 7 | 0.75 | 29 | 1.9 | 1.5 | 57 | B | B | | | B-C | B | | 82 | 2.5 | 01 |
| 140 | 10 | 0.75 | 41 | 1.5 | 1.1 | 62 | B | B | | | B-C | B | | 80 | 2.4 | 02 |
| 100 | 14 | 0.75 | 57 | 1.2 | 0.90 | 68 | B | B | | | B-C | B | | 79 | 2.6 | 03 |
| 78 | 18 | 0.55 | 51 | 1.2 | 0.67 | 62 | B | B | | | B-C | B | | 75 | 2.0 | 04 |
| 54 | 26 | 0.55 | 67 | 1.0 | 0.54 | 66 | B | B | | | B-C | B | | 69 | 2.7 | 05 |
| 47 | 30 | 0.55 | 79 | 0.9 | 0.50 | 72 | B | B | | | B-C | B | | 70 | 2.5 | 12 |
| 39 | 36 | 0.37 | 63 | 1.2 | 0.43 | 72 | B | | | B-C | B-C | | | 69 | 2.1 | 06 |
| 33 | 43 | 0.37 | 72 | 1.0 | 0.35 | 68 | B | | | B-C | B-C | | | 66 | 1.8 | 07 |
| 28 | 50 | 0.25 | 53 | 1.2 | 0.31 | 66 | B | | | B-C | B-C | | | 62 | 1.5 | 13 |
| 23 | 60 | 0.25 | 59 | 1.0 | 0.26 | 62 | B | | | B-C | B-C | | | 58 | 1.3 | 08 |
| 21 | 68 | 0.25 | 66 | 0.9 | 0.22 | 58 | B | | | B-C | B-C | | | 57 | 1.2 | 09 |
| 17.5 | 80 | 0.18 | 53 | 1.1 | 0.19 | 57 | B | | | B-C | B-C | | | 54 | 1.0 | 10 |
| 14 | 100 | 0.12 | 41 | 1.3 | 0.15 | 51 | B | | | B-C | B-C | | | 50 | 0.8 | 11 |

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 050 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 050 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 050 mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 050 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 050 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 050 Oil Quantity 0.14 Lt.

AGIP Telium VSF 320

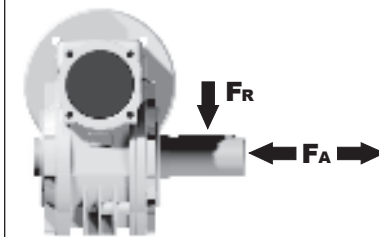
SHELL Omala S4 WE 320

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

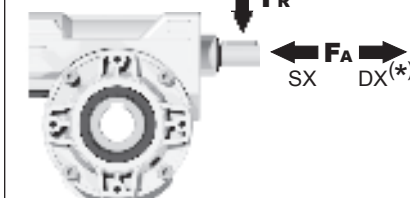
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 200 | 240 | 1200 |
| 150 | 280 | 1400 |
| 100 | 300 | 1500 |
| 75 | 340 | 1700 |
| 50 | 380 | 1900 |
| 25 | 480 | 2500 |
| 15 | 560 | 2800 |

Input shaft

albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 76 | 380 |

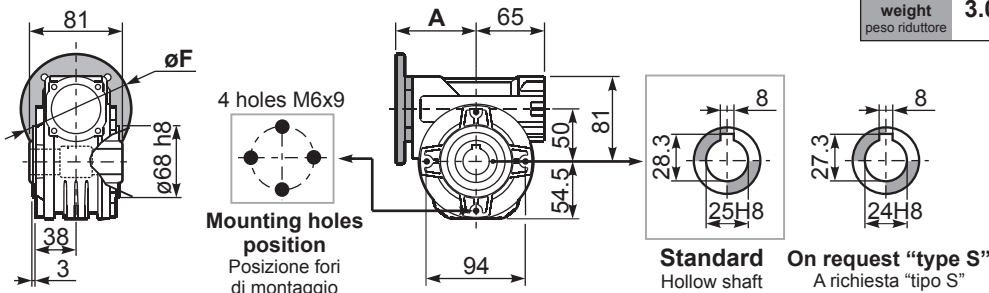
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P050FB... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **3.00 kg**

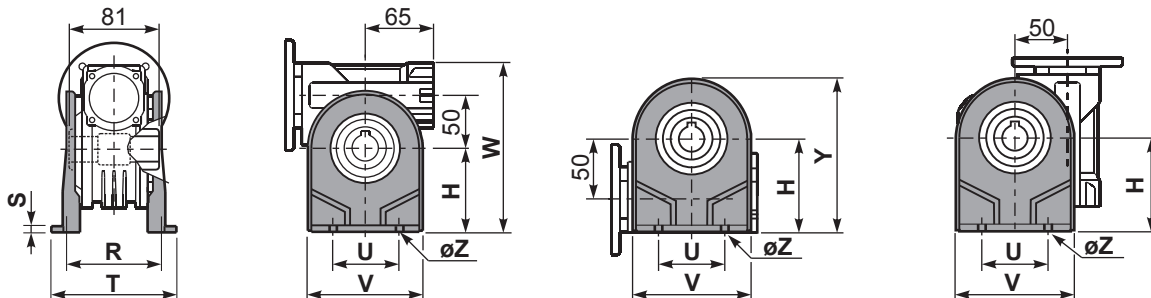
| M. flanges | Kit code | øF | A |
|--------------|------------|-----|------|
| 63B5 | K050.4.041 | 138 | 78.5 |
| 71B5 | K050.4.042 | 160 | 76 |
| 80B5 | K050.4.043 | 200 | 76.5 |
| 56B14 | KC40.4.049 | 80 | 76 |
| 63B14 | K050.4.047 | 90 | 78.5 |
| 71B14 | K050.4.045 | 105 | 76 |
| 80B14 | K050.4.046 | 120 | 76.5 |



P050PA... Feet
Piedini

P050PB... Feet
Piedini

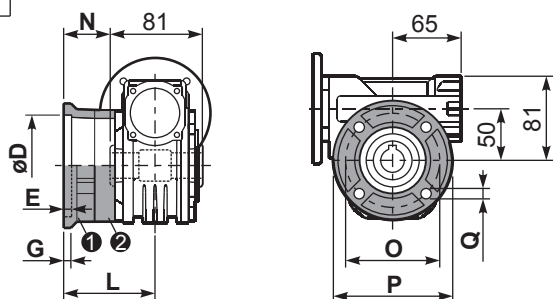
P050PV... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|----|------|-----|-----|----|-----|-------|-----|-------|-------------|
| type B | 82 | 98.5 | 3.5 | 123 | 63 | 113 | 138.5 | 163 | ø10.5 | K050.9.022 |
| type S | 85 | 96 | 10 | 114 | 85 | 110 | 139.5 | 166 | ø10 | KS050.9.023 |

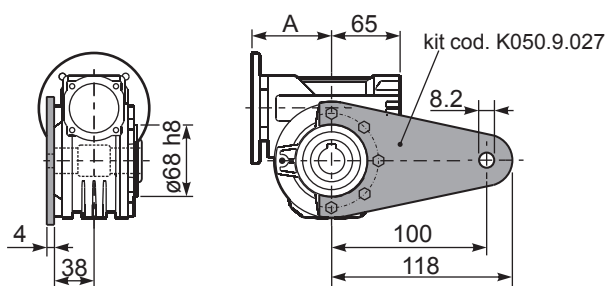
P050FC... Output flange
Flangia uscita

P050BR... Reaction arm
Braccio di reazione



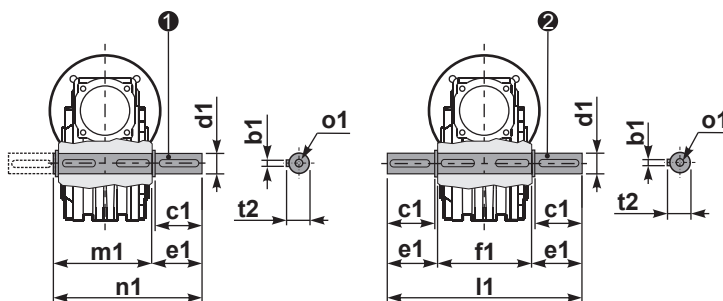
| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|--|---|----|-------|------|----|-----|------|------------------------------|
| FC | 70 ^{+0.20} / _{+0.15} | 9 | 12 | 85 | 44.5 | 90 | 123 | 10.5 | ① K050.9.010 ② - |
| FL | 70 ^{+0.20} / _{+0.15} | 9 | 12 | 114.5 | 74 | 90 | 123 | 10.5 | ① K050.9.010 ② K050.0.200 |

| type S | øD | E | G | L | N | O | P | Q | kit code |
|-----------|---|---|----|------|----|-----|-----|------|----------------------|
| F1 | 110 ^{+0.20} / _{+0.15} | 4 | 11 | 83.5 | 43 | 130 | 160 | 10 | ① KS050.9.012 ② - |
| F2 | 70 ^{+0.20} / _{+0.15} | 9 | 12 | 76.5 | 36 | 90 | 123 | 10.5 | ① KS050.9.014 ② - |
| F3 | 95 ^{+0.035} / ₀ | 4 | 10 | 66.5 | 26 | 115 | 140 | 10 | ① KS050.9.013 ② - |



P050.....S... Single Shaft
Albero lento semplice

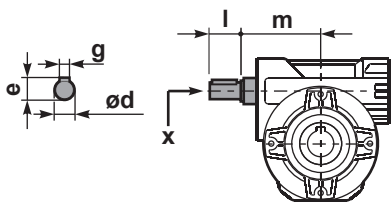
P050.....D... Double Shaft
Albero lento bisp.



① kit cod. K050.5.028 type B
kit cod. KS050.5.030 type S

② kit cod. K050.5.029 type B
kit cod. KS050.5.031 type S

R050FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|-------|----|---|----|------|-------|--|
| type B | 16 h6 | 18 | 5 | 30 | 74.5 | M6x16 | ① K050.5.006 PAM71 ② K050.5.007 PAM80 |
| type S | 14 h6 | 16 | 5 | 30 | 74.5 | M5x10 | ① KS050.5.008 PAM71 ② KS050.5.009 PAM80 |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|----|-----|------|-----|----|-------|
| type B | 8 | 52 | 25 ^{-0.005} / _{-0.020} | 59.5 | 81 | 200 | 86.5 | 146 | 28 | M8x20 |
| type S | 8 | 50 | 24 ^{-0.005} / _{-0.020} | 68.8 | 81 | 218 | 86.5 | 155 | 27 | M8x20 |



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 | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code | |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|----|-----------------------------|-----|-----|---------------------------------|--------------------------|-----------------|----|
| | | | | | | | -B | -C | -D | -E | -Q | -R | -T | | | | |
| | | | | | | | 63 | 71 | 80 | 90 | 71 | 80 | 90 | | | | |
| 200 | 7 | 1.8 | 71 | 1.8 | 3.2 | 125 | | B | B | | | B-C | B-C | | 83 | 3.1 | 01 |
| 140 | 10 | 1.8 | 99 | 1.4 | 2.4 | 134 | | B | B | | | B-C | B-C | | 81 | 3.1 | 02 |
| 93 | 15 | 1.5 | 121 | 1.1 | 1.7 | 138 | | B | B | | | B-C | B-C | | 79 | 3.1 | 03 |
| 74 | 19 | 1.1 | 111 | 1.2 | 1.4 | 138 | | B | B | | | B-C | B-C | | 78 | 2.6 | 04 |
| 58 | 24 | 1.1 | 135 | 1.0 | 1.2 | 142 | | B | B | | | B-C | B-C | | 75 | 2.0 | 05 |
| 47 | 30 | 1.1 | 167 | 0.9 | 0.96 | 146 | | B | B | | | B-C | B-C | | 74 | 3.2 | 06 |
| 39 | 36 | 0.75 | 125 | 1.2 | 0.88 | 147 | | B | B | | | B-C | B-C | | 68 | 2.7 | 07 |
| 35 | 40 | 0.75 | 135 | 1.0 | 0.78 | 140 | | B | B | B | | B-C | B-C | | 66 | 2.5 | 13 |
| 31 | 45 | 0.55 | 111 | 1.2 | 0.67 | 135 | B | B | | | | B-C | C | | 66 | 2.1 | 08 |
| 23 | 60 | 0.55 | 140 | 0.9 | 0.51 | 130 | B | B | | | | B-C | C | | 62 | 1.6 | 12 |
| 21 | 67 | 0.55 | 151 | 0.8 | 0.45 | 124 | B | B | | | | B-C | C | | 60 | 1.5 | 09 |
| 17.5 | 80 | 0.37 | 115 | 1.0 | 0.38 | 119 | B | B | | | | B-C | C | | 57 | 1.3 | 10 |
| 14.9 | 94 | 0.37 | 123 | 1.0 | 0.36 | 119 | B | B | | | | B-C | C | | 52 | 1.1 | 11 |

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 **063** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **063** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **063** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **063** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **063** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 063 Oil Quantity 0.40 Lt.

AGIP Telium VSF 320

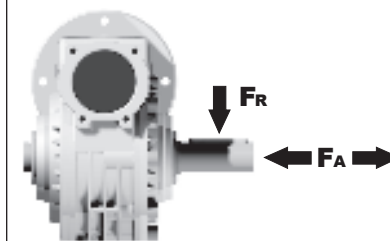
SHELL Omala S4 WE 320

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

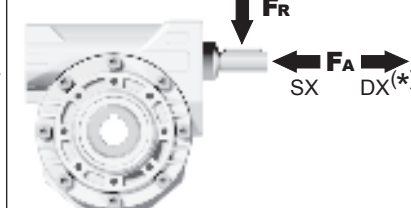
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 200 | 360 | 1800 |
| 150 | 400 | 2000 |
| 100 | 460 | 2300 |
| 75 | 500 | 2500 |
| 50 | 600 | 3000 |
| 25 | 700 | 3800 |
| 15 | 800 | 4000 |

Input shaft

albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 90 | 450 |

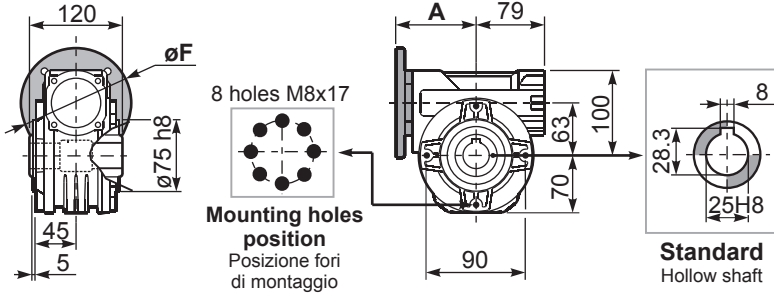
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P063FB... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **6.00 kg**

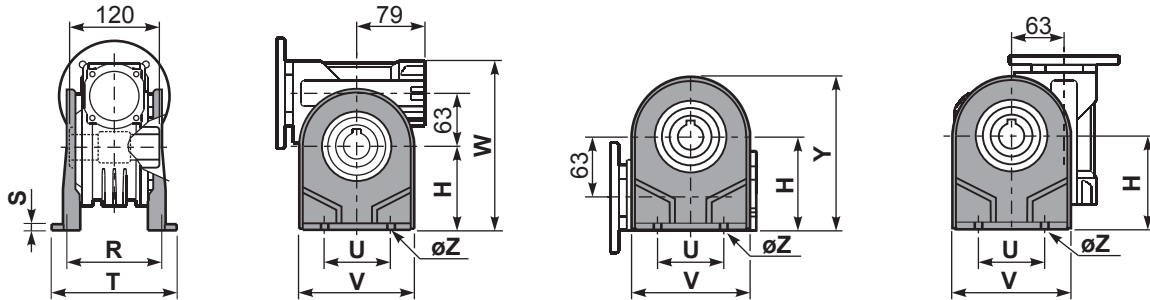
| M. flanges | Kit code | øF | A |
|----------------|------------|-----|------|
| 63B5 | K063.4.041 | 140 | 99.5 |
| 71B5 | K063.4.042 | 160 | 97.5 |
| 80/90B5 | K063.4.043 | 200 | 99.5 |
| 71B14 | K063.4.047 | 105 | 97.5 |
| 80B14 | K063.4.046 | 120 | 99.5 |
| 90B14 | K063.4.041 | 140 | 99.5 |



P063PA... Feet
Piedini

P063PB... Feet
Piedini

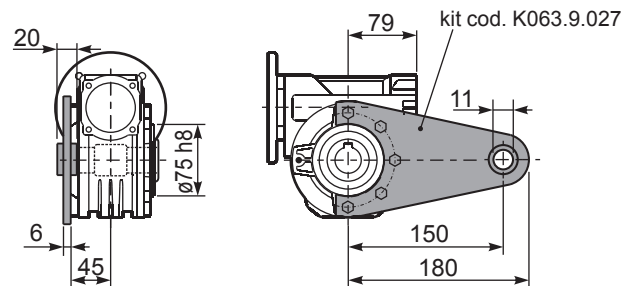
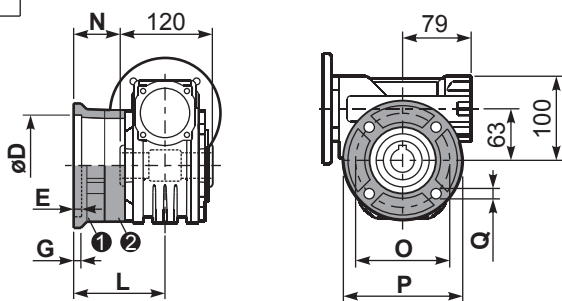
P063PV... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|---|-----|----|-----|-----|-----|-------|------------|
| type B | 100 | 111 | 4 | 144 | 95 | 133 | 170 | 200 | ø10.5 | K063.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

P063FC... Output flange
Flangia uscita

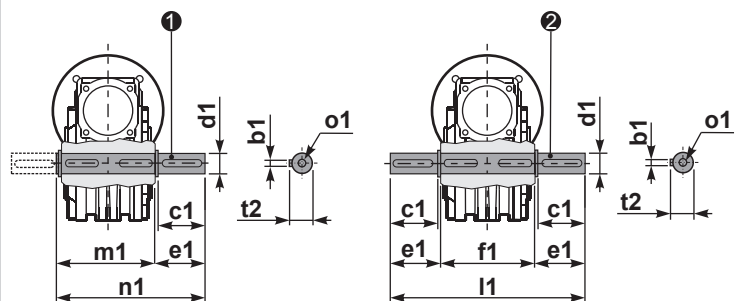
P063BR... Reaction arm
Braccio di reazione



| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|---|---|----|-----|----|-----|-----|----|------------------------------|
| FC | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 86 | 26 | 150 | 175 | 11 | 1 K063.9.010 2 - |
| FL | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | 1 K063.9.010 2 K063.0.200 |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 102 | 42 | 165 | 200 | 13 | 1 KS070.9.013 2 - |
| F2 | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | 1 KS063.9.013 2 - |
| F3 | 110 ^{+0.035} / ₀ | 5 | 11 | 82 | 22 | 130 | 160 | 10 | 1 KS063.9.011 2 - |

P063.....S... Single Shaft
Albero lento semplice

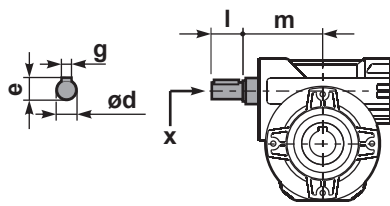
P063.....D... Double Shaft
Albero lento bisp.



1 kit cod. K063.5.028 type B

2 kit cod. K063.5.029 type B

R063FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|-------|------|---|----|----|-------|--|
| type B | 18 h6 | 20.5 | 6 | 45 | 93 | M6x16 | 1 K063.5.006 PAM80 2 K063.5.007 PAM90 |
| type S | 19 h6 | 21.5 | 6 | 40 | 93 | M8x20 | 1 KS063.5.008 PAM80 2 KS063.5.009 PAM90 |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-------|-------|-----|----|-------|
| type B | 8 | 60 | 25 ^{-0.005} / _{-0.020} | 63.2 | 120 | 246.4 | 126.8 | 190 | 28 | M8x20 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code | |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|----|-----------------------------|-----|-----|---------------------------------|--------------------------|-----------------|----|
| | | | | | | | -B | -C | -D | -E | -Q | -R | -T | | | | |
| | | | | | | | 63 | 71 | 80 | 90 | 71 | 80 | 90 | | | | |
| 200 | 7 | 1.8 | 71 | 2.3 | 4.1 | 162 | | B | B | | | B-C | B-C | | 83 | 3.1 | 01 |
| 140 | 10 | 1.8 | 99 | 1.7 | 3.1 | 173 | | B | B | | | B-C | B-C | | 81 | 3.1 | 02 |
| 93 | 15 | 1.5 | 121 | 1.5 | 2.2 | 178 | | B | B | | | B-C | B-C | | 79 | 3.1 | 03 |
| 74 | 19 | 1.5 | 152 | 1.2 | 1.8 | 178 | | B | B | | | B-C | B-C | | 78 | 2.6 | 04 |
| 58 | 24 | 1.5 | 184 | 1.0 | 1.5 | 185 | | B | B | | | B-C | B-C | | 75 | 2.0 | 05 |
| 47 | 30 | 1.5 | 227 | 0.8 | 1.3 | 189 | | B | B | | | B-C | B-C | | 74 | 3.2 | 06 |
| 39 | 36 | 1.1 | 184 | 1.0 | 1.1 | 191 | | B | B | | | B-C | B-C | | 68 | 2.7 | 07 |
| 35 | 40 | 1.1 | 198 | 0.9 | 1.0 | 181 | | B | B | | | B-C | B-C | | 66 | 2.5 | 13 |
| 31 | 45 | 0.75 | 152 | 1.2 | 0.86 | 175 | B | B | | | | B-C | C | | 66 | 2.1 | 08 |
| 23 | 60 | 0.55 | 140 | 1.2 | 0.66 | 168 | B | B | | | | B-C | C | | 62 | 1.6 | 12 |
| 21 | 67 | 0.55 | 151 | 1.1 | 0.58 | 159 | B | B | | | | B-C | C | | 60 | 1.5 | 09 |
| 17.5 | 80 | 0.37 | 115 | 1.3 | 0.49 | 153 | B | B | | | | B-C | C | | 57 | 1.3 | 10 |
| 14.9 | 94 | 0.37 | 123 | 1.1 | 0.39 | 130 | B | B | | | | B-C | C | | 52 | 1.1 | 11 |

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 **63A** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **63A** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **63A** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **63A** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **63A** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 63A Oil Quantity 0.40 Lt.

AGIP Telium VSF 320

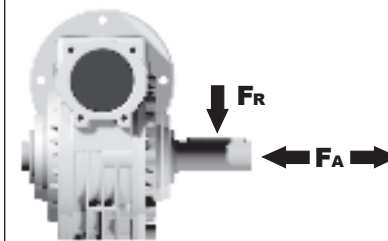
SHELL Omala S4 WE 320

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

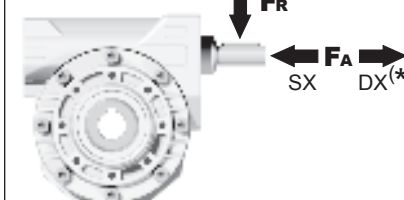
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 200 | 360 | 1800 |
| 150 | 400 | 2000 |
| 100 | 460 | 2300 |
| 75 | 500 | 2500 |
| 50 | 600 | 3000 |
| 25 | 700 | 3800 |
| 15 | 800 | 4000 |

Input shaft

albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 90 | 450 |

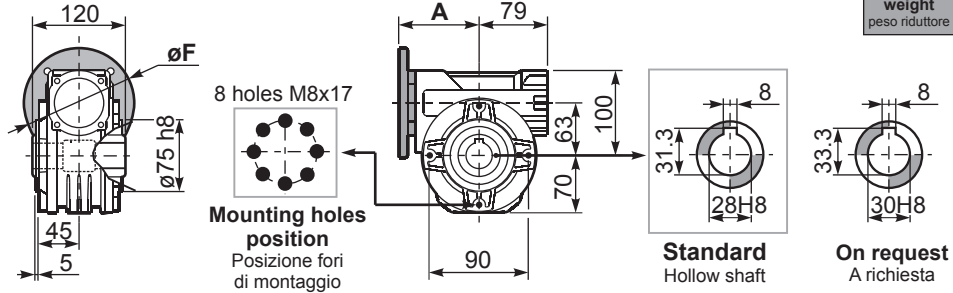
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P63AFB... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **6.00 kg**

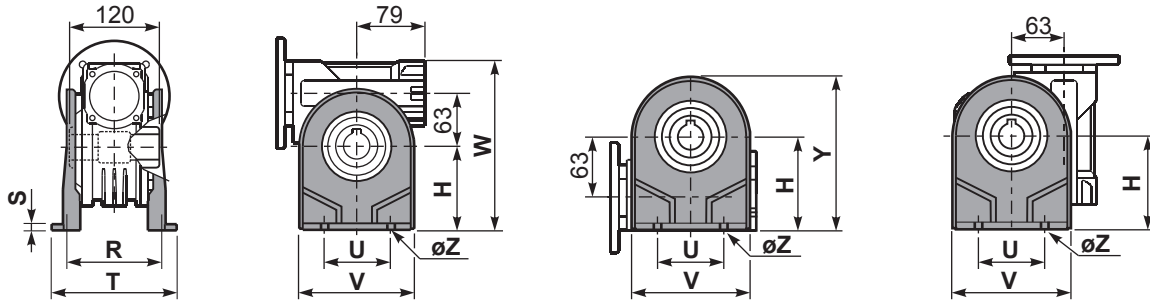
| M. flanges | Kit code | øF | A |
|----------------|------------|-----|------|
| 63B5 | K063.4.041 | 140 | 99.5 |
| 71B5 | K063.4.042 | 160 | 97.5 |
| 80/90B5 | K063.4.043 | 200 | 99.5 |
| 71B14 | K063.4.047 | 105 | 97.5 |
| 80B14 | K063.4.046 | 120 | 99.5 |
| 90B14 | K063.4.041 | 140 | 99.5 |



P63APA... Feet
Piedini

P63APB... Feet
Piedini

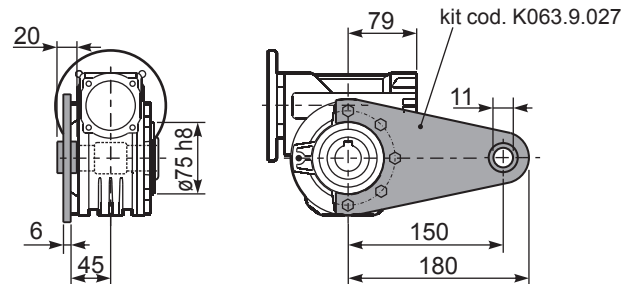
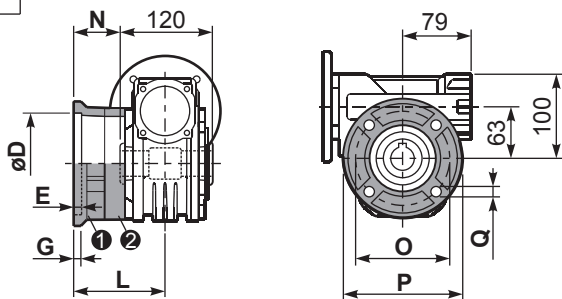
P63APV... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|----|-----|-----|-----|-----|-----|-----|------------|
| type B | 115 | 115 | 12 | 142 | 120 | 156 | 185 | 215 | ø11 | K070.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

P63AFC... Output flange
Flangia uscita

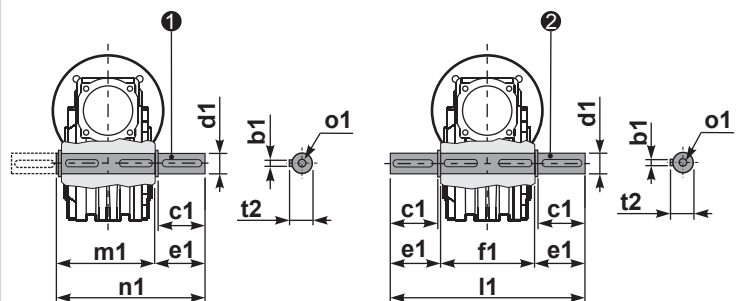
P63ABR... Reaction arm
Braccio di reazione



| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|---|---|------|------|------|-----|-----|----|------------------------------|
| FC | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 85 | 25 | 165 | 200 | 13 | ① K070.9.010 ② - |
| FL | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 111 | 51 | 165 | 200 | 13 | ① K070.9.010 ② K070.0.200 |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 111 | 51 | 165 | 200 | 13 | ① KS070.9.014 ② - |
| F2 | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | ① KS063.9.013 ② - |
| F3 | 110 ^{+0.035} / ₀ | 5 | 13.5 | 84.5 | 24.5 | 130 | 160 | 11 | ① KS070.9.011 ② - |

P63A...S... Single Shaft
Albero lento semplice

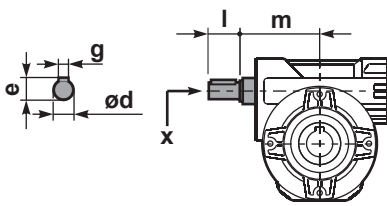
P63A...D... Double Shaft
Albero lento bisp.



① kit cod. K070.5.028 type B

② kit cod. K070.5.029 type B

R63AFB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|-------|------|---|----|----|-------|--|
| type B | 18 h6 | 20.5 | 6 | 45 | 93 | M6x16 | ① K063.5.006 PAM80 ② K063.5.007 PAM90 |
| type S | 19 h6 | 21.5 | 6 | 40 | 93 | M8x20 | ① KS063.5.008 PAM80 ② KS063.5.009 PAM90 |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-----|-------|-----|----|-------|
| type B | 8 | 60 | 28 ^{-0.005} / _{-0.020} | 63.5 | 120 | 247 | 127.5 | 191 | 31 | M8x20 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code | |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|------------|-----------------------------|----|------------|--------------------------|----------------------|-------------|----|
| | | | | | | | -C | -D | -E | -F | -R | -T | -U | | | | |
| | | | | | | | 71 | 80 | 90 | 100 112 | 80 | 90 | 100 112 | | | | |
| 200 | 7 | 4.0 | 168 | 1.5 | 6.1 | 257 | | B | B | | | B | B | | 88 | 4.23 | 01 |
| 140 | 10 | 4.0 | 218 | 1.3 | 5.2 | 284 | | B | B | | | B | B | | 80 | 4.2 | 02 |
| 100 | 14 | 3.0 | 223 | 1.4 | 4.1 | 305 | | B | B | | | B | B | | 78 | 4.5 | 03 |
| 70 | 20 | 2.2 | 237 | 1.2 | 2.7 | 294 | | B | B | | | B | B | | 79 | 3.4 | 04 |
| 64 | 22 | 2.2 | 258 | 1.1 | 2.5 | 294 | | B | B | | | B | B | | 78 | 3.1 | 05 |
| 50 | 28 | 2.2 | 315 | 1.1 | 2.4 | 347 | | B | B | B | | B | B | | 75 | 4.7 | 06 |
| 37 | 38 | 1.5 | 276 | 1.2 | 1.8 | 336 | B | B | | | | B | | | 71 | 3.5 | 07 |
| 30 | 46 | 1.5 | 320 | 1.0 | 1.5 | 326 | B | B | | | | B | | | 68 | 3.1 | 08 |
| 27 | 52 | 1.1 | 258 | 1.1 | 1.2 | 289 | B | B | | | | B | | | 66 | 2.7 | 09 |
| 21 | 67 | 1.1 | 327 | 0.9 | 0.97 | 289 | B | B | | | | B | | | 65 | 2.1 | 10 |
| 18.9 | 74 | 0.75 | 220 | 1.2 | 0.91 | 268 | B | B | | | | B | | | 58 | 1.9 | 11 |
| 14.6 | 96 | 0.55 | 191 | 1.3 | 0.70 | 242 | B | B | | | | B | | | 53 | 1.5 | 12 |

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 085 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 085 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 085 mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 085 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 085 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

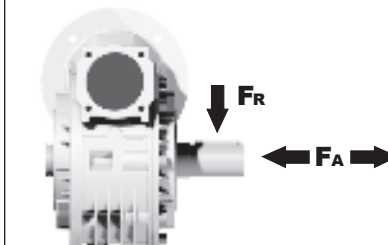
LUBRICATION 085 Oil Quantity 1.20 Lt.

| | |
|----------------------------|------------------------------|
| AGIP Telium VSF 320 | SHELL Omala S4 WE 320 |
|----------------------------|------------------------------|

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

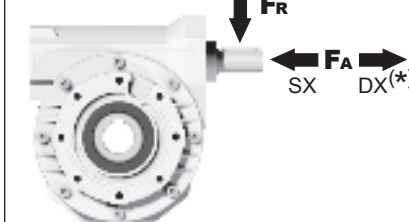
RADIAL AND AXIAL LOADS

Output shaft Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 200 | 500 | 2500 |
| 150 | 580 | 2900 |
| 100 | 600 | 3000 |
| 75 | 700 | 3500 |
| 50 | 800 | 4000 |
| 25 | 1000 | 5000 |
| 15 | 1160 | 5800 |

Input shaft albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 160 | 809 |

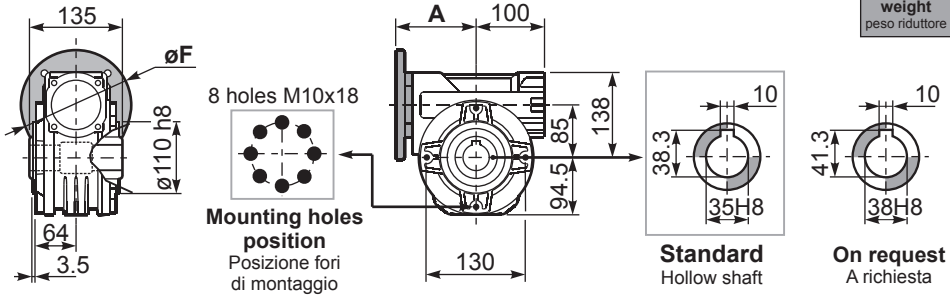
***Strong axial loads in the DX direction are not allowed.**
 Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P085FB... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **11.00 kg**

| M. flanges | Kit code | øF | A |
|-------------------|------------|-----|-------|
| 71B5 | K023.4.041 | 160 | 116.5 |
| 80/90B5 | K023.4.042 | 200 | 118.5 |
| 100/112B5 | K023.4.043 | 250 | 127.5 |
| 80B14 | K085.4.046 | 120 | 118.5 |
| 90B14 | K085.4.045 | 140 | 118.5 |
| 100/112B14 | K085.4.047 | 160 | 127.5 |



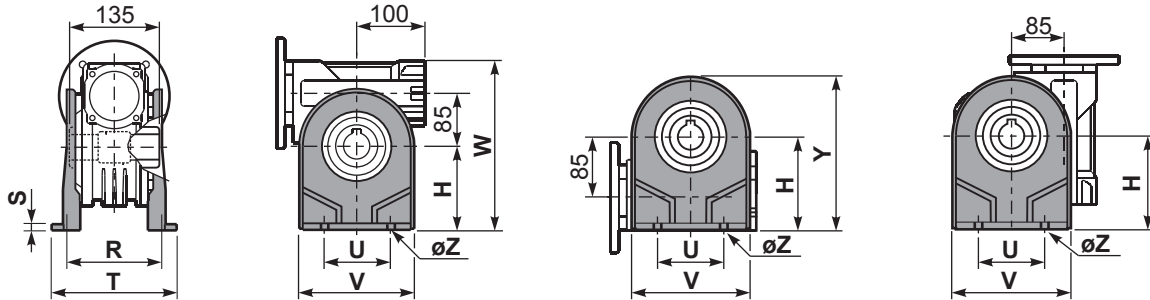
Standard
Hollow shaft

On request
A richiesta

P085PA... Feet
Piedini

P085PB... Feet
Piedini

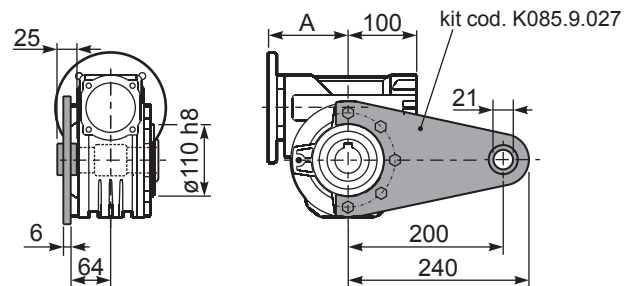
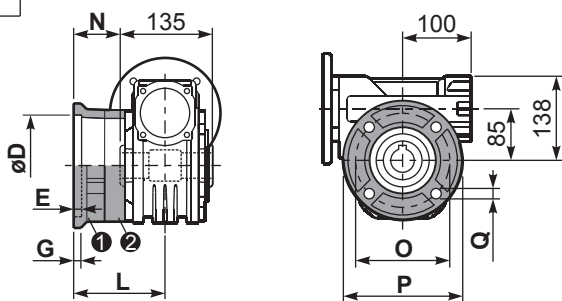
P085PV... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|---|-----|-----|-----|-------|-----|-------|------------|
| type B | 142 | 145 | 5 | 182 | 140 | 180 | 236.5 | 280 | ø10.5 | K085.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

P085FC... Output flange
Flangia uscita

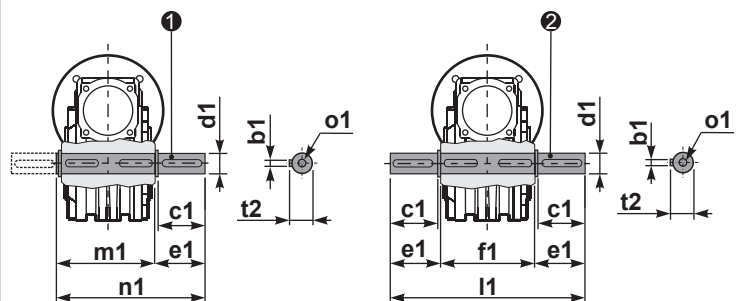
P085BR... Reaction arm
Braccio di reazione



| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|---|---|----|-------|------|-----|-----|------|------------------------------|
| FC | 152 ^{+0.06} / _{+0.00} | 5 | 16 | 108 | 40.5 | 176 | 205 | 13 | ① K085.9.010 ② - |
| FL | 152 ^{+0.06} / _{+0.00} | 5 | 16 | 148.5 | 81 | 176 | 205 | 13 | ① K085.9.010 ② K085.0.201 |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 130 H7 | 5 | 13 | 117.5 | 50 | 165 | 200 | 11.5 | ① KS085.9.012 ② - |
| F2 | 152 ^{+0.06} / _{+0.00} | 5 | 15 | 147.5 | 80 | 180 | 205 | 12.5 | ① KS085.9.013 ② - |
| F4 | 130 H7 | 5 | 13 | 106.5 | 39 | 165 | 200 | 13 | ① KS085.9.015 ② - |

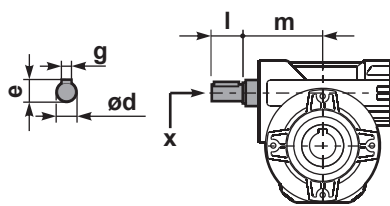
P085.....S... Single Shaft
Albero lento semplice

P085.....D... Double Shaft
Albero lento bisp.



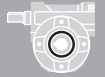
① kit cod. K085.5.028 type B ② kit cod. K085.5.029 type B

R085FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|-------|----|---|----|-----|-------|---|
| type B | 25 h6 | 28 | 8 | 50 | 112 | M8x20 | ① K085.5.007 PAM90 ② K085.5.008 PAM100 |
| type S | 24 h6 | 27 | 8 | 50 | 112 | M8x20 | ① KS085.5.009 PAM90 ② KS085.5.011 PAM100 |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-----|-----|-------|----|--------|
| type B | 10 | 60 | 35 ^{-0.005} / _{-0.020} | 73.5 | 135 | 282 | 141 | 214.5 | 38 | M10x23 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code | |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|------------|-----|-----------------------------|----|------------|-----|--------------------------|----------------------|-------------|----|
| | | | | | | | -C | -D | -E | -F | -G | -R | -T | -U | -V | | | | |
| | | | | | | | 71 | 80 | 90 | 100 112 | 132 | 80 | 90 | 100 112 | 132 | | | | |
| 200 | 7 | 7.5 | 315 | 1.5 | 11.5 | 483 | | B | B | | | | B | B | | | 88 | 5.5 | 01 |
| 140 | 10 | 7.5 | 440 | 1.2 | 9.0 | 525 | | B | B | | | | B | B | | | 86 | 5.4 | 02 |
| 88 | 16 | 5.5 | 492 | 1.1 | 6.0 | 536 | | B | B | | | | B | B | | | 82 | 5.3 | 03 |
| 70 | 20 | 4.0 | 447 | 1.2 | 4.9 | 546 | | B | B | | | | B | B | | | 82 | 4.5 | 04 |
| 61 | 23 | 3.0 | 377 | 1.4 | 4.1 | 515 | | B | B | | | | B | B | | | 80 | 3.9 | 05 |
| 47 | 30 | 3.0 | 467 | 1.4 | 4.2 | 651 | | B | B | | | | B | B | | | 76 | 5.6 | 06 |
| 37 | 38 | 3.0 | 583 | 1.1 | 3.3 | 641 | | B | B | | | | B | B | | | 75 | 4.7 | 07 |
| 31 | 45 | 2.2 | 493 | 1.2 | 2.7 | 599 | | B | B | | | | B | B | | | 73 | 4.0 | 08 |
| 26 | 53 | 2.2 | 557 | 1.1 | 2.5 | 620 | | B | B | | | | B | B | | | 70 | 3.5 | 09 |
| 22 | 64 | 1.5 | 452 | 1.2 | 1.8 | 536 | B | B | | | | | B | B | | | 69 | 2.9 | 10 |
| 16.7 | 84 | 1.1 | 410 | 1.2 | 1.3 | 494 | B | B | | | | | B | B | | | 65 | 2.2 | 11 |
| 14.1 | 99 | 1.1 | 446 | 1.1 | 1.2 | 483 | B | B | | | | | B | B | | | 60 | 1.9 | 12 |

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 110 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 110 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 110 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 110 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 110 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.

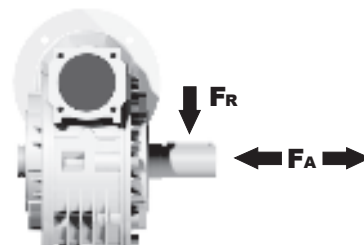
| | | | | | |
|---------|---------|---------|--------|---------|--------|
| | | | | | |
| B3 | B6 | B7 | B8 | V5 | V6 |
| 2.00 LT | 1.35 LT | 1.35 LT | 2.00LT | 2.00 LT | 2.00LT |

AGIP Blasias 460

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

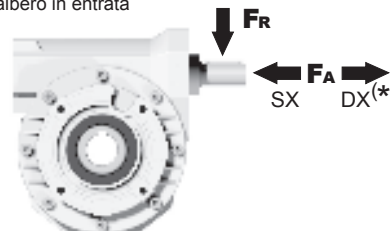
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 200 | 600 | 2900 |
| 150 | 700 | 3300 |
| 100 | 750 | 3600 |
| 75 | 800 | 4000 |
| 50 | 920 | 4600 |
| 25 | 1200 | 6000 |
| 15 | 1400 | 7000 |

Input shaft
albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 228 | 1140 |

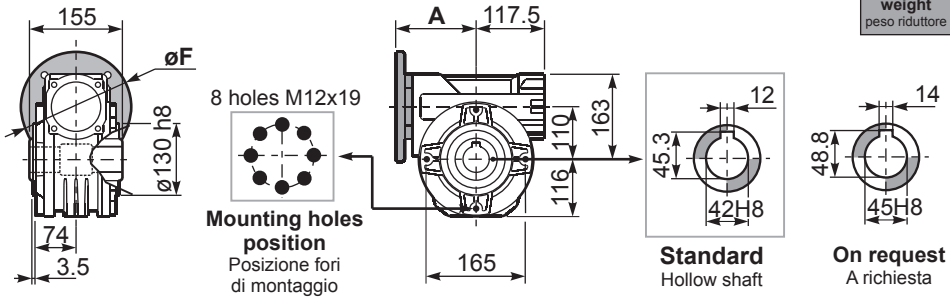
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

P110FB... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **35.00 kg**

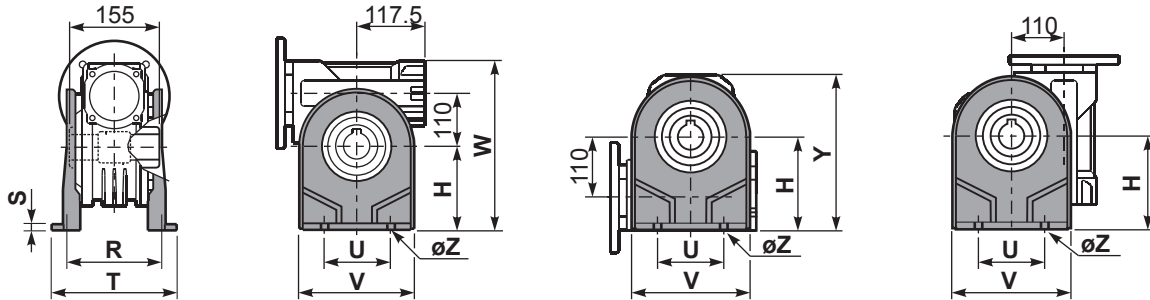
| M. flanges | Kit code | øF | A |
|------------|------------|-----|-----|
| 71B5 | K023.4.041 | 160 | 136 |
| 80/90B5 | K023.4.042 | 200 | 138 |
| 100/112B5 | K023.4.043 | 250 | 147 |
| 132B5 | - | 300 | 187 |
| | | | |
| 80B14 | K085.4.046 | 120 | 138 |
| 90B14 | K085.4.045 | 140 | 138 |
| 100/112B14 | K023.4.041 | 160 | 136 |
| 132B14 | - | 200 | 187 |



P110PA... Feet
Piedini

P110PB... Feet
Piedini

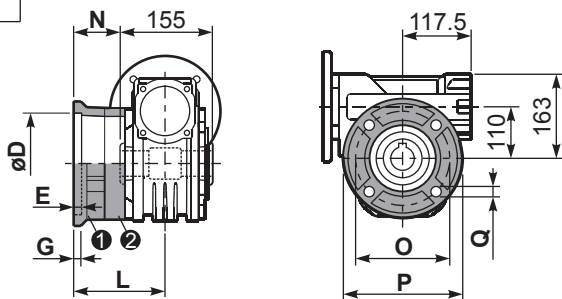
P110PV... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|----|-----|-----|-----|-----|-----|-----|-------------|
| type B | 170 | 180 | 22 | 224 | 200 | 240 | 286 | 333 | ø13 | K110.9.022 |
| type S | 172 | 160 | 8 | 204 | 200 | 240 | 288 | 335 | ø14 | KS110.9.023 |

P110FC... Output flange
Flangia uscita

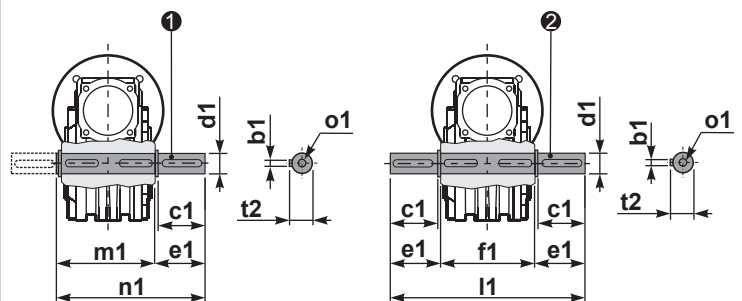
P110BR... Reaction arm
Braccio di reazione



| type B | øD | E | G | L | N | O | P | Q | kit code |
|--------|---|-----|------|-------|-------|-----|-----|----|----------------------|
| FC | 170 ^{+0.083} / _{+0.043} | 11 | 16.5 | 131.5 | 54 | 230 | 270 | 13 | ① K110.9.010 ② - |
| FL | 170 ^{+0.083} / _{+0.043} | 11 | 16.5 | 179.5 | 102 | 230 | 270 | 13 | ① K110.9.011 ② - |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 180 ^{+0.040} / ₀ | 5 | 18 | 150 | 72.5 | 215 | 250 | 15 | ① KS110.9.014 ② - |
| F2 | 170 ^{+0.083} / _{+0.043} | 9.5 | 15 | 178 | 100.5 | 230 | 270 | 13 | ① KS110.9.012 ② - |
| F3 | 180 ^{+0.040} / ₀ | 5 | 18 | 130 | 52.5 | 215 | 250 | 15 | ① KS110.9.013 ② - |

P110.....S... Single Shaft
Albero lento semplice

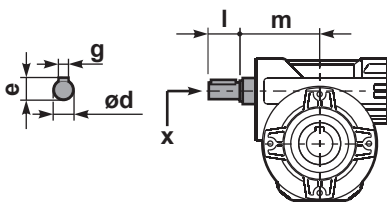
P110.....D... Double Shaft
Albero lento bisp.



① kit cod. K110.5.028 type B

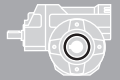
② kit cod. K110.5.029 type B

R110FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|-------|----|---|----|-------|-------|---|
| type B | 25 h6 | 28 | 8 | 50 | 131.5 | M8x20 | ① K085.5.007 PAM90 ② K085.5.008 PAM100 |
| type S | 24 h6 | 27 | 8 | 50 | 131.5 | M8x20 | ① KS085.5.009 PAM90 ② KS085.5.011 PAM100 |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-----|-------|-----|----|--------|
| type B | 12 | 75 | 42 ^{-0.005} / _{-0.020} | 96.5 | 155 | 348 | 163.5 | 260 | 45 | M12x32 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|-----------------------------|----|---------------------------------|--------------------------|-----------------|
| | | | | | | | -A | -B | -C | -P | -Q | | | |
| | | | | | | | 56 | 63 | 71 | 63 | 71 | | | |
| 47 | 30.1 | 0.25 | 38 | 1.4 | 0.36 | 55 | | | | C | | 74 | 2.2 | 01 |
| 33 | 43.0 | 0.25 | 53 | 1.0 | 0.26 | 55 | | | | C | | 72 | 2.2 | 02 |
| 23 | 60.2 | 0.25 | 62 | 0.9 | 0.22 | 55 | | | | C | | 60 | 2.4 | 03 |
| 15.5 | 90.3 | 0.12 | 42 | 1.3 | 0.16 | 55 | | | | C | | 57 | 1.6 | 04 |
| 11.6 | 120 | 0.12 | 52 | 1.1 | 0.13 | 55 | | | | C | | 53 | 2.5 | 05 |
| 8.8 | 159 | 0.12 | 64 | 0.9 | 0.10 | 55 | | | | C | | 49 | 1.8 | 06 |
| 7.1 | 198 | 0.12* | 55 | <0.8 | 0.09 | 55 | | | | C | | 47 | 1.5 | 07 |
| 5.4 | 258 | 0.12* | 55 | <0.8 | 0.07 | 55 | | | | C | | 45 | 1.2 | 08 |
| 4.7 | 301 | 0.12* | 39 | <0.8 | 0.05 | 39 | | | | C | | 40 | 1.0 | 09 |
| 3.2 | 439 | 0.12* | 39 | <0.8 | 0.04 | 39 | | | | C | | 36 | 0.72 | 10 |

A) 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

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

EN Unit **P45** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **P45** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **P45** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **P45** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **P45** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P45 Oil

Common lubrication 0.17 l (A + B).



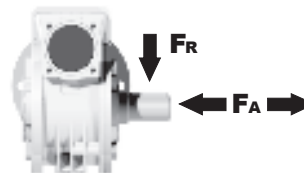
AGIP Telium VSF 320

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 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 75 | 240 | 1200 |
| 50 | 260 | 1400 |
| 25 | 300 | 1800 |
| 15-6 | 400 | 2000 |

Input shaft
albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 44 | 220 |

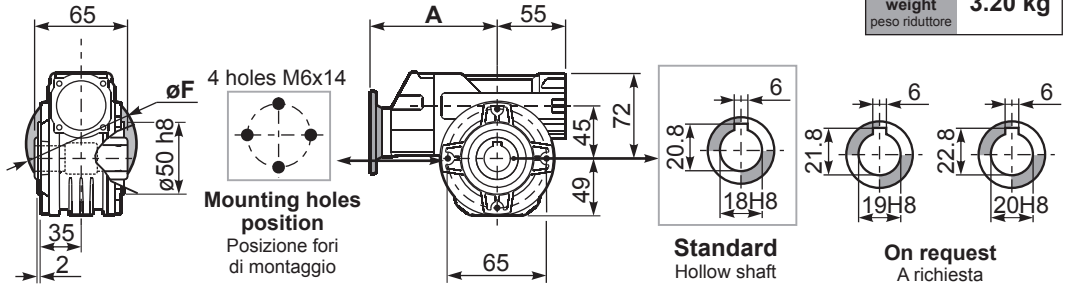
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PP45**FB**... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **3.20 kg**

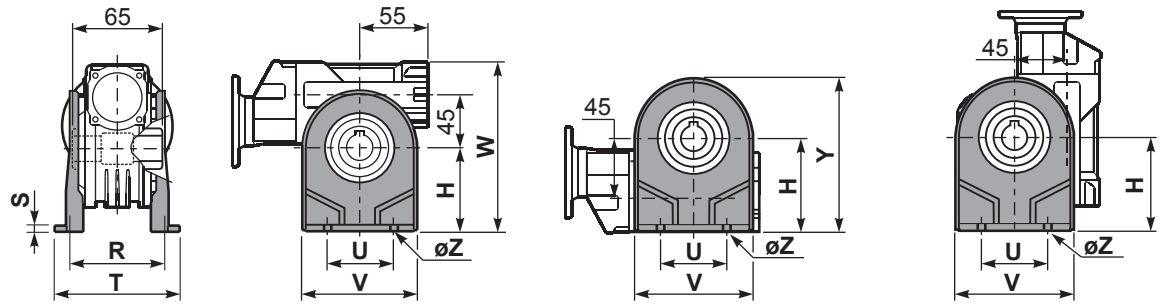
| M. flanges | Kit code | øF | A |
|------------|------------|-----|-------|
| 56B5 | K050.4.046 | 120 | 137.5 |
| 63B5 | K050.4.041 | 138 | 139.5 |
| 71B5 | K050.4.042 | 160 | 137 |
| 63B14 | K050.4.047 | 90 | 139.5 |
| 71B14 | K050.4.045 | 105 | 137 |



PP45**PA**... Feet
Piedini

PP45**PB**... Feet
Piedini

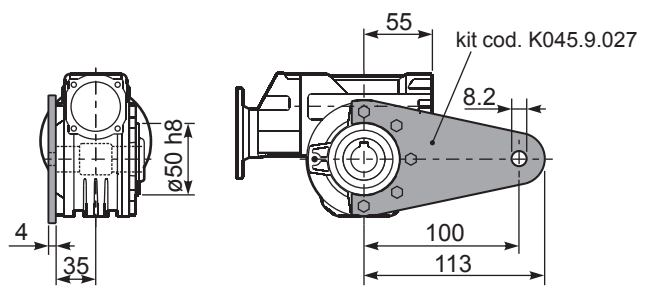
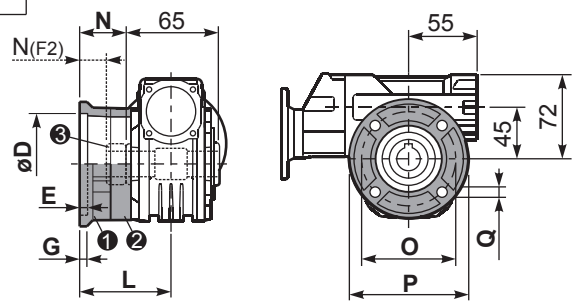
PP45**PV**... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|----|----|---|-----|----|----|-----|-----|-------|-------------|
| type B | 72 | 81 | 3 | 100 | 52 | 98 | 121 | 144 | ø10.5 | K045.9.022 |
| type S | 71 | 84 | 8 | 100 | 70 | 90 | 120 | 143 | ø8 | KS045.9.023 |

PP45**FC**... Output flange
Flangia uscita

PP45**BR**... Reaction arm
Braccio di reazione

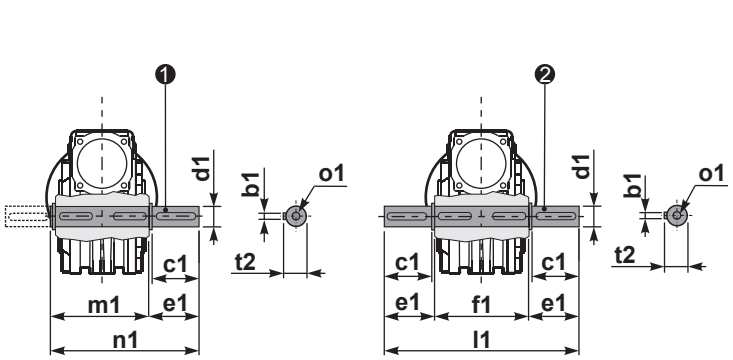


| type B | øD | E | G | L | N | O | P | Q | kit code |
|--------|--|---|---|------|----|----|-----|-----|------------------------------|
| FC | 60 ^{+0.15} / _{+0.05} | 9 | 9 | 60.5 | 28 | 87 | 110 | 8.5 | ① K045.9.010 ② - |
| FL | 60 ^{+0.15} / _{+0.05} | 9 | 9 | 90.5 | 58 | 87 | 110 | 8.5 | ① K045.9.010 ② K045.0.200 |

PP45.....**S**... Single Shaft
Albero lento semplice

PP45.....**D**... Double Shaft
Albero lento bisp.

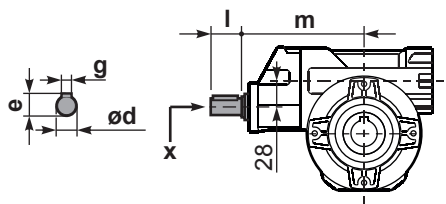
| type S | øD | E | G | L | N | O | P | Q | kit code |
|--------|--|---|----|------|----|-----|-----|-----|-------------------------------|
| F1 | 95 ^{+0.20} / _{+0.15} | 4 | 11 | 73.5 | 41 | 115 | 140 | 9 | ① KS045.9.013 ② - |
| F2 | 60 ^{+0.15} / _{+0.05} | 9 | 9 | 60.5 | 19 | 87 | 110 | 8.5 | ① KS045.9.010 ② S045.0.204 |
| F3 | 80 ^{+0.03} / _{+0.00} | 3 | 8 | 51.5 | 19 | 100 | 120 | 9 | ① KS045.9.014 ② - |



① kit cod. K045.5.028 type B
kit cod. KS045.5.030 type S

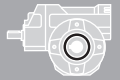
② kit cod. K045.5.029 type B
kit cod. KS045.5.031 type S

RP45**FB**... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | |
|--------|-------|----|---|----|-----|-------|-----------|
| type B | 14 h6 | 16 | 5 | 25 | 131 | M5x13 | C35.5.061 |
| type S | - | - | - | - | - | - | |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|----|-----|----|-------|------|-------|
| type B | 6 | 32 | 18 ^{-0.005} / _{-0.020} | 43 | 65 | 151 | 70 | 113 | 20.5 | M6x18 |
| type S | 6 | 40 | 19 ^{-0.005} / _{-0.020} | 58.8 | 65 | 182 | 70 | 128.5 | 21.5 | M8x20 |



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 | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|-----------------------------|----|---------------------------------|--------------------------|-----------------|
| | | | | | | | -A | -B | -C | -P | -Q | | | |
| | | | | | | | 56 | 63 | 71 | 63 | 71 | | | |
| 47 | 30.1 | 0.37 | 58 | 1.3 | 0.49 | 77 | | | | C | | 76 | 2.5 | 01 |
| 33 | 43.0 | 0.25 | 55 | 1.4 | 0.35 | 77 | | | | C | | 75 | 2.4 | 02 |
| 23 | 60.2 | 0.25 | 71 | 1.1 | 0.27 | 77 | | | | C | | 69 | 2.6 | 03 |
| 18.1 | 77.4 | 0.25 | 81 | 1.1 | 0.27 | 88 | | | | C | | 61 | 2.0 | 04 |
| 12.5 | 112 | 0.18 | 84 | 1.1 | 0.19 | 88 | | | | C | | 61 | 2.7 | 05 |
| 9.0 | 155 | 0.12 | 71 | 1.2 | 0.15 | 88 | | | | C | | 56 | 2.1 | 06 |
| 7.6 | 185 | 0.12 | 74 | 1.0 | 0.12 | 77 | | | | C | | 49 | 1.8 | 07 |
| 5.4 | 258 | 0.12* | 77 | <0.8 | 0.09 | 77 | | | | C | | 47 | 1.3 | 08 |
| 4.8 | 292 | 0.12* | 66 | <0.8 | 0.08 | 66 | | | | C | | 44 | 1.2 | 09 |
| 4.1 | 344 | 0.12* | 44 | <0.8 | 0.05 | 44 | | | | C | | 40 | 1.0 | 10 |
| 3.3 | 430 | 0.12* | 44 | <0.8 | 0.04 | 44 | | | | C | | 36 | 0.8 | 11 |

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

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

EN Unit **P50** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **P50** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **P50** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **P50** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **P50** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P50 Oil Common lubrication 0.26 l (A + B).

| | |
|----------------------------|------------------------------|
| 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 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 75 | 340 | 1700 |
| 50 | 380 | 1900 |
| 25 | 480 | 2500 |
| 15-6 | 560 | 2800 |

Input shaft
albero in entrata

| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 44 | 220 |

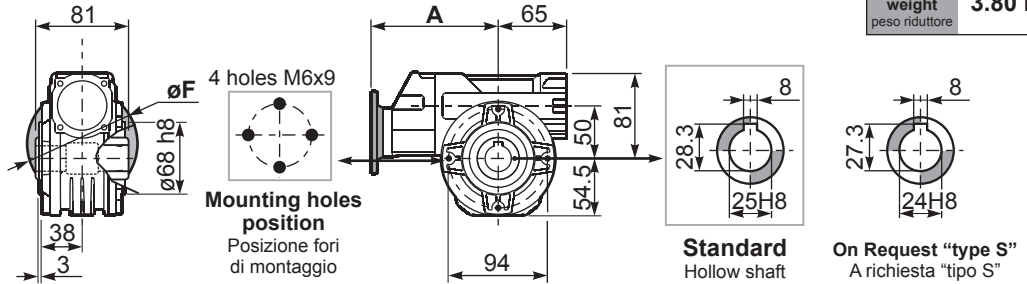
*Strong axial loads in the DX direction are not allowed.
 Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PP50FB... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **3.80 kg**

| M. flanges | Kit code | øF | A |
|--------------|------------|-----|-------|
| 56B5 | K050.4.046 | 120 | 142 |
| 63B5 | K050.4.041 | 138 | 144 |
| 71B5 | K050.4.042 | 160 | 141.5 |
| 63B14 | K050.4.047 | 90 | 144 |
| 71B14 | K050.4.045 | 105 | 141.5 |



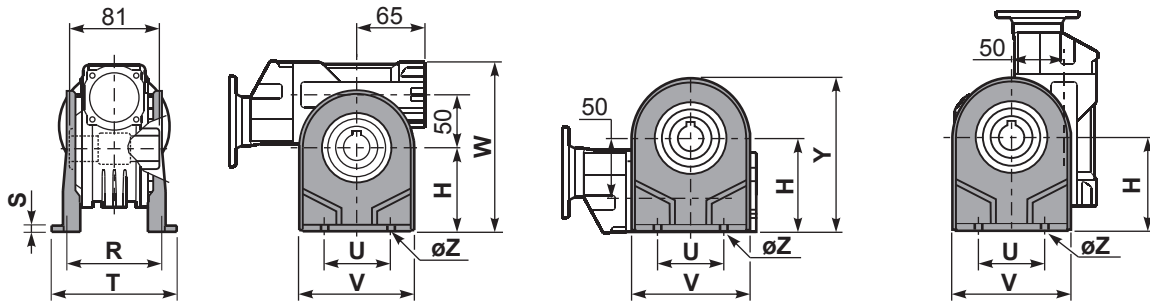
Standard
Hollow shaft

On Request "type S"
A richiesta "tipo S"

PP50PA... Feet
Piedini

PP50PB... Feet
Piedini

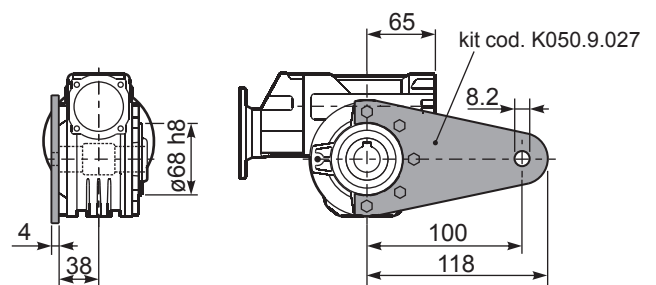
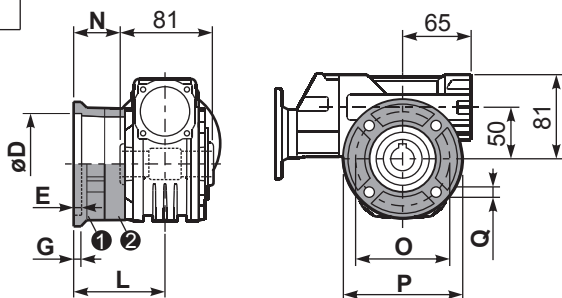
PP50PV... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|----|------|-----|-----|----|-----|-------|-----|-------|-------------|
| type B | 82 | 98.5 | 3.5 | 123 | 63 | 113 | 138.5 | 163 | ø10.5 | K050.9.022 |
| type S | 85 | 96 | 10 | 114 | 85 | 110 | 139.5 | 166 | ø10 | KS050.9.023 |

PP50FC... Output flange
Flangia uscita

PP50BR... Reaction arm
Braccio di reazione

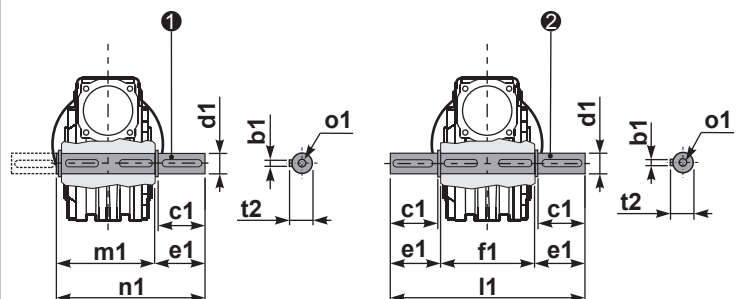


| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|--|---|----|-------|------|----|-----|------|------------------------------|
| FC | 70 ^{+0.20} / _{+0.15} | 9 | 12 | 85 | 44.5 | 90 | 123 | 10.5 | ① K050.9.010 ② - |
| FL | 70 ^{+0.20} / _{+0.15} | 9 | 12 | 114.5 | 74 | 90 | 123 | 10.5 | ① K050.9.010 ② K050.0.200 |

| type S | øD | E | G | L | N | O | P | Q | kit code |
|-----------|---|---|----|------|----|-----|-----|------|----------------------|
| F1 | 110 ^{+0.20} / _{+0.15} | 4 | 11 | 83.5 | 43 | 130 | 160 | 10 | ① KS050.9.012 ② - |
| F2 | 70 ^{+0.20} / _{+0.15} | 9 | 12 | 76.5 | 36 | 90 | 123 | 10.5 | ① KS050.9.014 ② - |
| F3 | 95 ^{+0.035} / ₀ | 4 | 10 | 66.5 | 26 | 115 | 140 | 10 | ① KS050.9.013 ② - |

PP50....S... Single Shaft
Albero lento semplice

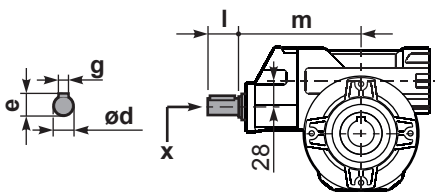
PP50....D... Double Shaft
Albero lento bisp.



① kit cod. K050.5.028 type B
kit cod. KS050.5.030 type S

② kit cod. K050.5.029 type B
kit cod. KS050.5.031 type S

RP50FB... Input shaft
Albero in entrata



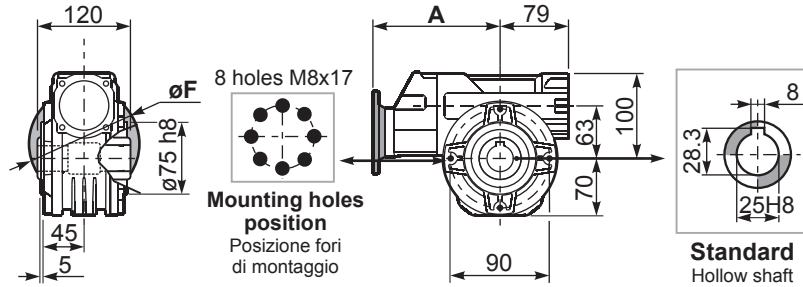
| | ød | e | g | l | m | x |
|--------|-------|----|---|----|-------|-------|
| type B | 14 h6 | 16 | 5 | 25 | 135.5 | M5x13 |
| type S | - | - | - | - | - | - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|----|-----|------|-----|----|-------|
| type B | 8 | 52 | 25 ^{-0.005} / _{-0.020} | 59.5 | 81 | 200 | 86.5 | 146 | 28 | M8x20 |
| type S | 8 | 50 | 24 ^{-0.005} / _{-0.020} | 68.8 | 81 | 218 | 86.5 | 155 | 27 | M8x20 |

PP63**FB**... Basic wormbox
Riduttore base

| | | |
|----------------|----------|---------|
| Gearbox weight | 29.9+111 | 139+434 |
| peso riduttore | 7.30 Kg | 7.80 Kg |

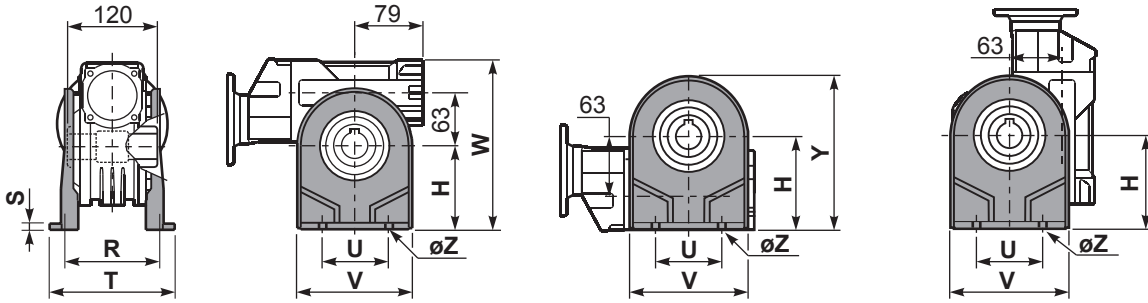
| M.flange | Kit code | øF | A |
|----------------|------------|-----|-------|
| 71B5 | K063.4.042 | 160 | 176.5 |
| 80/90B5 | K063.4.043 | 200 | 178.5 |
| 71B14 | K063.4.047 | 105 | 176.5 |
| 80B14 | K063.4.046 | 120 | 178.5 |
| 90B14 | K063.4.041 | 140 | 178.5 |
| 139+434 | | | |
| 63B5 | K050.4.041 | 138 | 162.5 |
| 71B5 | K050.4.042 | 160 | 160 |
| 63B14 | K050.4.047 | 90 | 162.5 |
| 71B14 | K050.4.045 | 105 | 160 |



PP63**PA**... Feet
Piedini

PP63**PB**... Feet
Piedini

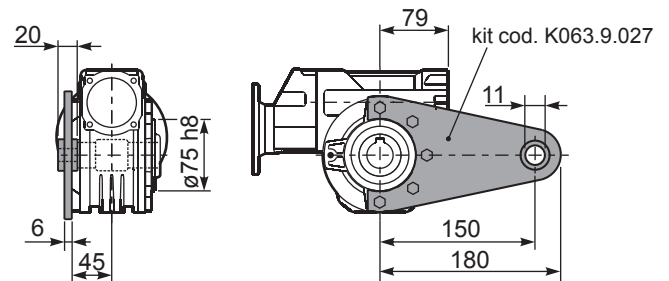
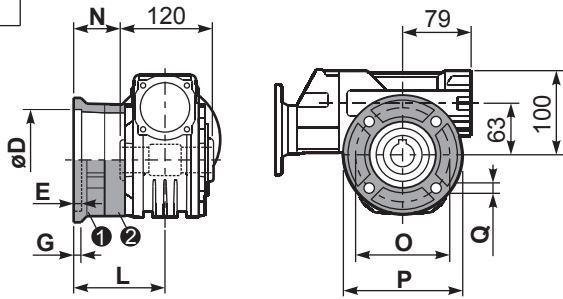
PP63**PV**... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|---|-----|----|-----|-----|-----|-------|------------|
| type B | 100 | 111 | 4 | 144 | 95 | 133 | 170 | 200 | ø10.5 | K063.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

PP63**FC**... Output flange
Flangia uscita

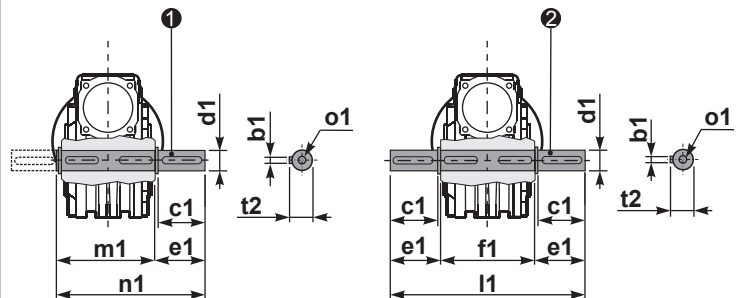
PP63**BR**... Reaction arm
Braccio di reazione



| type B | øD | E | G | L | N | O | P | Q | kit code |
|--------|---|---|----|-----|----|-----|-----|----|------------------------------|
| FC | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 86 | 26 | 150 | 175 | 11 | ① K063.9.010 ② - |
| FL | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | ① K063.9.010 ② K063.0.200 |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 102 | 42 | 165 | 200 | 13 | ① KS070.9.013 ② - |
| F2 | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | ① KS063.9.013 ② - |
| F3 | 110 ^{+0.035} / ₀ | 5 | 11 | 82 | 22 | 130 | 160 | 10 | ① KS063.9.011 ② - |

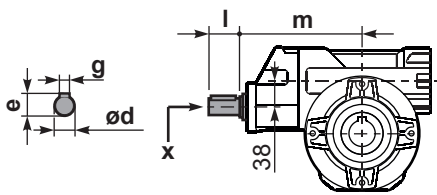
PP63.....**S**... Single Shaft
Albero lento semplice

PP63.....**D**... Double Shaft
Albero lento bisp.



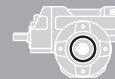
① kit cod. K063.5.028 type B ② kit cod. K063.5.029 type B

RP63**FB**... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | |
|----------|-------|------|---|----|-------|-------|-----------|
| 29.9+111 | 19 h6 | 21.5 | 6 | 35 | 169.4 | M6x16 | C40.5.062 |
| 139+434 | 14 h6 | 16 | 5 | 25 | 154.2 | M5x13 | C35.5.061 |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-------|-------|-----|----|-------|
| type B | 8 | 60 | 25 ^{-0.005} / _{-0.020} | 63.2 | 120 | 246.4 | 126.8 | 190 | 28 | M8x20 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|------------------|--|------------|--|--|------------------------|--|---|----------------------------|----|----|----|-----------------------------|----|----|----|--------------------------|----------------------|-------------|
| | | | | | | | | -B | -C | -D | -E | -P | -Q | -R | -T | | | |
| | | | | | | | | 63 | 71 | 80 | 90 | 63 | 71 | 80 | 90 | | | |
| IEC 90 - 80 - 71 | 47 | 29.9 | 0.75 | 113 | 1.6 | 1.20 | 182 | | | | | C | C | | 74 | 2.6 | 01 | |
| | 37 | 37.7 | 0.75 | 141 | 1.3 | 0.97 | 182 | | | | | C | C | | 73 | 2.0 | 02 | |
| | 30 | 47.1 | 0.75 | 169 | 1.2 | 0.91 | 206 | | | | | C | C | | 70 | 3.2 | 03 | |
| | 25 | 56.6 | 0.75 | 185 | 1.1 | 0.83 | 206 | | | | | C | C | | 64 | 2.7 | 04 | |
| | 19.8 | 70.7 | 0.55 | 162 | 1.3 | 0.70 | 206 | | | | | C | C | | 61 | 2.1 | 05 | |
| | 15.9 | 87.8 | 0.37 | 160 | 1.4 | 0.51 | 218 | | | | | C | C | | 72 | 2.6 | 06 | |
| | 12.6 | 111.0 | 0.37 | 196 | 1.1 | 0.41 | 218 | | | | | C | C | | 70 | 2.0 | 07 | |
| IEC 71 - 63 | 10.1 | 139 | 0.37 | 231 | 0.9 | 0.35 | 218 | | | | | C | | | 66 | 3.2 | 08 | |
| | 8.4 | 166 | 0.25 | 170 | 1.3 | 0.32 | 218 | | | | | C | | | 60 | 2.7 | 09 | |
| | 6.7 | 208 | 0.25 | 195 | 1.0 | 0.25 | 194 | | | | | C | | | 55 | 2.1 | 10 | |
| | 4.5 | 310 | 0.18 | 194 | 1.0 | 0.18 | 194 | | | | | C | | | 51 | 1.5 | 11 | |
| | 3.8 | 370 | 0.18 | 213 | 0.9 | 0.16 | 194 | | | | | C | | | 47 | 1.3 | 12 | |
| | 3.2 | 434 | 0.18* | 143 | <0.8 | 0.11 | 143 | | | | | C | | | 42 | 1.1 | 13 | |

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

EN Unit P6A is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 P6A viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe P6A mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 P6A est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 P6A se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P6A Oil

For B3-V5-V6 separate lubrication for A (0.40 l) B (0.08 l) , for B6-B7-B8 common lubrication 0.38 l (A + B).



AGIP Telium VSF 320

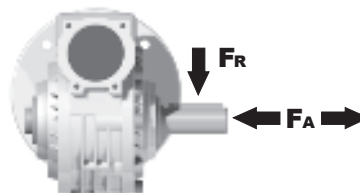
SHELL Omala S4 WE 320

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

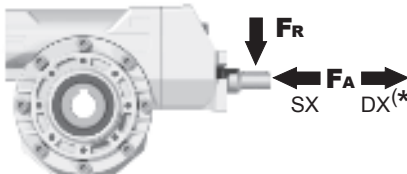
Albero di uscita



| n ₂ [min ⁻¹] | FA [N] | FR [N] |
|--|-----------|-----------|
| 75 | 500 | 2500 |
| 50 | 600 | 3000 |
| 25 | 700 | 3800 |
| 15-6 | 800 | 4000 |

Input shaft

albero in entrata



| n ₁ [min ⁻¹] | FA [N] | FR [N] |
|--|-----------|-----------|
| 1400 | 61 | 305 |

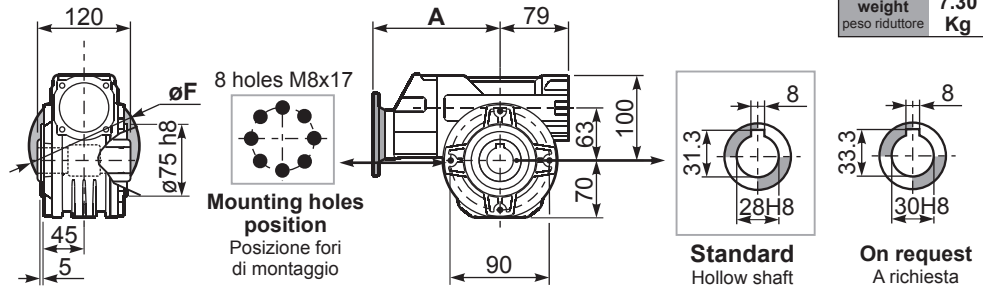
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

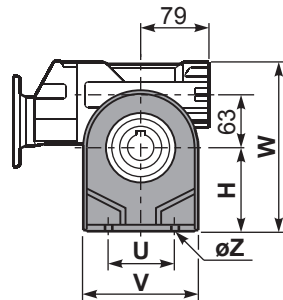
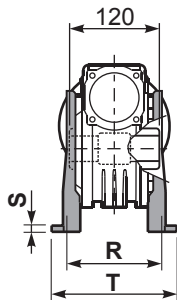
PP6AFB... Basic wormbox
Riduttore base

| | | |
|----------------------------------|----------|---------|
| Gearbox weight peso riduttore | 29.9+111 | 139+434 |
| | 7.30 Kg | 7.80 Kg |

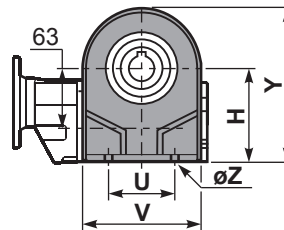
| M.flange | Kit code | øF | A |
|----------|------------|-----|-------|
| 71B5 | K063.4.042 | 160 | 176.5 |
| 80/90B5 | K063.4.043 | 200 | 178.5 |
| 71B14 | K063.4.047 | 105 | 176.5 |
| 80B14 | K063.4.046 | 120 | 178.5 |
| 90B14 | K063.4.041 | 140 | 178.5 |
| <hr/> | | | |
| 139+434 | | | |
| 63B5 | K050.4.041 | 138 | 162.5 |
| 71B5 | K050.4.042 | 160 | 160 |
| 63B14 | K050.4.047 | 90 | 162.5 |
| 71B14 | K050.4.045 | 105 | 160 |



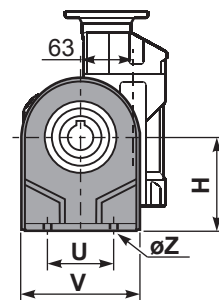
PP6APA... Feet
Piedini



PP6APB... Feet
Piedini

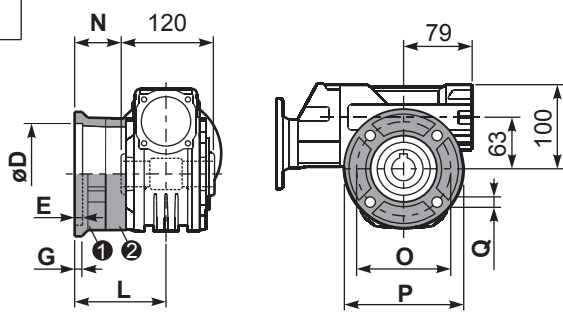


PP6APV... Feet
Piedini



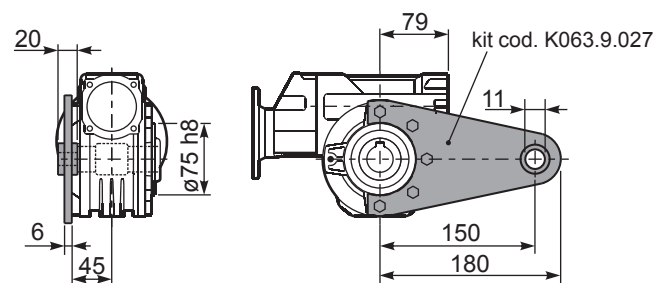
| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|----|-----|-----|-----|-----|-----|-----|------------|
| type B | 115 | 115 | 12 | 142 | 120 | 156 | 185 | 215 | ø11 | K070.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

PP6AFC... Output flange
Flangia uscita



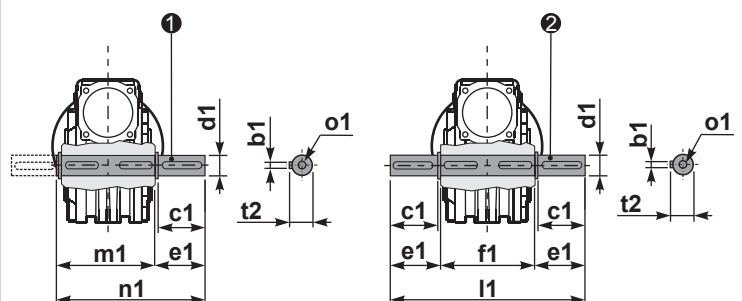
| type B | øD | E | G | L | N | O | P | Q | kit code |
|--------|---|---|------|------|------|-----|-----|----|------------------------------|
| FC | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 85 | 25 | 165 | 200 | 13 | 1 K070.9.010 2 - |
| FL | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 111 | 51 | 165 | 200 | 13 | 1 K070.9.010 2 K070.0.200 |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 111 | 51 | 165 | 200 | 13 | 1 KS070.9.014 2 - |
| F2 | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | 1 KS063.9.013 2 - |
| F3 | 110 ^{+0.035} / ₀ | 5 | 13.5 | 84.5 | 24.5 | 130 | 160 | 11 | 1 KS070.9.011 2 - |

PP6ABR... Reaction arm
Braccio di reazione



PP6A....S... Single Shaft
Albero lento semplice

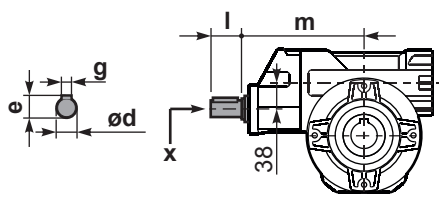
PP6A....D... Double Shaft
Albero lento bisp.



1 kit cod. K070.5.028 type B

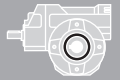
2 kit cod. K070.5.029 type B

RP6AFB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | |
|----------|-------|------|---|----|-------|-------|-----------|
| 29.9+111 | 19 h6 | 21.5 | 6 | 35 | 169.4 | M6x16 | C40.5.062 |
| 139+434 | 14 h6 | 16 | 5 | 25 | 154.2 | M5x13 | C35.5.061 |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-----|-------|-----|----|-------|
| type B | 8 | 60 | 28 ^{-0.005} / _{-0.020} | 63.5 | 120 | 247 | 127.5 | 191 | 31 | M8x20 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|----|-----------------------------|----|----|---------------------------------|----------------------|-------------|
| | | | | | | | -B | -C | -D | -E | -Q | -R | -T | | | |
| | | | | | | | 63 | 71 | 80 | 90 | 71 | 80 | 90 | | | |
| 23.5 | 59.7 | 1.1 | 300 | 1.4 | 1.5 | 418 | | | | | C | C | | 67 | 3.5 | 01 |
| 19.4 | 72.3 | 1.1 | 347 | 1.2 | 1.3 | 407 | | | | | C | C | | 64 | 3.1 | 02 |
| 17.1 | 81.7 | 1.1 | 374 | 1.1 | 1.2 | 418 | | | | | C | C | | 61 | 2.7 | 03 |
| 13.3 | 105 | 0.75 | 323 | 1.2 | 0.89 | 385 | | | | | C | C | | 60 | 2.1 | 04 |
| 8.0 | 176 | 0.55 | 415 | 1.1 | 0.58 | 440 | B | | | | C | C | | 63 | 3.5 | 05 |
| 6.6 | 213 | 0.37 | 322 | 1.3 | 0.47 | 407 | B | | | | C | C | | 60 | 3.1 | 06 |
| 5.8 | 240 | 0.37 | 321 | 1.3 | 0.48 | 418 | B | | | | C | C | | 53 | 2.7 | 07 |
| 4.3 | 328 | 0.37 | 438 | 1.0 | 0.35 | 418 | B | | | | C | C | | 53 | 2.7 | 08 |
| 3.3 | 422 | 0.25 | 374 | 1.0 | 0.26 | 385 | B | | | | C | C | | 52 | 2.1 | 09 |
| 3.0 | 466 | 0.25 | 358 | 0.9 | 0.23 | 330 | B | | | | C | C | | 45 | 1.9 | 10 |
| 2.3 | 605 | 0.18 | 297 | 1.1 | 0.20 | 330 | B | | | | C | C | | 40 | 1.5 | 11 |

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 **P85** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **P85** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **P85** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **P85** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **P85** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION P85 Oil

For B3-V5-V6 separate lubrication for A (1.20 l) B (0.14 l) , for B6-B7-B8 common lubrication 0.90 l (A + B).



AGIP Telium VSF 320

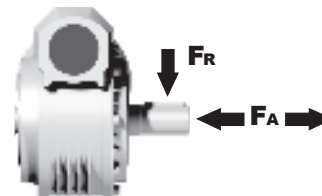
SHELL Omala S4 WE 320

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

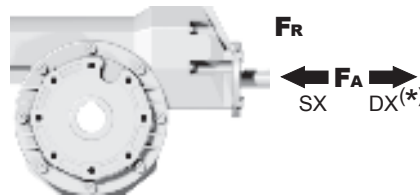
Albero di uscita



| n_2 [min ⁻¹] | F_A [N] | F_R [N] |
|-------------------------------|--------------|--------------|
| 75 | 700 | 3500 |
| 50 | 800 | 4000 |
| 25 | 1000 | 5000 |
| 15-6 | 1160 | 5800 |

Input shaft

albero in entrata



| n_1 [min ⁻¹] | F_A [N] | F_R [N] |
|-------------------------------|--------------|--------------|
| 1400 | 108 | 540 |

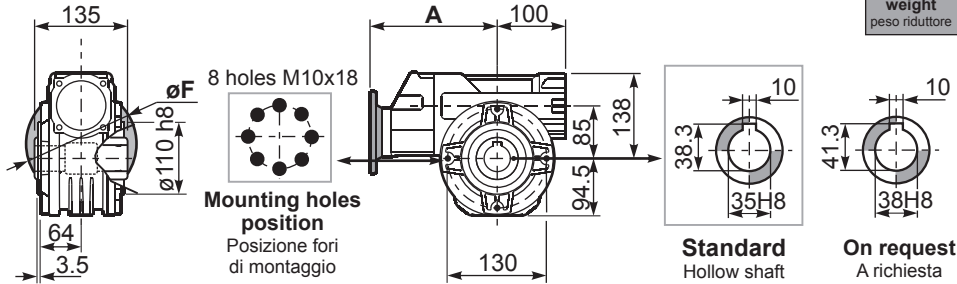
***Strong axial loads in the DX direction are not allowed.**
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PP85**FB**... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **19.30 kg**

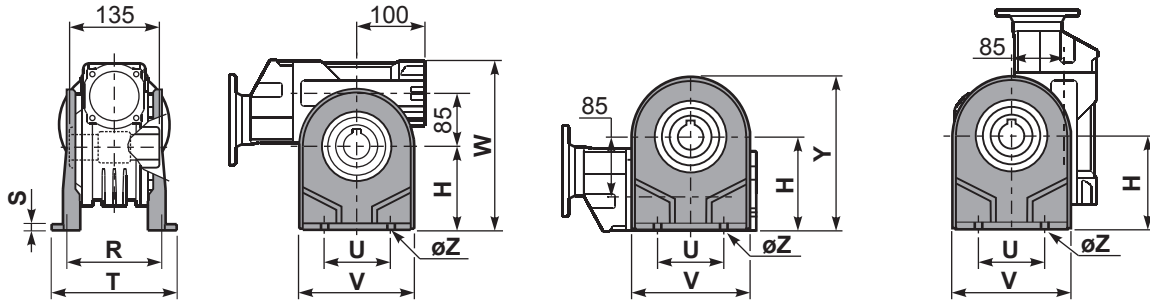
| M. flanges | Kit code | øF | A |
|------------|------------|-----|-------|
| 63B5 | K063.4.041 | 140 | 195.2 |
| 71B5 | K063.4.042 | 160 | 193.2 |
| 80/90B5 | K063.4.043 | 200 | 195.2 |
| 71B14 | K063.4.047 | 105 | 193.2 |
| 80B14 | K063.4.046 | 120 | 195.2 |
| 90B14 | K063.4.041 | 140 | 195.2 |



PP85**PA**... Feet
Piedini

PP85**PB**... Feet
Piedini

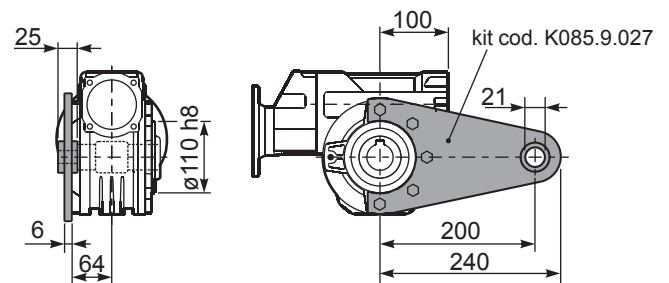
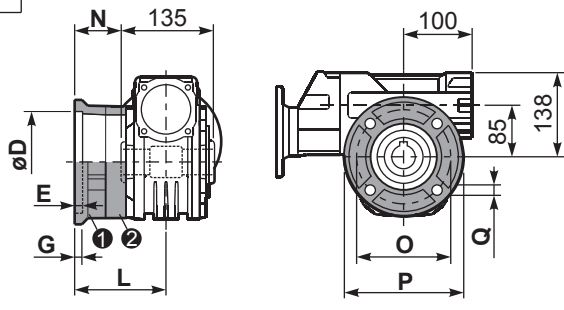
PP85**PV**... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|---|-----|-----|-----|-------|-----|-------|------------|
| type B | 142 | 145 | 5 | 182 | 140 | 180 | 236.5 | 280 | ø10.5 | K085.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

PP85**FC**... Output flange
Flangia uscita

PP85**BR**... Reaction arm
Braccio di reazione

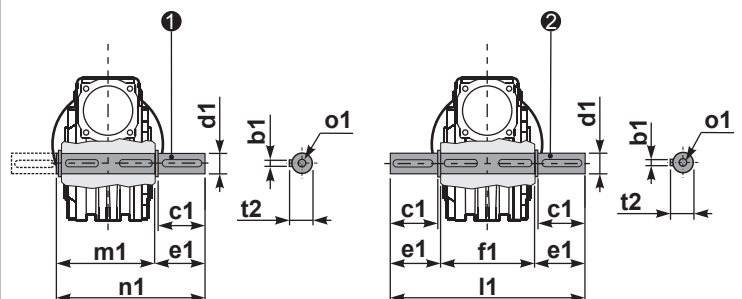


| type B | øD | E | G | L | N | O | P | Q | kit code |
|--------|---|---|----|-------|------|-----|-----|----|------------------------------|
| FC | 152 ^{+0.06} / _{+0.00} | 5 | 16 | 108 | 40.5 | 176 | 205 | 13 | ① K085.9.010 ② - |
| FL | 152 ^{+0.06} / _{+0.00} | 5 | 16 | 148.5 | 81 | 176 | 205 | 13 | ① K085.9.010 ② K085.0.201 |

| type S | øD | E | G | L | N | O | P | Q | kit code |
|--------|---|---|----|-------|----|-----|-----|------|----------------------|
| F1 | 130 ^{+0.04} / _{+0.00} | 5 | 13 | 117.5 | 50 | 165 | 200 | 11.5 | ① KS085.9.012 ② - |
| F2 | 152 ^{+0.06} / _{+0.00} | 5 | 15 | 147.5 | 80 | 180 | 205 | 12.5 | ① KS085.9.013 ② - |
| F4 | 130 ^{+0.04} / _{+0.00} | 5 | 13 | 106.5 | 39 | 165 | 200 | 13 | ① KS085.9.015 ② - |

PP85.....**S**... Single Shaft
Albero lento semplice

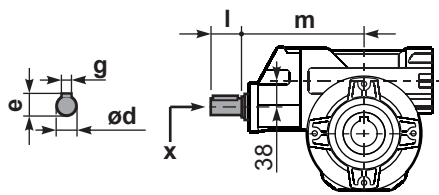
PP85.....**D**... Double Shaft
Albero lento bisp.



① kit cod. K085.5.028 type B

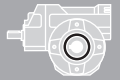
② kit cod. K085.5.029 type B

RP85**FB**... Input shaft
Albero in entrata



| | ød | e | g | l | m | x |
|--------|-------|------|---|----|-------|-------|
| type B | 19 h6 | 21.5 | 6 | 35 | 187.5 | M6x16 |
| type S | - | - | - | - | - | - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-----|-----|-------|----|--------|
| type B | 10 | 60 | 35 ^{-0.005} / _{-0.020} | 73.5 | 135 | 282 | 141 | 214.5 | 38 | M10x23 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|----|-----------------------------|----|----|---------------------------------|----------------------|-----------------|
| | | | | | | | -B | -C | -D | -E | -Q | -R | -T | | | |
| | | | | | | | 63 | 71 | 80 | 90 | 71 | 80 | 90 | | | |
| 16.8 | 83.2 | 1.5 | 587 | 1.1 | 1.7 | 660 | | | | | C | | | 69 | 3.5 | 01 |
| 13.9 | 100.5 | 1.5 | 699 | 0.8 | 1.3 | 594 | | | | | C | | | 68 | 2.9 | 02 |
| 10.6 | 132 | 1.1 | 634 | 0.9 | 0.95 | 550 | | | | | C | | | 64 | 2.2 | 03 |
| 8.0 | 176 | 0.75 | 666 | 1.2 | 0.90 | 803 | B | | | | C | | | 74 | 4.7 | 04 |
| 6.7 | 208 | 0.75 | 766 | 0.9 | 0.65 | 660 | B | | | | C | | | 72 | 4.0 | 05 |
| 5.7 | 245 | 0.55 | 634 | 1.0 | 0.57 | 660 | B | | | | C | | | 69 | 3.5 | 06 |
| 4.7 | 296 | 0.55 | 755 | 0.8 | 0.43 | 594 | B | | | | C | | | 68 | 2.9 | 07 |
| 4.2 | 334 | 0.55 | 865 | 0.8 | 0.42 | 660 | B | | | | C | | | 69 | 3.5 | 08 |
| 3.5 | 403 | 0.37 | 692 | 0.9 | 0.32 | 594 | B | | | | C | | | 68 | 2.9 | 09 |
| 2.6 | 529 | 0.25 | 577 | 1.0 | 0.24 | 550 | B | | | | C | | | 64 | 2.2 | 10 |
| 2.2 | 624 | 0.25 | 628 | 0.8 | 0.21 | 528 | B | | | | C | | | 59 | 1.9 | 11 |

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 **P10** 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. Primary reduction unit is supplied with closed plugs and lubricated for life with synthetic oil. 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 **P10** 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. La precoppia è fornita con tappi chiusi e lubrificata a vita con olio sintetico. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße **P10** 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. Die Stirnradvorstufe ist Lebensdauer geschmiert und wird mit synthetischem Öl geliefert. Die Stirnradvorstufe ist komplett geschlossen ohne Füllschrauben. 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 **P10** 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. Le pré couple est fourni lubrifié à vie avec de l'huile synthétique et avec des bouchons fermés. 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 **P10** 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 |
| 2.0/0.14LT | 1.35/0.14 LT | 1.35/0.14 LT | 2.0/0.14 LT | 2.0/0.14 LT | 2.0/0.14 LT |

AGIP Blasias 460

For all details on lubrication and plugs check our website

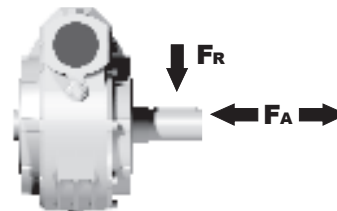
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

RADIAL AND AXIAL LOADS

Output shaft

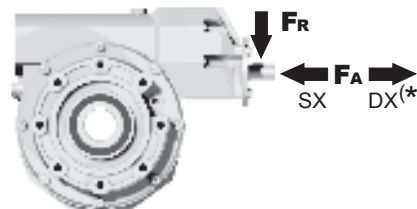
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 75 | 800 | 4000 |
| 50 | 920 | 4600 |
| 25 | 1200 | 6000 |
| 15-6 | 1400 | 7000 |

Input shaft

albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 150 | 760 |

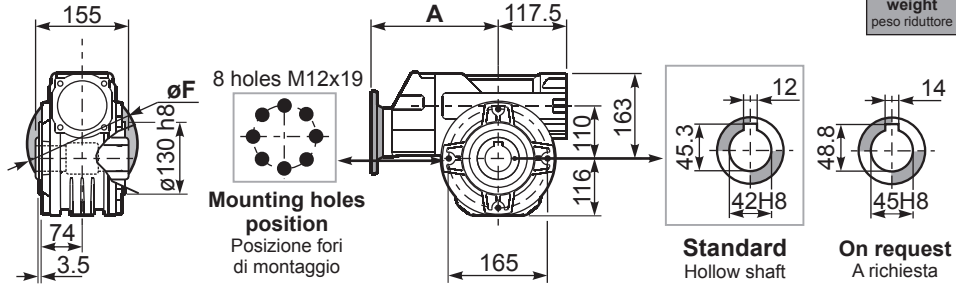
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PP10**FB**... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **41.00 kg**

| M. flanges | Kit code | øF | A |
|------------|------------|-----|-------|
| 63B5 | K063.4.041 | 140 | 214.7 |
| 71B5 | K063.4.042 | 160 | 212.7 |
| 80/90B5 | K063.4.043 | 200 | 214.7 |
| 71B14 | K063.4.047 | 105 | 212.7 |
| 80B14 | K063.4.046 | 120 | 214.7 |
| 90B14 | K063.4.041 | 140 | 214.7 |



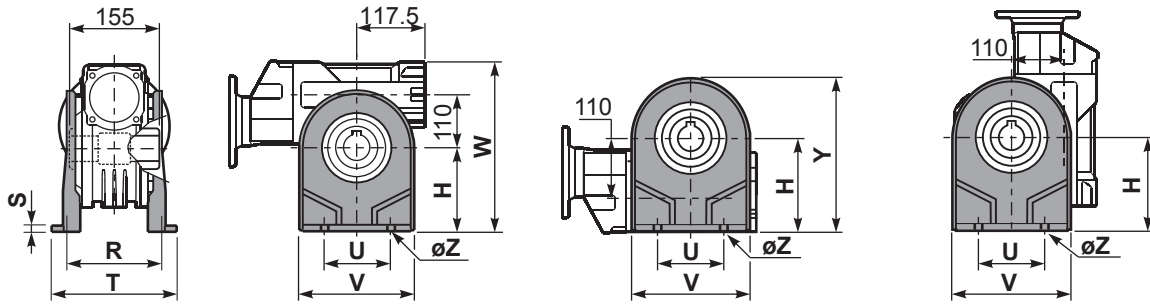
Standard
Hollow shaft

On request
A richiesta

PP10**PA**... Feet
Piedini

PP10**PB**... Feet
Piedini

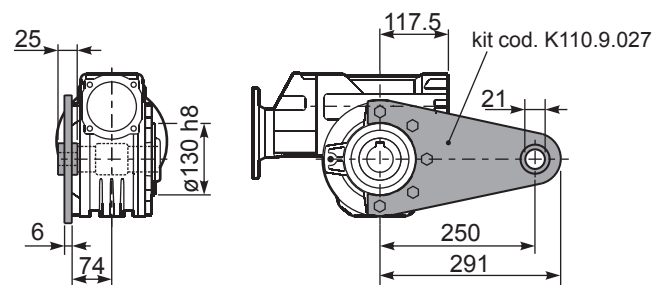
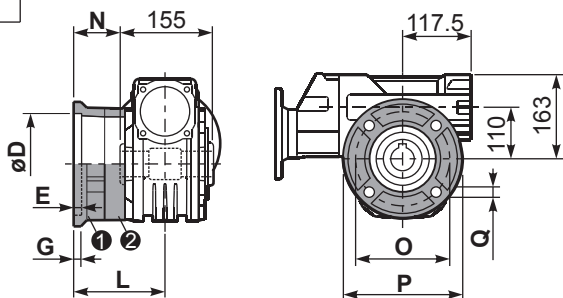
PP10**PV**... Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|----|-----|-----|-----|-----|-----|-----|-------------|
| type B | 170 | 180 | 22 | 224 | 200 | 240 | 286 | 333 | ø13 | K110.9.022 |
| type S | 172 | 160 | 8 | 204 | 200 | 240 | 288 | 335 | ø14 | KS110.9.023 |

PP10**FC**... Output flange
Flangia uscita

PP10**BR**... Reaction arm
Braccio di reazione

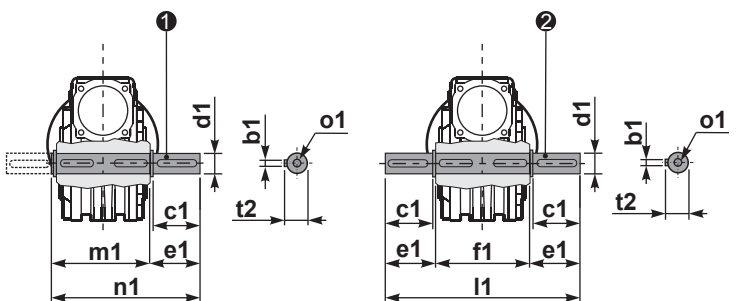


| type B | øD | E | G | L | N | O | P | Q | kit code |
|--------|------------------------------------|----|------|-------|-----|-----|-----|----|-----------------------|
| FC | 170 ^{+0.083} ₀ | 11 | 16.5 | 131.5 | 54 | 230 | 270 | 13 | 1 1 K110.9.010 2 - |
| FL | 170 ^{+0.083} ₀ | 11 | 16.5 | 179.5 | 102 | 230 | 270 | 13 | 1 1 K110.9.011 2 - |

PP10.....**S**... Single Shaft
Albero lento semplice

PP10.....**D**... Double Shaft
Albero lento bisp.

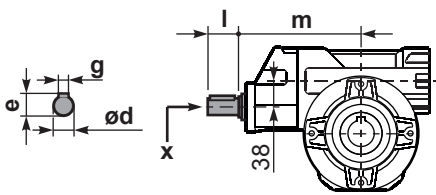
| type S | øD | E | G | L | N | O | P | Q | kit code |
|--------|------------------------------------|-----|----|-----|-------|-----|-----|----|------------------------|
| F1 | 180 ^{+0.040} ₀ | 5 | 18 | 150 | 72.5 | 215 | 250 | 15 | 1 1 KS110.9.014 2 - |
| F2 | 170 ^{+0.083} ₀ | 9.5 | 15 | 178 | 100.5 | 230 | 270 | 13 | 1 1 KS110.9.012 2 - |
| F3 | 180 ^{+0.040} ₀ | 5 | 18 | 130 | 52.5 | 215 | 250 | 15 | 1 1 KS110.9.013 2 - |



1 kit cod. K110.5.028 type B

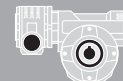
2 kit cod. K110.5.029 type B

RP10**FB**... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | |
|--------|-------|------|---|----|-----|-------|-----------|
| type B | 19 h6 | 21.5 | 6 | 35 | 205 | M6x16 | C40.5.062 |
| type S | - | - | - | - | - | - | - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-----|-------|-----|----|--------|
| type B | 12 | 75 | 42 ^{-0.005} _{-0.020} | 96.5 | 155 | 348 | 163.5 | 260 | 45 | M12x32 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|----|--------------------------------|----|---------------------------------|--------------------------|-----------------|
| | | | | | | | -A | -B | -O | -P | | | |
| | | | | | | | 56 | 63 | 56 | 63 | | | |
| 9.3 | 150 | 0.06 | 29 | 1.2 | 0.07 | 35 | B | | B-C | | 48 | 1.44 | 01 |
| 6.7 | 210 | 0.06 | 39 | 0.9 | 0.05 | 35 | B | | B-C | | 45 | 1.44 | 02 |
| 4.7 | 300 | 0.06* | 35 | <0.8 | 0.05 | 35 | B | | B-C | | 36 | 1.44 | 03 |
| 3.1 | 450 | 0.06* | 35 | <0.8 | 0.03 | 35 | B | | B-C | | 33 | 1.44 | 04 |
| 2.3 | 600 | 0.06* | 35 | <0.8 | 0.03 | 35 | B | | B-C | | 30 | 1.44 | 05 |
| 1.6 | 900 | 0.06* | 35 | <0.8 | 0.02 | 35 | B | | B-C | | 27 | 1.44 | 06 |
| 1.2 | 1200 | 0.06* | 35 | <0.8 | 0.02 | 35 | B | | B-C | | 26 | 1.44 | 07 |
| 0.8 | 1830 | 0.06* | 35 | <0.8 | 0.01 | 35 | B | | B-C | | 24 | 1.44 | 08 |
| 0.6 | 2400 | 0.06* | 35 | <0.8 | 0.01 | 35 | B | | B-C | | 22 | 1.44 | 09 |

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

EN Unit 303 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 303 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 303 mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 303 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 303 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 303 Oil 0.03 Lt. 0.03 Lt.

Quantity 0.03/0.03 Lt.

AGIP Telium VSF 320

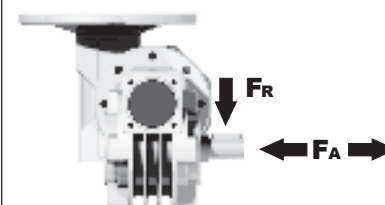
SHELL Omala S4 WE 320

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

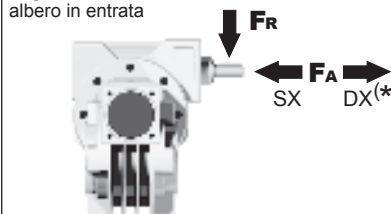
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 25 | 300 | 1800 |
| 15 | 400 | 2000 |

Input shaft

albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 20 | 100 |

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

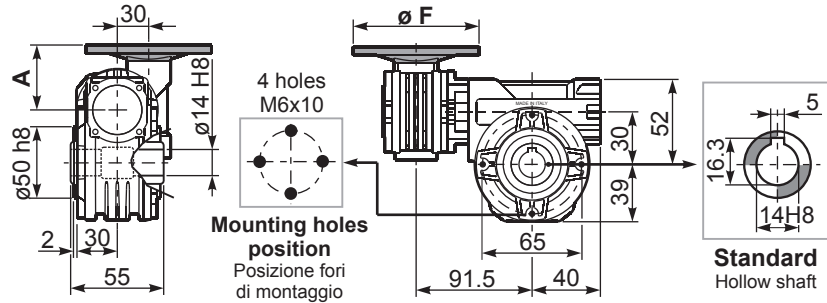
tab. 2

3D dimensions on request

P303FB... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **2.15 kg**

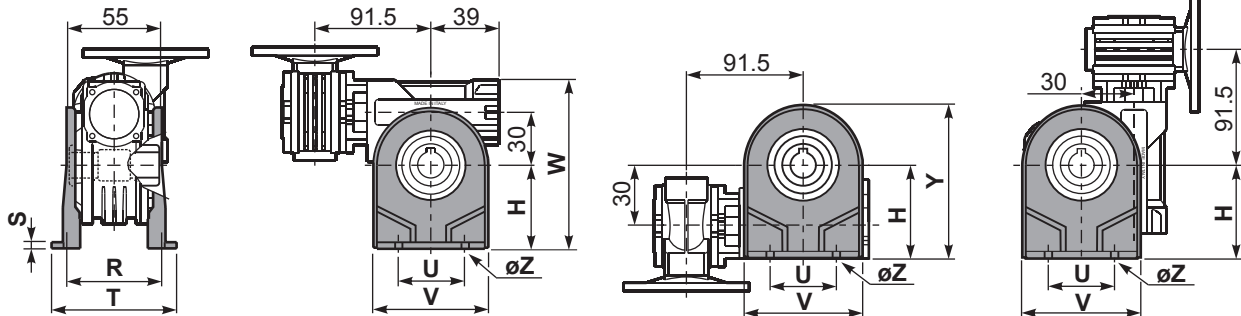
| M. flanges | Kit code | øF | A |
|--------------|------------|-----|------|
| 56B5 | K030.4.041 | 120 | 61.5 |
| 63B5 | K030.4.042 | 140 | 62.5 |
| 56B14 | K030.4.046 | 80 | 61.5 |
| 63B14 | K030.4.045 | 90 | 62.5 |



P303PA... Feet
Piedini

P303PB... Feet
Piedini

P303PV... Feet
Piedini

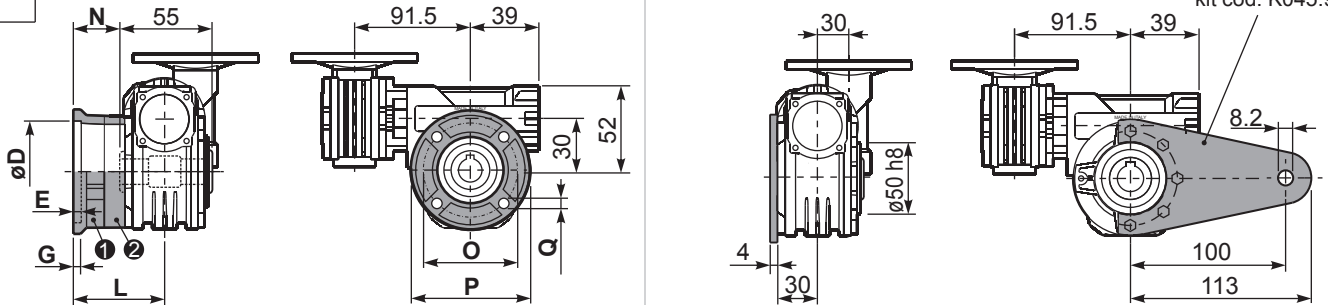


| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|----|----|---|----|----|----|----|-----|------|-------------|
| type B | 55 | 66 | 3 | 87 | 50 | 78 | 94 | 107 | ø6.5 | K030.9.022 |
| type S | 52 | 66 | 3 | 87 | 52 | 90 | 91 | 104 | ø6.5 | KS030.9.023 |

P303FC... Output flange
Flangia uscita

P303BR... Reaction arm
Braccio di reazione

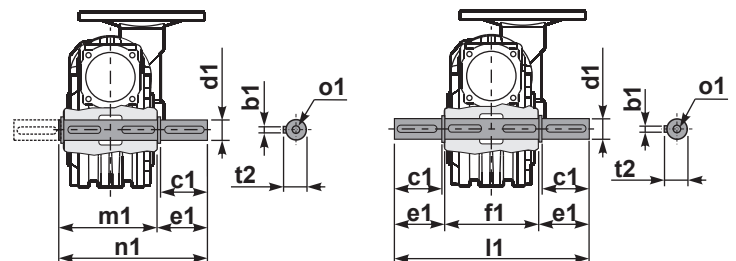
kit cod. K045.9.027



| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|--|-----|-----|------|------|----|-----|-----|----------------------|
| FC | 50 ^{+0.15} / _{+0.05} | 6 | 6 | 50.5 | 23 | 68 | 80 | 7 | 1 K030.9.010 2 - |
| FL | 60 ^{+0.15} / _{+0.05} | 6 | 6 | 55.5 | 28 | 87 | 110 | 8.5 | 1 K045.9.010 2 - |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 40 ^{+0.15} / _{+0.10} | 3.5 | 5.5 | 49 | 21.5 | 56 | 80 | 6.5 | 1 KS030.9.012 2 - |

P303....S... Single Shaft
Albero lento semplice

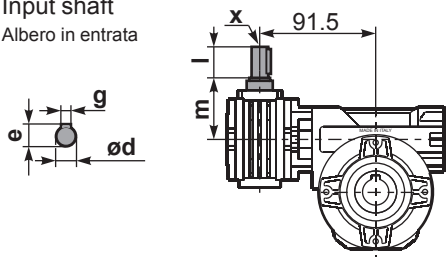
P303....D... Double Shaft
Albero lento bisp.



1 kit cod. K030.5.028 type B

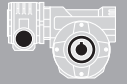
2 kit cod. K030.5.029 type B

R303FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|------|------|---|----|----|---|------------------|
| type B | 9 h6 | 10.2 | 3 | 20 | 58 | - | K030.5.006 PAM63 |
| type S | - | - | - | - | - | - | - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|----|-----|----|------|------|-------|
| type B | 5 | 25 | 14 ^{-0.005} / _{-0.020} | 35.5 | 55 | 126 | 59 | 94.5 | 15.8 | M5x14 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|----|---------------------------------|--------------------------|-----------------|
| | | | | | | | -A | -B | -O | -P | | | |
| | | | | | | | 56 | 63 | 56 | 63 | | | |
| 10.0 | 140 | 0.12 | 57 | 1.2 | 0.14 | 69 | B | | B-C | | 50 | 2.2 | 01 |
| 7.0 | 200 | 0.12 | 79 | 0.9 | 0.11 | 69 | B | | B-C | | 48 | 2.2 | 02 |
| 5.0 | 280 | 0.12* | 69 | <0.8 | 0.08 | 69 | B | | B-C | | 45 | 2.4 | 03 |
| 3.3 | 420 | 0.12* | 69 | <0.8 | 0.07 | 69 | B | | B-C | | 36 | 1.6 | 04 |
| 2.5 | 560 | 0.12* | 69 | <0.8 | 0.05 | 69 | B | | B-C | | 33 | 2.5 | 05 |
| 1.9 | 740 | 0.12* | 69 | <0.8 | 0.05 | 69 | B | | B-C | | 30 | 1.8 | 06 |
| 1.5 | 920 | 0.12* | 69 | <0.8 | 0.04 | 69 | B | | B-C | | 27 | 1.5 | 07 |
| 1.3 | 1120 | 0.12* | 69 | <0.8 | 0.03 | 69 | B | | B-C | | 26 | 2.5 | 08 |
| 0.9 | 1480 | 0.12* | 69 | <0.8 | 0.03 | 69 | B | | B-C | | 24 | 1.8 | 09 |
| 0.8 | 1840 | 0.12* | 69 | <0.8 | 0.02 | 69 | B | | B-C | | 22 | 1.5 | 10 |
| 0.6 | 2400 | 0.12* | 69 | <0.8 | 0.02 | 69 | B | | B-C | | 21 | 1.2 | 11 |

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

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

EN Unit 453 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 453 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 453 mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 453 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 453 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 453 Oil 0.09 Lt. 0.03 Lt.

Quantity 0.09/0.03 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 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 25 | 300 | 1800 |
| 15 | 400 | 2000 |

Input shaft
albero in entrata

| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 20 | 100 |

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

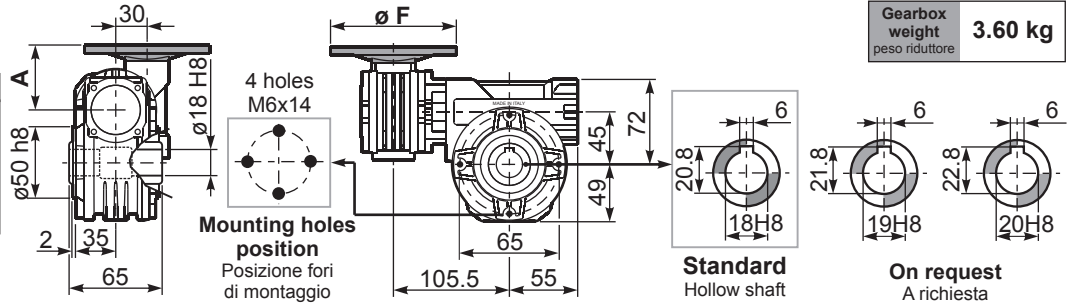
tab. 2

3D dimensions on request

P453FB... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **3.60 kg**

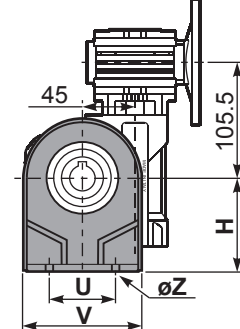
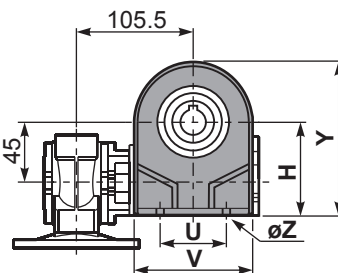
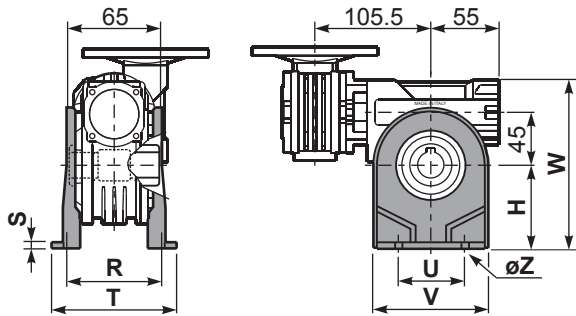
| M. flanges | Kit code | øF | A |
|--------------|------------|-----|------|
| 56B5 | K030.4.041 | 120 | 61.5 |
| 63B5 | K030.4.042 | 140 | 62.5 |
| 56B14 | K030.4.046 | 80 | 61.5 |
| 63B14 | K030.4.045 | 90 | 62.5 |



P453PA... Feet
Piedini

P453PB... Feet
Piedini

P453PV... Feet
Piedini

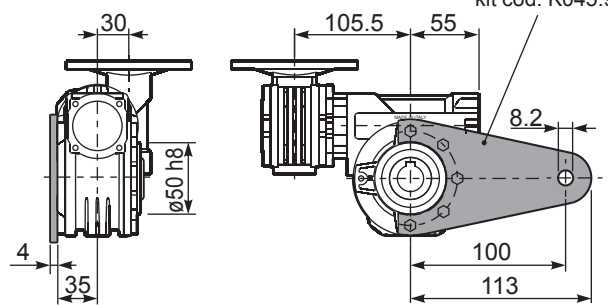
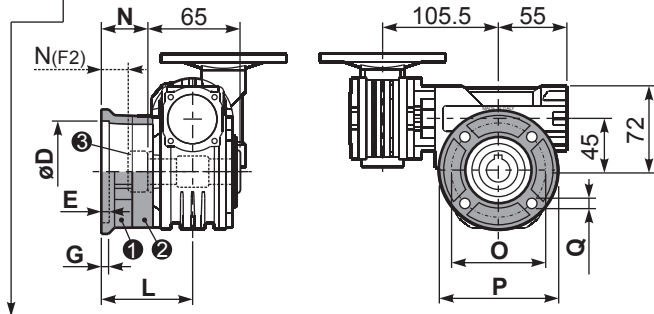


| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|----|----|---|-----|----|----|-----|-----|-------|-------------|
| type B | 72 | 81 | 3 | 100 | 52 | 98 | 121 | 144 | ø10.5 | K045.9.022 |
| type S | 71 | 84 | 8 | 100 | 70 | 90 | 120 | 143 | ø8 | KS045.9.023 |

P453FC... Output flange
Flangia uscita

P453BR... Reaction arm
Braccio di reazione

kit cod. K045.9.027

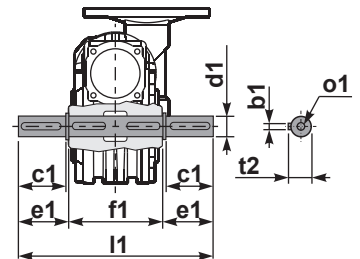
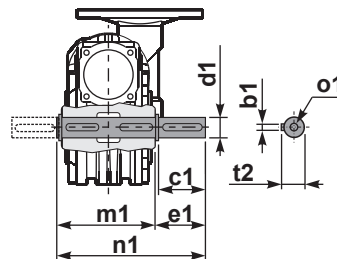


| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|--|---|---|------|----|----|-----|-----|---------------------------------|
| FC | 60 ^{+0.15} / _{+0.05} | 9 | 9 | 60.5 | 28 | 87 | 110 | 8.5 | 1, 2 K045.9.010 |
| FL | 60 ^{+0.15} / _{+0.05} | 9 | 9 | 90.5 | 58 | 87 | 110 | 8.5 | 1, 2 K045.9.010 3 S045.0.204 |

| type S | øD | E | G | L | N | O | P | Q | kit code |
|-----------|--|---|----|------|----|-----|-----|-----|----------------------------------|
| F1 | 95 ^{+0.20} / _{+0.15} | 4 | 11 | 73.5 | 41 | 115 | 140 | 9 | 1, 2 KS045.9.013 |
| F2 | 60 ^{+0.15} / _{+0.05} | 9 | 9 | 60.5 | 19 | 87 | 110 | 8.5 | 1, 2 KS045.9.010 3 S045.0.204 |
| F3 | 80 ^{+0.030} / ₀ | 3 | 8 | 51.5 | 19 | 100 | 120 | 9 | 1, 2 KS045.9.014 |

P453....S... Single Shaft
Albero lento semplice

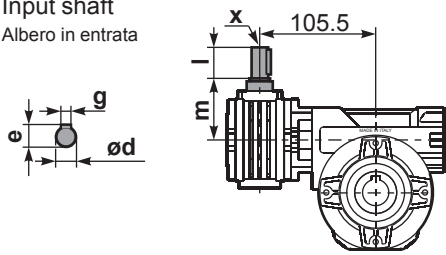
P453....D... Double Shaft
Albero lento bisp.



1 kit cod. K045.5.028 type B
kit cod. KS045.5.030 type S

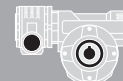
2 kit cod. K045.5.029 type B
kit cod. KS045.5.031 type S

R453FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|------|------|---|----|----|---|-----------------------|
| type B | 9 h6 | 10.2 | 3 | 20 | 58 | - | 1, 2 K030.5.006 PAM63 |
| type S | - | - | - | - | - | - | 1, 2 - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|----|-----|----|-------|------|-------|
| type B | 6 | 32 | 18 ^{-0.005} / _{-0.020} | 43 | 65 | 151 | 70 | 113 | 20.5 | M6x18 |
| type S | 6 | 40 | 19 ^{-0.005} / _{-0.020} | 58.5 | 65 | 182 | 70 | 128.5 | 21.5 | M8x20 |



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 | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|----|---------------------------------|----------------------|-------------|
| | | | | | | | -A | -B | -O | -P | | | |
| | | | | | | | 56 | 63 | 56 | 63 | | | |
| 5.6 | 252 | 0.12 | 97 | 1.1 | 0.14 | 109 | B | | B-C | | 47 | 2.1 | 01 |
| 3.9 | 360 | 0.12 | 124 | 0.9 | 0.11 | 109 | B | | B-C | | 42 | 2.1 | 02 |
| 2.6 | 540 | 0.12* | 109 | <0.8 | 0.08 | 109 | B | | B-C | | 39 | 2.1 | 03 |
| 1.9 | 720 | 0.12* | 109 | <0.8 | 0.06 | 109 | B | | B-C | | 36 | 2.1 | 04 |
| 1.6 | 860 | 0.12* | 109 | <0.8 | 0.06 | 109 | B | | B-C | | 32 | 1.8 | 05 |
| 1.2 | 1200 | 0.12* | 109 | <0.8 | 0.05 | 109 | B | | B-C | | 27 | 1.3 | 06 |
| 1.0 | 1440 | 0.12* | 109 | <0.8 | 0.04 | 109 | B | | B-C | | 26 | 2.1 | 07 |
| 0.8 | 1720 | 0.12* | 109 | <0.8 | 0.04 | 109 | B | | B-C | | 25 | 1.8 | 08 |
| 0.6 | 2400 | 0.12* | 104 | <0.8 | 0.03 | 104 | B | | B-C | | 21 | 1.3 | 09 |

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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



C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

EN Unit 503 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 503 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 503 mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 503 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 503 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 503 Oil 0.14 Lt. 0.03 Lt.

Quantity 0.14/0.03 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

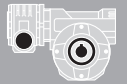
| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 25 | 480 | 2500 |
| 15 | 560 | 2800 |

Input shaft
albero in entrata

| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 20 | 100 |

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

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 | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|----|---------------------------------|--------------------------|-----------------|
| | | | | | | | -A | -B | -O | -P | | | |
| | | | | | | | 56 | 63 | 56 | 63 | | | |
| 5.6 | 252 | 0.18 | 142 | 1.6 | 0.29 | 230 | B | | B-C | | 46 | 2.7 | 01 |
| 3.9 | 360 | 0.18 | 181 | 1.3 | 0.23 | 230 | B | | B-C | | 41 | 2.7 | 02 |
| 2.6 | 540 | 0.12 | 164 | 1.4 | 0.17 | 230 | B | | B-C | | 37 | 2.7 | 03 |
| 1.9 | 720 | 0.12 | 200 | 1.1 | 0.14 | 230 | B | | B-C | | 34 | 2.7 | 04 |
| 1.3 | 1080 | 0.12 | 265 | 0.9 | 0.10 | 230 | B | | B-C | | 30 | 2.7 | 05 |
| 1.0 | 1440 | 0.12* | 230 | <0.8 | 0.09 | 230 | B | | B-C | | 27 | 2.7 | 06 |
| 0.5 | 2745 | 0.12* | 230 | <0.8 | 0.05 | 230 | B | | B-C | | 23 | 2.1 | 07 |

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

EN Unit **633** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **633** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **633** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **633** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **633** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 633 Oil 0.40 Lt. 0.03 Lt.
Quantity 0.40/0.03 Lt.

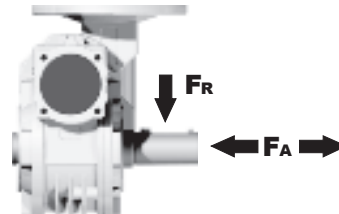
AGIP Telium VSF 320

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

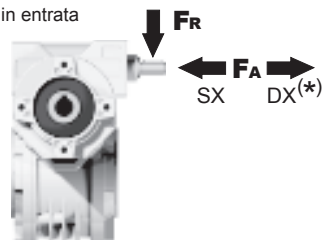
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 25 | 700 | 3800 |
| 15 | 800 | 4000 |

Input shaft
albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 20 | 100 |

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

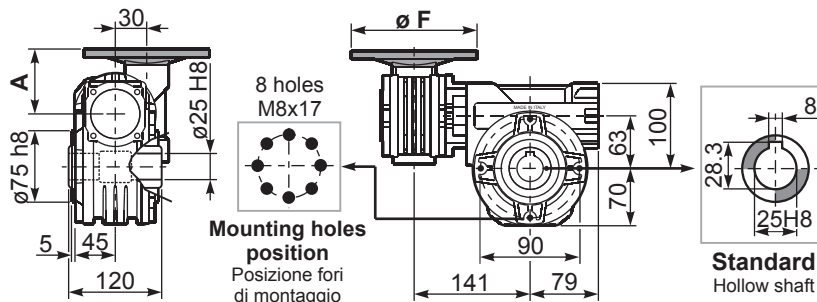
tab. 2

3D dimensions on request

P633**FB**... Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **7.50 kg**

| M. flanges | Kit code | øF | A |
|------------|------------|-----|------|
| 56B5 | K030.4.041 | 120 | 61.5 |
| 63B5 | K030.4.042 | 140 | 62.5 |
| 56B14 | K030.4.046 | 80 | 61.5 |
| 63B14 | K030.4.045 | 90 | 62.5 |

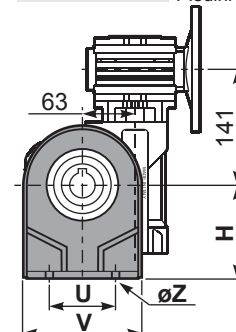
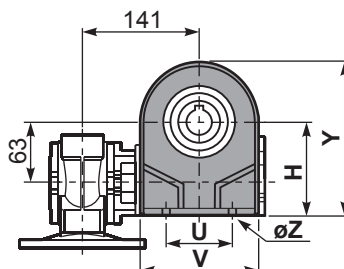
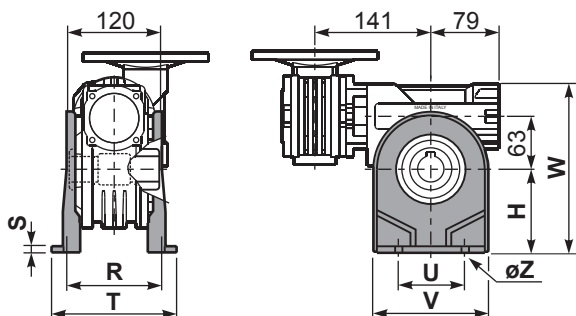


Standard
Hollow shaft

P633**PA**... Feet
Piedini

P633**PB**... Feet
Piedini

P633**PV**... Feet
Piedini

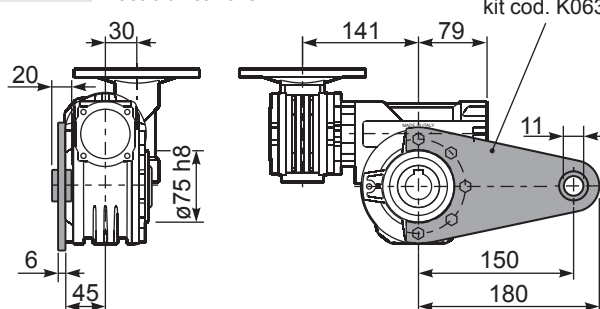
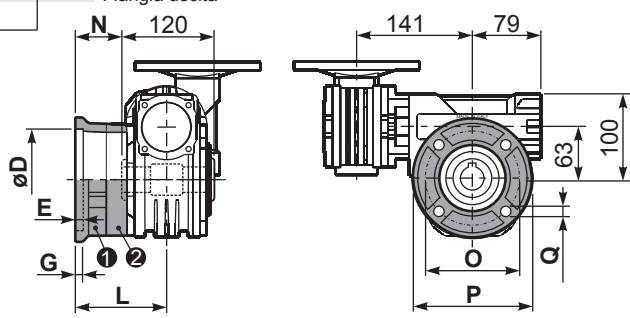


| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|---|-----|----|-----|-----|-----|-------|------------|
| type B | 100 | 111 | 4 | 144 | 95 | 133 | 170 | 200 | ø10.5 | K063.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

P633**FC**... Output flange
Flangia uscita

P633**BR**... Reaction arm
Braccio di reazione

kit cod. K063.9.027

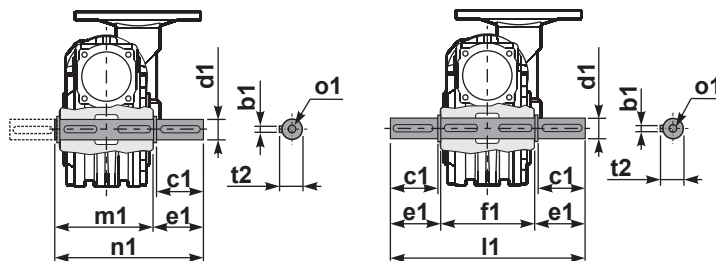


| type B | øD | E | G | L | N | O | P | Q | kit code |
|--------|---|---|----|-----|----|-----|-----|----|------------------------------|
| FC | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 86 | 26 | 150 | 175 | 11 | ① K063.9.010 ② - |
| FL | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | ① K063.9.010 ② K063.0.200 |

| type S | øD | E | G | L | N | O | P | Q | kit code |
|--------|---|---|----|-----|----|-----|-----|----|----------------------|
| F1 | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 102 | 42 | 165 | 200 | 13 | ① KS070.9.013 ② - |
| F2 | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | ① KS063.9.013 ② - |
| F3 | 110 ^{+0.035} / ₀ | 5 | 11 | 82 | 22 | 130 | 160 | 10 | ① KS063.9.011 ② - |

P633.....**S**... Single Shaft
Albero lento semplice

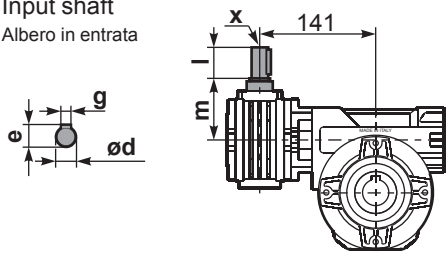
P633.....**D**... Double Shaft
Albero lento bisp.



① kit cod. K063.5.028 type B

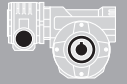
② kit cod. K063.5.029 type B

R633**FB**... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|------|------|---|----|----|---|---------------------------|
| type B | 9 h6 | 10.2 | 3 | 20 | 58 | - | ① K030.5.006 PAM63 ② - |
| type S | - | - | - | - | - | - | ① - ② - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-------|-------|-----|----|-------|
| type B | 8 | 60 | 25 ^{-0.005} / _{-0.020} | 63.2 | 120 | 246.4 | 126.8 | 190 | 28 | M8x20 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|-----|----|---------------------------------|--------------------------|-----------------|
| | | | | | | | -B | -C | -O | -P | -Q | | | |
| | | | | | | | 63 | 71 | 56 | 63 | 71 | | | |
| 5.6 | 252 | 0.25 | 198 | 1.3 | 0.33 | 265 | B | | B-C | B-C | | 46 | 2.7 | 01 |
| 3.9 | 360 | 0.18 | 186 | 1.4 | 0.26 | 265 | B | | B-C | B-C | | 42 | 2.7 | 02 |
| 2.8 | 504 | 0.18 | 241 | 1.1 | 0.20 | 265 | B | | B-C | B-C | | 39 | 2.7 | 03 |
| 1.9 | 756 | 0.12 | 204 | 1.3 | 0.16 | 265 | B | | B-C | B-C | | 33 | 2.7 | 04 |
| 1.4 | 1008 | 0.12 | 256 | 1.0 | 0.12 | 265 | B | | B-C | B-C | | 31 | 2.7 | 05 |
| 1.1 | 1332 | 0.12* | 265 | <0.8 | 0.10 | 265 | B | | B-C | B-C | | 30 | 2.7 | 06 |
| 0.8 | 1656 | 0.12* | 265 | <0.8 | 0.08 | 265 | B | | B-C | B-C | | 28 | 2.7 | 07 |
| 0.6 | 2160 | 0.12* | 265 | <0.8 | 0.07 | 265 | B | | B-C | B-C | | 26 | 2.7 | 08 |
| 0.6 | 2520 | 0.12* | 265 | <0.8 | 0.06 | 265 | B | | B-C | B-C | | 25 | 2.7 | 09 |

Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

EN Unit 634 is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 634 viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe 634 mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 634 est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 634 se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 634 Oil **Quantity 0.40/0.09 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 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 25 | 700 | 3800 |
| 15 | 800 | 4000 |

Input shaft
albero in entrata

| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 42 | 210 |

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

tab. 2

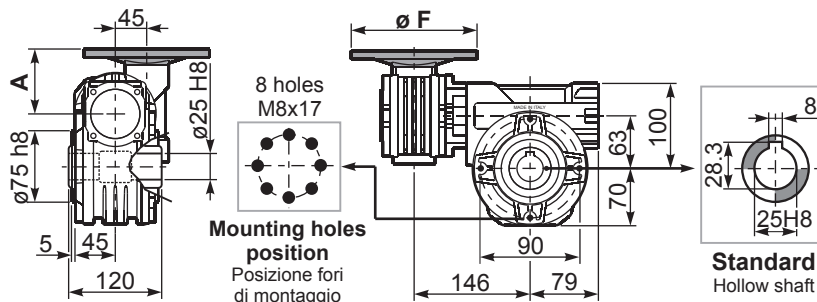
3D dimensions on request

P634FB...

Basic wormbox
Riduttore base

Gearbox weight
peso riduttore **8.90 kg**

| M. flanges | Kit code | øF | A |
|------------|------------|-----|------|
| 63B5 | K050.4.041 | 138 | 74 |
| 71B5 | K050.4.042 | 160 | 71.5 |
| 56B14 | KC40.4.049 | 80 | 71.5 |
| 63B14 | K050.4.047 | 90 | 74 |
| 71B14 | K050.4.045 | 105 | 71.5 |



P634PA...

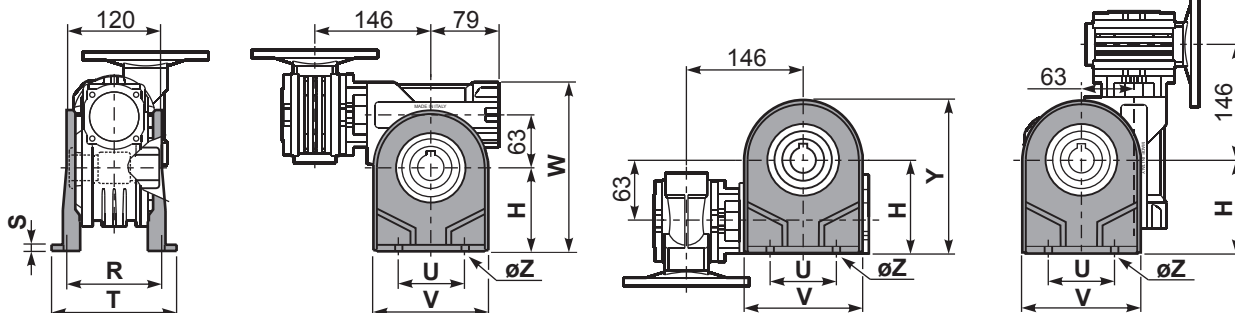
Feet
Piedini

P634PB...

Feet
Piedini

P634PV...

Feet
Piedini



| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|---|-----|----|-----|-----|-----|-------|------------|
| type B | 100 | 111 | 4 | 144 | 95 | 133 | 170 | 200 | ø10.5 | K063.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

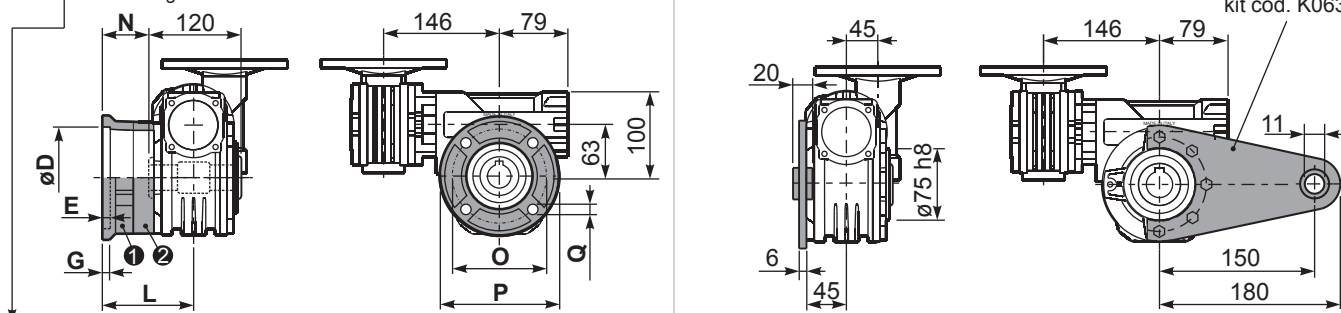
P634FC...

Output flange
Flangia uscita

P634BR...

Reaction arm
Braccio di reazione

kit cod. K063.9.027



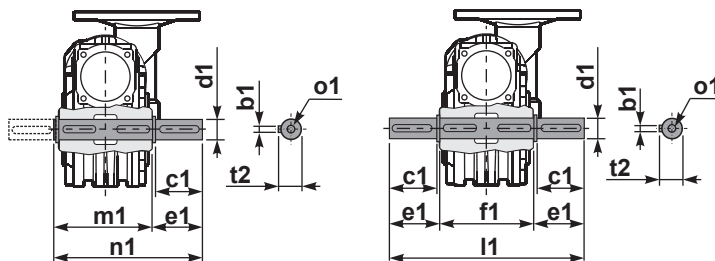
| type B | øD | E | G | L | N | O | P | Q | kit code |
|--------|---|---|----|-----|----|-----|-----|----|------------------------------|
| FC | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 86 | 26 | 150 | 175 | 11 | ① K063.9.010 ② - |
| FL | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | ① K063.9.010 ② K063.0.200 |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 102 | 42 | 165 | 200 | 13 | ① KS070.9.013 ② - |
| F2 | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | ① KS063.9.013 ② - |
| F3 | 110 ^{+0.035} / ₀ | 5 | 11 | 82 | 22 | 130 | 160 | 10 | ① KS063.9.011 ② - |

P634.....S...

Single Shaft
Albero lento semplice

P634.....D...

Double Shaft
Albero lento bisp.

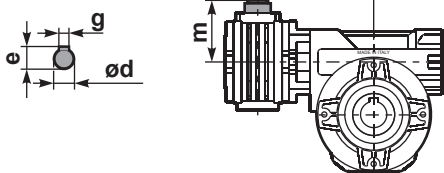


① kit cod. K063.5.028 type B

② kit cod. K063.5.029 type B

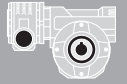
R634FB...

Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|-------|------|---|----|----|---|----------------------|
| type B | 11 h6 | 12.5 | 4 | 30 | 68 | - | ① ② K045.5.006 PAM71 |
| type S | - | - | - | - | - | - | ① ② - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-------|-------|-----|----|-------|
| type B | 8 | 60 | 25 ^{-0.005} / _{-0.020} | 63.2 | 120 | 246.4 | 126.8 | 190 | 28 | M8x20 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|----|---------------------------------|----------------------|-----------------|
| | | | | | | | -A | -B | -O | -P | | | |
| | | | | | | | 56 | 63 | 56 | 63 | | | |
| 5.6 | 252 | 0.18 | 142 | 2.0 | 0.37 | 290 | B | | B-C | | 46 | 2.7 | 01 |
| 3.9 | 360 | 0.18 | 181 | 1.6 | 0.29 | 290 | B | | B-C | | 41 | 2.7 | 02 |
| 2.6 | 540 | 0.18 | 245 | 1.2 | 0.21 | 290 | B | | B-C | | 37 | 2.7 | 03 |
| 1.9 | 720 | 0.12 | 200 | 1.4 | 0.17 | 290 | B | | B-C | | 34 | 2.7 | 04 |
| 1.3 | 1080 | 0.12 | 265 | 1.1 | 0.13 | 290 | B | | B-C | | 30 | 2.7 | 05 |
| 1.0 | 1440 | 0.12 | 318 | 0.9 | 0.11 | 290 | B | | B-C | | 27 | 2.7 | 06 |
| 0.5 | 2745 | 0.12* | 242 | <0.8 | 0.06 | 242 | B | | B-C | | 23 | 2.1 | 07 |

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

EN Unit **6A3** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **6A3** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **6A3** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **6A3** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **6A3** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 6A3 Oil 0.40 Lt. 0.03 Lt.

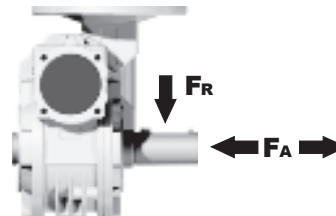
Quantity 0.40/0.03 Lt.

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

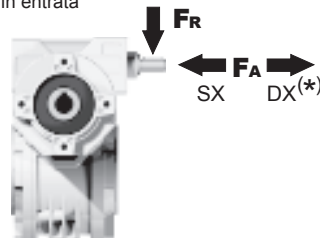
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 25 | 700 | 3800 |
| 15 | 800 | 4000 |

Input shaft
albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 20 | 100 |

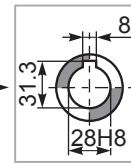
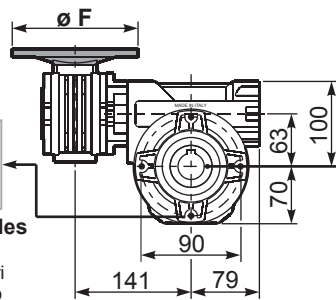
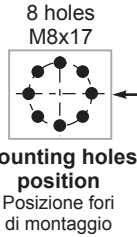
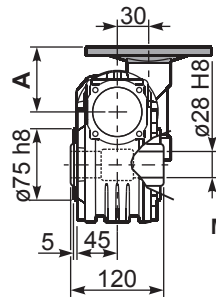
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

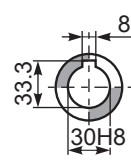
3D dimensions on request

P6A3FB... Basic wormbox
Riduttore base

| M. flanges | Kit code | øF | A |
|------------|------------|-----|------|
| 56B5 | K030.4.041 | 120 | 61.5 |
| 63B5 | K030.4.042 | 140 | 62.5 |
| 56B14 | K030.4.046 | 80 | 61.5 |
| 63B14 | K030.4.045 | 90 | 62.5 |



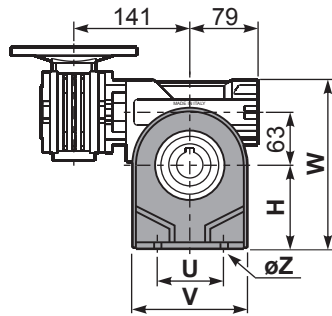
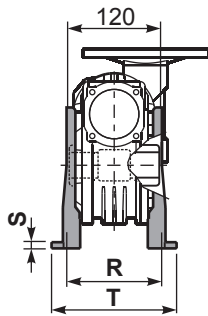
Standard
Hollow shaft



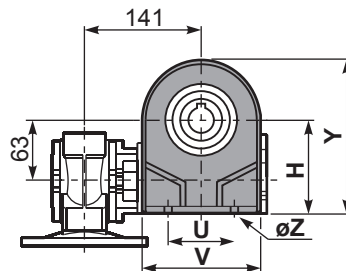
On request
A richiesta

Gearbox weight
peso riduttore **8.90 kg**

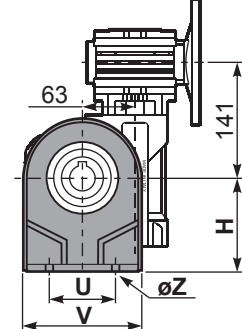
P6A3PA... Feet
Piedini



P6A3PB... Feet
Piedini

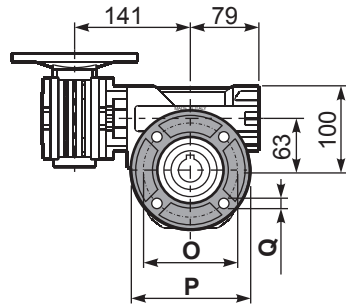
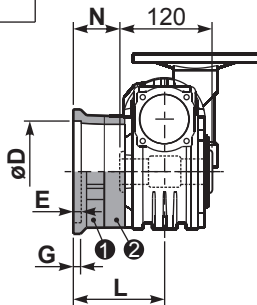


P6A3PV... Feet
Piedini



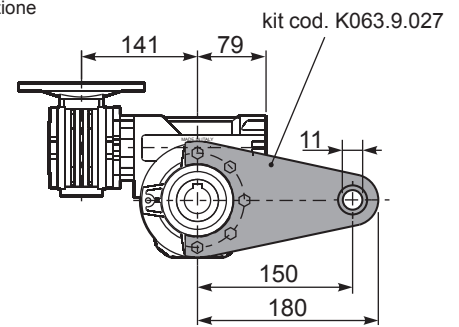
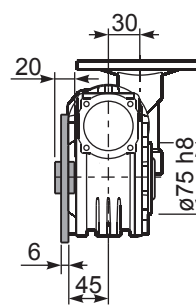
| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|----|-----|-----|-----|-----|-----|-----|------------|
| type B | 115 | 115 | 12 | 142 | 120 | 156 | 185 | 215 | ø11 | K070.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

P6A3FC... Output flange
Flangia uscita

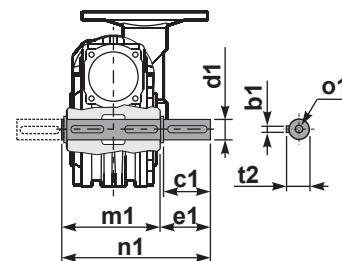


| type B | øD | E | G | L | N | O | P | Q | kit code |
|--------|---|---|------|------|------|-----|-----|----|------------------------------|
| FC | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 85 | 25 | 165 | 200 | 13 | ① K070.9.010 ② - |
| FL | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 111 | 51 | 165 | 200 | 13 | ① K070.9.010 ② K070.0.200 |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 111 | 51 | 165 | 200 | 13 | ① KS070.9.014 ② - |
| F2 | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | ① KS063.9.013 ② - |
| F3 | 110 ^{+0.035} / ₀ | 5 | 13.5 | 84.5 | 24.5 | 130 | 160 | 11 | ① KS070.9.011 ② - |

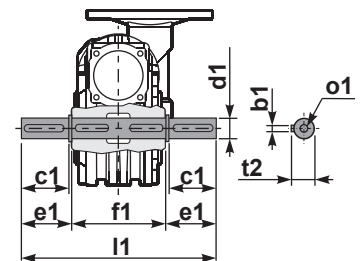
P6A3BR... Reaction arm
Braccio di reazione



P6A3....S... Single Shaft
Albero lento semplice



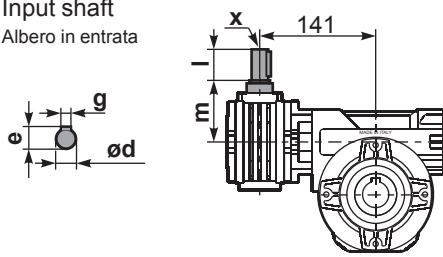
P6A3....D... Double Shaft
Albero lento bisp.



① kit cod. K070.5.028 type B

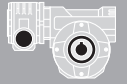
② kit cod. K070.5.029 type B

R6A3FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|------|------|---|----|----|---|---------------------------|
| type B | 9 h6 | 10.2 | 3 | 20 | 58 | - | ① K030.5.006 PAM63 ② - |
| type S | - | - | - | - | - | - | ① - ② - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-----|-------|-----|----|-------|
| type B | 8 | 60 | 28 ^{-0.005} / _{-0.020} | 63.5 | 120 | 247 | 127.5 | 191 | 31 | M8x20 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|-----|----|---------------------------------|----------------------|-------------|
| | | | | | | | -B | -C | -O | -P | -Q | | | |
| | | | | | | | 63 | 71 | 56 | 63 | 71 | | | |
| 5.6 | 252 | 0.25 | 198 | 1.5 | 0.38 | 304 | B | | B-C | B-C | | 46 | 2.7 | 01 |
| 3.9 | 360 | 0.25 | 258 | 1.2 | 0.29 | 304 | B | | B-C | B-C | | 42 | 2.7 | 02 |
| 2.8 | 504 | 0.18 | 241 | 1.3 | 0.23 | 304 | B | | B-C | B-C | | 39 | 2.7 | 03 |
| 1.9 | 756 | 0.12 | 204 | 1.5 | 0.18 | 304 | B | | B-C | B-C | | 33 | 2.7 | 04 |
| 1.4 | 1008 | 0.12 | 256 | 1.2 | 0.14 | 304 | B | | B-C | B-C | | 31 | 2.7 | 05 |
| 1.1 | 1332 | 0.12 | 327 | 0.9 | 0.11 | 304 | B | | B-C | B-C | | 30 | 2.7 | 06 |
| 0.8 | 1656 | 0.12* | 304 | <0.8 | 0.10 | 304 | B | | B-C | B-C | | 28 | 2.7 | 07 |
| 0.6 | 2160 | 0.12* | 304 | <0.8 | 0.08 | 304 | B | | B-C | B-C | | 26 | 2.7 | 08 |
| 0.6 | 2520 | 0.12* | 304 | <0.8 | 0.07 | 304 | B | | B-C | B-C | | 25 | 2.7 | 09 |

A) Motor Flanges Available
Flange Motore Disponibili

B) Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

C) Motor Flange Holes Position
Posizione Fori Flangia Motore

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

EN Unit **6A4** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **6A4** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **6A4** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **6A4** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **6A4** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

■ LUBRICATION 6A4 Oil 0.40 Lt.

Quantity 0.40/0.09 Lt. 0.09 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 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 25 | 700 | 3800 |
| 15 | 800 | 4000 |

Input shaft
albero in entrata

| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 42 | 210 |

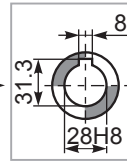
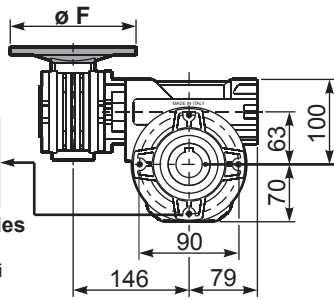
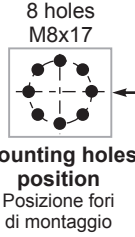
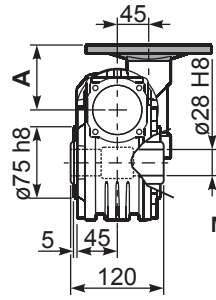
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

3D dimensions on request

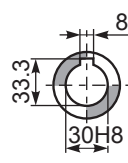
P6A4FB... Basic wormbox
Riduttore base

| M. flanges | Kit code | øF | A |
|------------|------------|-----|------|
| 63B5 | K050.4.041 | 138 | 74 |
| 71B5 | K050.4.042 | 160 | 71.5 |
| 56B14 | KC40.4.049 | 80 | 71.5 |
| 63B14 | K050.4.047 | 90 | 74 |
| 71B14 | K050.4.045 | 105 | 71.5 |



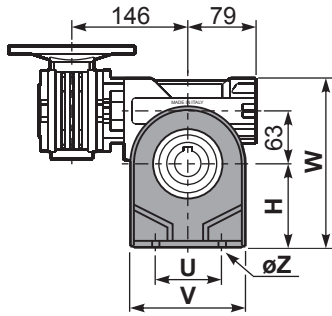
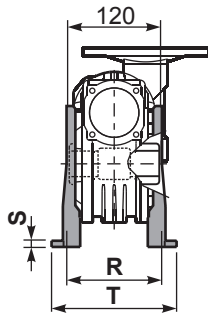
Standard
Hollow shaft

Gearbox weight
peso riduttore **8.90 kg**

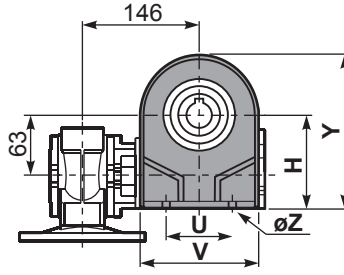


On request
A richiesta

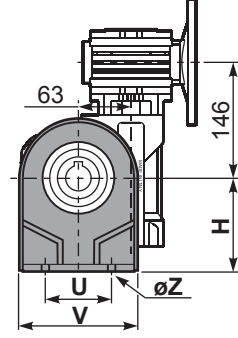
P6A4PA... Feet
Piedini



P6A4PB... Feet
Piedini

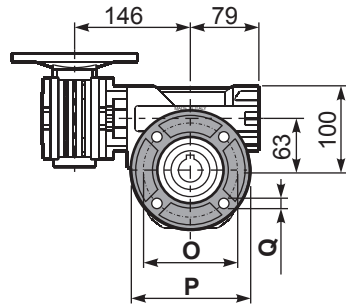
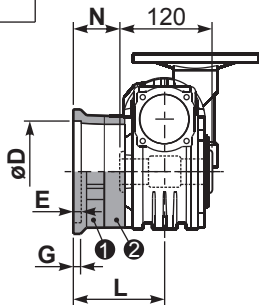


P6A4PV... Feet
Piedini



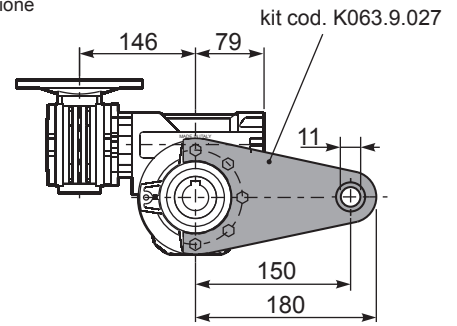
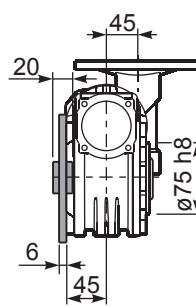
| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|----|-----|-----|-----|-----|-----|-----|------------|
| type B | 115 | 115 | 12 | 142 | 120 | 156 | 185 | 215 | ø11 | K070.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

P6A4FC... Output flange
Flangia uscita

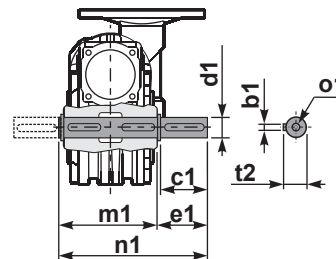


| type B | øD | E | G | L | N | O | P | Q | kit code |
|--------|---|---|------|------|------|-----|-----|----|------------------------------|
| FC | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 85 | 25 | 165 | 200 | 13 | 1 K070.9.010 2 - |
| FL | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 111 | 51 | 165 | 200 | 13 | 1 K070.9.010 2 K070.0.200 |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 130 ^{+0.20} / _{+0.15} | 7 | 13 | 111 | 51 | 165 | 200 | 13 | 1 KS070.9.014 2 - |
| F2 | 115 ^{+0.20} / _{+0.15} | 7 | 13 | 116 | 56 | 150 | 175 | 11 | 1 KS063.9.013 2 - |
| F3 | 110 ^{+0.035} / ₀ | 5 | 13.5 | 84.5 | 24.5 | 130 | 160 | 11 | 1 KS070.9.011 2 - |

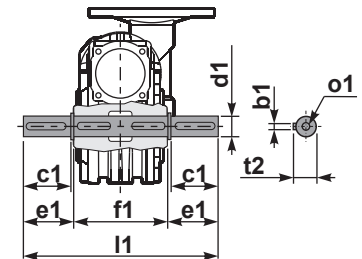
P6A4BR... Reaction arm
Braccio di reazione



P6A4....S... Single Shaft
Albero lento semplice



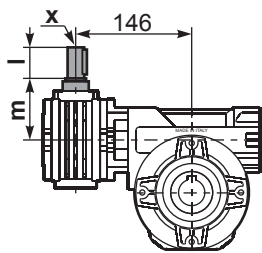
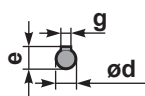
P6A4....D... Double Shaft
Albero lento bisp.



1 kit cod. K070.5.028 type B

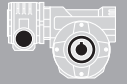
2 kit cod. K070.5.029 type B

R6A4FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|-------|------|---|----|----|---|----------------------|
| type B | 11 h6 | 12.5 | 4 | 30 | 68 | - | 1 2 K045.5.006 PAM71 |
| type S | - | - | - | - | - | - | 1 2 - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-----|-------|-----|----|-------|
| type B | 8 | 60 | 28 ^{-0.005} / _{-0.020} | 63.5 | 120 | 247 | 127.5 | 191 | 31 | M8x20 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|-----------------------------|-----|----|---------------------------------|----------------------|-----------------|
| | | | | | | | -B | -C | -O | -P | -Q | | | |
| | | | | | | | 63 | 71 | 56 | 63 | 71 | | | |
| 10 | 140 | 0.37 | 205 | 1.8 | 0.66 | 368 | B | | B-C | B-C | | 58 | 4.5 | 01 |
| 7.1 | 196 | 0.37 | 257 | 1.4 | 0.53 | 368 | B | | B-C | B-C | | 52 | 4.7 | 02 |
| 5.0 | 280 | 0.37 | 332 | 1.6 | 0.58 | 518 | B | | B-C | B-C | | 47 | 4.7 | 03 |
| 3.6 | 392 | 0.37 | 435 | 1.2 | 0.44 | 518 | B | | B-C | B-C | | 44 | 4.7 | 04 |
| 2.4 | 588 | 0.25 | 371 | 1.4 | 0.35 | 518 | B | | B-C | B-C | | 37 | 4.7 | 05 |
| 1.8 | 784 | 0.25 | 455 | 1.1 | 0.28 | 518 | B | | B-C | B-C | | 34 | 4.7 | 06 |
| 1.4 | 1036 | 0.18 | 420 | 1.2 | 0.22 | 518 | B | | B-C | B-C | | 33 | 4.7 | 07 |
| 1.1 | 1288 | 0.18 | 474 | 1.1 | 0.20 | 518 | B | | B-C | B-C | | 30 | 4.7 | 08 |
| 0.7 | 1960 | 0.12 | 449 | 1.2 | 0.14 | 518 | B | | B-C | B-C | | 28 | 4.7 | 09 |
| 0.5 | 2856 | 0.12 | 584 | 0.9 | 0.11 | 518 | B | | B-C | B-C | | 25 | 4.7 | 10 |

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 **854** is supplied with synthetic oil, providing "long life" lubrication. For mounting position V5-V6 please contact us. 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 **854** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

D Für die Lebensdauerschmierung ist das Getriebe der Größe **854** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. 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 **854** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique. 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 **854** se suministra, lubricado de por vida con aceite sintético. Para las posiciones V5 y V6 contactar con nuestro servicio técnico. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

LUBRICATION 854 Oil 1.2 Lt. 0.09 Lt.

Quantity 1.2/0.09 Lt.

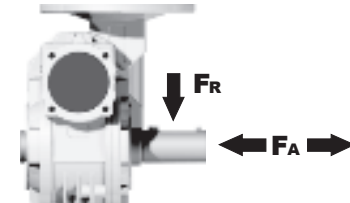
AGIP Telium VSF 320

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

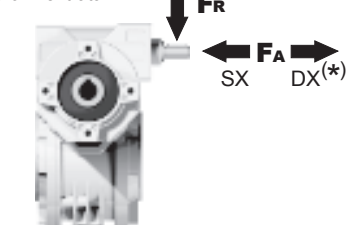
RADIAL AND AXIAL LOADS

Output shaft
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 25 | 1000 | 5000 |
| 15 | 1160 | 5800 |

Input shaft
albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 42 | 210 |

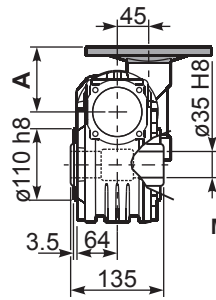
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

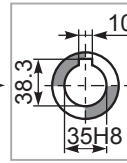
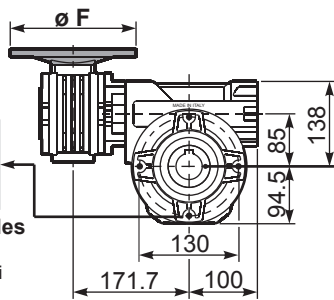
3D dimensions on request

P854FB... Basic wormbox
Riduttore base

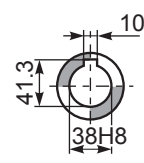
| M. flanges | Kit code | øF | A |
|--------------|------------|-----|------|
| 63B5 | K050.4.041 | 138 | 74 |
| 71B5 | K050.4.042 | 160 | 71.5 |
| 56B14 | KC40.4.049 | 80 | 71.5 |
| 63B14 | K050.4.047 | 90 | 74 |
| 71B14 | K050.4.045 | 105 | 71.5 |



8 holes
M10x18
Mounting holes
position
Posizione fori
di montaggio



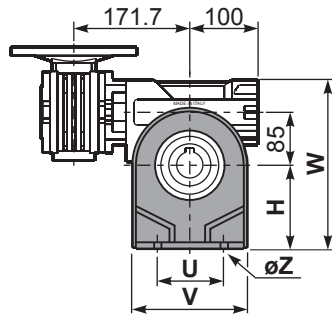
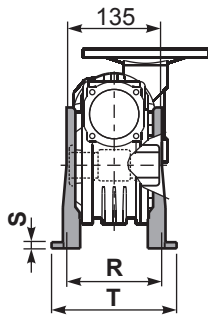
Standard
Hollow shaft



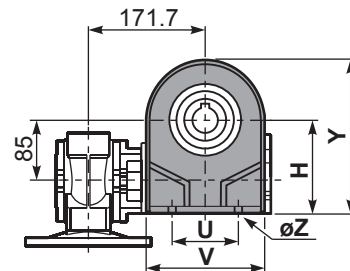
On request
A richiesta

Gearbox weight
peso riduttore **19.50 kg**

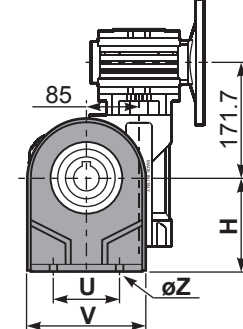
P854PA... Feet
Piedini



P854PB... Feet
Piedini

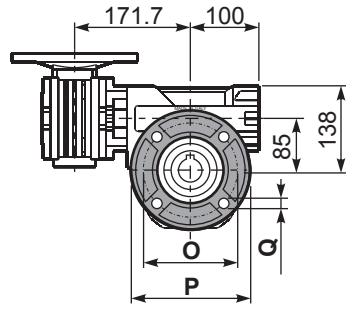
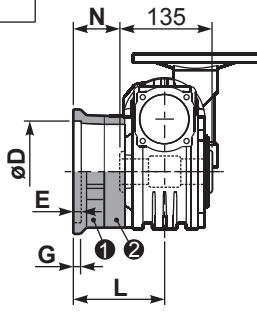


P854PV... Feet
Piedini

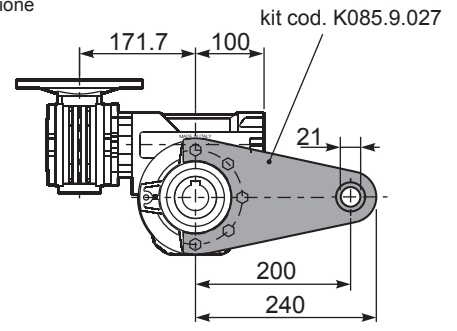
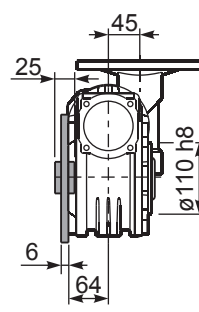


| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|---|-----|-----|-----|-------|-----|-------|------------|
| type B | 142 | 145 | 5 | 182 | 140 | 180 | 236.5 | 280 | ø10.5 | K085.9.022 |
| type S | - | - | - | - | - | - | - | - | - | - |

P854FC... Output flange
Flangia uscita



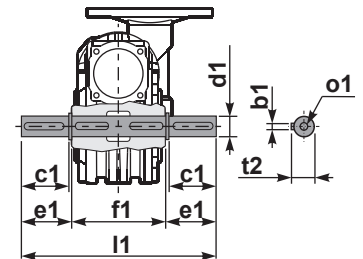
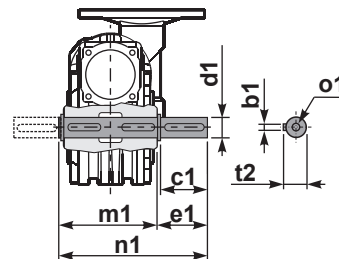
P854BR... Reaction arm
Braccio di reazione



| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|---------------------------------------|---|----|-------|------|-----|-----|------|---------------------------------|
| FC | 152 ^{+0.06} _{+0.00} | 5 | 16 | 108 | 40.5 | 176 | 205 | 13 | 1, 2 K085.9.010 |
| FL | 152 ^{+0.06} _{+0.00} | 5 | 16 | 148.5 | 81 | 176 | 205 | 13 | 1, 2 K085.9.010 2 K085.0.201 |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 130 ^{+0.040} ₀ | 5 | 13 | 117.5 | 50 | 165 | 200 | 11.5 | 1, 2 KS085.9.012 |
| F2 | 152 ^{+0.06} ₀ | 5 | 15 | 147.5 | 80 | 180 | 205 | 12.5 | 1, 2 KS085.9.013 |
| F4 | 130 ^{+0.040} ₀ | 5 | 13 | 106.5 | 39 | 165 | 200 | 13 | 1, 2 KS085.9.015 |

P854.....S... Single Shaft
Albero lento semplice

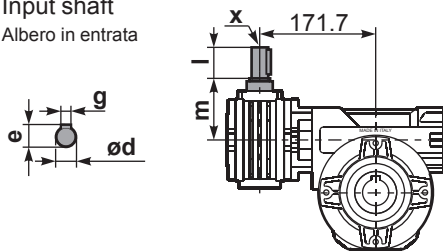
P854.....D... Double Shaft
Albero lento bisp.



1 kit cod. K085.5.028 type B

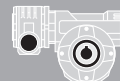
2 kit cod. K085.5.029 type B

R854FB... Input shaft
Albero in entrata



| | ød | e | g | l | m | x | kit code |
|--------|-------|------|---|----|----|---|-----------------------|
| type B | 11 h6 | 12.5 | 4 | 30 | 68 | - | 1, 2 K045.5.006 PAM71 |
| type S | - | - | - | - | - | - | 1, 2 - |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-----|-----|-------|----|--------|
| type B | 10 | 60 | 35 ^{-0.005} _{-0.020} | 73.5 | 135 | 282 | 141 | 214.5 | 38 | M10x23 |
| type S | - | - | - | - | - | - | - | - | - | - |



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 | | | | Dynamic efficiency RD | Tooth Module [mm] | Ratios code |
|---|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|-----------------------------|-----|----|----|---------------------------------|--------------------------|-----------------|
| | | | | | | | -B | -C | -D | -O | -P | -Q | -R | | | |
| | | | | | | | 63 | 71 | 80 | 56 | 63 | 71 | 80 | | | |
| 6.7 | 210 | 0.75 | 591 | 1.5 | 1.1 | 863 | B | B | | | B-C | B | | 55 | 5.6 | 01 |
| 4.7 | 300 | 0.75 | 752 | 1.3 | 0.97 | 978 | B | B | | | B-C | B | | 49 | 5.6 | 02 |
| 3.3 | 420 | 0.55 | 741 | 1.3 | 0.73 | 978 | B | B | | | B-C | B | | 47 | 5.6 | 03 |
| 2.6 | 540 | 0.55 | 851 | 1.1 | 0.63 | 978 | B | B | | | B-C | B | | 42 | 5.6 | 04 |
| 1.8 | 780 | 0.37 | 748 | 1.3 | 0.48 | 978 | B | B | | | B-C | B | | 38 | 5.6 | 05 |
| 1.3 | 1080 | 0.37 | 1009 | 1.0 | 0.36 | 978 | B | | | B-C | B-C | | | 37 | 5.6 | 06 |
| 1.1 | 1290 | 0.25 | 770 | 1.3 | 0.32 | 978 | B | | | B-C | B-C | | | 35 | 5.6 | 07 |
| 0.8 | 1800 | 0.25 | 921 | 1.1 | 0.27 | 978 | B | | | B-C | B-C | | | 30 | 5.6 | 08 |
| 0.7 | 2040 | 0.18 | 751 | 1.3 | 0.23 | 978 | B | | | B-C | B-C | | | 30 | 5.6 | 09 |
| 0.6 | 2400 | 0.18 | 825 | 1.2 | 0.21 | 978 | B | | | B-C | B-C | | | 28 | 5.6 | 10 |
| 0.5 | 3000 | 0.18 | 958 | 1.0 | 0.18 | 978 | B | | | B-C | B-C | | | 26 | 5.6 | 11 |

Motor Flanges Available
Flange Motore Disponibili

Supplied with Reduction Bushing
Fornito con Bussola di Riduzione

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

Motor Flange Holes Position
Posizione Fori Flangia Motore

EN Unit 115 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 type that are closed. Gearbox 050 is supplied lubricated for life. See tab.1 for oils and recommended quantity. In tab.2 there are radial loads and axial loads applicable to the gearbox.

I Il riduttore tipo 115 è fornito 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. Il riduttore 050 è fornito lubrificato a vita con olio sintetico. Tab.1 per oli e quantità consigliati. Tab.2 carichi radiali e assiali applicabili al riduttore.

D Das Getriebe der Baugröße 115 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. Das Getriebe der Baugröße 050 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 de type 115 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. Le réducteur de type 050 est fourni lubrifié à vie avec de l'huile synthétique. 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 115 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. El reductor 050 se suministra 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 |
| 2.0/0.14 LT | 1.35/0.14 LT | 1.35/0.14 LT | 2.0/0.14 LT | 2.0/0.14 LT | 2.0/0.14 LT |

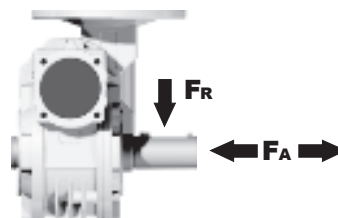
AGIP Blasia 460

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

RADIAL AND AXIAL LOADS

Output shaft

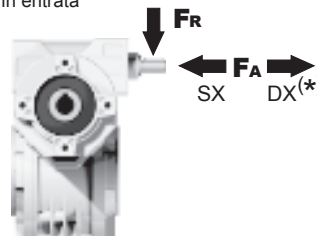
Albero di uscita



| n_2 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 25 | 1200 | 6000 |
| 15 | 1400 | 7000 |

Input shaft

albero in entrata



| n_1 [min ⁻¹] | FA [N] | FR [N] |
|-------------------------------|-----------|-----------|
| 1400 | 76 | 380 |

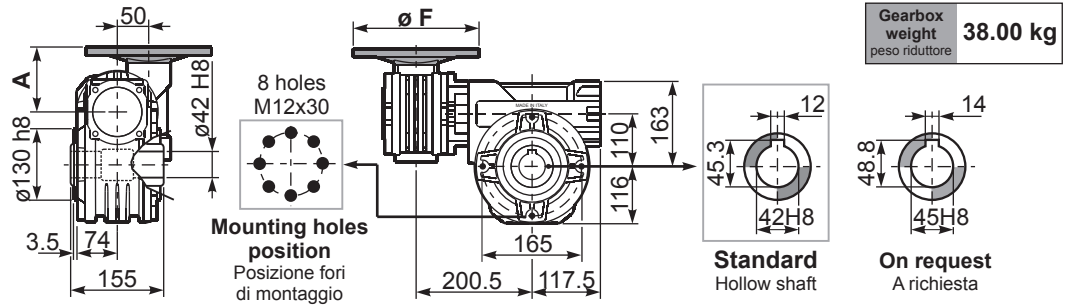
*Strong axial loads in the DX direction are not allowed.
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

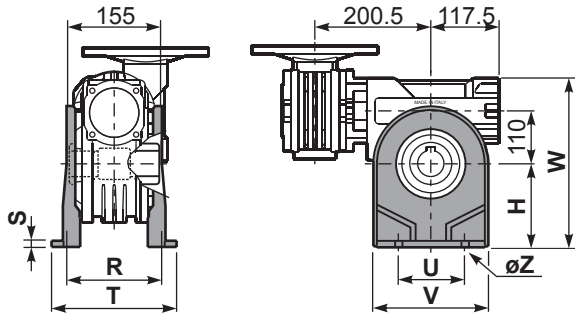
3D dimensions on request

P115FB... Basic wormbox
Riduttore base

| M. flanges | Kit code | øF | A |
|--------------|------------|-----|------|
| 63B5 | K050.4.041 | 138 | 78.5 |
| 71B5 | K050.4.042 | 160 | 76 |
| 80B5 | K050.4.043 | 200 | 76.5 |
| 56B14 | KC40.4.049 | 80 | 76 |
| 63B14 | K050.4.047 | 90 | 78.5 |
| 71B14 | K050.4.045 | 105 | 76 |
| 80B14 | K050.4.046 | 120 | 76.5 |

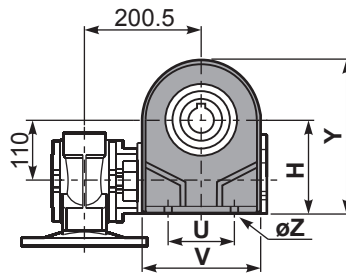


P115PA... Feet
Piedini

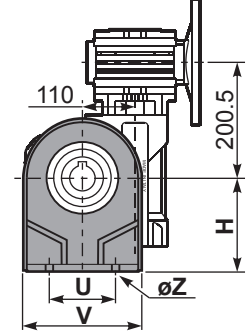


| | H | R | S | T | U | V | Y | W | øZ | kit code |
|--------|-----|-----|----|-----|-----|-----|-----|-----|-----|-------------|
| type B | 170 | 180 | 22 | 224 | 200 | 240 | 286 | 333 | ø13 | K110.9.022 |
| type S | 172 | 160 | 8 | 204 | 200 | 240 | 288 | 335 | ø14 | KS110.9.023 |

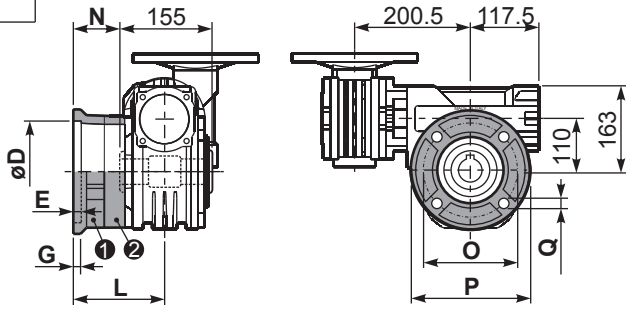
P115PB... Feet
Piedini



P115PV... Feet
Piedini

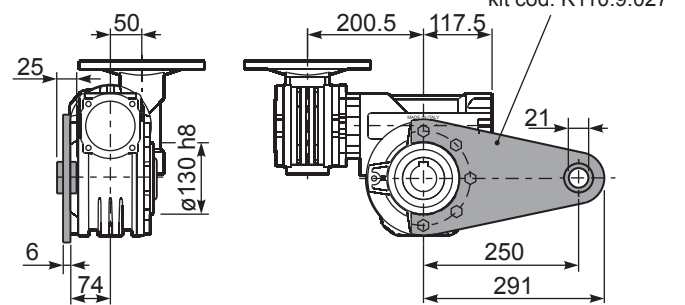


P115FC... Output flange
Flangia uscita

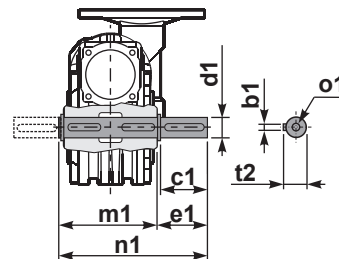


| type B | øD | E | G | L | N | O | P | Q | kit code |
|-----------|---|-----|------|-------|-------|-----|-----|----|-----------------|
| FC | 170 ^{+0.083} / _{+0.043} | 11 | 16.5 | 131.5 | 54 | 230 | 270 | 13 | 1 2 K110.9.010 |
| FL | 170 ^{+0.083} / _{+0.043} | 11 | 16.5 | 179.5 | 102 | 230 | 270 | 13 | 1 2 K110.9.011 |
| type S | øD | E | G | L | N | O | P | Q | kit code |
| F1 | 180 ^{+0.040} / ₀ | 5 | 18 | 150 | 72.5 | 215 | 250 | 15 | 1 2 KS110.9.014 |
| F2 | 170 ^{+0.083} / _{+0.043} | 9.5 | 15 | 178 | 100.5 | 230 | 270 | 13 | 1 2 KS110.9.012 |
| F3 | 180 ^{+0.040} / ₀ | 5 | 18 | 130 | 52.5 | 215 | 250 | 15 | 1 2 KS110.9.013 |

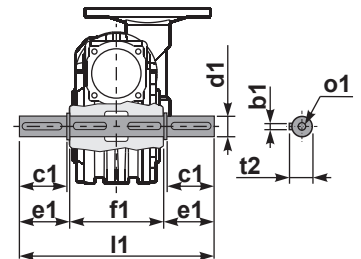
P115BR... Reaction arm
Braccio di reazione



P115....S... Single Shaft
Albero lento semplice



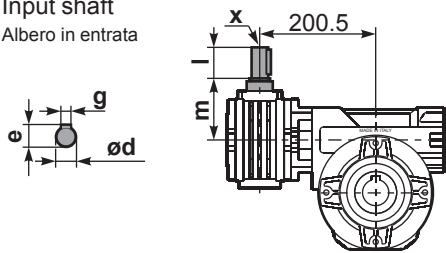
P115....D... Double Shaft
Albero lento bisp.



1 kit cod. K110.5.028 type B

2 kit cod. K110.5.029 type B

R115FB... Input shaft
Albero in entrata



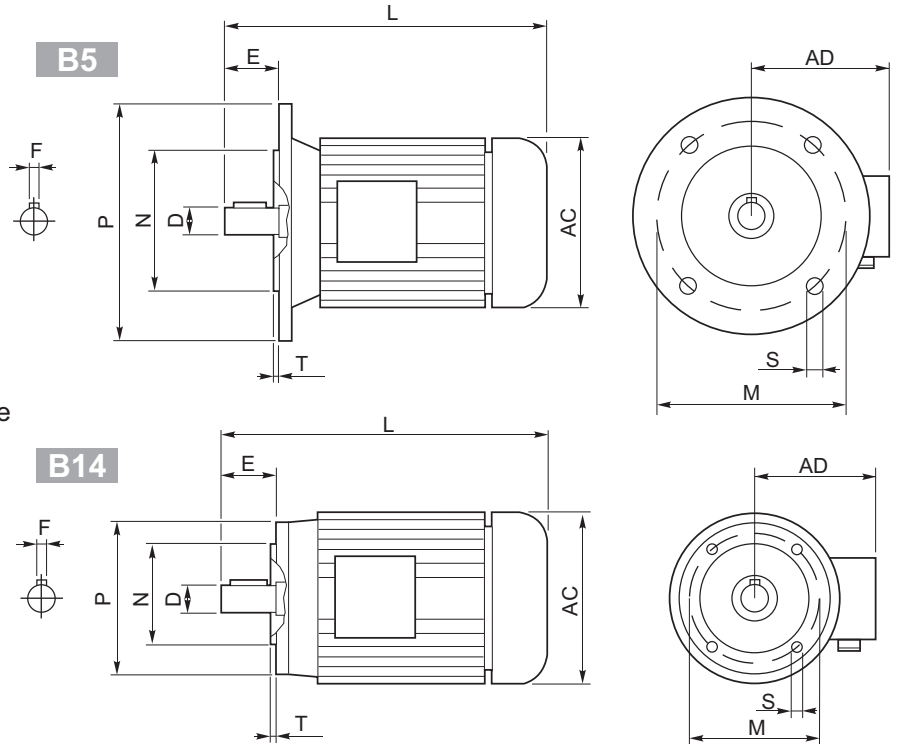
| | ød | e | g | l | m | x | kit code |
|--------|-------|----|---|----|------|-------|--|
| type B | 16 h6 | 18 | 5 | 30 | 74.5 | M6x16 | 1 K050.5.006 PAM71 2 K050.5.007 PAM80 |
| type S | 14 h6 | 16 | 5 | 30 | 74.5 | M5x10 | 1 KS050.5.008 PAM71 2 KS050.5.009 PAM80 |

| | b1 | c1 | d1 | e1 | f1 | l1 | m1 | n1 | t2 | o1 |
|--------|----|----|--|------|-----|-----|-------|-----|----|--------|
| type B | 12 | 75 | 42 ^{-0.005} / _{-0.020} | 96.5 | 155 | 348 | 163.5 | 260 | 45 | M12x32 |
| type S | - | - | - | - | - | - | - | - | - | - |



- 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 | 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 | 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 | — | — | — | 38 | 10 | 80 | 500 | 244 | 180 | 230 | 265 | 300 | 14 | 4 | 130 | 165 | 200 | M10 | 4 | 51 |
| 160 M | — | — | — | 11 | 72 | 21.5 | — | — | — | 42 | 12 | 110 | 613 | 335 | 246 | 250 | 300 | 350 | 18 | 5 | — | — | — | — | — | 79.2 |
| | — | — | — | 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 Cl.F
To be specified upon placing the order if different insulation is required.

Isolamento

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

Isolierung

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

Isolement

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

Aislamiento

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

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

Connections

Collegamenti

Verbindungselemente

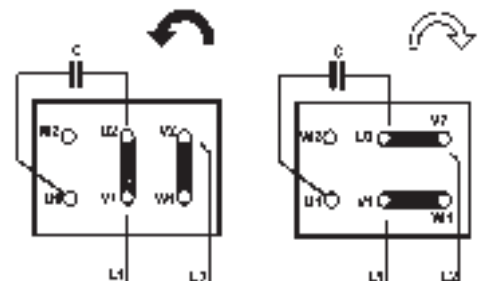
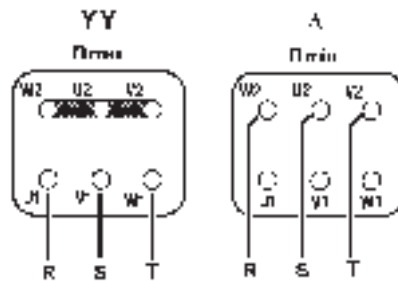
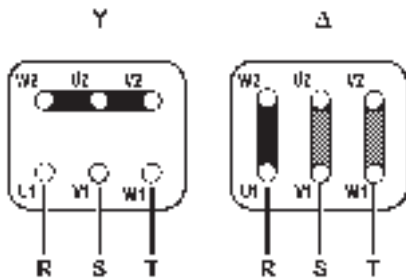
Branchements

Conexiones

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

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

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



Please Read Carefully

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

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

WARNING:

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

SELLING CONDITIONS

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

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

Leggere attentamente

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

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

ATTENZIONE:

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

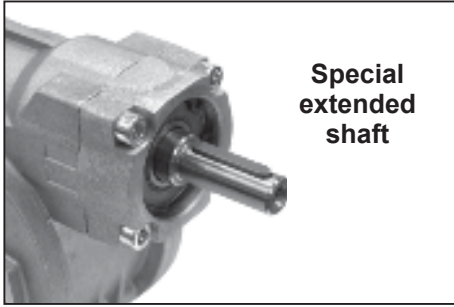
CONDIZIONI DI VENDITA

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

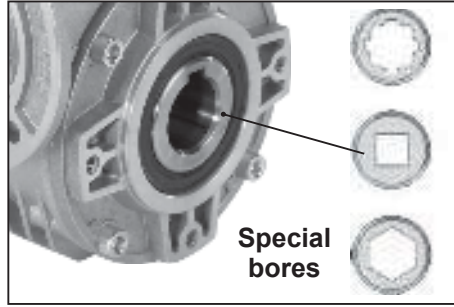
La garanzia decade nel caso in cui siano state eseguite riparazioni o apportate modifiche senza nostro consenso scritto.

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

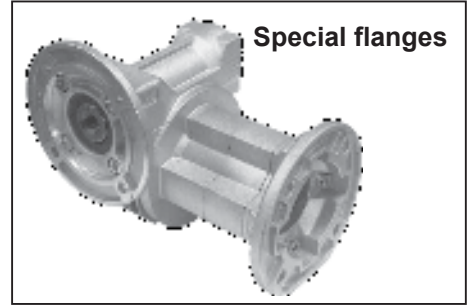
New options available



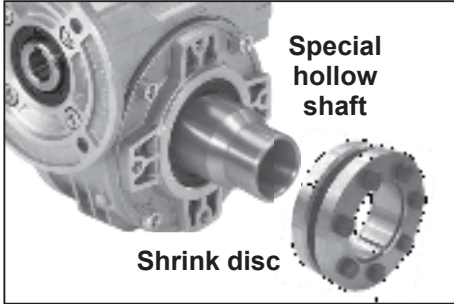
Special extended shaft



Special bores

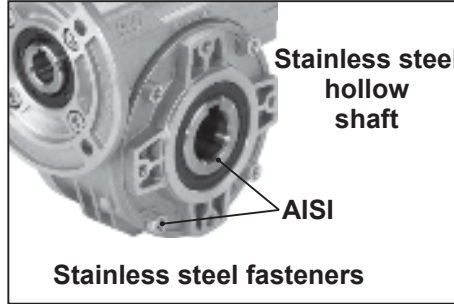


Special flanges



Special hollow shaft

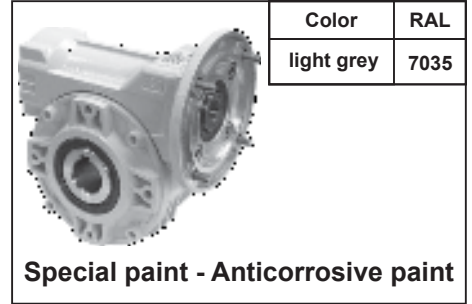
Shrink disc



Stainless steel hollow shaft

AISI

Stainless steel fasteners



Special paint - Anticorrosive paint

| Color | RAL |
|------------|------|
| light grey | 7035 |

Others HYDRO-MEC products



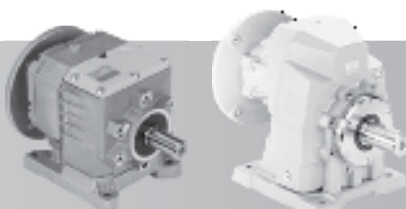
Square worm gearboxes
Rid. a vite senza fine quadro



Stainless steel worm gearboxes
Rid. a vite senza fine Inox



One step gearboxes
Riduttori ad uno stadio



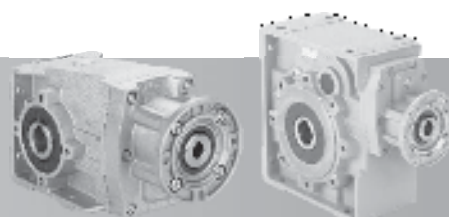
Coaxial gearboxes
Riduttori coassiali



Stainless steel one step gearbox
Riduttore uno stadio Inox



Shaft mounted gearboxes
Riduttori pendolari

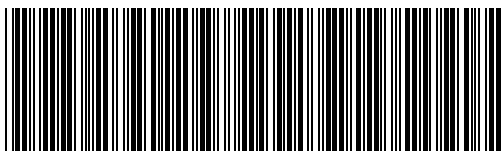


Helical bevel gearboxes
Rid. a coppia conica

Distributed From:

HYDRO-MEC

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Website: www.hydromec.com



* CT - VF M- BS - HM0 1 5