

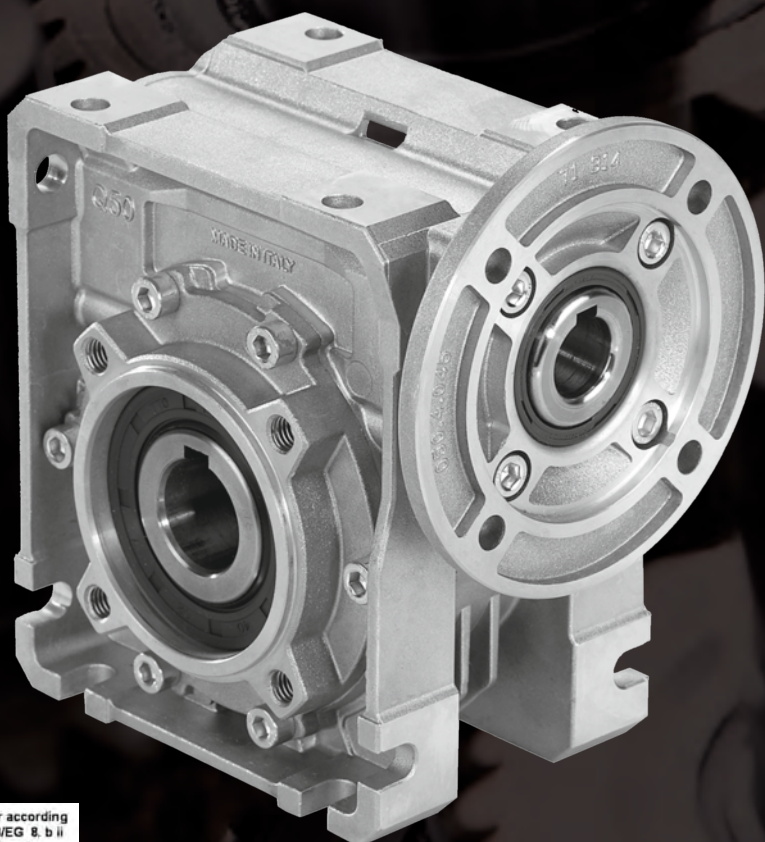
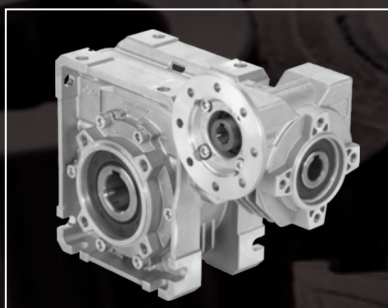
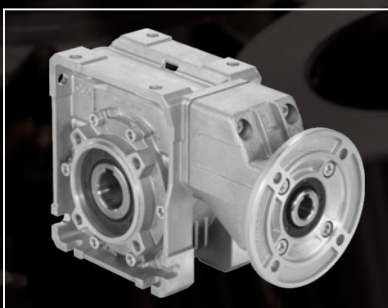
# Square

# Gears

Cat.: CT-VFM-Q-HM013

## Worm gearboxes

Riduttori a vite senza fine  
0.06 ÷ 7.5 kW



Made in Italy



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



# HYDRO • MEC

# Worm gearboxes type Q30 ÷ Q13

## 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.

### Flange

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

### Premium, high temperature

Nitrile® output seals

### Bronze alloy worm gears.

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

### Oversize bearing

For radial load capability and maximum hollow output shaft diameter.

### Standard hollow output shaft mounting

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

### 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.

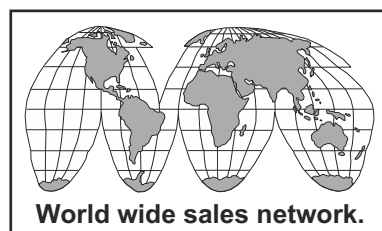
### Vent Free Design.

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

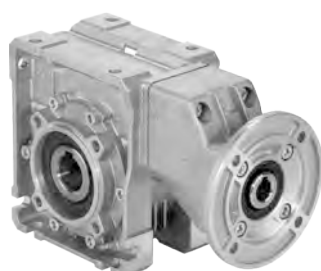


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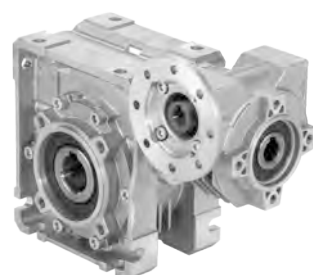
**Types / Tipi /**  
Tipen / Types /  
Tipos ➡

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| 3-5                                                       | 3-7                | 3-9                | 3-11                | 3-13                | 3-15                | 3-17                | 3-19                 |
|                                                           |                    |                    |                     |                     |                     |                     |                      |
| <b>Q30</b><br>21Nm                                        | <b>Q45</b><br>41Nm | <b>Q50</b><br>72Nm | <b>Q63</b><br>147Nm | <b>Q75</b><br>270Nm | <b>Q85</b><br>347Nm | <b>Q11</b><br>651Nm | <b>Q13</b><br>1050Nm |



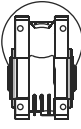
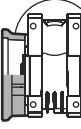
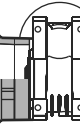
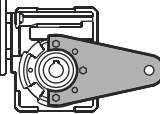
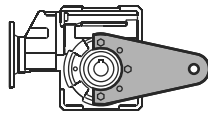
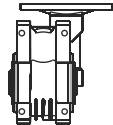
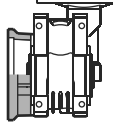
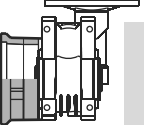
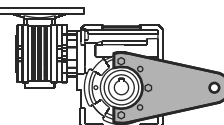
**Types / Tipi /**  
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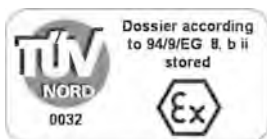
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| 3-21                                                      | 3-23               | 3-25                | 3-27                | 3-29                | 3-31                | 3-33                    |
|                                                           |                    |                     |                     |                     |                     |                         |
| <b>P4Q</b><br>55Nm                                        | <b>P5Q</b><br>88Nm | <b>P6Q</b><br>187Nm | <b>P7Q</b><br>310Nm | <b>P8Q</b><br>440Nm | <b>P1Q</b><br>803Nm | <b>Q13+511</b><br>972Nm |



**Types / Tipi /**  
Tipen / Types /  
Tipos ➡

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| 3-35                                                      | 3-37                | 3-39                | 3-41                | 3-43                | 3-45                | 3-47                |
|                                                           |                     |                     |                     |                     |                     |                     |
| <b>43Q</b><br>69Nm                                        | <b>53Q</b><br>109Nm | <b>63Q</b><br>230Nm | <b>64Q</b><br>265Nm | <b>74Q</b><br>359Nm | <b>84Q</b><br>518Nm | <b>15Q</b><br>978Nm |

| Type - Tipo - Typ<br>Type - Tipo                                                                                                                                                                                                                         | Size - Grandezza<br>Größe - Taille<br>Tamaño                                                                 | Mounting - Montaggio - Montage<br>Fixation - Tipo de montaje                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>P</b>                                                                                                                                                                                                                                                 | <b>Q45</b>                                                                                                   | <b>FC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Worm gearboxes</b><br>Riduttori a vite senza fine<br>Schneckengetriebe<br>Reducteurs a vis sans fin<br>Reductores de corona sin fin                                                                                                                   | <b>Q30</b><br><b>Q45</b><br><b>Q50</b><br><b>Q63</b><br><b>Q75</b><br><b>Q85</b><br><b>Q11</b><br><b>Q13</b> | <br><b>FB</b> <br><b>FC</b> <br><b>FL</b> <b>F1</b><br><b>F2</b><br><b>F3</b><br><b>F4</b> <br><b>BR</b>         |
| <b>Worm gearboxes with primary reduction</b><br>Riduttori a vite senza fine con precoppia<br>Schneckengetriebe mit Stirnradstufe am Eintrieb<br>Reducteurs a vis sans fin avec pré-réduction<br>Reductores corona sin fin con prereductora de engranajes | <b>P4Q</b><br><b>P5Q</b><br><b>P6Q</b><br><b>P7Q</b><br><b>P8Q</b><br><b>P1Q</b>                             | <br><b>FB</b> <br><b>FC</b> <br><b>FL</b> <b>F1</b><br><b>F2</b><br><b>F3</b><br><b>F4</b> <br><b>BR</b>    |
| <b>Combined worm gearboxes</b><br>Riduttori a vite senza fine combinati<br>Schneckengetriebekombinationen<br>Reducteurs a double train de vis sans fin<br>Reductores combinados corona sin fin                                                           | <b>43Q</b><br><b>53Q</b><br><b>63Q</b><br><b>64Q</b><br><b>74Q</b><br><b>84Q</b><br><b>15Q</b>               | <br><b>FB</b> <br><b>FC</b> <br><b>FL</b> <b>F1</b><br><b>F2</b><br><b>F3</b><br><b>F4</b> <br><b>BR</b> |



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<br>Rapporto<br>Untersetzung<br>Reduction<br>Relación                                                                                                                      | Hub<br>Mozzo corona<br>Hohlwelle<br>Arbre creux<br>Nucleo corona                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Output shaft<br>Albero lento<br>Abtriebswelle<br>Arbre de sortie<br>Eje solida | Motor size<br>Grandezza motore<br>Motor Grösse<br>Grandeur moteur<br>Tamaño motor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Terminal box position<br>Posizione morsettiera<br>Klemmkastenlage<br>Position boîte a bornes<br>Posición caja de bornes | Mounting position<br>Posizione montaggio<br>Einbaulage<br>Position de montage<br>Posición de montaje  | Reduced Input bore<br>Foro entrata ridotto<br>Riduzierte Eingangshohlwelle<br>Trou d'entree de diametre reduit<br>Eje hueco de entrada reducido                                                                                                                                                                                                                                                                                                        | Mountin position<br>Esecuzione montaggio<br>Einbaulage<br>Exécution de montage<br>Posición de montaje                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 10                                                                                                                                                                              | C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Ø                                                                              | -Q                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | B                                                                                                                       | B3                                                                                                    | -                                                                                                                                                                                                                                                                                                                                                                                                                                                      | ---                                                                                                                                                                                                                                                                                                             |
| <p>See technical data table</p> <p>Vedi tabella dati tecnici.</p> <p>Technisches Datenblatt beachten</p> <p>Voir tableau données techniques</p> <p>Ver tabla datos técnicos</p> | <p><b>C</b></p> <p>STANDARD</p> <p>Q30 ⇒ Ø14<br/>Q45 ⇒ Ø18<br/>Q50 ⇒ Ø25<br/>Q63 ⇒ Ø25<br/>Q75 ⇒ Ø30<br/>Q85 ⇒ Ø35<br/>Q11 ⇒ Ø42<br/>Q13 ⇒ Ø45</p> <p><b>I</b></p> <p>Stainless steel hub<br/>Mozzo in acciaio Inox<br/>Edelstahlhohlwelle<br/>Moyeu en acier Inox<br/>Nucleo corona de acero Inox</p> <p>Special series<br/>Serie Speciale</p> <p><b>S</b></p> <p>Q45 ⇒ Ø19<br/>Q50 ⇒ Ø24</p> <p><b>X</b></p> <p>Stainless steel hub<br/>Mozzo in acciaio Inox<br/>Edelstahlhohlwelle<br/>Moyeu en acier Inox<br/>Nucleo corona de acero Inox</p> <p><b>U</b></p> <p>INCH</p> <p>Q45 ⇒ Ø0.750"<br/>Q50 ⇒ Ø1.000"<br/>Q63 ⇒ Ø1.125"<br/>Q85 ⇒ Ø1.500"</p> | <p><b>Ø</b></p> <p><b>S</b></p> <p><b>D</b></p>                                | <p><b>-M</b><br/>without flange<br/>Senza flangia</p> <p><b>B5</b></p> <p><b>-A</b>=56<br/>(Ø120)<br/><b>-B</b>=63<br/>(Ø140)<br/><b>-C</b>=71<br/>(Ø160)<br/><b>-D</b>=80<br/>(Ø200)<br/><b>-E</b>=90<br/>(Ø200)<br/><b>-F</b>=100÷112<br/>(Ø250)<br/><b>-G</b>=132<br/>(Ø300)</p> <p><b>B14</b></p> <p><b>-O</b>=56<br/>(Ø80)<br/><b>-P</b>=63<br/>(Ø90)<br/><b>-Q</b>=71<br/>(Ø105)<br/><b>-R</b>=80<br/>(Ø120)<br/><b>-T</b>=90<br/>(Ø140)<br/><b>-U</b>=100÷112<br/>(Ø160)<br/><b>-V</b>=132<br/>(Ø200)</p> <p><b>-0</b>=Type R</p> <p>Reduced Fl.</p> <p><b>-1</b>=56B5/Ø11<br/><b>-2</b>=63B5/Ø14<br/><b>-3</b>=71B5/Ø19<br/><b>-4</b>=71B5/Ø24<br/><b>-5</b>=90B5/Ø28<br/><b>-6</b>=100B5/Ø38<br/><b>-7</b>=132B5/Ø42<br/><b>-8</b>=80B14/Ø11<br/><b>-9</b>=100B5/Ø24</p> | <p><b>A</b></p> <p><b>B</b><br/>STANDARD</p> <p><b>C</b></p> <p><b>D</b></p>                                            | <p><b>B3</b></p> <p><b>B8</b></p> <p><b>B6</b></p> <p><b>B7</b></p> <p><b>V5</b></p> <p><b>V6</b></p> | <p><b>-</b></p> <p>Nothing indication<br/>standard bore</p> <p>Nessuna indicazione foro standard</p> <p><b>P</b></p> <p>Input bore<br/>reduced one size</p> <p>Foro entrata ridotto di una misura</p> <p>Ex.<br/>Input Flange<br/>71 B14<br/>Standard Ø14<br/>Reduced Ø11</p> <p><b>Q</b></p> <p>Input bore<br/>reduced two sizes</p> <p>Due grandezze ridotte foro entrata</p> <p>Ex.<br/>Input Flange<br/>71 B14<br/>Standard Ø14<br/>Reduced Ø9</p> | <p>Only for combined units<br/>See technical data table</p> <p>Solo per i riduttori combinati<br/>Vedi tabella dati tecnici.</p> <p>Ausführungen für Getriebekombinationen it</p> <p>Uniquement pour combinés.<br/>Voir tableau données techniques</p> <p>Sólo para combinados<br/>ver tabla datos técnicos</p> |

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

Lifting / sollevamento / hubantriebe / levage / elevación

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

Rotation / rotazione / drehung / rotation / rotation

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

Linear movement / traslazione / linearbewegung / translation / translacion

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

3

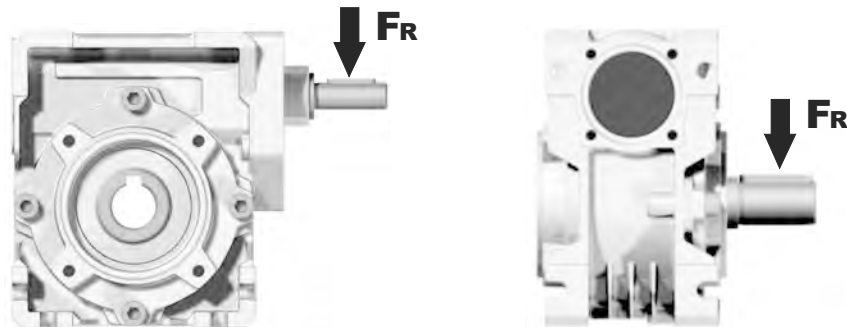
TORQUE / COPPIA / DREHMOMENT / COUPLE / PAR

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

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

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

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



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

|                                                                                          |                                                                                                    |                                                                                                            |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|
| <b>B</b>                                                                                 | Output speed<br>Velocità in uscita<br>Abtriebsdrehzahl<br>Vitesse de sortie<br>Velocidad de salida | Nominal power<br>Potenza nominale<br>Max. mögliche Leistung<br>Poissance nominale<br>Potencia nominal      |
| Gear size<br>Grandezza riduttore<br>Getriebegröße<br>Taille réducteur<br>Tamaño reductor | Motor power<br>Potenza motore<br>Motorleistung<br>Puissance moteur<br>Potencia motor               | <b>A</b>                                                                                                   |
|                                                                                          |                                                                                                    | Nominal torque<br>Momento torcente nominale<br>Nenn Drehmoment<br>Couple nominal<br>Par de torsión nominal |
|                                                                                          |                                                                                                    | Flange code<br>Codice flangia<br>Flanschtype<br>Code bride<br>Código bridas                                |
|                                                                                          |                                                                                                    | Dynamic efficiency<br>Rendimento dinamico<br>Dynamischer<br>Rendement dynamique<br>Rendimento dinámico     |
|                                                                                          |                                                                                                    | Input speed<br>Velocità in entrata<br>Eintriebsdrehzahl<br>Vitesse en entrée<br>Velocidad de entrada       |

**Q45** Square - Gear  
**41Nm**

Rating - Aluminum WORM GEARBOXES



■ QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{12M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{12R}$<br>[Nm] | Available<br>B5 motor flanges |   | Available<br>B14 motor flanges |     |   | Dynamic efficiency<br>RD | Tooth Module<br>[mm] | Ratio 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         |

|          |                                                                       |                                                                                                                 |                                                                                                     |                                                                                      |                                               |
|----------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------|
| <b>C</b> | Ratio<br>Rapporto<br>Untersetzung<br>Rapport de réduction<br>Relación | Transmitted torque<br>Momento torcente trasmesso<br>Mögliche Drehmomente<br>Couple de sortie<br>Par transmitido | Service factor<br>Fattore di servizio<br>Betriebsfaktor<br>Facteur de service<br>Factor de servicio | Nominal module<br>Modulo nominale<br>Nenn modul<br>Module nominale<br>Módulo nominal | Notes<br>Note<br>Anmerkungen<br>Note<br>Notas |
|----------|-----------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|-----------------------------------------------|

| fs                                                                                                               |                     | Oper. hours per day<br>Ore di funz. giorn. |         |          |
|------------------------------------------------------------------------------------------------------------------|---------------------|--------------------------------------------|---------|----------|
| Type of load and starts per hour<br>Tipo di carico e avviamenti per ora                                          |                     | <2 h                                       | 2 - 8 h | 8 - 16 h |
| Continuous or intermittent<br>appl. with start / hour<br>Applicazione cont. o interm.<br>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<br>with start / hour<br>Applicazione intermittente<br>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     |

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

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





#### QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |   | Available<br>B14 motor flanges |   | Dynamic efficiency | Tooth Module<br>[mm] | Ratios code<br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|---|--------------------------------|---|--------------------|----------------------|-----------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | A                             | B | O                              | P |                    |                      |                 |
| 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              |

**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 **Q30** 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 **Q30** 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 **Q30** 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 **Q30** 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 **Q30** 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 Q30 Oil Quantity 0.03Lt.

**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website

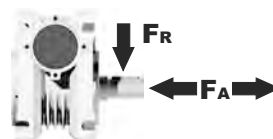
tab. 1

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

#### RADIAL AND AXIAL LOADS

##### Output shaft

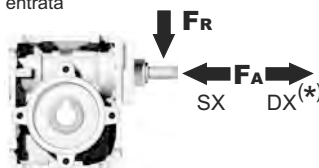
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[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



| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 20        | 100       |

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

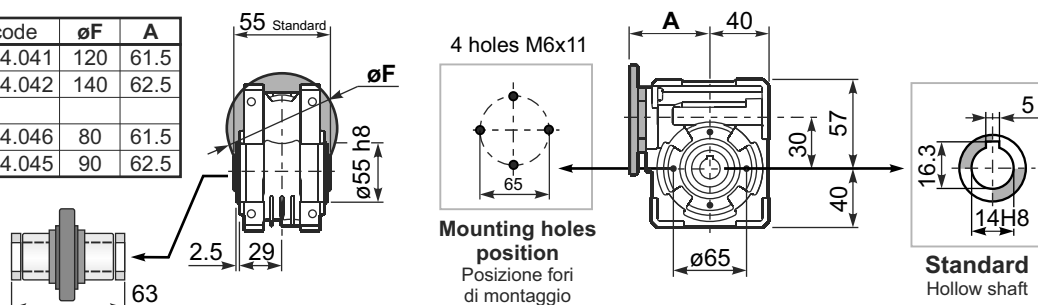
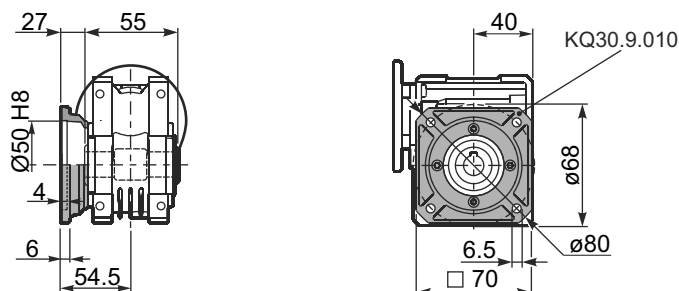
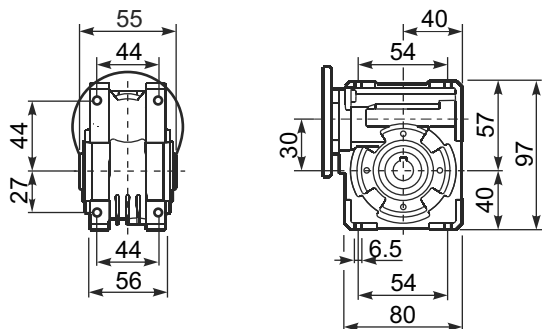
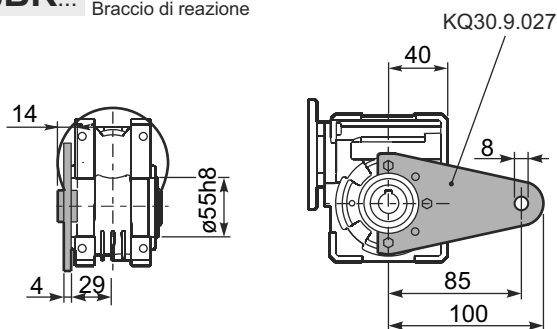
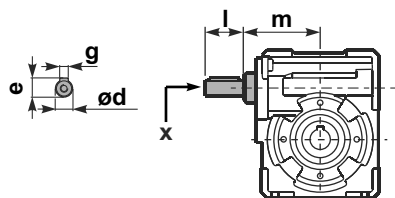
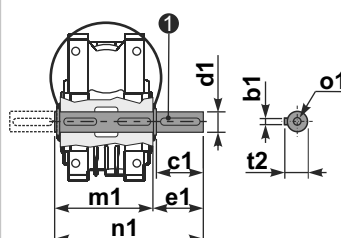
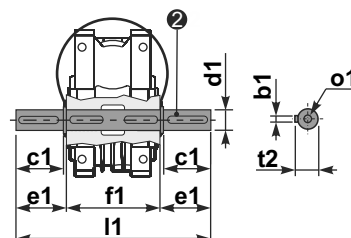
tab. 2



PQ30**FB**...Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore

1.15 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 |

On Request  
Output shaft  
with spacers  
cod. Q30.3.014PQ30**FC**...Square flange  
Flangia quadrataPQ30**FB**...Feet  
PiediniPQ30**BR**...Reaction arm  
Braccio di reazioneRQ30**FB**...Input shaft  
Albero in entrataPQ30.....**S**...Single Shaft  
Albero lento semplicePQ30.....**D**...Double Shaft  
Albero lento bisp.

① kit cod. K030.5.028 type B

② kit cod. K030.5.029 type B

|        | 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 <sup>-0.005/-0.020</sup> | 35.5 | 55 | 126 | 59 | 94.5 | 16 | M5x14 |
| type S | -  | -  | -                           | -    | -  | -   | -  | -    | -  | -     |



## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available B5 motor flanges |    | Available B14 motor flanges |     |    | Dynamic efficiency<br>RD | Tooth Module<br>[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          |

**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 Q45 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 Q45 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 Q45 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 Q45 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 Q45 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 Q45 Oil Quantity 0.09 Lt.

AGIP Telium VSF 320

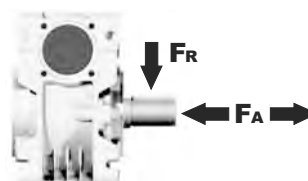
SHELL Omala S4 WE 320

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

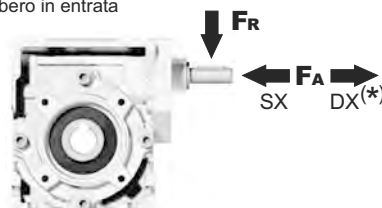
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[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



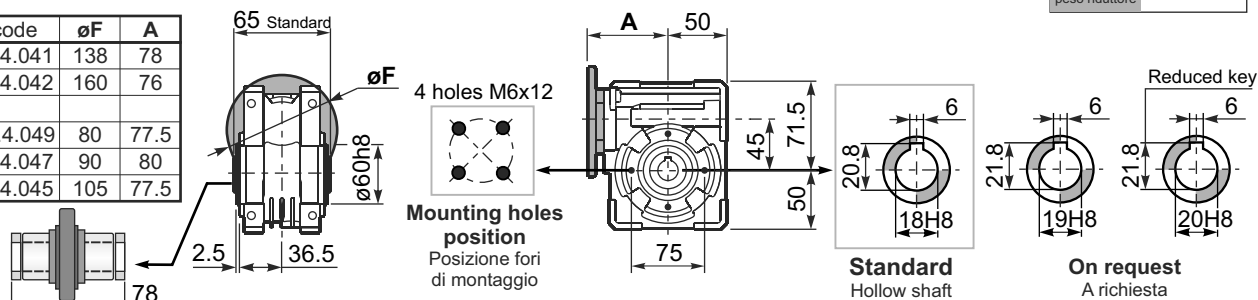
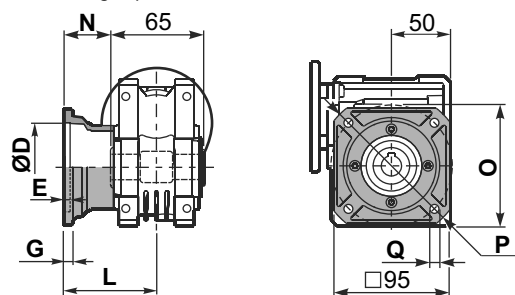
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 42        | 210       |

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

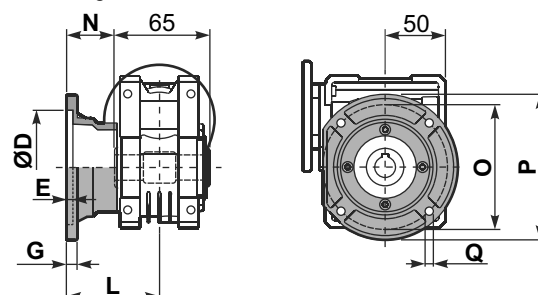
**tab. 2**

PQ45**FB**...Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore**2.30 kg**

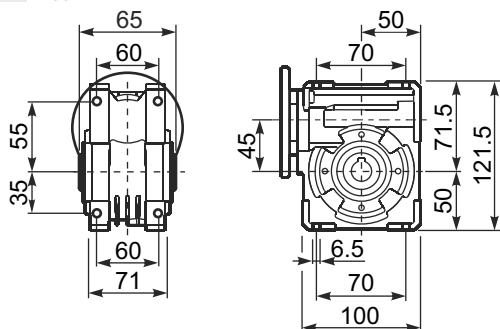
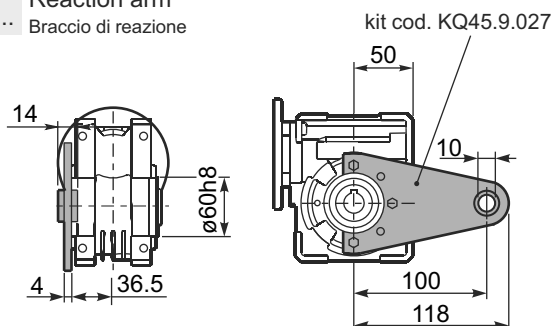
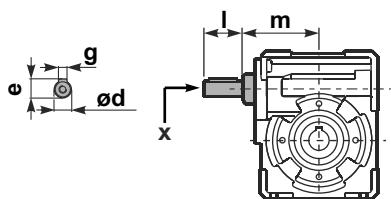
| M. flanges   | Kit code   | øF  | A    |
|--------------|------------|-----|------|
| <b>63B5</b>  | K050.4.041 | 138 | 78   |
| <b>71B5</b>  | K050.4.042 | 160 | 76   |
| <b>56B14</b> | KC40.4.049 | 80  | 77.5 |
| <b>63B14</b> | K050.4.047 | 90  | 80   |
| <b>71B14</b> | K050.4.045 | 105 | 77.5 |

On Request  
output shaft  
with spacers  
cod. Q45.3.018PQ45**FC**...Square flange  
Flangia quadrata

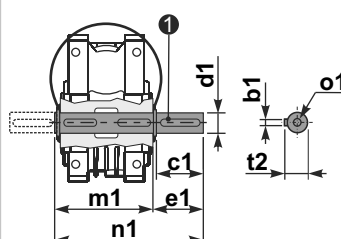
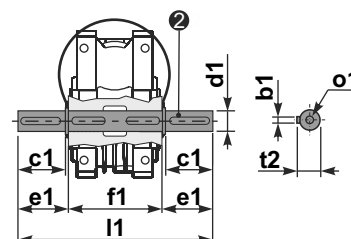
| type B    | øD    | E | G | L  | N    | O  | P   | Q | kit code   |
|-----------|-------|---|---|----|------|----|-----|---|------------|
| <b>FC</b> | 60 H8 | 4 | 7 | 67 | 34.5 | 75 | 110 | 9 | KQ45.9.010 |
| <b>FL</b> | 60 H8 | 4 | 7 | 97 | 64.5 | 75 | 110 | 9 | KQ45.9.011 |

PQ45**F1**...Round flange  
Flangia rotonda

| type S    | øD   | E | G  | L  | N    | O   | P   | Q   | kit code    |
|-----------|------|---|----|----|------|-----|-----|-----|-------------|
| <b>F1</b> | 95H8 | 5 | 9  | 80 | 47.5 | 115 | 140 | 9.5 | KSQ45.9.012 |
| <b>F2</b> | 80H8 | 5 | 12 | 58 | 25.5 | 100 | 120 | 9   | KSQ45.9.013 |

PQ45**FB**...Feet  
PiediniPQ45**BR**...Reaction arm  
Braccio di reazioneRQ45**FB**...Input shaft  
Albero in entrata

|        | ød    | e    | g | l  | m  | x | kit code           |
|--------|-------|------|---|----|----|---|--------------------|
| type B | 11 h6 | 12.5 | 4 | 30 | 74 | - | ① K045.5.006 PAM71 |
| type S | -     | -    | - | -  | -  | - | ② -                |

PQ45.....**S**...Single Shaft  
Albero lento semplice① kit cod. K045.5.028 type B  
kit cod. KS045.5.030 type SPQ45.....**D**...Double Shaft  
Albero lento bisp.② kit cod. K045.5.029 type B  
kit cod. KS045.5.031 type S

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



## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |    |    | Available<br>B14 motor flanges |     |    |    | Dynamic efficiency<br>RD | Tooth Module<br><br>[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                                                                                              |
| 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                                                                                              |

 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 Q50 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 Q50 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 Q50 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 Q50 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 Q50 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 Q50 Oil Quantity 0.14 Lt.

AGIP Telium VSF 320

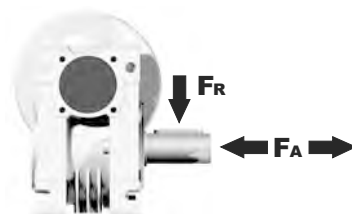
SHELL Omala S4 WE 320

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

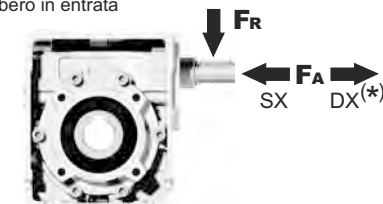
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[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



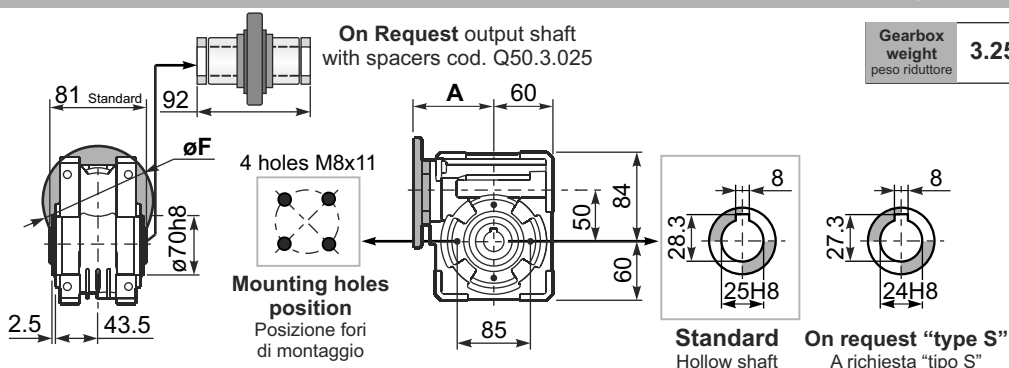
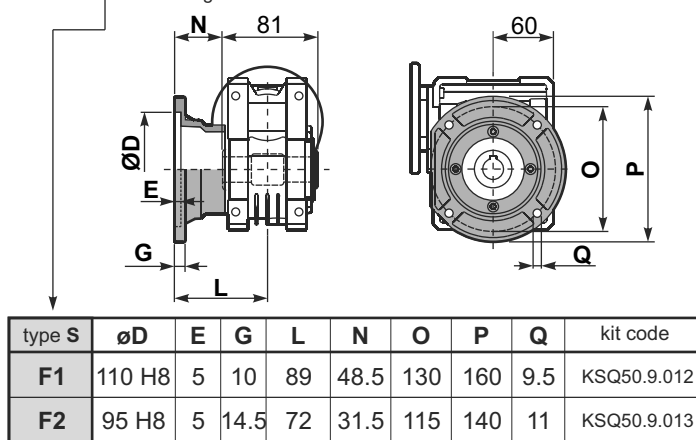
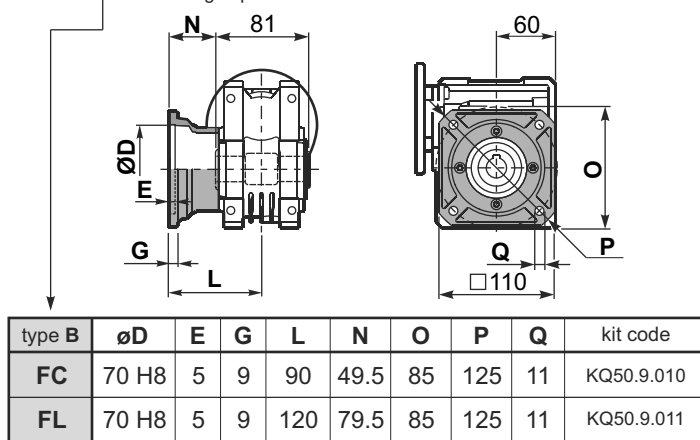
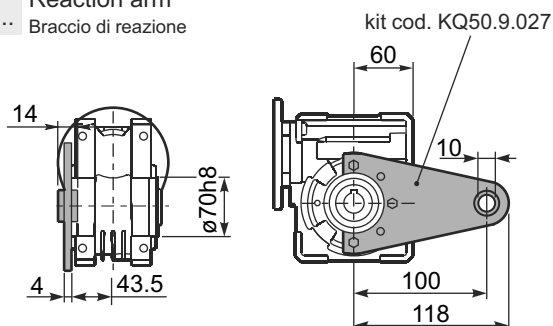
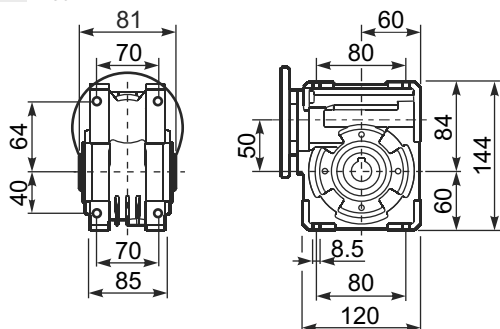
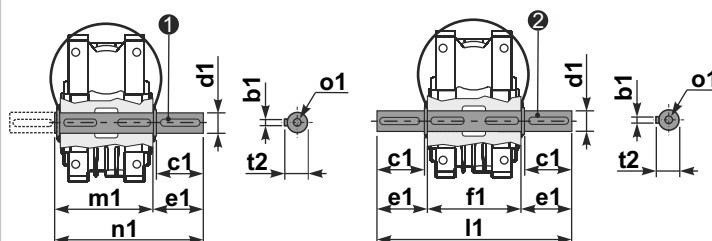
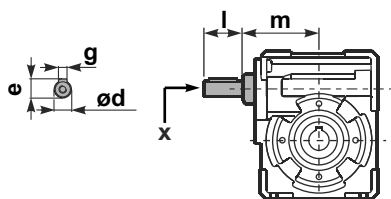
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 76        | 380       |

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

tab. 2

**PQ50FB...** Basic wormbox  
Riduttore baseOn Request output shaft  
with spacers cod. Q50.3.025Gearbox  
weight  
peso riduttore **3.25 kg**

| M. flanges   | Kit code   | øF  | A    |
|--------------|------------|-----|------|
| <b>63B5</b>  | K050.4.041 | 138 | 81.5 |
| <b>71B5</b>  | K050.4.042 | 160 | 79.5 |
| <b>80B5</b>  | K050.4.043 | 200 | 81.5 |
| <b>56B14</b> | KC40.4.049 | 80  | 81   |
| <b>63B14</b> | K050.4.047 | 90  | 83.5 |
| <b>71B14</b> | K050.4.045 | 105 | 81   |
| <b>80B14</b> | K050.4.046 | 120 | 81.5 |

**PQ50FC...** Square flange  
Flangia quadrata**PQ50F1...** Round flange  
Flangia rotonda**PQ50FB...** Feet  
Piedini**PQ50BR...** Reaction arm  
Braccio di reazione**RQ50FB...** Input shaft  
Albero in entrata**PQ50.....S...** Single Shaft  
Albero lento semplice**PQ50.....D...** Double Shaft  
Albero lento bisp.

|        | ød    | e  | g | l  | m    | x     | kit code                                   |
|--------|-------|----|---|----|------|-------|--------------------------------------------|
| type B | 16 h6 | 18 | 5 | 30 | 79.5 | M6x16 | ① K050.5.006 PAM71<br>② K050.5.007 PAM80   |
| type S | 14 h6 | 16 | 5 | 30 | 79.5 | M5x10 | ① KS050.5.008 PAM71<br>② KS050.5.009 PAM80 |

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



#### QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available B5 motor flanges |   |   |   | Available B14 motor flanges |     |   | Dynamic efficiency<br>RD | Tooth Module<br>[mm] | Ratios code |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|---|---|---|-----------------------------|-----|---|--------------------------|----------------------|-------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | B                          | C | D | E | Q                           | R   | T |                          |                      |             |
| 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          |
| 31                                            | 45           | 0.55                            | 111                               | 1.2                    | 0.67                              | 135                                |                            | B | B |   | B-C                         | C   |   | 66                       | 2.1                  | 08          |
| 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          |

**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 **Q63** 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 **Q63** 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 **Q63** 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 **Q63** 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 **Q63** 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 Q63 Oil Quantity 0.30 Lt.

**AGIP** Telium VSF 320

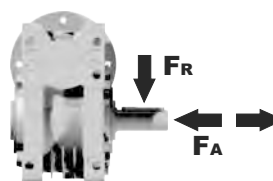
**SHELL** Omala S4 WE 320

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

#### RADIAL AND AXIAL LOADS

##### Output shaft

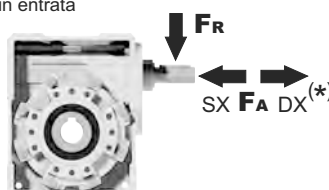
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[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



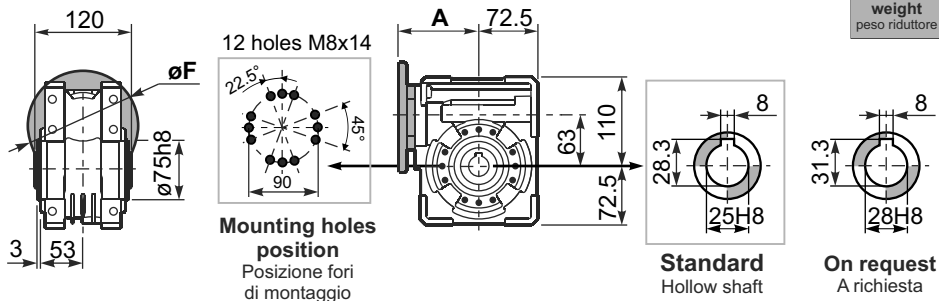
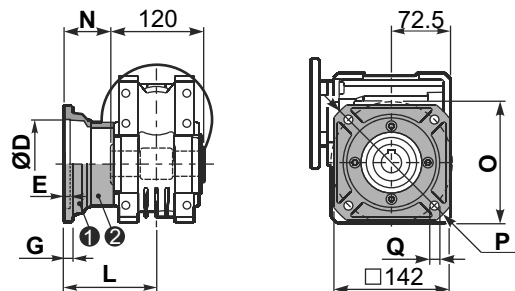
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 90        | 450       |

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

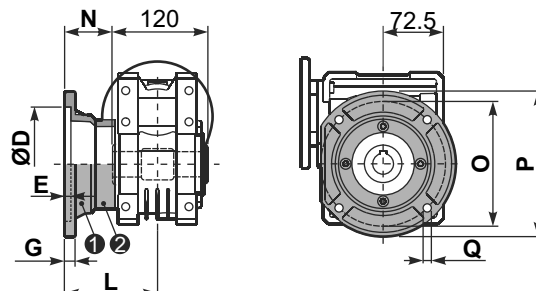
**tab. 2**

PQ63**FB**...Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore**6.00 kg**

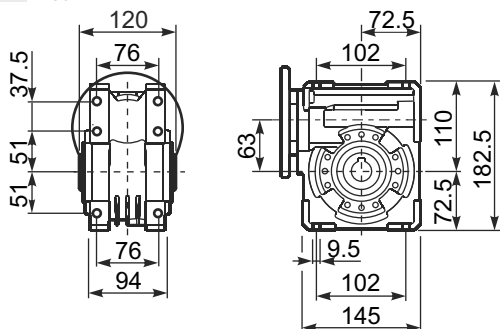
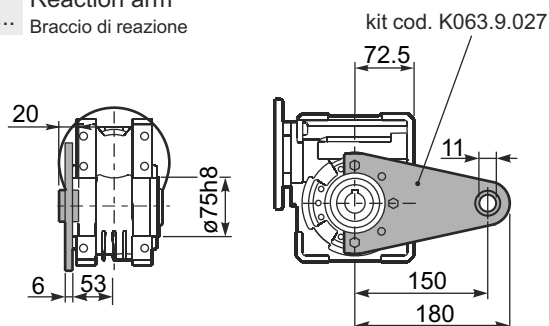
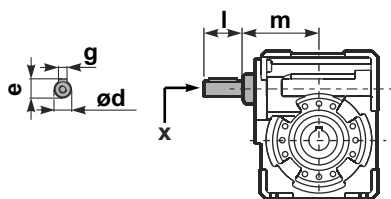
| M. flanges     | Kit code   | øF  | A    |
|----------------|------------|-----|------|
| <b>63B5</b>    | K063.4.041 | 140 | 99.5 |
| <b>71B5</b>    | K063.4.042 | 160 | 97.5 |
| <b>80/90B5</b> | K063.4.043 | 200 | 99.5 |
| <b>71B14</b>   | K063.4.047 | 105 | 97.5 |
| <b>80B14</b>   | K063.4.046 | 120 | 98.5 |
| <b>90B14</b>   | K063.4.041 | 140 | 99.5 |

PQ63**FC**...Square flange  
Flangia quadrata

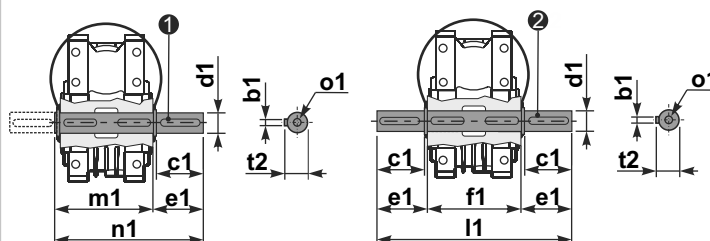
| type B    | øD                                    | E | G  | L   | N  | O   | P   | Q  | kit code                     |
|-----------|---------------------------------------|---|----|-----|----|-----|-----|----|------------------------------|
| <b>FC</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 6 | 12 | 86  | 26 | 150 | 180 | 11 | ① KQ63.9.010<br>② -          |
| <b>FL</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 6 | 12 | 116 | 56 | 150 | 180 | 11 | ① KQ63.9.010<br>② K063.0.200 |

PQ63**F1**...Round flange  
Flangia rotonda

| type S    | øD                                    | E | G  | L   | N  | O   | P   | Q  | kit code             |
|-----------|---------------------------------------|---|----|-----|----|-----|-----|----|----------------------|
| <b>F1</b> | 130 <sup>+0.20</sup> <sub>+0.15</sub> | 7 | 13 | 110 | 50 | 165 | 200 | 13 | ① KS070.9.013<br>② - |
| <b>F2</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 7 | 13 | 124 | 64 | 150 | 175 | 11 | ① KS063.9.013<br>② - |
| <b>F3</b> | 110 <sup>+0.035</sup> <sub>0</sub>    | 5 | 11 | 90  | 30 | 130 | 160 | 10 | ① KS063.9.011<br>② - |

PQ63**FB**...Feet  
PiediniPQ63**BR**...Reaction arm  
Braccio di reazioneRQ63**FB**...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<br>② K063.5.007 PAM90   |
| type S | 19 h6 | 21.5 | 6 | 40 | 93 | M8x20 | ① KS063.5.008 PAM80<br>② KS063.5.009 PAM90 |

PQ63.....**S**...Single Shaft  
Albero lento semplicePQ63.....**D**...Double Shaft  
Albero lento bisp.

① kit cod. K063.5.028 type B

② kit cod. K063.5.029 type B

|        | b1 | c1 | d1                                     | e1   | f1  | l1    | m1    | n1  | t2 | o1    |
|--------|----|----|----------------------------------------|------|-----|-------|-------|-----|----|-------|
| type B | 8  | 60 | 25 <sup>-0.005</sup> <sub>-0.020</sub> | 63.2 | 120 | 246.4 | 126.8 | 190 | 28 | M8x20 |
| type S | -  | -  | -                                      | -    | -   | -     | -     | -   | -  | -     |





## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available B5 motor flanges |    |    |            | Available B14 motor flanges |    |            | Dynamic efficiency<br>RD | Tooth Module<br>[mm] | Ratios code |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|------------|-----------------------------|----|------------|--------------------------|----------------------|-------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | C                          | D  | E  | F          | R                           | T  | U          |                          |                      |             |
|                                               |              |                                 |                                   |                        |                                   |                                    | 71                         | 80 | 90 | 100<br>112 | 80                          | 90 | 100<br>112 |                          |                      |             |
| 200                                           | 7            | 4                               | 172                               | 1.1                    | 4.4                               | 190                                |                            | B  | B  |            | B                           | B  |            | 90                       | 3.75                 | 01          |
| 140                                           | 10           | 4                               | 240                               | 1.0                    | 3.8                               | 230                                |                            | B  | B  |            | B                           | B  |            | 88                       | 3.75                 | 02          |
| 93                                            | 15           | 3                               | 261                               | 1.0                    | 2.9                               | 250                                |                            | B  | B  |            | B                           | B  |            | 85                       | 3.75                 | 03          |
| 70                                            | 20           | 2.2                             | 249                               | 1.0                    | 2.2                               | 250                                |                            | B  | B  |            | B                           | B  |            | 83                       | 3.00                 | 04          |
| 56                                            | 25           | 1.5                             | 205                               | 1.2                    | 1.8                               | 250                                | B                          | B  |    |            | B                           |    |            | 80                       | 2.41                 | 05          |
| 45                                            | 31           | 1.5                             | 244                               | 1.1                    | 1.7                               | 270                                | B                          | B  |    |            | B                           |    |            | 77                       | 3.75                 | 06          |
| 35                                            | 40           | 1.5                             | 295                               | 0.9                    | 1.3                               | 255                                | B                          | B  |    |            | B                           |    |            | 72                       | 3.10                 | 07          |
| 28                                            | 50           | 0.75                            | 174                               | 1.3                    | 0.95                              | 220                                | B                          |    |    |            |                             |    |            | 68                       | 2.41                 | 08          |
| 23                                            | 60           | 0.75                            | 202                               | 1.0                    | 0.75                              | 200                                | B                          |    |    |            |                             |    |            | 65                       | 2.10                 | 09          |
| 17.5                                          | 80           | 0.55                            | 177                               | 1.0                    | 0.56                              | 180                                | B                          |    |    |            |                             |    |            | 59                       | 1.53                 | 10          |
| 14.0                                          | 100          | 0.55*                           | 206                               | 0.7                    | 0.40                              | 150                                | B                          |    |    |            |                             |    |            | 55                       | 1.23                 | 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 Q75 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 Q75 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 Q75 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 Q75 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 Q75 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 Q75 Oil Quantity 0.40 Lt.

AGIP Telium VSF 320

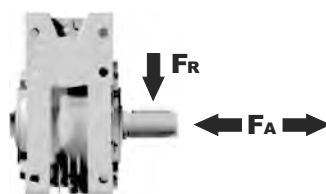
SHELL Omala S4 WE 320

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

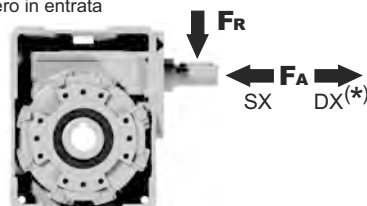
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 200                           | 460       | 2300      |
| 150                           | 520       | 2600      |
| 100                           | 560       | 2800      |
| 75                            | 620       | 3100      |
| 50                            | 720       | 3600      |
| 25                            | 880       | 4400      |
| 15                            | 1000      | 5000      |

### Input shaft

albero in entrata



| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 125       | 630       |

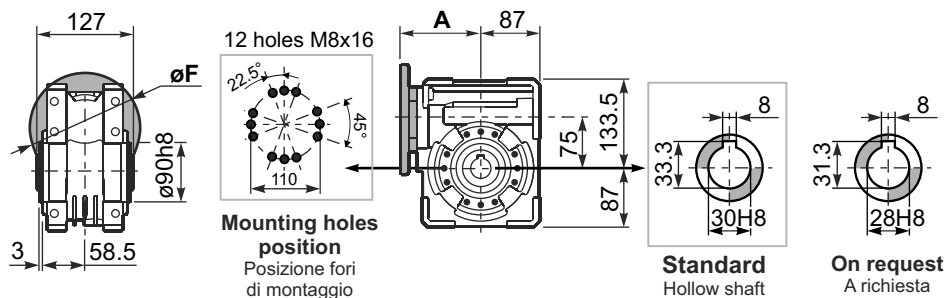
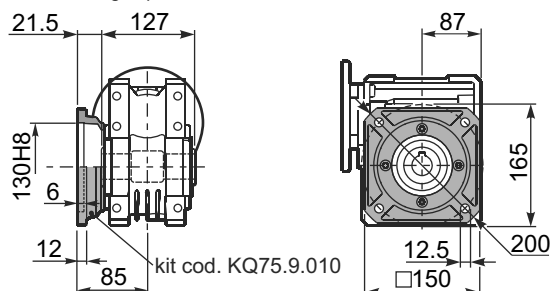
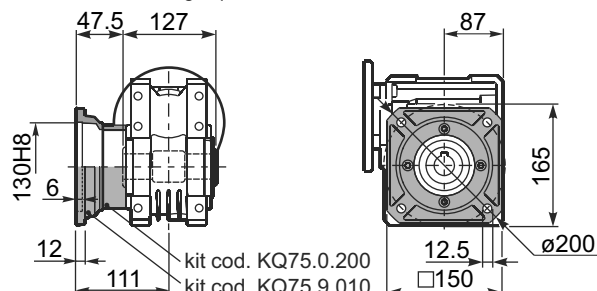
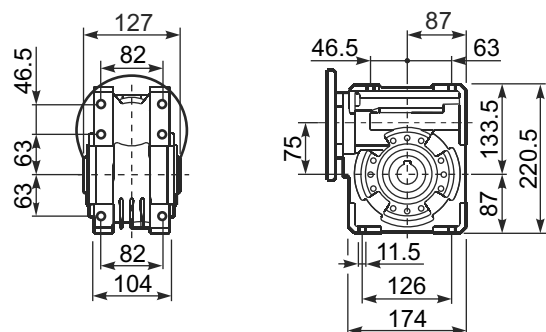
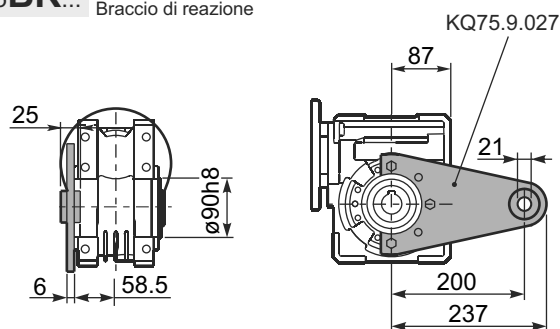
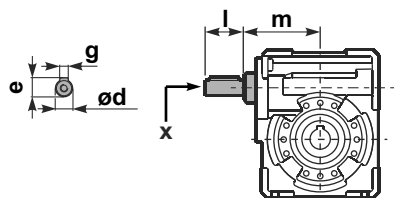
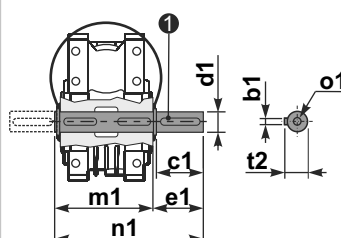
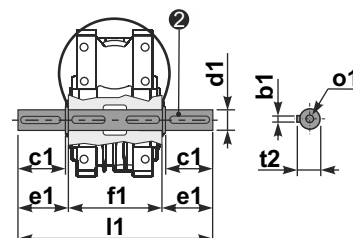
**\*Strong axial loads in the DX direction are not allowed.**  
Non sono consentiti forti carichi assiali con direzione DX

**tab. 2**

PQ75**FB**...Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore

8.70 kg

| M. flanges | Kit code   | øF  | A     |
|------------|------------|-----|-------|
| 71B5       | K023.4.041 | 160 | 113.5 |
| 80/90B5    | K023.4.042 | 200 | 115.5 |
| 100/112B5  | K023.4.043 | 250 | 121.5 |
| 80B14      | K085.4.046 | 120 | 113.5 |
| 90B14      | K085.4.045 | 140 | 113.5 |
| 100/112B14 | K023.4.041 | 160 | 113.5 |

PQ75**FC**...Square flange  
Flangia quadrataPQ75**FL**...Square flange  
Flangia quadrataPQ75**FB**...Feet  
PiediniPQ75**BR**...Reaction arm  
Braccio di reazioneRQ75**FB**...Input shaft  
Albero in entrataPQ75.....**S**...Single Shaft  
Albero lento semplice① kit cod. KQ75.5.028 Standard  
kit cod. KQ75.5.026 On requestPQ75.....**D**...Double Shaft  
Albero lento bisp.② kit cod. KQ75.5.029 Standard  
kit cod. KQ75.5.027 On request

|        | ød    | e    | g | l  | m     | x     | kit code                                                  |
|--------|-------|------|---|----|-------|-------|-----------------------------------------------------------|
| type B | 25 h6 | 27.8 | 8 | 50 | 109.5 | M8x20 | KQ75.5.006 PAM80<br>K085.5.007 PAM90<br>K085.5.008 PAM100 |

|            | b1 | c1 | d1                          | e1 | f1  | l1  | m1  | n1  | t2 | o1    |
|------------|----|----|-----------------------------|----|-----|-----|-----|-----|----|-------|
| Standard   | 8  | 60 | 30 <sup>-0.005/-0.020</sup> | 65 | 127 | 255 | 134 | 199 | 33 | M8x20 |
| On request | 8  | 60 | 28 <sup>-0.005/-0.020</sup> | 65 | 127 | 255 | 134 | 199 | 31 | M8x20 |



#### QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available B5 motor flanges |    |    |            | Available B14 motor flanges |    |            | Dynamic efficiency<br>RD | Tooth Module<br>[mm] | Ratios code |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|------------|-----------------------------|----|------------|--------------------------|----------------------|-------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | C                          | D  | E  | F          | R                           | T  | U          |                          |                      |             |
|                                               |              |                                 |                                   |                        |                                   |                                    | 71                         | 80 | 90 | 100<br>112 | 80                          | 90 | 100<br>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  |            | 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          |

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 Q85 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 Q85 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 Q85 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 Q85 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 Q85 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 Q85 Oil Quantity 1.20 Lt.

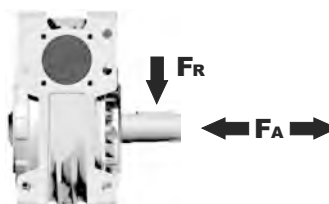
AGIP Telium VSF 320

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

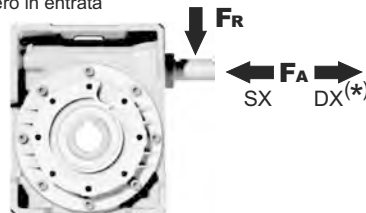
#### RADIAL AND AXIAL LOADS

##### Output shaft Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[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



| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 160       | 809       |

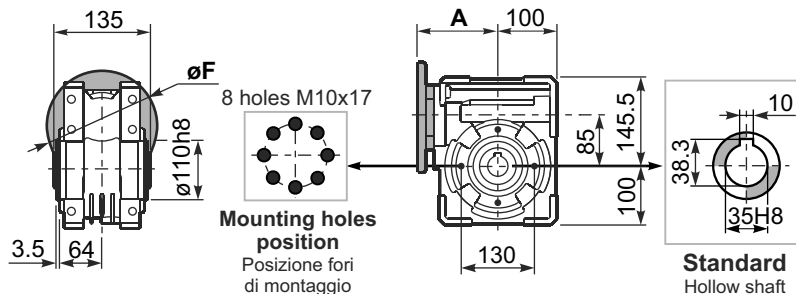
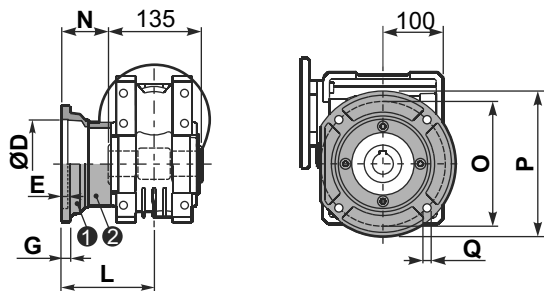
\*Strong axial loads in the DX direction are not allowed.  
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

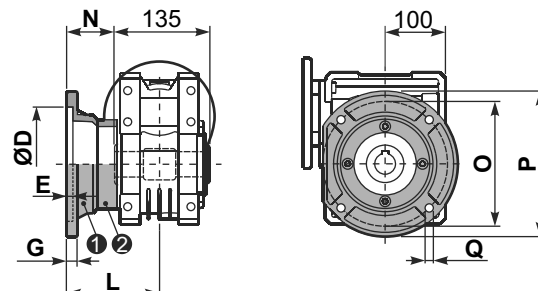
PQ85**FB**...Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore

18.7 kg

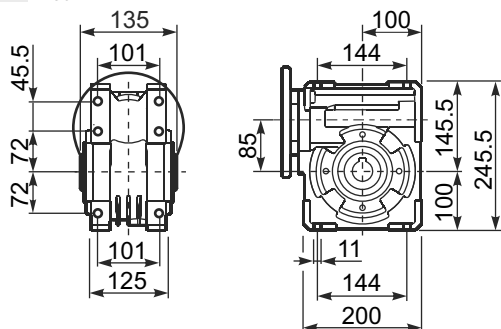
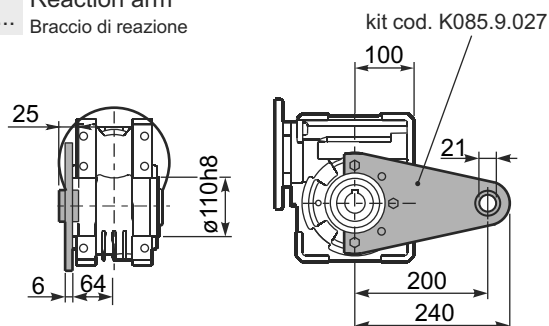
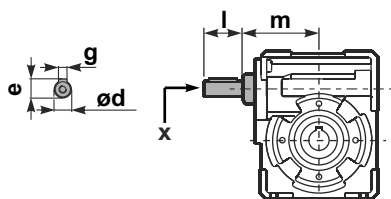
| M. flanges        | Kit code   | øF  | A   |
|-------------------|------------|-----|-----|
| <b>71B5</b>       | K023.4.041 | 160 | 116 |
| <b>80/90B5</b>    | K023.4.042 | 200 | 118 |
| <b>100/112B5</b>  | K023.4.043 | 250 | 124 |
| <b>80B14</b>      | K085.4.046 | 120 | 116 |
| <b>90B14</b>      | K085.4.045 | 140 | 116 |
| <b>100/112B14</b> | K023.4.041 | 160 | 116 |

PQ85**FC**...Output flange  
Flangia uscita

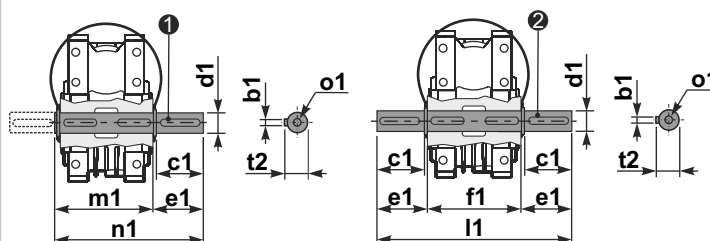
| type B    | øD                                    | E | G  | L     | N    | O   | P   | Q  | kit code                     |
|-----------|---------------------------------------|---|----|-------|------|-----|-----|----|------------------------------|
| <b>FC</b> | 152 <sup>+0.06</sup> <sub>+0.00</sub> | 5 | 16 | 108   | 40.5 | 176 | 205 | 13 | ① K085.9.010<br>② -          |
| <b>FL</b> | 152 <sup>+0.06</sup> <sub>+0.00</sub> | 5 | 16 | 148.5 | 81   | 176 | 205 | 13 | ① K085.9.010<br>② K085.0.201 |

PQ85**F1**...Output flange  
Flangia uscita

| type S    | øD                                    | E | G  | L     | N  | O   | P   | Q    | kit code             |
|-----------|---------------------------------------|---|----|-------|----|-----|-----|------|----------------------|
| <b>F1</b> | 130 H7                                | 5 | 13 | 117.5 | 50 | 165 | 200 | 11.5 | ① KS085.9.012<br>② - |
| <b>F2</b> | 152 <sup>+0.06</sup> <sub>+0.00</sub> | 5 | 15 | 147.5 | 80 | 180 | 205 | 12.5 | ① KS085.9.013<br>② - |
| <b>F4</b> | 130 H7                                | 5 | 13 | 106.5 | 39 | 165 | 200 | 13   | ① KS085.9.015<br>② - |

PQ85**FB**...Feet  
PiediniPQ85**BR**...Reaction arm  
Braccio di reazioneRQ85**FB**...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<br>② K085.5.008 PAM100   |
| type S | 24 h6 | 27 | 8 | 50 | 112 | M8x20 | ① KS085.5.009 PAM90<br>② KS085.5.011 PAM100 |

PQ85.....**S**...Single Shaft  
Albero lento semplicePQ85.....**D**...Double Shaft  
Albero lento bisp.

① kit cod. K085.5.028 type B

② kit cod. K085.5.029 type B

|        | b1 | c1 | d1                                     | e1   | f1  | l1  | m1  | n1    | t2 | o1     |
|--------|----|----|----------------------------------------|------|-----|-----|-----|-------|----|--------|
| type B | 10 | 60 | 35 <sup>-0.005</sup> <sub>-0.020</sub> | 73.5 | 135 | 282 | 141 | 214.5 | 38 | M10x23 |
| type S | -  | -  | -                                      | -    | -   | -   | -   | -     | -  | -      |



#### QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available B5 motor flanges |    |    |            |     | Available B14 motor flanges |    |            |     | Dynamic efficiency<br><br>RD | Tooth Module<br><br>[mm] | Ratios code<br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|----|----|------------|-----|-----------------------------|----|------------|-----|------------------------------|--------------------------|----------------------------------------------------------------------------------------------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | C                          | D  | E  | F          | G   | R                           | T  | U          | V   |                              |                          |                                                                                                    |
|                                               |              |                                 |                                   |                        |                                   |                                    | 71                         | 80 | 90 | 100<br>112 | 132 | 80                          | 90 | 100<br>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                           |    |            |     | 69                           | 2.9                      | 10                                                                                                 |
| 16.7                                          | 84           | 1.1                             | 410                               | 1.2                    | 1.3                               | 494                                | B                          | B  |    |            |     | B                           |    |            |     | 65                           | 2.2                      | 11                                                                                                 |
| 14.1                                          | 99           | 1.1                             | 446                               | 1.1                    | 1.2                               | 483                                | 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

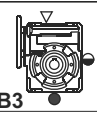
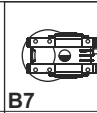
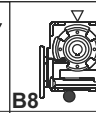
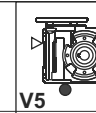
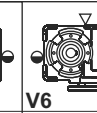
**EN** Unit **Q11** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug.  
See table 1 for lubrication and recommended quantity.  
In table 2 please see possible radial loads and axial loads on the gearbox.

**I** Il riduttore tipo **Q11** 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 **Q11** 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 **Q11** 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 **Q11** 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                                                                           | 1.50 LT                                                                            | 1.50 LT                                                                             | 2.00LT                                                                              | 2.00 LT                                                                             | 2.00LT                                                                              |

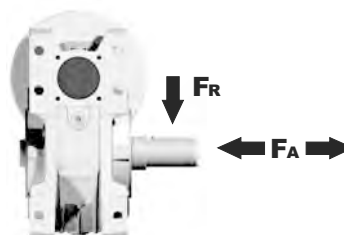
AGIP Blasias 460

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

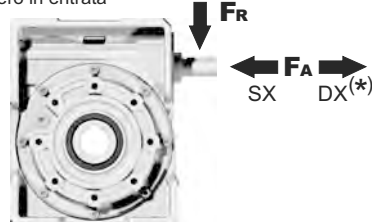
#### RADIAL AND AXIAL LOADS

##### Output shaft Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[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



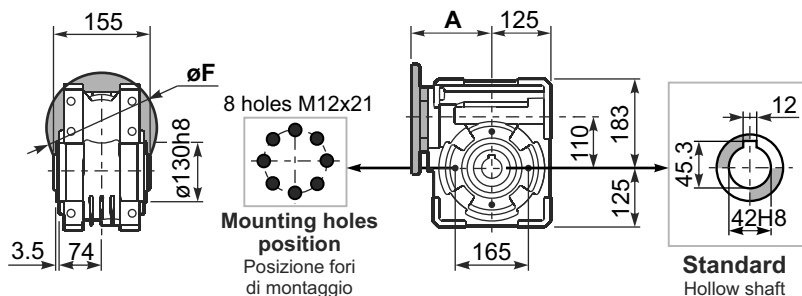
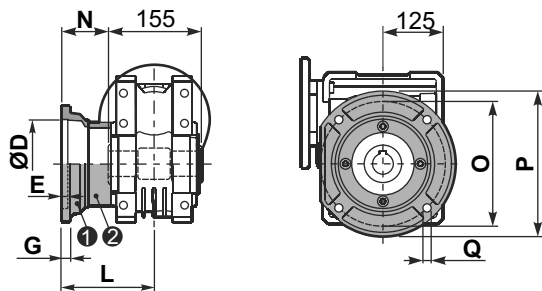
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 228       | 1140      |

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

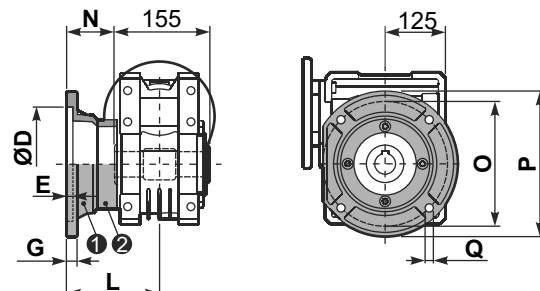
tab. 2

**PQ11FB...**Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore**35.0 kg**

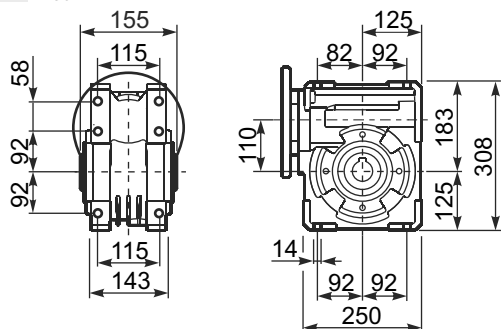
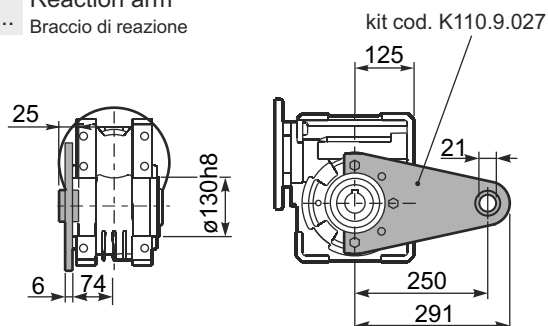
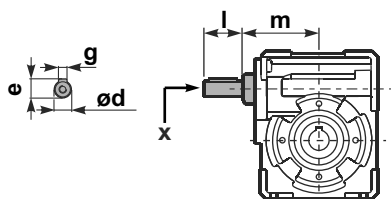
| M. flanges        | Kit code   | øF  | A     |
|-------------------|------------|-----|-------|
| <b>71B5</b>       | K023.4.041 | 160 | 135.5 |
| <b>80/90B5</b>    | K023.4.042 | 200 | 137.5 |
| <b>100/112B5</b>  | K023.4.043 | 250 | 143.5 |
| <b>132B5</b>      | -          | 300 | 187   |
|                   |            |     |       |
| <b>80B14</b>      | K085.4.046 | 120 | 135.5 |
| <b>90B14</b>      | K085.4.045 | 140 | 135.5 |
| <b>100/112B14</b> | K023.4.041 | 160 | 135.5 |
| <b>132B14</b>     | -          | 200 | 187   |

**PQ11FC...**Output flange  
Flangia uscita

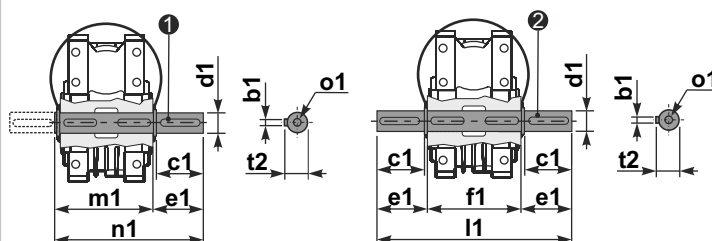
| type B    | øD                                      | E  | G    | L     | N   | O   | P   | Q  | kit code            |
|-----------|-----------------------------------------|----|------|-------|-----|-----|-----|----|---------------------|
| <b>FC</b> | 170 <sup>+0.083</sup> <sub>-0.043</sub> | 11 | 16.5 | 131.5 | 54  | 230 | 270 | 13 | 1 K110.9.010<br>2 - |
| <b>FL</b> | 170 <sup>+0.083</sup> <sub>-0.043</sub> | 11 | 16.5 | 179.5 | 102 | 230 | 270 | 13 | 1 K110.9.011<br>2 - |

**PQ11F1...**Output flange  
Flangia uscita

| type S    | øD                                      | E   | G  | L   | N     | O   | P   | Q  | kit code             |
|-----------|-----------------------------------------|-----|----|-----|-------|-----|-----|----|----------------------|
| <b>F1</b> | 180 <sup>+0.040</sup> <sub>0</sub>      | 5   | 18 | 150 | 72.5  | 215 | 250 | 15 | 1 KS110.9.014<br>2 - |
| <b>F2</b> | 170 <sup>+0.083</sup> <sub>-0.043</sub> | 9.5 | 15 | 178 | 100.5 | 230 | 270 | 13 | 1 KS110.9.012<br>2 - |
| <b>F3</b> | 180 <sup>+0.040</sup> <sub>0</sub>      | 5   | 18 | 130 | 52.5  | 215 | 250 | 15 | 1 KS110.9.013<br>2 - |

**PQ11FB...**Feet  
Piedini**PQ11BR...**Reaction arm  
Braccio di reazione**RQ11FB...**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<br>2 K085.5.008 PAM100   |
| type S | 24 h6 | 27 | 8 | 50 | 131.5 | M8x20 | 1 KS085.5.009 PAM90<br>2 KS085.5.011 PAM100 |

**PQ11.....S...**Single Shaft  
Albero lento semplice**PQ11.....D...**Double Shaft  
Albero lento bisp.

1 kit cod. K110.5.028 type B

2 kit cod. K110.5.029 type B

|        | b1 | c1 | d1                                     | e1   | f1  | l1  | m1    | n1  | t2 | o1     |
|--------|----|----|----------------------------------------|------|-----|-----|-------|-----|----|--------|
| type B | 12 | 75 | 42 <sup>-0.005</sup> <sub>-0.020</sub> | 96.5 | 155 | 348 | 163.5 | 260 | 45 | M12x32 |
| type S | -  | -  | -                                      | -    | -   | -   | -     | -   | -  | -      |



#### QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |   |   | B14 motor flanges<br>not available |  |  |  | Dynamic efficiency<br><br>RD | Tooth Module<br><br>[mm] | Ratios code<br><br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|---|---|------------------------------------|--|--|--|------------------------------|--------------------------|--------------------------------------------------------------------------------------------------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | E                             | F | G |                                    |  |  |  |                              |                          |                                                                                                        |
| 187                                           | 7.5          | 7.5                             | 345                               | 2.1                    | 16.1                              | 741                                |                               | B |   |                                    |  |  |  | 90                           | 6.11                     | 01                                                                                                     |
| 140                                           | 10           | 7.5                             | 455                               | 1.8                    | 13.5                              | 820                                |                               | B |   |                                    |  |  |  | 89                           | 6.45                     | 02                                                                                                     |
| 93                                            | 15           | 7.5                             | 668                               | 1.4                    | 10.3                              | 917                                |                               | B |   |                                    |  |  |  | 87                           | 6.72                     | 03                                                                                                     |
| 70                                            | 20           | 7.5                             | 870                               | 1.0                    | 7.8                               | 905                                |                               | B |   |                                    |  |  |  | 85                           | 5.24                     | 04                                                                                                     |
| 56                                            | 25           | 5.5                             | 788                               | 1.2                    | 6.5                               | 931                                |                               | B |   |                                    |  |  |  | 84                           | 4.28                     | 05                                                                                                     |
| 46.7                                          | 30           | 5.5                             | 900                               | 1.2                    | 6.4                               | 1047                               |                               | B |   |                                    |  |  |  | 80                           | 6.91                     | 06                                                                                                     |
| 35                                            | 40           | 4.0                             | 851                               | 1.2                    | 4.9                               | 1043                               |                               | B |   |                                    |  |  |  | 78                           | 5.36                     | 07                                                                                                     |
| 28                                            | 50           | 4.0                             | 1023                              | 0.9                    | 3.8                               | 972                                | B                             |   |   |                                    |  |  |  | 75                           | 4.35                     | 08                                                                                                     |
| 23.3                                          | 60           | 3.0                             | 896                               | 1.0                    | 3.1                               | 928                                | B                             |   |   |                                    |  |  |  | 73                           | 3.65                     | 09                                                                                                     |
| 17.5                                          | 80           | 2.2                             | 816                               | 1.0                    | 2.3                               | 853                                | B                             |   |   |                                    |  |  |  | 68                           | 2.76                     | 10                                                                                                     |
| 14                                            | 100          | 1.5                             | 655                               | 1.1                    | 1.7                               | 742                                | B                             |   |   |                                    |  |  |  | 64                           | 2.23                     | 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 Q13 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 Q13 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 Q13 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 Q13 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 Q13 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                                                                                  |
| 4.50 LT                                                                           | 3.50 LT                                                                            | 3.50 LT                                                                             | 3.30LT                                                                              | 4.50 LT                                                                             | 3.30LT                                                                              |

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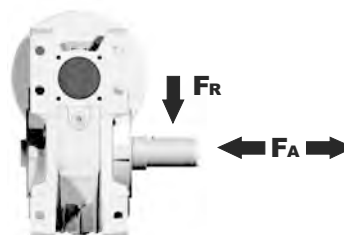
For all details on lubrication and plugs check our website  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

#### RADIAL AND AXIAL LOADS

##### Output shaft

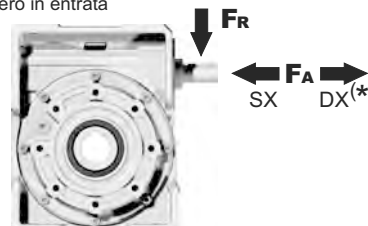
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 200                           | 960       | 4800      |
| 150                           | 1100      | 5500      |
| 100                           | 1240      | 6200      |
| 75                            | 1380      | 6900      |
| 50                            | 1560      | 7800      |
| 25                            | 2000      | 10000     |
| 15                            | 2400      | 12000     |

##### Input shaft

albero in entrata



| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 300       | 1500      |

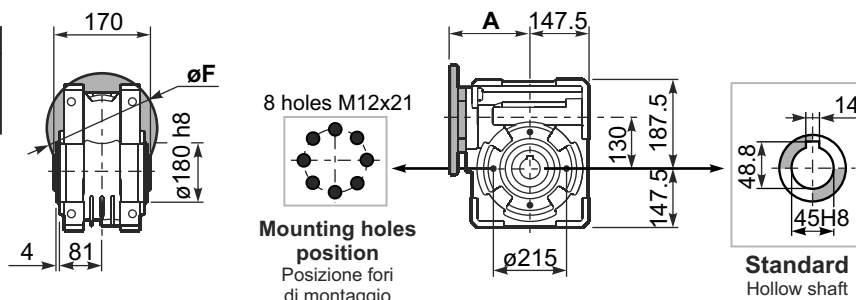
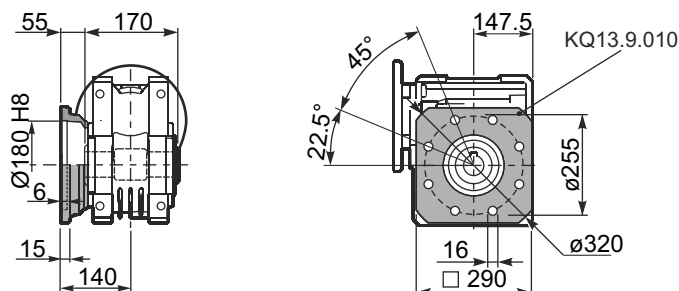
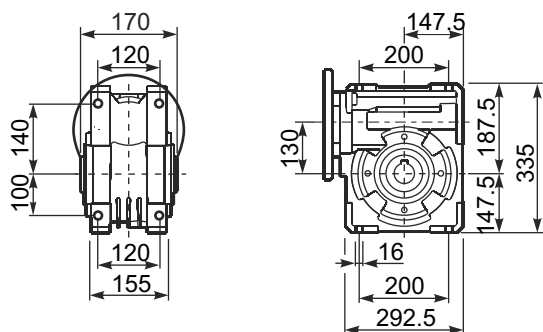
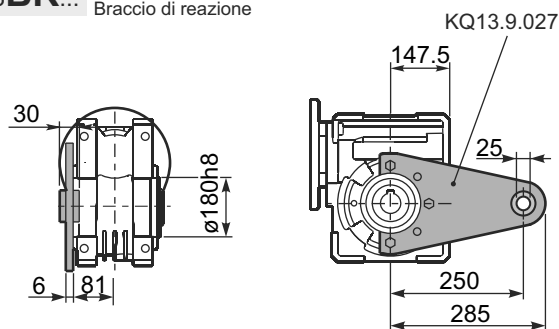
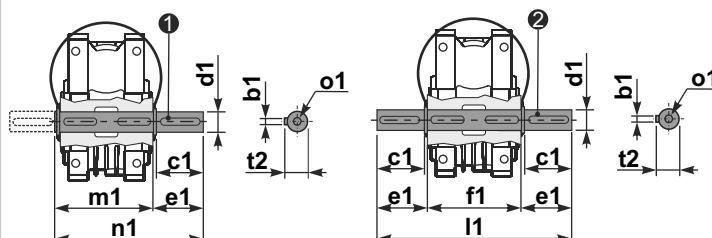
\*Strong axial loads in the DX direction are not allowed.  
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PQ13**FB**...Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore

48.0 kg

| M. flanges | Kit code   | øF  | A   |
|------------|------------|-----|-----|
| 90B5       | KQ13.4.041 | 200 | 180 |
| 100/112B5  | KQ13.4.042 | 250 | 180 |
| 132B5      | KQ13.4.043 | 300 | 180 |

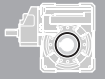
PQ13**FC**...Square flange  
Flangia quadrataPQ13**FB**...Feet  
PiediniPQ13**BR**...Reaction arm  
Braccio di reazionePQ13.....**S**...Single Shaft  
Albero lento semplicePQ13.....**D**...Double Shaft  
Albero lento bisp.

1 kit cod. KQ13.5.028 type B

2 kit cod. KQ13.5.029 type B

|      | b1 | c1 | d1                          | e1 | f1  | l1  | m1  | n1  | t2   | o1  |
|------|----|----|-----------------------------|----|-----|-----|-----|-----|------|-----|
| type | 14 | 80 | 45 <sup>-0.005/-0.020</sup> | 85 | 170 | 340 | 180 | 265 | 48.5 | M16 |
| type | -  | -  | -                           | -  | -   | -   | -   | -   | -    | -   |





## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |    |    | Available<br>B14 motor flanges |    | Dynamic efficiency<br><br>RD | Tooth Module<br><br>[mm] | Ratios code<br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|----|----|--------------------------------|----|------------------------------|--------------------------|----------------------------------------------------------------------------------------------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | 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                                                                                                 |

 **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 **P4Q** 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.

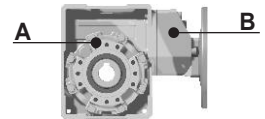
**I** Il riduttore tipo **P4Q** viene fornito lubrificato a vita con olio sintetico. Per posizioni V5-V6 contattare il ns. servizio tecnico. Vedi tab.1 per oli e quantità consigliati. In tab.2 sono presenti i carichi radiali e assiali applicabili al riduttore.

**D** Für die Lebensdauerschmierung ist das Getriebe der Größe **P4Q** 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 **P4Q** 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 **P4Q** 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 P4Q 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

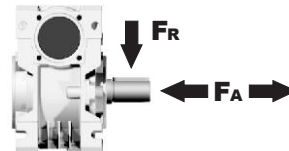
tab. 1

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

## RADIAL AND AXIAL LOADS

### Output shaft

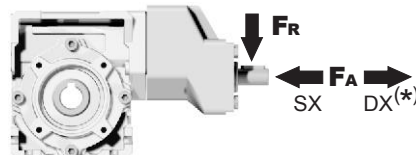
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 75                            | 240       | 1200      |
| 50                            | 260       | 1400      |
| 25                            | 300       | 1800      |
| 15-6                          | 400       | 2000      |

### Input shaft

albero in entrata



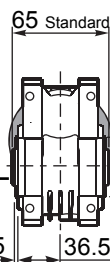
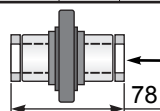
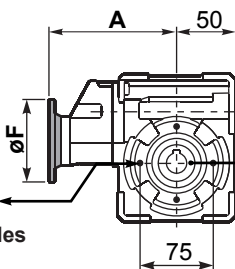
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 44        | 220       |

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

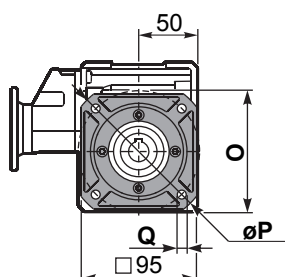
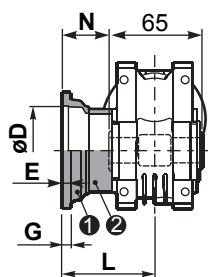
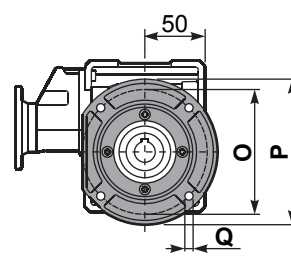
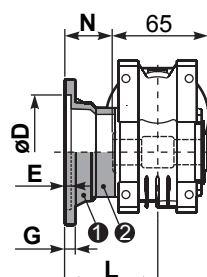
tab. 2

**PP4QFB...**Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore**3.10 kg**

| M. flanges   | Kit code   | øF  | A     |
|--------------|------------|-----|-------|
| <b>56B5</b>  | K050.4.046 | 120 | 143.5 |
| <b>63B5</b>  | K050.4.041 | 138 | 143.5 |
| <b>71B5</b>  | K050.4.042 | 160 | 141.5 |
| <b>63B14</b> | K050.4.047 | 90  | 145.5 |
| <b>71B14</b> | K050.4.045 | 105 | 143   |

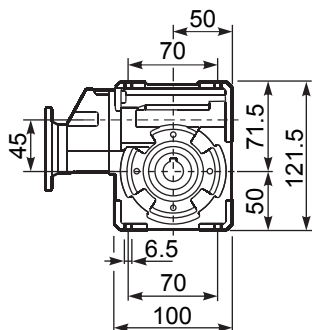
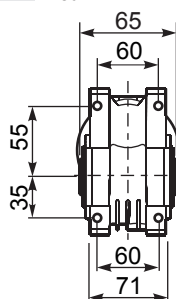
On Request  
output shaft  
with spacers  
cod. Q45.3.0184 holes  
M6x12Mounting holes  
position  
Posizione fori  
di montaggioStandard  
Hollow shaftOn request  
A richiesta

Reduced key

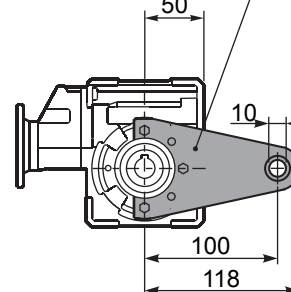
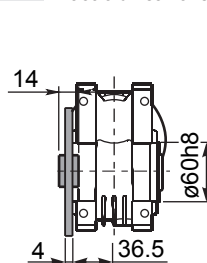
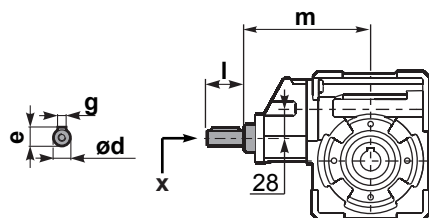
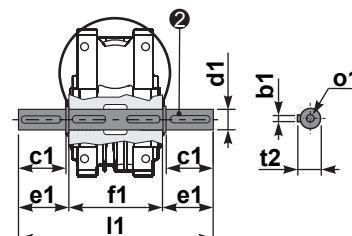
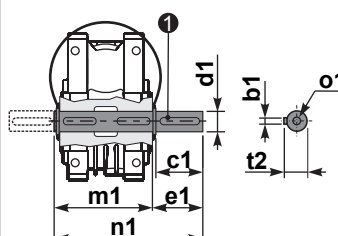
**PP4QFC...**Square flange  
Flangia quadrata**PP4QF1...**Round flange  
Flangia rotonda

| type B    | øD    | E | G | L  | N    | O  | P   | Q | kit code   |
|-----------|-------|---|---|----|------|----|-----|---|------------|
| <b>FC</b> | 60 H8 | 4 | 7 | 67 | 34.5 | 75 | 110 | 9 | KQ45.9.010 |
| <b>FL</b> | 60 H8 | 4 | 7 | 97 | 64.5 | 75 | 110 | 9 | KQ45.9.011 |

| type S    | øD   | E | G  | L  | N    | O   | P   | Q   | kit code    |
|-----------|------|---|----|----|------|-----|-----|-----|-------------|
| <b>F1</b> | 95H8 | 5 | 9  | 80 | 47.5 | 115 | 140 | 9.5 | KSQ45.9.012 |
| <b>F2</b> | 80H8 | 5 | 12 | 58 | 25.5 | 100 | 120 | 9   | KSQ45.9.013 |

**PP4QFB...**Feet  
Piedini**PP4QBR...**Reaction arm  
Braccio di reazione

kit cod. KQ45.9.027

**RP4QFB...**Input shaft  
Albero in entrata**PP4Q.....S...**Single Shaft  
Albero lento semplice**PP4Q.....D...**Double Shaft  
Albero lento bisp.① kit cod. K045.5.028 type B  
kit cod. KS045.5.030 type S② kit cod. K045.5.029 type B  
kit cod. KS045.5.031 type S

|        | ød    | e  | g | l  | m   | x     |           |
|--------|-------|----|---|----|-----|-------|-----------|
| type B | 14 h6 | 16 | 5 | 25 | 141 | M5x13 | C35.5.061 |
| type S | -     | -  | - | -  | -   | -     |           |

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



### QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |    |    | Available<br>B14 motor flanges |    | Dynamic efficiency<br>RD | Tooth Module<br>[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 **P5Q** 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 **P5Q** 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.

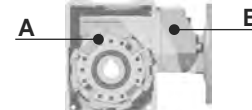
**D** Für die Lebensdauerschmierung ist das Getriebe der Größe **P5Q** mit synthetischem Öl befüllt. Bei Einbaulage V5 oder V6 bitten wir um Rücksprache. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **P5Q** 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 **P5Q** 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 P5Q 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

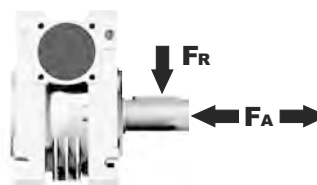
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

### RADIAL AND AXIAL LOADS

#### Output shaft

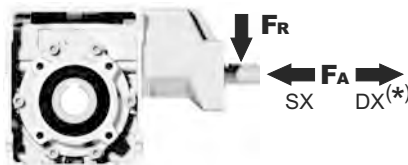
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 75                            | 340       | 1700      |
| 50                            | 380       | 1900      |
| 25                            | 480       | 2500      |
| 15-6                          | 560       | 2800      |

#### Input shaft

albero in entrata



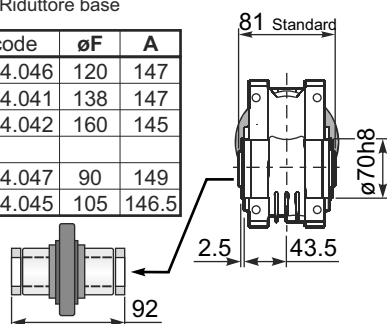
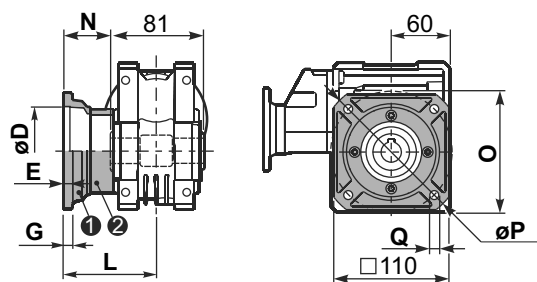
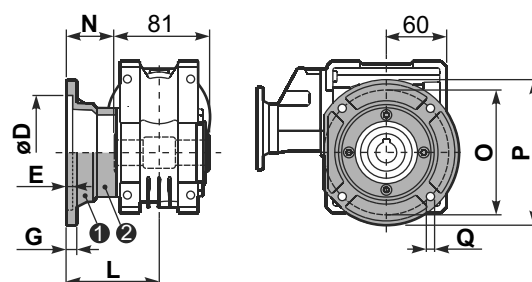
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 44        | 220       |

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

tab. 2

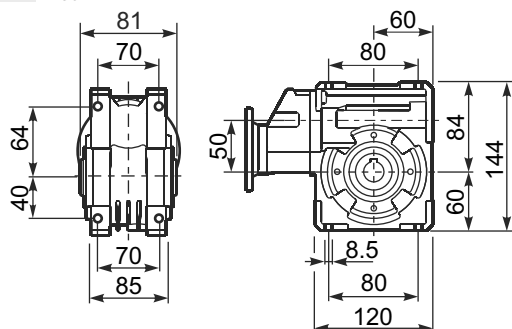
**PP5QFB...** Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore **4.60 kg**

| M. flanges   | Kit code   | øF  | A     |
|--------------|------------|-----|-------|
| <b>56B5</b>  | K050.4.046 | 120 | 147   |
| <b>63B5</b>  | K050.4.041 | 138 | 147   |
| <b>71B5</b>  | K050.4.042 | 160 | 145   |
| <b>63B14</b> | K050.4.047 | 90  | 149   |
| <b>71B14</b> | K050.4.045 | 105 | 146.5 |

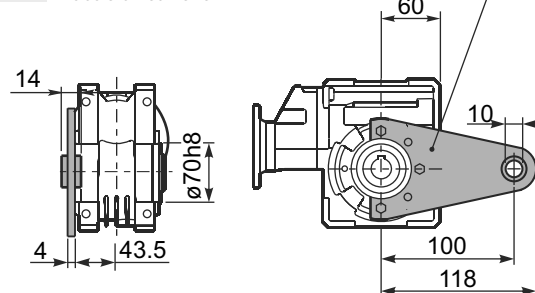
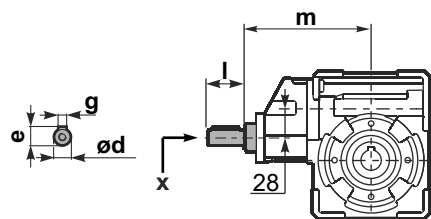
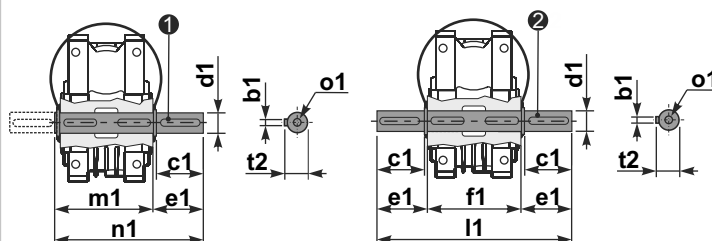
On Request  
Output shaft  
with spacers  
cod. Q50.3.0254 holes  
M8x11  
**Mounting holes  
position**  
Posizione fori  
di montaggio**Standard**  
Hollow shaftOn Request "type s"  
A richiesta "tipo s"**PP5QFC...** Square flange  
Flangia quadrata**PP5QF1...** Round flange  
Flangia rotonda

| type B    | øD    | E | G | L   | N    | O  | P   | Q  | kit code   |
|-----------|-------|---|---|-----|------|----|-----|----|------------|
| <b>FC</b> | 70 H8 | 5 | 9 | 90  | 49.5 | 85 | 125 | 11 | KQ50.9.010 |
| <b>FL</b> | 70 H8 | 5 | 9 | 120 | 79.5 | 85 | 125 | 11 | KQ50.9.011 |

| type S    | øD     | E | G    | L  | N    | O   | P   | Q   | kit code    |
|-----------|--------|---|------|----|------|-----|-----|-----|-------------|
| <b>F1</b> | 110 H8 | 5 | 10   | 89 | 69.5 | 130 | 160 | 9.5 | KSQ50.9.012 |
| <b>F2</b> | 95 H8  | 5 | 14.5 | 72 | 31.5 | 115 | 140 | 11  | KSQ50.9.013 |

**PP5QFB...** Feet  
Piedini**PP5QBR...** Reaction arm  
Braccio di reazione

kit cod. KQ50.9.027

**RP5QFB...** Input shaft  
Albero in entrata**PP5Q.....S...** Single Shaft  
Albero lento semplice**PP5Q.....D...** Double Shaft  
Albero lento bisp.① kit cod. K050.5.028 type B  
kit cod. KS050.5.030 type S② kit cod. K050.5.029 type B  
kit cod. KS050.5.031 type S

|        | ød    | e  | g | l  | m     | x     |           |
|--------|-------|----|---|----|-------|-------|-----------|
| type B | 14 h6 | 16 | 5 | 25 | 140.5 | M5x13 | C35.5.061 |
| type S | -     | -  | - | -  | -     | -     |           |

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



## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |    |    |    | Available<br>B14 motor flanges |    |    |    | Dynamic efficiency<br>RD | Tooth Module<br>[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                    | 1.5                               | 1.1                                | 165                           |    |    |    |                                | C  | C  |    | 74                       | 2.6                  | 01          |
|                                               | 37           | 37.7                            | 0.75                              | 141                    | 1.2                               | 0.88                               | 165                           |    |    |    |                                | C  | C  |    | 73                       | 2.0                  | 02          |
|                                               | 30           | 47.1                            | 0.75                              | 169                    | 1.1                               | 0.83                               | 187                           |    |    |    |                                | C  | C  |    | 70                       | 3.2                  | 03          |
|                                               | 25           | 56.6                            | 0.55                              | 136                    | 1.4                               | 0.76                               | 187                           |    |    |    |                                | C  | C  |    | 64                       | 2.7                  | 04          |
|                                               | 19.8         | 70.7                            | 0.55                              | 164                    | 1.1                               | 0.63                               | 187                           |    |    |    |                                | C  | C  |    | 62                       | 2.1                  | 05          |
|                                               | 15.9         | 87.8                            | 0.37                              | 162                    | 1.2                               | 0.43                               | 187                           |    |    |    |                                | C  | C  |    | 73                       | 2.6                  | 06          |
|                                               | 12.6         | 111.0                           | 0.37                              | 199                    | 0.9                               | 0.35                               | 187                           |    |    |    |                                | C  | C  |    | 71                       | 2.0                  | 07          |
|                                               |              |                                 |                                   |                        |                                   |                                    |                               |    |    |    |                                |    |    |    |                          |                      |             |
| IEC 71 - 63                                   | 10.1         | 139                             | 0.37                              | 234                    | 0.8                               | 0.30                               | 187                           |    |    |    | C                              |    |    |    | 67                       | 3.2                  | 08          |
|                                               | 8.4          | 166                             | 0.25                              | 173                    | 1.1                               | 0.27                               | 187                           |    |    |    | C                              |    |    |    | 61                       | 2.7                  | 09          |
|                                               | 6.7          | 208                             | 0.18                              | 151                    | 1.1                               | 0.20                               | 165                           |    |    |    | C                              |    |    |    | 59                       | 2.1                  | 10          |
|                                               | 4.5          | 310                             | 0.12                              | 129                    | 1.3                               | 0.15                               | 165                           |    |    |    | C                              |    |    |    | 51                       | 1.5                  | 11          |
|                                               | 3.8          | 370                             | 0.12                              | 145                    | 1.1                               | 0.14                               | 165                           |    |    |    | C                              |    |    |    | 48                       | 1.3                  | 12          |
|                                               | 3.2          | 434                             | 0.12                              | 149                    | 0.9                               | 0.11                               | 138                           |    |    |    | C                              |    |    |    | 42                       | 1.1                  | 13          |
|                                               |              |                                 |                                   |                        |                                   |                                    |                               |    |    |    |                                |    |    |    |                          |                      |             |

**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 **P6Q** 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 **P6Q** 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 **P6Q** 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 **P6Q** 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 **P6Q** 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 P6Q Oil

For B3-V5-V6 separate lubrication for A ( 0.30 l ) B ( 0.08 l ) , for B6-B7-B8 common lubrication 0.35 l ( A + B ).

AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

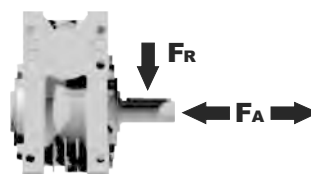
tab. 1

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

## RADIAL AND AXIAL LOADS

### Output shaft

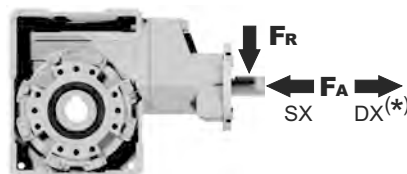
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 75                            | 500       | 2500      |
| 50                            | 600       | 3000      |
| 25                            | 700       | 3800      |
| 15-6                          | 800       | 4000      |

### Input shaft

albero in entrata



| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 61        | 305       |

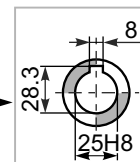
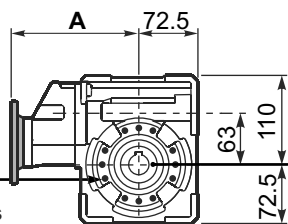
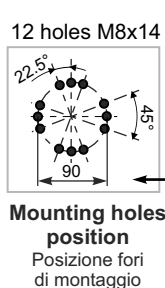
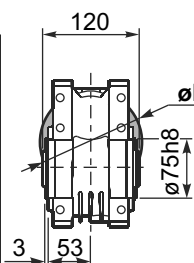
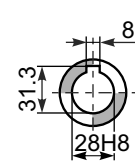
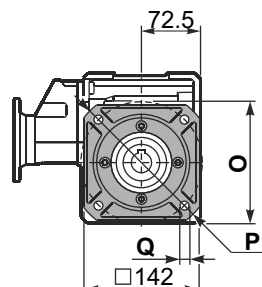
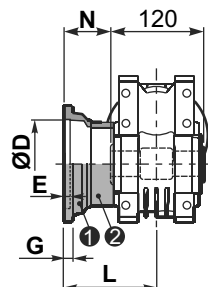
\*Strong axial loads in the DX direction are not allowed.  
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

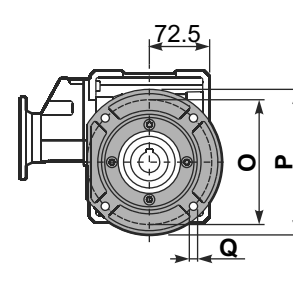
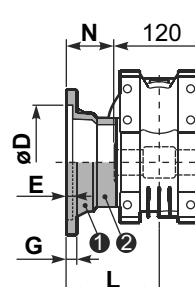
**PP6QFB...**Basic wormbox  
Riduttore base

|                                  |          |         |
|----------------------------------|----------|---------|
| Gearbox weight<br>peso riduttore | 29.9+111 | 139+434 |
|                                  | 7.05 Kg  | 6.60 Kg |

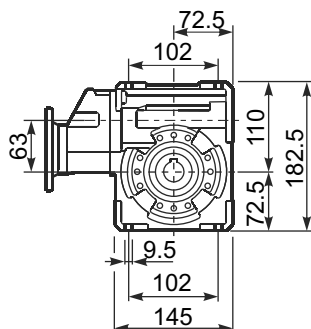
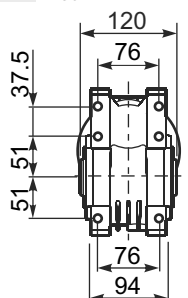
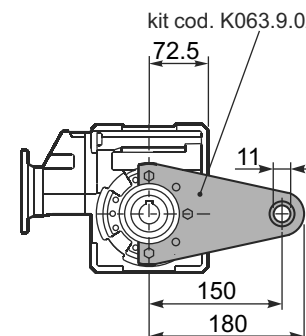
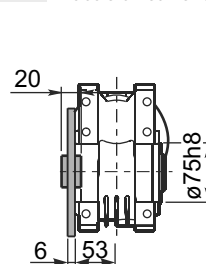
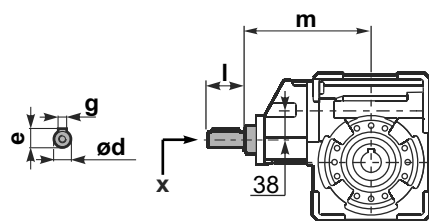
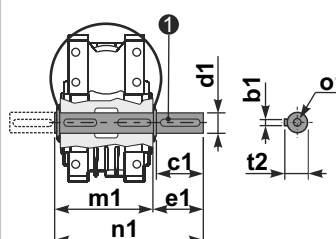
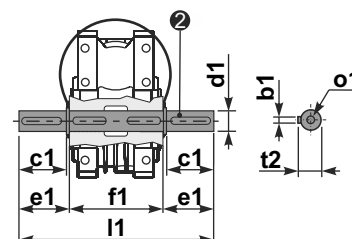
| M.flange                | Kit code   | øF  | A     |
|-------------------------|------------|-----|-------|
| 29.9+111<br><b>71B5</b> | K063.4.042 | 160 | 176.5 |
| <b>80/90B5</b>          | K063.4.043 | 200 | 178.5 |
| <b>71B14</b>            | K063.4.047 | 105 | 176.5 |
| <b>80B14</b>            | K063.4.046 | 120 | 177.5 |
| <b>90B14</b>            | K063.4.041 | 140 | 178.5 |
| 139+434<br><b>63B5</b>  | K050.4.041 | 138 | 160.5 |
| <b>71B5</b>             | K050.4.042 | 160 | 158.5 |
| <b>63B14</b>            | K050.4.047 | 90  | 162.5 |
| <b>71B14</b>            | K050.4.045 | 105 | 160   |

**Standard**  
Hollow shaft**On request**  
A richiesta**PP6QFC...**Output flange  
Flangia uscita

| type B    | øD                                    | E | G  | L   | N  | O   | P   | Q  | kit code                     |
|-----------|---------------------------------------|---|----|-----|----|-----|-----|----|------------------------------|
| <b>FC</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 6 | 12 | 86  | 26 | 150 | 180 | 11 | 1 KQ63.9.010<br>2 -          |
| <b>FL</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 6 | 12 | 116 | 56 | 150 | 180 | 11 | 1 KQ63.9.010<br>2 K063.0.200 |

**PP6QF1...**Output flange  
Flangia uscita

| type S    | øD                                    | E | G  | L   | N  | O   | P   | Q  | kit code             |
|-----------|---------------------------------------|---|----|-----|----|-----|-----|----|----------------------|
| <b>F1</b> | 130 <sup>+0.20</sup> <sub>+0.15</sub> | 7 | 13 | 110 | 50 | 165 | 200 | 13 | 1 KS070.9.013<br>2 - |
| <b>F2</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 7 | 13 | 124 | 64 | 150 | 175 | 11 | 1 KS063.9.013<br>2 - |
| <b>F3</b> | 110 <sup>+0.035</sup> <sub>0</sub>    | 5 | 11 | 90  | 30 | 130 | 160 | 10 | 1 KS063.9.011<br>2 - |

**PP6QFB...**Feet  
Piedini**PP6QBR...**Reaction arm  
Braccio di reazione**RP6QFB...**Input shaft  
Albero in entrata**PP6Q.....S...**Single Shaft  
Albero lento semplice**PP6Q.....D...**Double Shaft  
Albero lento bisp.

1 kit cod. K063.5.028 type B

2 kit cod. K063.5.029 type B

|          | 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 <sup>-0.005</sup> <sub>-0.020</sub> | 63.2 | 120 | 246.4 | 126.8 | 190 | 28 | M8x20 |
| type S | -  | -  | -                                      | -    | -   | -     | -     | -   | -  | -     |



## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |    |    |    | Available<br>B14 motor flanges |    |    | Dynamic efficiency<br>RD | Tooth Module<br>[mm] | Ratios code |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|----|----|----|--------------------------------|----|----|--------------------------|----------------------|-------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | B                             | C  | D  | E  | Q                              | R  | T  |                          |                      |             |
|                                               |              |                                 |                                   |                        |                                   |                                    | 63                            | 71 | 80 | 90 | 71                             | 80 | 90 |                          |                      |             |
| 22                                            | <b>62.9</b>  | 0.75                            | 248                               | 1.2                    | <b>0.87</b>                       | <b>286</b>                         |                               |    |    |    | C                              | C  |    | 77                       | 3.10                 | 01          |
| 18                                            | <b>78.5</b>  | 0.75                            | 293                               | 1.0                    | <b>0.73</b>                       | <b>286</b>                         |                               |    |    |    | C                              | C  |    | 73                       | 2.41                 | 02          |
| 15                                            | <b>94.2</b>  | 0.75                            | 333                               | 0.9                    | <b>0.70</b>                       | <b>310</b>                         |                               |    |    |    | C                              | C  |    | 69                       | 2.10                 | 03          |
| 11                                            | <b>126</b>   | 0.55                            | 297                               | 1.0                    | <b>0.55</b>                       | <b>296</b>                         | B                             |    |    |    | C                              | C  |    | 63                       | 1.53                 | 04          |
| 9                                             | <b>157</b>   | 0.37                            | 230                               | 1.1                    | <b>0.41</b>                       | <b>252</b>                         | B                             |    |    |    | C                              | C  |    | 58                       | 1.23                 | 05          |
| 8                                             | <b>185</b>   | 0.37                            | 257                               | 1.2                    | <b>0.43</b>                       | <b>296</b>                         | B                             |    |    |    | C                              | C  |    | 55                       | 3.10                 | 06          |
| 6                                             | <b>231</b>   | 0.25                            | 193                               | 1.5                    | <b>0.38</b>                       | <b>296</b>                         | B                             |    |    |    | C                              | C  |    | 49                       | 2.41                 | 07          |
| 5                                             | <b>277</b>   | 0.25                            | 222                               | 1.3                    | <b>0.33</b>                       | <b>296</b>                         | B                             |    |    |    | C                              | C  |    | 47                       | 2.10                 | 08          |
| 4                                             | <b>378</b>   | 0.18                            | 200                               | 1.5                    | <b>0.27</b>                       | <b>296</b>                         | B                             |    |    |    | C                              | C  |    | 43                       | 2.10                 | 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 P7Q 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 P7Q 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.

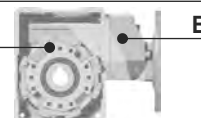
**D** Für die Lebensdauerschmierung ist das Getriebe der Größe P7Q mit synthetischem Öl befüllt.  
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.  
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type P7Q 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 P7Q 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 P7Q Oil

For B3-V5-V6 separate lubrication for A ( 0.40 l ) B ( 0.14 l ) , for B6-B7-B8 common lubrication 0.65 l ( A + B ).



**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

For all details on lubrication and plugs check our website

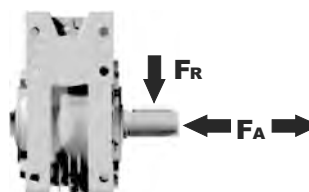
tab. 1

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

## RADIAL AND AXIAL LOADS

### Output shaft

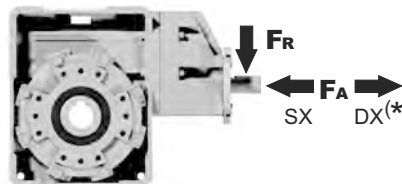
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | $F_A$<br>[N] | $F_R$<br>[N] |
|-------------------------------|--------------|--------------|
| 75                            | 620          | 3100         |
| 50                            | 720          | 3600         |
| 25                            | 880          | 4400         |
| 15-6                          | 1000         | 5000         |

### Input shaft

albero in entrata



| $n_1$<br>[min <sup>-1</sup> ] | $F_A$<br>[N] | $F_R$<br>[N] |
|-------------------------------|--------------|--------------|
| 1400                          | 108          | 540          |

\*Strong axial loads in the DX direction are not allowed.

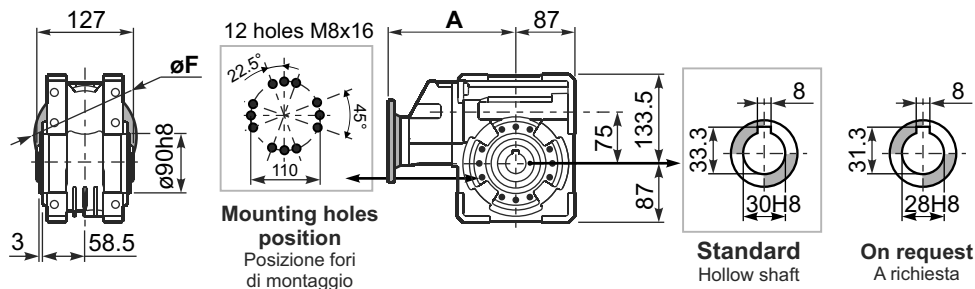
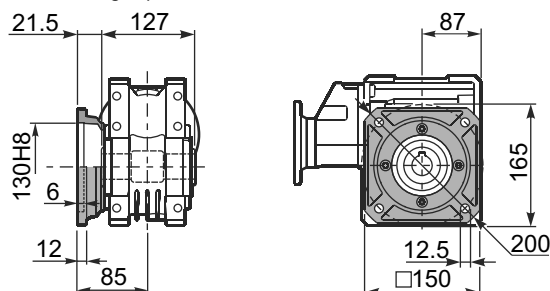
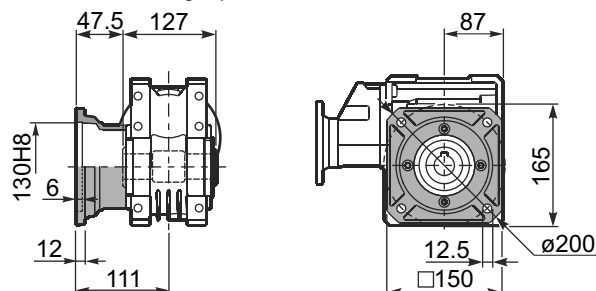
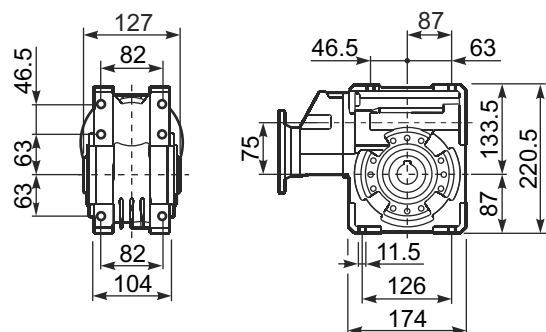
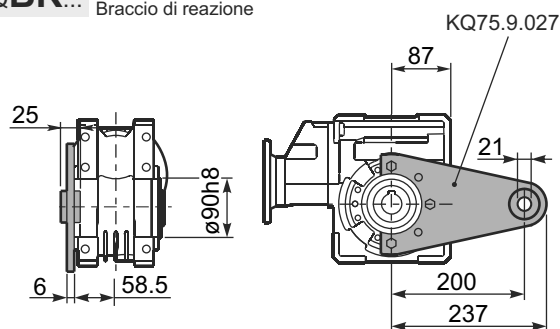
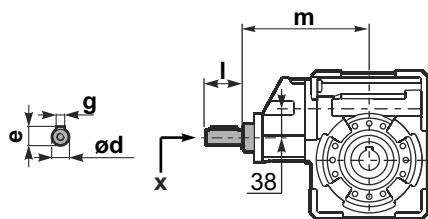
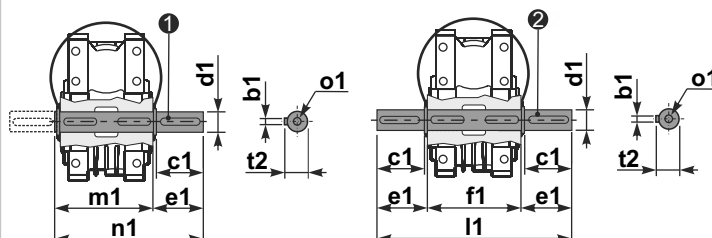
Non sono consentiti forti carichi assiali con direzione DX

tab. 2

PP7Q**FB**...Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore

9.90 kg

| M. flanges     | Kit code   | øF  | A     |
|----------------|------------|-----|-------|
| <b>63B5</b>    | K063.4.041 | 140 | 192.7 |
| <b>71B5</b>    | K063.4.042 | 160 | 190.7 |
| <b>80/90B5</b> | K063.4.043 | 200 | 192.7 |
| <b>71B14</b>   | K063.4.047 | 105 | 190.7 |
| <b>80B14</b>   | K063.4.046 | 120 | 194.2 |
| <b>90B14</b>   | K063.4.041 | 140 | 192.7 |

PP7Q**FC**...Square flange  
Flangia quadrataPP7Q**FL**...Square flange  
Flangia quadrataPP7Q**FB**...Feet  
PiediniPP7Q**BR**...Reaction arm  
Braccio di reazioneRP7Q**FB**...Input shaft  
Albero in entrataPP7Q.....**S**...Single Shaft  
Albero lento semplicePP7Q.....**D**...Double Shaft  
Albero lento bisp.

|        | ød    | e    | g | l  | m     | x     |           |
|--------|-------|------|---|----|-------|-------|-----------|
| type B | 19 h6 | 21.5 | 6 | 35 | 185.5 | M6x16 | C40.5.062 |
| type S | -     | -    | - | -  | -     | -     |           |

|            | b1 | c1 | d1                          | e1 | f1  | l1  | m1  | n1  | t2 | o1    |
|------------|----|----|-----------------------------|----|-----|-----|-----|-----|----|-------|
| Standard   | 8  | 60 | 30 <sup>-0.005/-0.020</sup> | 65 | 127 | 255 | 134 | 199 | 33 | M8x20 |
| On request | 8  | 50 | 28 <sup>-0.005/-0.020</sup> | 65 | 127 | 255 | 134 | 199 | 31 | M8x20 |





#### QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |    |    |    | Available<br>B14 motor flanges |    |    | Dynamic efficiency<br><br>RD | Tooth Module<br><br>[mm] | Ratios code<br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|----|----|----|--------------------------------|----|----|------------------------------|--------------------------|----------------------------------------------------------------------------------------------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | B                             | C  | D  | E  | Q                              | R  | T  |                              |                          |                                                                                                    |
|                                               |              |                                 |                                   |                        |                                   |                                    | 63                            | 71 | 80 | 90 | 71                             | 80 | 90 |                              |                          |                                                                                                    |
| 23.5                                          | <b>59.7</b>  | 1.1                             | 300                               | 1.4                    | <b>1.5</b>                        | <b>418</b>                         |                               |    |    |    | C                              | C  |    | 67                           | 3.5                      | 01                                                                                                 |
| 19.4                                          | <b>72.3</b>  | 1.1                             | 347                               | 1.2                    | <b>1.3</b>                        | <b>407</b>                         |                               |    |    |    | C                              | C  |    | 64                           | 3.1                      | 02                                                                                                 |
| 17.1                                          | <b>81.7</b>  | 1.1                             | 374                               | 1.1                    | <b>1.2</b>                        | <b>418</b>                         |                               |    |    |    | C                              | C  |    | 61                           | 2.7                      | 03                                                                                                 |
| 13.3                                          | <b>105</b>   | 0.75                            | 323                               | 1.2                    | <b>0.89</b>                       | <b>385</b>                         |                               |    |    |    | C                              | C  |    | 60                           | 2.1                      | 04                                                                                                 |
| 8.0                                           | <b>176</b>   | 0.55                            | 415                               | 1.1                    | <b>0.58</b>                       | <b>440</b>                         | B                             |    |    |    | C                              | C  |    | 63                           | 3.5                      | 05                                                                                                 |
| 6.6                                           | <b>213</b>   | 0.37                            | 322                               | 1.3                    | <b>0.47</b>                       | <b>407</b>                         | B                             |    |    |    | C                              | C  |    | 60                           | 3.1                      | 06                                                                                                 |
| 5.8                                           | <b>240</b>   | 0.37                            | 321                               | 1.3                    | <b>0.48</b>                       | <b>418</b>                         | B                             |    |    |    | C                              | C  |    | 53                           | 2.7                      | 07                                                                                                 |
| 4.3                                           | <b>328</b>   | 0.37                            | 438                               | 1.0                    | <b>0.35</b>                       | <b>418</b>                         | B                             |    |    |    | C                              | C  |    | 53                           | 2.7                      | 08                                                                                                 |
| 3.3                                           | <b>422</b>   | 0.25                            | 374                               | 1.0                    | <b>0.26</b>                       | <b>385</b>                         | B                             |    |    |    | C                              | C  |    | 52                           | 2.1                      | 09                                                                                                 |
| 3.0                                           | <b>466</b>   | 0.25                            | 358                               | 0.9                    | <b>0.23</b>                       | <b>330</b>                         | B                             |    |    |    | C                              | C  |    | 45                           | 1.9                      | 10                                                                                                 |
| 2.3                                           | <b>605</b>   | 0.18                            | 297                               | 1.1                    | <b>0.20</b>                       | <b>330</b>                         | 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 **P8Q** 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 **P8Q** 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.

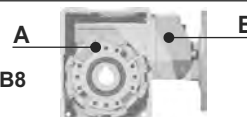
**D** Für die Lebensdauerschmierung ist das Getriebe der Größe **P8Q** mit synthetischem Öl befüllt.  
Bei Einbaulage V5 oder V6 bitten wir um Rücksprache.  
In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben.  
In Tabelle 2 sind die zulässigen Radial- und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type **P8Q** 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 **P8Q** 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 P8Q Oil

For B3-V5-V6 separate lubrication for A ( 1.20 l ) B ( 0.14 l ) , for B6-B7-B8 common lubrication 1.00 l ( A + B ).



AGIP Telium VSF 320

SHELL Omala S4 WE 320

For all details on lubrication and plugs check our website

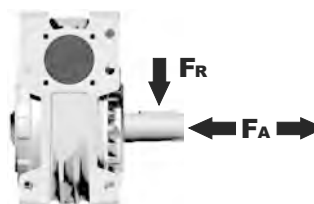
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

#### RADIAL AND AXIAL LOADS

##### Output shaft

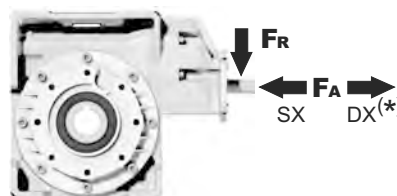
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 75                            | 700       | 3500      |
| 50                            | 800       | 4000      |
| 25                            | 1000      | 5000      |
| 15-6                          | 1160      | 5800      |

##### Input shaft

albero in entrata



| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[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

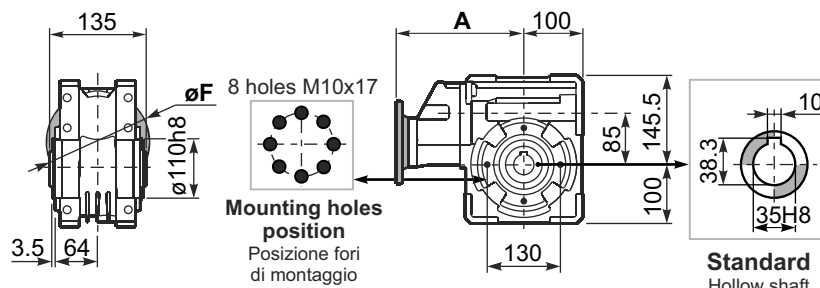
PP8Q**FB**...

Basic wormbox  
Riduttore base

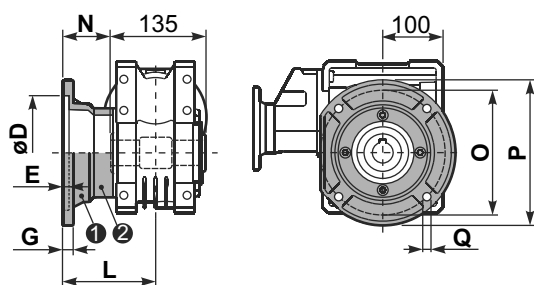
**Gearbox weight**  
peso riduttore

**18.9 kg**

| M. flanges     | Kit code   | ØF  | A     |
|----------------|------------|-----|-------|
| <b>63B5</b>    | K063.4.041 | 140 | 195.2 |
| <b>71B5</b>    | K063.4.042 | 160 | 193.2 |
| <b>80/90B5</b> | K063.4.043 | 200 | 195.2 |
|                |            |     |       |
| <b>71B14</b>   | K063.4.047 | 105 | 193.2 |
| <b>80B14</b>   | K063.4.046 | 120 | 194.2 |
| <b>90B14</b>   | K063.4.041 | 140 | 195.2 |

PP8QFC...

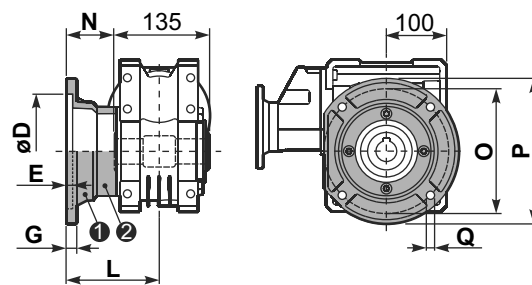
Output flange  
Flangia uscita



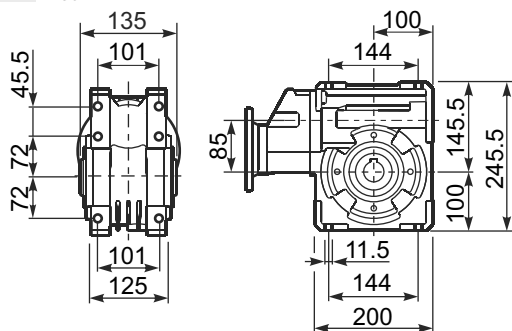
| type B | øD                                    | E | G  | L     | N    | O   | P   | Q  | kit code                     |
|--------|---------------------------------------|---|----|-------|------|-----|-----|----|------------------------------|
| FC     | 152 <sup>+0.06</sup> <sub>+0.00</sub> | 5 |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

PP8Q**F1**...

Output flange  
Flangia uscita



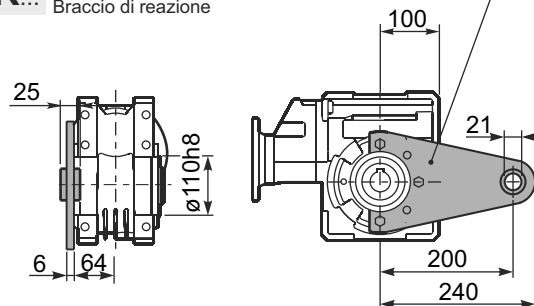
| type S    | øD                             | E | G  | L     | N  | O   | P   | Q    | kit code             |
|-----------|--------------------------------|---|----|-------|----|-----|-----|------|----------------------|
| <b>F1</b> | 130 <sup>+0.04<br/>+0.00</sup> | 5 | 13 | 117.5 | 50 | 165 | 200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

PP8Q**FB**...Feet  
Piedini

## PP8QBR...

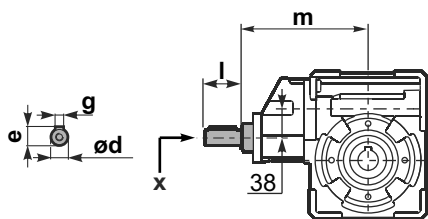
Reaction arm  
Braccio di reazione

kit cod. K085.9.027



**R**P8QFB...

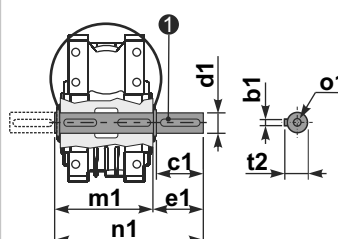
Input shaft  
Albero in entrata



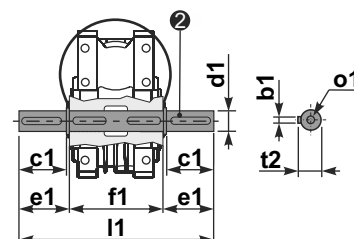
|               | ød    | e    | g | l  | m     | x     |           |
|---------------|-------|------|---|----|-------|-------|-----------|
| type <b>B</b> | 19 h6 | 21.5 | 6 | 35 | 187.5 | M6x16 | C40.5.062 |
| type <b>S</b> | -     | -    | - | -  | -     | -     |           |

## PP8Q.....S...

Single Shaft  
Albero lento semplice

PP8Q.....**D**...

Double Shaft  
Albero lento bisp.



① kit cod. K085.5.028 type B

② kit cod. K085.5.029 type B

[illegible]



#### QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |    |    |    | Available<br>B14 motor flanges |    |    | Dynamic efficiency<br><br>RD | Tooth Module<br><br>[mm] | Ratios code<br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|----|----|----|--------------------------------|----|----|------------------------------|--------------------------|----------------------------------------------------------------------------------------------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | B                             | C  | D  | E  | Q                              | R  | T  |                              |                          |                                                                                                    |
|                                               |              |                                 |                                   |                        |                                   |                                    | 63                            | 71 | 80 | 90 | 71                             | 80 | 90 |                              |                          |                                                                                                    |
| 16.8                                          | <b>83.2</b>  | 1.5                             | 587                               | 1.1                    | <b>1.7</b>                        | <b>660</b>                         |                               |    |    |    | C                              |    |    | 69                           | 3.5                      | 01                                                                                                 |
| 13.9                                          | <b>100.5</b> | 1.5                             | 699                               | 0.8                    | <b>1.3</b>                        | <b>594</b>                         |                               |    |    |    | C                              |    |    | 68                           | 2.9                      | 02                                                                                                 |
| 10.6                                          | <b>132</b>   | 1.1                             | 634                               | 0.9                    | <b>0.95</b>                       | <b>550</b>                         |                               |    |    |    | C                              |    |    | 64                           | 2.2                      | 03                                                                                                 |
| 8.0                                           | <b>176</b>   | 0.75                            | 666                               | 1.2                    | <b>0.90</b>                       | <b>803</b>                         | B                             |    |    |    | C                              |    |    | 74                           | 4.7                      | 04                                                                                                 |
| 6.7                                           | <b>208</b>   | 0.75                            | 766                               | 0.9                    | <b>0.65</b>                       | <b>660</b>                         | B                             |    |    |    | C                              |    |    | 72                           | 4.0                      | 05                                                                                                 |
| 5.7                                           | <b>245</b>   | 0.55                            | 634                               | 1.0                    | <b>0.57</b>                       | <b>660</b>                         | B                             |    |    |    | C                              |    |    | 69                           | 3.5                      | 06                                                                                                 |
| 4.7                                           | <b>296</b>   | 0.55                            | 755                               | 0.8                    | <b>0.43</b>                       | <b>594</b>                         | B                             |    |    |    | C                              |    |    | 68                           | 2.9                      | 07                                                                                                 |
| 4.2                                           | <b>334</b>   | 0.55                            | 865                               | 0.8                    | <b>0.42</b>                       | <b>660</b>                         | B                             |    |    |    | C                              |    |    | 69                           | 3.5                      | 08                                                                                                 |
| 3.5                                           | <b>403</b>   | 0.37                            | 692                               | 0.9                    | <b>0.32</b>                       | <b>594</b>                         | B                             |    |    |    | C                              |    |    | 68                           | 2.9                      | 09                                                                                                 |
| 2.6                                           | <b>529</b>   | 0.25                            | 577                               | 1.0                    | <b>0.24</b>                       | <b>550</b>                         | B                             |    |    |    | C                              |    |    | 64                           | 2.2                      | 10                                                                                                 |
| 2.2                                           | <b>624</b>   | 0.25                            | 628                               | 0.8                    | <b>0.21</b>                       | <b>528</b>                         | 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

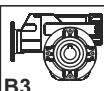
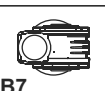
**EN** Unit **P1Q** is supplied without lubricant and equipped with a breather, level and drain plugs. User can add mineral oil keeping existing plugs. Should the user wish to fill it with synthetic oil, it is recommended to replace the existing plugs with a closed plug. Primary reduction unit is supplied 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 **P1Q** 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 **P1Q** 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 Lebensdauergeschmiert 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 **P1Q** 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 précouple 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 **P1Q** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético. Ver tabla 1, para cantidades y aceites recomendados. En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

|                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |  |
| <b>B3</b>                                                                         | <b>B6</b>                                                                          | <b>B7</b>                                                                           | <b>B8</b>                                                                           | <b>V5</b>                                                                           | <b>V6</b>                                                                           |
| 2.0/0.14LT                                                                        | 1.5/0.14 LT                                                                        | 1.5/0.14 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

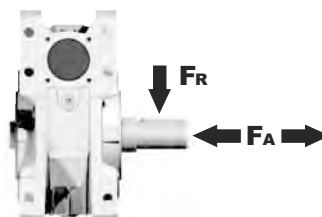
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

#### RADIAL AND AXIAL LOADS

##### Output shaft

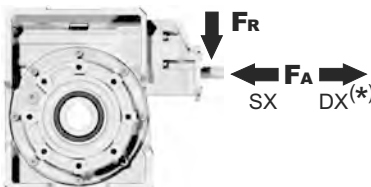
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| <b>75</b>                     | 800       | 4000      |
| <b>50</b>                     | 920       | 4600      |
| <b>25</b>                     | 1200      | 6000      |
| <b>15-6</b>                   | 1400      | 7000      |

##### Input shaft

albero in entrata



| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| <b>1400</b>                   | 150       | 760       |

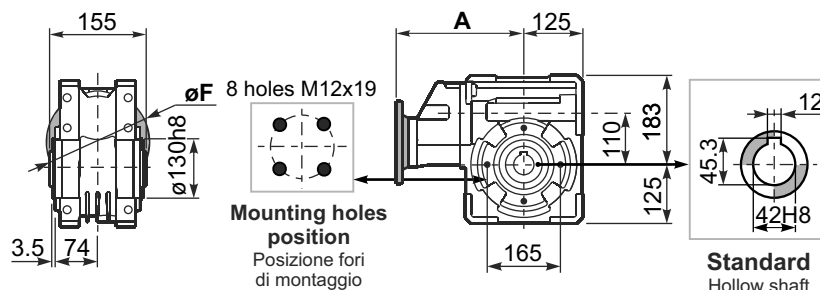
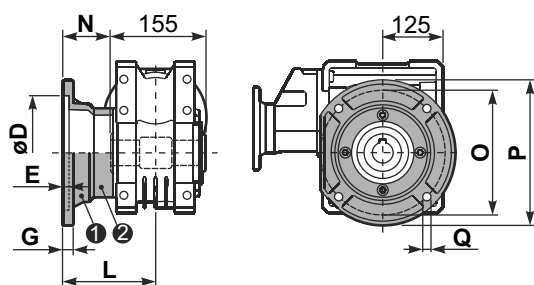
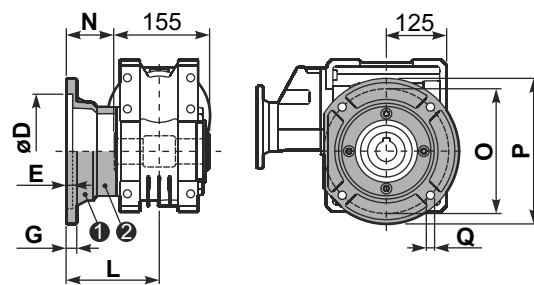
\*Strong axial loads in the DX direction are not allowed.

Non sono consentiti forti carichi assiali con direzione DX

tab. 2

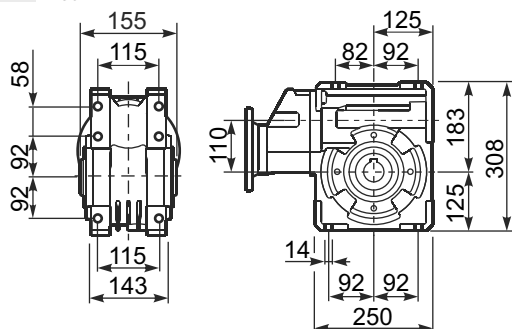
PP1Q**FB**...Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore**37.3 kg**

| M. flanges     | Kit code   | øF  | A     |
|----------------|------------|-----|-------|
| <b>63B5</b>    | K063.4.041 | 140 | 214.7 |
| <b>71B5</b>    | K063.4.042 | 160 | 212.7 |
| <b>80/90B5</b> | K063.4.043 | 200 | 214.7 |
| <b>71B14</b>   | K063.4.047 | 105 | 212.7 |
| <b>80B14</b>   | K063.4.046 | 120 | 213.7 |
| <b>90B14</b>   | K063.4.041 | 140 | 214.7 |

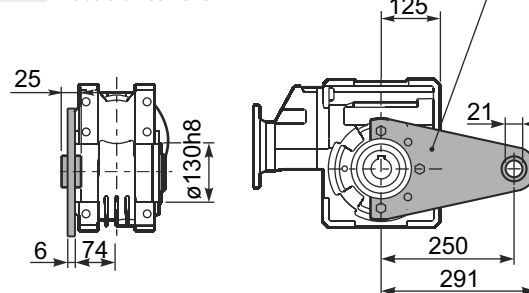
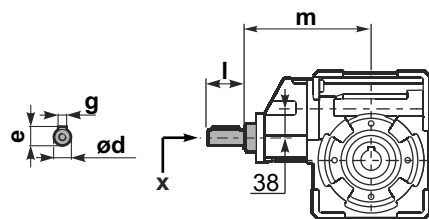
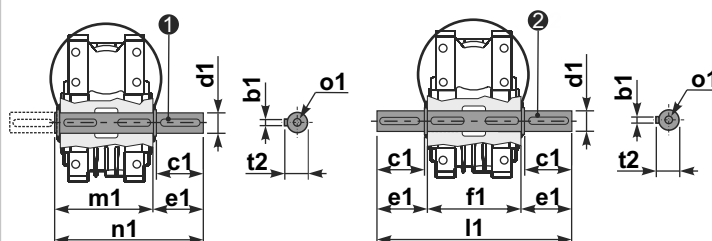
Standard  
Hollow shaftPP1Q**FC**...Output flange  
Flangia uscitaPP1Q**F1**...Output flange  
Flangia uscita

| type B    | øD                                      | E  | G    | L     | N   | O   | P   | Q  | kit code            |
|-----------|-----------------------------------------|----|------|-------|-----|-----|-----|----|---------------------|
| <b>FC</b> | 170 <sup>+0.083</sup> <sub>-0.043</sub> | 11 | 16.5 | 131.5 | 54  | 230 | 270 | 13 | ① K110.9.010<br>② - |
| <b>FL</b> | 170 <sup>+0.083</sup> <sub>-0.043</sub> | 11 | 16.5 | 179.5 | 102 | 230 | 270 | 13 | ① K110.9.011<br>② - |

| type S    | øD                                      | E   | G  | L   | N     | O   | P   | Q  | kit code             |
|-----------|-----------------------------------------|-----|----|-----|-------|-----|-----|----|----------------------|
| <b>F1</b> | 180 <sup>+0.040</sup> <sub>0</sub>      | 5   | 18 | 150 | 72.5  | 215 | 250 | 15 | ① KS110.9.014<br>② - |
| <b>F2</b> | 170 <sup>+0.083</sup> <sub>-0.043</sub> | 9.5 | 15 | 178 | 100.5 | 230 | 270 | 13 | ① KS110.9.012<br>② - |
| <b>F3</b> | 180 <sup>+0.040</sup> <sub>0</sub>      | 5   | 18 | 130 | 52.5  | 215 | 250 | 15 | ① KS110.9.013<br>② - |

PP1Q**FB**...Feet  
PiediniPP1Q**BR**...Reaction arm  
Braccio di reazione

kit cod. K110.9.027

RP1Q**FB**...Input shaft  
Albero in entrataPP1Q.....**S**...Single Shaft  
Albero lento semplicePP1Q.....**D**...Double Shaft  
Albero lento bisp.

① kit cod. K110.5.028 type B

② kit cod. K110.5.029 type B

|        | 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 <sup>-0.005</sup> <sub>-0.020</sub> | 96.5 | 155 | 348 | 163.5 | 260 | 45 | M12x32 |
| type S | -  | -  | -                                      | -    | -   | -   | -     | -   | -  | -      |



## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |    |    |            | Available<br>B14 motor flanges |    |            |     | Dynamic efficiency<br>RD | Tooth Module<br>[mm] | Ratios code |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|----|----|------------|--------------------------------|----|------------|-----|--------------------------|----------------------|-------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | C                             | D  | E  | F          | R                              | T  | U          | V   |                          |                      |             |
|                                               |              |                                 |                                   |                        |                                   |                                    | 71                            | 80 | 90 | 100<br>112 | 80                             | 90 | 100<br>112 | 132 |                          |                      |             |
| 11.4                                          | <b>123</b>   | 1.5                             | 928                               | 1.0                    | <b>1.6</b>                        | <b>972</b>                         | B                             |    |    |            |                                |    |            |     | 74                       | 4.35                 | 01          |
| 8.5                                           | <b>166</b>   | 1.1                             | 919                               | 1.1                    | <b>1.2</b>                        | <b>972</b>                         | B                             |    |    |            |                                |    |            |     | 74                       | 4.35                 | 02          |
| 6.5                                           | <b>216</b>   | 1.1                             | 1197                              | 0.8                    | <b>0.89</b>                       | <b>972</b>                         | B                             |    |    |            |                                |    |            |     | 74                       | 4.35                 | 03          |
| 5.3                                           | <b>264</b>   | 0.75                            | 998                               | 1.0                    | <b>0.73</b>                       | <b>972</b>                         | B                             |    |    |            |                                |    |            |     | 74                       | 4.35                 | 04          |
| 4.4                                           | <b>316</b>   | 0.55                            | 854                               | 1.1                    | <b>0.60</b>                       | <b>928</b>                         | B                             |    |    |            |                                |    |            |     | 72                       | 3.65                 | 05          |
| 3.7                                           | <b>382</b>   | 0.55                            | 1059                              | 0.9                    | <b>0.50</b>                       | <b>972</b>                         | B                             |    |    |            |                                |    |            |     | 74                       | 4.35                 | 06          |
| 3.1                                           | <b>458</b>   | 0.37                            | 832                               | 1.1                    | <b>0.41</b>                       | <b>928</b>                         | B                             |    |    |            |                                |    |            |     | 72                       | 3.65                 | 07          |
| 2.7                                           | <b>525</b>   | 0.37                            | 981                               | 1.0                    | <b>0.37</b>                       | <b>972</b>                         | B                             |    |    |            |                                |    |            |     | 74                       | 4.35                 | 08          |
| 2.2                                           | <b>630</b>   | 0.25                            | 774                               | 1.2                    | <b>0.30</b>                       | <b>928</b>                         | B                             |    |    |            |                                |    |            |     | 72                       | 3.65                 | 09          |
| 1.7                                           | <b>840</b>   | 0.25                            | 960                               | 0.9                    | <b>0.22</b>                       | <b>853</b>                         | B                             |    |    |            |                                |    |            |     | 67                       | 2.76                 | 10          |

**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 **Q13+511** 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 **Q13+511** 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 **Q13+511** 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 **Q13+511** 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 **Q13+511** se suministra sin lubricante, provisto de tapones de respiración, nivel y descarga de aceite. El usuario puede utilizar aceite mineral, manteniendo los tapones existentes. Si prefiere utilizar aceite sintético deberá sustituir los tapones existentes por tapones ciegos. La prerreducción se suministra con tapones ciegos, lubricado de por vida con aceite sintético.  
Ver tabla 1, para cantidades y aceites recomendados.  
En la tabla 2, se encuentran las cargas radiales y axiales admitidas por el reductor.

|             |             |             |             |             |             |
|-------------|-------------|-------------|-------------|-------------|-------------|
|             |             |             |             |             |             |
| <b>B3</b>   | <b>B6</b>   | <b>B7</b>   | <b>B8</b>   | <b>V5</b>   | <b>V6</b>   |
| 4.5/0.14 LT | 3.5/0.14 LT | 3.5/0.14 LT | 3.3/0.14 LT | 4.5/0.14 LT | 3.3/0.14 LT |

AGIP Blasias 460

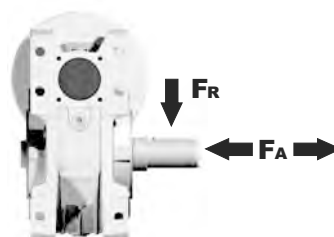
For all details on lubrication and plugs check our website  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

## RADIAL AND AXIAL LOADS

### Output shaft

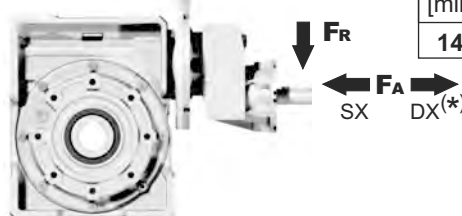
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| <b>75</b>                     | 1380      | 6900      |
| <b>50</b>                     | 1560      | 7800      |
| <b>25</b>                     | 2000      | 10000     |
| <b>15-6</b>                   | 2400      | 12000     |

### Input shaft

albero in entrata



| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| <b>1400</b>                   | 400       | 2000      |

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

tab. 2

|                                         |                |
|-----------------------------------------|----------------|
| <b>Gearbox weight</b><br>peso riduttore | <b>53.0 kg</b> |
|-----------------------------------------|----------------|

Q13 - input flange 90B5  
511 - output flange 90B5

8 holes M12x21

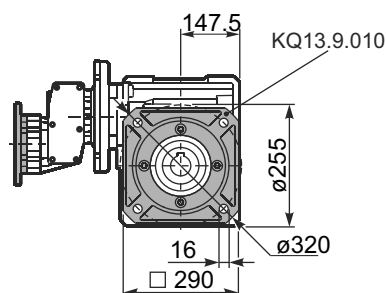
Mounting holes position  
Posizione fori di montaggio

Standard  
Hollow shaft

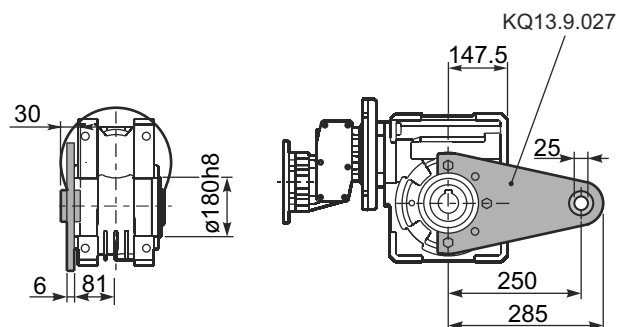
Dimensions (mm):

- Front view: 170 (width), 180 h8 (flange thickness), 4 (flange hole offset), 81 (flange hole diameter)
- Side view: A (total length), 147.5 (flange to center distance), 50 (flange thickness), 130 (housing thickness), 147.5 (center to output flange distance), 187.5 (center to output flange distance), 377.5 (total length)
- Shaft view: 14 (key width), 48.8 (key height), 45H8 (key fit)
- Input/Output flanges: 90B5
- Mounting holes: 8 holes M12x21
- Mounting holes position: Posizione fori di montaggio
- Standard: Standard
- Hollow shaft: Hollow shaft

3

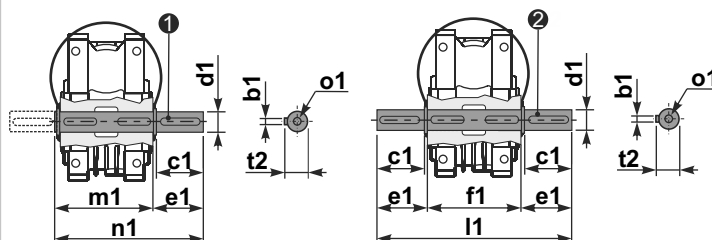


Output flange  
Flangia uscita



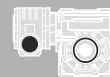
Double Shaft  
Albero lento bisp.

P511-F... Output flange  
Flangia uscita



② kit cod. KQ13.5.029 type B

[illegible]



## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |    | Available<br>B14 motor flanges |    | Dynamic efficiency<br>RD | Tooth Module<br>[mm] | Ratios code |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|----|--------------------------------|----|--------------------------|----------------------|-------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | A                             | B  | O                              | P  |                          |                      |             |
|                                               |              |                                 |                                   |                        |                                   |                                    | 56                            | 63 | 56                             | 63 |                          |                      |             |
| 10.0                                          | <b>140</b>   | 0.12                            | 57                                | 1.2                    | <b>0.14</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 50                       | 2.2                  | 01          |
| 7.0                                           | <b>200</b>   | 0.12                            | 79                                | 0.9                    | <b>0.11</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 48                       | 2.2                  | 02          |
| 5.0                                           | <b>280</b>   | 0.12*                           | 69                                | <0.8                   | <b>0.08</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 45                       | 2.4                  | 03          |
| 3.3                                           | <b>420</b>   | 0.12*                           | 69                                | <0.8                   | <b>0.07</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 36                       | 1.6                  | 04          |
| 2.5                                           | <b>560</b>   | 0.12*                           | 69                                | <0.8                   | <b>0.05</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 33                       | 2.5                  | 05          |
| 1.9                                           | <b>740</b>   | 0.12*                           | 69                                | <0.8                   | <b>0.05</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 30                       | 1.8                  | 06          |
| 1.5                                           | <b>920</b>   | 0.12*                           | 69                                | <0.8                   | <b>0.04</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 27                       | 1.5                  | 07          |
| 1.3                                           | <b>1120</b>  | 0.12*                           | 69                                | <0.8                   | <b>0.03</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 26                       | 2.5                  | 08          |
| 0.9                                           | <b>1480</b>  | 0.12*                           | 69                                | <0.8                   | <b>0.03</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 24                       | 1.8                  | 09          |
| 0.8                                           | <b>1840</b>  | 0.12*                           | 69                                | <0.8                   | <b>0.02</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 22                       | 1.5                  | 10          |
| 0.6                                           | <b>2400</b>  | 0.12*                           | 69                                | <0.8                   | <b>0.02</b>                       | <b>69</b>                          | B                             |    | B-C                            |    | 21                       | 1.2                  | 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

\* 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 43Q 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 43Q 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 43Q 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 43Q 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 43Q 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 43Q Oil**  
Quantity 0.09/0.03 Lt.

0.09 Lt. 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

| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 25                            | 300       | 1800      |
| 15                            | 400       | 2000      |

**Input shaft**  
albero in entrata

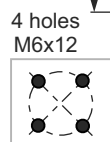
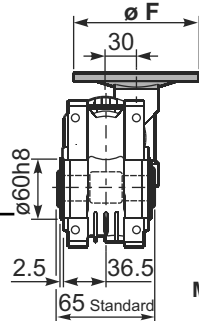
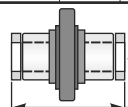
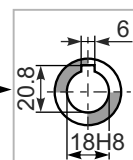
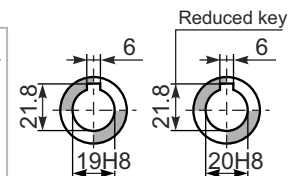
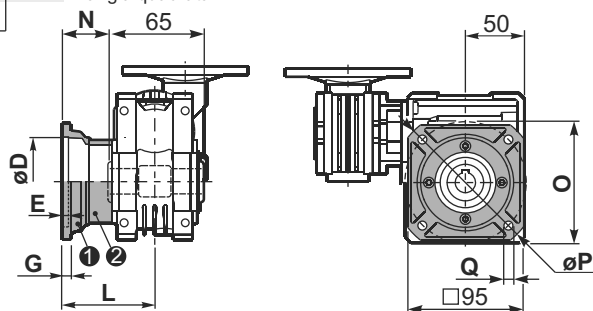
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 20        | 100       |

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

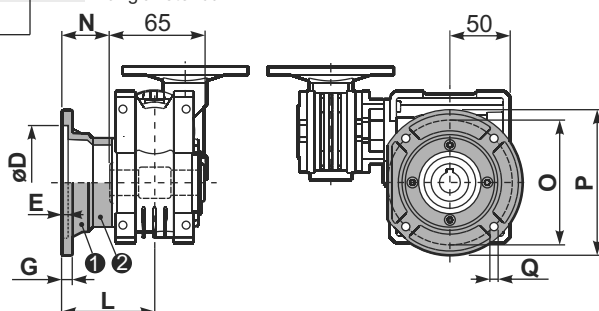
tab. 2

**P43QFB...**Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore**3.60 kg**

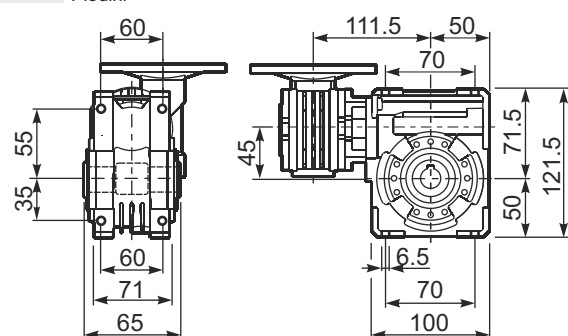
| M. flanges   | Kit code   | øF  | A    |
|--------------|------------|-----|------|
| <b>56B5</b>  | K030.4.041 | 120 | 61.5 |
| <b>63B5</b>  | K030.4.042 | 140 | 62.5 |
| <b>56B14</b> | K030.4.046 | 80  | 61.5 |
| <b>63B14</b> | K030.4.045 | 90  | 62.5 |

On Request  
output shaft  
with spacers  
cod. Q45.3.018Mounting holes position  
Posizione fori di montaggioStandard  
Hollow shaftOn request  
A richiesta**P43QFC...**Square flange  
Flangia quadrata

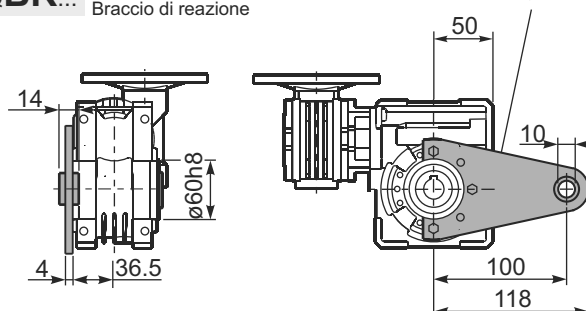
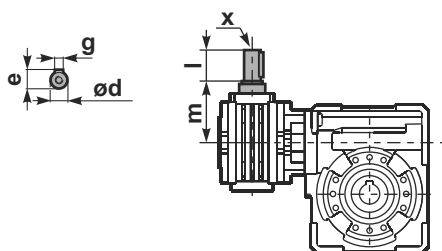
| type B    | øD    | E | G | L  | N    | O  | P   | Q | kit code   |
|-----------|-------|---|---|----|------|----|-----|---|------------|
| <b>FC</b> | 60 H8 | 4 | 7 | 67 | 34.5 | 75 | 110 | 9 | KQ45.9.010 |
| <b>FL</b> | 60 H8 | 4 | 7 | 97 | 64.5 | 75 | 110 | 9 | KQ45.9.011 |

**P43QF1...**Round flange  
Flangia rotonda

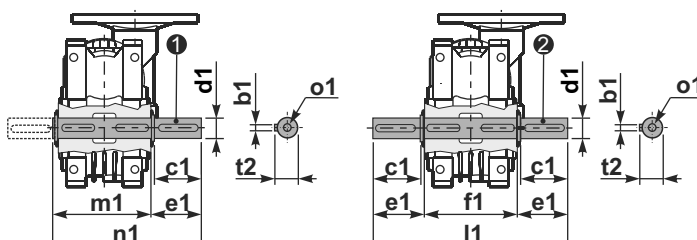
| type S    | øD   | E | G  | L  | N    | O   | P   | Q   | kit code    |
|-----------|------|---|----|----|------|-----|-----|-----|-------------|
| <b>F1</b> | 95H8 | 5 | 9  | 80 | 47.5 | 115 | 140 | 9.5 | KSQ50.9.012 |
| <b>F2</b> | 80H8 | 5 | 12 | 58 | 25.5 | 100 | 120 | 9   | KSQ50.9.013 |

**P43QFB...**Feet  
Piedini**P43QBR...**Reaction arm  
Braccio di reazione

kit cod. KQ45.9.027

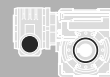
**R43QFB...**Input shaft  
Albero in entrata

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

**P43Q.....S...**Single Shaft  
Albero lento semplice**P43Q.....D...**Double Shaft  
Albero lento bisp.① kit cod. K045.5.028 type B  
kit cod. KS045.5.030 type S② kit cod. K045.5.029 type B  
kit cod. KS045.5.031 type S

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





## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available B5 motor flanges |   | Available B14 motor flanges |   | Dynamic efficiency | Tooth Module<br><br>[mm] | Ratio code<br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|---|-----------------------------|---|--------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | A                          | B | O                           | P |                    |                                                                                                             |                                                                                                   |
| 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                                                                                                |

**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 53Q 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 53Q 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 53Q 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 53Q 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 53Q 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.

0.14 Lt.

0.03 Lt.

**■ LUBRICATION 53Q Oil**  
Quantity 0.14/0.03 Lt.

AGIP Telium VSF 320

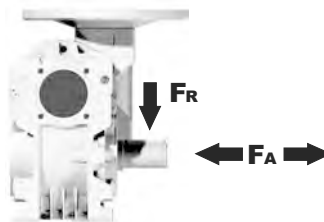
SHELL Omala S4 WE 320

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

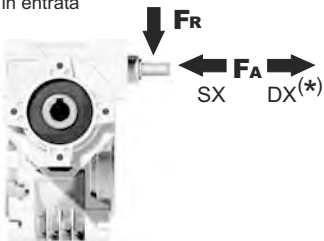
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 25                            | 480       | 2500      |
| 15                            | 560       | 2800      |

### Input shaft

albero in entrata



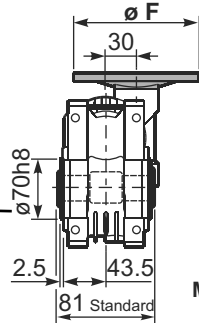
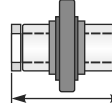
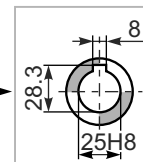
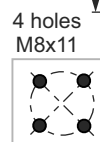
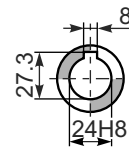
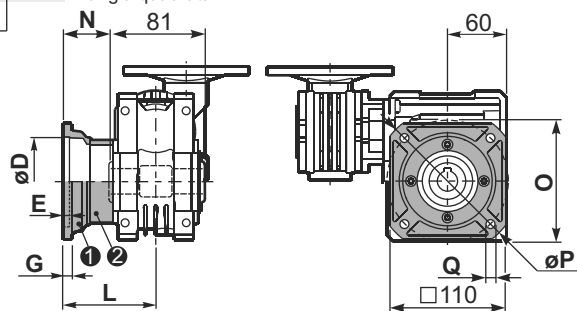
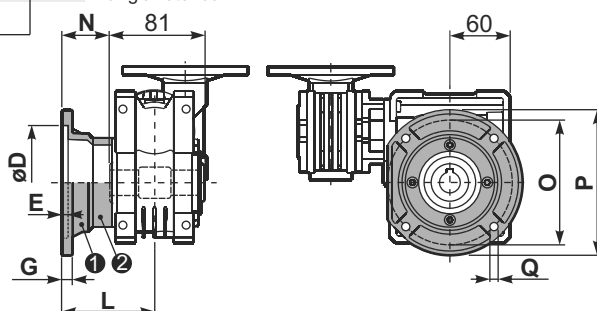
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 20        | 100       |

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

**tab. 2**

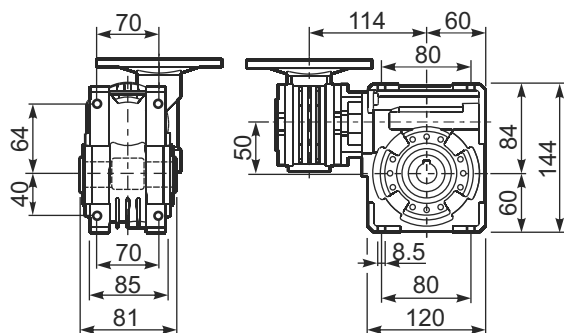
**P53QFB...**Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore**4.61 kg**

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

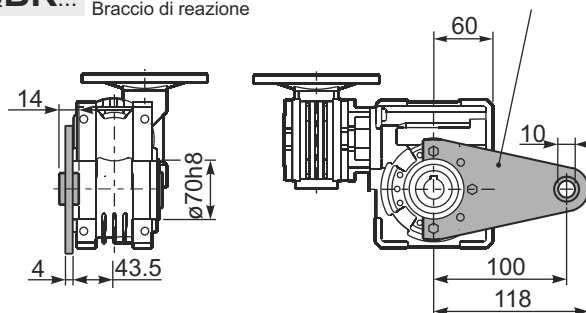
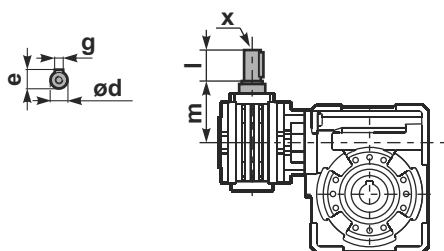
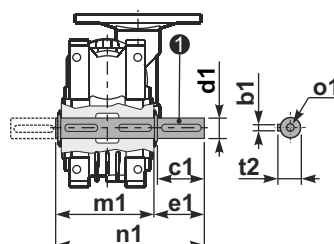
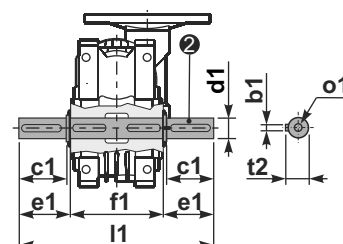
On Request  
Output shaft  
with spacers  
cod. Q50.3.025Mounting holes position  
Posizione fori di montaggioStandard  
Hollow shaftOn Request  
A richiesta**P53QFC...**Square flange  
Flangia quadrata**P53QF1...**Round flange  
Flangia rotonda

| type B    | øD    | E | G | L   | N    | O  | P   | Q  | kit code   |
|-----------|-------|---|---|-----|------|----|-----|----|------------|
| <b>FC</b> | 70 H8 | 5 | 9 | 90  | 49.5 | 85 | 125 | 11 | KQ50.9.010 |
| <b>FL</b> | 70 H8 | 5 | 9 | 120 | 79.5 | 85 | 125 | 11 | KQ50.9.011 |

| type S    | øD     | E | G    | L  | N    | O   | P   | Q   | kit code    |
|-----------|--------|---|------|----|------|-----|-----|-----|-------------|
| <b>F1</b> | 110 H8 | 5 | 10   | 89 | 48.5 | 130 | 160 | 9.5 | KSQ50.9.012 |
| <b>F2</b> | 95 H8  | 5 | 14.5 | 72 | 31.5 | 115 | 140 | 11  | KSQ50.9.013 |

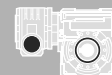
**P53QFB...**Feet  
Piedini**P53QBR...**Reaction arm  
Braccio di reazione

kit cod. KQ50.9.027

**R53QFB...**Input shaft  
Albero in entrata**P53Q.....S** Single Shaft  
Albero lento semplice**P53Q.....D** Double Shaft  
Albero lento bisp.① kit cod. K050.5.028 type B  
kit cod. KS050.5.030 type S② kit cod. K050.5.029 type B  
kit cod. KS050.5.031 type S

|        | 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 | 8  | 52 | 25 <sup>-0.005/-0.020</sup> | 59.5 | 81 | 200 | 86.5 | 146 | 28 | M8x20 |
| type S | 8  | 50 | 24 <sup>-0.005/-0.020</sup> | 68.8 | 81 | 218 | 86.5 | 155 | 27 | M8x20 |



## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |    | Available<br>B14 motor flanges |    | Dynamic efficiency<br>RD | Tooth Module<br><br>[mm] | Ratios code<br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|----|--------------------------------|----|--------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | A                             | B  | O                              | P  |                          |                                                                                                             |                                                                                                    |
|                                               |              |                                 |                                   |                        |                                   |                                    | 56                            | 63 | 56                             | 63 |                          |                                                                                                             |                                                                                                    |
| 5.6                                           | <b>252</b>   | 0.18                            | 142                               | 1.6                    | <b>0.29</b>                       | <b>230</b>                         | B                             |    | B-C                            |    | 46                       | 2.7                                                                                                         | 01                                                                                                 |
| 3.9                                           | <b>360</b>   | 0.18                            | 181                               | 1.3                    | <b>0.23</b>                       | <b>230</b>                         | B                             |    | B-C                            |    | 41                       | 2.7                                                                                                         | 02                                                                                                 |
| 2.6                                           | <b>540</b>   | 0.12                            | 164                               | 1.4                    | <b>0.17</b>                       | <b>230</b>                         | B                             |    | B-C                            |    | 37                       | 2.7                                                                                                         | 03                                                                                                 |
| 1.9                                           | <b>720</b>   | 0.12                            | 200                               | 1.1                    | <b>0.14</b>                       | <b>230</b>                         | B                             |    | B-C                            |    | 34                       | 2.7                                                                                                         | 04                                                                                                 |
| 1.3                                           | <b>1080</b>  | 0.12                            | 265                               | 0.9                    | <b>0.10</b>                       | <b>230</b>                         | B                             |    | B-C                            |    | 30                       | 2.7                                                                                                         | 05                                                                                                 |
| 1.0                                           | <b>1440</b>  | 0.12*                           | 230                               | <0.8                   | <b>0.09</b>                       | <b>230</b>                         | B                             |    | B-C                            |    | 27                       | 2.7                                                                                                         | 06                                                                                                 |
| 0.5                                           | <b>2745</b>  | 0.12*                           | 230                               | <0.8                   | <b>0.05</b>                       | <b>230</b>                         | 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 supportabile dal riduttore. Selezionare in base al momento torcente  $M_{2R}$

**EN** Unit **63Q** 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 **63Q** 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 **63Q** 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.

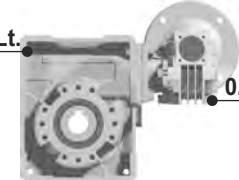
**F** Le réducteur de type **63Q** est fourni lubrifié à vie avec de l'huile synthétique. Concernant les positions V5.V6, contactez notre service d'assistance technique.  
Voir tableau 1 concernant les huiles et les quantités conseillées. Les charges radiales et axiales applicables au réducteur sont précisées dans le tableau 2.

**E** El reductor tamaño **63Q** 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.

**0.30 Lt.**

**0.03 Lt.**

**LUBRICATION 63Q Oil**  
Quantity 0.30/0.03 Lt.



**AGIP** Telium VSF 320

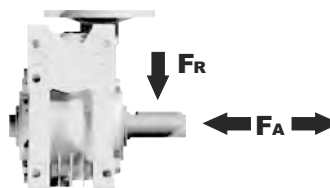
**SHELL** Omala S4 WE 320

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

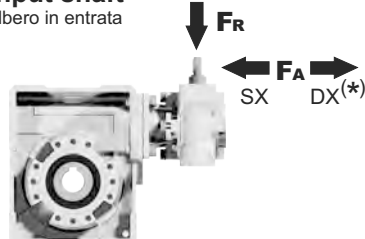
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | $F_A$<br>[N] | $F_R$<br>[N] |
|-------------------------------|--------------|--------------|
| 25                            | 700          | 3800         |
| 15                            | 800          | 4000         |

### Input shaft

albero in entrata



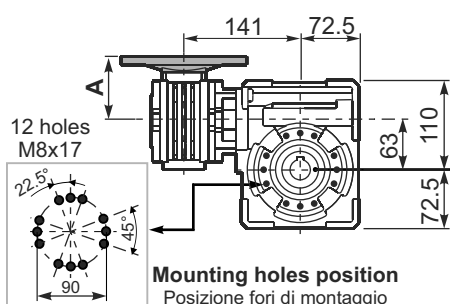
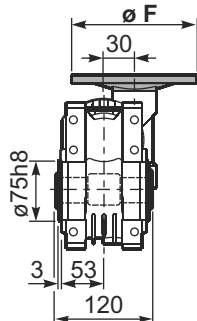
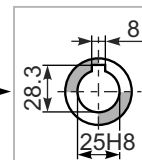
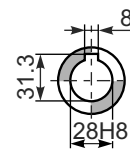
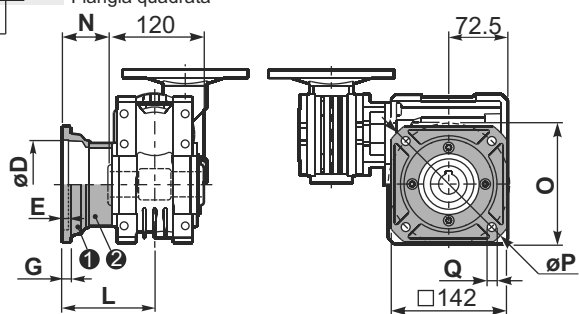
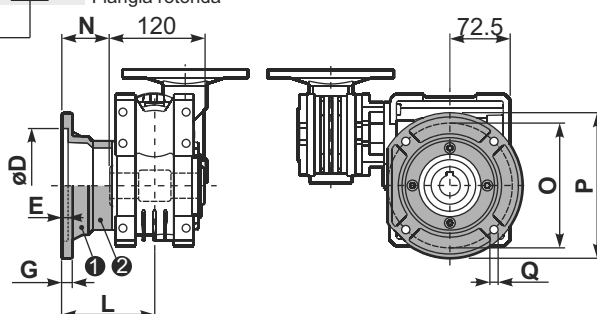
| $n_1$<br>[min <sup>-1</sup> ] | $F_A$<br>[N] | $F_R$<br>[N] |
|-------------------------------|--------------|--------------|
| 1400                          | 20           | 100          |

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

tab. 2

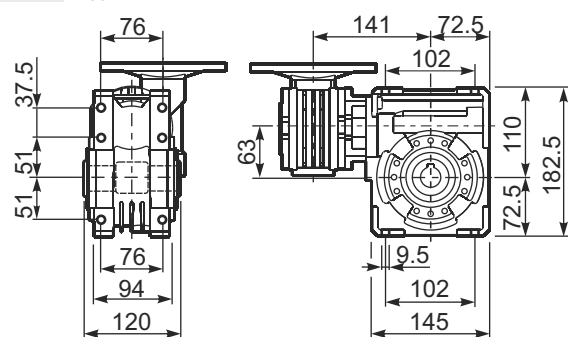
**P63QFB...**Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore**7.25 kg**

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

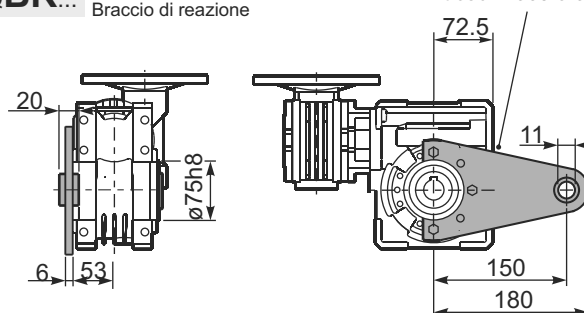
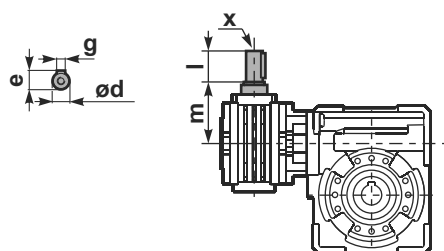
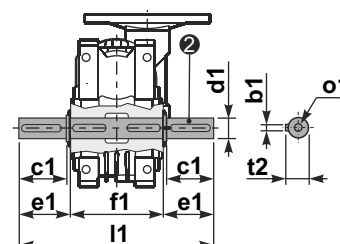
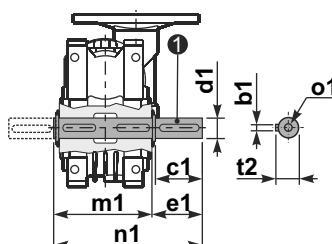
Mounting holes position  
Posizione fori di montaggioStandard  
Hollow shaftOn Request  
A richiesta**P63QFC...**Square flange  
Flangia quadrata**P63QF1...**Round flange  
Flangia rotonda

| type B    | øD                                    | E | G  | L   | N  | O   | P   | Q  | kit code                     |
|-----------|---------------------------------------|---|----|-----|----|-----|-----|----|------------------------------|
| <b>FC</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 6 | 12 | 86  | 26 | 150 | 180 | 11 | 1 KQ63.9.010<br>2 -          |
| <b>FL</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 6 | 12 | 116 | 56 | 150 | 180 | 11 | 1 KQ63.9.010<br>2 K063.0.200 |

| type S    | øD                                    | E | G  | L   | N  | O   | P   | Q  | kit code             |
|-----------|---------------------------------------|---|----|-----|----|-----|-----|----|----------------------|
| <b>F1</b> | 130 <sup>+0.20</sup> <sub>+0.15</sub> | 7 | 13 | 110 | 50 | 165 | 200 | 13 | 1 KS070.9.013<br>2 - |
| <b>F2</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 7 | 13 | 124 | 64 | 150 | 175 | 11 | 1 KS063.9.013<br>2 - |
| <b>F3</b> | 110 <sup>+0.035</sup> <sub>0</sub>    | 5 | 11 | 90  | 30 | 130 | 160 | 10 | 1 KS063.9.011<br>2 - |

**P63QFB...**Feet  
Piedini**P63QBR...**Reaction arm  
Braccio di reazione

kit cod. K063.9.027

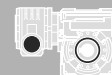
**R63QFB...**Input shaft  
Albero in entrata**P63Q.....S...**Single Shaft  
Albero lento semplice**P63Q.....D...**Double Shaft  
Albero lento bisp.

1 kit cod. K063.5.028 type B

2 kit cod. K063.5.029 type B

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

|        | b1 | c1 | d1                                     | e1   | f1  | l1    | m1    | n1  | t2 | o1    |
|--------|----|----|----------------------------------------|------|-----|-------|-------|-----|----|-------|
| type B | 8  | 60 | 25 <sup>-0.005</sup> <sub>-0.020</sub> | 63.2 | 120 | 246.4 | 126.8 | 190 | 28 | M8x20 |
| type S | -  | -  | -                                      | -    | -   | -     | -     | -   | -  | -     |



## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |   | Available<br>B14 motor flanges |     |   | Dynamic efficiency | Tooth Module<br><br>[mm] | Ratio code<br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|---|--------------------------------|-----|---|--------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | B                             | C | O                              | P   | Q | RD                 |                                                                                                             |                                                                                                   |
| 5.6                                           | <b>252</b>   | 0.25                            | 198                               | 1.3                    | <b>0.33</b>                       | <b>265</b>                         | <b>B</b>                      |   | B-C                            | B-C |   | 46                 | 2.7                                                                                                         | 01                                                                                                |
| 3.9                                           | <b>360</b>   | 0.18                            | 186                               | 1.4                    | <b>0.26</b>                       | <b>265</b>                         | <b>B</b>                      |   | B-C                            | B-C |   | 42                 | 2.7                                                                                                         | 02                                                                                                |
| 2.8                                           | <b>504</b>   | 0.18                            | 241                               | 1.1                    | <b>0.20</b>                       | <b>265</b>                         | <b>B</b>                      |   | B-C                            | B-C |   | 39                 | 2.7                                                                                                         | 03                                                                                                |
| 1.9                                           | <b>756</b>   | 0.12                            | 204                               | 1.3                    | <b>0.16</b>                       | <b>265</b>                         | <b>B</b>                      |   | B-C                            | B-C |   | 33                 | 2.7                                                                                                         | 04                                                                                                |
| 1.4                                           | <b>1008</b>  | 0.12                            | 256                               | 1.0                    | <b>0.12</b>                       | <b>265</b>                         | <b>B</b>                      |   | B-C                            | B-C |   | 31                 | 2.7                                                                                                         | 05                                                                                                |
| 1.1                                           | <b>1332</b>  | 0.12*                           | 265                               | <0.8                   | <b>0.10</b>                       | <b>265</b>                         | <b>B</b>                      |   | B-C                            | B-C |   | 30                 | 2.7                                                                                                         | 06                                                                                                |
| 0.8                                           | <b>1656</b>  | 0.12*                           | 265                               | <0.8                   | <b>0.08</b>                       | <b>265</b>                         | <b>B</b>                      |   | B-C                            | B-C |   | 28                 | 2.7                                                                                                         | 07                                                                                                |
| 0.6                                           | <b>2160</b>  | 0.12*                           | 265                               | <0.8                   | <b>0.07</b>                       | <b>265</b>                         | <b>B</b>                      |   | B-C                            | B-C |   | 26                 | 2.7                                                                                                         | 08                                                                                                |
| 0.6                                           | <b>2520</b>  | 0.12*                           | 265                               | <0.8                   | <b>0.06</b>                       | <b>265</b>                         | <b>B</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 **64Q** 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 **64Q** 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 **64Q** 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 **64Q** 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 **64Q** 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.

**0.30 Lt.**

**0.09 Lt.**

**LUBRICATION 64Q Oil**  
Quantity 0.30/0.09 Lt.

**AGIP** Telium VSF 320

**SHELL** Omala S4 WE 320

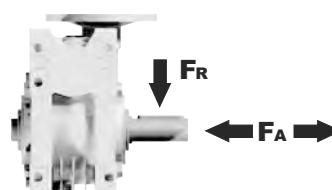
For all details on lubrication and plugs check our website  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

## RADIAL AND AXIAL LOADS

### Output shaft

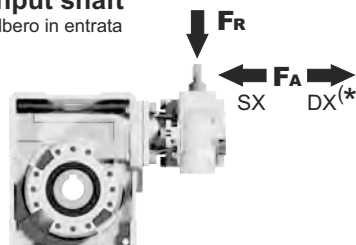
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | $F_A$<br>[N] | $F_R$<br>[N] |
|-------------------------------|--------------|--------------|
| 25                            | 700          | 3800         |
| 15                            | 800          | 4000         |

### Input shaft

albero in entrata



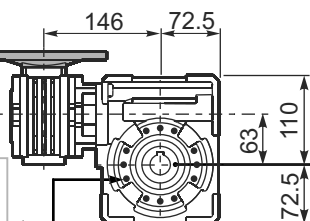
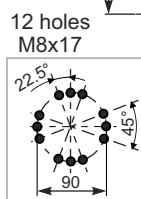
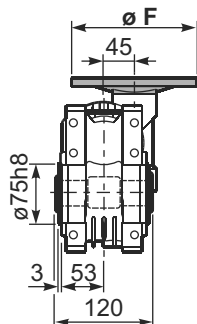
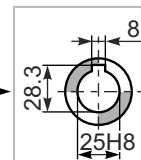
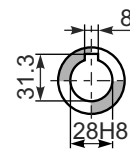
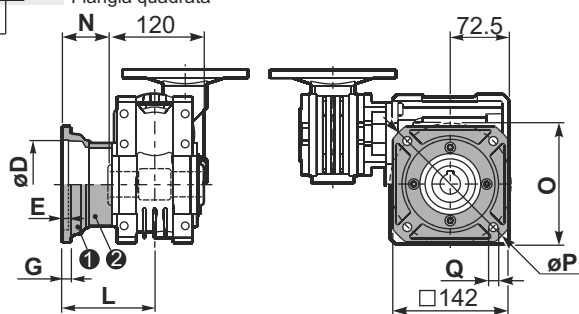
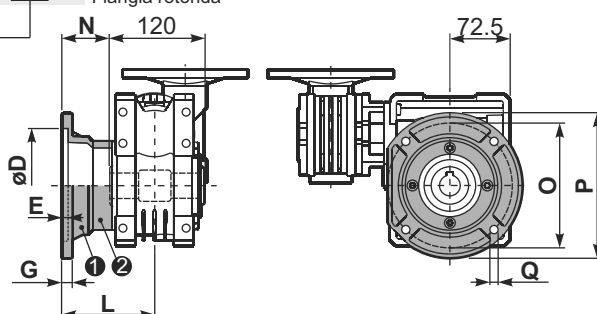
| $n_1$<br>[min <sup>-1</sup> ] | $F_A$<br>[N] | $F_R$<br>[N] |
|-------------------------------|--------------|--------------|
| 1400                          | 42           | 210          |

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

tab. 2

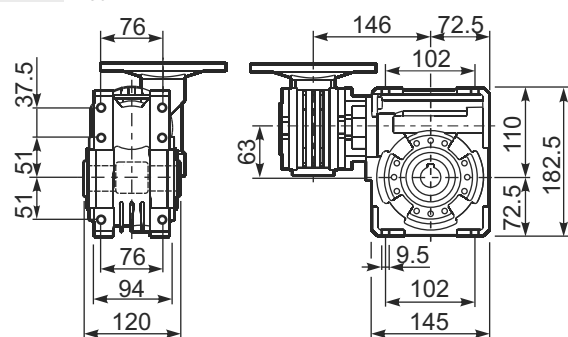
**P64QFB...**Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore**7.25 kg**

| M. flanges   | Kit code   | øF  | A    |
|--------------|------------|-----|------|
| <b>63B5</b>  | K050.4.041 | 138 | 72   |
| <b>71B5</b>  | K050.4.042 | 160 | 70   |
| <b>56B14</b> | KC40.4.049 | 80  | 71.5 |
| <b>63B14</b> | K050.4.047 | 90  | 74   |
| <b>71B14</b> | K050.4.045 | 105 | 71.5 |

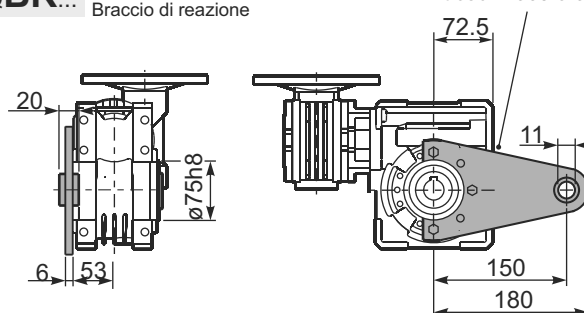
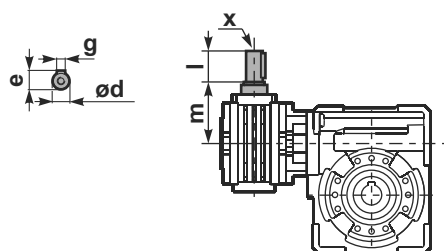
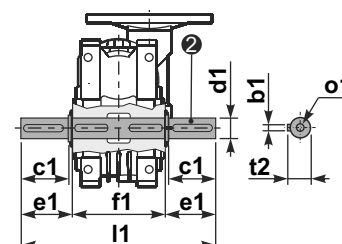
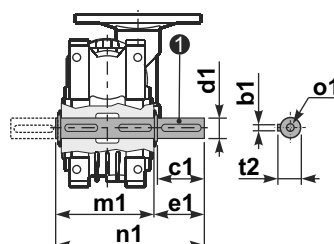
Mounting holes position  
Posizione fori di montaggioStandard  
Hollow shaftOn Request  
A richiesta**P64QFC...**Square flange  
Flangia quadrata**P64QF1...**Round flange  
Flangia rotonda

| type B    | øD                                    | E | G  | L   | N  | O   | P   | Q  | kit code                     |
|-----------|---------------------------------------|---|----|-----|----|-----|-----|----|------------------------------|
| <b>FC</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 6 | 12 | 86  | 26 | 150 | 180 | 11 | ① KQ63.9.010<br>② -          |
| <b>FL</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 6 | 12 | 116 | 56 | 150 | 180 | 11 | ① KQ63.9.010<br>② K063.0.200 |

| type S    | øD                                    | E | G  | L   | N  | O   | P   | Q  | kit code             |
|-----------|---------------------------------------|---|----|-----|----|-----|-----|----|----------------------|
| <b>F1</b> | 130 <sup>+0.20</sup> <sub>+0.15</sub> | 7 | 13 | 110 | 50 | 165 | 200 | 13 | ① KS070.9.013<br>② - |
| <b>F2</b> | 115 <sup>+0.20</sup> <sub>+0.15</sub> | 7 | 13 | 124 | 64 | 150 | 175 | 11 | ① KS063.9.013<br>② - |
| <b>F3</b> | 110 <sup>+0.035</sup> <sub>0</sub>    | 5 | 11 | 90  | 30 | 130 | 160 | 10 | ① KS063.9.011<br>② - |

**P64QFB...**Feet  
Piedini**P64QBR...**Reaction arm  
Braccio di reazione

kit cod. K063.9.027

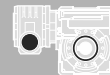
**R64QFB...**Input shaft  
Albero in entrata**P64Q.....S...**Single Shaft  
Albero lento semplice**P64Q.....D...**Double Shaft  
Albero lento bisp.

① kit cod. K063.5.028 type B

② kit cod. K063.5.029 type B

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

|        | b1 | c1 | d1                                     | e1   | f1  | l1    | m1    | n1  | t2 | o1    |
|--------|----|----|----------------------------------------|------|-----|-------|-------|-----|----|-------|
| type B | 8  | 60 | 25 <sup>-0.005</sup> <sub>-0.020</sub> | 63.2 | 120 | 246.4 | 126.8 | 190 | 28 | M8x20 |
| type S | -  | -  | -                                      | -    | -   | -     | -     | -   | -  | -     |



## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available<br>B5 motor flanges |   | Available<br>B14 motor flanges |     |   | Dynamic efficiency | Tooth Module<br><br>[mm] | Ratio code<br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|-------------------------------|---|--------------------------------|-----|---|--------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | B                             | C | O                              | P   | Q | RD                 |                                                                                                             |                                                                                                   |
| 5                                             | 280          | 0.37                            | 403                               | 0.9                    | 0.33                              | 359                                | B                             |   | B-C                            | B-C |   | 57                 | 3.10                                                                                                        | 01                                                                                                |
| 3.5                                           | 400          | 0.25                            | 314                               | 1.1                    | 0.29                              | 359                                | B                             |   | B-C                            | B-C |   | 46                 | 3.10                                                                                                        | 02                                                                                                |
| 2.5                                           | 560          | 0.25                            | 420                               | 0.9                    | 0.21                              | 359                                | B                             |   | B-C                            | B-C |   | 44                 | 3.10                                                                                                        | 03                                                                                                |
| 1.7                                           | 840          | 0.18                            | 423                               | 0.8                    | 0.15                              | 359                                | B                             |   | B-C                            | B-C |   | 41                 | 3.10                                                                                                        | 04                                                                                                |
| 1.3                                           | 1120         | 0.12                            | 339                               | 1.1                    | 0.13                              | 359                                | B                             |   | B-C                            | B-C |   | 37                 | 3.10                                                                                                        | 05                                                                                                |
| 0.9                                           | 1480         | 0.09                            | 336                               | 1.1                    | 0.10                              | 359                                | B                             |   | B-C                            | B-C |   | 37                 | 3.10                                                                                                        | 06                                                                                                |
| 0.8                                           | 1840         | 0.09                            | 373                               | 1.0                    | 0.09                              | 359                                | B                             |   | B-C                            | B-C |   | 33                 | 3.10                                                                                                        | 07                                                                                                |
| 0.6                                           | 2400         | 0.06                            | 275                               | 1.3                    | 0.08                              | 359                                | B                             |   | B-C                            | B-C |   | 28                 | 3.10                                                                                                        | 08                                                                                                |
| 0.5                                           | 2800         | 0.06                            | 298                               | 1.2                    | 0.07                              | 359                                | B                             |   | B-C                            | B-C |   | 26                 | 3.10                                                                                                        | 09                                                                                                |
| 0.3                                           | 4080         | 0.06                            | 250                               | 1.4                    | 0.09                              | 359                                | B                             |   | B-C                            | B-C |   | 15                 | 3.10                                                                                                        | 10                                                                                                |

 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 74Q 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 74Q 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 74Q 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 74Q 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 74Q 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 74Q Oil**  
Quantity 0.40/0.09 Lt.

0.40 Lt.  0.09 Lt.

AGIP Telium VSF 320

SHELL Omala S4 WE 320

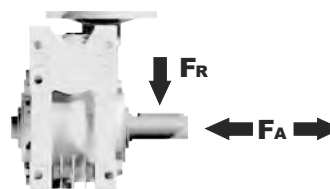
For all details on lubrication and plugs check our website  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

## RADIAL AND AXIAL LOADS

### Output shaft

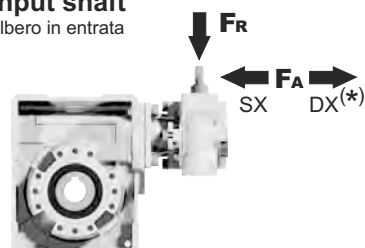
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 25                            | 880       | 4400      |
| 15                            | 1000      | 5000      |

### Input shaft

albero in entrata



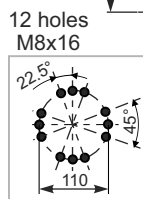
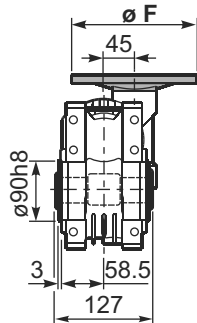
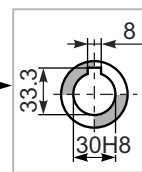
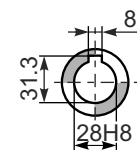
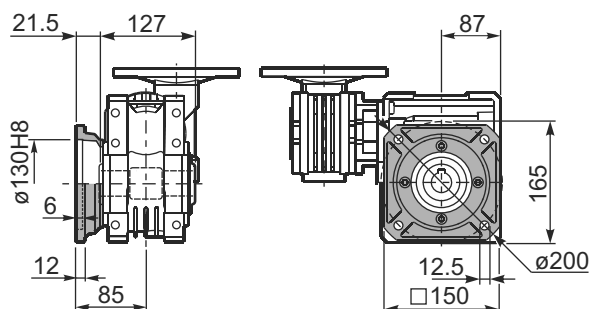
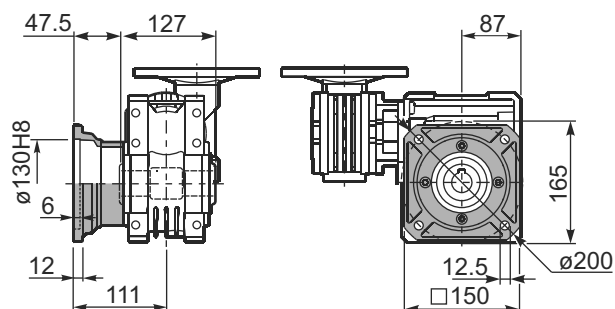
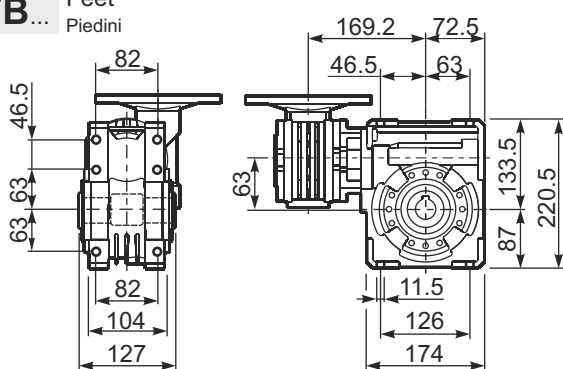
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 42        | 210       |

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

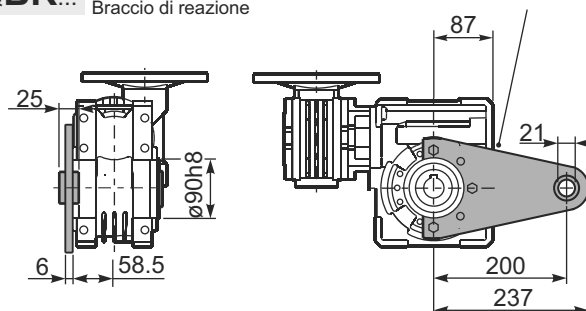
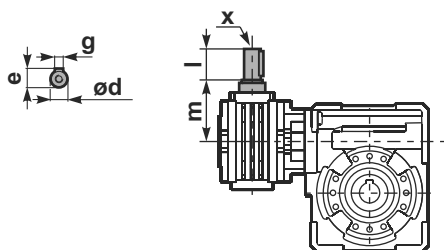
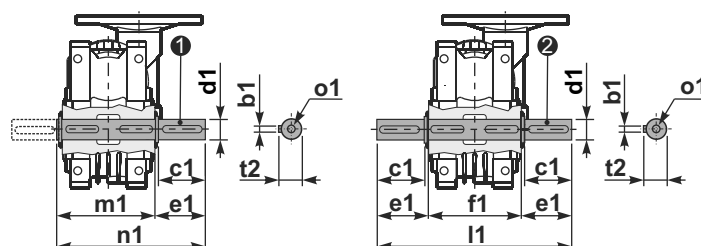
tab. 2

**P74QFB...** Basic wormbox  
Riduttore baseGearbox weight  
peso riduttore **11.4 kg**

| M. flanges   | Kit code   | øF  | A    |
|--------------|------------|-----|------|
| <b>63B5</b>  | K050.4.041 | 138 | 72   |
| <b>71B5</b>  | K050.4.042 | 160 | 70   |
| <b>56B14</b> | KC40.4.049 | 80  | 71.5 |
| <b>63B14</b> | K050.4.047 | 90  | 74   |
| <b>71B14</b> | K050.4.045 | 105 | 71.5 |

**Mounting holes position**  
Posizione fori di montaggio**Standard**  
Hollow shaft**On request**  
A richiesta**P74QFC...** Square flange  
Flangia quadrata**P74QFL...** Square flange  
Flangia quadrata**P74QFB...** Feet  
Piedini**P74QBR...** Reaction arm  
Braccio di reazione

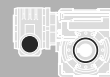
kit cod. KQ75.9.027

**R74QFB...** Input shaft  
Albero in entrata**P74Q.....S...** Single Shaft  
Albero lento semplice**P74Q.....D...** Double Shaft  
Albero lento bisp.① kit cod. KQ75.5.028 Standard  
kit cod. KQ75.5.026 On request② kit cod. KQ75.5.029 Standard  
kit cod. KQ75.5.027 On request

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

|                   | b1 | c1 | d1                          | e1 | f1  | l1  | m1  | n1  | t2 | o1    |
|-------------------|----|----|-----------------------------|----|-----|-----|-----|-----|----|-------|
| <b>Standard</b>   | 8  | 60 | 30 <sup>-0.005/-0.020</sup> | 65 | 127 | 255 | 134 | 199 | 33 | M8x20 |
| <b>On request</b> | 8  | 60 | 28 <sup>-0.005/-0.020</sup> | 65 | 127 | 255 | 134 | 199 | 31 | M8x20 |





## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available B5 motor flanges |   | Available B14 motor flanges |     |   | Dynamic efficiency | Tooth Module<br>[mm] | Ratio code<br> |
|-----------------------------------------------|--------------|---------------------------------|-----------------------------------|------------------------|-----------------------------------|------------------------------------|----------------------------|---|-----------------------------|-----|---|--------------------|----------------------|----------------|
|                                               |              |                                 |                                   |                        |                                   |                                    | B                          | C | O                           | P   | Q | RD                 |                      |                |
| 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 **84Q** 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 **84Q** 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 **84Q** 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 **84Q** 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 **84Q** 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.

| B3                  | B6          | B7          | B8                    | V5          | V6          |
|---------------------|-------------|-------------|-----------------------|-------------|-------------|
| 1.2/0.09LT          | 1.2/0.09 LT | 1.2/0.09 LT | 1.2/0.09 LT           | 1.2/0.09 LT | 1.2/0.09 LT |
| AGIP Telium VSF 320 |             |             | SHELL Omala S4 WE 320 |             |             |

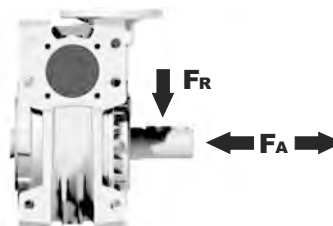
For all details on lubrication and plugs check our website  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

## RADIAL AND AXIAL LOADS

### Output shaft

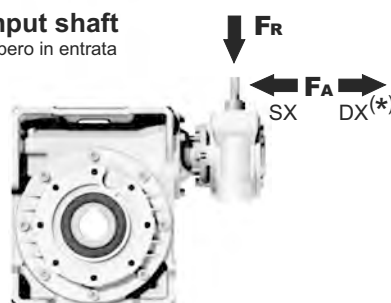
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 25                            | 1000      | 5000      |
| 15                            | 1160      | 5800      |

### Input shaft

albero in entrata



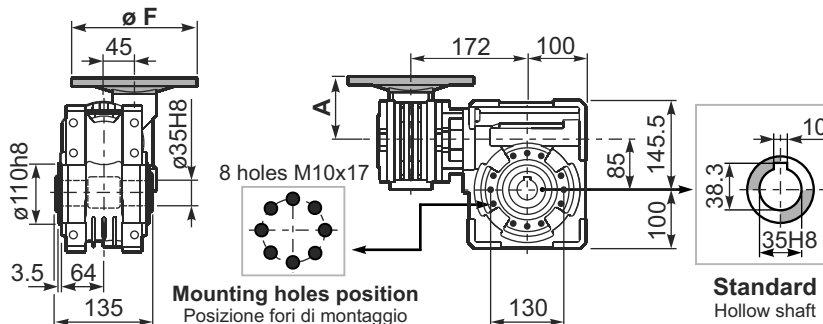
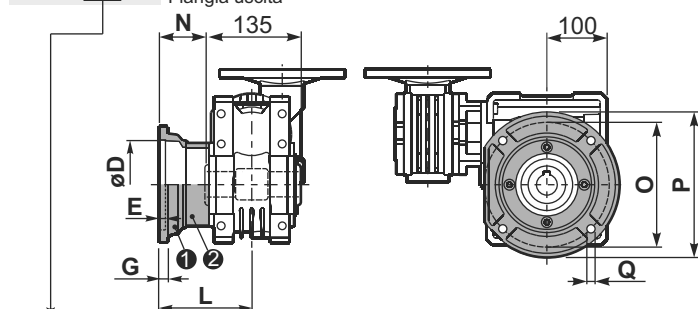
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 42        | 210       |

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

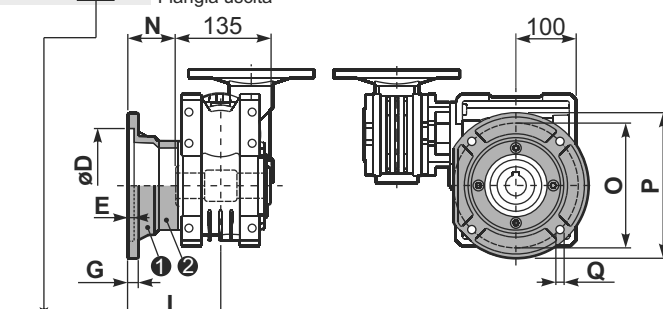
tab. 2

**P84QFB...** Basic wormbox  
Riduttore baseGearbox weight  
peso riduttore **22.8 kg**

| M. flanges   | Kit code   | øF  | A    |
|--------------|------------|-----|------|
| <b>63B5</b>  | K050.4.041 | 138 | 72   |
| <b>71B5</b>  | K050.4.042 | 160 | 70   |
| <b>56B14</b> | KC40.4.049 | 80  | 71.5 |
| <b>63B14</b> | K050.4.047 | 90  | 74   |
| <b>71B14</b> | K050.4.045 | 105 | 71.5 |

**P84QFC...** Output flange  
Flangia uscita**P84QF1...** Output flange  
Flangia uscita

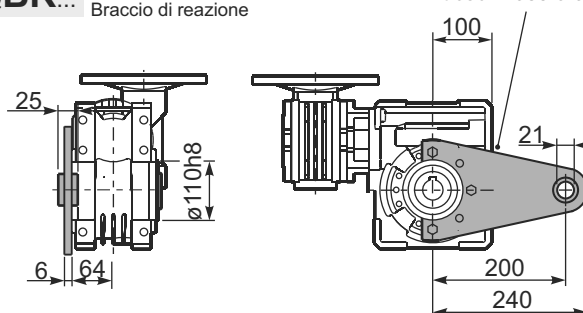
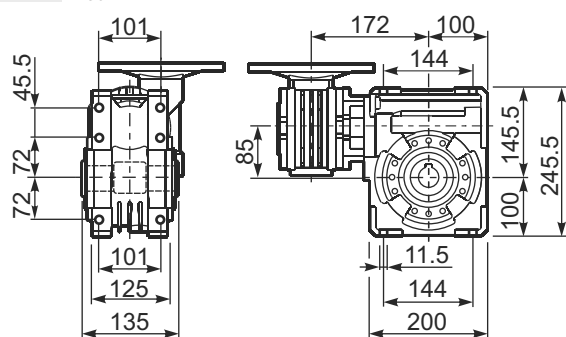
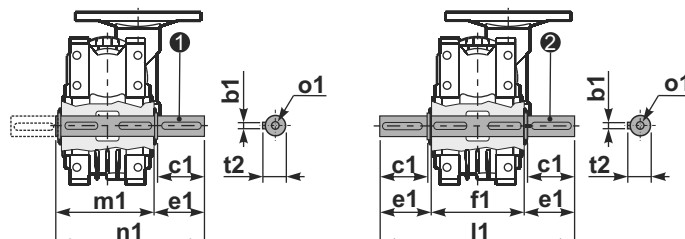
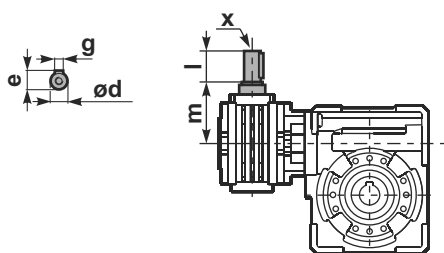
| type B    | øD                                    | E | G  | L     | N    | O   | P   | Q  | kit code                     |
|-----------|---------------------------------------|---|----|-------|------|-----|-----|----|------------------------------|
| <b>FC</b> | 152 <sup>+0.06</sup> <sub>+0.00</sub> | 5 | 16 | 108   | 40.5 | 176 | 205 | 13 | 1 K085.9.010<br>2 -          |
| <b>FL</b> | 152 <sup>+0.06</sup> <sub>+0.00</sub> | 5 | 16 | 148.5 | 81   | 176 | 205 | 13 | 1 K085.9.010<br>2 K085.0.201 |



| type S    | øD                                    | E | G  | L     | N  | O   | P   | Q    | kit code             |
|-----------|---------------------------------------|---|----|-------|----|-----|-----|------|----------------------|
| <b>F1</b> | 130 H7                                | 5 | 13 | 117.5 | 50 | 165 | 200 | 11.5 | 1 KS085.9.012<br>2 - |
| <b>F2</b> | 152 <sup>+0.06</sup> <sub>+0.00</sub> | 5 | 15 | 147.5 | 80 | 180 | 205 | 12.5 | 1 KS085.9.013<br>2 - |
| <b>F4</b> | 130 H7                                | 5 | 13 | 106.5 | 39 | 165 | 200 | 13   | 1 KS085.9.015<br>2 - |

**P84QFB...** Feet  
Piedini**P84QBR...** Reaction arm  
Braccio di reazione

kit cod. K085.9.027

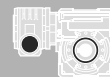
**R84QFB...** Input shaft  
Albero in entrata**P84Q.....S** Single Shaft  
Albero lento semplice**P84Q.....D** Double Shaft  
Albero lento bisp.

1 kit cod. K085.5.028 type B

2 kit cod. K085.5.029 type B

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

|        | b1 | c1 | d1                                     | e1   | f1  | l1  | m1  | n1    | t2 | o1     |
|--------|----|----|----------------------------------------|------|-----|-----|-----|-------|----|--------|
| type B | 10 | 60 | 35 <sup>-0.005</sup> <sub>-0.020</sub> | 73.5 | 135 | 282 | 141 | 214.5 | 38 | M10x23 |
| type S | -  | -  | -                                      | -    | -   | -   | -   | -     | -  | -      |



## QUICK SELECTION / Selezione veloce

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

| Output Speed<br>$n_2$<br>[min <sup>-1</sup> ] | Ratio<br>$i$ | Motor power<br>$P_{1M}$<br>[kW] | Output torque<br>$M_{2M}$<br>[Nm] | Service factor<br>f.s. | Nominal power<br>$P_{1R}$<br>[kW] | Nominal torque<br>$M_{2R}$<br>[Nm] | Available B5 motor flanges |    |    | Available B14 motor flanges |     |    |    | Dynamic efficiency<br>RD | Tooth Module<br>[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

**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 15Q 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 15Q 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. 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 15Q 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 lebensdauergeschmiert. In Tabelle 1 ist die Schmiermenge und das empfohlene Schmiermittel angegeben. In Tabelle 2 sind die zulässigen Radial - und Axialbelastungen des Getriebes aufgeführt.

**F** Le réducteur de type 15Q est fourni sans lubrification et avec un bouchon de remplissage, de niveau et d'évacuation de l'huile. L'utilisateur peut verser de l'huile minérale en conservant les bouchons existants. S'il y versera de l'huile synthétique, il devra substituer les bouchons existants avec d'autres bouchons de type fermé. 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 15Q 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          |
| 2.0/0.14LT | 1.5/0.14 LT | 1.5/0.14 LT | 2.0/0.14 LT | 2.0/0.14 LT | 2.0/0.14 LT |

AGIP Blasias 460

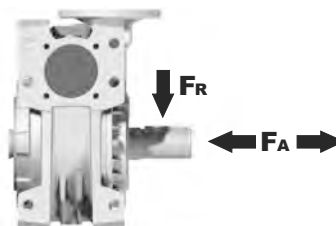
For all details on lubrication and plugs check our website  
Per maggiori dettagli su lubrificazione e tappi olio vedi il nostro sito web

tab. 1

## RADIAL AND AXIAL LOADS

### Output shaft

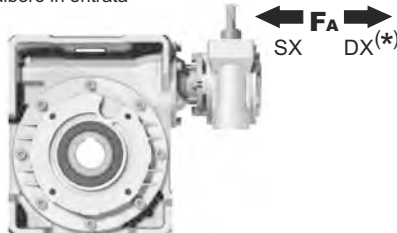
Albero di uscita



| $n_2$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 25                            | 1200      | 6000      |
| 15                            | 1400      | 7000      |

### Input shaft

albero in entrata



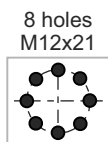
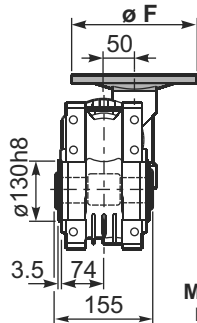
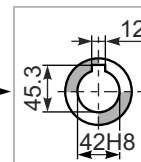
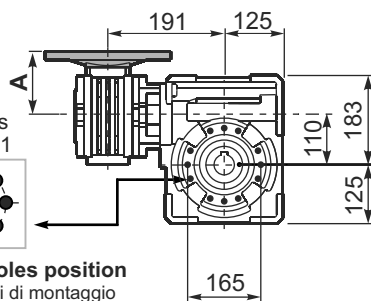
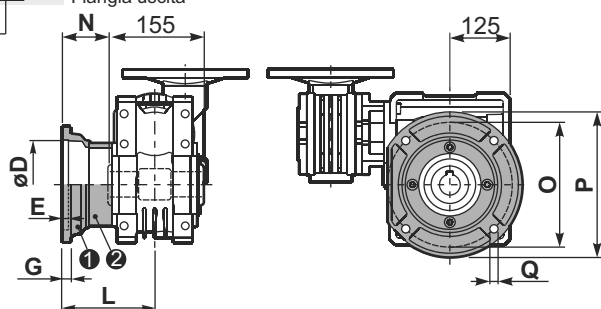
| $n_1$<br>[min <sup>-1</sup> ] | FA<br>[N] | FR<br>[N] |
|-------------------------------|-----------|-----------|
| 1400                          | 76        | 380       |

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

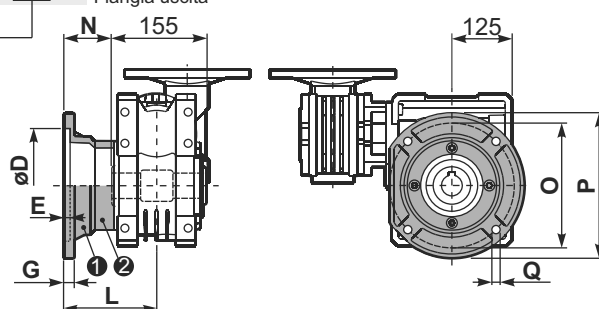
tab. 2

**P15QFB...**Basic wormbox  
Riduttore baseGearbox  
weight  
peso riduttore**38.8 kg**

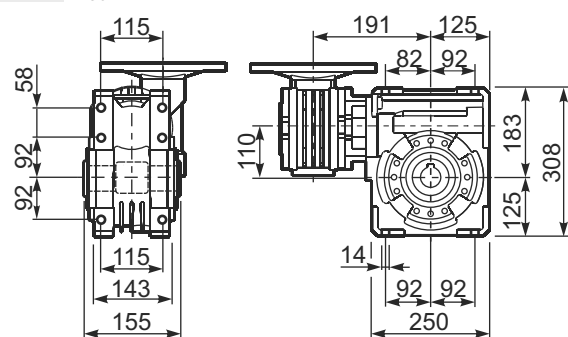
| M. flanges   | Kit code   | øF  | A    |
|--------------|------------|-----|------|
| <b>63B5</b>  | K050.4.041 | 138 | 76.5 |
| <b>71B5</b>  | K050.4.042 | 160 | 74.5 |
| <b>80B5</b>  | K050.4.043 | 200 | 76.5 |
| <b>56B14</b> | KC40.4.049 | 80  | 76   |
| <b>63B14</b> | K050.4.047 | 90  | 78.5 |
| <b>71B14</b> | K050.4.045 | 105 | 76   |
| <b>80B14</b> | K050.4.046 | 120 | 76.5 |

Mounting holes position  
Posizione fori di montaggioStandard  
Hollow shaft**P15QFC...**Output flange  
Flangia uscita

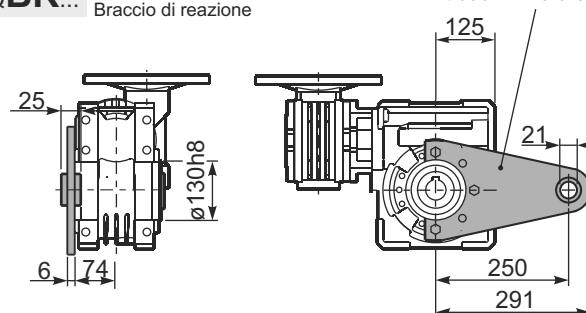
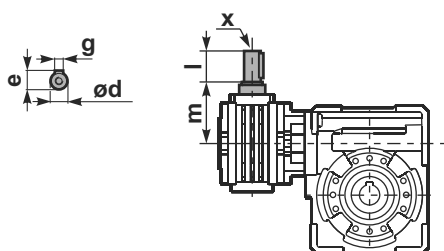
| type B    | øD                                      | E  | G    | L     | N   | O   | P   | Q  | kit code            |
|-----------|-----------------------------------------|----|------|-------|-----|-----|-----|----|---------------------|
| <b>FC</b> | 170 <sup>+0.083</sup> <sub>+0.043</sub> | 11 | 16.5 | 131.5 | 54  | 230 | 270 | 13 | ① K110.9.010<br>② - |
| <b>FL</b> | 170 <sup>+0.083</sup> <sub>+0.043</sub> | 11 | 16.5 | 179.5 | 102 | 230 | 270 | 13 | ① K110.9.011<br>② - |

**P15QF1...**Output flange  
Flangia uscita

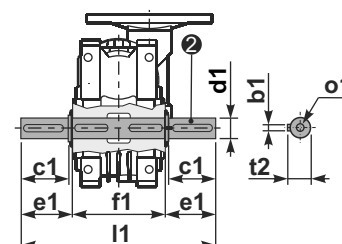
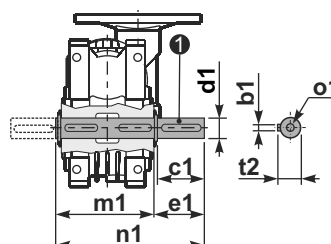
| type S    | øD                                      | E   | G  | L   | N     | O   | P   | Q  | kit code             |
|-----------|-----------------------------------------|-----|----|-----|-------|-----|-----|----|----------------------|
| <b>F1</b> | 180 <sup>+0.040</sup> <sub>0</sub>      | 5   | 18 | 150 | 72.5  | 215 | 250 | 15 | ① KS110.9.014<br>② - |
| <b>F2</b> | 170 <sup>+0.083</sup> <sub>+0.043</sub> | 9.5 | 15 | 178 | 100.5 | 230 | 270 | 13 | ① KS110.9.012<br>② - |
| <b>F3</b> | 180 <sup>+0.040</sup> <sub>0</sub>      | 5   | 18 | 130 | 52.5  | 215 | 250 | 15 | ① KS110.9.013<br>② - |

**P15QFB...**Feet  
Piedini**P15QBR...**Reaction arm  
Braccio di reazione

kit cod. K110.9.027

**R15QFB...**Input shaft  
Albero in entrata

|        | ød    | e  | g | l  | m    | x     | kit code                                   |
|--------|-------|----|---|----|------|-------|--------------------------------------------|
| type B | 16 h6 | 18 | 5 | 30 | 79.5 | M6x16 | ① K050.5.006 PAM71<br>② K050.5.007 PAM80   |
| type S | 14 h6 | 16 | 5 | 30 | 79.5 | M5x10 | ① KS050.5.008 PAM71<br>② KS050.5.009 PAM80 |

**P15Q.....S...**Single Shaft  
Albero lento semplice**P15Q.....D...**Double Shaft  
Albero lento bisp.

① kit cod. K110.5.028 type B

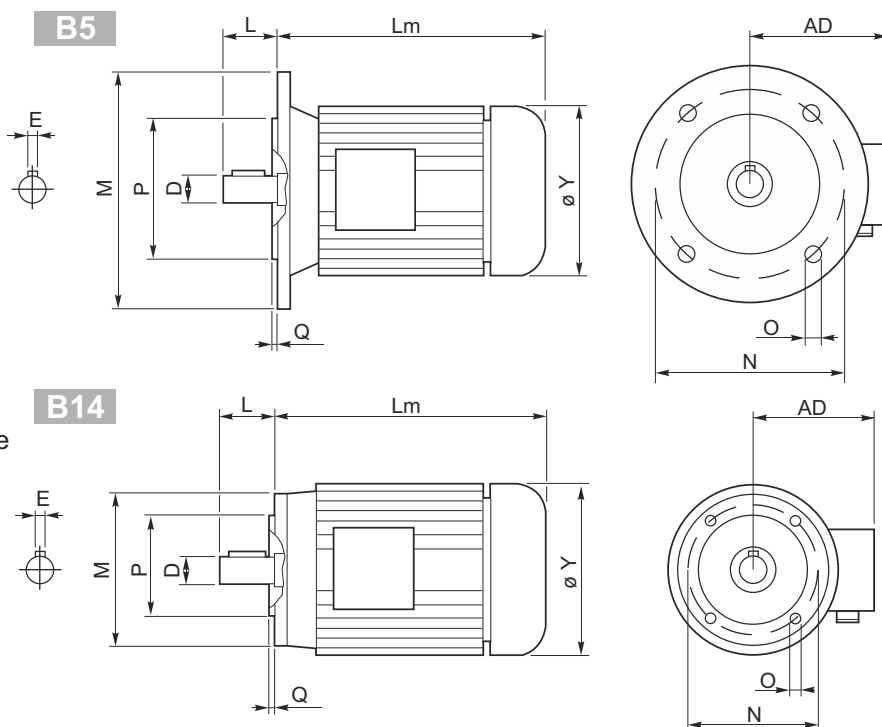
② kit cod. K110.5.029 type B

|        | b1 | c1 | d1                                     | e1   | f1  | l1  | m1    | n1  | t2 | o1     |
|--------|----|----|----------------------------------------|------|-----|-----|-------|-----|----|--------|
| type B | 12 | 75 | 42 <sup>-0.005</sup> <sub>-0.020</sub> | 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 may be different according to manufacturers.

Le dimensioni esterne sono indicative, possono variare tra i vari costruttori.

|        | 2 poli / poles |      |             | 4 poli / poles |      |             | 6 poli / poles |      |             | B5-B14 |    |     |     |     |     | B5  |     |     |      |     | B14 |     |     |     |     | Kg   |
|--------|----------------|------|-------------|----------------|------|-------------|----------------|------|-------------|--------|----|-----|-----|-----|-----|-----|-----|-----|------|-----|-----|-----|-----|-----|-----|------|
|        | kW             | Nm   | A<br>(400V) | kW             | Nm   | A<br>(400V) | kW             | Nm   | A<br>(400V) | D      | E  | L   | Lm  | Y   | AD  | P   | N   | M   | O    | Q   | P   | N   | M   | O   | Q   |      |
| 56 A   | 0.09           | 0.32 | 0.38        | 0.06           | 0.44 | 0.27        | —              | —    | —           | 9      | 3  | 20  | 179 | 108 | 96  | 80  | 100 | 120 | 7    | 2.5 | 50  | 65  | 80  | M5  | 2.5 | 2.7  |
| 56 B   | 0.12           | 0.42 | 0.46        | 0.09           | 0.67 | 0.37        | —              | —    | —           |        |    |     |     |     |     |     |     |     |      |     |     |     |     |     |     | 2.9  |
| 63 A   | 0.18           | 0.63 | 0.60        | 0.12           | 0.84 | 0.50        | 0.09           | 0.99 | 0.57        | 11     | 4  | 23  | 185 | 120 | 99  | 95  | 115 | 140 | 9.5  | 3   | 60  | 75  | 90  | M5  | 2.5 | 3.8  |
| 63 B   | 0.25           | 0.87 | 0.76        | 0.18           | 1.30 | 0.69        | 0.12           | 1.32 | 0.74        |        |    |     |     |     |     |     |     |     |      |     |     |     |     |     |     | 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        |        |    |     | 225 | 141 | 107 |     |     |     |      |     |     |     |     |     |     | 6.5  |
| 80 A   | 0.75           | 2.60 | 1.85        | 0.55           | 3.77 | 1.51        | 0.37           | 3.84 | 1.18        | 19     | 6  | 40  | 256 | 159 | 127 | 130 | 165 | 200 | 11.5 | 3.5 | 80  | 100 | 120 | M6  | 3   | 8.5  |
| 80 B   | 1.1            | 3.90 | 2.64        | 0.75           | 5.11 | 2.57        | 0.55           | 5.84 | 1.80        |        |    |     |     |     |     |     |     |     |      |     |     |     |     |     |     | 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        |        |    |     | 280 |     |     |     |     |     |      |     |     |     |     |     |     | 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        | —              | —    | —           |        |    |     |     |     |     |     |     |     |      |     |     |     |     |     |     | 22   |
| 112 M  | 4.0            | 13.4 | 8.10        | 4.0            | 26.7 | 8.55        | 2.2            | 22.6 | 5.30        |        |    |     | 321 | 210 | 164 |     |     |     |      |     |     |     |     |     |     | 35   |
| 132 S  | 5.5            | 18.3 | 11.2        | 5.5            | 36.5 | 11.4        | 3.0            | 30.2 | 7.20        | 38     | 10 | 80  | 375 |     |     | 230 | 265 | 300 | 14   | 4   | 130 | 165 | 200 | M10 | 4   | 41   |
|        | 7.5            | 24.9 | 15.3        |                |      |             |                |      |             |        |    |     | 244 | 180 |     | 250 | 265 | 300 | 14   | 4   | 130 | 165 | 200 | M10 | 4   | 51   |
| 132 M  | —              | —    | —           | 7.5            | 49.4 | 15.0        | 4.0            | 40.0 | 9.13        |        |    |     | 420 |     |     |     |     |     |      |     |     |     |     |     |     | 51   |
|        |                |      |             | 9              | 61.4 | 18.5        |                |      |             |        |    |     |     |     |     |     |     |     |      |     |     |     |     |     |     |      |
| 160 M  | —              | —    | —           | 11             | 72   | 21.5        | —              | —    | —           | 42     | 12 | 110 | 503 | 335 | 246 | 250 | 300 | 350 | 18   | 5   | —   | —   | —   | —   | —   | 79.2 |
| 160 L  | —              | —    | —           | 15             | 98   | 29          | —              | —    | —           |        |    |     | 547 |     |     |     |     |     |      |     |     |     |     |     |     | 97.5 |
| 180 M  | —              | —    | —           | 18.5           | 121  | 35.5        | —              | —    | —           | 48     | 14 | 110 | 602 | 366 | 266 | 250 | 300 | 350 | 19   | 5   | —   | —   | —   | —   | —   | 170  |
| 180 L  | —              | —    | —           | 22             | 144  | 42          | —              | —    | —           |        |    |     |     |     |     |     |     |     |      |     |     |     |     |     |     |      |



**Metric electric motors are in aluminum.**  
On request they can be supplied with different  
Level of protection and painted with 2 or 3  
level of anticorrosive paint.

*I motori metrici sono in alluminio,  
su richiesta possono essere forniti  
con differenti livelli di protezione e  
verniciati con vernice  
anticorrosiva.*

**Protection**

Standard IP55

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

**Grado di protezione**

IP55 Standard

Specificare in sede di ordinazione per IP superiore.

**Schutzart**

IP55 Standard.

Höheren IP Grad bitte im Auftrag angeben.

**Degré de protection**

IP55 standard.

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

**Grado de protección**

IP55 standard.

Especificar en el pedido cuando necesiten protección IP superior.

**Insulation**

Standard Cl.F

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

**Isolamento**

Cl.F Standard

Specificare in sede di ordinazione classe di isolamento diversa.

**Isolierung**

Cl.F Standard.

Davon abweichende Isolierungsklasse im Auftrag angeben.

**Isolement**

Cl.F Standard.

Au moment de la commande, spécifiez une classe d'isolement différente.

**Aislamiento**

Cl.F standard.

Especificar al efectuar el pedido la clase diferente de aislamiento.

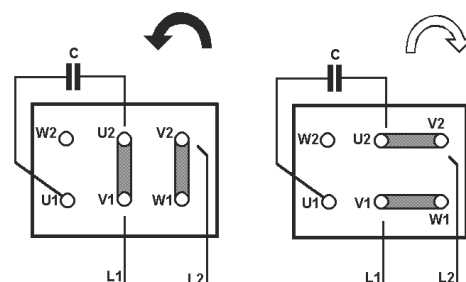
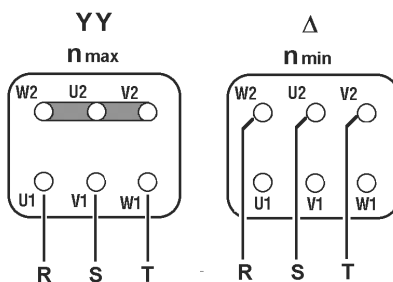
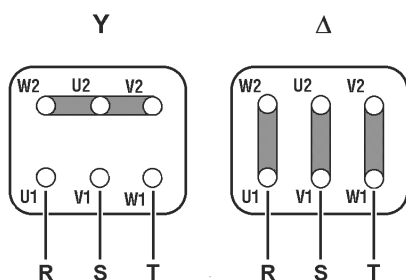
| Insulation / Isolamento<br>Isolierung / Aislamiento |    | E    | B    | F    | H    |
|-----------------------------------------------------|----|------|------|------|------|
| Max. temp.                                          | C° | 120° | 130° | 155° | 175° |
|                                                     | 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



[illegible]

## Please Read Carefully

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

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

## WARNING:

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

## SELLING CONDITIONS

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

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

## Leggere attentamente

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

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

## ATTENZIONE!

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

## CONDIZIONI DI VENDITA

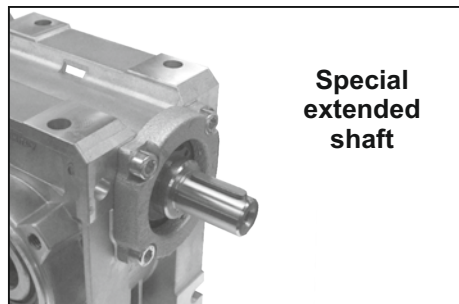
La garanzia relativa a difetti di costruzione ha la durata di un anno dalla data di fatturazione della merce. Tale garanzia comporta per Hydro-mec l'onere della sostituzione o riparazione delle parti difettose ma non ammette ulteriori addebiti per eventuali danni diretti o indiretti di qualsiasi natura.

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

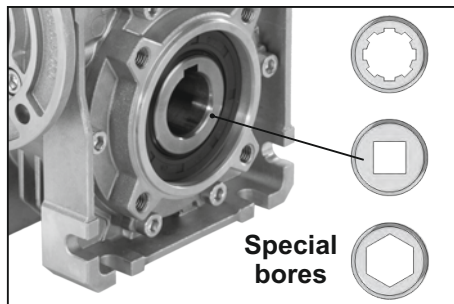
**La nostra ditta non si ritiene responsabile per eventuali danni diretti o indiretti derivanti da un uso improprio dei prodotti e dalla mancata osservanza delle indicazioni riportate a catalogo o web..**



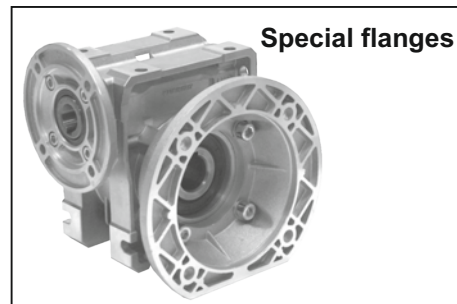
# New options available



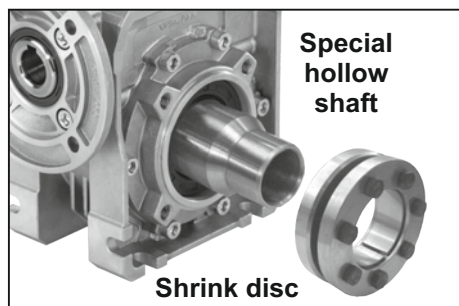
Special  
extended  
shaft



Special  
bores

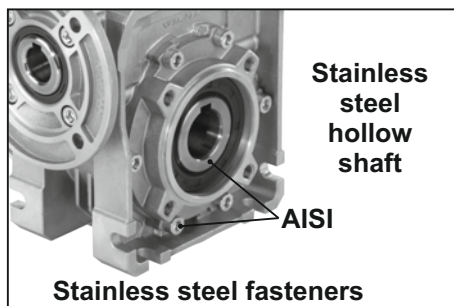


Special flanges



Special  
hollow  
shaft

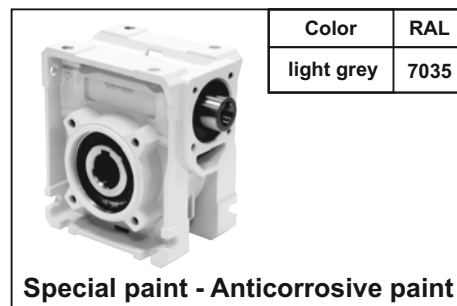
Shrink disc



Stainless  
steel  
hollow  
shaft

AISI

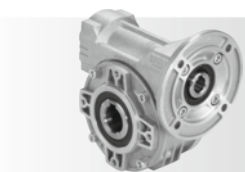
Stainless steel fasteners



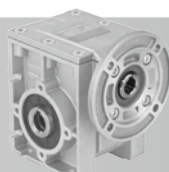
| Color      | RAL  |
|------------|------|
| light grey | 7035 |

Special paint - Anticorrosive paint

## Others HYDRO-MEC products



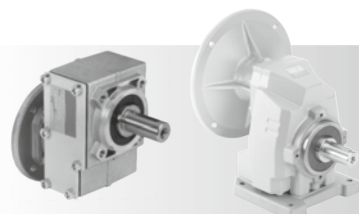
Worm gearboxes  
Rid. a vite senza fine



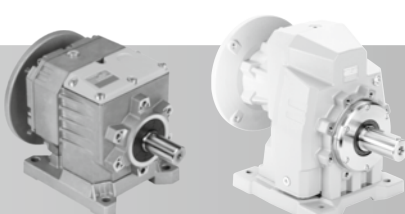
S series square worm gearboxes  
Rid. a vite senza fine quadro serie S



Stainless steel worm gearboxes  
Rid. a vite senza fine Inox



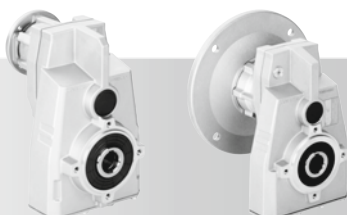
One step gearboxes  
Riduttori ad uno stadio



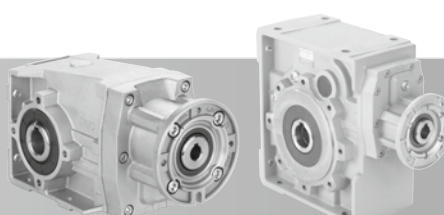
Coaxial gearboxes  
Riduttori coassiali



Stainless steel coaxial gearboxes  
Riduttori coassiali Inox



Shaft mounted gearboxes  
Riduttori pendolari

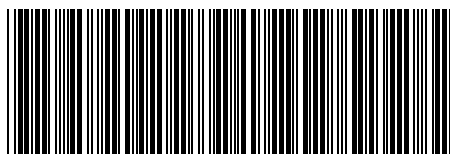


Helical bevel gearboxes  
Rid. a coppia conica

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Website: [www.hydromec.com](http://www.hydromec.com)



\* CT- VFM- Q- HM013\*