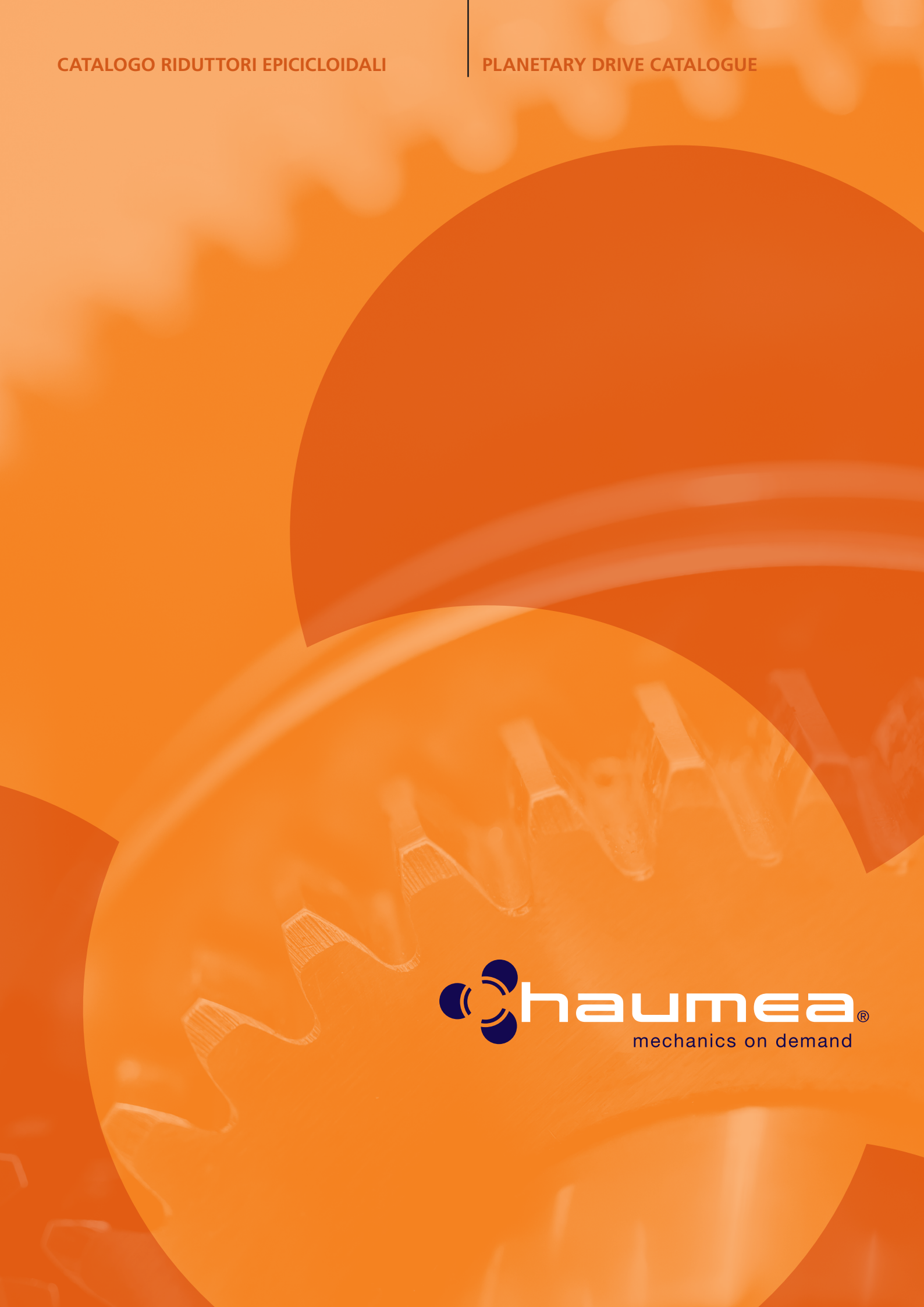
CATALOGO RIDUTTORI EPICICLOIDALI

PLANETARY DRIVE CATALOGUE

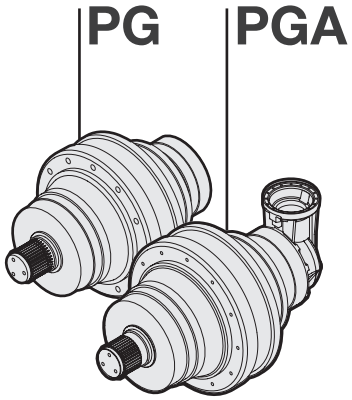




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	i	kNm	
100	3.55-3422	1.00	PAG. B-2
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250	3.77-2369	2.50	PAG. B-22
500	3.77-1735	5.00	PAG. B-32
700	3.66-2722	7.00	PAG. B-42
1000	3.55-2230	10.00	PAG. B-52
1600	3.55-2230	16.00	PAG. B-62
1800	13.00-1561	18.00	PAG. B-72
2500	4.00-2277	25.00	PAG. B-82
3000	14.20-1425	30.00	PAG. B-92
3500	4.00-1290	35.00	PAG. B-102
5000	4.00-1982	50.00	PAG. B-110
6500	3.83-1005	65.00	PAG. B-118
9000	4.00-8360	90.00	PAG. B-126
12000	4.09-5665	120.00	PAG. C-2
16000	3.83-8729	160.00	PAG. C-10
21000	3.68-8127	210.00	PAG. C-18
26000	3.68-8018	260.00	PAG. C-26
31000	3.43-8522	310.00	PAG. C-34
40000	3.43-8938	400.00	PAG. C-42
45000	3.84-4952	450.00	PAG. C-50
53000	3.84-7890	530.00	PAG. C-58
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IL PRODOTTO / THE PRODUCT

L'utilizzo del riduttore epicicloidale per la trasmissione di potenza è una risposta moderna alle esigenze di ingombri limitati, di semplicità costruttiva e di affidabilità per l'utilizzatore. La famiglia di riduttori epicicloidali PG è offerta al mercato in 21 grandezze di base, selezionate in funzione dei momenti torcenti che possono essere trasmessi all'albero di uscita, che vanno da 0.05 kNm fino a 65 kNm. La modularità del prodotto Haumea permette l'accoppiamento ai riduttori epicicloidali di coppie coniche, riduttori vite senza fine, freni idraulici, diversi tipi di alberi di ingresso, nonchè di flange per l'accoppiamento diretto a motori idraulici o elettrici. Un altro grande vantaggio derivante dalla modularità dei riduttori epicicloidali è la possibilità del montaggio in serie di stadi di differenti grandezze, in modo da ottenere una vastissima gamma di rapporti di riduzione. La gamma di prodotti Haumea offre rapporti di riduzione da 3:1 a 7:1 per i riduttori a singolo stadio fino a 10.000:1 e oltre per i riduttori a 5 stadi di riduzione. Le diverse opzioni di albero e flangiatura in uscita semplificano l'installazione del riduttore su applicazioni mobili e impianti fissi industriali.

The use of planetary gear units in the field of power transmission is the modern answer to the demand for compactness, constructive simplicity and product reliability PG planetary gear units are divided into 21 basic groups depending on the different torques that are to be transmitted to the output shaft, which can vary from 0.05 to 65 kNm. In fact, the Haumea product modular construction permits the coupling of bevel gears, worm gears, hydraulic brakes and a variety of input shafts to the planetary units, as well as providing for a wide choise of coupling flanges for hydraulic or electric motors. Another advantage offered by the modular construction technique of the planetary gear units is the possibility to mount a series of stages of different sizes in order to obtain a vast range of reduction ratios. The Haumea product range provides reduction ratios from 3:1 to 7:1 on a single stage unit up to 10.000:1 and more on a 5 stage unit. The wide selection of output shafts and flanges simplifies the reduction unit mounting operation on industrial machinery or plants

LE APPLICAZIONI / THE APPLICATIONS

Dai primi impieghi limitati soprattutto alle macchine movimento terra, Haumea ha esteso ed evoluto le possibilità applicative nel settore industriale. Sempre più frequenti sono le applicazioni in impianti chimici, macchine utensili, macchine lavorazione marmo, sistemi di trasporto e sollevamento, impianti alimentari ed ecologici e macchine mobili in generale.

Since the first applications which were limited mostly to earth moving machinery, Haumea reduction units have successfully applied themselves in the field of industrial machinery. The range of applications has now extended to chemical plants, machine tools, marble processing machinery, transportation and lifting machinery, the food and ecology industry and a variety of mobile applications.

- Applicazioni marine - comando eliche direzionali
  Marine applications - directional propellers control
- Carri miscelatori orizzontali
  Horizontal feed mixers
- Pompe per calcestruzzo
  Concrete pumps
- Gru e sistemi di sollevamento
  Cranes and hoisting systems
- Autogru
  Off-road mobile cranes
- Generatori eolici
  Wind power generators
- Carri miscelatori verticali
  Vertical feed mixers
- Gru gommate e cingolate
  Wheeled and tracked cranes
- Trattamento acque
  Water treatment
- Gru per edilizia
  Tower cranes
- Impianti fissi industriali
  Stationary industrial equipment
- Impianti trasformazione ferro/acciaio
  Steel/iron processing equipments
- Giostre
  Amusement park rides
- Macchine enologiche, presse per uva
  Wine-making machines, grape presses

CARATTERISTICHE TECNICHE
/ TECHNICAL INFORMATION

La conoscenza e l'esatta interpretazione dei dati riportati sul presente catalogo sono condizione indispensabile per la scelta e l'impiego corretto dei prodotti presentati.

È importante quindi definire alcuni parametri caratteristici:

RAPPORTO DI TRASMISSIONE i
È il valore effettivo del rapporto tra la velocità di entrata n_1 e la velocità di uscita n_2. Viene indicato per ogni tipo di riduttore nella relativa scheda tecnica.

VELOCITÀ MASSIMA IN ENTRATA n_{1max} [min^{-1}]
Rappresenta il valore massimo accettabile per ogni grandezza di riduttore, in condizioni di funzionamento intermittente. Per applicazioni in servizio continuo o per velocità superiori a quelle indicate, il Servizio Tecnico Commerciale Haumea è a disposizione per ulteriori chiarimenti. I valori della velocità massima in entrata per ogni tipo di riduttore sono illustrati nelle singole schede tecniche.

RENDIMENTO
Nella trasmissione epicicloidale, il rendimento è generalmente elevato, mediamente 0.97- 0.98 per ogni stadio di riduzione. Questo dato indicativo si riduce nel caso di funzionamenti a velocità elevate o nel caso di riduttori in versione angolare.

COPPIA CONTINUA Mc [kNm]
È quella coppia per cui il valore delle sollecitazioni sugli ingranaggi è pari al valore limite secondo le norme internazionali ISO 6336. Questo valore convenzionale corrisponde ad una durata di vita teorica illimitata degli ingranaggi, tenendo conto sia della sollecitazione a flessione che della resistenza superficiale del dente (pressione di Hertz).

Ai fini della scelta del riduttore questo valore va posto in riferimento alla COSTANTE DI DURATA nxh espressa nel Diagramma 1 dove:
n = velocità in uscita (min^{-1})
h = durata di funzionamento (ore).
Per semplicità di consultazione, nella scheda tecnica di prodotto sono riportati i valori di Mc corrispondenti ad un valore $n_2$xh prefissato.

COPPIA MASSIMA M_{MAX} [kNm]
È il valore massimo di coppia che il riduttore può trasmettere per breve tempo senza che si verifichino danneggiamenti ai suoi componenti interni ed alla sua struttura. Tale valore deve essere considerato come una coppia massima dovuta a picchi o spunti di avviamento e mai come coppia di lavoro; il valore M_{MAX} deve inoltre essere opportunamente valutato in quegli azionamenti che comportano un elevato numero di avviamenti o inversioni. Il valore M_{MAX} è indicato nelle schede tecniche di prodotto.

To properly select and implement our products, users must have complete knowledge of and correctly interpret the information provided in this catalogue.

Thus, it's important to define some distinctive parameters, such as:

REDUCTION RATIO i
This is the ratio between input speed n_1 and output speed n_2. It is provided for each drive shown on the relative technical sheet.

MAXIMUM INPUT SPEED n_{1max} [min^{-1}]
This is the maximum allowable speed for each size of drive under intermittent work conditions. For more information about continuous duty or higher speeds, please contact the Haumea Technical-Commercial Service Department. Maximum speed values for each type of planetary drive are illustrated on the single technical sheets.

EFFICIENCY
Efficiency is usually high in planetary transmissions: average values range between 0.97 and 0.98 for each reduction stage. This approximate value decreases under high-speed conditions or in applications with bevel gears.

CONTINUOUS TORQUE Mc [kNm]
Continuous torque is the maximum value of the stress on the gears according to international standard ISO 6336. This conventional value corresponds to the unlimited theoretical duration of the gears, taking into account both the bending stress and the surface strength of the tooth (Hertz pressure).

For the purpose of selecting a drive, this value must be considered in relation to the DURATION CONSTANT nxh, as shown in Curve 1 where:
n = output speed (min^{-1})
h = working time (hours)
To make consultation easier, the Mc values corresponding to a fixed $n_2$xh value are shown on the product technical sheets.

MAXIMUM TORQUE M_{MAX} [kNm]
This is the maximum output torque that the drive can transmit over a brief time interval without damaging its internal components and structure. This value must be considered as the maximum output torque owing to working or start-up peaks and never as the continuous working torque. M_{MAX} must also be carefully evaluated in those applications with a high number of start-ups or reversals. The M_{MAX} value is shown on the single product technical cards.

TEMPERATURA DI FUNZIONAMENTO
Le temperature dell'olio a cui i riduttori possono funzionare sono quelle comprese tra -20°C e + 90°C. Temperature al di fuori di questa fascia possono essere accettate se si prevedono particolari accorgimenti relativi ai tipi di lubrificante e di guarnizioni utilizzati. Tali accorgimenti possono essere decisi caso per caso, d'accordo con il Servizio Tecnico-Commerciale Haumea Industries.

POTENZA TERMICA Pt [kW]
È la potenza massima trasmissibile dal riduttore in funzionamento continuo con lubrificazione normale a sbattimento, senza che l'olio superi la temperatura di 90°C. I valori di Pt riportati nelle singole schede tecniche di prodotto sono valori massimi espressi alle seguenti condizioni di impiego:

- servizio continuo
- velocità n_1 = 1500 min^{-1}
- olio ISO VG 150
- posizione di montaggio orizzontale
- temperatura ambiente 20°C.

Qualora la potenza richiesta ecceda i valori indicati nella scheda tecnica del riduttore sarà necessario prevedere un sistema di raffreddamento del lubrificante. Per i riduttori con piedi (dalla grandezza PG 100 alla grandezza PG 1600) il valore di Pt può essere incrementato del 15%. Nel caso le caratteristiche di impiego siano diverse, si può applicare ai valori di Pt un fattore correttivo fk, come indica la Tabella 1, di seguito riportata:

$$Pt_1 = Pt \times fk$$

Vedi tabella 1

N.B. Si noti che la Pt è riferita alla potenza effettivamente trasmessa dal riduttore, da non confondere quindi con la potenza del motore su di esso installato, che per vari motivi potrebbe essere superiore. Per ulteriori dettagli si prega di contattare il Servizio Tecnico-Commerciale Haumea.

WORKING TEMPERATURE
The working oil temperature of the drives should range between -20°C and +90°C. Temperatures falling outside this range might be tolerated only if special lubricants and gaskets are used. For further information, please contact the Haumea Technical-Commercial Service Department.

THERMAL POWER Pt [kW]
The thermal power is the maximum power the drive can transmit under continuous duty with normal turbulence lubrication and without exceeding an oil temperature of 90°C. The Pt values shown on the single product technical sheet indicate the maximum values under the following duty conditions:

- continuous duty
- speed n_1 = 1500 min^{-1}
- oil ISO VG 150
- horizontal mounting position
- Room temperature 20°C.

If the required power exceeds the values indicated on the drive technical sheet, a lubricant cooling system must be installed. For foot-mounted drives (from the PG 100 to the PG 1600 series), the Pt value can be increased by 15%. If the duty characteristics differ, you can apply a corrective factor fk to the Pt values as indicated in Table 1 below:

$$Pt1 = Pt \times fk$$

See table 1

NOTE. Pt refers to the power actually transmitted by the drive. It should not be confused with the power of the motor mounted on the drive which, for various reasons, might be higher. For further details please contact the Haumea Technical-Commercial Service Department.

TABELLA 1 / TABLE 1

Fattore di adeguamento della capacità termica fk Thermal power adjustment factor fk					
Tempo% di funzionamento Worktime%	Temperatura ambiente °C / Room temperature °C				
	10°	20°	30°	40°	50°
100	1.1	1.0	0.8	0.7	0.6
80	1.2	1.1	1.0	0.8	0.7
60	1.4	1.2	1.1	1.0	0.8
40	1.6	1.4	1.2	1.1	1.0
20	1.8	1.6	1.4	1.2	1.1

FATTORE DI SERVIZIO fs
È un coefficiente di moltiplicazione che viene inserito nella formula per la scelta del riduttore. Serve per tener conto delle condizioni di carico dell'applicazione, ed è definito dalla Tabella 2

CARICHI SULL'ALBERO DI USCITA E ENTRATA Fr ; Fa [N]

Fr =carico radiale

Fa =carico assiale

I valori dei carichi applicabili sugli alberi di uscita si ricavano dai diagrammi riportati in corrispondenza di ogni grandezza di riduttore, mentre quelli relativi agli alberi di entrata si trovano a pag. D-4. I carichi radiali ed assiali massimi non possono agire contemporaneamente. L'entità dei carichi ammessi Fr , Fa è riferita ad una durata dei cuscinetti secondo ISO 281, corrispondente a:

$n \times h = 10^5$ per alberi di uscita

$n \times h = 5x10^6$ per alberi in entrata

I riduttori in versione F vengono normalmente utilizzati per trasmettere coppia senza carichi radiali, pertanto non vengono indicate le capacità di Fr ed Fa massime. Per informazioni ulteriori contattare il Servizio Tecnico-Commerciale Haumea.

Nell'ambito del continuo sviluppo e miglioramento del prodotto, Haumea si riserva la facoltà di apportare le modifiche sia tecniche sia dimensionali che saranno ritenute opportune, senza darne espresso preavviso.

SCELTA DEL RIDUTTORE
In una trasmissione meccanica, il riduttore è un organo inserito tra motore ed utenza. Le sollecitazioni a cui è sottoposto durante il funzionamento sono funzione delle curve caratteristiche del motore come di quelle dell'utenza (assorbimento e ciclo di lavoro). La conoscenza della trasmissione nella sua interezza è condizione necessaria per la corretta scelta del riduttore.
È necessario conoscere:

UTENZA

a) tipo di servizio

b) velocità di rotazione

c) potenza e/o coppia assortita

d) ciclo di lavoro

MOTORE

e) tipo e caratteristiche del motore

f) potenza e/o coppia erogata

g) velocità di funzionamento

SERVICE FACTOR fs
Service factor fs is a multiplication coefficient introduced into the formula for selecting the drive. This factor takes into account the application load conditions. It is defined in Table 2.

OUTPUT AND INPUT SHAFT LOADS Fr ; Fa [N]

Fr = radial load

Fa = axial load

The load values that output shafts can bear are indicated on the load curves shown for each drive size; the load values relevant to input shafts are shown on page D-4. Maximum radial and axial loads must not occur simultaneously. The values of the tolerated loads Fr, Fa refer to a bearing duration, according to standard ISO 281, corresponding to:

$n \times h = 10^5$ for output shafts

$n \times h = 5x10^6$ for input shafts

F gear units are usually applied in the transmission of a torque without radial loads. In this case, maximum values Fr and Fa are not shown. For further information, please contact the Haumea Technical-Commercial Service Department.

Because Haumea is continuously improving its product, it will make the technical and dimensional changes deemed necessary, without notifying the market in advance.

DRIVE SELECTION
In a mechanical transmission system, a drive is a device positioned between the prime mover and the driven equipment. The stress it is subjected to during operation is strictly related to the characteristics of the prime mover and the driven equipment (power absorption and work cycle). Knowledge of the entire transmission system is mandatory to choose the best drive.
It is necessary to know the following:

DRIVEN EQUIPEMENT

a) type of operation

b) rotation speed

c) power and/or torque absorption

d) working cycle

PRIME MOVER

e) type and characteristics of the prime mover

f) delivered power and/or torque

g) operating speed

CARATTERISTICHE TECNICHE
/ TECHNICAL INFORMATION

Queste informazioni permettono una prima scelta dei riduttori dopo aver determinato:

- rapporto di trasmissione i
- coppia di lavoro M [kNm]
- carichi sull'albero in uscita e in entrata al riduttore Fr; Fa [N]

Successivamente si dovrà procedere alle verifiche dei parametri caratteristici dei riduttori come segue:

I) velocità in ingresso al riduttore ≤ n_1 max

II) coppia di lavoro ≤ Mc

III) carichi applicati all'albero in uscita e in entrata ≤ Fr ; Fa

IV) potenza da trasmettere ≤ Pt (se in servizio continuo)

V) temperatura ambiente

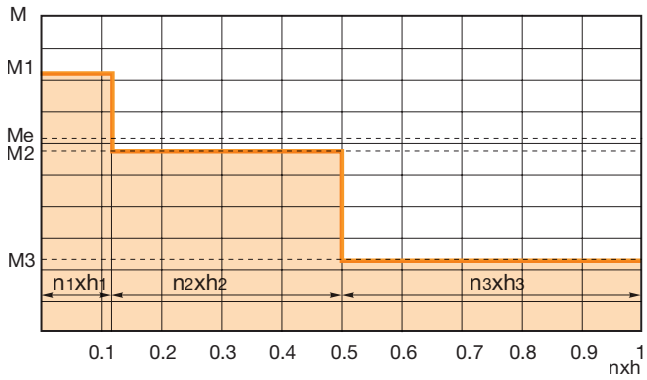
Le relazioni I e V sono di immediata verifica mentre per la II, la III e la IV si procede come segue:

VERIFICA DEL RIDUTTORE IN FUNZIONE DELLA COPPIA

Calcolo della coppia equivalente Me [kNm]

Quando il carico è variabile nel tempo (Istogramma 1), si deve determinare il valore della coppia equivalente. Con il criterio del cumulativo di carico si calcola, con la formula sotto indicata, la coppia in grado di provocare lo stesso livello di usura dopo il numero di cicli (nxh) richiesto dal progetto.

$$Me = \sqrt[6]{M_1^6 \frac{(n_1 \times h_1)}{(n \times h)} + M_2^6 \frac{(n_2 \times h_2)}{(n \times h)} + M_3^6 \frac{(n_3 \times h_3)}{(n \times h)}}$$



Fattore di durata fh

Nelle applicazioni industriali o di norma quando il numero di cicli di lavoro previsto nxh supera $2x10^4$, si rende necessario introdurre un fattore di durata fh (con l'ausilio del Diagramma 1) per adeguare il valore della coppia di catalogo Mc ad un valore che permetta di raggiungere il numero di cicli (nxh) designato a progetto.

With this information an initial drive selection can be made, determining the following:

- reduction ratio i
- working torque M [kNm]
- loads Fr and Fa [N] on drive output and input shafts

Subsequently, we must verify some specific drive parameters as follows::

I) drive input rotation peed n_1 max

II) working torque Mc

III) loads on output and input shafts Fr ; Fa

IV) horsepower to be transmitted Pt (if under continuous duty)

V) room temperature

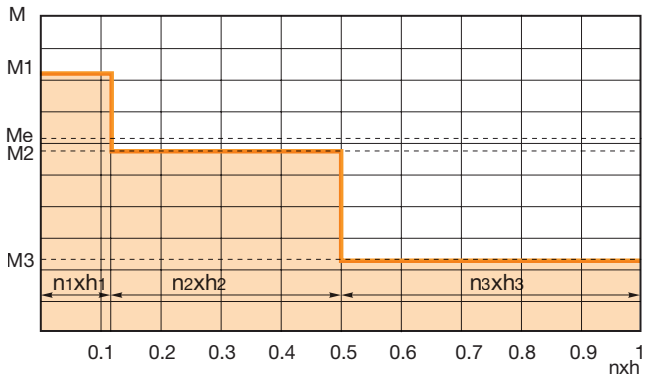
Relations I and V can be readily verified; as for relations II, III and IV we must proceed as follows:

VERIFICATION OF THE PLANETARY UNIT ACCORDING TO THE TORQUE

Calculation of the equivalent working torque Me [kNm]

When loads are intermittent (see Histogram 1), we must determine the equivalent working torque value. The cumulative load principle, based on the following formula, is used to determine the torque value which produces the same fatigue after the number of cycles (nxh) required by the project:

$$Me = \sqrt[6]{M_1^6 \frac{(n_1 \times h_1)}{(n \times h)} + M_2^6 \frac{(n_2 \times h_2)}{(n \times h)} + M_3^6 \frac{(n_3 \times h_3)}{(n \times h)}}$$



Duration factor fh

In industrial installations and whenever the number of working cycles nxh exceeds 2x104, we must consider a duration factor fh (see Curve 1) in order to adapt the Mc torque shown in the catalogue to a new value which allows the machine to operate at the number of cycles (nxh) required by the project.

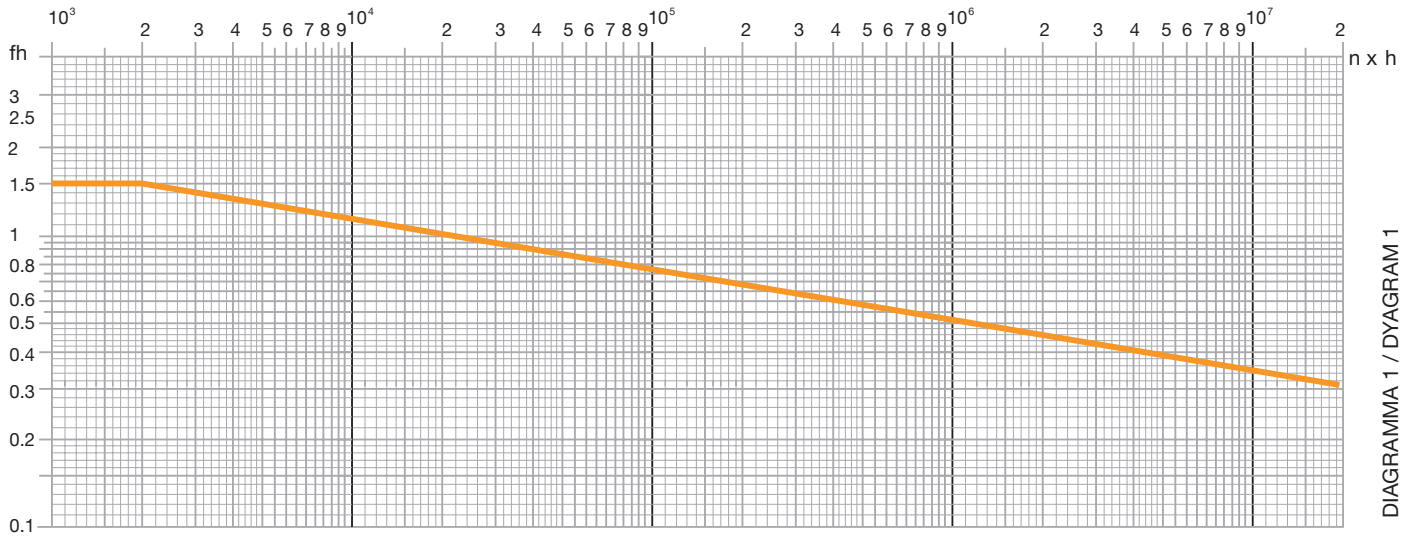


DIAGRAMMA 1 / DYAGRAM 1

Determinazione del fattore dl servizio fs
L'effetto degli urti derivanti da irregolarità del moto, dai sovraccarichi nei transitori di velocità (avviamenti ed arresti), viene conteggiato introducendo un fattore di servizio fs. La Tabella 2 indica i fattori fs in funzione del tipo di applicazione.

Service factor fs calculation
The effect of shocks generated by intermittent motion and overloads during starts and stops must be calculated, introducing a service factor fs. Table 2 indicates the service factors fs in relation to the type of operation.

	Condizioni di carico / Load classifications											
	U Uniforme / Uniform				M Moderato / Moderate				H Pesante / Heavy			
Ore-giorno / Hours-day Avviamenti-ora Start-time	< 1.0	1 - 4	4 - 8	8 - 24	< 1.0	1 - 4	4 - 8	8 - 24	< 1.0	1 - 4	4 - 8	8 - 24
< 5	0.8	0.9	1.0	1.5	0.9	1.0	1.3	1.9	1.0	1.5	1.9	2.4
5 - 50	1.0	1.0	1.4	1.7	1.0	1.3	1.6	1.9	1.4	1.8	2.1	2.5
> 50	1.3	1.5	1.7	1.9	1.4	1.7	1.9	2.2	1.7	2.1	2.5	2.9
	fs											

TABELLA 2 / TABLE 2

I valori riportati sono per azionamento con motori idraulici e elettrici. Nel caso vengano utilizzati altri tipi di motori (combustione interna), contattare il nostro Servizio Tecnico-Commerciale.

La Tabella 3 a fine paragrafo indica alcuni esempi di classificazione delle condizioni di carico.
La relazione II è verificata dalla formula:

Me x fs Mc x fh

Si richiede inoltre che $Mp \leq M_{MAX}$
Mp = coppia di picco in funzionamento

Operating values refer to drives with hydraulic and electric motors. If other types of motors are operated (internal combustion engine), please contact our Technical-Commercial Service Department.

Table 3 at the end of this section includes some examples of load classifications. Relationship II can be verified by using the following formula:

Me x fs Mc x fh

It is also required that $Mp \leq M_{MAX}$
Mp = working peak torque

VERIFICA DEL RIDUTTORE IN FUNZIONE DEI CARICHI SULL'ALBERO DI USCITA E DI ENTRATA
Calcolo dei carichi equivalenti Fre; Fae [N]
Analogamente a quanto fatto per il calcolo della coppia equivalente, quando il carico è variabile nel tempo, si deve determinare il valore del carico medio equivalente. Con il criterio del cumulativo di carico si determina, con la formula sotto indicata, il carico in grado di provocare lo stesso livello di usura sui cuscinetti dopo il numero di cicli (nxh) richiesto dal progetto:

$$Fe = \sqrt[10/3]{F_1^{10/3}\frac{(n_1 \times h_1)}{(n \times h)} + F_2^{10/3}\frac{(n_2 \times h_2)}{(n \times h)} + F_3^{10/3}\frac{(n_3 \times h_3)}{(n \times h)}}$$

Fattore di servizio fs
Il fattore di servizio fs si calcola con l'ausilio delle Tabelle 2 e 3 analogamente a quanto fatto per la coppia.
La relazione III è verificata dalle formule:

Fre x fs ≤ Fr x fh
Fae x fs ≤ Fa x fh

CARICHI RADIALI Fr [N]
Questo capitolo vuole essere di supporto all'utilizzatore del catalogo per determinare il carico radiale massimo accettabile e/o la durata di vita dei cuscinetti degli alberi di entrata e uscita del riduttore selezionato.

Come determinare il carico radiale massimo ammissibile di un albero di entrata o di uscita conoscendo la durata di vita richiesta dei cuscinetti e la posizione del carico.
Parametri conosciuti:

- Versione del supporto
  Entrata: EL, EML, EM, EP, ET
  Uscita: MS, MC, PS, PC
- Distanza E [mm]
  (Distanza del carico dallo spallamento dell'albero)
- Durata di vita richiesta dei cuscinetti [h]
- Velocità di rotazione dell'albero [min^{-1}]

VERIFICATION OF THE DRIVE ACCORDING TO OUTPUT SHAFT LOADS
Equivalent working loads Fre; Fae [N]
In the same manner that we calculated the equivalent working torque, when loads vary over time, we must determine the value of the average equivalent load. As before, we use the cumulative load principle, based on the following formula, to determine the load value which produces the same fatigue on the bearings after the number of cycles (nxh) required by the project:

$$Fe = \sqrt[10/3]{F_1^{10/3}\frac{(n_1 \times h_1)}{(n \times h)} + F_2^{10/3}\frac{(n_2 \times h_2)}{(n \times h)} + F_3^{10/3}\frac{(n_3 \times h_3)}{(n \times h)}}$$

Service factor fs
Service factor fs can be calculated using Tables 2 and 3 in the same manner as calculating the torque. Relationship III can be verified by using the following formulas:

Fre x fs ≤ Fr x fh
Fae x fs ≤ Fa x fh

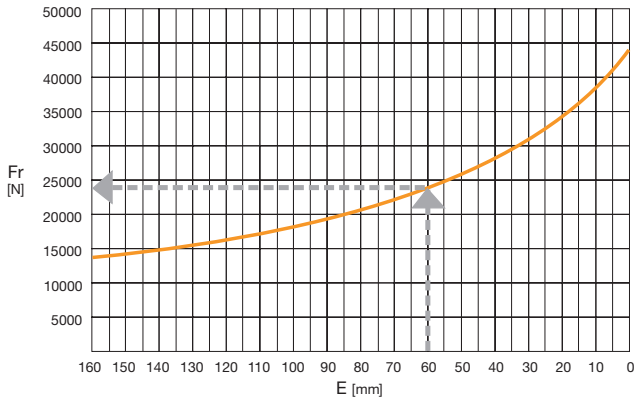
RADIAL LOADS Fr [N]
This section provides the catalogue user with the information needed to determine the maximum allowable radial load and/or the service life of the bearings on input and output shafts of the selected drive.

How to determine the admissible radial load of an input or output shaft knowing the required service life of the bearings and the load position.
Known parameters:

- Input or output version
  Input: EL, EML, EM, EP, ET
  Output: MS, MC, PS, PC
- Distance E [mm]
  (Distance of the load position from output shaft shoulder)
- Required bearing service life [h]
- Shaft rotation speed [min^{-1}]

Per determinare la capacità di carico radiale massimo ammissibile di un albero di entrata o di uscita, in base ai parametri conosciuti, seguire il seguente procedimento:

1. Selezionare il grafico della curva dei cuscinetti per l'albero di uscita o entrata selezionato. (I grafici relativi ai carichi applicabili in uscita sono riportati nelle sezioni dei dati tecnici di ogni riduttore, mentre quelli relativi agli alberi di entrata si trovano a pag. D-4).
2. Trovare nel grafico il valore del carico radiale (Fr) riferito alla distanza E.



Esempio di diagramma della curva dei cuscinetti dei supporti di entrata e uscita

3. Il valore di Fr trovato è il valore di carico radiale massimo accettabile nella posizione E per una durata di vita dei cuscinetti h di:

Albero di uscita $h = \frac{10^5}{n_2}$

Albero di entrata $h = \frac{5 \times 10^6}{n_1}$

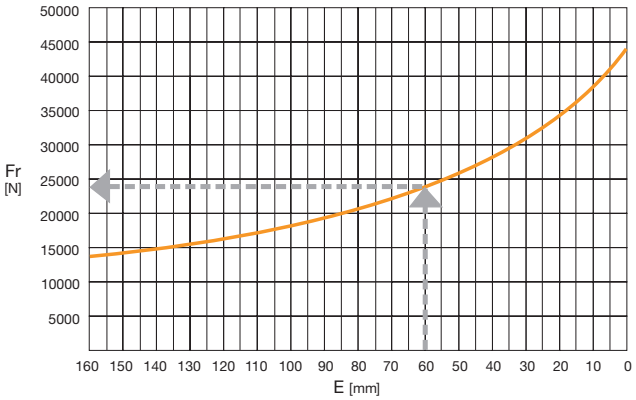
h = Durata di vita dei cuscinetti [h]
n_1 = Velocità di rotazione dell'albero entrata [min^{-1}]
n2 = Velocità di rotazione dell'albero uscita [min^{-1}]

Nel caso la durata di vita dei cuscinetti, calcolata con le suddette formule, non corrisponda a quella richiesta occorrerà determinare il coefficiente di correzione del carico radiale per ottenere la durata richiesta seguendo il seguente procedimento:

4. Determinare il numero di cicli che l'albero compierà durante la durata di vita richiesta: nxh = $n_{1\text{-}2}$ [min^{-1}] x h [h].
5. Determinare, nel grafico del coefficiente di correzione del carico radiale, il valore K corrispondente al numero di cicli calcolati al punto 1. (I grafici relativi ai coefficienti di correzione riferiti ai carichi applicabili in uscita sono riportati nelle sezioni dei dati tecnici di ogni riduttore, mentre quelli relativi agli alberi di entrata si trovano a pag. D-4).

To determine the admissible radial load capacity of a selected input or output shaft, based on known parameters, follow the steps described below:

1. Select the bearing service life chart for the selected input or output shaft (radial load curves for output shaft versions are shown on the drive technical sheets, while the curves for input versions can be found on page D-4).
2. Use the curve to find the radial load (Fr) value with reference to the distance E.



Example of bearing life chart for input and/or output shaft versions

3. Fr will be the max. load the shaft can bear at position E for a bearing service life h of:

Output version $h = \frac{10^5}{n_2}$

Input version $h = \frac{5 \times 10^6}{n_1}$

h = Bearings life time [h]
n1 = Input shaft speed [min^{-1}]
n2 = Output shaft speed [min^{-1}]

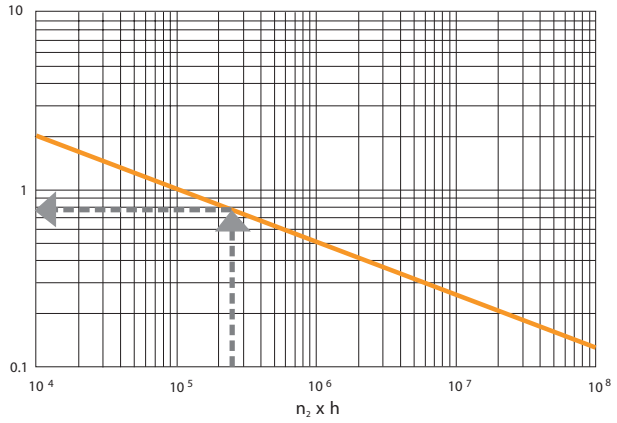
If the bearing service life, as calculated with the previous formulas, does not meet customer requirements, the radial load correction factor that would allow the bearings to meet the service life requirements must be determined according to the following procedure:

4. Determine the no. of cycles that the shaft will complete during the required service life:

nxh = $n_{1\text{-}2}$ [min^{-1}] x h [h]

5. Use the radial load correction factor curve to determine the K value corresponding to the no. of cycles calculated in point 1.

(radial load correction factor curves for output shaft versions are shown on the drive technical sheets, while the curves for input versions can be found on page D-4).



Esempio di diagramma del coefficiente di correzione del carico radiale

6. Ora potrete definire quale sarà il carico massimo accettabile Fr_{nxh} nella posizione E che garantirà la durata di vita dei cuscinetti richiesta applicando la seguente formula:

$$Fr_{nxh} = Fr \times K$$

Come determinare la durata di vita richiesta dei cuscinetti di un albero di entrata o di uscita conoscendo il carico radiale applicato e la posizione del carico.
Parametri conosciuti:

- Versione del supporto
  Entrata: EL, EML, EM, EP, ET
  Uscita: MS, MC, PS, PC
- Distanza E [mm]
  (Distanza del carico dallo spallamento dell'albero)
- Carico radiale applicato [kN]
- Velocità di rotazione dell'albero [min^{-1}]

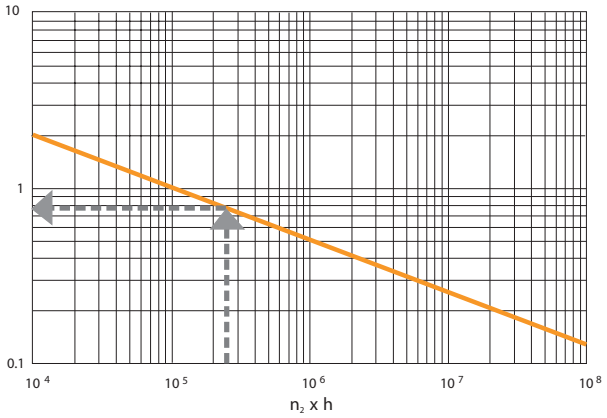
Per determinare la durata di vita dell'albero di entrata o di uscita scelto, in base ai parametri conosciuti, seguire il seguente procedimento:

1. Selezionare il grafico della durata di vita dei cuscinetti dell'albero di entrata o uscita selezionato.
2. Individuare nel grafico il carico radiale (Fr) riferito alla posizione del carico E.
3. Determinare il fattore di correzione del carico radiale K applicando la seguente formula:

$$K = \frac{Fr_{ap}}{Fr}$$

4. Una volta determinato il fattore K individuare sul grafico del fattore di correzione del carico radiale il valore di nxh corrispondente.
5. Infine per determinare la durata di vita dei cuscinetti riferito al carico radiale applicato ed alla sua posizione E applicare la seguente formula:

$$h = \frac{n \times h}{n_{1\text{-}2}}$$



Example of radial load correction factor chart for input and/or output shaft versions

6. Now you can determine the acceptable radial load Fr_{nxh} at the known position E to meet the bearing service life requirements, applying the following formula

$$Fr_{nxh} = Fr \times K$$

How to determine the bearing service life of an input or output shaft version knowing the applied radial load and its load position.
Known parameters:

- Input or output version
  Input: EL, EML, EM, EP, ET
  Output: MS, MC, PS, PC
- Load position E [mm]
  (Distance of the load from the output shaft shoulder)
- Applied radial load [kN]
- Shaft speed [min^{-1}]

To determine the bearing service life of the selected input or output shaft, based on known parameters, follow the steps described below:

1. Select the service life curve of the bearings for the selected input or output shaft.
2. Use the chart to find the radial load (Fr) with reference to the load position E.
3. Determine the radial load correction factor K applying the following formula:

$$K = \frac{Fr_{ap}}{Fr}$$

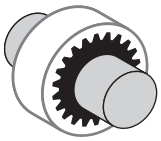
4. Once you have determined the K factor, use the radial load correction factor curve to find the corresponding (nxh) value.
5. Finally, to determine the bearing service life based on the applied radial load and its position E, apply the following formula:

$$h = \frac{n \times h}{n_{1\text{-}2}}$$

Il carico radiale Fra agente sull'albero del riduttore può essere calcolato con le seguenti formule secondo il tipo di trasmissione adottato.

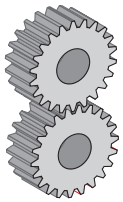
The Fra radial load on the drive's shaft can be calculated with the following formulas according to the type of transmission used.

Giunto elastico
Elastic coupling



No carico radiale
No radial load

Ingranaggi a denti diritti (angolo pressione 20°)
Spur gear (pressure angle 20°)



$$Fr_a = \frac{2100 \cdot M_2}{D}$$

Catene a bassa velocità (z < 17)
Chain drives at low speed (z < 17)



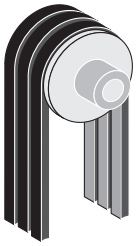
$$Fr_a = \frac{2100 \cdot M_2}{D}$$

Pulegge dentate
Trigger belt



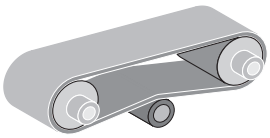
$$Fr_a = \frac{2100 \cdot M_2}{D}$$

Pulegge a gole V
Pulley for V belt



$$Fr_a = \frac{4000 \cdot M_2}{D}$$

Cinghia piana con tenditore
Flat belt with spanning pulley



$$Fr_a = \frac{8000 \cdot M_2}{D}$$

Fr_a = Carico radiale risultante sull'albero[N]
M_2 = Momento torcente sull'albero [Nm]
D = Diametro primitivo ingranaggio o puleggia [mm]

Fr_a = Radial load on shaft [N]
M_2 = Torque on shaft [Nm]
D = Gear or pulley pitch diameter [mm]

VERIFICA DEL RIDUTTORE IN FUNZIONE DELLA POTENZA TERMICA Pt [kW]

Nel caso in cui il riduttore sia utilizzato a velocità di uscita superiore a 20 min^{-1} ed in servizio continuo, o comunque abbia soste tra una inserzione e l'altra tali da non consentire il normale smaltimento del calore, è necessario verificare che la potenza effettivamente trasmessa non superi quella indicata nella scheda tecnica relativa al singolo tipo di riduttore.

Per i riduttori di grosse dimensioni vi possono essere limitazioni alla velocità max in entrata, di cui si deve tenere conto e che sono indicate sempre nella scheda tecnica del prodotto.

Le informazioni tecniche contenute nel presente catalogo intendono essere una rapida guida alla scelta dei riduttori e non vogliono in nessun caso sostituirsi alle conoscenze ed all'esperienza dei tecnici impiantisti cui spetta il compito di determinare i riduttori da installare. Nello spirito della migliore collaborazione con i clienti, Haumea è lieta di mettere a disposizione il proprio servizio tecnico per le verifiche che si rendano necessarie.

VERIFICATION OF THE DRIVE ACCORDING TO THE THERMAL POWER Pt [kW]

When the drive is used with an output speed greater than 20 min^{-1} under continuous duty or with stops between applications that inhibit normal heat dissipation, make sure that the actual transmitted power does not exceed the power indicated on the data sheet of the individual drive.

For large drives, the maximum input speeds, as always shown on the product's data sheet, must be taken into account.

The technical information in this catalog is provided as a brief guide for selecting drives and does not substitute the knowledge and experience of the installers who are responsible for selecting the proper drive. To collaborate as much as possible with its customers, Haumea is pleased to offer the services of its technical assistance department to carry out any necessary verifications.

CONDIZIONI DI CARICO

Le condizioni di carico qui elencate possono subire variazioni in funzione delle reali condizioni di funzionamento dei riduttori

Legenda:
U = Carico uniforme
M = Carico moderato
H = Carico pesante

LOAD CLASSIFICATION

Listed load conditions may change depending on drive actual operating conditions

Legend:
U = Uniform load
M = Moderate load
H = Heavy load

TABELLA 3 / TABLE 3

Compressori, ventilatori	**Blowers, ventilators**			
Compressori (assiali e radiali)	Blowers (axial and radial)	**U**		
Ventilatori a torre di raffredamento	Cooling tower fans		**M**	
Ventilatori a tiraggio indotto	Induced draught fans		**M**	
Compressori a pistoni rotanti	Rotary piston blowers		**M**	
Compressoriturbo	Turbo blowers	**U**		
Industria chimica	**Chemical industry**			
Agitatori (materiali liquidi)	Agitators (liquid material)	**U**		
Agitatori (materiali semi-liquidi)	Agitators (semi-liquid material)		**M**	
Centrifughe (pesanti)	Centrifuges (heavy)		**M**	
Centrifughe (leggere)	Centrifuges (light)	**U**		
Tamburi di raffreddamento	Cooling drums		**M**	
Tamburi di essicazione	Drying drums		**M**	
Miscelatori	Mixers		**M**	
Compressori	**Compressors**			
Compressori a pistone	Piston compressors			**H**
Compressori turbo	Turbo compressors		**M**	
Convogliatori	**Conveyors**			
Nastro trasportatore a piastre	Apron conveyors		**M**	
Sollevatori zavorra	Ballast elevators		**M**	
Convogliatori nastro a sacca	Band pocket conveyors		**M**	
Convogliatori a nastro (materie voluminose)	Belt conveyors (bulk material)		**M**	
Convogliatori (merce a pezzi)	Belt conveyors (piece goods)			**H**
Convogliatori a tazza per farinacei	Bucket conveyors for flour	**U**		
Convogliatori a catena	Chain conveyors		**M**	
Convogliatori circolari	Circular conveyors		**M**	
Montacarichi	Hoists			**H**
Montacarichi inclinati	Inclined hoists			**H**
Convogliatore a nastro d'acciaio	Steel belt conveyors		**M**	
Sollevatori per persone	Passenger lifts		**M**	
Trasportatori a coclea	Screw conveyors		**M**	
Trasportatore a nastro concavo	Trough chain conveyors		**M**	
Trasportatore a verricello	Winches hauling		**M**	
Gru	**Cranes**			
Meccanismo del braccio di trivellazione	Derricking jib gear		**M**	
Meccanismo di montacarico	Hoist gear	**U**		
Meccanismo girevole	Slewing gear		**M**	
Meccanismo di traslazione	Travelling gear			**H**
Draghe	**Dredgers**			
Convogliatori a tazza	Bucket conveyors			**H**
Ruote a tazza	Bucket wheels			**H**
Teste portautensili	Cutter heads			**H**
Verricelli per manovre	Manoeuvring winches		**M**	
Pompe	Pumps		**M**	
Meccanismo girevole	Slewing gear		**M**	
Meccanismo di traslazione (mezzo cingolato)	Travelling gear (caterpillar)			**H**
Meccanismo di traslazione (rotaie)	Travelling gear (rails)		**M**	

Macchinari per industria alimentare	**Food industry machinery**			
Macchine per il riempimento di bottiglie e contenitori	Bottling and container filling machines	**U**		
Frantumatori di canna	Cane crushers		**M**	
Coltelli per canna	Cane knives			**H**
Macina per canna	Cane mills		**M**	
Impastatrice	Kneading machines		**M**	
Vasche per macerazione (cristallizzanti)	Mash tubs (crystallizers)			**H**
Macchinari per imballaggio	Packaging machines		**U**	
Taglierine per barbabietole da zucchero	Sugar beet cutters	**M**		
Macchine per il lavaggio di barbabietole da zucchero	Sugar beet washing machines	**M**		
Macchinari per costruzione	**Building machinery**			
Betoniere	Concrete mixers		**M**	
Montacarichi	Hoists		**M**	
Macchinari per costruzione strade	Road construction machinery		**M**	
Generatori e trasformatori	**Generators, transformers**			
Trasformatori di frequenza	Frequency transformers			**H**
Generatori	Generators			**H**
Generatori per saldatrici	Welding generators			**H**
Lavanderie	**Laundries**			
Invertitori	Tumblers		**M**	
Lavatrici	Washing machines		**M**	
Stiratrici	Pressing machines		**M**	
Laminatori per metalli	**Metal rolling mills**			
Cesoie per laminatoi	Billet shears			**H**
Trasmissioni a catena	Chain transfers		**M**	
Laminatoi a freddo	Cold rolling mills			**H**
Impianti per fusione continua	Continuous casting plant			**H**
Basamenti refrigeranti	Cooling beds		**M**	
Cesoie per spuntatura	Cropping shears			**H**
Laminatoi per piatti medi e pesanti	Heavy and medium plate mills			**H**
Treni sbozzatori e lingotti	Descaling machines			**H**
Manipolatori	Manipulators			**H**
Trancia lamiere	Ingot pushers			**H**
Raddrizzatore rulli	Plate tilters		**M**	
Tavole a rulli (pesante)	Roller tables (heavy)			**H**
Tavole a rulli (leggere)	Roller tables (light)			**H**
Macchine saldatrici a tubo	Tube welding machines		**M**	
Macchine avvolgitrici (guarnizioni e fili)	Winding machines (strip and wire)		**M**	
Banchi da disegno a filo	Wire drawing banches		**M**	
Macchine per la lavorazione del metallo	**Metal working machines**			
Contralberi, alberi in linea	Contershafts, line shafts	**U**		
Pressa per stampaggio a caldo	Forging presses			**H**
Martelli	Hammers			**H**
Guide ausiliarie, macchine utensili	Auxiliary drives, machine tools	**U**		
Guide principali, macchine utensili	Main drives, machine tools		**M**	
Macchine per la piallatura di metalli	Metal planing machines			**H**
Raddrizzatrice per la lamiera	Plate straightening machines			**H**
Presse	Presses			**H**
Presse per stampi	Punch presses			**H**
Cesoie	Shears			**M**
Macchine per piegatrici di metallo	Sheet metal bending machines			**M**
Industria petrolifera	**Oil industry**			
Pompe conduttrici	Pipeline pumps		**M**	
Attrezzatura trapanatrice rotante	Rotary drilling equipment			**H**

Legenda:
U = Carico uniforme
M = Carico moderato
H = Carico pesante

Legend:
U = Uniform load
M = Moderate load
H = Heavy load

TABELLA 3 / TABLE 3

Macchine per la carta	**Paper machines**			
Calandre	Calenders			**H**
Manicotto	Couches			**H**
Tamburo essicatore	Drying cylinders			**H**
Cilindro essicatore	Glazing cylinders			**H**
Raffinatrice	Pulpers			**H**
Sfibratore per pasta	Pulp grinders			**H**
Rulli aspiranti	Suction rolls			**H**
Presse aspiranti	Suction presses			**H**
Presse a umido	Wet presses			**H**
Battitoi	Willows			**H**
Macchinari per la plastica	**Plastic industry machinery**			
Calandre	Calenders		**M**	
Frantoi	Crushers		**M**	
Estrusori	Extruders		**M**	
Miscelatori	Mixers		**M**	
Pompe	**Pumps**			
Pompa centrifuga (liquidi leggeri)	Centrifugal pumps (light liquids)	**U**		
Pompa centrifuga (liquidi viscosi)	Centrifugal pumps (viscous liquids)			**H**
Pompe a pistoni	Piston pumps			**H**
Pompe a pulsante	Plunger pumps			**H**
Pompe a pressione	Pressure pumps			**H**
Macchinari per la gomma	**Rubber machinery**			
Calandre	Calenders		**M**	
Estrusori	Extruders			**H**
Miscelatori	Mixers		**M**	
Impastatrice	Pug mills			**H**
Laminatoi	Rolling mills			**H**
Macchine per la lavorazione della pietra e dell'argilla	**Stone and clay working machines**			
Mulino a martelli	Hammer mills			**H**
Laminatoi per raffinare	Beater mills			**H**
Interruttore	Breakers			**H**
Presse per mattoni	Brick presses			**H**
Forno rotante	Rotary ovens			**H**
Laminatoi a tubo	Tube mills			**H**
Macchine tessili	**Textile machines**			
Dosatori	Batchers		**M**	
Telai per tessitura	Looms		**M**	
Macchine per la stampa e la tintura	Printing and dyeing machines		**M**	
Vasca per la concia	Tanning vats		**M**	
Battitoi	Willows		**M**	
Trattamenti ad acqua	**Water treatment**			
Aeratori	Aerators		**M**	
Pompa a vite	Screw pumps		**M**	
Macchine per la lavorazione del legno	**Wood working machines**			
Scortecciatrici	Barkers			**H**
Macchine per la piallatura	Planing machines		**M**	
Telaio per seghe	Saw frames			**H**
Macchine per la lavorazione del legno	Wood working machines	**U**		

Legenda:
U = Carico uniforme
M = Carico moderato
H = Carico pesante

Legend:
U = Uniform load
M = Moderate load
H = Heavy load

NORME GENERALI PER L'INSTALLAZIONE E LA MANUTENZIONE

Per garantire un buon funzionamento dei riduttori ed una miglior durata nel tempo è necessario un corretto accoppiamento alla struttura cui viene fissato il gruppo. Pertanto le superfici di tale struttura dovranno essere lavorate con centraggi in H8 ed in modo da garantire un'ottima planarità e perpendicolarità con l'asse del riduttore.

Per il fissaggio del riduttore usare la bulloneria indicata sotto ogni disegno nelle schede tecniche di prodotto. Usare inoltre tutti i fori di fissaggio previsti sulle flange dei riduttori.

Per gruppi installati all'aperto si consiglia, dove possibile, di proteggere i riduttori dalle intemperie, di trattarli con sistemi anticorrosivi e di proteggere i paraoli con grasso idrorepellente.

Nelle applicazioni in cui possono verificarsi sovraccarichi accidentali tali da compromettere l'integrità della trasmissione, occorre prevedere un sistema di sicurezza (idraulico, meccanico) per salvaguardare il riduttore.

L'abbinamento fra riduttori e motori, principalmente elettrici o idraulici, viene normalmente fatto mediante flangiatura diretta quando non si presentano particolari condizioni di criticità, che possono provocare danni dopo l'installazione.

A tale proposito, ove è richiesto di installare motori molto pesanti, oltre i 100 Kg, consigliamo di contattare il nostro Servizio Tecnico-Commerciale, per meglio valutare l'applicazione in funzione della posizione di montaggio. In alternativa, si consiglia un montaggio separato dei due particolari collegati mediante giunto o pulegge.

SMALTIMENTO DELLA MACCHINA

Lo smaltimento dei rifiuti derivati dalla demolizione della macchina dovrà essere eseguito nel rispetto ambientale, evitando di inquinare suolo, aria e acqua. I rifiuti derivanti dalla demolizione della macchina sono classificabili come rifiuti speciali. In ogni caso dovranno essere rispettate le locali legislazioni e le normative di tutela ambientali nel rispetto delle leggi vigenti in materia nel paese di utilizzo della macchina.

Materiali ferrosi: trattasi di materiale riciclabile (materie prime secondarie) da conferire ad apposito centro di raccolta autorizzato.

Materiali plastici: riciclo consentito ove effettuato, smaltimento in discarica per rifiuti assimilabili agli urbani, incenerimento consentito in impianto dotato di postcombustione e sistema di abbattimento polveri prima dell'immissione in atmosfera.

GENERAL MOUNTING AND MAINTEANCE INSTRUCTIONS

For the longest and most efficient service life, drives must be correctly mounted on the application structure. Therefore, all structure faces must be machined with H8 spigots so that they are flat and perpendicular to the drive axis.

To secure the drive, use the nuts and bolts shown under each technical drawing on the product technical sheets. Make sure to use all the fixing holes on the flanges. For outdoor installations, drives must be protected against bad weather, treated with anticorrosive agents and oil seals protected with water-repellent grease.

In operations in which transmission malfunctions might occur due to accidental overloads, a mechanical or hydraulic safety device must be used to protect the drive.

Drives are usually connected directly to what are mainly electric or hydraulic motors by means of flanges when there are particularly critical conditions that might cause damage after installation. With this in mind, and when heavy motors must be installed (weighing more than 100 Kg), please contact our Technical-Commercial Service Department, to evaluate the proper mounting position. As an alternative, we suggest to separately mount the two units and to connect them with either a coupling or pulleys.

MACHINE DISPOSAL

Disposing of waste deriving from demolition of the machine must be done with the environment in mind, avoiding pollution of the soil, air and water. Waste from demolition of the machine is classified as special waste. Local laws and environmental protection regulations must in any case be observed, in compliance with the environmental laws in force in the country where the machine is used.

Ferrous materials: these are recyclable (secondary raw materials) to be delivered to a special authorised collection centre.

Plastic materials: recycling permitted where done, disposal in landfill for waste similar to urban waste, incineration allowed in plant equipped with post-combustion and dust damping system before being released into the air.

GRUPPI CON FISSAGGIO A FLANGIA AVANZATA O SENZA FLANGIA

Riduttori con albero lento maschio (M-P)

Per tali gruppi, quando i carichi sono superiori del 50% rispetto a quelli indicati nei grafici riportati nelle singole schede di prodotto, si consiglia di utilizzare entrambi i centraggi previsti sulla scatola lato uscita. In tutti i casi, invece, devono essere utilizzati i centraggi previsti sugli alberi scanalati, soprattutto quando vengono montati dei pignoni dentati. Nelle applicazioni dove si verificano condizioni di forti carichi esterni agenti contemporaneamente sia sull'uscita che sull'entrata, si consiglia di contattare il nostro Servizio Tecnico-Commerciale.

Riduttori con albero lento femmina (F)

Per la tipologia di costruzione questi riduttori sono idonei alla trasmissione della pura coppia. Occorre quindi curare particolarmente la coassialità e l'ortogonalità nel collegamento con l'albero condotto

Riduttori a basamento con piedi (CPC)

Anche per questi gruppi occorre che siano verificate le condizioni di fissaggio relative a coassialità ed ortogonalità già elencate all'inizio di questo capitolo. Occorre inoltre controllare adeguatamente l'allineamento del gruppo con la macchina da movimentare. Se si hanno dei dubbi sulla perfetta riuscita di tale operazione, utilizzare un collegamento non rigido fra riduttore e macchina, ad esempio un giunto elastico. Durante l'installazione considerare che il riduttore così montato non deve essere soggetto a fenomeni di vibrazione.

Riduttori per montaggio pendolare (FS)

Per l'installazione di questi riduttori si prescrive l'applicazione di un braccio di reazione che rispetti le lunghezze minime riportate a disegno per ogni singolo gruppo. Inoltre, si consiglia di ammortizzare il vincolo di reazione con elementi in gomma e/o ammortizzatori. In caso di applicazione di motori molto pesanti o di montaggio con cinghia sul lato entrata, contattare il nostro Servizio Tecnico-Commerciale per verificare l'installazione. In questi casi si producono, infatti, carichi esterni che, aggiungendosi a quelli della trasmissione, possono ridurre sensibilmente la vita dei cuscinetti, compromettere l'efficacia del serraggio dell'anello calettatore o influire sulla resistenza dell'albero.

UNITS WITH FLANGE CLAMPING OR WITHOUT FLANGE MOUNTING

Drive with male output shaft t (M-P)

For these units, when the loads are 50% greater than those indicated on the single product technical sheets, use both spigots on the output housing. In all other cases, especially when toothed pinions are mounted, the spigots on the splined output shafts must be used. In applications where heavy external load conditions act simultaneously on both the output and the input sides, please contact our Technical-Commercial Service Department.

Drives with female output shaft (F)

Thanks to their construction design, these drives are particularly suitable for transmitting pure torque. Therefore always check that the shaft is concentric and in-line with the axis of the driven shaft.

Foot mounted drives (CPC)

The fastening conditions with respect to the concentricity and alignment as discussed in the beginning of this section, also apply to these units. Ensure that the unit is properly aligned with the machine to be operated. Should you have any doubts about the outcome of this operation, connect a flexible coupling between the drive and the machine. Ensure that the mounted drive is not subjected to vibrations.

Shaft-mounted drives (FS)

Before installing these drives, apply a torque arm that respects the minimum lengths shown on the drawing for each single unit. It is also recommended to cushion the reaction constraint using rubber pieces and/or shock absorbers. When installing very heavy motors or for a belt mounting on the input side, please contact our Technical-Commercial Service Department. These external and transmission load conditions might significantly shorten bearing service life, loosening shrink disc tightness or affecting shaft resistance.

INSTALLAZIONE E MANUTENZIONE
/ INSTALLATION AND MAINTENANCE

Per garantire un efficiente accoppiamento riduttore-utente, occorre sgrassare opportunamente la superficie interna dell'albero del riduttore e il relativo albero maschio di accoppiamento. Per un corretto serraggio dell'anello calettatore si raccomanda di serrare le viti in modo graduale ed uniforme, con sequenza continua. Per la rimozione, occorre svitare gradualmente le viti nello stesso modo in cui sono state avvitate, cioè con sequenza continua e graduale. Si consiglia di far compiere 1/3 di giro ad ogni vite nella prima sequenza di allentamento, in modo da evitare eventuali intraversamenti. Procedere poi allo sbloccaggio totale, ma sempre gradualmente e senza arrivare all'estrazione totale delle viti dai filetti. È consigliabile realizzare l'albero maschio da accoppiare ai gruppi Planetary Drives in tolleranza h6. Seguire, inoltre, le indicazioni riportate a lato di ogni disegno.

To ensure that the drive-driven equipment coupling is as efficient as possible, thoroughly degrease the internal surface of the drive shaft and its male coupling shaft. Tighten the screws on the shrink disc in a gradual and uniform manner in a continuous sequence. To remove the unit, gradually loosen the screws in the same order that they were tightened; i.e. in a gradual and continuous sequence. Each screw should be backed off one third turn during the first loosening sequence to avoid any misalignment. Then proceed to completely unfasten the unit, always in a gradual manner without completely removing the screw from the threads. It is recommended to use tolerance h6 for the male shafts to be connected to the Planetary Drives. In addition, follow the instructions provide next to each drawing.

LUBRIFICAZIONE
/ LUBRICATION

Per il buon funzionamento dei riduttori è indispensabile una corretta lubrificazione.
Si consiglia pertanto di verificare le seguenti condizioni in fase di installazione:

- Controllare che, in relazione alla posizione di montaggio specificata in fase d'ordine, il gruppo abbia i tappi di servizio montati correttamente, secondo le indicazioni del capitolo POSIZIONI DI MONTAGGIO (pag.A-26).
- Quando il gruppo è montato in posizione orizzontale bisogna riempirlo fino alla mezzeria, indipendentemente dalla configurazione lineare o angolare. Controllare visivamente il livello dell'olio svitando il tappo posto sulla stessa zona o in zona limitrofa, vale a dire appena sopra.
- Nel caso di gruppi angolari, la coppia conica è collegata in modo che l'olio possa circolare liberamente; conviene comunque effettuare il riempimento a terra, secondo la corretta posizione di montaggio, introducendo olio da entrambe le parti non contemporaneamente, in modo da snellire l'operazione di riempimento e, nello stesso tempo, avere la certezza di introdurre la quantità di olio necessaria, qualora l'olio impieghi tempo per passare da una camera all'altra.
- Rivolgere particolare attenzione ai gruppi montati in posizione verticale che devono essere completamente riempiti mediante gomiti e prolunghe, di cui è dotato il gruppo. Per queste posizioni è consigliabile l'uso di un vaso di espansione fornito su richiesta, separatamente dal gruppo. Il vaso deve essere posizionato oltre il punto più alto del riduttore ed ha il compito di alloggiare eventuali espansioni di olio o di garantire un rabbocco sicuro per gruppi montati in posizioni inaccessibili.
- I freni e gli attacchi motore assemblati formano una camera separata dal resto del riduttore; bisogna pertanto provvedere al loro riempimento separatamente dal riduttore, vedere capitolo FRENI (pag. D-2).
- I gruppi con servizio continuativo sono soggetti a surriscaldamento per la notevole quantità di olio in essi contenuta: in questi casi consigliamo l'uso di oli con una viscosità più bassa.

I quantitativi di olio indicati nelle tabelle di catalogo, riportate per ogni grandezza, sono puramente indicativi e sono soggetti a variazioni in funzione della configurazione del riduttore: tipo di rapporto, freno, attacco motore e supporto in uscita.
Durante il funzionamento la temperatura delle superfici esterne non deve superare gli 80°C.
Se si verificano temperature superiori contattare il Servizio Tecnico-Commerciale Haumea.

Correct lubrication is required to run drives efficiently. Therefore, check the following conditions during installation:

- Make sure that all plugs are correctly mounted with respect to the installation position specified in the order and according to the instructions in the MOUNTING POSITIONS section (page A-26).
- Fill horizontally-mounted units up to the central line regardless of a linear or angular configuration. To visually check the oil level, unscrew the plug located just above the center line.
- For right angle units, the bevel gear is connected so that the oil is free to circulate. In any case, carry out the filling operation on both ends, but not simultaneously, and while the unit is on the ground, based on the correct mounting position. This will speed up the operation and ensure that the correct quantity of oil is introduced, regardless of how long it would take for the oil to go from one chamber to the other.
- Particular attention should be paid to vertically-mounted units which must be completely filled by means of elbows and extensions supplied with the unit. For these positions it is recommended to use an expansion tank, which can be supplied separately on request. This tank must be positioned above the highest point of the drive and is designed to collect any oil expansions or to ensure that the units mounted in hard-to-reach places can be topped up.
- Brakes and assembled motor connections form a separate chamber from the drive and thus must be filled separately - see the BRAKES section (page D-2).
- Units running under continuous duty conditions may overheat due to the large quantity of oil they contain. In these cases, use oil with a lower viscosity.

Please note that the oil quantities shown in the catalogue are approximate and may vary depending on the drive configuration: ratio, brake, motor connections and output adapters.
During normal operation, the temperature of the outer casing should not exceed 80°C.
If the temperature exceeds 80°C, contact the Haumea Technical-Commercial Service Department.

CAMBIO OLIO

- Effettuare il primo cambio olio dopo 100 ore di funzionamento.
- I cambi successivi devono avvenire dopo 2000 ore o almeno una volta all'anno.
- Lo svuotamento del riduttore va effettuato con l'olio ancora caldo, per evitare il deposito di morchie.
- Pulire i tappi.
- Prima del riempimento con nuovo olio effettuare un lavaggio interno del gruppo con liquido detergente consigliato dal fornitore di lubrificante.
- Controllare periodicamente che non vi siano perdite d'olio e che, a gruppo fermo, l'olio raggiunga il livello previsto. Se necessario, effettuare un rabbocco con lo stesso tipo di olio presente nel riduttore.
- **Attenzione**: un rabbocco superiore al 10% del quantitativo totale può essere indice di perdita nel riduttore.

SMALTIMENTO OLIO ESAUSTO

Durante le fasi di smaltimento degli oli esausti è obbligatorio utilizzare tutte le cautele e le professionalità necessarie per eseguire il lavoro a regola d'arte, evitando di inquinare suolo, aria, acqua e rispettando l'ambiente e la salute umana. L'olio esausto, non inquinato da altre sostanze, deve essere raccolto e conferito in apposito centro autorizzato, nel pieno rispetto delle locali legislazioni e normative di tutela ambientale e delle leggi vigenti

OIL CHANGES

- The first oil change should be done after 100 hours of duty
- Subsequent oil changes should take place after 2000 hours or at least once a year.
- To avoid sludge deposits, change the oil while the drive is still hot.
- Clean all plugs.
- Before adding the new oil, the unit should be flushed with a liquid detergent recommended by the lubricant supplier.
- Periodically check for oil leaks and the oil level while the unit is idling. If needed, top up using the same type of oil.
- **Attention**: if the quantity of oil used to top up is greater than 10% of the oil capacity, then check again for leaks.

DISPOSING OF EXHAUSTED OIL

When disposing of exhausted oils, it is mandatory to adopt all precautions and professional expertise necessary for carrying out the job in a workmanlike manner so as not to pollute the soil, air and water and treating the environment and human health with care. Exhausted oil not contaminated by other substances must be collected and delivered to a special authorised centre, in full compliance with local environmental protection laws and regulations and laws in force.

LUBRIFICANTE

Haumea consiglia l'uso di olii per ingranaggi con additivi EP e caratteristiche antischiuma. Quando il riduttore è sottoposto ad elevate temperature, si consiglia l'uso di olii a base sintetica con additivi EP (tipo Mobilgear SHC XMP 220 Olio sintetico PAO, EP, ISO VG 220 compatibile con oli minerali). A tale riguardo la Tabella N° 4 riporta alcuni tipi di olii commerciali che rispondono alle caratteristiche richieste in funzione della temperatura ambiente.

In generale, i riduttori Planetary Drives vengono forniti privi di lubrificante

Scelta del lubrificante in funzione della temperatura ambiente

LUBRICANT

Haumea recommends using EP additive oil with anti-foaming properties. If the drive is subjected to high temperatures, use EP additive synthetic oil (such as Mobilgear SHC XMP 220 PAO Synthetic Oil, EP, ISO VG 220 compatible with mineral oils). With this in mind, Table 4 shows some types of commercially available oils that meet the lubrication requirements in relation to different ambient temperatures.

Generally, Planetary Drives are supplied without lubricant

Lubricants are selected in relation to ambient temperature.

TABELLA 4 / TABLE 4

	Temperatura ambiente / Ambient temperature			
	-20°C / +5°C - IV 95	+5°C / +40°C - IV 95	+40°C / +55°C - IV 95	-30°C / +65°C - IV 165
ISO 3448	VG 100	VG 150	VG 320	VG 150-200
MOBIL	Olio Minerale Mineral oil	**Mobilgear XMP 150**	**Mobilgear XMP 320**	
	Olio Sintetico PAO, EP, ISO VG 220 Synthetic oil	**Mobilgear SHC XMP 220**		
AGIP	Blasia 100	Blasia 150	Blasia 320	Blasia S 220
ARAL	Degol BG 100	Degol BG 150	Degol BG 320	Degol GS 220
BP MACH	GR XP 100	GR XP 150	GR XP 320	Enersyn HTX 220
CASTROL	Alpha SP 100	Alpha SP 150	Alpha 320	Alpha SN 150
CHEVRON	non leaded gear compound 100	non leaded gear compound 150	non leaded gear compound 320	
ESSO	Spartan EP 100	Spartan EP 150	Spartan EP 320	
Q8	Goya 100	Goya 150	Goya 320	El Greco 228
IP	Mellana 100	Mellana 150	Mellana 320	Telesia Oil 150
SHELL	Omala oil 100	Omala oil 150	Omala oil 320	Tivela Oil SA
TOTAL	Carter EP 100 N	Carter EP 150	Carter EP 320 N	
KLUEBER	Gem 1-100	Gem 1-150	Gem 1-320	Synteso D 220 EP
ELF	Reductelf SP 100	Reductelf SP 150	Reductelf SP 320	Elf ORITIS 125 MS Elf Syntherma P 30
FINA	Giran 100	Giran 150	Giran 320	Giran 220

QUANTITÀ DI LUBRIFICANTE CONTENUTO NEI RIDUTTORI [l]

LUBRICANT QUANTITY INSIDE THE DRIVES [l]

	M		P		CPC		F		FS	
										
PG 101	0.5	1.0	0.5	1.0	0.8	1.6	0.5	1.0	0.5	1.0
PG 102	0.7	1.4	0.7	1.4	1.0	2.0	0.7	1.4	0.7	1.4
PG 103	0.9	1.8	0.9	1.8	1.2	2.4	0.9	1.8	0.9	1.8
PG 104	1.1	2.2	1.1	2.2	1.4	2.8	1.1	2.2	1.1	2.2
PGA 102	2	4	2	4	2.3	4.6	2.0	4.0	2.0	4.0
PGA 103	2.2	4.4	2.2	4.4	2.5	5.0	2.2	4.4	2.2	4.4
PGA 104	2.4	4.8	2.4	4.8	2.7	5.4	2.4	4.8	2.4	4.8
PG 161	0.6	1.2	0.6	1.2	0.9	1.8	0.6	1.2	0.6	1.2
PG 162	0.8	1.6	0.8	1.6	1.1	2.2	0.8	1.6	0.8	1.6
PG 163	1.0	2.0	1.0	2.0	1.3	2.6	1.0	2.0	1.0	2.0
PG 164	1.2	2.4	1.2	2.4	1.5	3.0	1.2	2.4	1.2	2.4
PGA 162	2.1	4.2	2.1	4.2	2.4	4.8	2.1	4.2	2.1	4.2
PGA 163	2.3	4.6	2.3	4.6	2.6	5.2	2.3	4.6	2.3	4.6
PGA 164	2.5	5.0	2.5	5.0	2.8	5.6	2.5	5.0	2.5	5.0
PG 251	1.0	2.0	1.2	2.4	1.5	3.0	0.8	1.6	1.0	2.0
PG 252	1.3	2.6	1.5	3.0	1.8	3.6	1.1	2.2	1.3	2.6
PG 253	1.5	3.0	1.7	3.4	2.0	4.0	1.3	2.6	1.5	3.0
PG 254	1.7	3.4	1.9	3.8	2.2	4.4	1.5	3.0	1.5	3.0
PGA 252	2.6	5.2	3.8	7.6	3.1	6.2	2.4	4.8	2.6	5.2
PGA 253	2.8	5.6	3.0	6.0	3.3	6.6	2.6	5.2	2.8	5.6
PGA 254	3.0	6.0	3.2	6.4	3.5	7.0	2.8	5.6	3.0	6.0
PG 501	1.1	2.2	1.3	2.6	1.6	3.2	0.9	1.8	1.1	2.2
PG 502	1.5	3.0	1.7	3.4	2.0	4.0	1.3	2.6	1.5	3.0
PG 503	1.8	3.6	2.0	4.0	2.3	4.6	1.6	3.2	1.8	3.6
PG 504	2.0	4.0	2.2	4.4	2.5	5.0	1.8	3.6	2.0	4.0
PGA 502	3.1	6.2	3.3	6.6	3.6	7.2	2.9	5.8	3.1	6.2
PGA 503	3.2	6.4	3.4	6.8	3.7	7.4	3.3	6.6	3.2	6.4
PGA 504	3.3	6.6	3.5	7.0	3.8	7.6	3.1	6.2	3.3	6.6
PG 701	—	—	1.6	3.2	2.4	4.8	1.6	3.2	1.6	3.2
PG 702	—	—	2.0	4.0	2.8	5.6	2.0	4.0	2.0	4.0
PG 703	—	—	2.3	4.6	3.1	6.2	2.3	4.6	2.3	4.6
PG 704	—	—	2.5	5.0	3.3	6.6	2.5	5.0	2.5	5.0
PGA 702	—	—	3.6	7.2	4.4	8.8	3.6	7.2	3.6	7.2
PGA 703	—	—	3.8	7.6	4.6	9.2	3.8	7.6	3.8	7.6
PGA 704	—	—	4.0	8.0	4.8	9.6	4.0	8.0	4.0	8.0
PG 1001	2.4	4.8	—	—	3.6	7.2	2.2	4.4	2.4	4.8
PG 1002	3.1	6.2	—	—	4.3	8.6	2.9	5.8	3.1	6.2
PG 1003	3.5	7.0	—	—	4.7	9.4	3.3	6.6	3.5	7.0
PG 1004	3.8	7.6	—	—	5.0	10.0	3.6	7.2	3.8	7.6
PGA 1002	4.4	8.8	—	—	5.6	11.2	4.2	8.4	4.4	8.8
PGA 1003	5.1	10.2	—	—	6.3	12.6	4.9	9.8	5.1	10.2
PGA 1004	6.5	13.0	—	—	7.7	15.4	5.5	11.0	6.5	13.0

NB. Le quantità di lubrificante riportate sono indicative e vanno controllate in fase di riempimento verificando il livello tramite l'apposito tappo di servizio.

NOTE: The lubricant quantities shown in the table are indicative, but should be verified during the filling operation, checking the level through the service plug.

QUANTITÀ DI LUBRIFICANTE CONTENUTO NEI RIDUTTORI [l]

LUBRICANT QUANTITY INSIDE THE DRIVES [l]

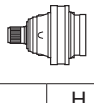
	M		P		CPC		F		FS	
										
PG 1601	2.6	5.2	4.3	8.6	3.9	7.8	1.9	3.8	2.6	5.2
PG 1602	3.3	6.6	5.0	10.0	4.6	9.2	2.6	5.2	3.3	6.6
PG 1603	3.7	7.4	5.4	10.8	5.0	10.0	3.0	6.0	3.7	7.4
PG 1604	4.0	8.0	5.7	11.4	5.3	10.6	3.3	6.6	4.0	8.0
PGA 1602	4.6	9.2	6.3	12.6	5.9	11.8	3.9	7.8	4.6	9.2
PGA 1603	5.3	10.6	7.0	14.0	6.6	13.2	4.6	9.2	5.3	10.6
PGA 1604	6.5	13.0	7.3	14.6	7.8	15.6	5.8	11.6	6.5	13.0
PG 1802	3.9	7.8	5.6	11.2	5.2	10.4	3.2	6.4	3.9	7.8
PG 1803	4.6	9.2	6.3	12.6	5.9	11.8	3.9	7.8	4.6	9.2
PG 1804	4.9	9.8	6.6	13.2	6.2	12.4	4.2	8.4	4.9	9.8
PGA 1802	5.6	11.2	7.3	14.6	6.9	13.8	4.9	9.8	5.6	11.2
PGA 1803	5.9	11.8	7.6	15.2	7.2	14.4	5.2	10.4	5.9	11.8
PGA 1804	6.6	13.2	8.3	16.6	7.9	15.8	5.9	11.8	6.6	13.2
PG 2501	3.7	7.4	—	—	3.7	7.4	2.9	5.8	2.9	5.8
PG 2502	4.6	9.2	—	—	4.6	9.2	3.8	7.6	3.8	7.6
PG 2503	5.0	10.0	—	—	5.0	10.0	4.2	8.4	4.2	8.4
PG 2504	5.3	10.6	—	—	5.3	10.6	4.5	9.0	4.5	9.0
PGA 2502	9.1	18.2	—	—	9.1	18.2	8.3	16.6	8.3	16.6
PGA 2503	6.6	13.2	—	—	6.6	13.2	5.8	11.6	5.8	11.6
PGA 2504	7.0	14.0	—	—	7.0	14.0	6.2	12.4	6.2	12.4
PG 3002	5.3	10.6	—	—	5.3	10.6	4.5	9.0	4.5	9.0
PG 3003	5.8	11.6	—	—	5.8	11.6	5.0	10.0	5.0	10.0
PG 3004	6.1	12.2	—	—	6.1	12.2	5.3	10.6	5.3	10.6
PGA 3003	10.2	20.4	—	—	10.2	20.4	9.4	18.8	9.4	18.8
PGA3004	8.2	16.4	—	—	8.2	16.4	7.0	14.0	7.0	14.0
PG 3501	4.0	8.0	—	—	4.0	8.0	3.3	6.6	3.3	6.6
PG 3502	5.5	11.0	—	—	5.5	11.0	4.7	9.4	4.7	9.4
PG 3503	6.0	12.0	—	—	6.0	12.0	5.2	10.4	5.2	10.4
PG 3504	6.3	12.6	—	—	6.3	12.6	5.5	11.0	5.5	11.0
PGA 3502	6.7	13.4	—	—	6.7	13.4	5.8	11.6	5.8	11.6
PGA 3503	10.2	20.4	—	—	10.2	20.4	9.4	18.8	9.4	18.8
PGA 3504	8.2	16.4	—	—	8.2	16.4	7.0	14.0	7.0	14.0
PG 5001	5.2	10.4	—	—	5.2	10.4	4.5	9.0	4.5	9.0
PG 5002	6.5	13.0	—	—	6.5	13.0	5.8	11.6	5.8	11.6
PG 5003	7.1	14.2	—	—	7.1	14.2	6.4	12.8	6.4	12.8
PG 5004	7.5	15.0	—	—	7.5	15.0	6.9	13.8	6.9	13.8
PGA5002	11.0	22.0	—	—	11.0	22.0	10.3	20.6	10.3	20.6
PGA 5003	8.5	17.0	—	—	8.5	17.0	7.8	15.6	7.8	15.6
PGA 5004	9.1	18.2	—	—	9.1	18.2	8.4	16.8	8.4	16.8
PG 6501	7.2	14.4	—	—	7.2	14.4	6.2	12.4	6.2	12.4
PG 6502	8.5	17.0	—	—	8.5	17.0	7.5	15.0	7.5	15.0
PG 6503	9.7	19.4	—	—	9.7	19.4	8.7	17.4	8.7	17.4
PG 6504	10.1	20.2	—	—	10.1	20.2	9.1	18.2	9.1	18.2
PGA 6503	14.2	28.4	—	—	14.2	28.4	13.2	26.4	13.2	26.4
PGA 6504	11.7	23.4	—	—	11.7	23.4	10.7	21.4	10.7	21.4
PG 9001	8.7	17.4	—	—	8.7	17.4	8.7	17.4	8.7	17.4
PG 9002	10.0	20.0	—	—	10.0	20.0	10.0	20.0	10.0	20.0
PG 9003	11.2	22.4	—	—	11.2	22.4	11.2	22.4	11.2	22.4
PG 9004	11.6	23.2	—	—	11.6	23.2	11.6	23.2	11.6	23.2
PGA 9003	15.7	31.4	—	—	15.7	31.4	15.7	31.4	15.7	31.4
PGA 9004	13.2	26.4	—	—	13.2	26.4	13.2	26.4	13.2	26.4

NB. Le quantità di lubrificante riportate sono indicative e vanno controllate in fase di riempimento verificando il livello tramite l'apposito tappo di servizio.

NOTE: The lubricant quantities shown in the table are indicative, but should be verified during the filling operation, checking the level through the service plug.

QUANTITÀ DI LUBRIFICANTE CONTENUTO NEI RIDUTTORI [l]

LUBRICANT QUANTITY INSIDE THE DRIVES [l]

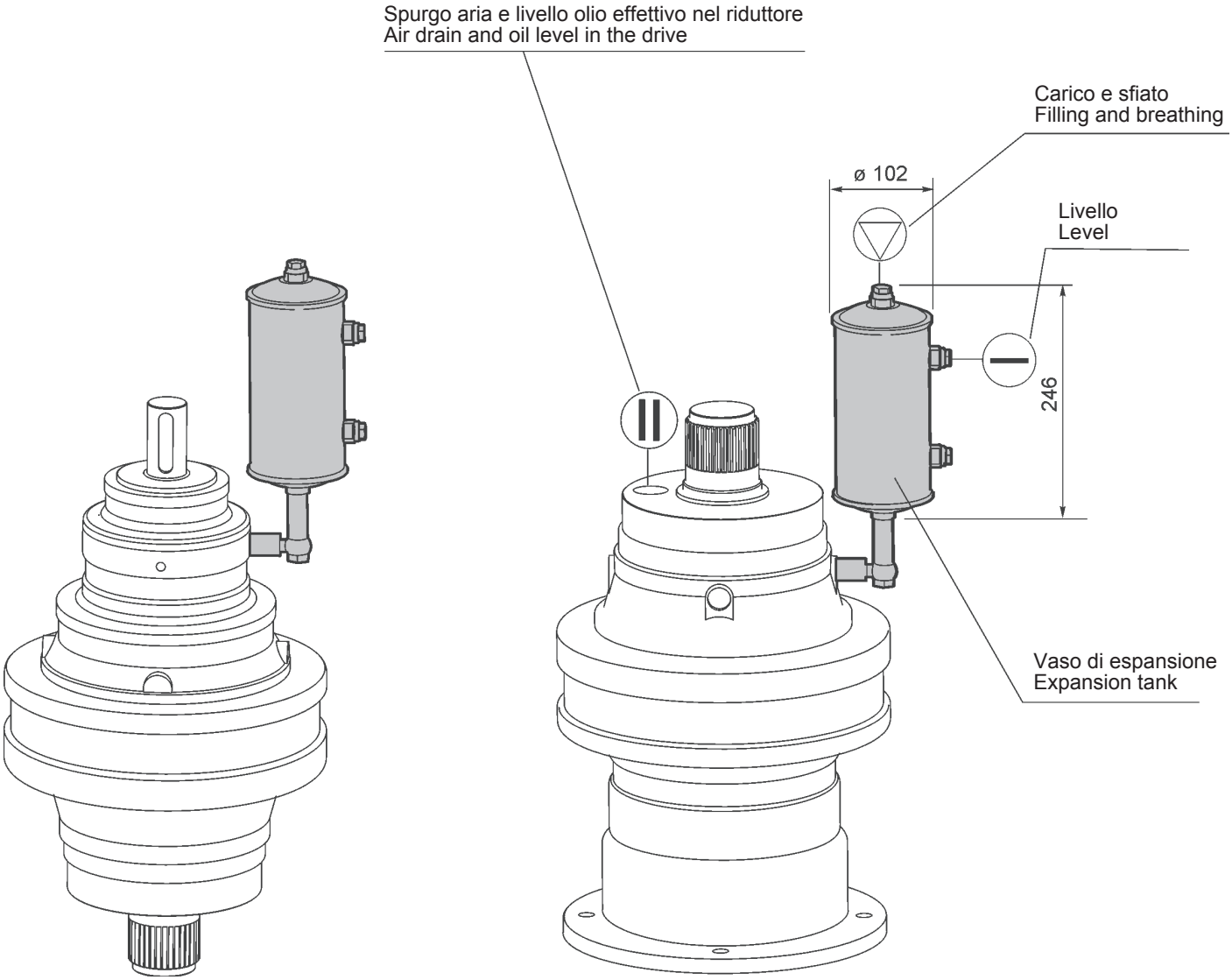
	M				P		CPC		F				FS			
																
		H		H						H		H		H		H
PG 12001	13.5	-	-	-	-	-	-	-	14.3	-	-	-	14.3	-	-	-
PG 12002	14.9	-	29.8	-	-	-	-	-	15.7	-	31.4	-	15.7	-	31.4	-
PG 12003	16.1	-	32.2	-	-	-	-	-	16.9	-	33.8	-	16.9	-	33.8	-
PG 12004	16.6	-	33.2	-	-	-	-	-	17.4	-	34.8	-	17.4	-	34.8	-
PG 12005	16.9	-	33.8	-	-	-	-	-	17.7	-	35.4	-	17.7	-	35.4	-
PGA 12003	17.9	-	35.8	-	-	-	-	-	18.7	-	37.4	-	18.7	-	37.4	-
PGA 12004	19.1	-	38.2	-	-	-	-	-	19.9	-	39.8	-	19.9	-	39.8	-
PGA 12005	18.6	-	37.2	-	-	-	-	-	19.4	-	38.8	-	19.4	-	38.8	-
PG 16001	14.5	-	-	-	-	-	-	-	14.5	-	29	-	14.5	-	29	-
PG 16002	16.9	-	33.8	-	-	-	-	-	16.9	-	33.8	-	16.9	-	33.8	-
PG 16003	18.3	-	36.6	-	-	-	-	-	18.3	-	36.6	-	18.3	-	36.6	-
PG 16004	18.8	-	37.6	-	-	-	-	-	18.8	-	37.6	-	18.8	-	37.6	-
PG 16005	19.1	-	38.2	-	-	-	-	-	19.1	-	38.2	-	19.1	-	38.2	-
PGA 16003	19.9	-	39.8	-	-	-	-	-	19.9	-	39.8	-	19.9	-	39.8	-
PGA 16004	21.3	-	42.6	-	-	-	-	-	21.3	-	42.6	-	21.3	-	42.6	-
PGA 16005	20.8	-	41.6	-	-	-	-	-	20.8	-	41.6	-	20.8	-	41.6	-
PG 21001	21	-	42		-	-	-	-	21	-	42	-	21	-	42	-
PG 21002	23.4	24.9	46.8	49.8	-	-	-	-	23.4	24.9	46.8	49.8	23.4	24.9	46.8	49.8
PG 21003	24.8	27.2	49.6	54.4	-	-	-	-	24.8	27.2	49.6	54.4	24.8	27.2	49.6	54.4
PG 21004	25.3	28.3	50.6	56.6	-	-	-	-	25.3	28.3	50.6	56.6	25.3	28.3	50.6	56.6
PG 21005	25.6	28.9	51.2	57.8	-	-	-	-	25.6	28.9	51.2	57.8	25.6	28.9	51.2	57.8
PGA 21003	26.4	-	52.8	-	-	-	-	-	26.4	-	52.8	-	26.4	-	52.8	-
PGA 21004	27.8	30.2	55.6	60.4	-	-	-	-	27.8	30.2	55.6	60.4	27.8	30.2	55.6	60.4
PGA 21005	27.3	30.3	54.6	60.6	-	-	-	-	27.3	30.3	54.6	60.6	27.3	30.3	54.6	60.6
PG 26001	20	-	40	-	-	-	-	-	20	-	40	-	20	-	40	-
PG 26002	25.2	-	50.4	-	-	-	-	-	25.2	-	50.4	-	25.2	-	50.4	-
PG 26003	26.6	-	53.2	-	-	-	-	-	26.6	-	53.2	-	26.6	-	53.2	-
PG 26004	27.5	-	55	-	-	-	-	-	27.5	-	55	-	27.5	-	55	-
PG 26005	27.9	-	55.8	-	-	-	-	-	27.9	-	55.8	-	27.9	-	55.8	-
PGA 26004	29.6	-	59.2	-	-	-	-	-	29.6	-	59.2	-	29.6	-	59.2	-
PGA 26005	29.5	-	59	-	-	-	-	-	29.5	-	59	-	29.5	-	59	-
PG 31001	42	-	84	-	-	-	-	-	42	-	84	-	42	-	84	-
PG 31002	46.5	50.4	93	100.8	-	-	-	-	46.5	50.4	93	100.8	46.5	50.4	93	100.8
PG 31003	47.9	51.8	95.8	103.6	-	-	-	-	47.9	51.8	95.8	103.6	47.9	51.8	95.8	103.6
PG 31004	48.7	53	97.4	106	-	-	-	-	48.7	53	97.4	106	48.7	53	97.4	106
PG 31005	49.1	53.5	98.2	107	-	-	-	-	49.1	53.5	98.2	107	49.1	53.5	98.2	107
PGA 31004	50.9	53.4	101.8	106.8	-	-	-	-	50.9	53.4	101.8	106.8	50.9	53.4	101.8	106.8
PGA 31005	50.7	54.8	101.4	109.6	-	-	-	-	50.7	54.8	101.4	109.6	50.7	54.8	101.4	109.6
PG 40001	44	-	88	-	-	-	-	-	44	-	88	-	44	-	88	-
PG 40002	49	-	98	-	-	-	-	-	49	-	98	-	49	-	98	-
PG 40003	50.4	-	100.8	-	-	-	-	-	50.4	-	100.8	-	50.4	-	100.8	-
PG 40004	51.3	-	102.6	-	-	-	-	-	51.3	-	102.6	-	51.3	-	102.6	-
PG 40005	51.7	-	103.4	-	-	-	-	-	51.7	-	103.4	-	51.7	-	103.4	-
PGA 40005	54.3	-	108.6	-	-	-	-	-	54.3	-	108.6	-	54.3	-	108.6	-
PG 45001	44	-	88	-	-	-	-	-	44	-	88	-	44	-	88	-
PG 45002	50	-	100	-	-	-	-	-	50	-	100	-	50	-	100	-
PG 45003	52.4	-	104.8	-	-	-	-	-	52.4	-	104.8	-	52.4	-	104.8	-
PG 45004	53.8	-	107.6	-	-	-	-	-	53.8	-	107.6	-	53.8	-	107.6	-
PG 45005	54.3	-	108.6	-	-	-	-	-	54.3	-	108.6	-	54.3	-	108.6	-
PGA 45005	56.8	-	113.6	-	-	-	-	-	56.8	-	113.6	-	56.8	-	113.6	-
PG 53001	70	-	140	-	-	-	-	-	70	-	140	-	70	-	140	-
PG 53002	80	-	160	-	-	-	-	-	80	-	160	-	80	-	160	-
PG 53003	82.4	-	164.8	-	-	-	-	-	82.4	-	164.8	-	82.4	-	164.8	-
PG 53004	83.8	-	167.6	-	-	-	-	-	83.8	-	167.6	-	83.8	-	167.6	-
PG 53005	84.3	-	168.6	-	-	-	-	-	84.3	-	168.6	-	84.3	-	168.6	-
PGA 53005	86.8	-	173.6	-	-	-	-	-	86.8	-	173.6	-	86.8	-	173.6	-
PG 61001	67	-	134	-	-	-	-	-	67	-	134	-	67	-	134	-
PG 61002	77	-	154	-	-	-	-	-	77	-	154	-	77	-	154	-
PG 61003	79.4	-	158.8	-	-	-	-	-	79.4	-	158.8	-	79.4	-	158.8	-
PG 61004	80.8	-	161.6	-	-	-	-	-	80.8	-	161.6	-	80.8	-	161.6	-
PG 61005	81.3	-	162.6	-	-	-	-	-	81.3	-	162.6	-	81.3	-	162.6	-
PGA 61005	83.8	-	167.6	-	-	-	-	-	83.8	-	167.6	-	83.8	-	167.6	-

NB. Le quantità di lubrificante riportate sono indicative e vanno controllate in fase di riempimento verificando il livello tramite l'apposito tappo di servizio.

NOTE: The lubricant quantities shown in the table are indicative, but should be verified during the filling operation, checking the level through the service plug.

VASO DI ESPANSIONE
Per applicazioni dove vengono considerate posizioni di montaggio verticali si consiglia l'utilizzo di un vaso di espansione che permette di alloggiare eventuali espansioni di olio o di garantire un rabbocco in posizioni inaccessibili. Tale accessorio può essere fornito su richiesta.

EXPANSION TANK
For vertical applications, it is recommended to use an expansion tank that can absorb any oil expansions and/or ensure topping up in hard-to-reach places. This fitting can be supplied on request.



POSIZIONI DI MONTAGGIO

MOUNTING POSITIONS

TAPPI OLIO

- Tappo sfiato
- Tappo carico
- Tappo livello
- Tappo scarico

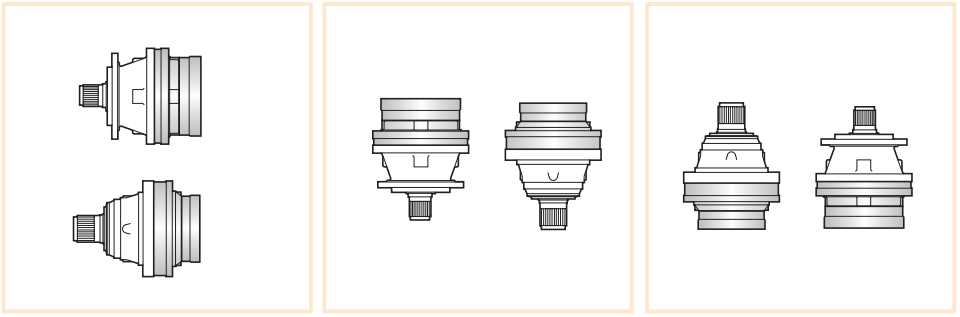
N.B. L'orientamento della foratura della flangia di fissaggio è come illustrato nelle schede dei dati dimensionali dei riduttori.

OIL PLUGS

- Vent plug
- Filling plug
- Level plug
- Drain plug

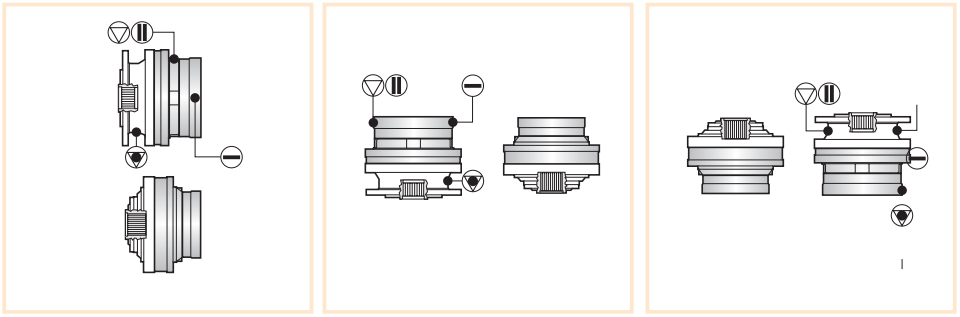
N.B. The mounting flange orientation is shown in each planetary gears techincal sheets.

M-P



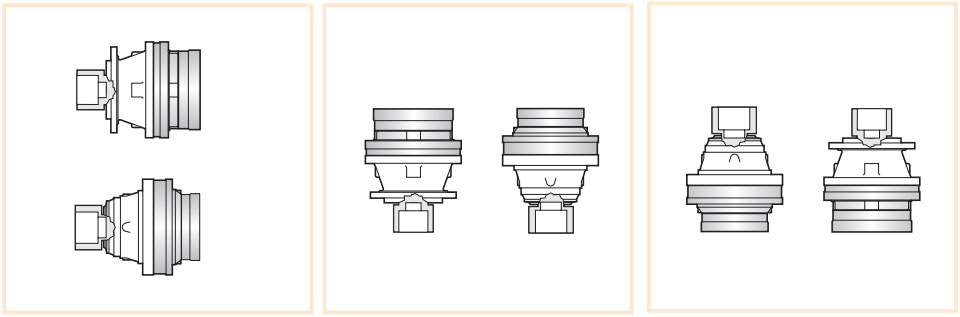
B5 V1 V3

F



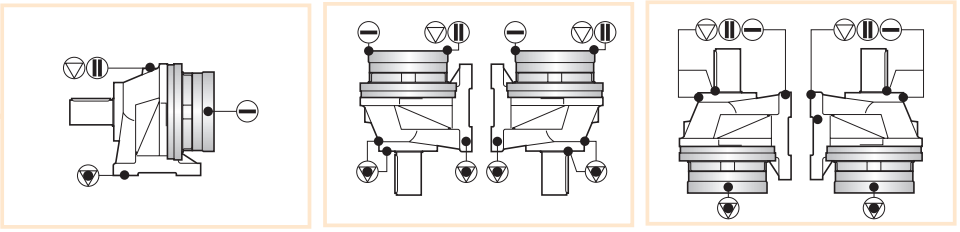
B5 V1 V3

FS

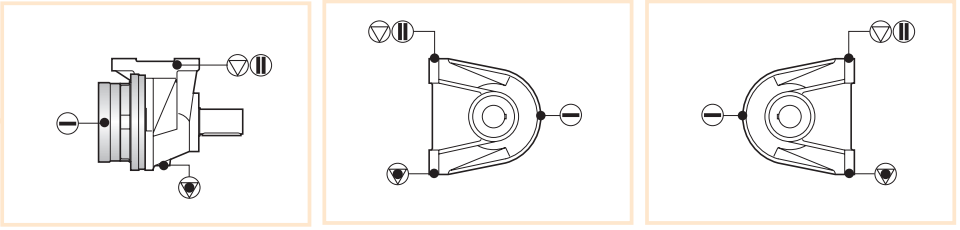


B5 V1 V3

CPC



B3 V2 V4

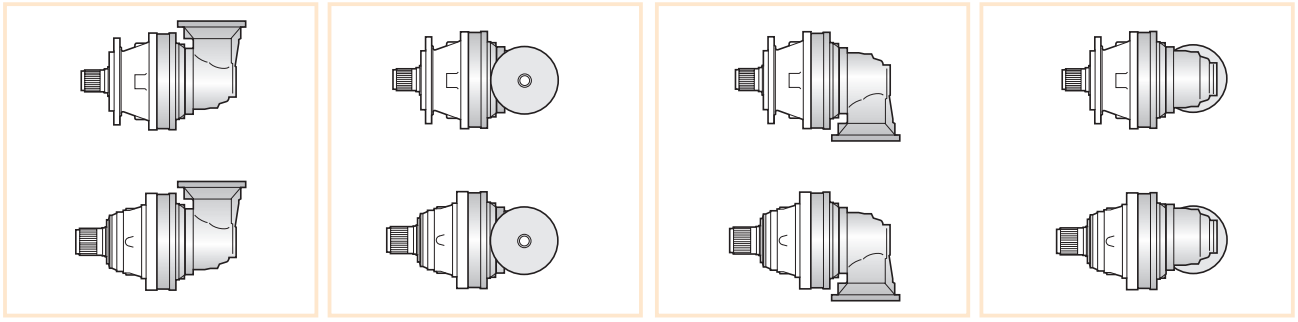


B4 B6 B7

POSIZIONI DI MONTAGGIO

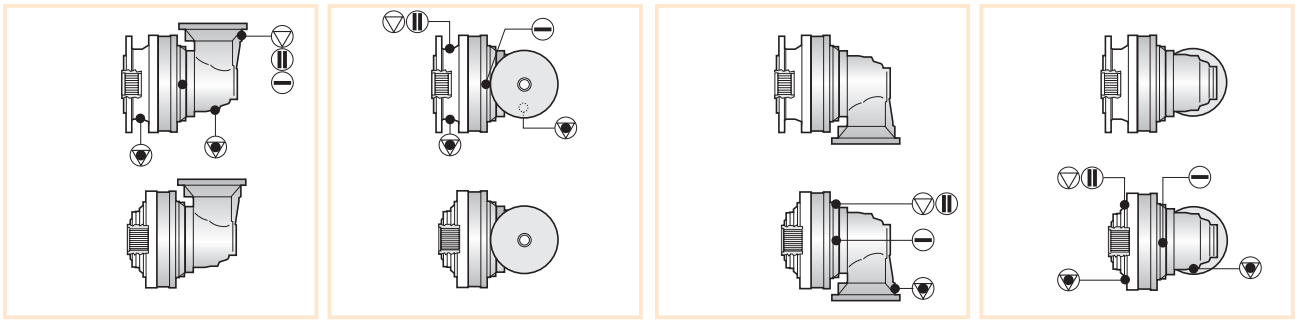
MOUNTING POSITIONS

M-P



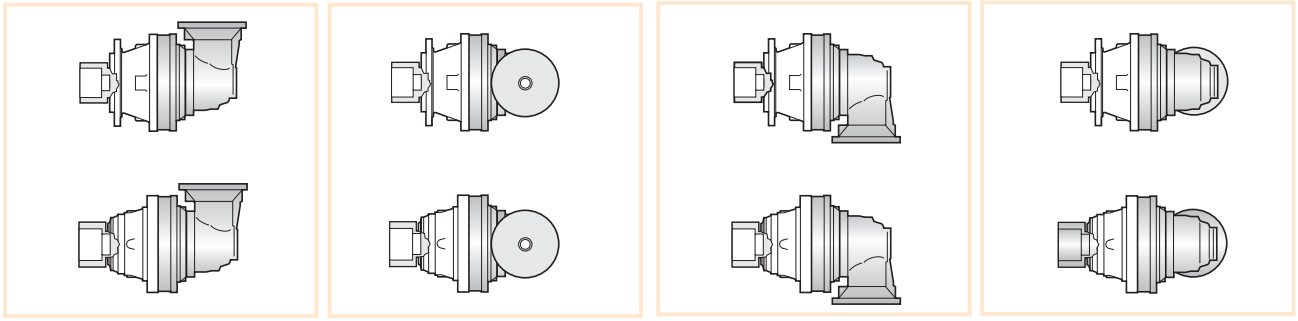
B51 B55 B53 B54

F



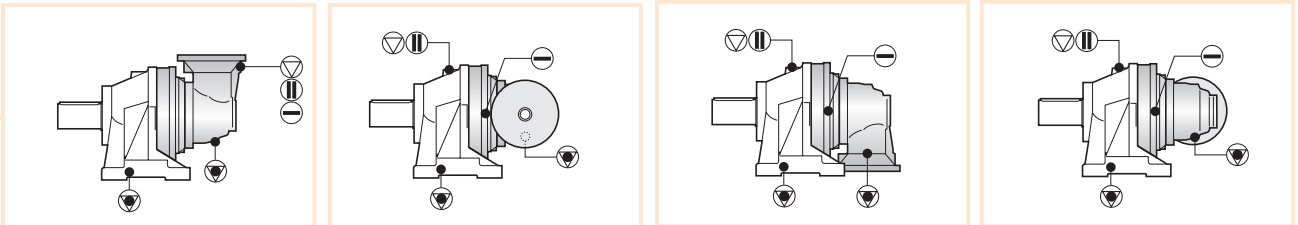
B51 B55 B53 B54

FS

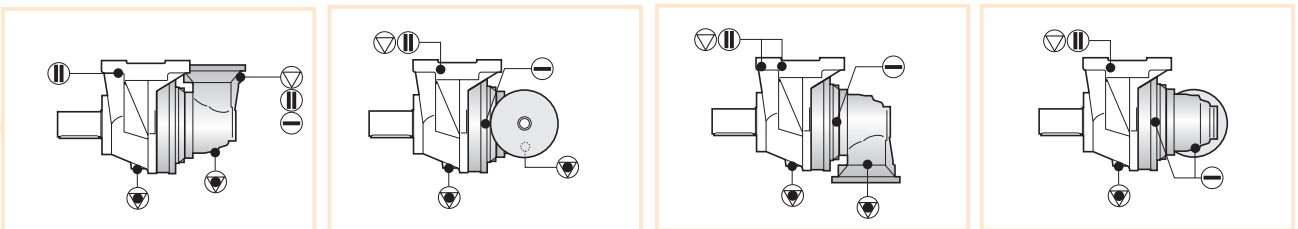


B51 B55 B53 B54

CPC



B56 B60 B58 B62

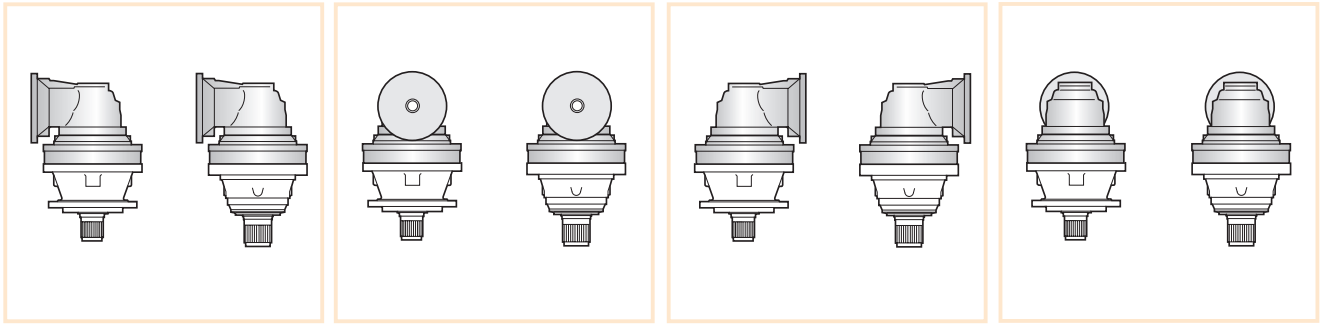


B57 B61 B59 B63

POSIZIONI DI MONTAGGIO

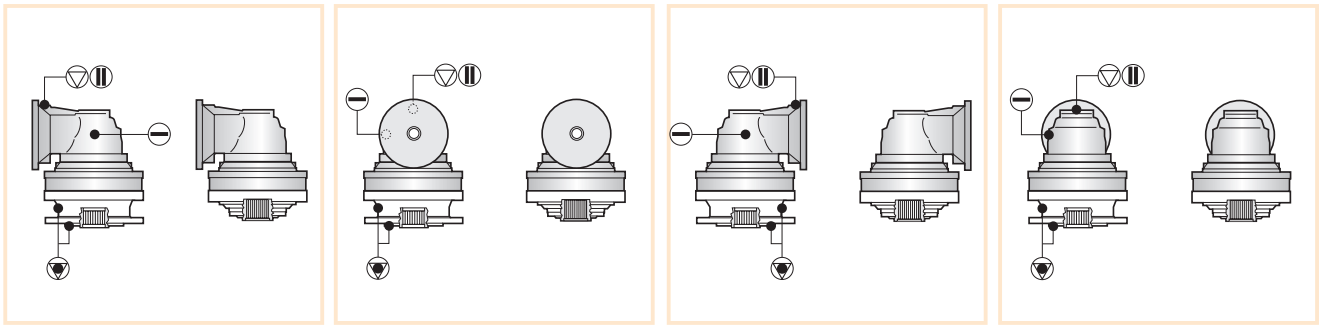
MOUNTING POSITIONS

M-P



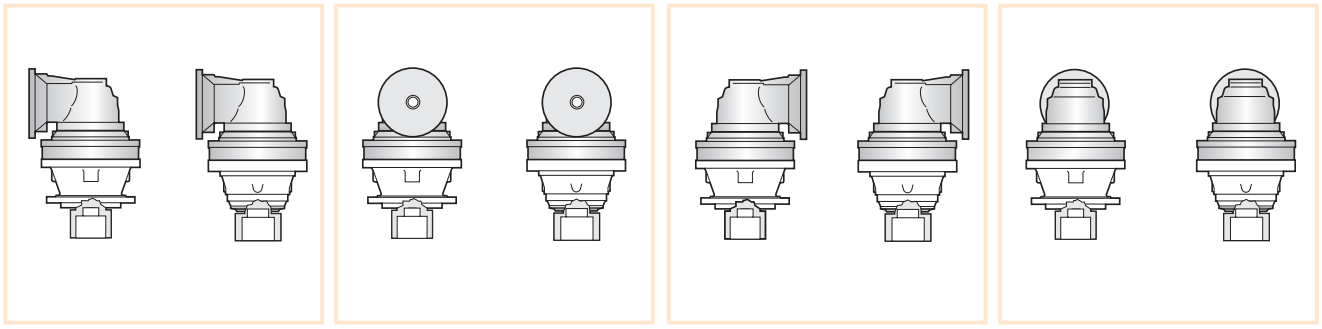
V15 V16 V17 V18

F



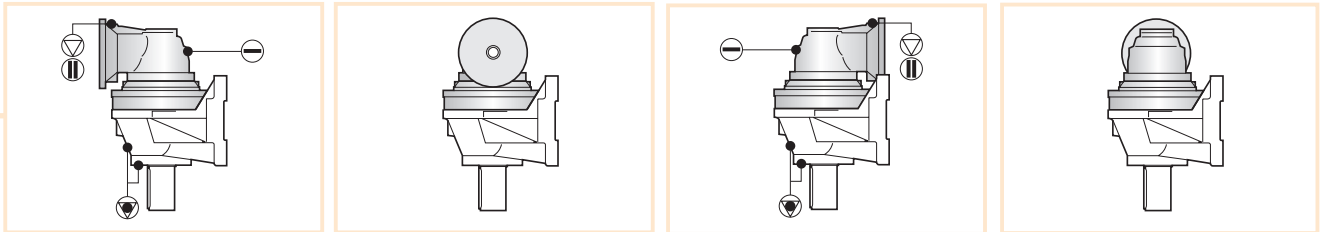
V15 V16 V17 V18

FS

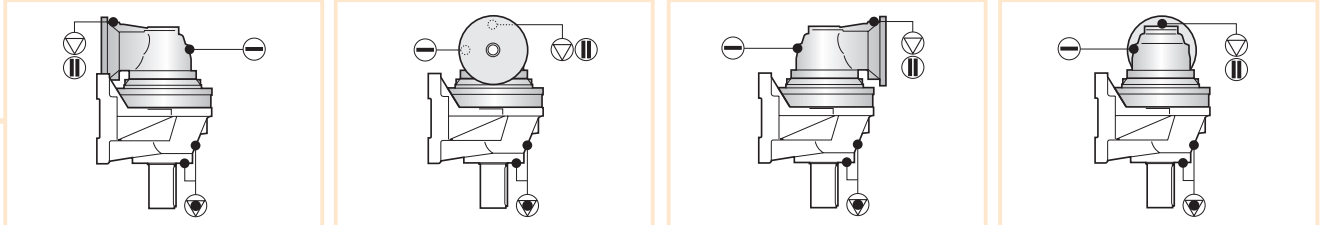


V15 V16 V17 V18

CPC



V53 V52 V54 V55

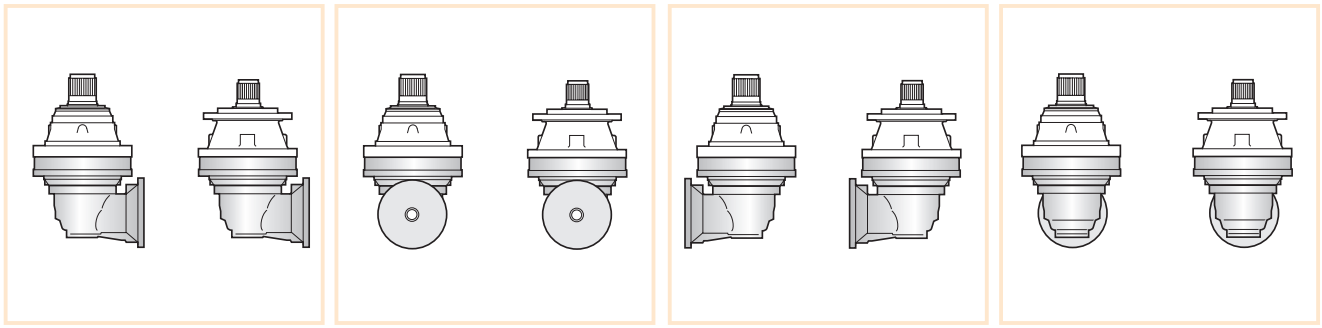


V49 V48 V50 V51

POSIZIONI DI MONTAGGIO

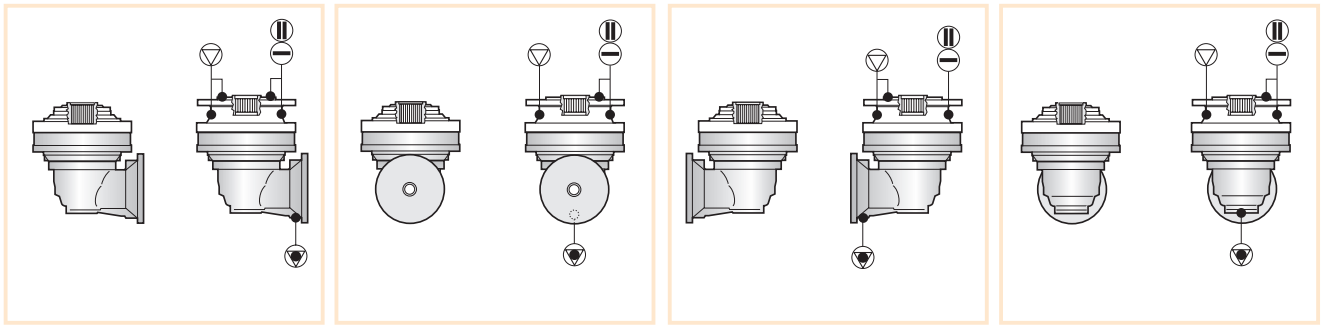
MOUNTING POSITIONS

M-P



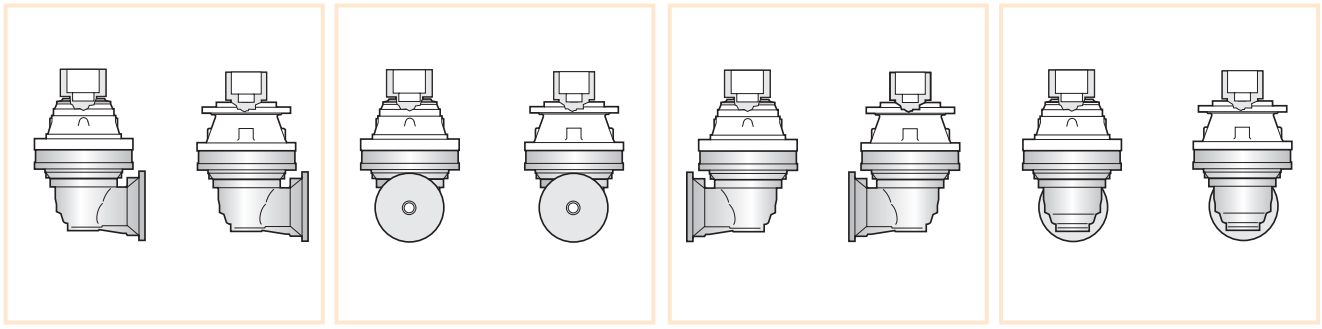
V35 V36 V37 V38

F



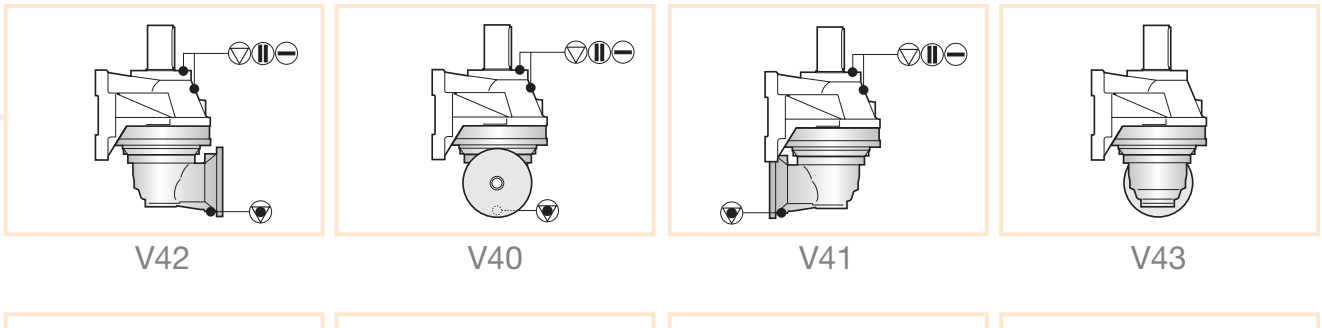
V35 V36 V37 V38

FS

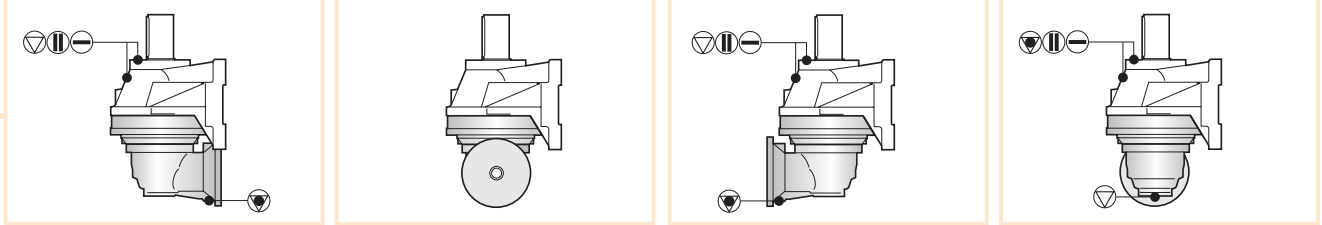


V35 V36 V37 V38

CPC



V42 V40 V41 V43



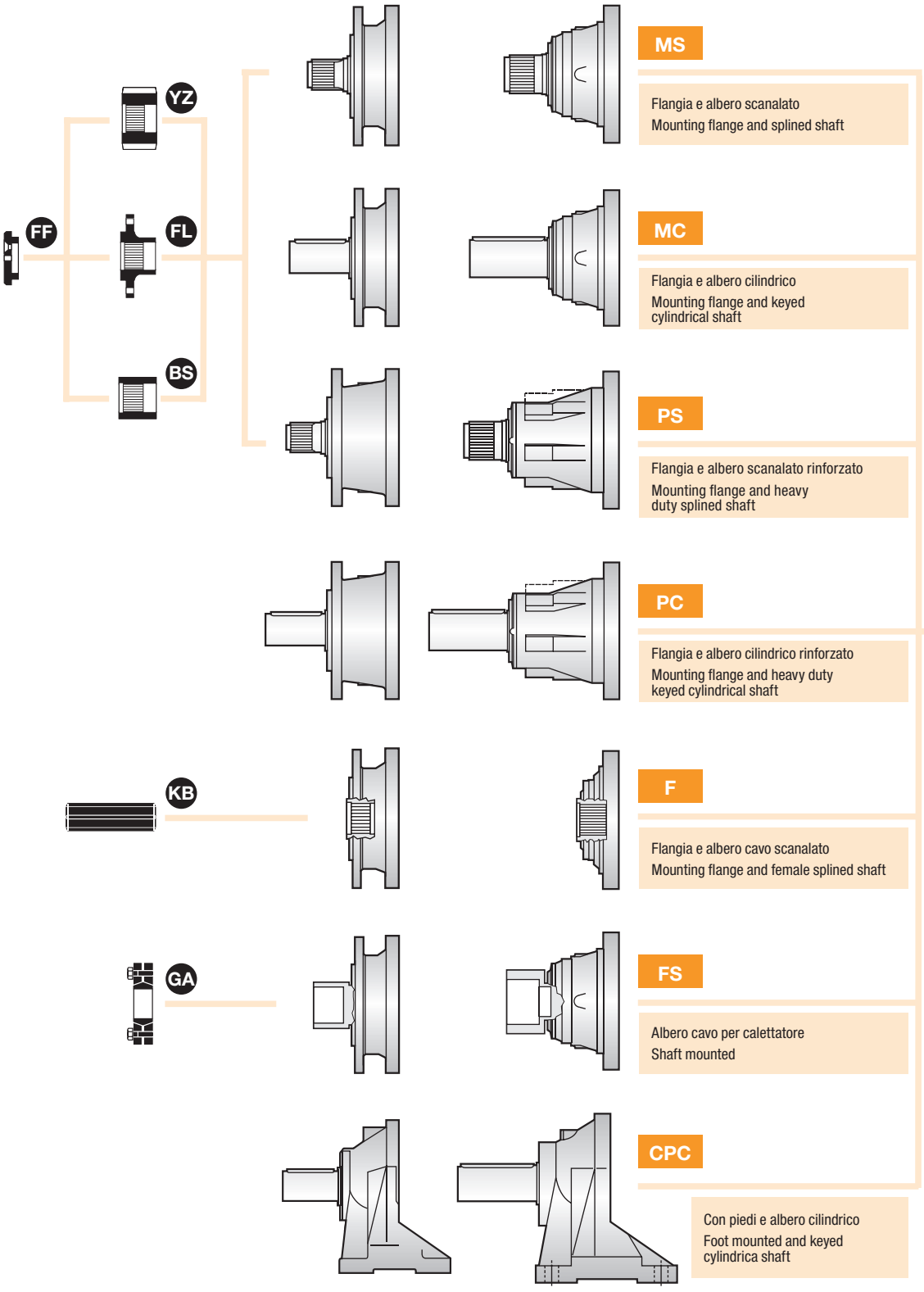
V46 V44 V45 V47

LAYOUT
/ LAYOUT

ACCESSORI USCITA
OUTPUT FITTINGS

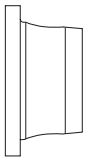
VERSIONI USCITA
OUTPUT TYPES

FORMA COSTRUTTIVA
TYPE OF REDUCTION UNIT



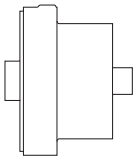
chaumea® mechanics on demand

ACCESSORI ENTRATA
INPUT FITTINGS

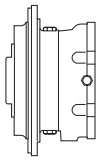


ED Entrate dirette senza freno con attacco motore
Direct input motor adaptor without brake — PAG. D-8

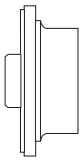
EDF Entrate dirette con freno e attacco motore
Direct input motor adaptor with brake — PAG. D-9



EF Entrate dirette con freno e attacco motore
Direct input motor adaptor with brake — PAG. D-9

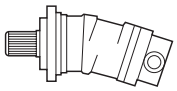


RA **RB** Freno
Brake — PAG. D-2

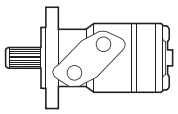


PAG. D-15

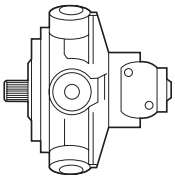
Predisposizione motore idraulico
Hydraulic motor coupling



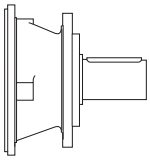
Motore a pistoni assiali
Axial pistons motor



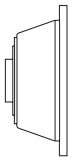
Motore orbitale
Orbit motor



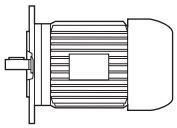
Motore a pistoni radiali
Radial pistons motor



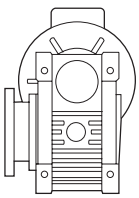
Albero entrata
Input shaft — PAG. D-4



Predisposizione motore elettrico
Electric motor coupling — PAG. D-19



Motore elettrico
Electric motor



Predisposizione rid. vite senza fine
Worm gearbox adaptor — PAG. D-21

DESIGNAZIONE PRODOTTO
/ PRODUCT IDENTIFICATION

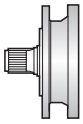
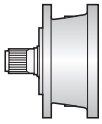
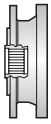
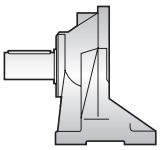
RIDUTTORE GEAR UNIT

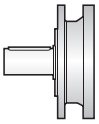
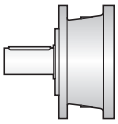
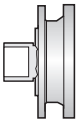
P	G	1	6	0	0	5	M	S	1	0	1	3	.	1	6

RAPPORTO / RATIO

i	Vedi schede tecniche / See technical sheets

VERSIONE E ALBERO DI USCITA / OUTPUT TYPE AND SHAFT

MS 
PS 
F 
CPC 

MC 
PC 
FS 

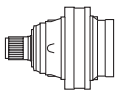
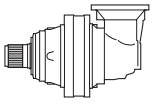
N° STADI / N° STAGES

1, 2, 3, 4,5

GRANDEZZA / SIZE

100, 160, 250, 500, 700, 1000, 1600, 1800, 2500, 3000, 3500, 5000, 6500, 9000, 12000, 16000, 21000, 26000, 31000, 40000, 45000, 53000, 61000

FORMA COSTRUTTIVA / TYPE OF REDUCTION UNIT

PG		Riduttore con stadi lineari / Inline stages gear unit
PGA		Riduttore con stadi angolari / Bevel stages gear unit

Esempio di ordinazione:
/ Example of order:

PG 16005 MS 1013.16

DESIGNAZIONE PRODOTTO
/ PRODUCT IDENTIFICATION

ACCESSORI FITTINGS

B	S	F	F	R	A	2	5	4	7	0	6	...	S	A	E	A	4	7	0	2	...	V	1

USCITA / OUTPUT

ENTRATA / INPUT

POSIZIONE DI MONTAGGIO / MOUNTING POSITION

Vedi schede tecniche / See technical sheets

Freni modulari / Brake

RA
RB

Albero entrata / Input shaft

EL28, EL42, ...

Predisposizione motore elettrico / Electric motor coupling

H71, H80, ...

Predisposizione motore idraulico / Hydraulic motor coupling

SAE A, SAE B, ...

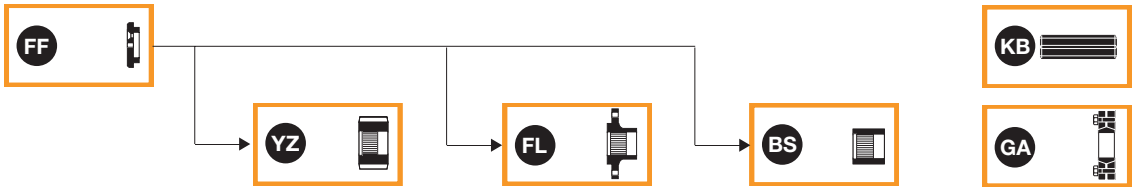
Entrata diretta con freno e attacco motore / Direct input motor adaptor with brake

EDF
EF

Entrata diretta senza freno e con attacco motore / Direct input motor adaptor without brake

ED

Accessori di uscita / Output fittings



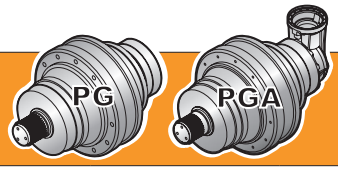
Esempio di ordinazione:
/ Example of order:

BS FF RA 25 4706.002.500 SAE A 4702.012.012 V1

SIMBOLOGIA
/ LEGEND

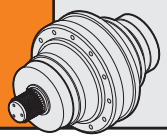
Cfs	[Nm]	Coppia frenante statica	Static braking torque
Fa	[N]	Carico assiale	Axial load
fh		Fattore di durata	Duraction factor
fk		Fattore di adeguamento della capacità termica	Thermal power adjustement factor
Fr	[N]	Carico radiale	Radial load
fs		Fattore di servizio	Service factor
η		Rendimento	Efficiency
i		Rapporto di riduzione	Ratio
K		Coefficiente di correzione del carico radiale	Radial load correction factor
Kg	[Kg]	Peso	Weight
Mc	[kNm]	Coppia continua	Continuous torque
Me	[kNm]	Coppia equivalente	Equivalent working torque
M_{max}	[kNm]	Coppia massima	Maximum torque
Mp	[kNm]	Coppia di picco	Working peak torque
$n_{1\ max}$	[min^{-1}]	Velocità massima in entrata	Maximum input speed
n_2	[min^{-1}]	Velocità in uscita	Output speed
nxh		Numero cicli	Cycles number
Pa_{min}	[bar]	Pressione di apertura	Opening pressure
P_{max}	[bar]	Pressione massima	Max pressure
Pt	[kW]	Potenza termica	Thermal power
		Informazioni	Information
		Quantità lubrificante	Oil quantity

SCHEDE TECNICHE RIDUTTORI
/ PLANETARY GEARS TECHNICAL SHEETS

			i	Mc (n_2h 20.000) [kNm]	
B	**(100 ÷ 9000)**		**(3.56 ÷ 8360.53)**	**(0.45 ÷ 99.00)**	**B-1**
	100	**PG**	3.56 ÷ 3422.25	0.45 ÷ 1.10	**B-2**
		PGA	10.41 ÷ 1484.79	0.70 ÷ 1.10	
	160	**PG**	3.56 ÷ 3422.25	1.00 ÷ 1.70	**B-12**
		PGA	10.4 ÷ 1484.79	1.00 ÷ 1.70	
	250	**PG**	3.78 ÷ 2369.25	1.73 ÷ 3.52	**B-22**
		PGA	12.08 ÷ 1319.81	1.69 ÷ 3.34	
	500	**PG**	3.78 ÷ 1735.07	2.61 ÷ 5.11	**B-32**
		PGA	13.05 ÷ 1242.08	2.61 ÷ 5.11	
	700	**PG**	3.67 ÷ 2722.78	3.85 ÷ 7.02	**B-42**
		PGA	12.67 ÷ 1067.27	3.85 ÷ 7.02	
	1000	**PG**	3.56 ÷ 2229.71	4.41 ÷ 12.21	**B-52**
		PGA	12.28 ÷ 967.39	4.50 ÷ 12.21	
	1600	**PG**	3.56 ÷ 2229.71	9.13 ÷ 18.02	**B-62**
		PGA	10.92 ÷ 967.39	9.13 ÷ 18.02	
	1800	**PG**	13.04 ÷ 1561.86	12.01 ÷ 18.02	**B-72**
		PGA	45.04 ÷ 1184.17	12.39 ÷ 18.02	
	2500	**PG**	4.00 ÷ 2277.71	16.91 ÷ 30.76	**B-82**
		PGA	12.29 ÷ 1726.91	16.91 ÷ 24.55	
	3000	**PG**	14.22 ÷ 1425.06	23.51 ÷ 30.76	**B-92**
		PGA	43.68 ÷ 1385.48	23.51 ÷ 30.76	
	3500	**PG**	4.00 ÷ 1289.65	21.65 ÷ 37.50	**B-102**
		PGA	12.29 ÷ 1253.82	16.65 ÷ 37.11	
	5000	**PG**	3.95 ÷ 1981.97	35.50 ÷ 60.80	**B-110**
		PGA	12.15 ÷ 1326.27	20.64 ÷ 45.19	
	6500	**PG**	3.83 ÷ 1005.54	52.67 ÷ 69.31	**B-118**
		PGA	47.01 ÷ 911.35	49.57 ÷ 69.31	
	9000	**PG**	4.04 ÷ 8360.53	65.49 ÷ 99.00	**B-126**
		PGA	49.68 ÷ 1010.02	59.80 ÷ 79.00	
C	**(12000 ÷ 61000)**		**(3.43 ÷ 8938.38)**	**(55.6 ÷ 858.1)**	**C-1**

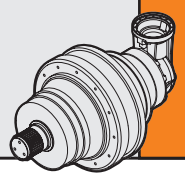
Le pagine che seguono riportano i dati tecnici prestazionali e dimensionali dei riduttori Serie PG-PGA. Per facilitare la ricerca della grandezza desiderata riportiamo la tabella sopraindicata con i dati indicativi e i riferimenti alle pagine.

The following pages show the technical information on performances and dimensions of the PG-PGA planetary the research and the selection of the required size you can refer to the above table, including some technical data and the corresponding page.



100

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 101	**3.56**	1.24	1.10	0.94	0.83							
	4.29	1.24	1.10	0.94	0.83							
	5.60	0.90	0.80	0.68	0.60	2800	12	13	15	18	11	14
	6.75	0.79	0.70	0.60	0.53							
	8.67	0.51	0.45	0.38	0.34							
PG 102	**12.64**	1.24	1.10	0.94	0.83							
	15.24	1.24	1.10	0.94	0.83							
	19.91	1.24	1.10	0.94	0.83							
	24.00	1.24	1.10	0.94	0.83							
	28.93	1.24	1.10	0.94	0.83	2800	8	19	21	24	17	20
	31.36	0.90	0.80	0.68	0.60							
	37.14	1.24	1.10	0.94	0.83							
	48.53	0.90	0.80	0.68	0.60							
	58.50	0.79	0.70	0.60	0.53							
PG 103	**54.18**	1.24	1.10	0.94	0.83							
	65.31	1.24	1.10	0.94	0.83							
	70.80	1.24	1.10	0.94	0.83							
	78.72	1.24	1.10	0.94	0.83							
	85.33	1.24	1.10	0.94	0.83							
	102.86	1.24	1.10	0.94	0.83							
	111.50	1.24	1.10	0.94	0.83							
	134.40	1.24	1.10	0.94	0.83							
	162.00	1.24	1.10	0.94	0.83							
	172.56	1.24	1.10	0.94	0.83	2800	5	25	27	30	23	26
	208.00	1.24	1.10	0.94	0.83							
	211.68	0.90	0.80	0.68	0.60							
	255.15	0.90	0.80	0.68	0.60							
	271.79	0.90	0.80	0.68	0.60							
	307.55	0.79	0.70	0.60	0.53							
	321.90	1.24	1.10	0.94	0.83							
	394.88	0.79	0.70	0.60	0.53							
PG 104	**337.36**	1.24	1.10	0.94	0.83							
	365.71	1.24	1.10	0.94	0.83							
	396.45	1.24	1.10	0.94	0.83							
	440.82	1.24	1.10	0.94	0.83							
	477.87	1.24	1.10	0.94	0.83							
	531.34	1.24	1.10	0.94	0.83							
	576.00	1.24	1.10	0.94	0.83							
	624.41	1.24	1.10	0.94	0.83							
	694.29	1.24	1.10	0.94	0.83							
	752.64	1.24	1.10	0.94	0.83							
	836.86	1.24	1.10	0.94	0.83	2800	1.5	31	33	36	29	32
	907.20	1.24	1.10	0.94	0.83							
	966.35	1.24	1.10	0.94	0.83							
	1093.50	1.24	1.10	0.94	0.83							
	1144.55	1.24	1.10	0.94	0.83							
	1185.41	0.90	0.80	0.68	0.60							
	1318.06	1.24	1.10	0.94	0.83							
	1428.84	0.90	0.80	0.68	0.60							
	1692.32	1.24	1.10	0.94	0.83							
	3422.25	0.79	0.70	0.60	0.53							



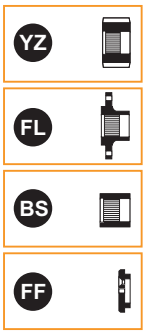
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 102	10.41	1.24	1.10	0.94	0.83	2800	8	28	30	33	26	29
	12.55	1.24	1.10	0.94	0.83							
	16.40	0.90	0.80	0.68	0.60							
	19.77	0.79	0.70	0.60	0.53							
PGA 103	37.02	1.24	1.10	0.94	0.83	2800	5	34	36	39	32	35
	44.63	1.24	1.10	0.94	0.83							
	53.79	1.24	1.10	0.94	0.83							
	58.31	1.24	1.10	0.94	0.83							
	70.29	1.24	1.10	0.94	0.83							
	84.72	1.24	1.10	0.94	0.83							
	90.24	1.24	1.10	0.94	0.83							
	108.78	1.24	1.10	0.94	0.83							
	133.43	0.79	0.70	0.60	0.53							
	142.13	0.90	0.80	0.68	0.60							
	171.32	0.79	0.70	0.60	0.53							
PGA 104	131.64	1.24	1.10	0.94	0.83	2800	1.5	40	42	45	38	41
	158.67	1.24	1.10	0.94	0.83							
	191.25	1.24	1.10	0.94	0.83							
	207.33	1.24	1.10	0.94	0.83							
	230.53	1.24	1.10	0.94	0.83							
	301.22	1.24	1.10	0.94	0.83							
	326.54	1.24	1.10	0.94	0.83							
	363.08	1.24	1.10	0.94	0.83							
	393.60	1.24	1.10	0.94	0.83							
	474.43	1.24	1.10	0.94	0.83							
	514.30	0.90	0.80	0.68	0.60							
	571.86	1.24	1.10	0.94	0.83							
	609.14	1.24	1.10	0.94	0.83							
	734.23	1.24	1.10	0.94	0.83							
	782.11	1.24	1.10	0.94	0.83							
	942.72	1.24	1.10	0.94	0.83							
	1156.42	0.79	0.70	0.60	0.53							
	1231.82	0.90	0.80	0.68	0.60							
	1484.79	0.79	0.70	0.60	0.53							

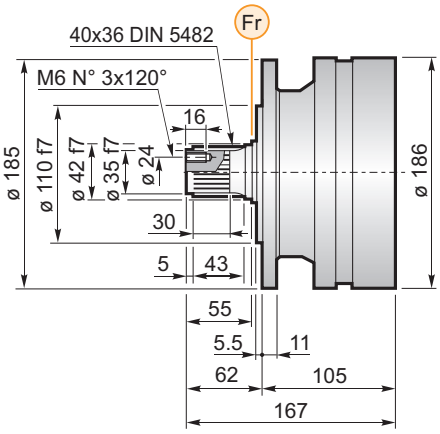


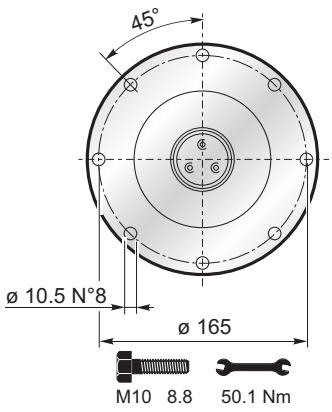
(n_2 x h = 20.000)

$M_{max} = M_c \times 2$

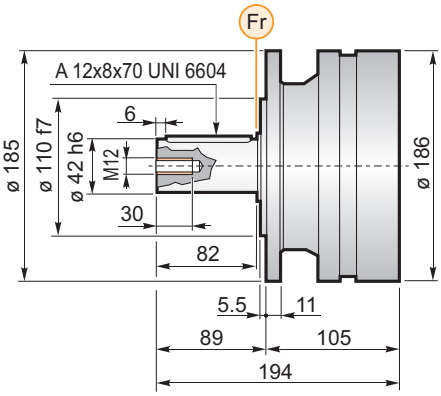
MS

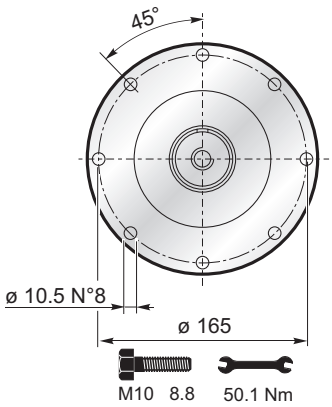

YZ
FL
BS
FF


40x36 DIN 5482
Fr
M6 N° 3x120°
16
ø 185
ø 110 f7
ø 42 f7
ø 35 f7
ø 24
ø 186
30
5
43
55
5.5
11
62
105
167

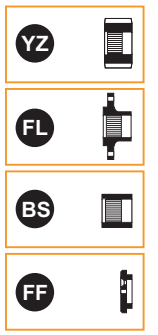

45°
ø 10.5 N°8
ø 165
M10 8.8 50.1 Nm

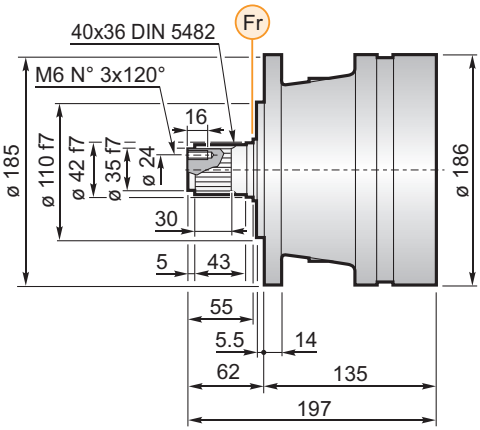
MC

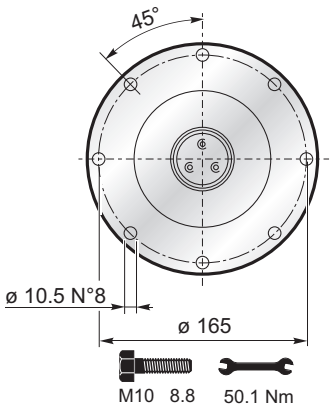

Fr
A 12x8x70 UNI 6604
6
ø 185
ø 110 f7
ø 42 h6
M12
ø 186
30
82
5.5
11
89
105
194


45°
ø 10.5 N°8
ø 165
M10 8.8 50.1 Nm

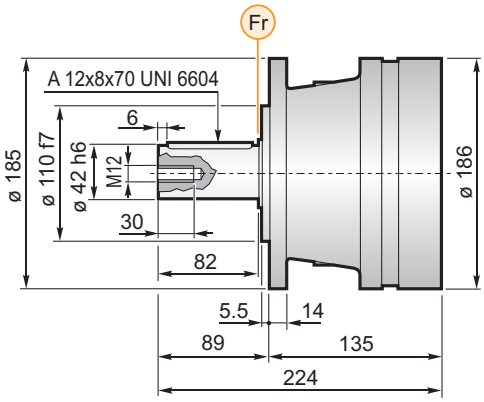
PS

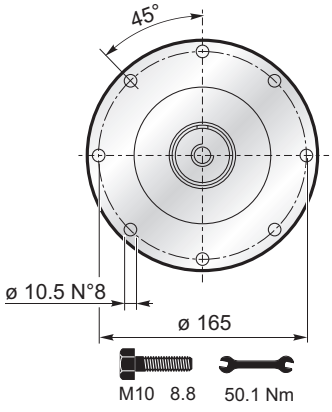

YZ
FL
BS
FF

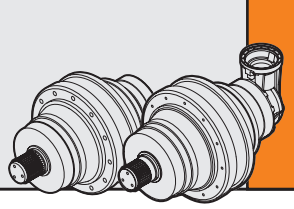

40x36 DIN 5482
Fr
M6 N° 3x120°
16
ø 185
ø 110 f7
ø 42 f7
ø 35 f7
ø 24
ø 186
30
5
43
55
5.5
14
62
135
197


45°
ø 10.5 N°8
ø 165
M10 8.8 50.1 Nm

PC

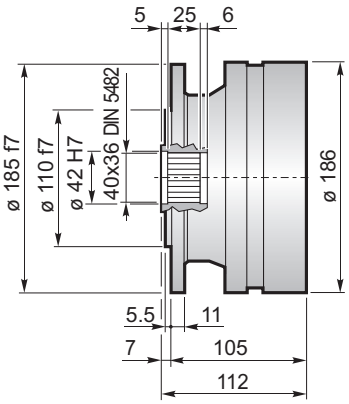

Fr
A 12x8x70 UNI 6604
6
ø 185
ø 110 f7
ø 42 h6
M12
ø 186
30
82
5.5
14
89
135
224

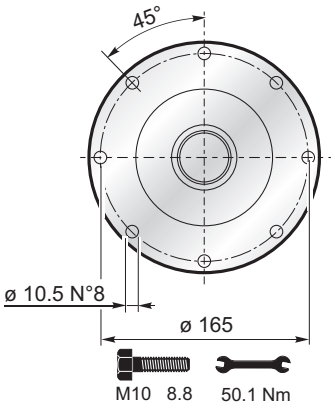

45°
ø 10.5 N°8
ø 165
M10 8.8 50.1 Nm



F

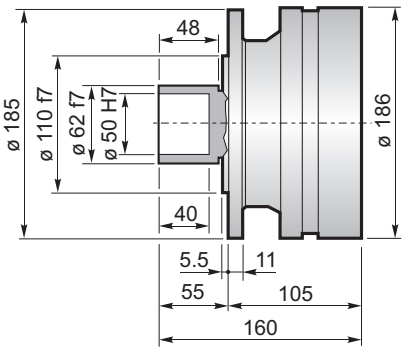
KB

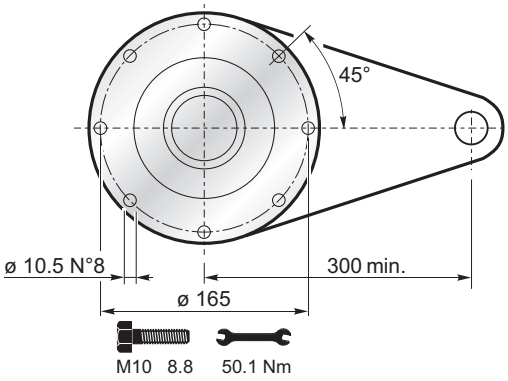


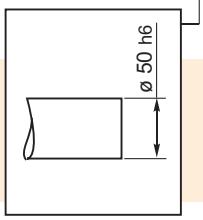


FS

GA



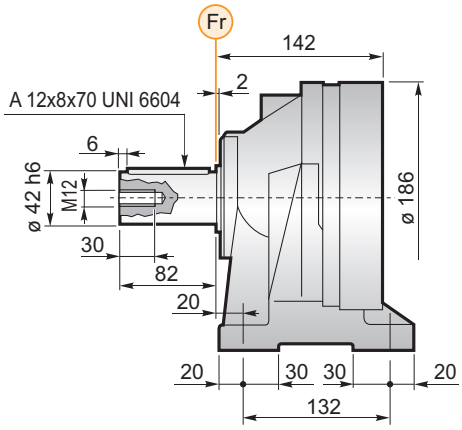


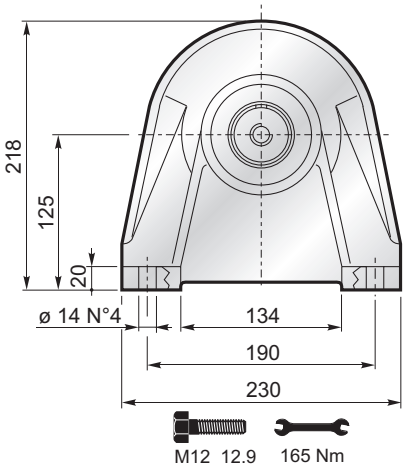


M_{max} = 2.2 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

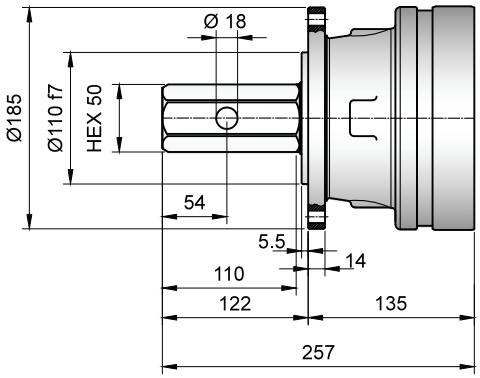
CPC

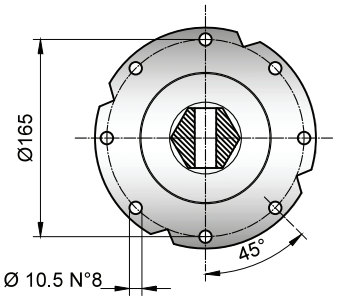




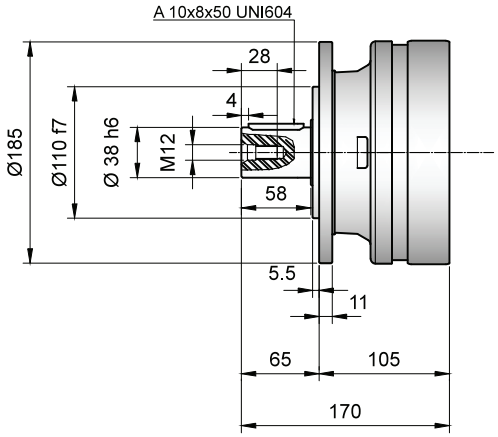
FL YZ BS FF KB GA → B-10

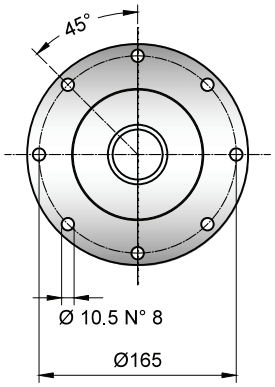
PE

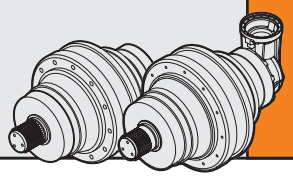

Ø 18
Ø185
Ø110 f7
HEX 50
54
5.5
14
110
122
135
257

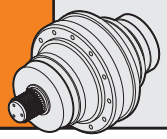

Ø165
45°
Ø 10.5 N°8

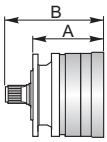
MCT


A 10x8x50 UNI604
28
4
Ø185
Ø110 f7
Ø 38 h6
M12
58
5.5
11
65
105
170

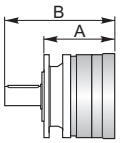

45°
Ø 10.5 N° 8
Ø165



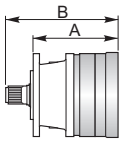




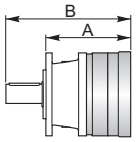
PG ...MS	A	B	RA	RB	EF	EDF
PG 101	105	167	•			•
PG 102	153	215	•			•
PG 103	201	263	•			•
PG 104	249	311	•			•



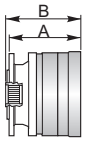
PG ...MC	A	B	RA	RB	EF	EDF
PG 101	105	194	•			•
PG 102	153	242	•			•
PG 103	201	290	•			•
PG 104	249	338	•			•



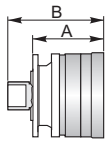
PG ...PS	A	B	RA	RB	EF	EDF
PG 101	135	197	•			•
PG 102	183	245	•			•
PG 103	231	293	•			•
PG 104	271	341	•			•



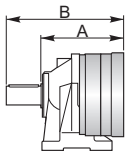
PG ...PC	A	B	RA	RB	EF	EDF
PG 101	135	224	•			•
PG 102	183	272	•			•
PG 103	231	320	•			•
PG 104	279	368	•			•



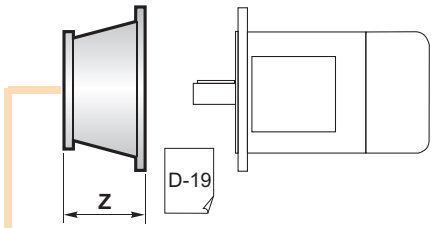
PG ...F	A	B	RA	RB	EF	EDF
PG 101	105	112	•			•
PG 102	153	160	•			•
PG 103	201	208	•			•
PG 104	249	256	•			•

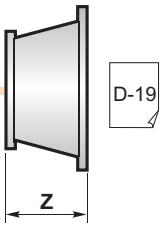


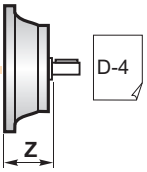
PG ...FS	A	B	RA	RB	EF	EDF
PG 101	105	160	•			•
PG 102	153	208	•			•
PG 103	201	256	•			•
PG 104	249	304	•			•

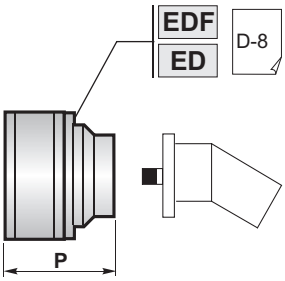


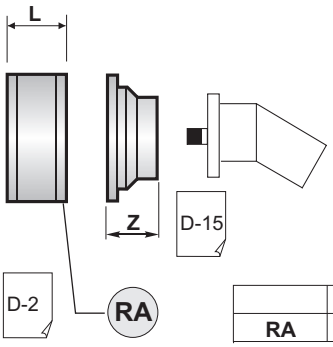
PG ...CPC	A	B	RA	RB	EF	EDF
PG 101	142	224	•			•
PG 102	190	272	•			•
PG 103	238	320	•			•
PG 104	287	368	•			•





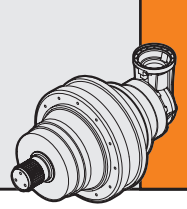


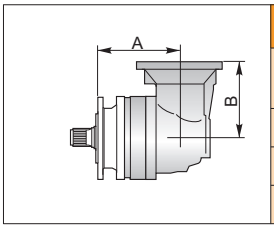




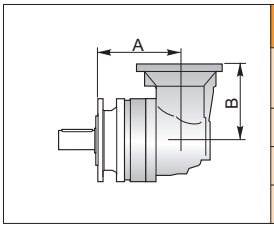
	L
RA	81

chaumea mechanics on demand

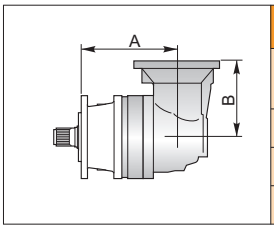




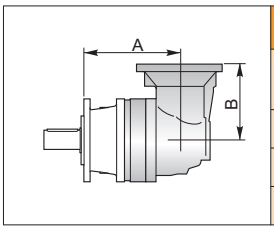
PGA ...MS	A	B	RA	RB	EF
PGA 102	180	159	•		•
PGA 103	228	159	•		•
PGA 104	276	159	•		•



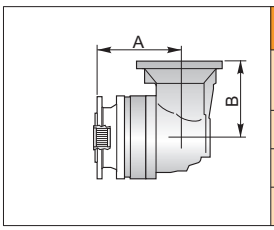
PGA ...MC	A	B	RA	RB	EF
PGA 102	180	159	•		•
PGA 103	228	159	•		•
PGA 104	276	159	•		•



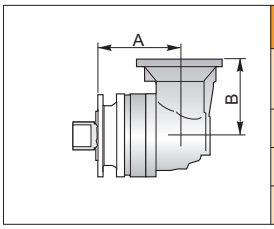
PGA ...PS	A	B	RA	RB	EF
PGA 102	210	159	•		•
PGA 103	258	159	•		•
PGA 104	306	159	•		•



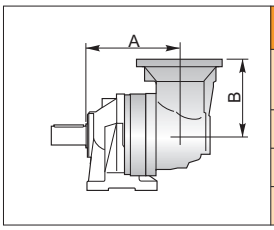
PGA ...PC	A	B	RA	RB	EF
PGA 102	210	159	•		•
PGA 103	258	159	•		•
PGA 104	306	159	•		•



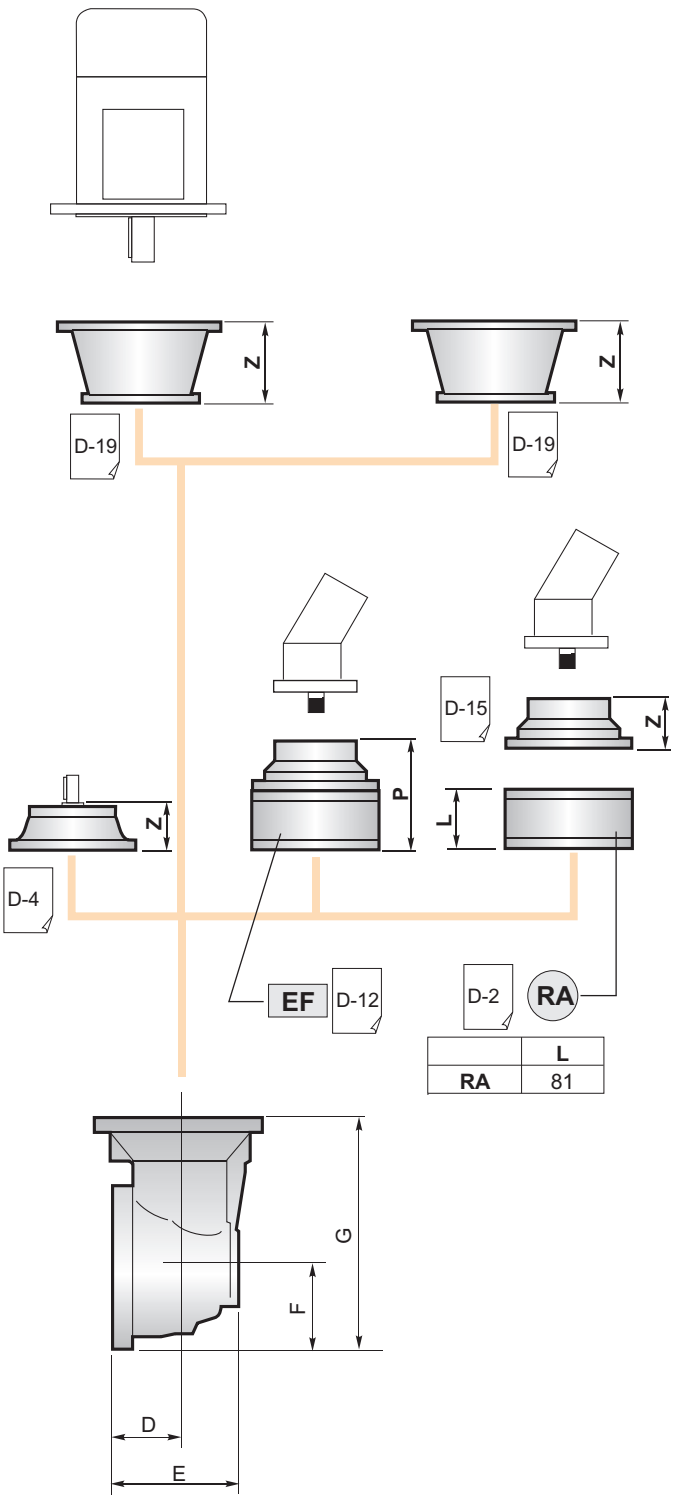
PGA ...F	A	B	RA	RB	EF
PGA 102	180	159	•		•
PGA 103	228	159	•		•
PGA 104	276	159	•		•



PGA ...FS	A	B	RA	RB	EF
PGA 102	180	159	•		•
PGA 103	228	159	•		•
PGA 104	276	159	•		•



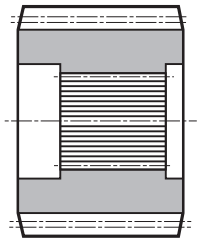
PGA ...CPC	A	B	RA	RB	EF
PGA 102	217	159	•		•
PGA 103	265	159	•		•
PGA 104	313	159	•		•



	L
RA	81

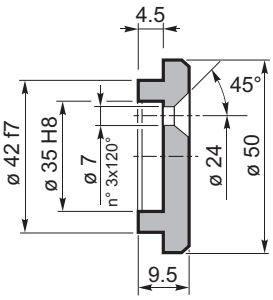
	D	E	F	G
PGA 102	75	141.5	93	252
PGA 103	75	141.5	93	252
PGA 104	75	141.5	93	252

YZ
Pignoni / Pinion
Ritzel / Pignon
Piñones / Pinhões



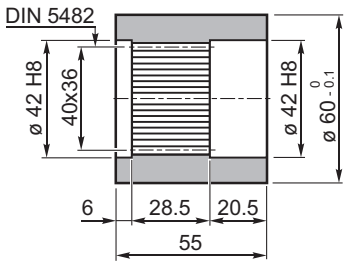
Su richiesta / On request
Auf Anfrage / Sur demande
Bajo demanda / Sob consulta

FF
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código
5701.034.000

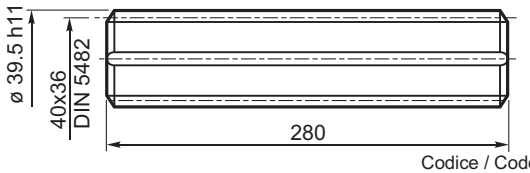
BS
Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



Materiale / Material
Material / Matière
Material / Material
UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código
1710.100.076

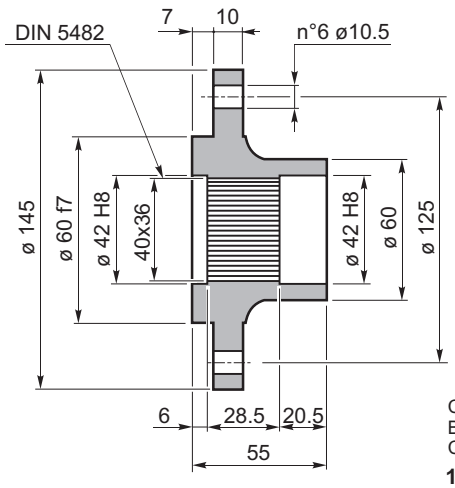
KB
Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada



Materiale / Material
Material / Matière
Material / Material
UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

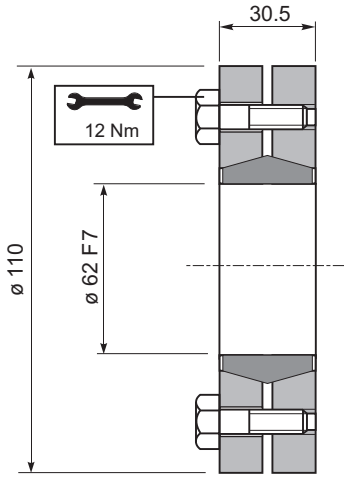
Codice / Code
Bestell - Nr. / Code
Código / Código
1703.179.042

FL
Flangia / Flange
Flansch / Bride
Brida / Flange



Codice / Code
Bestell - Nr. / Code
Código / Código
1710.102.025

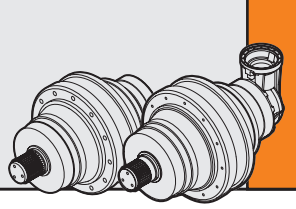
GA
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

2.2 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.062.000



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

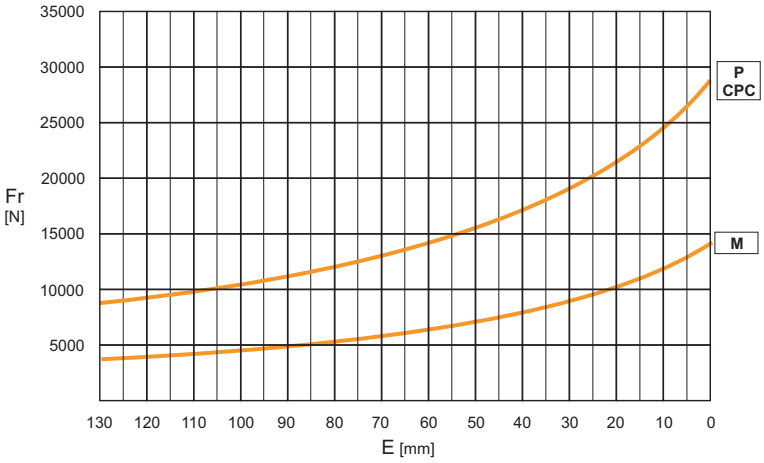
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

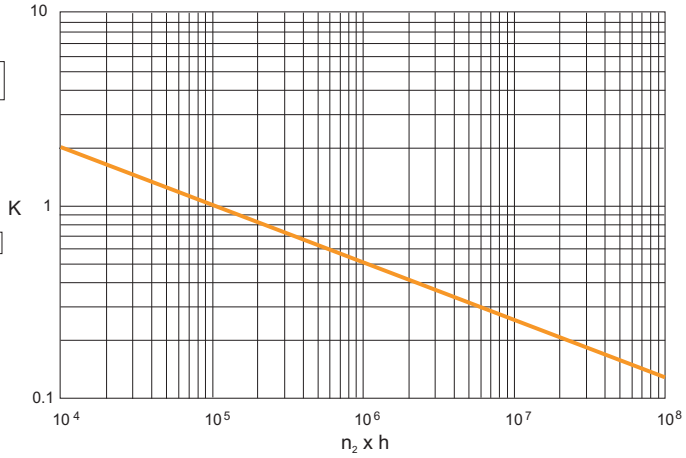
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

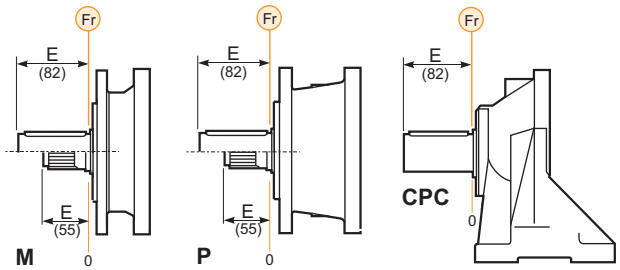
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M - P - CPC*





	n x h				
	10^5	10^4	10^6	10^7	10^8
M - P	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

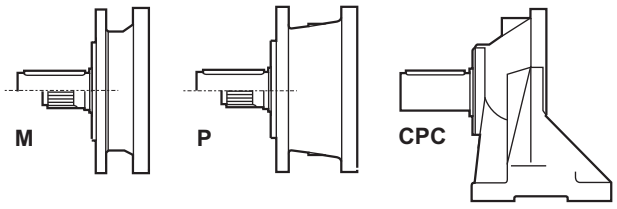
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

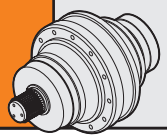
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

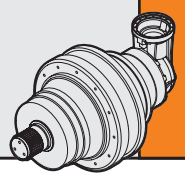
Fa [N]	M	P - CPC	
	16000	18000	←
	16000	18000	→





160

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 161	**3.56**	1.92	1.70	1.45	1.28	2800	12	15	17	20	13	16
	4.29	1.92	1.70	1.45	1.28							
	5.60	1.37	1.21	1.03	0.91							
	6.75	1.13	1.00	0.85	0.75							
PG 162	**12.64**	1.92	1.70	1.45	1.28	2800	8	21	23	26	19	22
	15.24	1.92	1.70	1.45	1.28							
	19.91	1.92	1.70	1.45	1.28							
	24.00	1.92	1.70	1.45	1.28							
	28.93	1.92	1.70	1.45	1.28							
	31.36	1.37	1.21	1.03	0.91							
	37.80	1.37	1.21	1.03	0.91							
	45.56	1.13	1.00	0.85	0.75							
	58.50	1.13	1.00	0.85	0.75							
PG 163	**54.18**	1.92	1.70	1.45	1.28	2800	5	27	29	32	25	28
	65.31	1.92	1.70	1.45	1.28							
	70.80	1.92	1.70	1.45	1.28							
	78.72	1.92	1.70	1.45	1.28							
	85.33	1.92	1.70	1.45	1.28							
	102.86	1.92	1.70	1.45	1.28							
	111.50	1.92	1.70	1.45	1.28							
	134.40	1.92	1.70	1.45	1.28							
	162.00	1.92	1.70	1.45	1.28							
	172.56	1.92	1.70	1.45	1.28							
	208.00	1.92	1.70	1.45	1.28							
	211.68	1.37	1.21	1.03	0.91							
	250.71	1.92	1.70	1.45	1.28							
	271.79	1.37	1.21	1.03	0.91							
	307.55	1.13	1.00	0.85	0.75							
	327.60	1.37	1.21	1.03	0.91							
	394.88	1.13	1.00	0.85	0.75							
PG 164	**337.36**	1.92	1.70	1.45	1.28	2800	1.5	33	35	38	31	34
	365.71	1.92	1.70	1.45	1.28							
	396.45	1.92	1.70	1.45	1.28							
	440.82	1.92	1.70	1.45	1.28							
	477.87	1.92	1.70	1.45	1.28							
	531.34	1.92	1.70	1.45	1.28							
	576.00	1.92	1.70	1.45	1.28							
	624.41	1.92	1.70	1.45	1.28							
	694.29	1.92	1.70	1.45	1.28							
	752.64	1.92	1.70	1.45	1.28							
	836.86	1.92	1.70	1.45	1.28							
	907.20	1.92	1.70	1.45	1.28							
	966.35	1.92	1.70	1.45	1.28							
	1093.50	1.92	1.70	1.45	1.28							
	1144.55	1.65	1.45	1.23	1.10							
	1185.41	1.37	1.21	1.03	0.91							
	1318.06	1.92	1.70	1.45	1.28							
	1404.00	1.92	1.70	1.45	1.28							
	1692.32	1.92	1.70	1.45	1.28							
	3422.25	1.13	1.00	0.85	0.75							



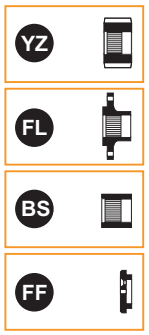
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 162	**10.41**	1.92	1.70	1.45	1.28	2800	8	30	32	35	28	31
	12.55	1.92	1.70	1.45	1.28							
	16.40	1.37	1.21	1.03	0.91							
	19.77	1.13	1.00	0.85	0.75							
PGA 163	**37.02**	1.92	1.70	1.45	1.28	2800	5	36	38	41	34	37
	44.63	1.92	1.70	1.45	1.28							
	53.79	1.92	1.70	1.45	1.28							
	58.31	1.92	1.70	1.45	1.28							
	70.29	1.92	1.70	1.45	1.28							
	84.72	1.92	1.70	1.45	1.28							
	91.84	1.37	1.21	1.03	0.91							
	110.70	1.37	1.21	1.03	0.91							
	133.43	1.13	1.00	0.85	0.75							
	142.13	1.37	1.21	1.03	0.91							
	171.32	1.13	1.00	0.85	0.75							
PGA 164	**131.64**	1.92	1.70	1.45	1.28	2800	1.5	42	44	47	40	43
	158.67	1.92	1.70	1.45	1.28							
	191.25	1.92	1.70	1.45	1.28							
	207.33	1.92	1.70	1.45	1.28							
	230.53	1.92	1.70	1.45	1.28							
	301.22	1.92	1.70	1.45	1.28							
	326.54	1.92	1.70	1.45	1.28							
	363.08	1.92	1.70	1.45	1.28							
	393.60	1.92	1.70	1.45	1.28							
	474.43	1.92	1.70	1.45	1.28							
	514.30	1.37	1.21	1.03	0.91							
	571.86	1.92	1.70	1.45	1.28							
	609.14	1.92	1.70	1.45	1.28							
	734.23	1.92	1.70	1.45	1.28							
	795.95	1.37	1.21	1.03	0.91							
	942.72	1.65	1.45	1.23	1.10							
	1156.42	1.13	1.00	0.85	0.75							
	1231.82	1.37	1.21	1.03	0.91							
	1484.79	1.13	1.00	0.85	0.75							

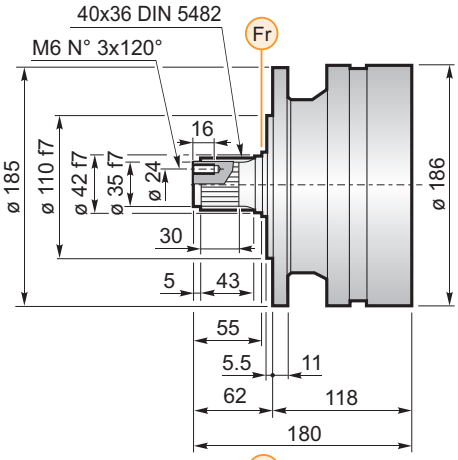


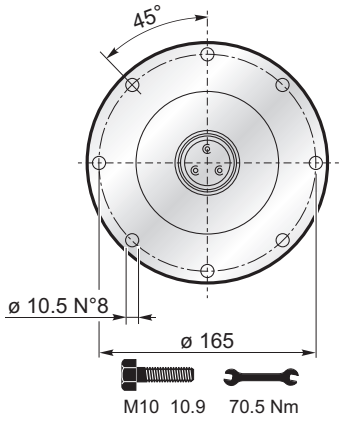
(n_2 x h = 20.000)

$M_{max} = M_c \times 2$

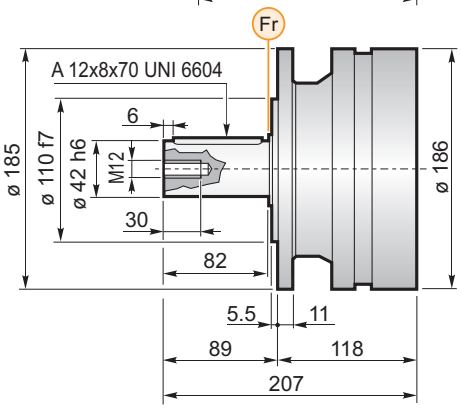
MS

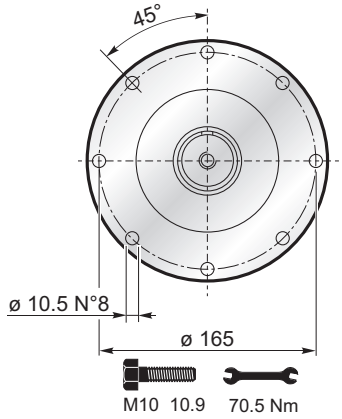




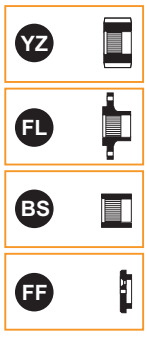


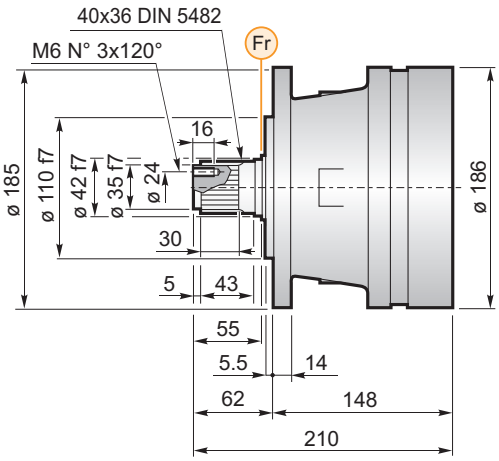
MC

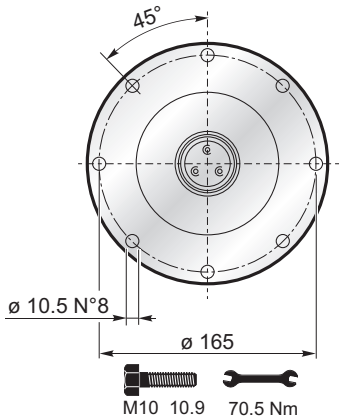




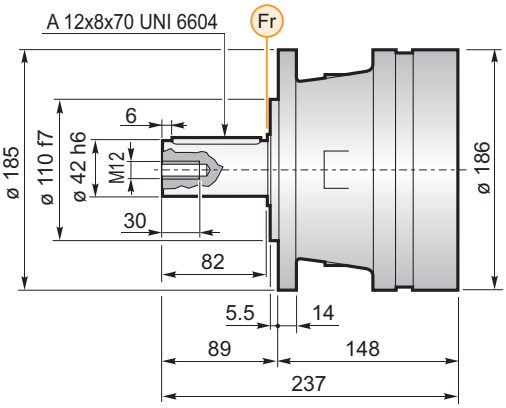
PS

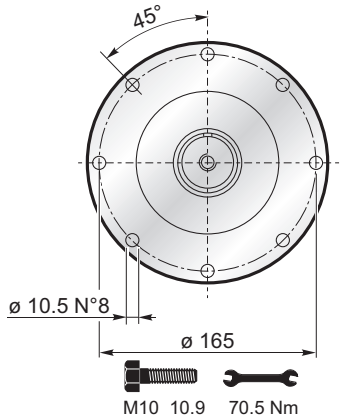




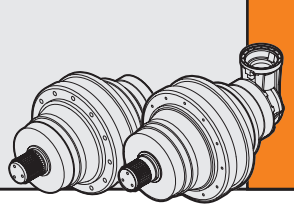


PC



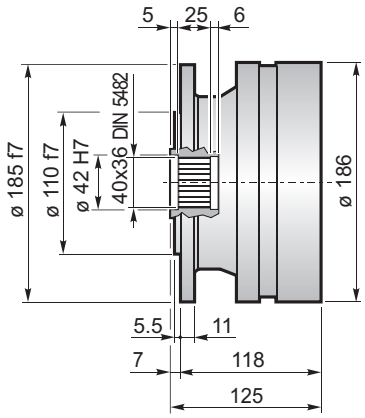


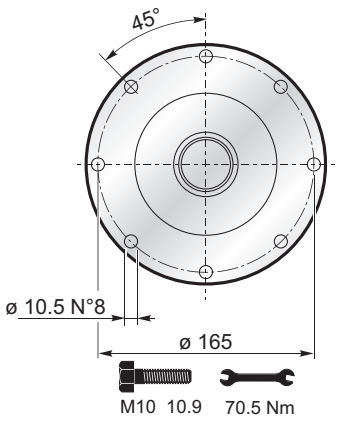
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F

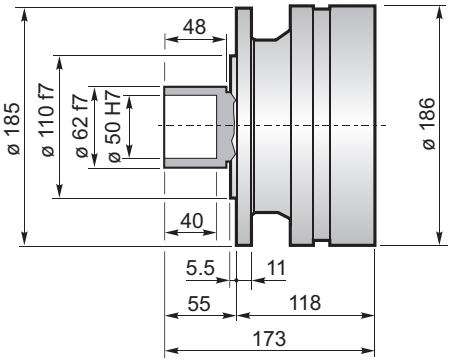
KB

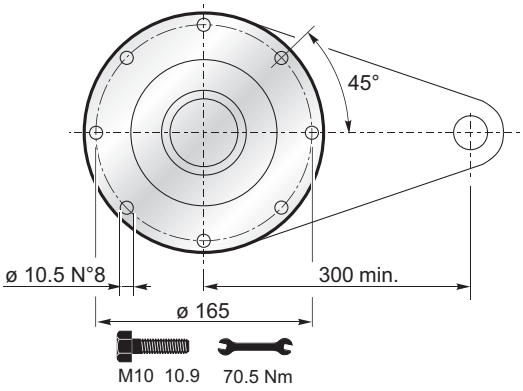


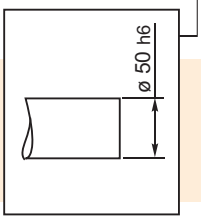


FS

GA



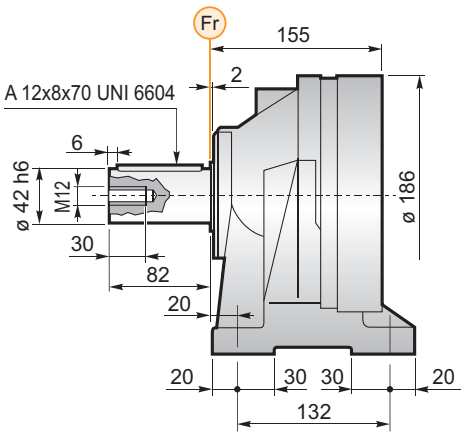


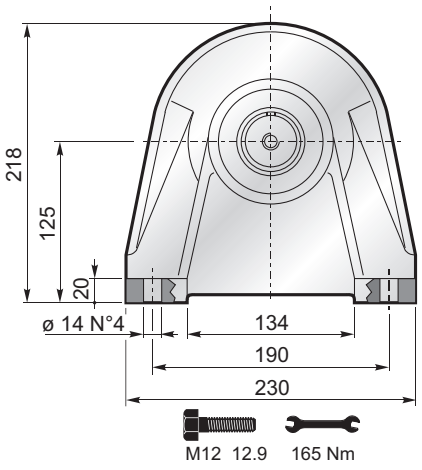


M_{max} = 2.2 kNm

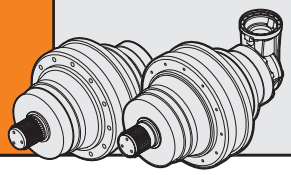
La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

CPC

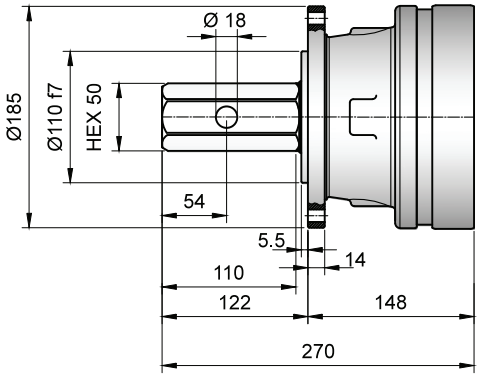


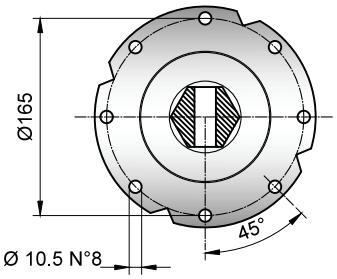


FL YZ BS FF KB GA → B-20

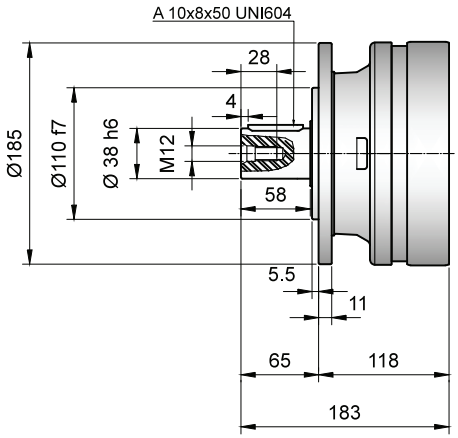


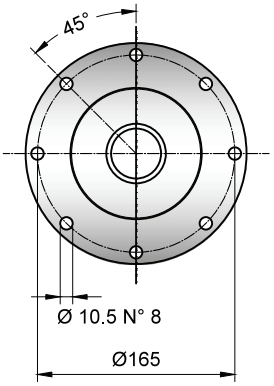
PE



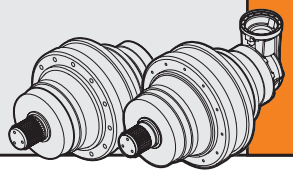


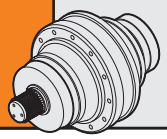
MCT

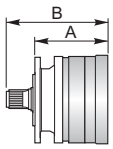




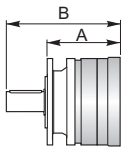
haumea mechanics on demand



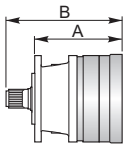




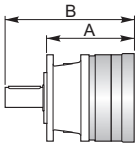
PG ...MS	A	B	RA	RB	EF	EDF
PG 161	118	180	•			•
PG 162	166	228	•			•
PG 163	214	276	•			•
PG 164	262	324	•			•



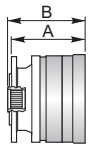
PG ...MC	A	B	RA	RB	EF	EDF
PG 161	118	207	•			•
PG 162	166	255	•			•
PG 163	214	303	•			•
PG 164	262	351	•			•



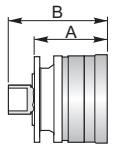
PG ...PS	A	B	RA	RB	EF	EDF
PG 161	148	210	•			•
PG 162	196	258	•			•
PG 163	244	306	•			•
PG 164	292	354	•			•



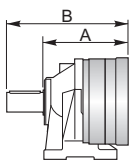
PG ...PC	A	B	RA	RB	EF	EDF
PG 161	148	237	•			•
PG 162	196	285	•			•
PG 163	244	333	•			•
PG 164	292	381	•			•



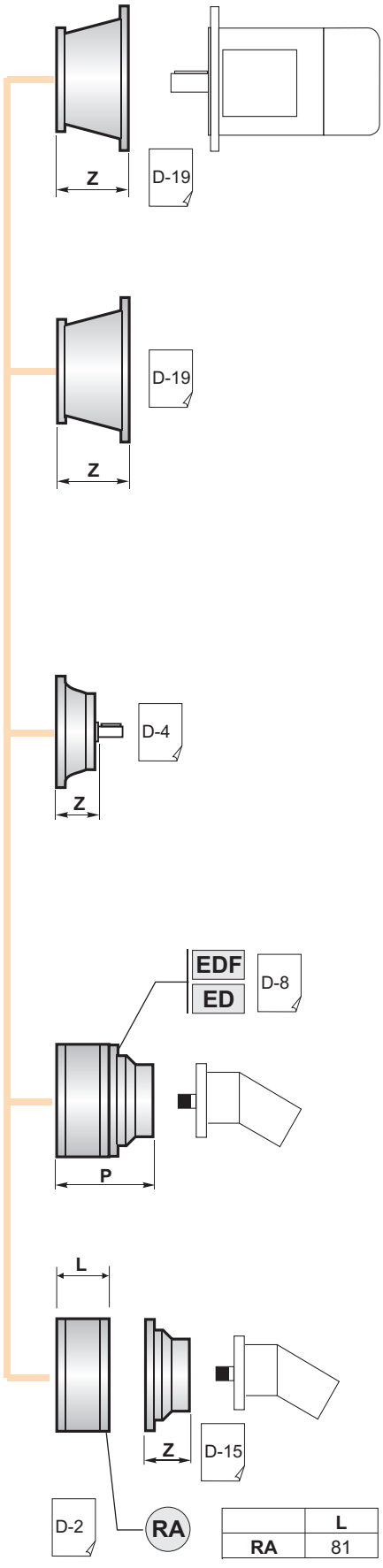
PG ...F	A	B	RA	RB	EF	EDF
PG 161	118	125	•			•
PG 162	166	173	•			•
PG 163	214	221	•			•
PG 164	262	269	•			•



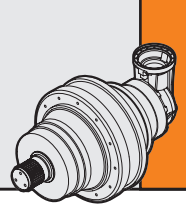
PG ...FS	A	B	RA	RB	EF	EDF
PG 161	118	173	•			•
PG 162	166	221	•			•
PG 163	214	269	•			•
PG 164	262	317	•			•

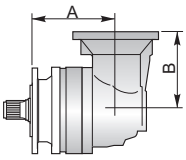


PG ...CPC	A	B	RA	RB	EF	EDF
PG 161	155	237	•			•
PG 162	203	285	•			•
PG 163	251	333	•			•
PG 164	299	381	•			•

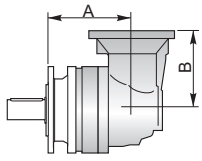


chaumea mechanics on demand

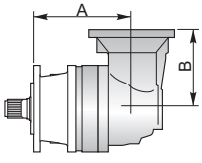




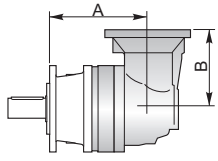
PGA ...MS	A	B	RA	RB	EF
PGA 162	193	159	•		•
PGA 163	241	159	•		•
PGA 164	289	159	•		•



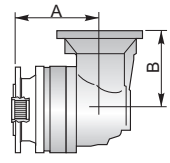
PGA ...MC	A	B	RA	RB	EF
PGA 162	193	159	•		•
PGA 163	241	159	•		•
PGA 164	289	159	•		•



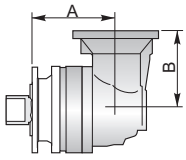
PGA ...PS	A	B	RA	RB	EF
PGA 162	223	159	•		•
PGA 163	271	159	•		•
PGA 164	319	159	•		•



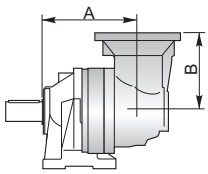
PGA ...PC	A	B	RA	RB	EF
PGA 162	223	159	•		•
PGA 163	271	159	•		•
PGA 164	319	159	•		•



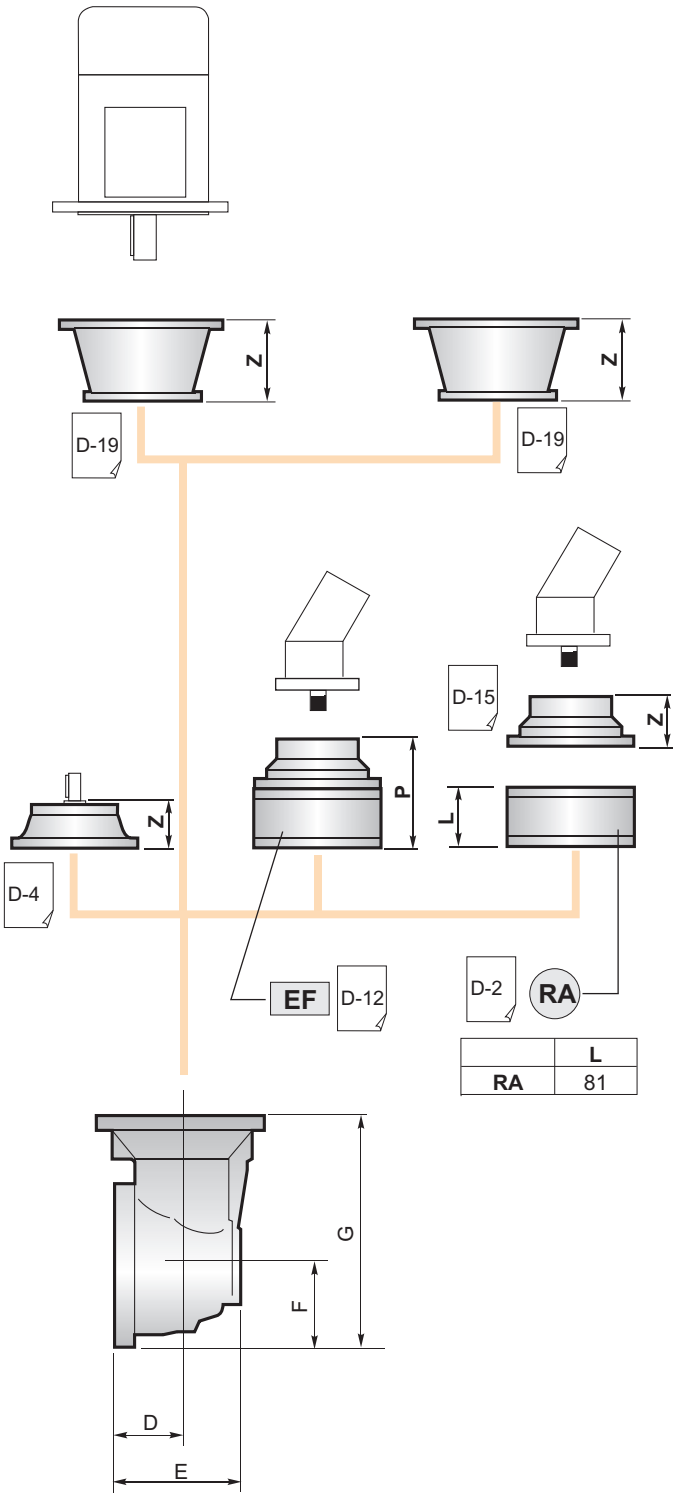
PGA ...F	A	B	RA	RB	EF
PGA 162	193	159	•		•
PGA 163	241	159	•		•
PGA 164	289	159	•		•



PGA ...FS	A	B	RA	RB	EF
PGA 162	193	159	•		•
PGA 163	241	159	•		•
PGA 164	289	159	•		•



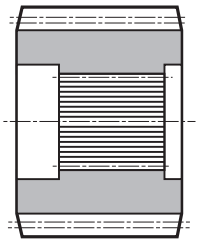
PGA ...CPC	A	B	RA	RB	EF
PGA 162	230	159	•		•
PGA 163	278	159	•		•
PGA 164	326	159	•		•



	L
RA	81

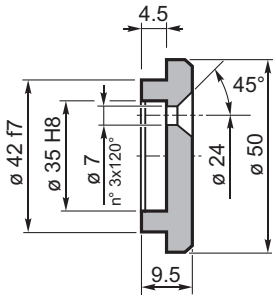
	D	E	F	G
PGA 162	75	141.5	93	252
PGA 163	75	141.5	93	252
PGA 164	75	141.5	93	252

YZ
Pignoni / Pinion
Ritzel / Pignon
Piñones / Pinhões



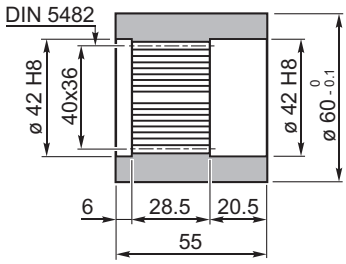
Su richiesta / On request
Auf Anfrage / Sur demande
Bajo demanda / Sob consulta

FF
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código
5701.034.000

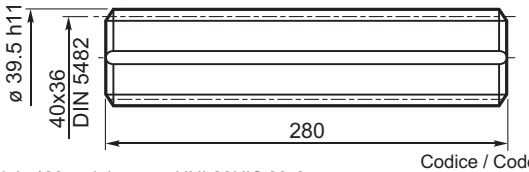
BS
Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



Materiale / Material
Material / Matière
Material / Material
UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código
1710.100.076

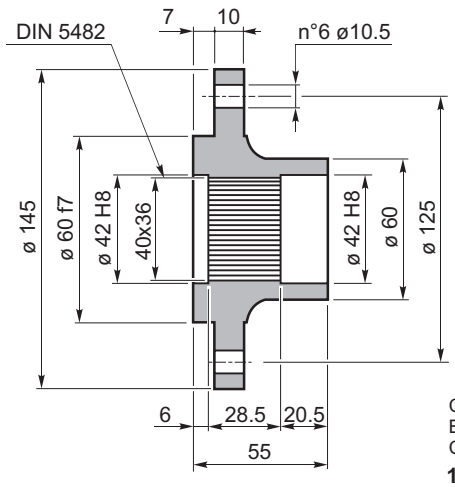
KB
Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada



Materiale / Material
Material / Matière
Material / Material
UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

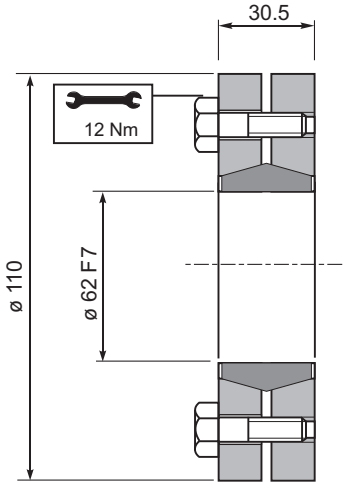
Codice / Code
Bestell - Nr. / Code
Código / Código
1703.179.042

FL
Flangia / Flange
Flansch / Bride
Brida / Flange



Codice / Code
Bestell - Nr. / Code
Código / Código
1710.102.025

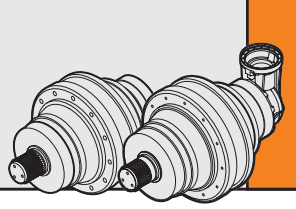
GA
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

2.2 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.062.000



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

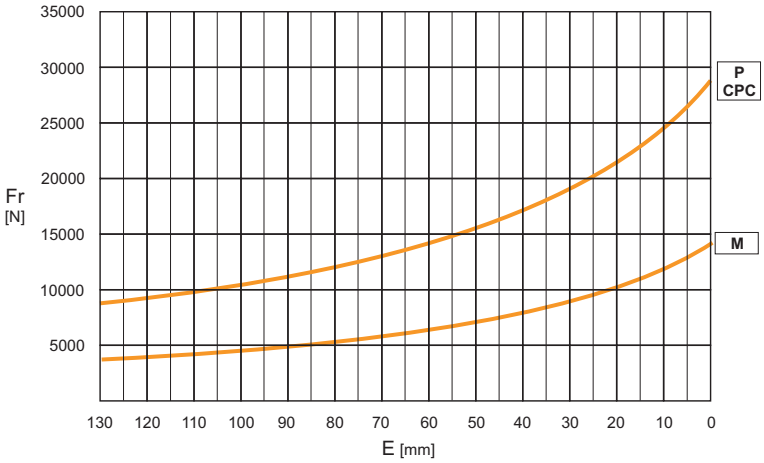
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

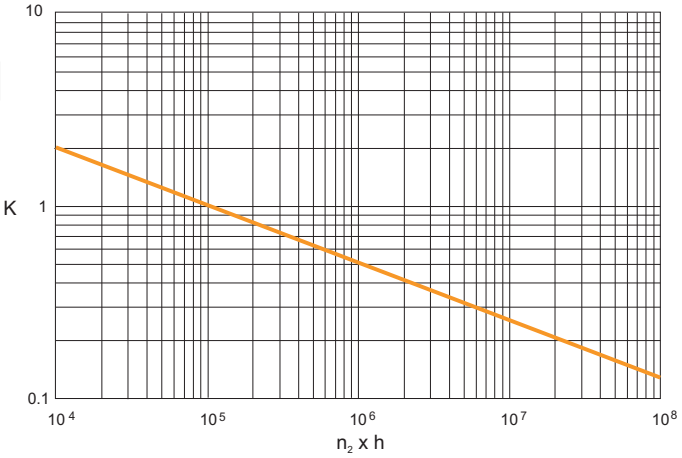
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

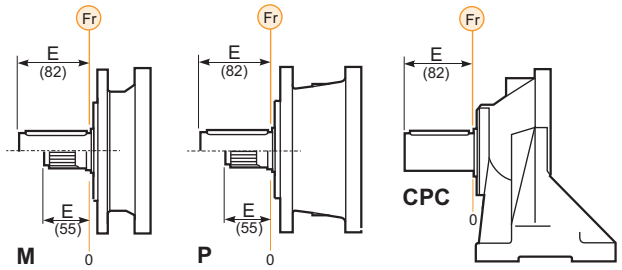
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M - P - CPC*





	n x h				
	10^5	10^4	10^6	10^7	10^8
M - P	Fr	Fr • K			
*CPC	Fr • 0.75	Fr • K • 0.75			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

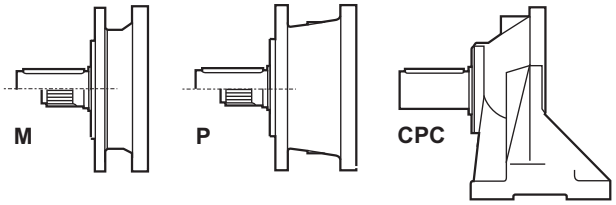
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

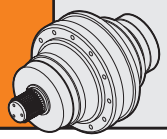
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

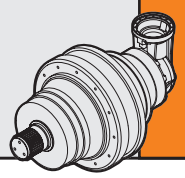
Fa [N]	M	P - CPC	
	16000	18000	←
	16000	18000	→





250

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 251	**3.78**	3.98	3.52	3.00	2.65							
	4.13	3.60	3.19	2.71	2.40							
	5.17	3.01	2.66	2.26	2.00	2800	20	29	38	42	20	31
	6.00	2.52	2.23	1.90	1.68							
	7.25	1.95	1.73	1.47	1.30							
PG 252	**13.43**	3.60	3.20	2.73	2.41							
	16.19	3.60	3.20	2.73	2.41							
	18.37	3.01	2.66	2.26	2.00							
	23.10	2.81	2.50	2.13	1.88							
	28.93	3.01	2.66	2.26	2.00	2800	12	35	44	48	27	37
	34.88	2.97	2.63	2.26	1.99							
	40.50	2.52	2.23	1.90	1.68							
	48.94	1.95	1.73	1.47	1.30							
	62.83	1.95	1.73	1.47	1.30							
PG 253	**52.15**	3.60	3.19	2.71	2.40							
	57.57	3.60	3.20	2.73	2.41							
	62.86	3.60	3.19	2.71	2.40							
	75.22	3.60	3.20	2.73	2.41							
	82.13	3.60	3.19	2.71	2.40							
	90.67	3.60	3.20	2.73	2.41							
	99.00	3.60	3.19	2.71	2.40							
	119.33	3.60	3.19	2.71	2.40							
	127.11	3.60	3.19	2.71	2.40							
	140.32	3.60	3.20	2.73	2.41	2800	8	41	50	54	32	43
	153.21	3.60	3.19	2.71	2.40							
	162.03	3.01	2.66	2.26	2.00							
	173.57	2.52	2.23	1.90	1.68							
	195.30	3.01	2.66	2.26	2.00							
	235.41	2.97	2.63	2.26	1.99							
	273.38	2.52	2.23	1.90	1.68							
	302.25	2.97	2.63	2.26	1.99							
	351.00	2.52	2.23	1.90	1.68							
	424.13	1.95	1.73	1.47	1.30							
PG 254	**352.00**	3.60	3.19	2.71	2.40							
	365.77	3.01	2.66	2.26	2.00							
	388.57	3.60	3.20	2.73	2.41							
	413.91	3.60	3.20	2.73	2.41							
	424.29	3.60	3.19	2.71	2.40							
	468.37	3.60	3.20	2.73	2.41							
	511.42	3.60	3.19	2.71	2.40							
	554.40	2.81	2.50	2.13	1.88							
	601.36	3.60	3.20	2.73	2.41							
	668.25	2.81	2.50	2.13	1.88							
	724.42	2.81	2.50	2.13	1.88	2800	4	47	56	60	38	49
	799.68	2.62	2.33	1.98	1.74							
	858.00	3.60	3.19	2.71	2.40							
	907.35	3.01	2.66	2.26	2.00							
	1034.20	3.60	3.19	2.71	2.40							
	1093.68	3.01	2.66	2.26	2.00							
	1318.28	3.01	2.66	2.26	2.00							
	1588.99	2.97	2.63	2.26	1.99							
	1845.28	2.52	2.23	1.90	1.68							
	2369.25	2.52	2.23	1.90	1.68							

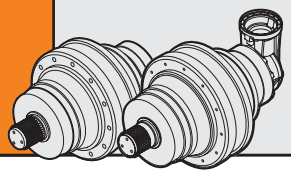


	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 252	**12.08**	2.63	2.57	2.48	2.43	2800	12	47	56	60	35	49
	15.13	3.27	3.19	3.09	2.87							
	17.57	3.77	3.34	2.84	2.52							
	21.23	2.95	2.61	2.22	1.97							
PGA 253	**39.34**	3.60	3.20	2.73	2.41	2800	8	53	62	66	45	55
	47.41	3.60	3.20	2.73	2.41							
	53.80	3.01	2.66	2.26	2.00							
	64.85	3.01	2.66	2.26	2.00							
	75.31	2.52	2.23	1.90	1.68							
	84.73	3.01	2.66	2.26	2.00							
	90.99	1.95	1.73	1.47	1.30							
	102.13	2.97	2.63	2.26	1.99							
	118.61	2.52	2.23	1.90	1.68							
	143.32	1.95	1.73	1.47	1.30							
	152.29	2.17	1.92	1.62	1.45							
PGA 254	**139.86**	3.60	3.20	2.73	2.41	2800	4	59	68	72	50	61
	168.59	3.60	3.20	2.73	2.41							
	184.08	3.60	3.19	2.71	2.40							
	221.88	3.60	3.19	2.71	2.40							
	240.53	2.81	2.50	2.13	1.88							
	267.76	2.52	2.23	1.90	1.68							
	289.93	2.81	2.50	2.13	1.88							
	322.74	2.52	2.23	1.90	1.68							
	363.14	3.01	2.66	2.26	2.00							
	421.71	2.52	2.23	1.90	1.68							
	448.70	3.60	3.19	2.71	2.40							
	474.51	3.01	2.66	2.26	2.00							
	508.32	2.52	2.23	1.90	1.68							
	551.04	2.52	2.23	1.90	1.68							
	614.22	1.95	1.73	1.47	1.30							
	664.20	2.52	2.23	1.90	1.68							
	734.36	1.92	1.69	1.43	1.28							
	800.60	2.52	2.23	1.90	1.68							
	1027.93	2.17	1.92	1.62	1.45							
	1242.08	1.95	1.73	1.47	1.30							
	1319.81	2.17	1.92	1.62	1.45							



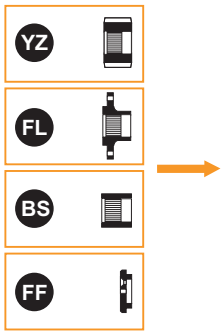
(n_2 x h = 20.000)

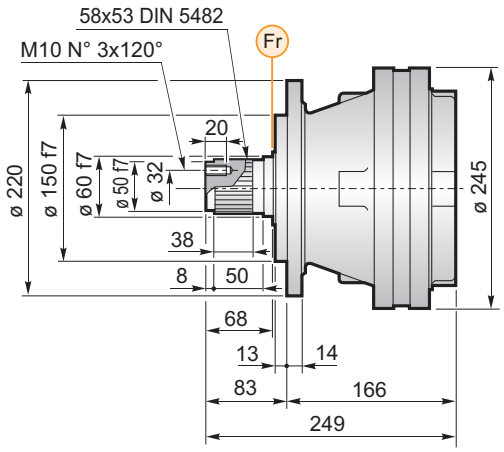
$M_{max} = M_c \times 2$

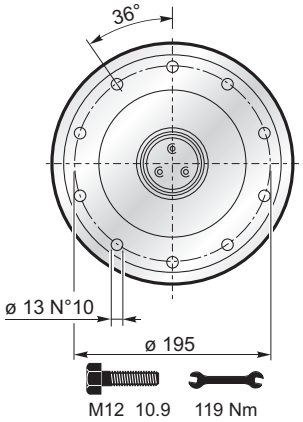


250

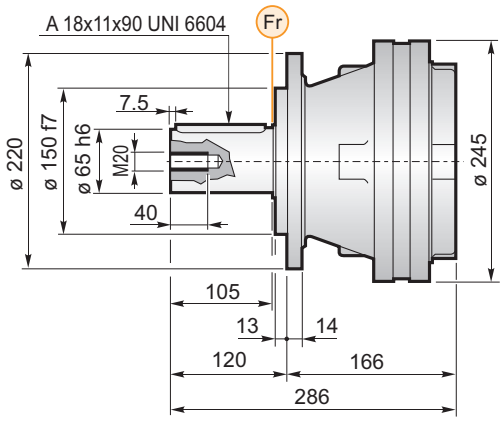
MS

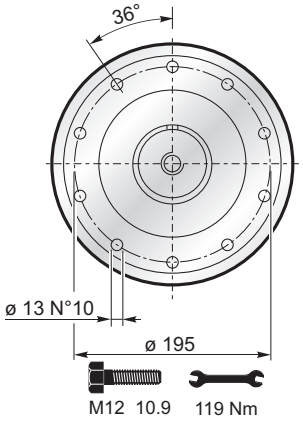




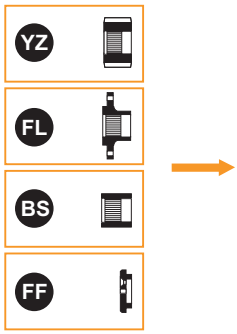


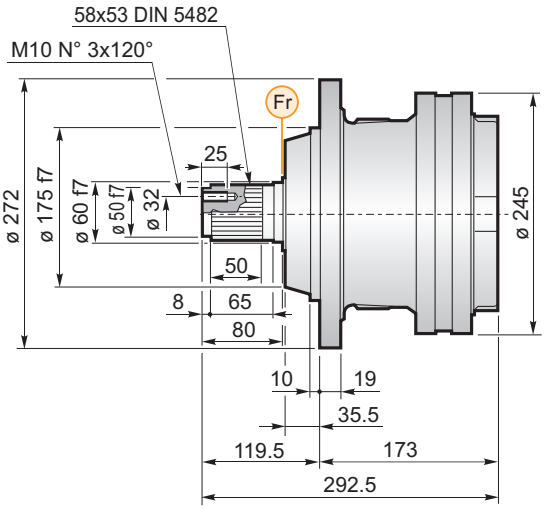
MC

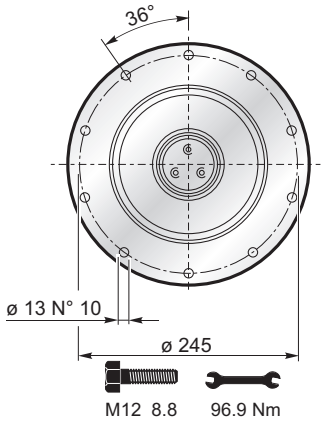




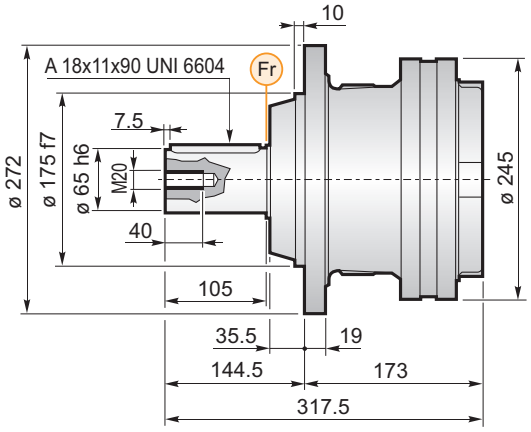
PS

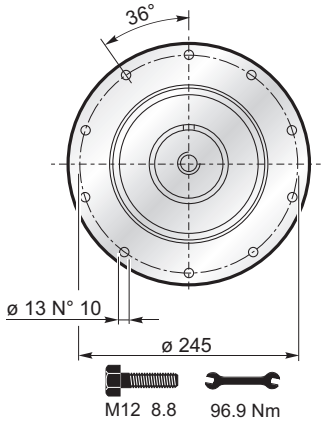




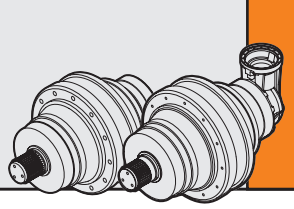


PC



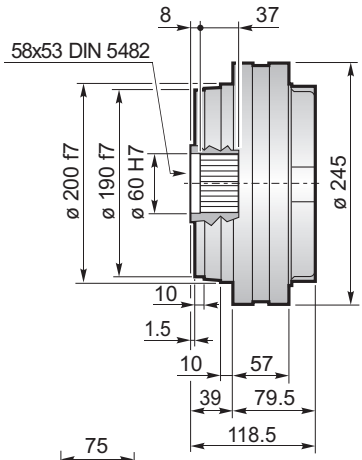


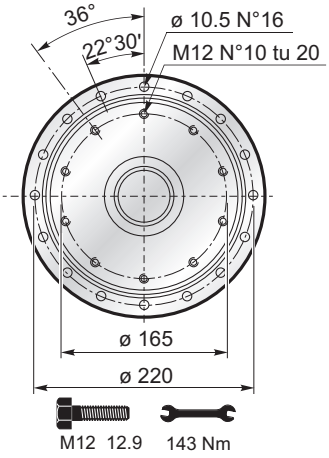
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F

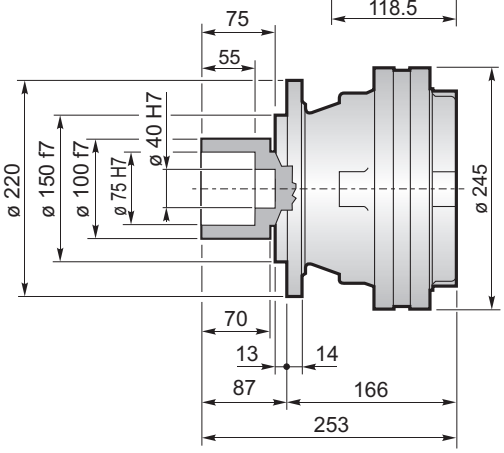
KB →

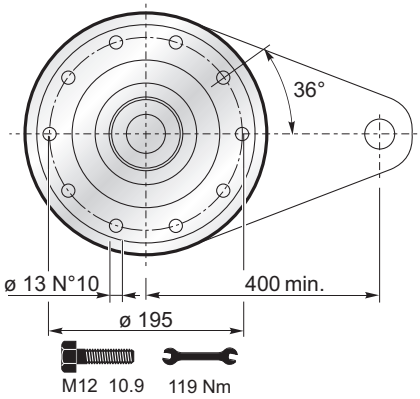


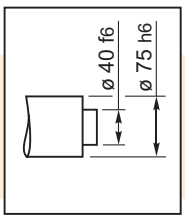


FS

GA →



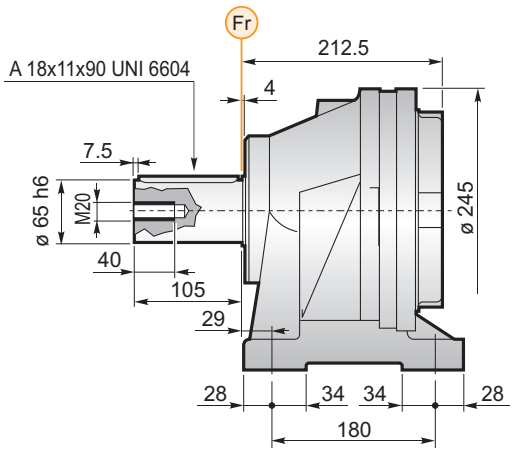


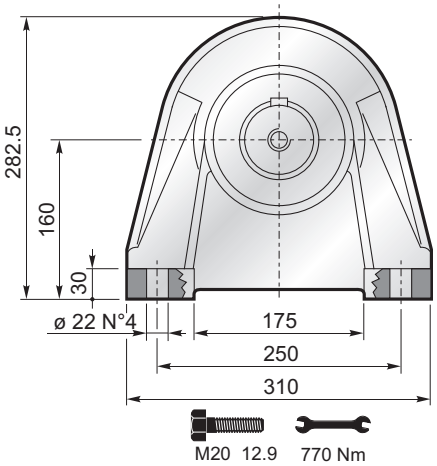


M_{max} = 7.5 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

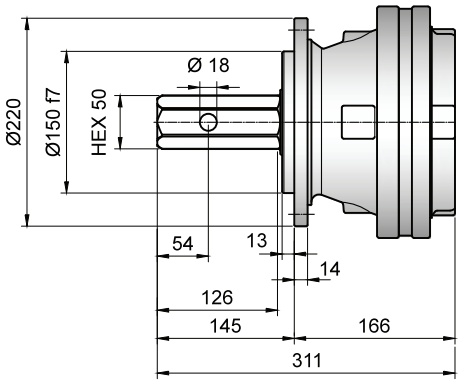
CPC

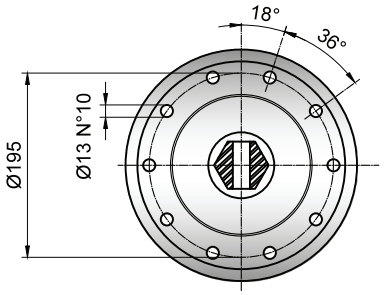




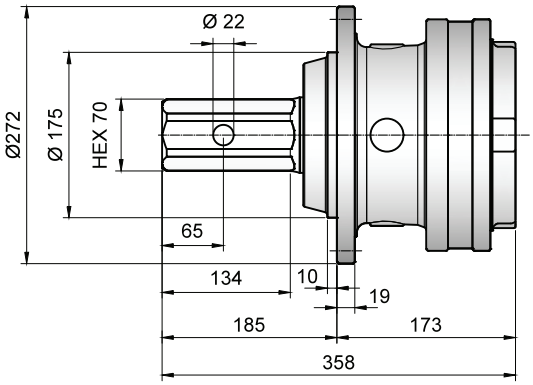
FL YZ BS FF KB GA → B-30

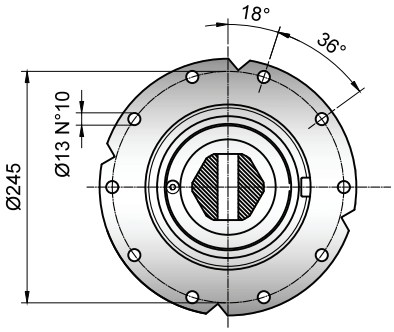
ME


Ø220
Ø150 f7
HEX 50
Ø 18
54
13
14
126
145
166
311

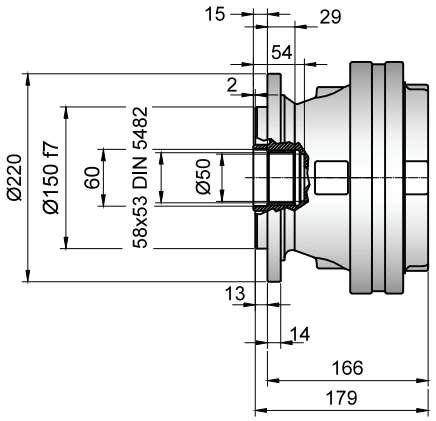

18°
36°
Ø195
Ø13 N°10

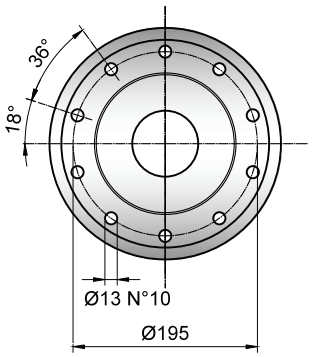
PE


Ø272
Ø 175
HEX 70
Ø 22
65
134
10
19
185
173
358

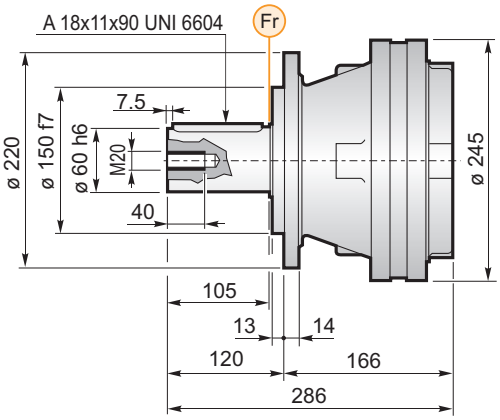

18°
36°
Ø245
Ø13 N°10

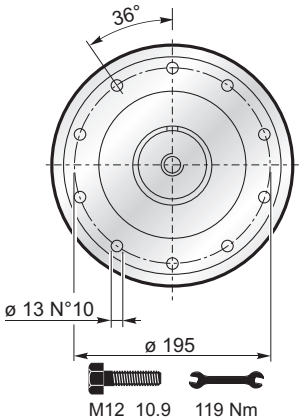
FT

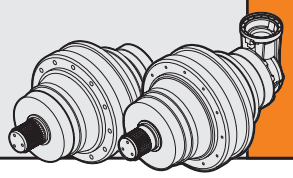

15
29
54
2
Ø220
Ø150 f7
60
58x53 DIN 5482
Ø50
13
14
166
179

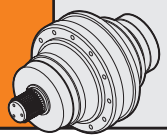

36°
18°
Ø13 N°10
Ø195

MCT

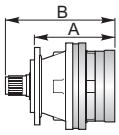

A 18x11x90 UNI 6604
Fr
7.5
ø 220
ø 150 f7
ø 60 h6
M20
40
ø 245
105
13
14
120
166
286


36°
ø 13 N°10
ø 195
M12 10.9 119 Nm

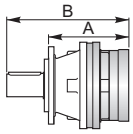




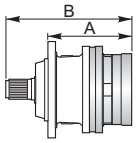
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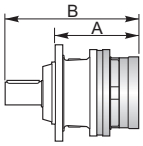
PG ...MS	A	B	RA	RB	EF	EDF
PG 251	166	249	•	o	•	
PG 252	214	297	•			•
PG 253	262	345	•			•
PG 254	310	393	•			•



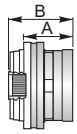
PG ...MC	A	B	RA	RB	EF	EDF
PG 251	166	286	•	o	•	
PG 252	214	334	•			•
PG 253	262	382	•			•
PG 254	310	430	•			•



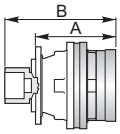
PG ...PS	A	B	RA	RB	EF	EDF
PG 251	173	292.5	•	o	•	
PG 252	221	340.5	•			•
PG 253	269	388.5	•			•
PG 254	317	436.5	•			•



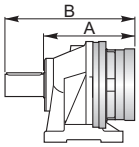
PG ...PC	A	B	RA	RB	EF	EDF
PG 251	173	317.5	•	o	•	
PG 252	221	365.5	•			•
PG 253	269	413.5	•			•
PG 254	317	461.5	•			•



PG ...F	A	B	RA	RB	EF	EDF
PG 251	79.5	118.5	•	o	•	
PG 252	127.5	166.5	•			•
PG 253	175.5	214.5	•			•
PG 254	223.5	262.5	•			•

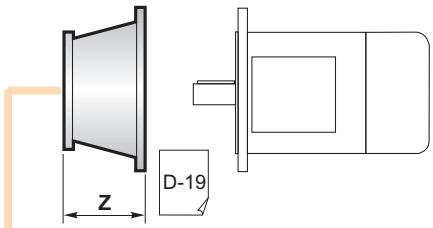


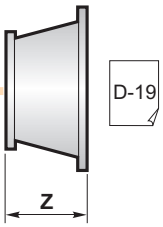
PG ...FS	A	B	RA	RB	EF	EDF
PG 251	166	253	•	o	•	
PG 252	214	301	•			•
PG 253	262	349	•			•
PG 254	310	397	•			•

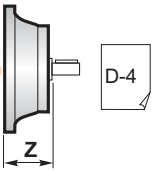


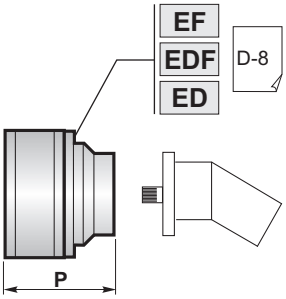
PG ...CPC	A	B	RA	RB	EF	EDF
PG 251	212.5	317.5	•	o	•	
PG 252	260.5	365.5	•			•
PG 253	308.5	413.5	•			•
PG 254	356.5	461.5	•			•

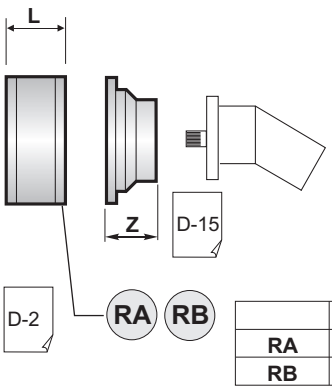
A+13.5	B+13.5	o





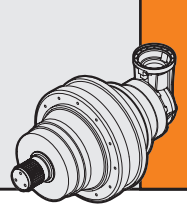


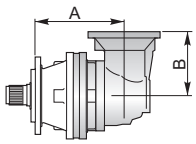




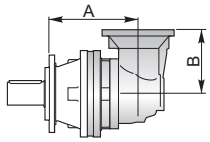
	L
RA	81
RB	125

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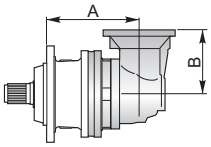




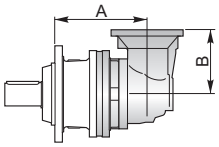
PGA ...MS	A	B	RA	RB	EF
PGA 252	241	159	•		•
PGA 253	289	159	•		•
PGA 254	337	159	•		•



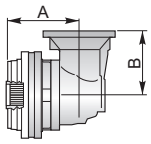
PGA ...MC	A	B	RA	RB	EF
PGA 252	241	159	•		•
PGA 253	289	159	•		•
PGA 254	337	159	•		•



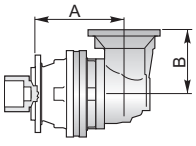
PGA ...PS	A	B	RA	RB	EF
PGA 252	248	159	•		•
PGA 253	296	159	•		•
PGA 254	344	159	•		•



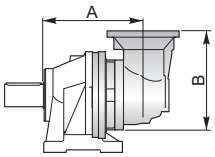
PGA ...PC	A	B	RA	RB	EF
PGA 252	248	159	•		•
PGA 253	296	159	•		•
PGA 254	344	159	•		•



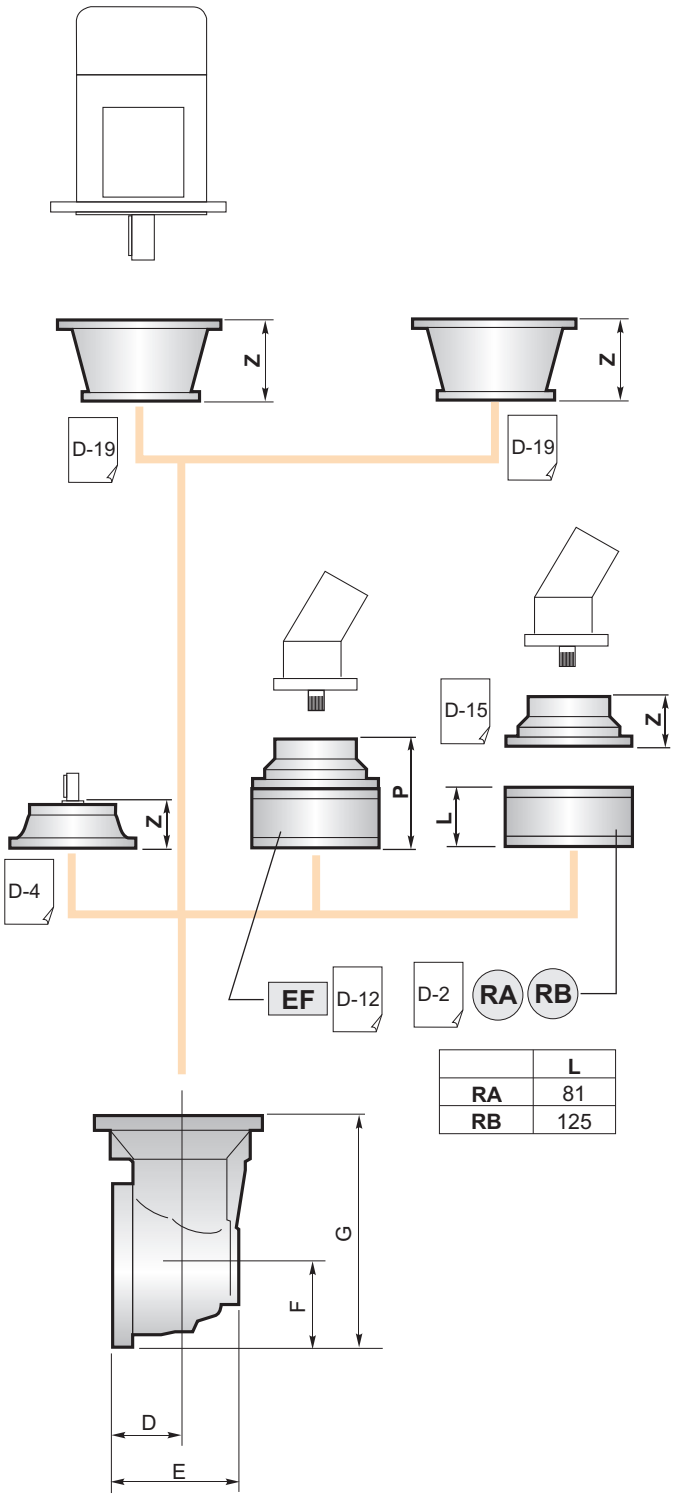
PGA ...F	A	B	RA	RB	EF
PGA 252	192	159	•		•
PGA 253	240	159	•		•
PGA 254	288	159	•		•



PGA ...FS	A	B	RA	RB	EF
PGA 252	241	159	•		•
PGA 253	289	159	•		•
PGA 254	337	159	•		•



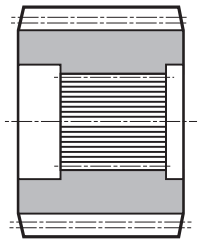
PGA ...CPC	A	B	RA	RB	EF
PGA 252	287.5	159	•		•
PGA 253	335.5	159	•		•
PGA 254	383.5	159	•		•



	L
RA	81
RB	125

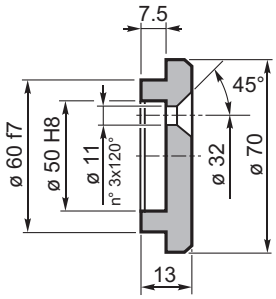
	D	E	F	G
PGA 252	75	141.5	93	252
PGA 253	75	141.5	93	252
PGA 254	75	141.5	93	252

YZ
Pignoni / Pinion
Ritzel / Pignon
Piñones / Pinhões



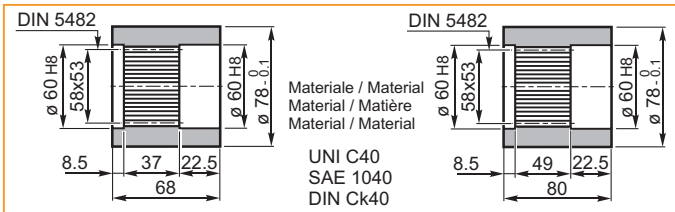
Su richiesta / On request
Auf Anfrage / Sur demande
Bajo demanda / Sob consulta

FF
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código
5701.015.000

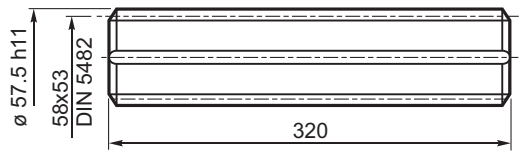
BS
Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



MS Codice / Code
Bestell - Nr. / Code
Código / Código
1712.101.076

PS Codice / Code
Bestell - Nr. / Code
Código / Código
1714.101.076

KB
Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada

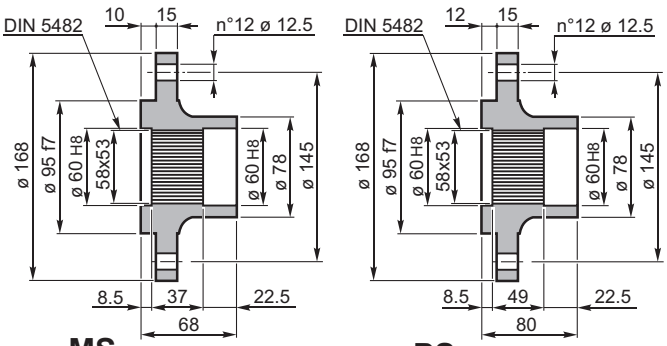


Materiale / Material
Material / Matière
Material / Material

UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

Codice / Code
Bestell - Nr. / Code
Código / Código
1703.181.042

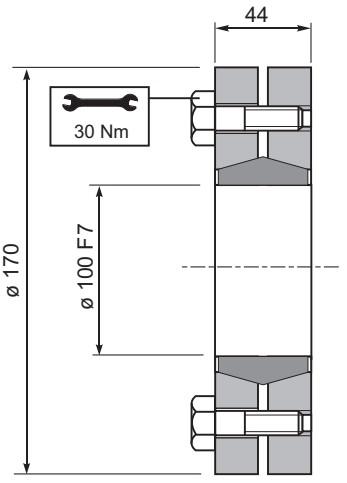
FL
Flangia / Flange
Flansch / Bride
Brida / Flange



MS Codice / Code
Bestell - Nr. / Code
Código / Código
1712.103.025

PS Codice / Code
Bestell - Nr. / Code
Código / Código
1714.103.098

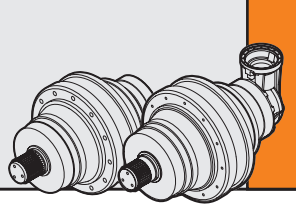
GA
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

7.5 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.100.000



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

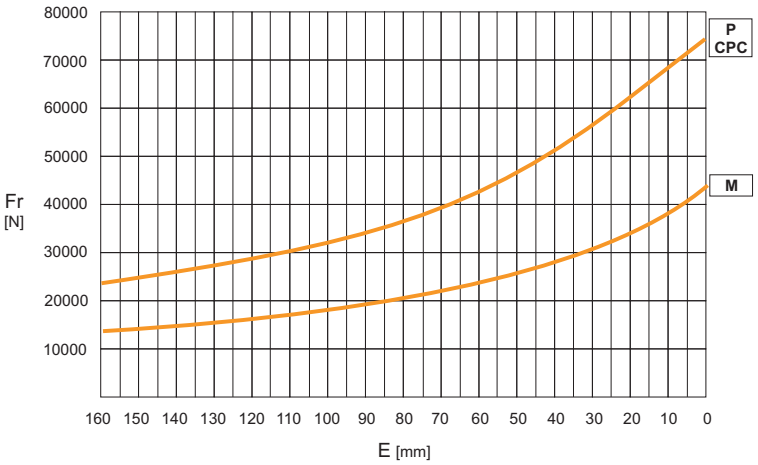
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

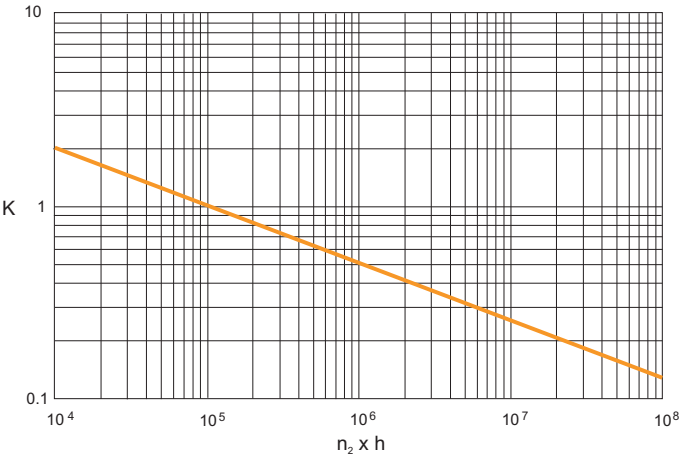
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

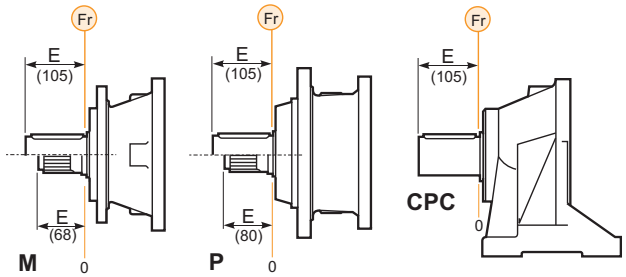
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M - P - CPC*





	n x h				
	10^5	10^4	10^6	10^7	10^8
M - P	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

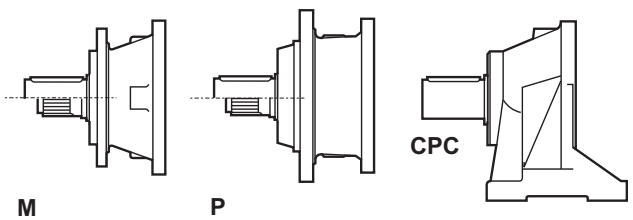
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

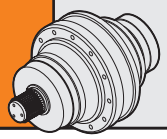
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

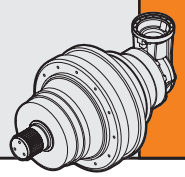
Fa [N]	M	P - CPC	
	32000	32000	←
	32000	48000	→





500

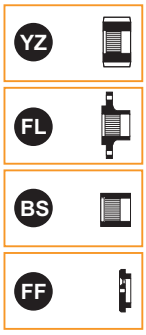
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 501	**3.78**	5.77	5.11	4.35	3.85	2800	20	33	42	46	25	35
	4.13	5.26	4.66	3.97	3.51							
	5.17	4.30	3.81	3.24	2.87							
	6.00	3.77	3.34	2.84	2.52							
	7.25	2.95	2.61	2.22	1.97							
PG 502	**13.43**	5.57	4.93	4.20	3.71	2800	15	41	50	54	32	43
	16.19	5.57	4.93	4.20	3.71							
	18.37	4.30	3.81	3.24	2.87							
	23.10	4.27	3.77	3.21	2.84							
	28.93	4.30	3.81	3.24	2.87							
	34.88	4.24	3.75	3.19	2.81							
	40.50	3.77	3.34	2.84	2.52							
	48.94	2.95	2.61	2.22	1.97							
PG 503	**52.15**	5.26	4.66	3.97	3.51	2800	10	47	56	60	38	49
	57.57	5.57	4.93	4.20	3.71							
	62.86	5.26	4.66	3.97	3.51							
	75.22	5.57	4.93	4.20	3.71							
	82.13	5.26	4.66	3.97	3.51							
	90.67	5.57	4.93	4.20	3.71							
	99.00	5.26	4.66	3.97	3.51							
	119.33	5.26	4.66	3.97	3.51							
	129.36	4.27	3.77	3.21	2.84							
	140.32	4.78	4.22	3.56	3.19							
	153.21	5.14	4.54	3.83	3.43							
	162.03	4.30	3.81	3.24	2.87							
	173.57	3.77	3.34	2.84	2.52							
	195.30	4.30	3.81	3.24	2.87							
	235.41	4.24	3.75	3.19	2.81							
	273.38	3.77	3.34	2.84	2.52							
	302.25	4.24	3.75	3.19	2.81							
	351.00	3.77	3.34	2.84	2.52							
PG 504	**365.77**	4.30	3.81	3.24	2.87	2800	6	53	62	66	44	55
	388.57	5.57	4.93	4.20	3.71							
	413.91	5.57	4.93	4.20	3.71							
	424.29	5.26	4.66	3.97	3.51							
	468.37	5.57	4.93	4.20	3.71							
	511.42	5.26	4.66	3.97	3.51							
	554.40	4.27	3.77	3.21	2.84							
	601.36	5.57	4.93	4.20	3.71							
	656.63	5.26	4.66	3.97	3.51							
	711.82	4.41	3.89	3.28	2.94							
	785.78	4.78	4.22	3.56	3.19							
	822.45	4.30	3.81	3.24	2.87							
	858.00	5.14	4.54	3.83	3.43							
	907.35	4.30	3.81	3.24	2.87							
	1034.20	5.14	4.54	3.83	3.43							
	1216.08	4.78	4.22	3.56	3.19							
	1327.86	5.14	4.54	3.83	3.43							
	1588.99	4.24	3.75	3.19	2.81							
	1735.07	4.27	3.77	3.21	2.84							

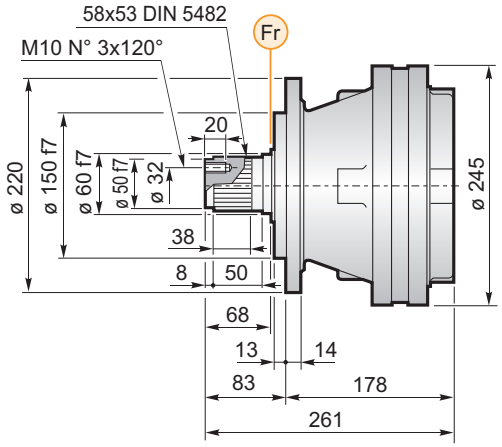


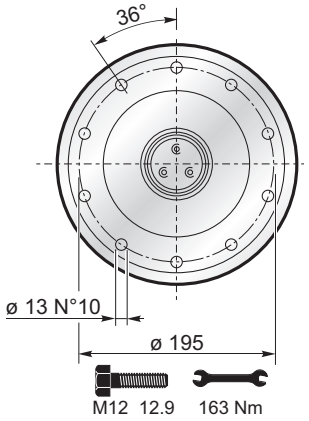
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 502	**13.05**	5.77	5.11	4.35	3.85	2800	15	51	60	64	43	53
	14.25	5.26	4.66	3.97	3.51							
	17.85	4.30	3.81	3.24	2.87							
	20.73	3.77	3.34	2.84	2.52							
	22.46	3.70	3.45	3.15	2.94							
	28.13	4.30	3.81	3.24	2.87							
	32.67	3.77	3.34	2.84	2.52							
	39.47	2.95	2.61	2.22	1.97							
PGA 503	**39.34**	5.57	4.93	4.20	3.71	2800	10	59	68	72	50	61
	47.41	5.57	4.93	4.20	3.71							
	53.80	4.30	3.81	3.24	2.87							
	67.65	4.27	3.77	3.21	2.84							
	75.31	3.77	3.34	2.84	2.52							
	84.73	4.30	3.81	3.24	2.87							
	90.99	2.95	2.61	2.22	1.97							
	102.13	4.24	3.75	3.19	2.81							
	118.61	3.77	3.34	2.84	2.52							
	143.32	2.95	2.61	2.22	1.97							
PGA 504	**139.86**	5.57	4.93	4.20	3.71	2800	6	65	74	78	56	67
	168.59	5.57	4.93	4.20	3.71							
	184.08	5.26	4.66	3.97	3.51							
	221.88	5.26	4.66	3.97	3.51							
	240.53	4.27	3.77	3.21	2.84							
	267.76	3.77	3.34	2.84	2.52							
	289.93	4.27	3.77	3.21	2.84							
	322.74	3.77	3.34	2.84	2.52							
	346.95	3.97	3.51	2.99	2.64							
	410.93	4.78	4.22	3.56	3.19							
	448.70	5.14	4.54	3.83	3.43							
	474.51	4.30	3.81	3.24	2.87							
	508.32	3.77	3.34	2.84	2.52							
	536.95	3.97	3.51	2.99	2.64							
	571.95	4.30	3.81	3.24	2.87							
	652.65	3.77	3.34	2.84	2.52							
	734.36	4.30	3.81	3.24	2.87							
	885.16	4.24	3.75	3.19	2.81							
	1027.93	3.77	3.34	2.84	2.52							
	1242.08	2.95	2.61	2.22	1.97							

$M_{max} = M_c \times 2$ (n_2 x h = 20.000)

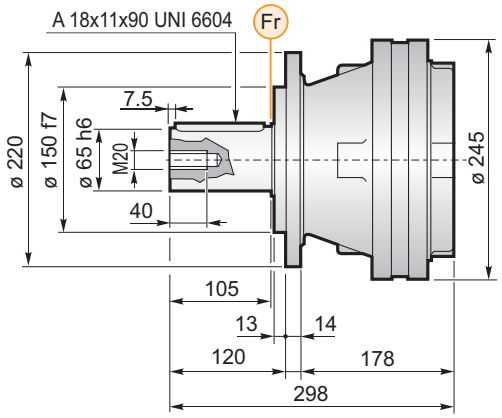
MS

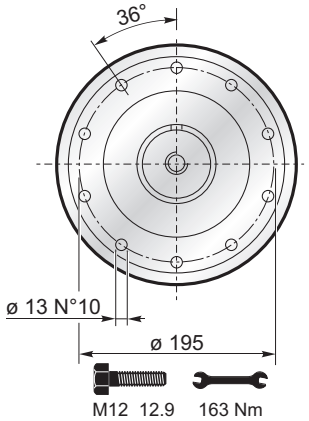

YZ
FL
BS
FF


58x53 DIN 5482
M10 N° 3x120°
Fr
ø 220
ø 150 f7
ø 60 f7
ø 50 f7
ø 32
ø 245
20
38
8
50
68
13
14
83
178
261

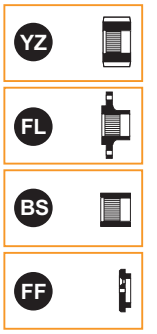

36°
ø 13 N°10
ø 195
M12 12.9 163 Nm

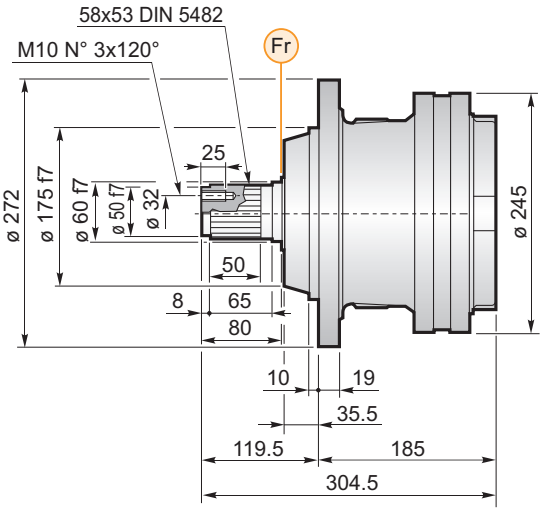
MC

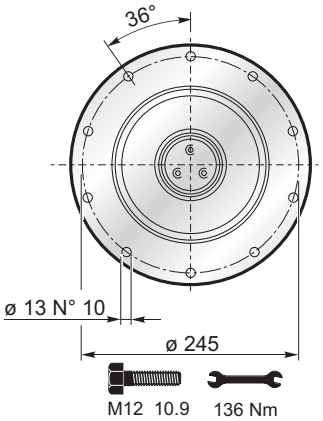

A 18x11x90 UNI 6604
Fr
ø 220
ø 150 f7
ø 65 h6
M20
ø 245
7.5
40
105
13
14
120
178
298


36°
ø 13 N°10
ø 195
M12 12.9 163 Nm

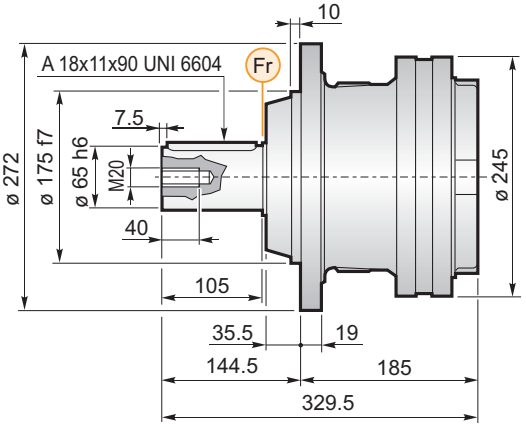
PS

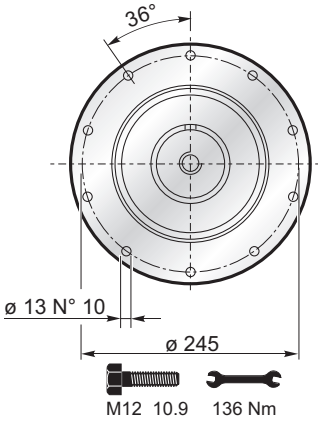

YZ
FL
BS
FF

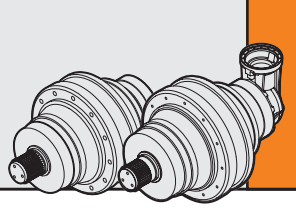

58x53 DIN 5482
M10 N° 3x120°
Fr
ø 272
ø 175 f7
ø 60 f7
ø 50 f7
ø 32
ø 245
25
50
8
65
80
10
19
35.5
119.5
185
304.5


36°
ø 13 N° 10
ø 245
M12 10.9 136 Nm

PC

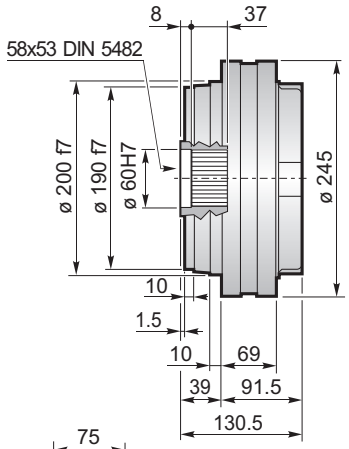

10
A 18x11x90 UNI 6604
Fr
ø 272
ø 175 f7
ø 65 h6
M20
ø 245
7.5
40
105
35.5
19
144.5
185
329.5

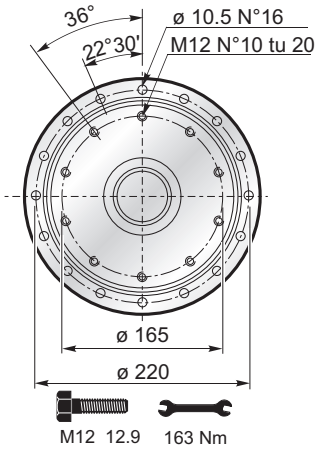

36°
ø 13 N° 10
ø 245
M12 10.9 136 Nm



F

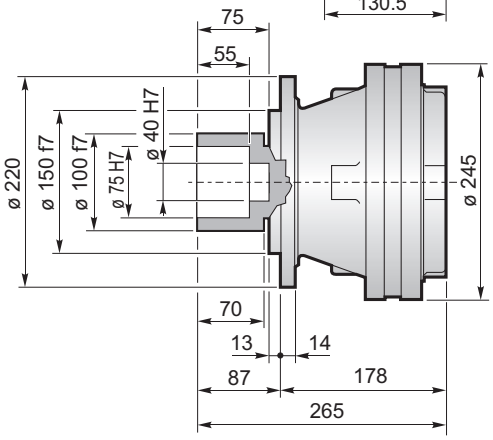
KB →

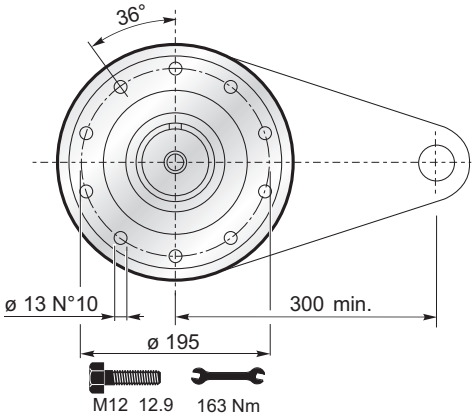


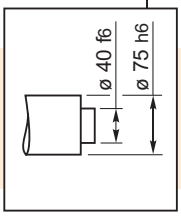


FS

GA →



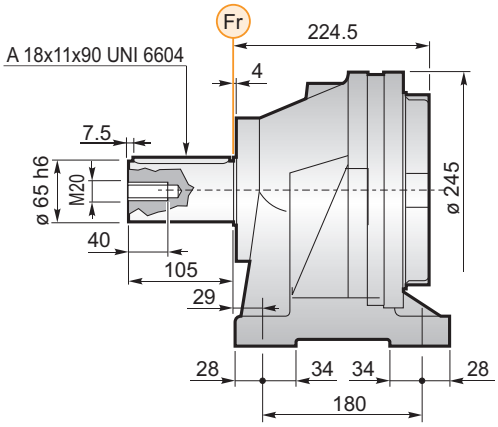


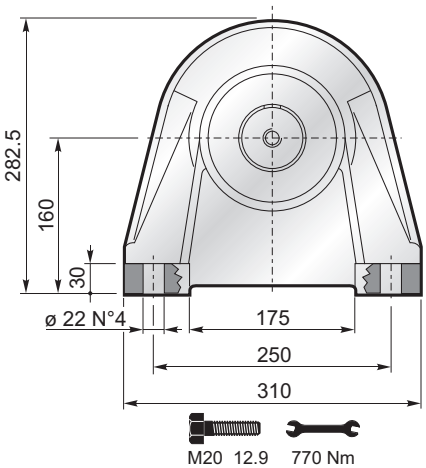


M_{max} = 7.5 kNm

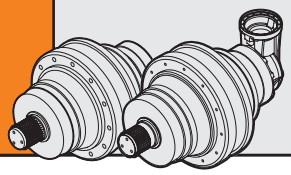
La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

CPC



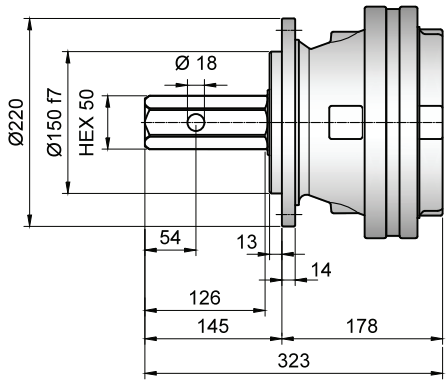


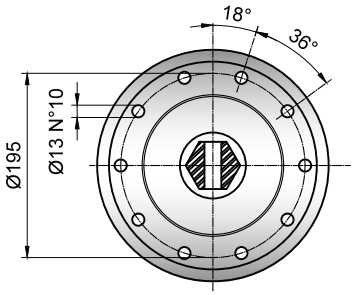
FL YZ BS FF KB GA → B-40



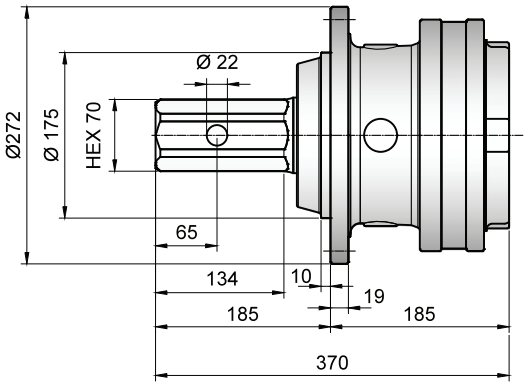
500

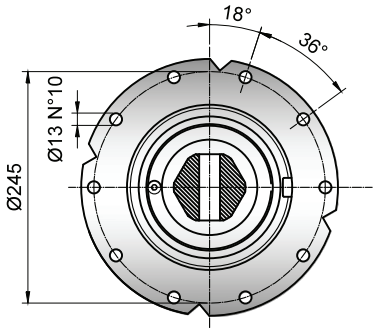
ME



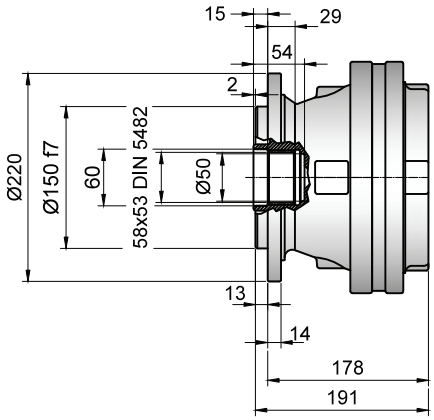


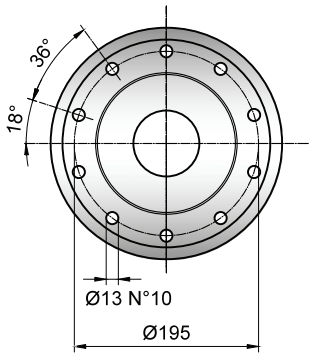
PE



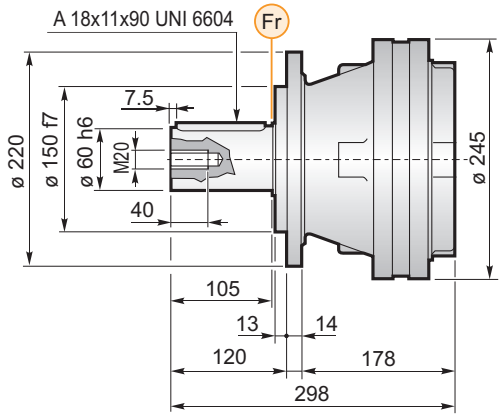


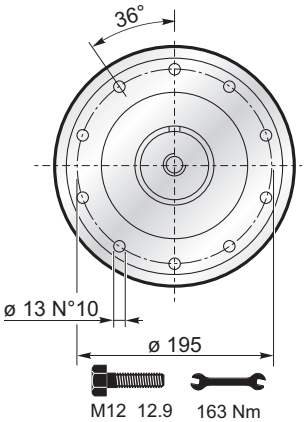
FT



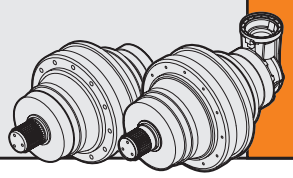


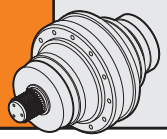
MCT



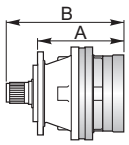


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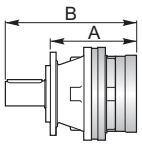




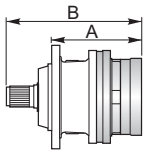
500



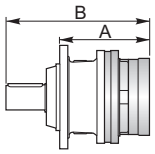
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG 501	178	261	•	o	•	
PG 502	239	322	•			•
PG 503	287	370	•			•
PG 504	335	418	•			•



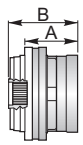
	PG ...MC					
	A	B	RA	RB	EF	EDF
PG 501	178	298	•	o	•	
PG 502	239	359	•			•
PG 503	287	407	•			•
PG 504	335	455	•			•



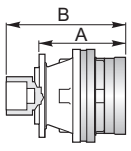
	PG ...PS					
	A	B	RA	RB	EF	EDF
PG 501	185	304.5	•	o	•	
PG 502	246	365.5	•			•
PG 503	294	413.5	•			•
PG 504	342	461.5	•			•



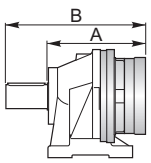
	PG ...PC					
	A	B	RA	RB	EF	EDF
PG 501	185	329.5	•	o	•	
PG 502	246	390.5	•			•
PG 503	294	438.5	•			•
PG 504	342	486.5	•			•



	PG ...F					
	A	B	RA	RB	EF	EDF
PG 501	91.5	130.5	•	o	•	
PG 502	152.5	191.5	•			•
PG 503	200.5	239.5	•			•
PG 504	248.5	287.5	•			•

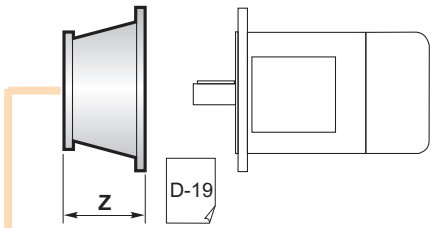


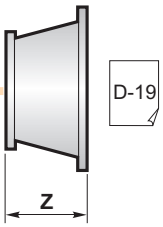
	PG ...FS					
	A	B	RA	RB	EF	EDF
PG 501	178	265	•	o	•	
PG 502	239.5	326	•			•
PG 503	287	374	•			•
PG 504	335	422	•			•

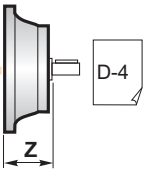


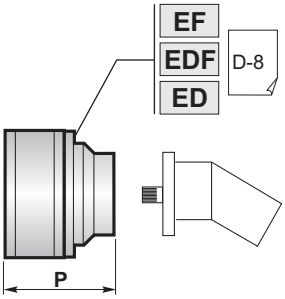
	PG ...CPC					
	A	B	RA	RB	EF	EDF
PG 501	224.5	329.5	•	o	•	
PG 502	285.5	390.5	•			•
PG 503	333.5	438.5	•			•
PG 504	381.5	486.5	•			•

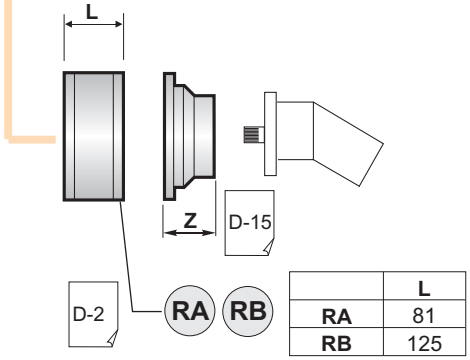
A+13.5	B+13.5	o





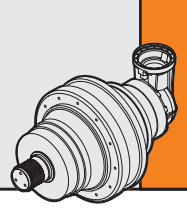


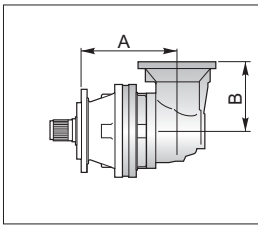




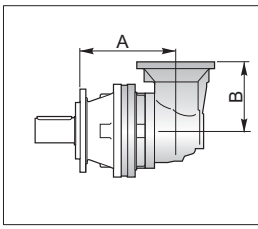
	L
RA	81
RB	125

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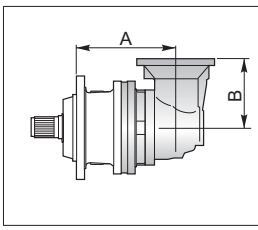




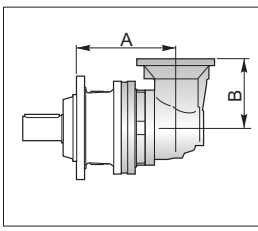
PGA ...MS	A	B	RA	RB	EF
PGA 502	279.5	240	•		•
PGA 503	314	159	•		•
PGA 504	362	159	•		•



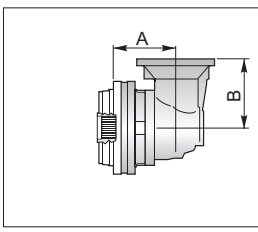
PGA ...MC	A	B	RA	RB	EF
PGA 502	279.5	240	•		•
PGA 503	314	159	•		•
PGA 504	362	159	•		•



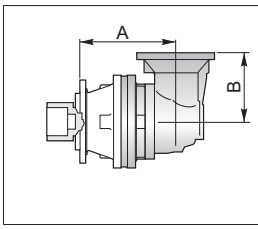
PGA ...PS	A	B	RA	RB	EF
PGA 502	286.5	240	•		•
PGA 503	321	159	•		•
PGA 504	369	159	•		•



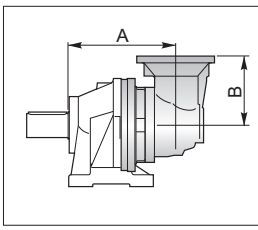
PGA ...PC	A	B	RA	RB	EF
PGA 502	286.5	240	•		•
PGA 503	321	159	•		•
PGA 504	369	159	•		•



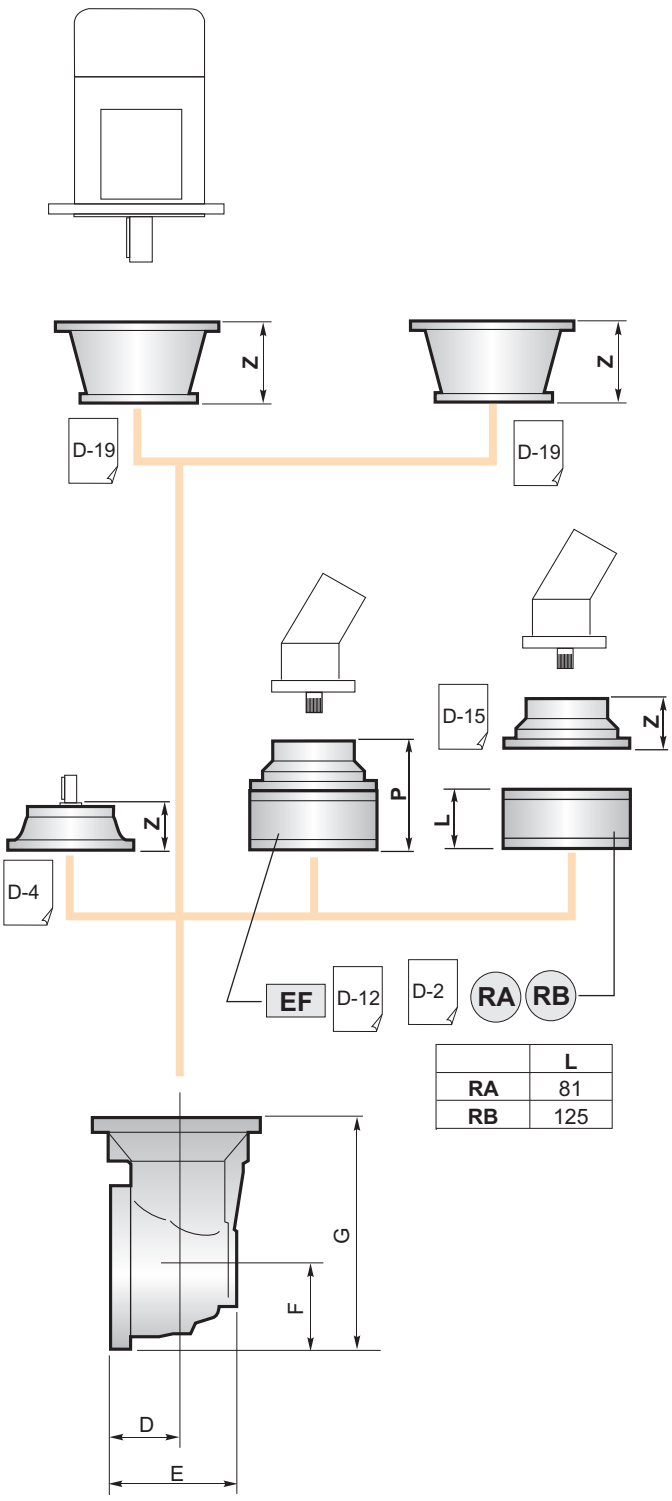
PGA ...F	A	B	RA	RB	EF
PGA 502	193	240	•		•
PGA 503	227.5	159	•		•
PGA 504	275.5	159	•		•



PGA ...FS	A	B	RA	RB	EF
PGA 502	279.5	240	•		•
PGA 503	314	159	•		•
PGA 504	362	159	•		•



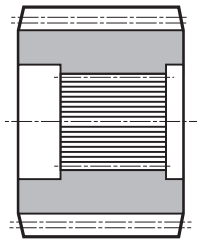
PGA ...CPC	A	B	RA	RB	EF
PGA 502	326	240	•		•
PGA 503	360.5	159	•		•
PGA 504	408.5	159	•		•



	L
RA	81
RB	125

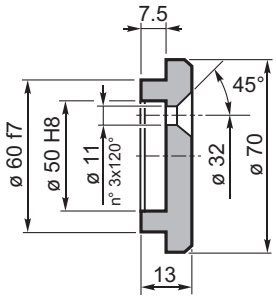
	D	E	F	G
PGA 502	88	164	140	380
PGA 503	75	141.5	93	252
PGA 504	75	141.5	93	252

YZ
Pignoni / Pinion
Ritzel / Pignon
Piñones / Pinhões



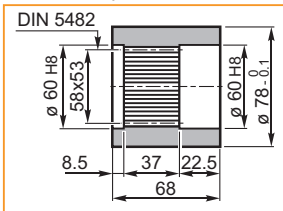
Su richiesta / On request
Auf Anfrage / Sur demande
Bajo demanda / Sob consulta

FF
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



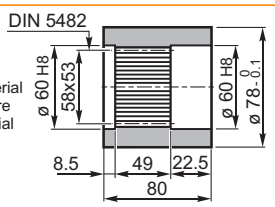
Codice / Code
Bestell - Nr. / Code
Código / Código
5701.015.000

BS
Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



Materiale / Material
Material / Matière
Material / Material

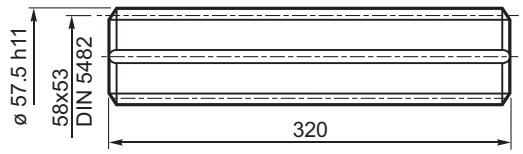
UNI C40
SAE 1040
DIN Ck40



MS
Codice / Code
Bestell - Nr. / Code
Código / Código
1712.101.076

PS
Codice / Code
Bestell - Nr. / Code
Código / Código
1714.101.076

KB
Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada

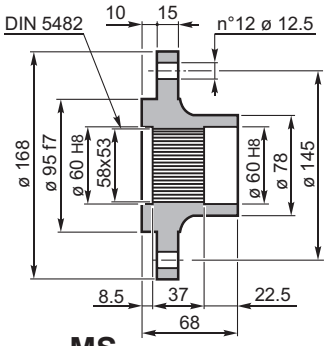


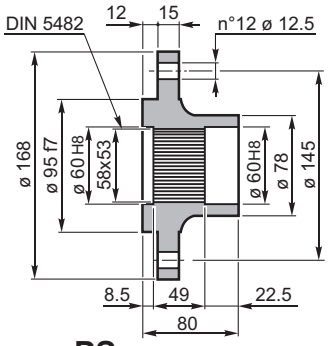
Materiale / Material
Material / Matière
Material / Material

UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

Codice / Code
Bestell - Nr. / Code
Código / Código
1703.181.042

FL
Flangia / Flange
Flansch / Bride
Brida / Flange

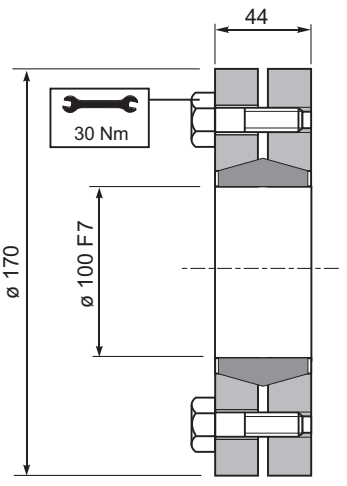




MS
Codice / Code
Bestell - Nr. / Code
Código / Código
1712.103.025

PS
Codice / Code
Bestell - Nr. / Code
Código / Código
1714.103.098

GA
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração

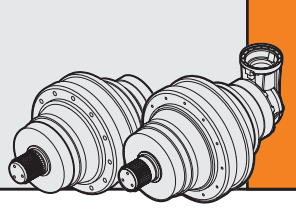


Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

7.5 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.100.000

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CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

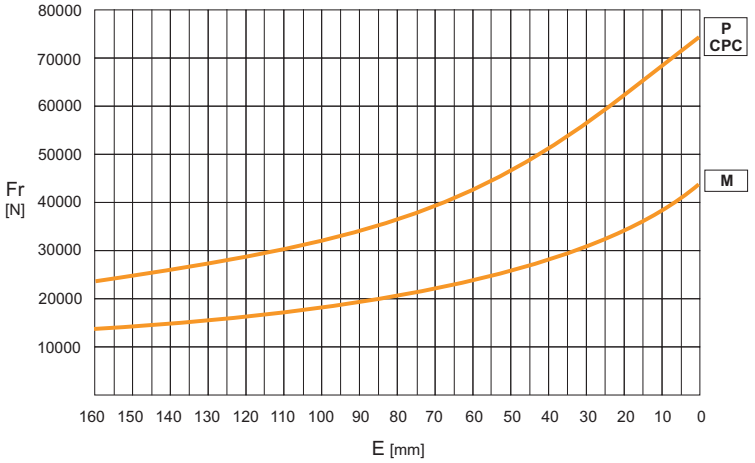
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

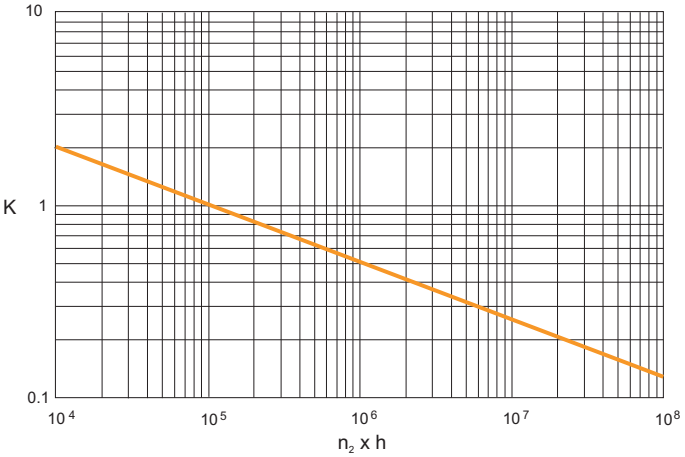
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

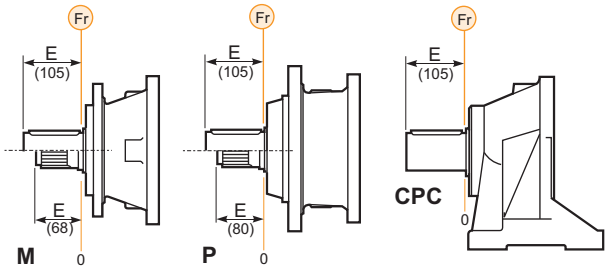
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M - P - CPC*





	n x h				
	10^5	10^4	10^6	10^7	10^8
M - P	Fr	Fr • K			
*CPC	Fr • 0.75	Fr • K • 0.75			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

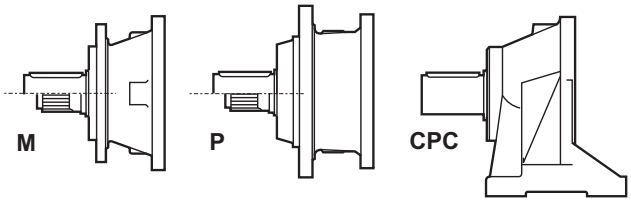
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

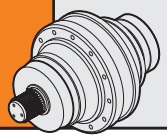
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

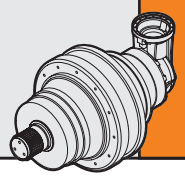
Fa [N]	M	P - CPC	
	32000	32000	←
	32000	48000	→





700

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 701	**3.67**	7.93	7.02	5.97	5.29							
	4.43	7.24	6.41	5.45	4.83							
	5.00	6.36	5.63	4.79	4.24	2800	30	-	67	83	49	70
	5.80	5.38	4.76	4.05	3.59							
	7.00	4.35	3.85	3.28	2.90							
PG 702	**13.85**	7.93	7.02	5.97	5.29							
	18.27	7.24	6.41	5.45	4.83							
	20.63	6.36	5.63	4.79	4.24							
	22.88	7.24	6.41	5.45	4.83							
	26.57	7.24	6.41	5.45	4.83	2800	18	-	79	95	61	82
	30.00	6.36	5.63	4.79	4.24							
	36.25	6.36	5.63	4.79	4.24							
	42.05	5.38	4.76	4.05	3.59							
	50.75	4.35	3.85	3.28	2.90							
PG 703	**53.78**	7.93	7.02	5.97	5.29							
	64.82	7.93	7.02	5.97	5.29							
	71.70	7.24	6.41	5.45	4.83							
	78.29	7.24	6.41	5.45	4.83							
	84.70	7.93	7.02	5.97	5.29							
	93.50	6.51	5.77	4.95	4.37							
	102.09	7.00	6.20	5.32	4.70							
	112.93	7.24	6.41	5.45	4.83							
	127.88	7.93	7.02	5.97	5.29							
	139.22	6.36	5.63	4.79	4.24	2800	14	-	85	101	67	88
	148.80	7.24	6.41	5.45	4.83							
	154.45	7.24	6.41	5.45	4.83							
	179.36	7.24	6.41	5.45	4.83							
	190.67	6.16	5.43	4.59	4.11							
	216.72	6.44	5.71	4.86	4.29							
	244.69	6.36	5.63	4.79	4.24							
	278.26	6.44	5.71	4.86	4.29							
	314.17	6.36	5.63	4.79	4.24							
PG 704	**332.44**	7.42	6.59	5.60	4.95							
	347.96	7.93	7.02	5.97	5.29							
	400.71	7.93	7.02	5.97	5.29							
	434.39	7.42	6.59	5.60	4.95							
	474.32	7.93	7.02	5.97	5.29							
	523.60	6.51	5.77	4.95	4.37							
	571.73	7.93	7.02	5.97	5.29							
	632.40	7.24	6.41	5.45	4.83							
	661.91	7.24	6.41	5.45	4.83							
	747.32	6.36	5.63	4.79	4.24	2800	8	-	91	107	73	94
	768.67	7.24	6.41	5.45	4.83							
	832.33	7.24	6.41	5.45	4.83							
	884.81	7.00	6.20	5.32	4.70							
	978.71	7.24	6.41	5.45	4.83							
	1042.51	7.24	6.41	5.45	4.83							
	1177.03	6.36	5.63	4.79	4.24							
	1338.54	7.24	6.41	5.45	4.83							
	1651.64	6.36	5.63	4.79	4.24							
	2722.78	6.36	5.63	4.79	4.24							



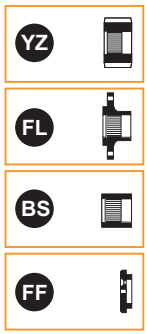
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 702	**12.67**	6.84	6.23	5.50	5.01	2800	18	-	104	120	86	107
	15.30	7.24	6.41	5.45	4.83							
	17.27	6.36	5.63	4.79	4.24							
	20.04	5.38	4.76	4.05	3.59							
	24.18	4.35	3.85	3.28	2.90							
	27.22	4.37	4.08	3.72	3.47							
	31.58	4.97	4.64	4.05	3.59							
	38.11	4.35	3.85	3.28	2.90							
PGA 703	**44.29**	7.93	7.02	5.97	5.29	2800	14	-	94	110	76	97
	53.50	7.24	6.41	5.45	4.83							
	55.48	7.93	7.02	5.97	5.29							
	60.40	6.36	5.63	4.79	4.24							
	67.01	7.24	6.41	5.45	4.83							
	77.82	7.24	6.41	5.45	4.83							
	87.86	6.36	5.63	4.79	4.24							
	94.03	6.44	5.71	4.86	4.29							
	106.16	6.36	5.63	4.79	4.24							
	123.15	5.38	4.76	4.05	3.59							
	148.63	4.35	3.85	3.28	2.90							
PGA 704	**157.49**	7.93	7.02	5.97	5.29	2800	8	-	110	116	82	103
	173.85	7.93	7.02	5.97	5.29							
	189.83	7.93	7.02	5.97	5.29							
	209.98	7.24	6.41	5.45	4.83							
	229.28	7.24	6.41	5.45	4.83							
	248.05	7.93	7.02	5.97	5.29							
	273.82	6.51	5.77	4.95	4.37							
	298.99	7.00	6.20	5.32	4.70							
	330.72	7.24	6.41	5.45	4.83							
	361.12	7.24	6.41	5.45	4.83							
	402.98	6.44	5.71	4.86	4.29							
	454.97	6.36	5.63	4.79	4.24							
	510.67	6.36	5.63	4.79	4.24							
	558.38	6.16	5.43	4.59	4.11							
	593.04	6.36	5.63	4.79	4.24							
	674.41	7.20	6.35	5.36	4.80							
	716.58	6.36	5.63	4.79	4.24							
	831.24	5.38	4.76	4.05	3.59							
	920.06	6.36	5.63	4.79	4.24							
	1067.27	5.38	4.76	4.05	3.59							

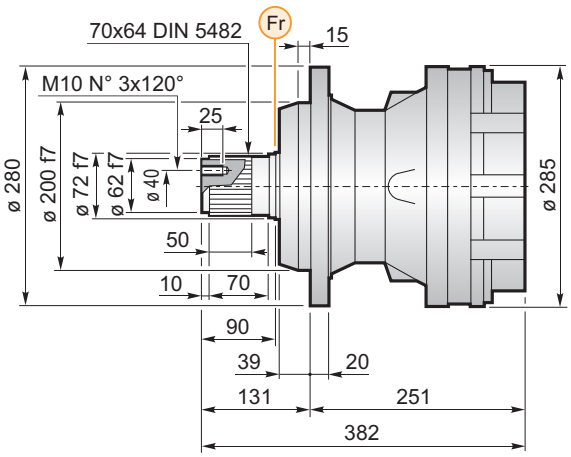


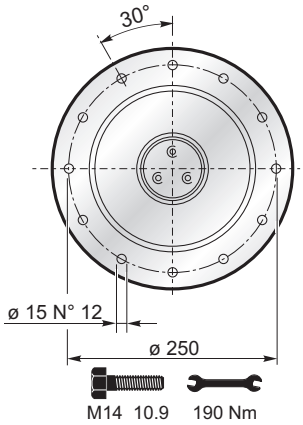
(n_2 x h = 20.000)

$M_{max} = M_c \times 2$

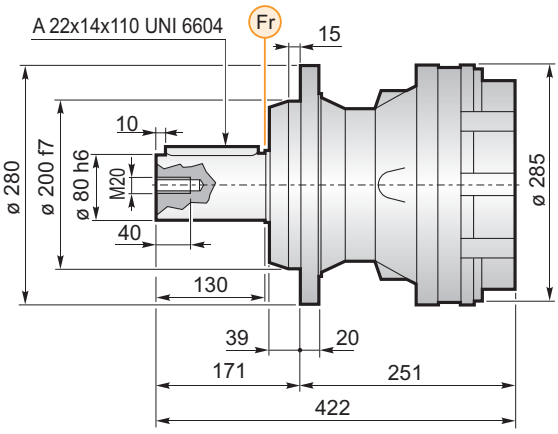
PS

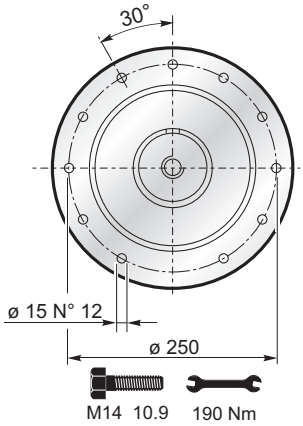

YZ
FL
BS
FF

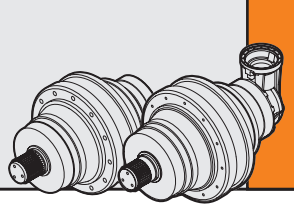

70x64 DIN 5482
Fr
15
M10 N° 3x120°
25
ø 280
ø 200 f7
ø 72 f7
ø 62 f7
ø 40
ø 285
50
10
70
90
39
20
131
251
382


30°
ø 15 N° 12
ø 250
M14 10.9 190 Nm

PC

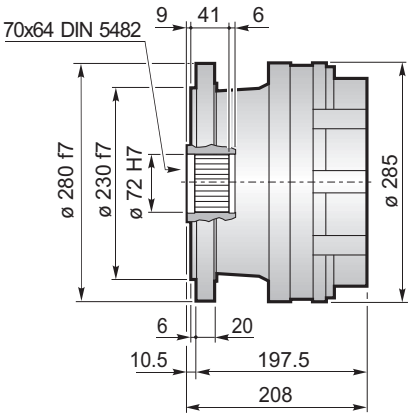

A 22x14x110 UNI 6604
Fr
15
10
ø 280
ø 200 f7
ø 80 h6
M20
ø 285
40
130
39
20
171
251
422

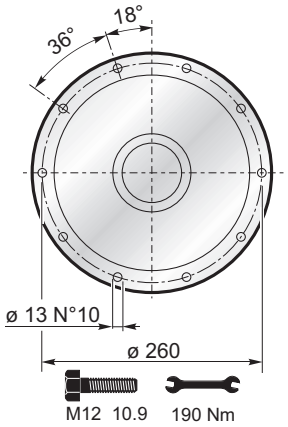

30°
ø 15 N° 12
ø 250
M14 10.9 190 Nm



F

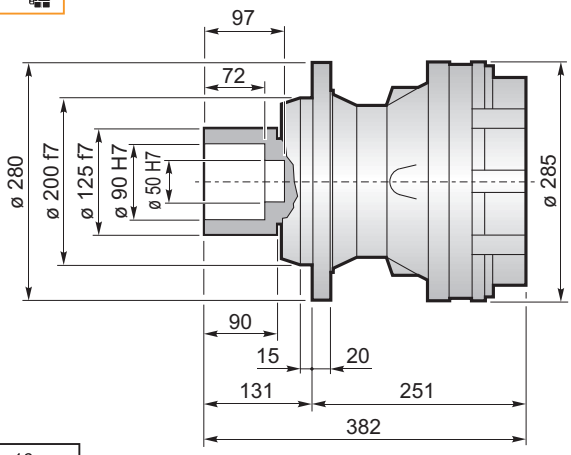


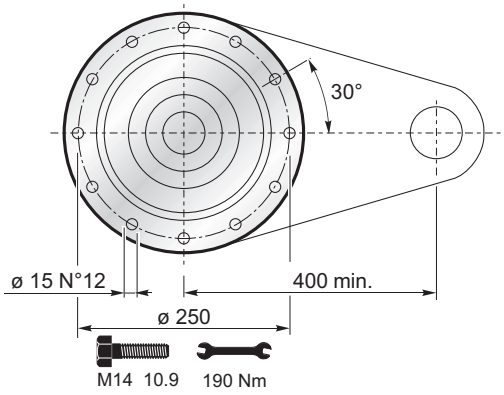


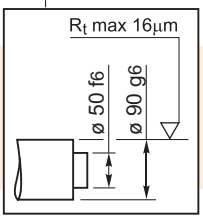


FS





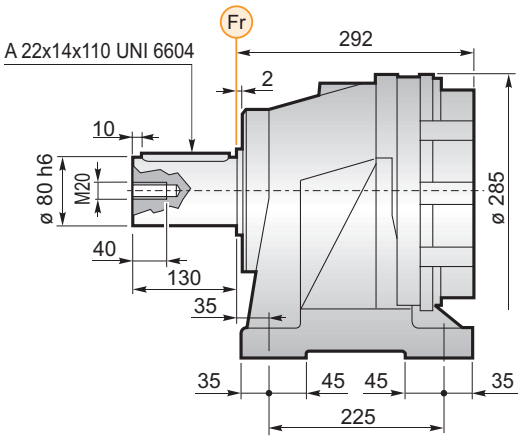


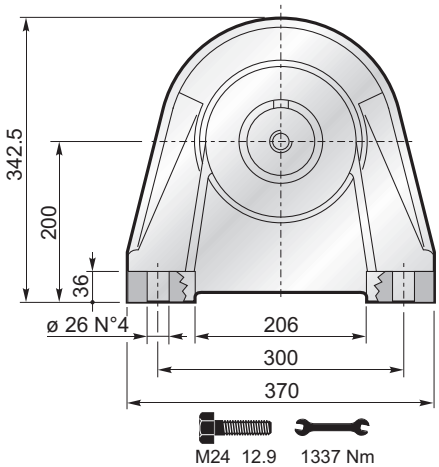


M_{max} = 13 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

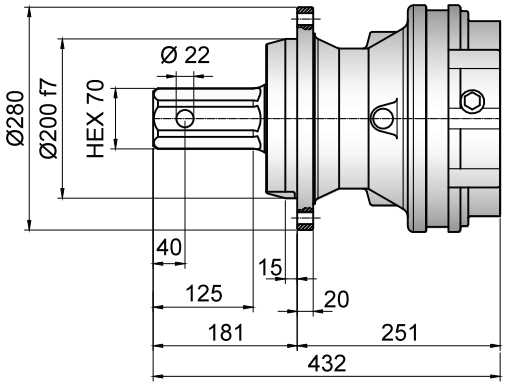
CPC

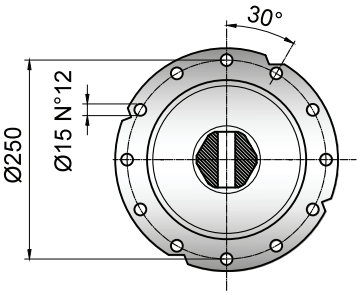


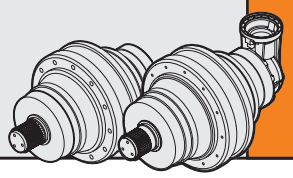


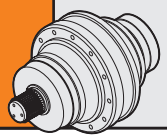
FL YZ BS FF KB GA → B-50

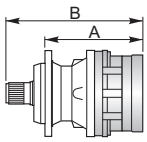
PE



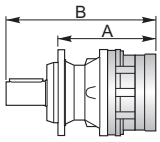




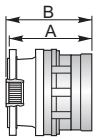




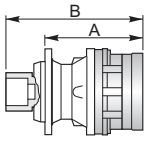
PG ...PS	A	B	RA	RB	EF	EDF
PG 701	251	382				
PG 702	310.5	441.5		o		
PG 703	358.5	489.5				
PG 704	406.5	537.5				



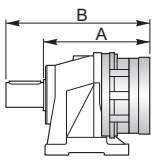
PG ...PC	A	B	RA	RB	EF	EDF
PG 701	251	422				
PG 702	310.5	481.5		o		
PG 703	358.5	529.5				
PG 704	406.5	577.5				



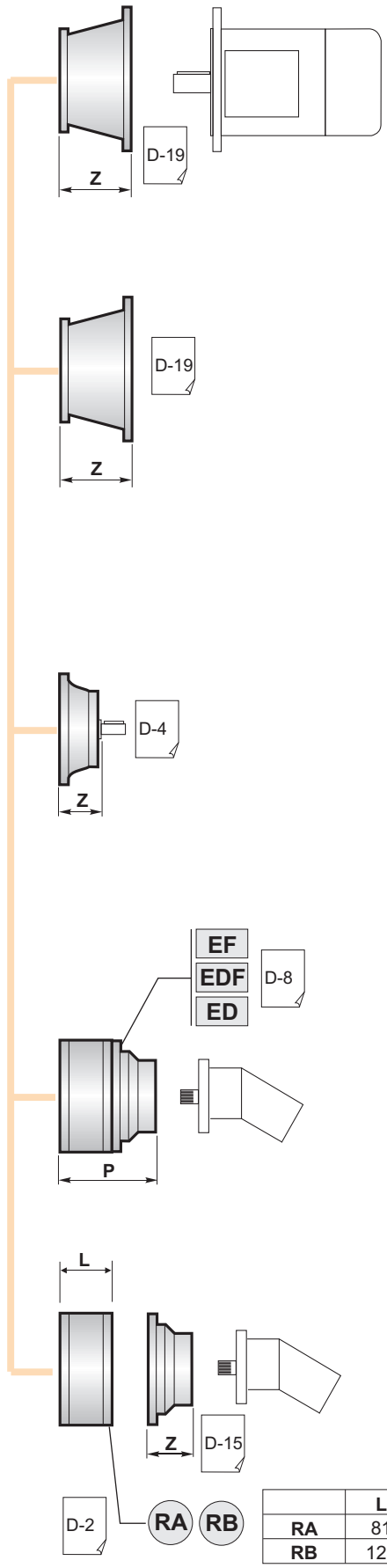
PG ...F	A	B	RA	RB	EF	EDF
PG 701	197.5	208				
PG 702	257	285		o		
PG 703	305	315.5				
PG 704	353	363.5				



PG ...FS	A	B	RA	RB	EF	EDF
PG 701	251	382				
PG 702	310.5	441.5		o		
PG 703	358.5	489.5				
PG 704	406.5	537.5				



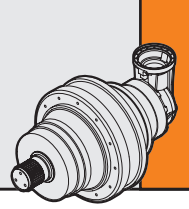
PG ...CPC	A	B	RA	RB	EF	EDF
PG 701	292	422				
PG 702	351.5	481.5		o		
PG 703	399.5	529.5				
PG 704	447.5	577.5				

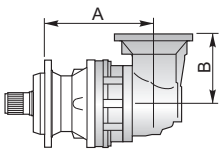


	L
RA	81
RB	125

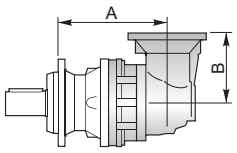
A+13.5	B+13.5	o

chaumea mechanics on demand

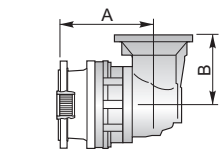




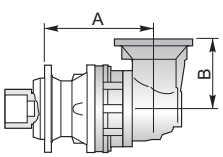
PGA ...PS	A	B	RA	RB	EF
PGA 702	339	240	•	o	•
PGA 703	385.5	159	•		•
PGA 704	433.5	159	•		•



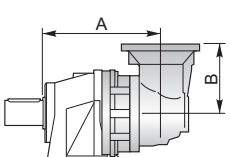
PGA ...PC	A	B	RA	RB	EF
PGA 702	339	240	•	o	•
PGA 703	385.5	159	•		•
PGA 704	433.5	159	•		•



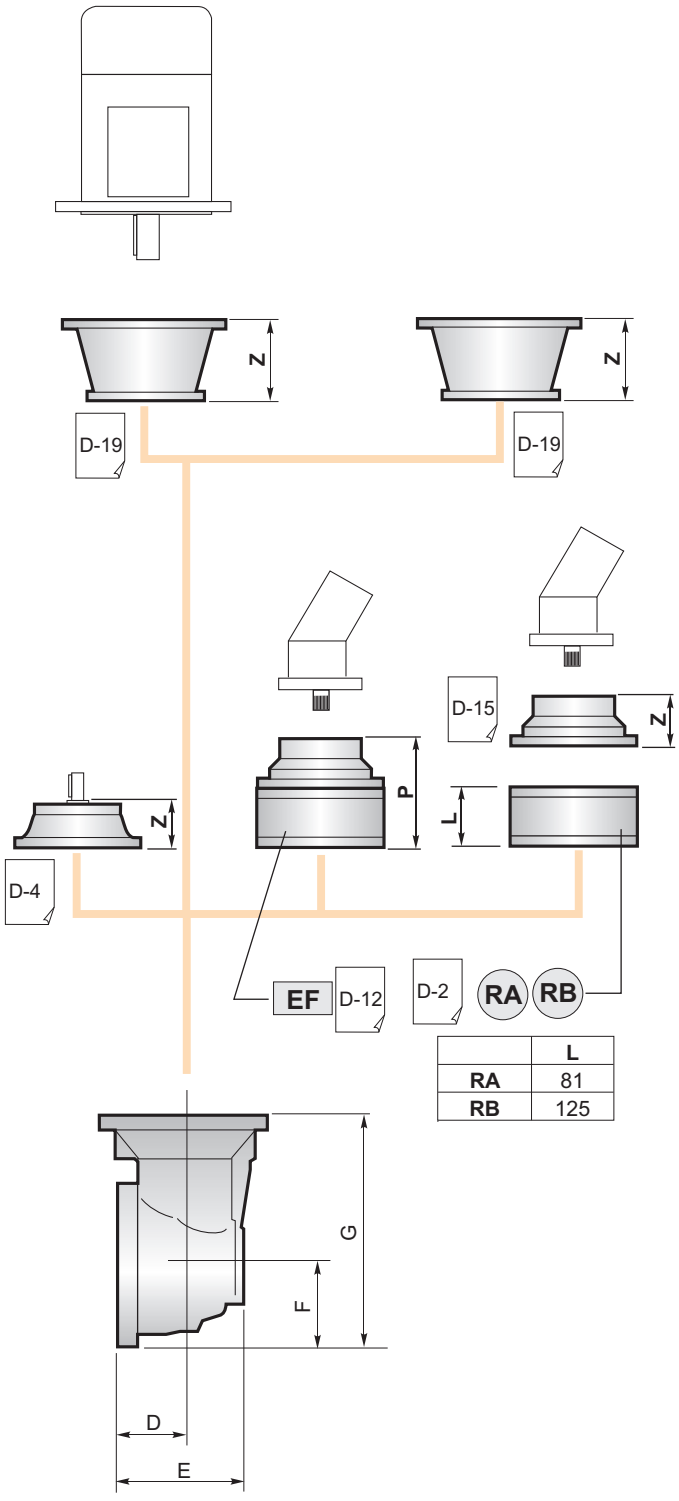
PGA ...F	A	B	RA	RB	EF
PGA 702	285.5	240	•	o	•
PGA 703	332	159	•		•
PGA 704	380	159	•		•



PGA ...FS	A	B	RA	RB	EF
PGA 702	339	240	•	o	•
PGA 703	385.5	159	•		•
PGA 704	433.5	159	•		•



PGA ...CPC	A	B	RA	RB	EF
PGA 702	380	240	•	o	•
PGA 703	426.5	159	•		•
PGA 704	474.5	159	•		•

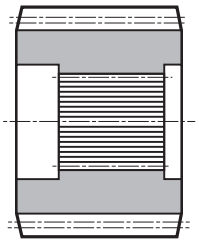


	L
RA	81
RB	125

	D	E	F	G
PGA 702	88	164	140	380
PGA 703	75	141.5	93	252
PGA 704	75	141.5	93	252

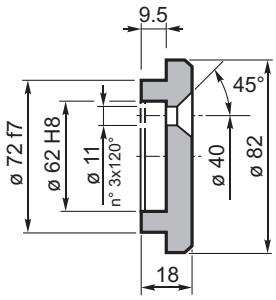
A	B	•
A	B+16.5	o

YZ
Pignoni / Pinion
Ritzel / Pignon
Piñones / Pinhões



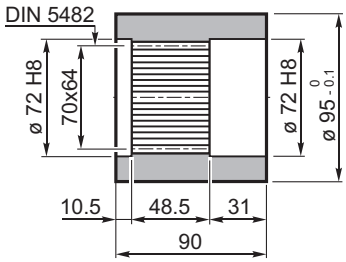
Su richiesta / On request
Auf Anfrage / Sur demande
Bajo demanda / Sob consulta

FF
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código
5701.012.000

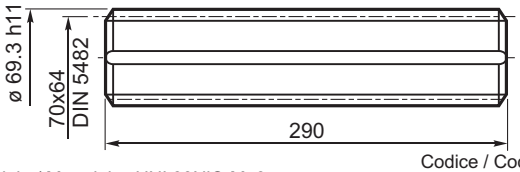
BS
Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



Materiale / Material
Material / Matière
Material / Material
UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código
1715.102.076

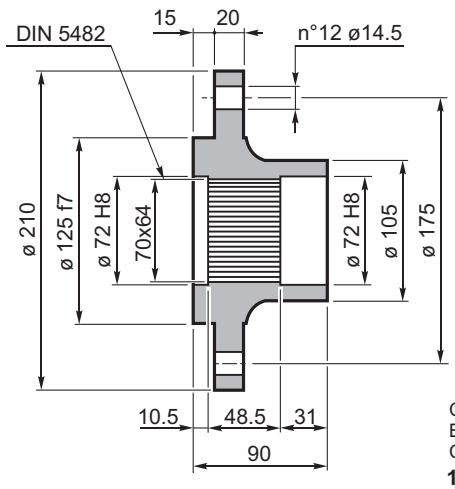
KB
Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada



Materiale / Material
Material / Matière
Material / Material
UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

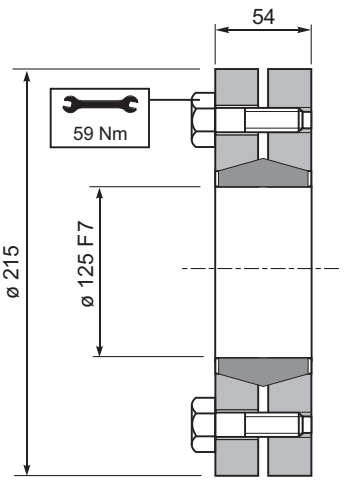
Codice / Code
Bestell - Nr. / Code
Código / Código
1703.405.042

FL
Flangia / Flange
Flansch / Bride
Brida / Flange



Codice / Code
Bestell - Nr. / Code
Código / Código
1715.108.098

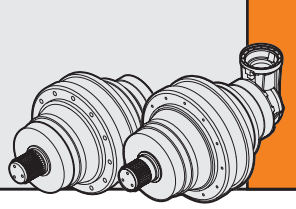
GA
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

13 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.125.000



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

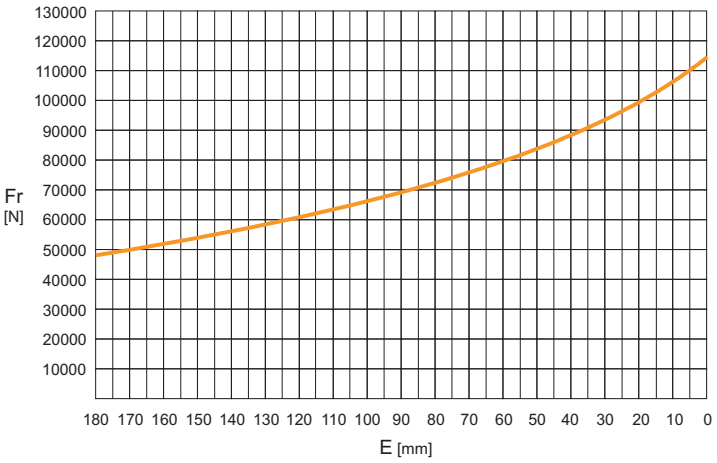
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

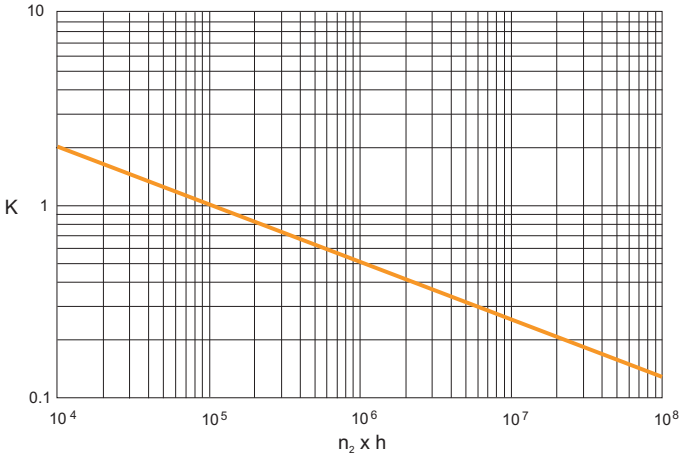
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

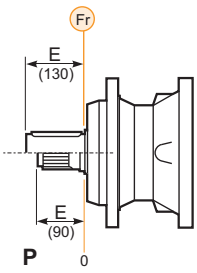
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

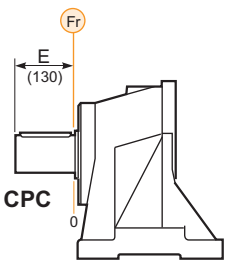
P - CPC*





	n x h				
	10^5	10^4	10^6	10^7	10^8
P	Fr	Fr • K			
*CPC	Fr • 0.75	Fr • K • 0.75			





CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

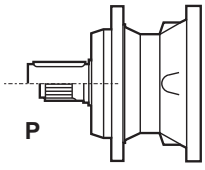
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

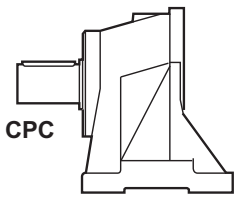
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

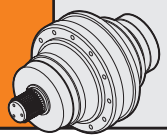
CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

Fa [N]	P	CPC	
	40000	40000	←
	60000	60000	→

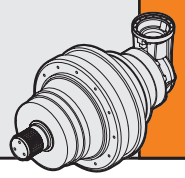






1000

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	**20.000**	**50.000**	**100.000**	[min^{-1}]	[kW]	**M**	**P**	**CPC**	**F**	**FS**
PG 1001	**3.56**	13.80	12.21	10.39	9.20	2000	40	97	-	147	65	102
	4.29	11.86	10.50	8.94	7.91							
	5.60	9.22	8.16	6.94	6.15							
	6.75	7.04	6.23	5.30	4.69							
	8.67	4.98	4.41	3.75	3.32							
PG 1002	**13.43**	13.80	12.21	10.39	9.20	2800	23	113	-	163	81	118
	16.19	11.86	10.50	8.94	7.91							
	18.37	11.87	10.51	8.94	7.92							
	22.14	11.86	10.50	8.94	7.91							
	25.71	11.86	10.50	8.94	7.91							
	28.93	9.22	8.16	6.94	6.15							
	33.60	9.22	8.16	6.94	6.15							
	40.60	9.22	8.16	6.94	6.15							
	48.94	7.04	6.23	5.30	4.69							
PG 1003	**57.57**	13.80	12.21	10.39	9.20	2800	15	121	-	171	89	126
	62.86	13.80	12.21	10.39	9.20							
	75.77	11.86	10.50	8.94	7.91							
	82.13	11.78	10.41	8.86	7.83							
	94.90	11.86	10.50	8.94	7.91							
	110.20	11.86	10.50	8.94	7.91							
	119.33	11.33	10.03	8.53	7.52							
	124.00	11.70	10.35	8.80	7.76							
	144.00	11.86	10.50	8.94	7.91							
	155.93	9.22	8.16	6.94	6.15							
	173.57	11.86	10.50	8.94	7.91							
	188.16	9.22	8.16	6.94	6.15							
	195.30	9.22	8.16	6.94	6.15							
	209.73	9.50	8.40	7.15	6.34							
	226.80	9.22	8.16	6.94	6.15							
	235.41	7.04	6.23	5.30	4.69							
	274.05	9.22	8.16	6.94	6.15							
	330.33	7.04	6.23	5.30	4.69							
PG 1004	**352.00**	13.80	12.21	10.39	9.20	2800	11	127	-	177	95	132
	388.57	11.86	10.50	8.94	7.91							
	413.91	11.33	10.00	8.44	7.55							
	440.89	11.87	10.51	8.94	7.92							
	468.37	11.86	10.50	8.94	7.91							
	511.42	11.86	10.50	8.94	7.91							
	531.43	11.86	10.50	8.94	7.91							
	566.08	11.87	10.51	8.94	7.92							
	601.36	11.86	10.50	8.94	7.91							
	640.56	11.86	10.50	8.94	7.91							
	724.42	9.22	8.16	6.94	6.15							
	806.40	10.40	9.22	7.84	6.95							
	907.35	9.22	8.16	6.94	6.15							
	972.00	11.86	10.50	8.94	7.91							
	1074.67	11.86	10.50	8.94	7.91							
	1171.61	11.86	10.50	8.94	7.91							
	1270.08	9.22	8.16	6.94	6.15							
	1530.90	9.22	8.16	6.94	6.15							
	1817.68	9.50	8.40	7.15	6.34							
	2229.71	7.04	6.23	5.30	4.69							

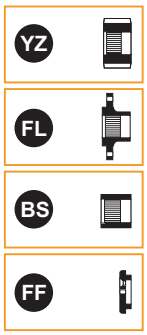


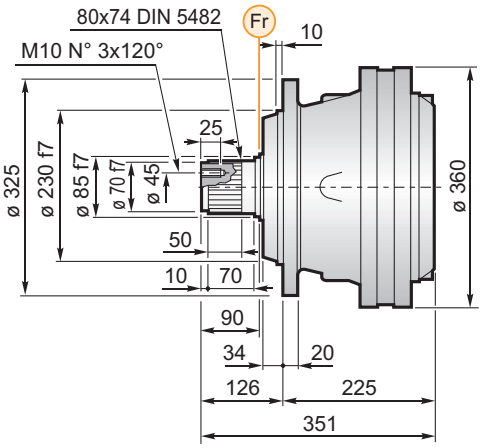
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 1002	**12.28**	6.66	6.07	5.36	4.88	2800	23	134	-	184	102	139
	14.81	7.83	7.13	6.30	5.73							
	19.35	9.22	8.16	6.94	6.15							
	23.32	7.04	6.23	5.30	4.69							
	30.49	4.82	4.50	4.10	3.83							
	36.75	5.67	5.29	4.82	4.50							
PGA 1003	**46.40**	13.80	12.21	10.39	9.20	2800	15	153	-	203	121	158
	50.67	13.80	12.21	10.39	9.20							
	61.07	11.86	10.50	8.94	7.91							
	73.70	10.40	9.22	7.84	6.95							
	88.83	11.86	10.50	8.94	7.91							
	96.25	11.86	10.50	8.94	7.91							
	116.15	10.40	9.22	7.84	6.95							
	120.56	11.86	10.50	8.94	7.91							
	125.77	9.22	8.16	6.94	6.15							
	140.00	11.86	10.50	8.94	7.91							
	157.53	9.22	8.16	6.94	6.15							
	182.93	9.22	8.16	6.94	6.15							
	221.04	9.22	8.16	6.94	6.15							
	266.44	7.04	6.23	5.30	4.69							
PGA 1004	**139.86**	13.80	12.21	10.39	9.20	2800	11	136	-	186	104	141
	168.59	11.86	10.50	8.94	7.91							
	184.08	13.80	12.21	10.39	9.20							
	203.21	11.86	10.50	8.94	7.91							
	230.57	11.86	10.50	8.94	7.91							
	267.76	11.86	10.50	8.94	7.91							
	277.92	11.86	10.50	8.94	7.91							
	301.27	9.22	8.16	6.94	6.15							
	322.74	11.86	10.50	8.94	7.91							
	349.87	10.40	9.22	7.84	6.95							
	378.84	9.22	8.16	6.94	6.15							
	421.71	9.22	8.16	6.94	6.15							
	474.51	9.22	8.16	6.94	6.15							
	508.32	11.86	10.50	8.94	7.91							
	551.04	9.22	8.16	6.94	6.15							
	665.84	9.22	8.16	6.94	6.15							
	802.58	7.04	6.23	5.30	4.69							
	967.39	7.04	6.23	5.30	4.69							

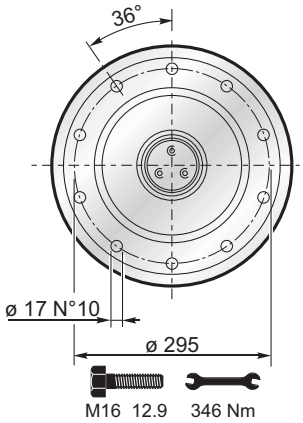


$$M_{max} = M_c \times 2 \quad (n_2 \times h = 20.000)$$

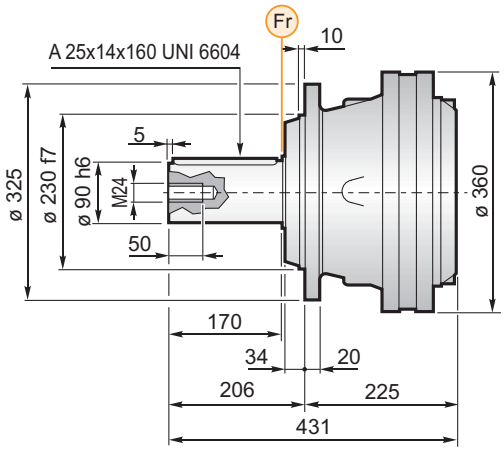
MS

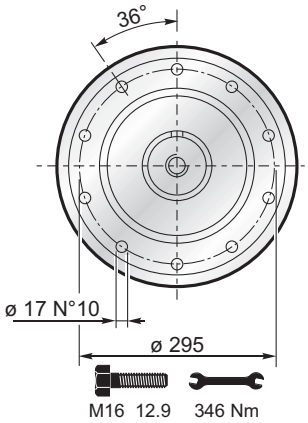

YZ
FL
BS
FF

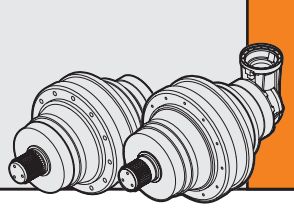

80x74 DIN 5482
M10 N° 3x120°
Fr
10
25
ø 325
ø 230 f7
ø 85 f7
ø 70 f7
ø 45
ø 360
50
10
70
90
34
20
126
225
351


36°
ø 17 N°10
ø 295
M16 12.9 346 Nm

MC

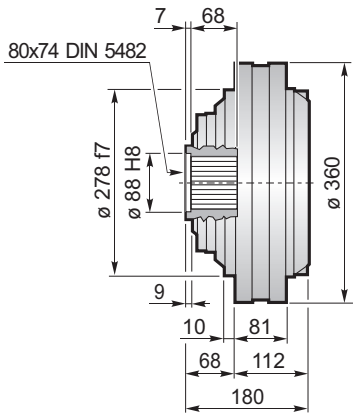

Fr
10
A 25x14x160 UNI 6604
5
ø 325
ø 230 f7
ø 90 h6
M24
ø 360
50
170
34
20
206
225
431

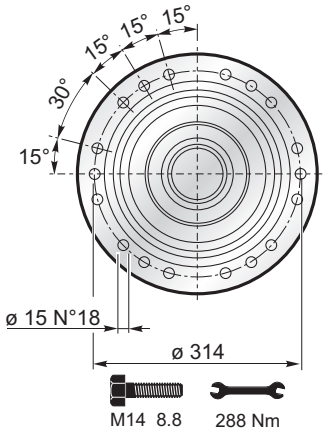

36°
ø 17 N°10
ø 295
M16 12.9 346 Nm



F

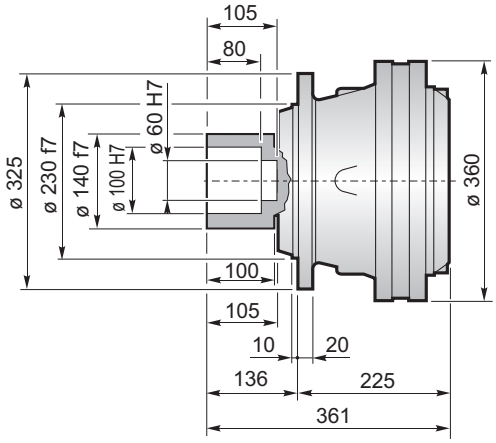
KB →

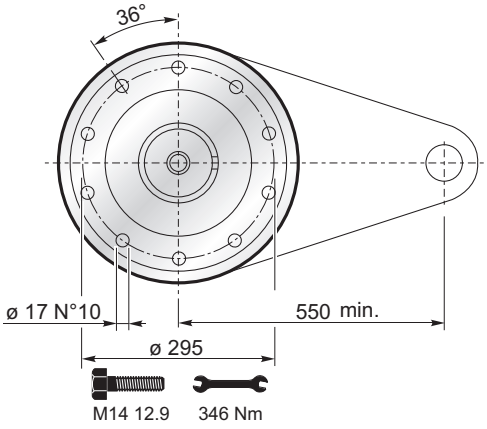


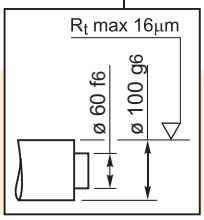


FS

GA



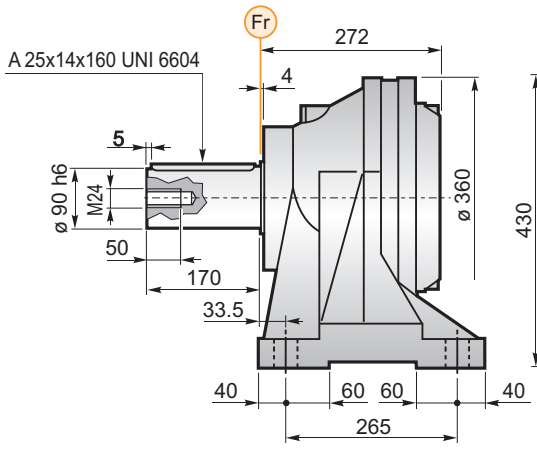


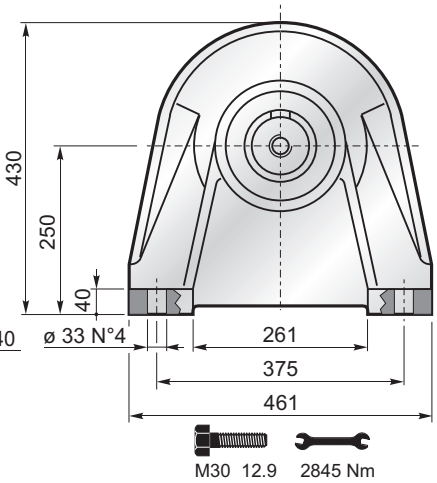


M_{max} = 17.6 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

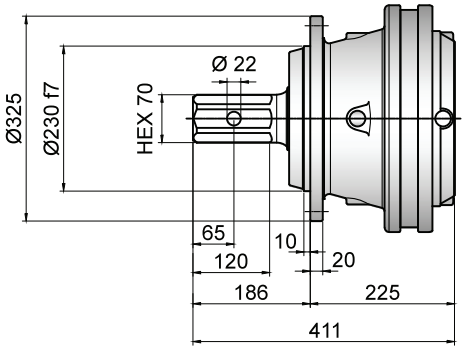
CPC

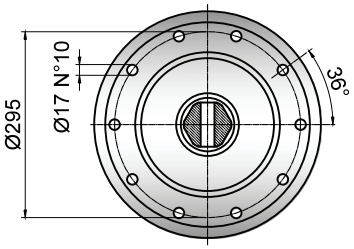


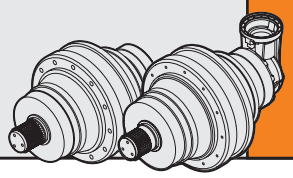


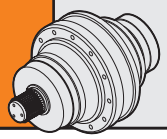
FL YZ BS FF KB GA → B-60

ME

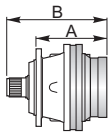




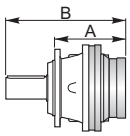




1000



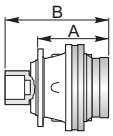
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG 1001	225	351		•		
PG 1002	296.5	422.5	•	o	•	
PG 1003	357.5	483.5	•			•
PG 1004	405.5	531.5	•			•



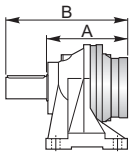
	PG ...MC					
	A	B	RA	RB	EF	EDF
PG 1001	225	431		•		
PG 1002	296.5	502.5	•	o	•	
PG 1003	357.5	563.5	•			•
PG 1004	405.5	611.5	•			•



	PG ...F					
	A	B	RA	RB	EF	EDF
PG 1001	112	180		•		
PG 1002	183.5	251.5	•	o	•	
PG 1003	244.5	383.5	•			•
PG 1004	292.5	360.5	•			•



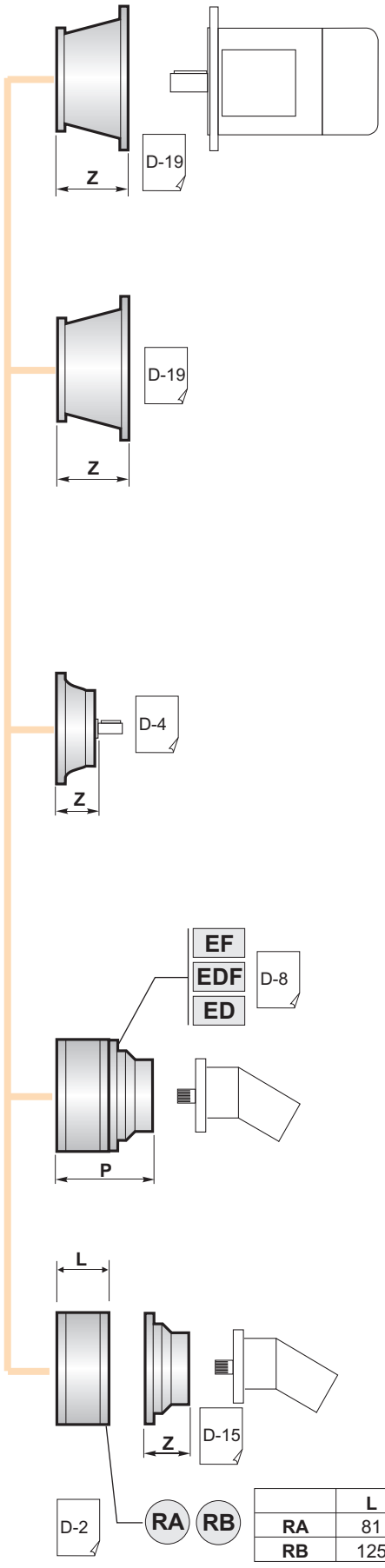
	PG ...FS					
	A	B	RA	RB	EF	EDF
PG 1001	225	361		•		
PG 1002	296.5	432.5	•	o	•	
PG 1003	357.5	493.5	•			•
PG 1004	405.5	541.5	•			•



	PG ...CPC					
	A	B	RA	RB	EF	EDF
PG 1001	272	442		•		
PG 1002	343.5	513.5	•	o	•	
PG 1003	404.5	574.5	•			•
PG 1004	452.5	622.5	•			•

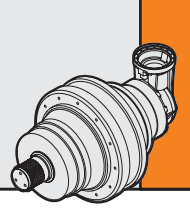


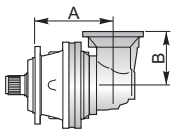
A+13.5	B+13.5	o



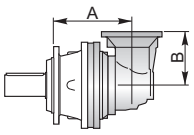
	L
RA	81
RB	125

chaumea mechanics on demand

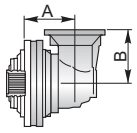




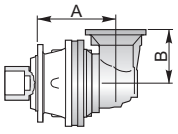
PGA ...MS	A	B	RA	RB	EF
PGA 1002	313	240	•	o	•
PGA 1003	398	240	•	o	•
PGA 1004	432.5	159	•		•



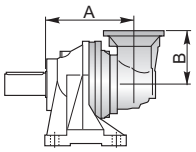
PGA ...MC	A	B	RA	RB	EF
PGA 1002	313	240	•	o	•
PGA 1003	398	240	•	o	•
PGA 1004	432.5	159	•		•



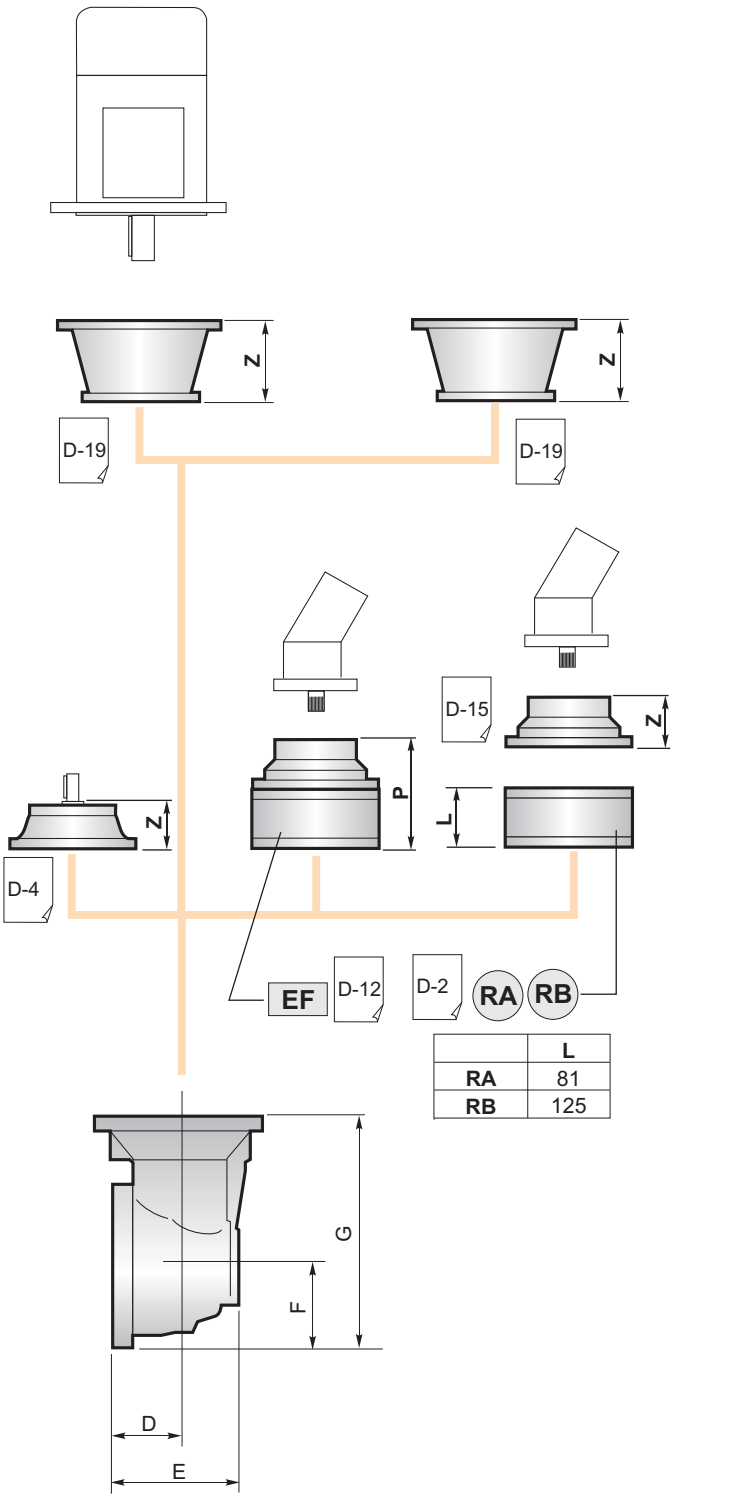
PGA ...F	A	B	RA	RB	EF
PGA 1002	200	240	•	o	•
PGA 1003	285	240	•	o	•
PGA 1004	319.5	159	•		•



PGA ...FS	A	B	RA	RB	EF
PGA 1002	313	240	•	o	•
PGA 1003	398	240	•	o	•
PGA 1004	432.5	159	•		•



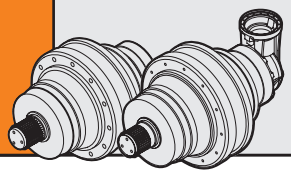
PGA ...CPC	A	B	RA	RB	EF
PGA 1002	360	240	•	o	•
PGA 1003	445	240	•	o	•
PGA 1004	479.5	159	•		•



	L
RA	81
RB	125

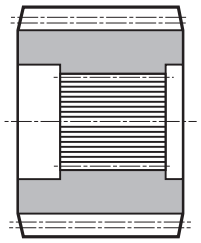
	D	E	F	G
PGA 1002	88	164	140	380
PGA 1003	88	164	140	380
PGA 1004	75	141.5	93	252

	B+16.5	o



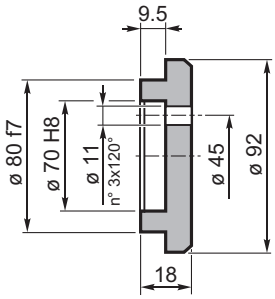
1000

YZ
Pignoni / Pinion
Ritzel / Pignon
Piñones / Pinhões



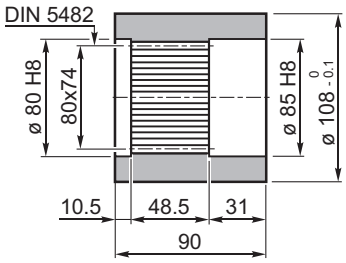
Su richiesta / On request
Auf Anfrage / Sur demande
Bajo demanda / Sob consulta

FF
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código
5701.030.000

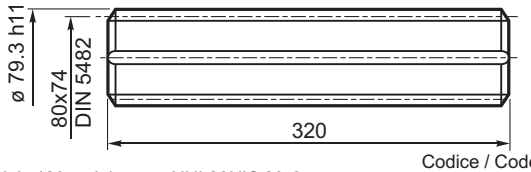
BS
Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



Materiale / Material
Material / Matière
Material / Material
UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código
1716.103.076

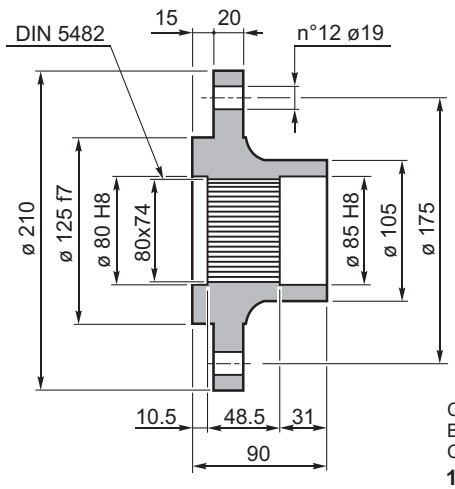
KB
Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada



Materiale / Material
Material / Matière
Material / Material
UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

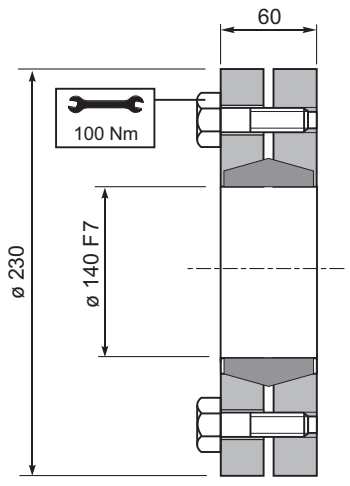
Codice / Code
Bestell - Nr. / Code
Código / Código
1703.406.042

FL
Flangia / Flange
Flansch / Bride
Brida / Flange



Codice / Code
Bestell - Nr. / Code
Código / Código
1716.105.098

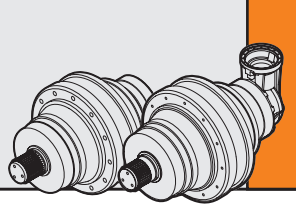
GA
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

17,6 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.140.000



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

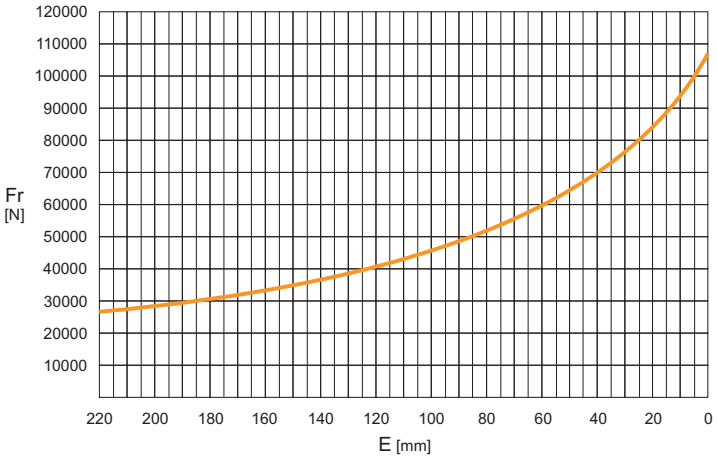
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

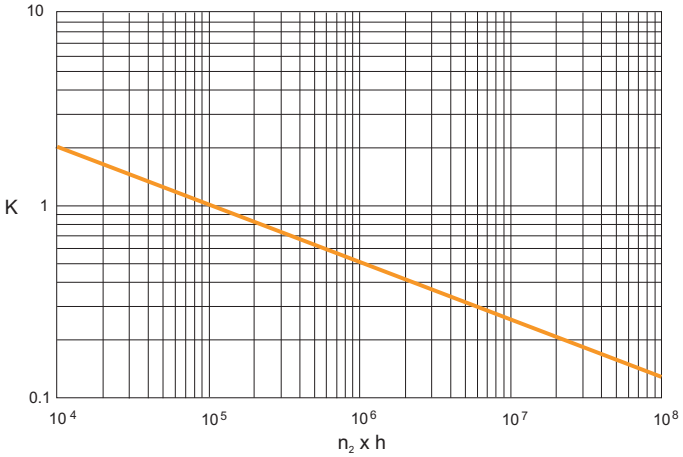
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

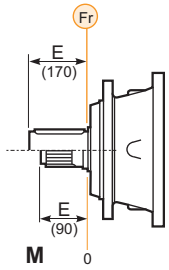
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

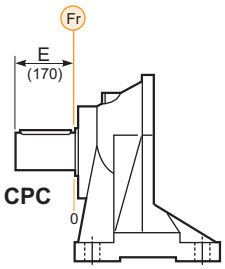
M - CPC





	n x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			





CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

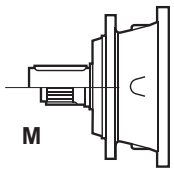
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

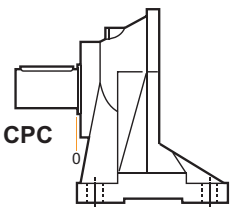
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

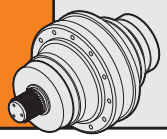
CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

Fa [N]	M	CPC	
	40000	40000	←
	65000	65000	→

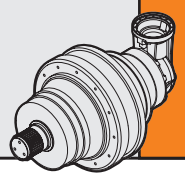






1600

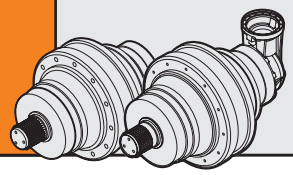
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 1601	**3.56**	20.36	18.02	15.33	13.57	2000	40	105	132	155	74	110
	4.29	17.74	15.70	13.36	11.83							
	5.60	13.57	12.01	10.22	9.05							
	6.75	10.32	9.13	7.77	6.88							
PG 1602	**13.43**	15.92	14.10	12.01	10.63	2800	23	121	148	171	90	126
	16.19	17.74	15.70	13.36	11.83							
	22.14	13.84	12.26	10.43	9.24							
	28.93	13.57	12.01	10.22	9.05							
	33.60	13.57	12.01	10.22	9.05							
	40.60	11.84	10.47	8.91	7.91							
	48.94	10.32	9.13	7.77	6.88							
PG 1603	**57.57**	17.74	15.70	13.36	11.83	2800	15	129	156	179	98	134
	62.86	16.93	15.00	12.78	11.30							
	75.77	16.93	15.00	12.78	11.30							
	82.13	13.57	12.01	10.22	9.05							
	94.90	13.84	12.26	10.43	9.24							
	110.20	12.14	10.75	9.14	8.11							
	118.47	13.57	12.01	10.22	9.05							
	124.00	13.84	12.26	10.43	9.24							
	129.36	13.57	12.01	10.22	9.05							
	144.00	13.57	12.01	10.22	9.05							
	155.93	13.57	12.01	10.22	9.05							
	188.16	13.57	12.01	10.22	9.05							
	195.30	13.57	12.01	10.22	9.05							
	226.80	13.57	12.01	10.22	9.05							
	274.05	11.84	10.47	8.91	7.91							
	330.33	10.32	9.13	7.77	6.88							
PG 1604	**352.00**	16.93	15.00	12.78	11.30	2800	11	135	162	185	104	140
	388.57	17.74	15.70	13.36	11.83							
	424.29	16.93	15.00	12.78	11.30							
	440.89	13.84	12.26	10.43	9.24							
	468.37	17.74	15.70	13.36	11.83							
	511.42	16.93	15.00	12.78	11.30							
	531.43	13.84	12.26	10.43	9.24							
	554.40	13.57	12.01	10.22	9.05							
	601.36	15.42	13.61	11.49	10.28							
	656.63	16.58	14.63	12.36	11.06							
	724.42	13.57	12.01	10.22	9.05							
	806.40	13.57	12.01	10.22	9.05							
	907.35	13.57	12.01	10.22	9.05							
	1026.75	13.57	12.01	10.22	9.05							
	1121.12	13.57	12.01	10.22	9.05							
	1270.08	13.57	12.01	10.22	9.05							
	1530.90	13.57	12.01	10.22	9.05							
	1692.60	13.57	12.01	10.22	9.05							
	1965.60	13.57	12.01	10.22	9.05							
	2229.71	10.32	9.13	7.77	6.88							



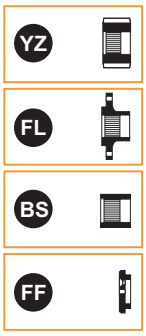
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 1602	**10.92**	20.36	18.02	15.33	13.57	2000	25	197	224	247	166	202
	13.16	17.74	15.70	13.36	11.83							
	16.59	15.89	14.95	13.80	12.71							
	20.00	17.74	15.70	13.36	11.83							
	26.13	13.57	12.01	10.22	9.05							
PGA 1603	**46.40**	15.92	14.10	12.01	10.63	2800	15	161	188	211	130	166
	50.67	14.52	12.86	10.96	9.69							
	55.93	17.74	15.70	13.36	11.83							
	61.07	16.93	15.00	12.78	11.30							
	76.49	13.84	12.26	10.43	9.24							
	88.83	12.14	10.75	9.14	8.11							
	99.95	13.57	12.01	10.22	9.05							
	116.07	13.57	12.01	10.22	9.05							
	120.56	13.84	12.26	10.43	9.24							
	125.77	13.57	12.01	10.22	9.05							
	140.00	12.14	10.75	9.14	8.11							
	157.53	13.57	12.01	10.22	9.05							
	182.93	13.57	12.01	10.22	9.05							
	221.04	11.84	10.47	8.91	7.91							
	266.44	10.32	9.13	7.77	6.88							
PGA 1604	**139.86**	15.36	13.60	11.60	10.24	2800	11	144	171	194	113	149
	168.59	17.74	15.70	13.36	11.83							
	184.08	16.93	15.00	12.78	11.30							
	203.21	17.74	15.70	13.36	11.83							
	221.88	16.93	15.00	12.78	11.30							
	240.53	13.57	12.01	10.22	9.05							
	277.92	13.84	12.26	10.43	9.24							
	301.27	13.57	12.01	10.22	9.05							
	322.74	12.14	10.75	9.14	8.11							
	346.95	13.57	12.01	10.22	9.05							
	378.84	13.57	12.01	10.22	9.05							
	421.71	13.57	12.01	10.22	9.05							
	474.51	13.57	12.01	10.22	9.05							
	508.32	12.14	10.75	9.14	8.11							
	551.04	13.57	12.01	10.22	9.05							
	665.84	11.84	10.47	8.91	7.91							
	802.58	10.32	9.13	7.77	6.88							
	967.39	10.32	9.13	7.77	6.88							

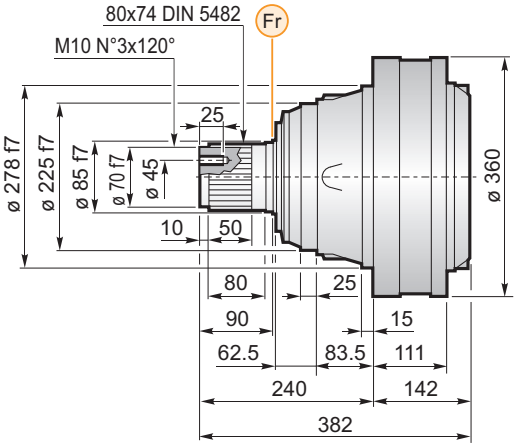
(n_2 x h = 20.000)

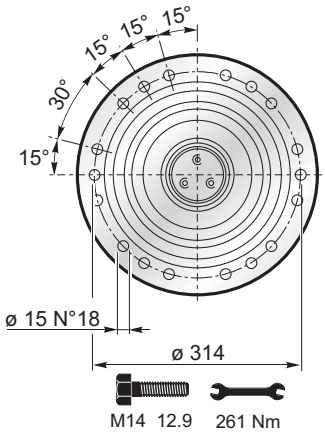
$$M_{max} = M_c \times 2$$



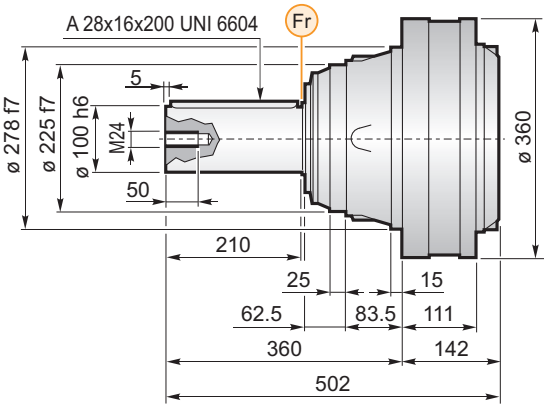
MS

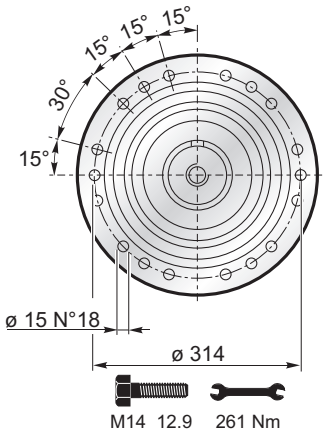




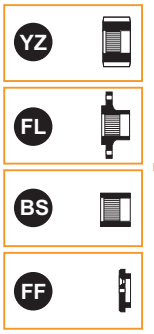


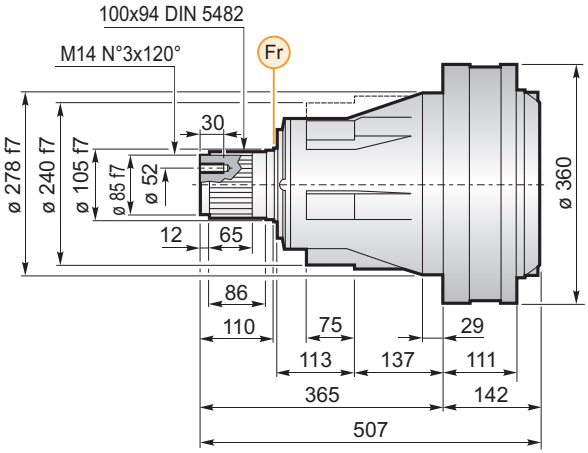
MC

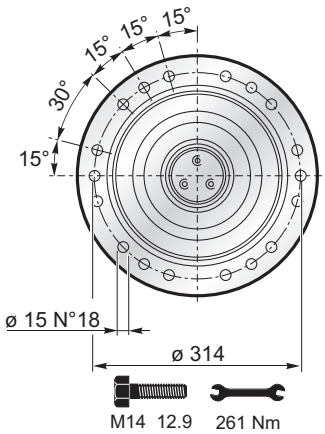




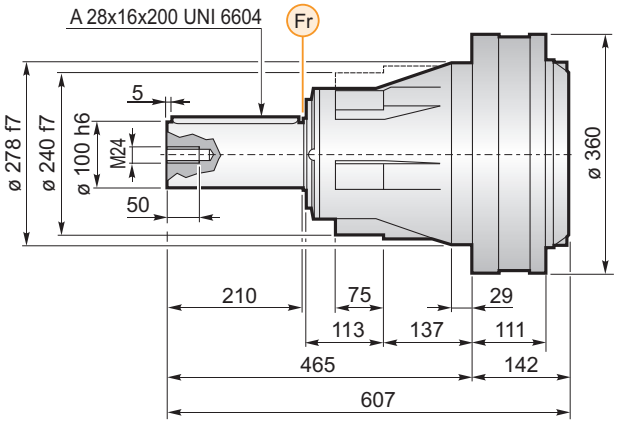
PS

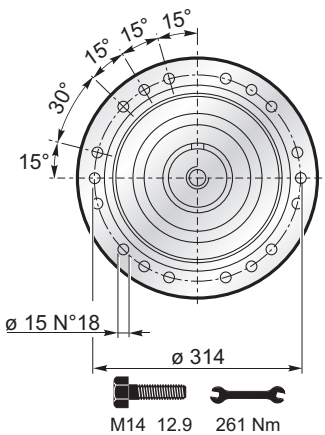




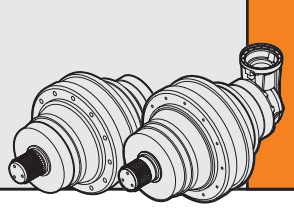


PC



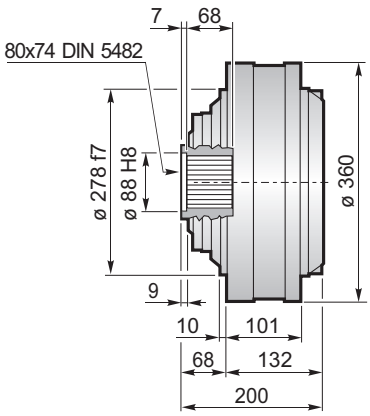


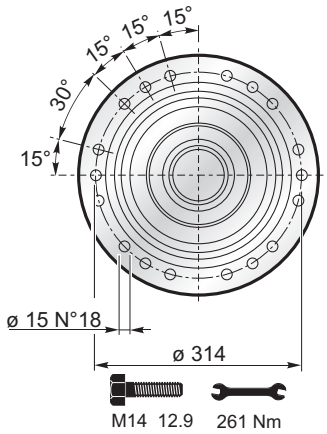
haumea mechanics on demand



F

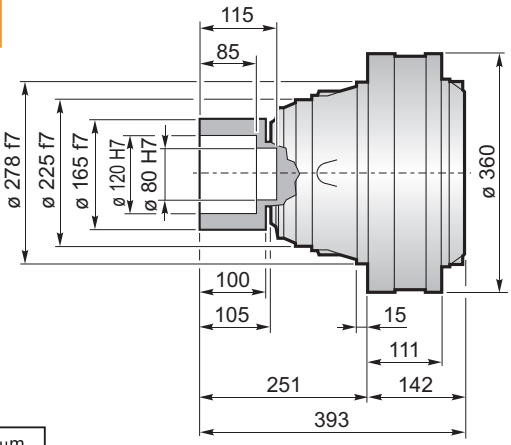


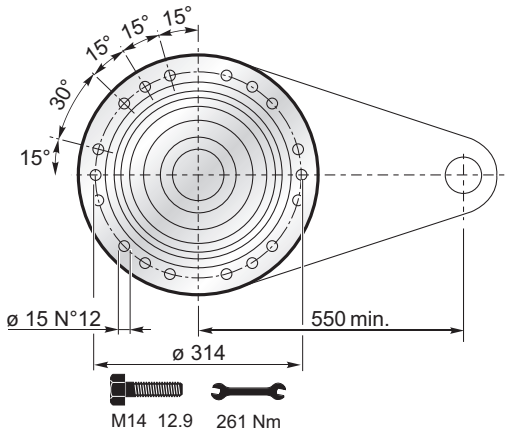


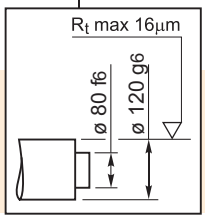


FS





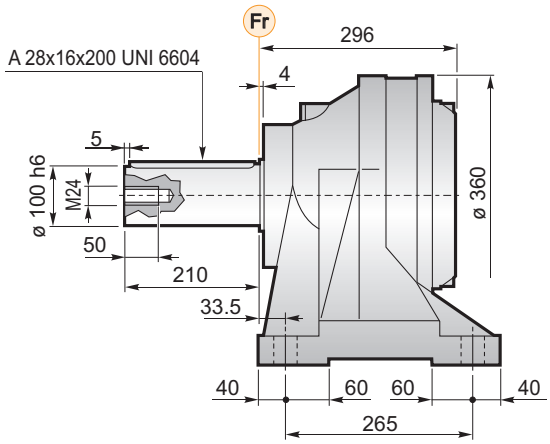


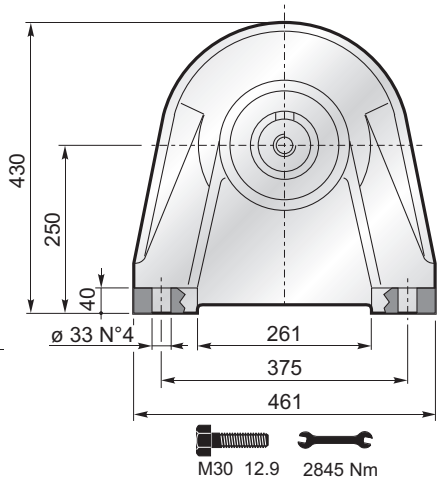


M_{max} = 35 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

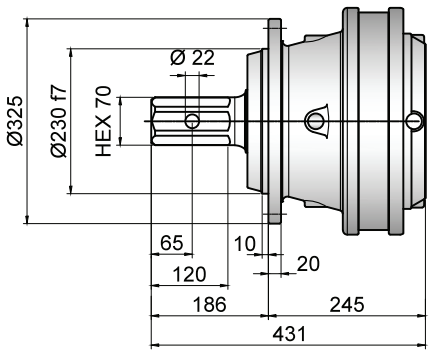
CPC

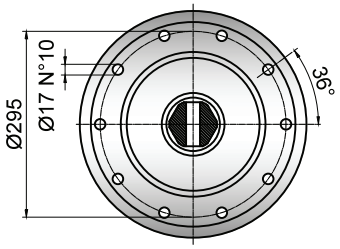




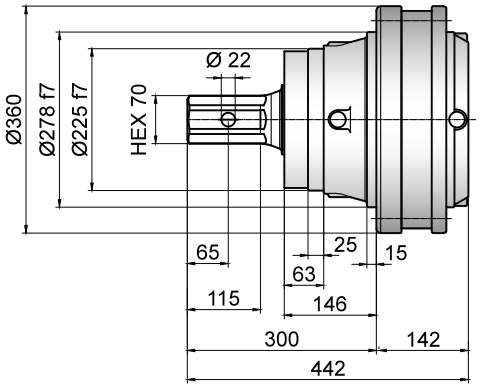
FL YZ BS FF KB GA → B-70

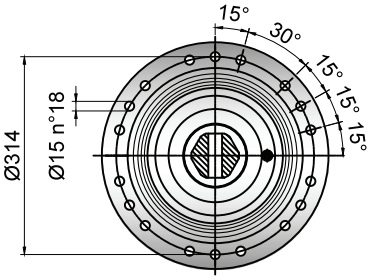
MFE


Ø325
Ø230 f7
HEX 70
Ø 22
65
10
20
120
186
245
431

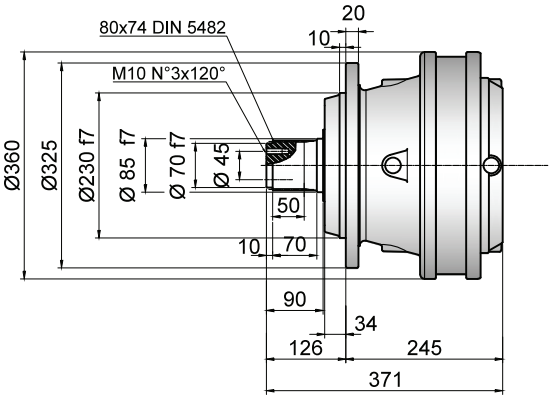

Ø295
Ø17 N°10
36°

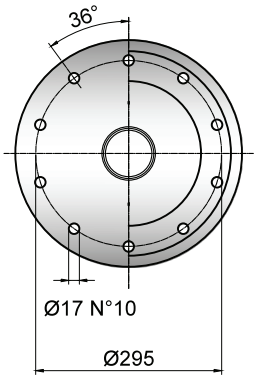
ME

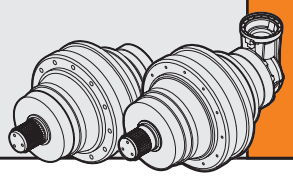

Ø360
Ø278 f7
Ø225 f7
HEX 70
Ø 22
65
25
15
63
115
146
300
142
442

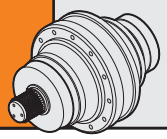

Ø314
Ø15 n°18
15°
30°
15°
15°
15°

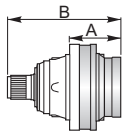
MFS


80x74 DIN 5482
M10 N°3x120°
20
10
Ø360
Ø325
Ø230 f7
Ø 85 f7
Ø 70 f7
Ø 45
50
10
70
90
34
126
245
371

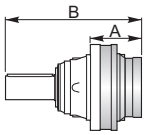

36°
Ø17 N°10
Ø295



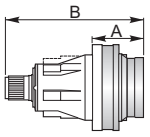




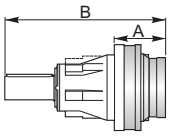
PG ...MS	A	B	RA	RB	EF	EDF
PG 1601	142	382		•		
PG 1602	213.5	453.5	•	o	•	
PG 1603	274.5	514.5	•			•
PG 1604	322.5	562.5	•			•



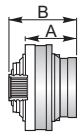
PG ...MC	A	B	RA	RB	EF	EDF
PG 1601	142	502		•		
PG 1602	213.5	573.5	•	o	•	
PG 1603	274.5	634.5	•			•
PG 1604	322.5	682.5	•			•



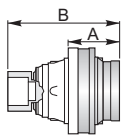
PG ...PS	A	B	RA	RB	EF	EDF
PG 1601	142	507		•		
PG 1602	213.5	578.5	•	o	•	
PG 1603	274.5	639.5	•			•
PG 1604	322.5	687.5	•			•



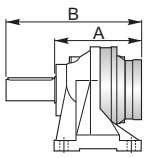
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PG 1602	213.5	678.5	•	o	•	
PG 1603	274.5	739.5	•			•
PG 1604	322.5	787.5	•			•



PG ...F	A	B	RA	RB	EF	EDF
PG 1601	132	200		•		
PG 1602	203.5	271.5	•	o	•	
PG 1603	264.5	332.5	•			•
PG 1604	312.5	380.5	•			•

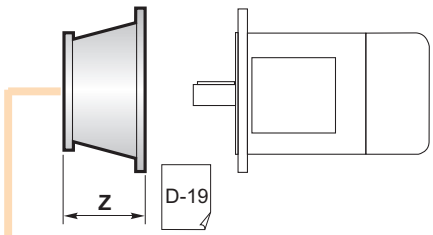


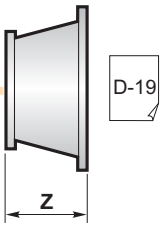
PG ...FS	A	B	RA	RB	EF	EDF
PG 1601	142	393		•		
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PG 1603	274.5	525.5	•			•
PG 1604	322.5	573.5	•			•

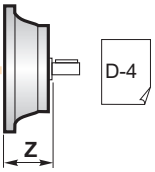


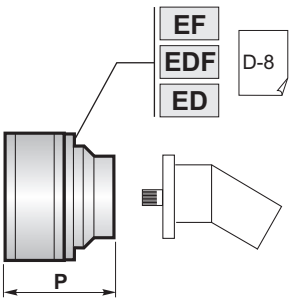
PG ...CPC	A	B	RA	RB	EF	EDF
PG 1601	296	506		•		
PG 1602	317.5	577.5	•	o	•	
PG 1603	428.5	638.5	•			•
PG 1604	476.5	686.5	•			•

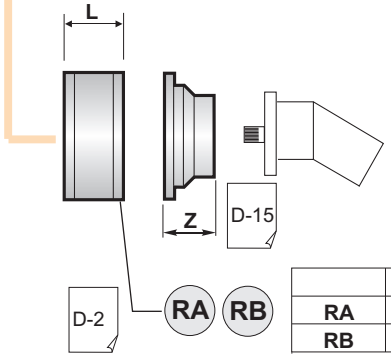
A+13.5	B+13.5	o





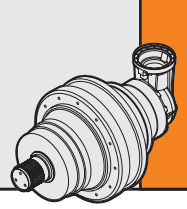


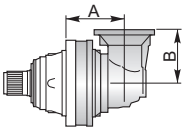




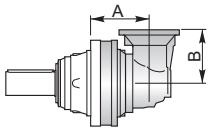
	L
RA	81
RB	125

chaumea mechanics on demand

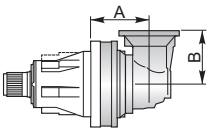




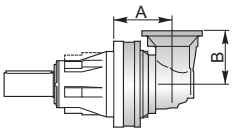
PGA ...MS	A	B	RA	RB	EF
PGA 1602	230	240	•	o	•
PGA 1603	315	240	•	o	•
PGA 1604	349.5	159	•		•



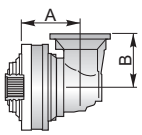
PGA ...MC	A	B	RA	RB	EF
PGA 1602	230	240	•	o	•
PGA 1603	315	240	•	o	•
PGA 1604	349.5	159	•		•



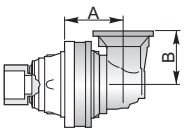
PGA ...PS	A	B	RA	RB	EF
PGA 1602	230	240	•	o	•
PGA 1603	315	240	•	o	•
PGA 1604	349.5	159	•		•



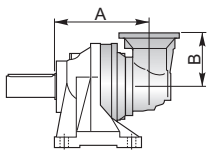
PGA ...PC	A	B	RA	RB	EF
PGA 1602	230	240	•	o	•
PGA 1603	315	240	•	o	•
PGA 1604	349.5	159	•		•



PGA ...F	A	B	RA	RB	EF
PGA 1602	220	240	•	o	•
PGA 1603	305	240	•	o	•
PGA 1604	339.5	159	•		•

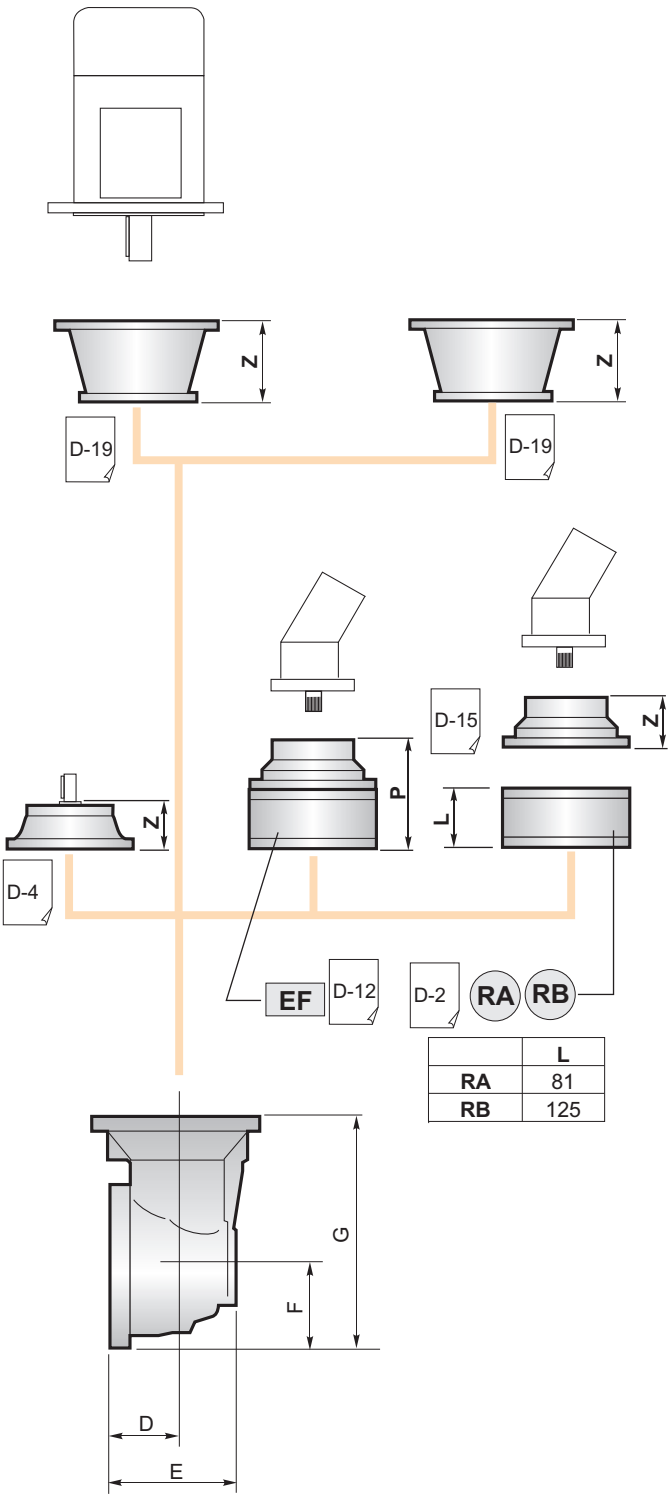


PGA ...FS	A	B	RA	RB	EF
PGA 1602	230	240	•	o	•
PGA 1603	315	240	•	o	•
PGA 1604	349.5	159	•		•



PGA ...CPC	A	B	RA	RB	EF
PGA 1602	384	240	•	o	•
PGA 1603	469	240	•	o	•
PGA 1604	503.5	159	•		•

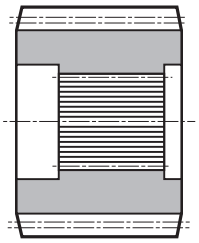
	B+16.5	o



	L
RA	81
RB	125

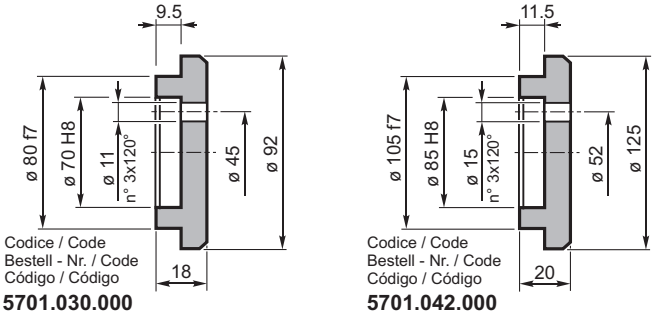
	D	E	F	G
PGA 1602	88	164	140	380
PGA 1603	88	164	140	380
PGA 1604	75	141.5	93	252

YZ
Pignoni / Pinion
Ritzel / Pignon
Piñones / Pinhões



Su richiesta / On request
Auf Anfrage / Sur demande
Bajo demanda / Sob consulta

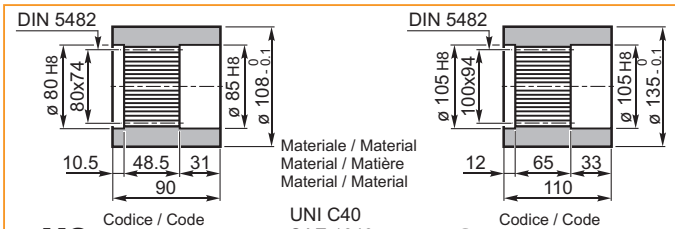
FF
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código
5701.030.000

Codice / Code
Bestell - Nr. / Code
Código / Código
5701.042.000

BS
Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



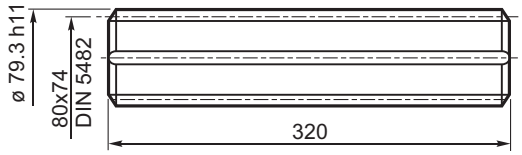
Materiale / Material
Material / Matière
Material / Material

UNI C40
SAE 1040
DIN Ck40

MS Codice / Code
Bestell - Nr. / Code
Código / Código
1716.103.076

PS Codice / Code
Bestell - Nr. / Code
Código / Código
1718.112.041

KB
Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada

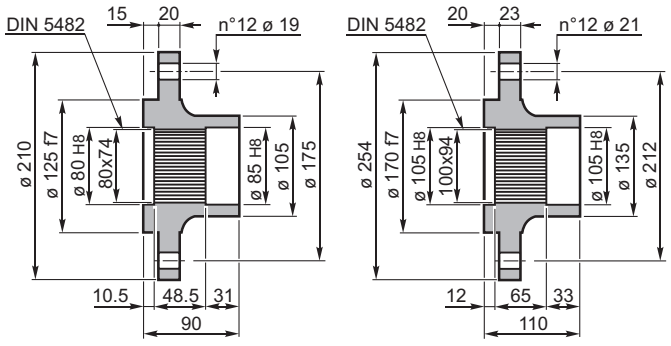


Materiale / Material
Material / Matière
Material / Material

UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

Codice / Code
Bestell - Nr. / Code
Código / Código
1703.406.042

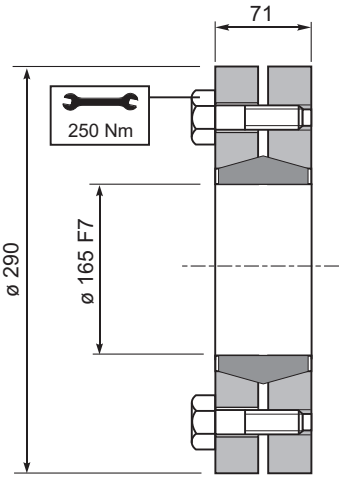
FL
Flangia / Flange
Flansch / Bride
Brida / Flange



MS Codice / Code
Bestell - Nr. / Code
Código / Código
1716.105.098

PS Codice / Code
Bestell - Nr. / Code
Código / Código
1718.104.098

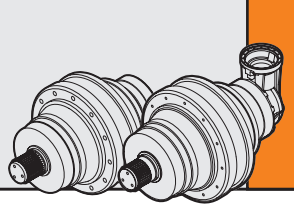
GA
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

35 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.165.000



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

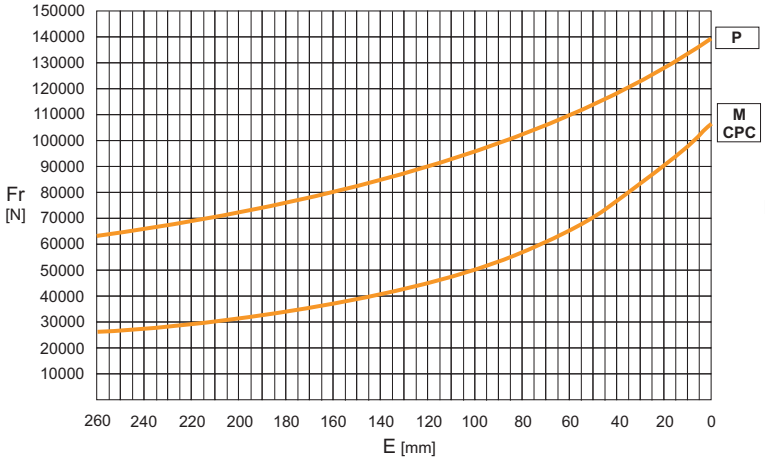
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

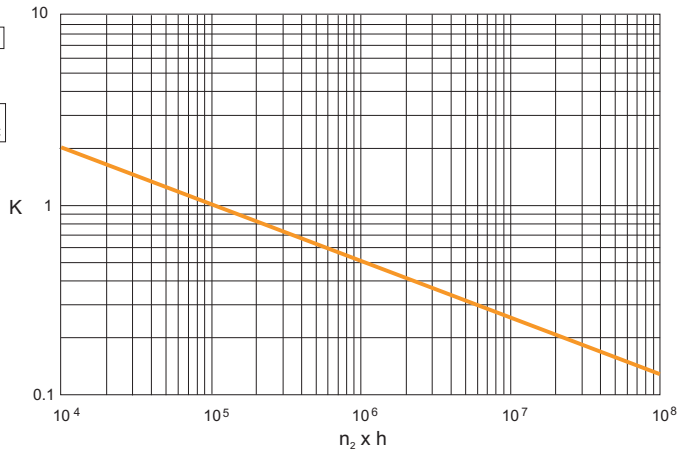
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

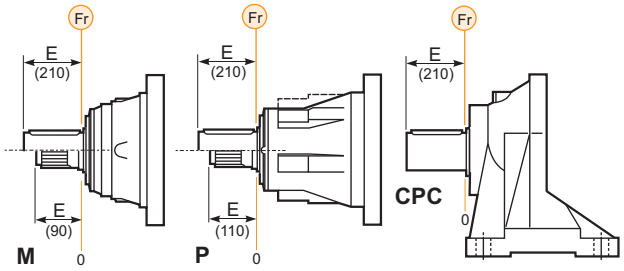
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M - CPC* - P





	n x h				
	10^5	10^4	10^6	10^7	10^8
M - P	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

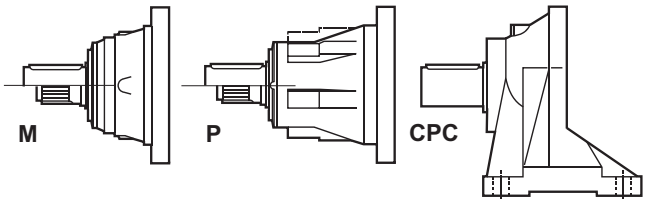
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

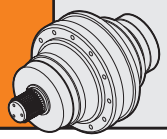
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

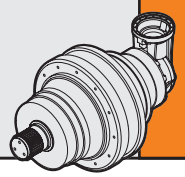
Fa [N]	M - CPC	P	
	45000	85000	←
	65000	85000	→





1800

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 1802	**13.04**	20.36	18.02	15.33	13.57							
	15.75	19.98	17.69	15.04	13.33							
	18.98	17.74	15.70	13.36	11.83							
	21.43	17.74	15.70	13.36	11.83	2800	25	130	157	180	99	135
	24.86	17.32	15.32	13.04	11.55							
	30.00	14.00	12.39	10.56	9.33							
	39.20	13.57	12.01	10.22	9.05							
PG 1803	**53.78**	20.36	18.02	15.33	13.57							
	64.95	19.98	17.69	15.04	13.33							
	73.33	17.55	15.54	13.22	11.70							
	81.35	19.98	17.69	15.04	13.33							
	94.48	19.98	17.69	15.04	13.33							
	106.67	17.55	15.54	13.22	11.70	2800	17	142	169	192	111	147
	128.43	17.32	15.32	13.04	11.55							
	149.14	17.32	15.32	13.04	11.55							
	180.21	17.32	15.32	13.04	11.55							
	217.50	14.00	12.39	10.56	9.33							
PG 1804	**275.81**	20.36	18.02	15.33	13.57							
	332.44	18.00	15.95	13.67	12.08							
	348.66	19.98	17.69	15.04	13.33							
	377.20	20.36	18.02	15.33	13.57							
	438.43	19.98	17.69	15.04	13.33							
	489.25	17.75	15.75	13.38	11.84							
	549.14	19.98	17.69	15.04	13.33							
	620.00	17.55	15.54	13.22	11.70							
	665.82	17.74	15.70	13.36	11.83							
	720.00	17.74	15.70	13.36	11.83	2800	13	149	176	199	118	154
	770.57	17.75	15.75	13.38	11.84							
	818.79	19.90	17.56	14.83	13.27							
	849.86	17.74	15.70	13.36	11.83							
	928.81	17.74	15.70	13.36	11.83							
	989.38	17.75	15.75	13.38	11.84							
	1114.29	17.74	15.70	13.36	11.83							
	1216.45	17.32	15.32	13.04	11.55							
	1346.43	17.74	15.70	13.36	11.83							
	1561.86	17.32	15.32	13.04	11.55							

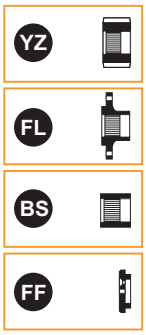


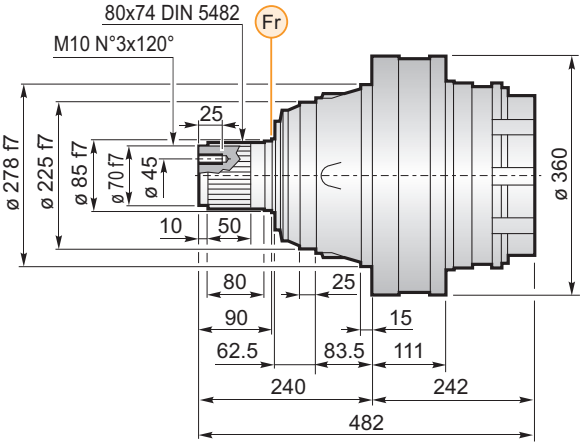
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 1803	**45.04**	19.88	18.02	15.28	12.42	2800	17	167	194	217	136	172
	54.40	19.98	17.69	15.04	13.33							
	74.03	17.74	15.70	13.36	11.83							
	85.87	17.32	15.32	13.04	11.55							
	103.64	14.00	12.39	10.56	9.33							
	116.67	14.93	13.93	12.70	11.83							
	135.33	16.98	15.32	13.04	11.55							
	163.33	14.00	12.39	10.56	9.33							
PGA 1804	**185.78**	20.36	18.02	15.33	13.57	2800	13	169	196	219	138	174
	224.38	19.98	17.69	15.04	13.33							
	281.04	19.98	17.69	15.04	13.33							
	323.86	19.98	17.69	15.04	13.33							
	353.63	19.98	17.69	15.04	13.33							
	394.37	17.75	15.75	13.38	11.84							
	442.93	19.98	17.69	15.04	13.33							
	500.08	17.55	15.54	13.22	11.70							
	558.25	17.32	15.32	13.04	11.55							
	580.74	17.55	15.54	13.22	11.70							
	621.53	17.75	15.75	13.38	11.84							
	700.00	17.74	15.70	13.36	11.83							
	749.17	17.74	15.70	13.36	11.83							
	812.00	17.32	15.32	13.04	11.55							
	981.17	17.32	15.32	13.04	11.55							
	1184.17	14.00	12.39	10.56	9.33							

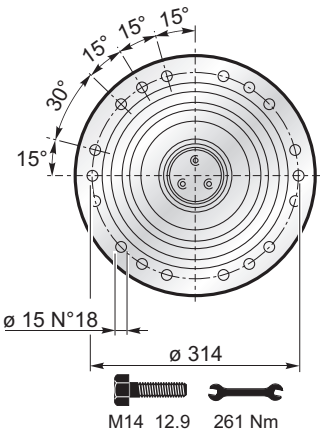


$$M_{max} = M_c \times 2 \quad (n_2 \times h = 20.000)$$

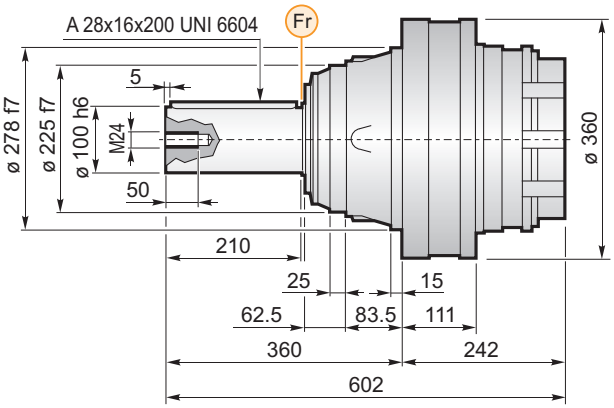
MS

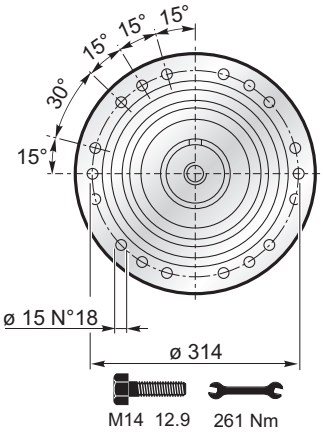




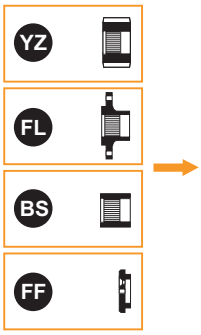


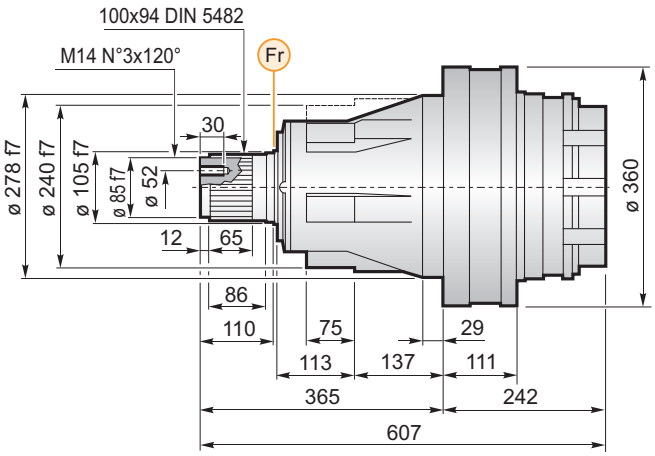
MC

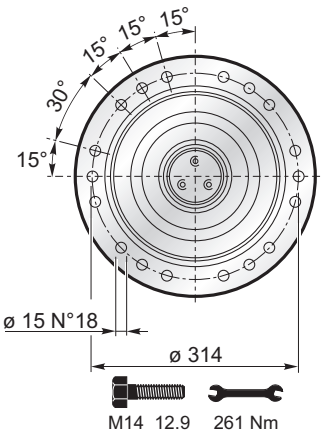




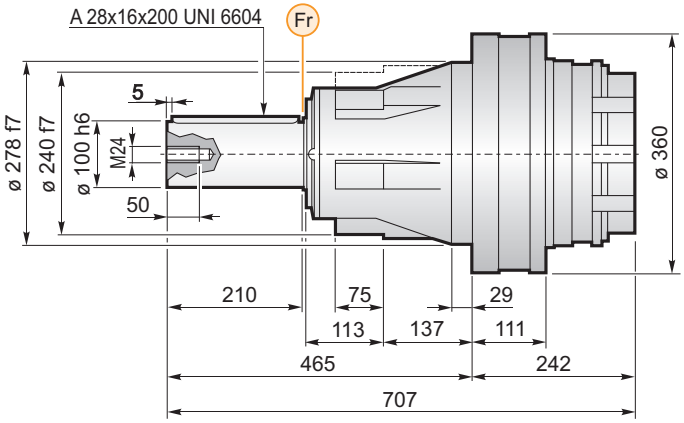
PS

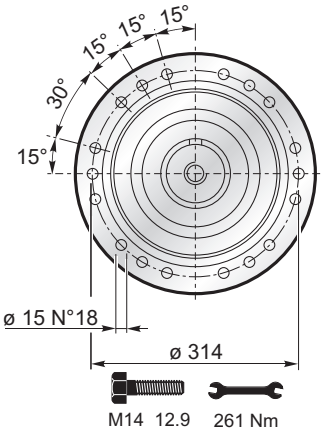




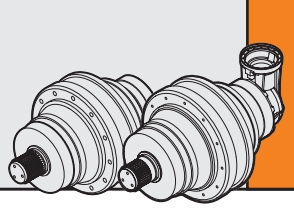


PC



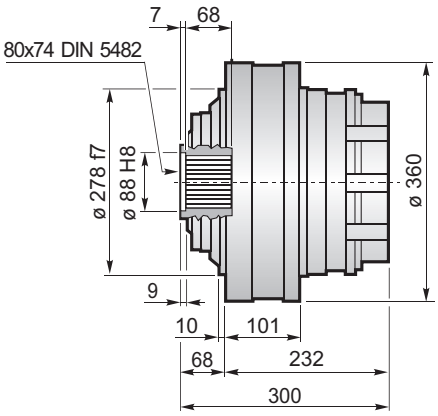


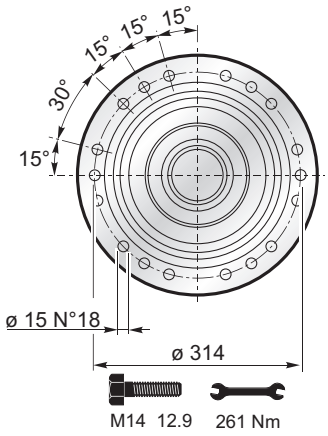
haumea mechanics on demand



F

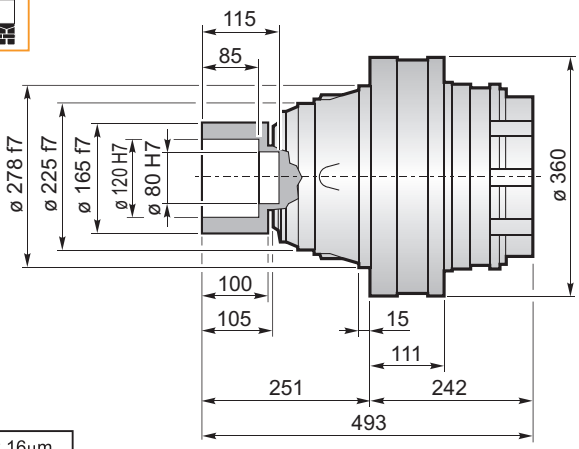
KB →

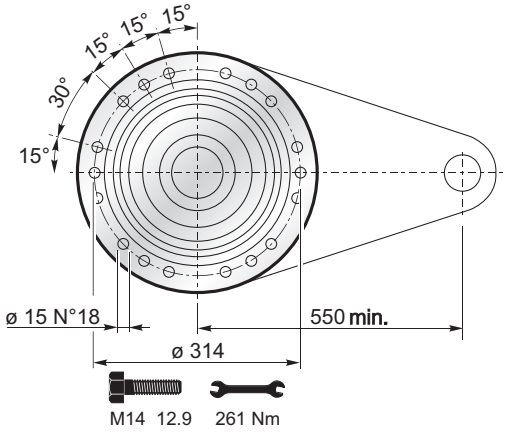


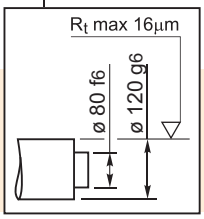


FS

GA



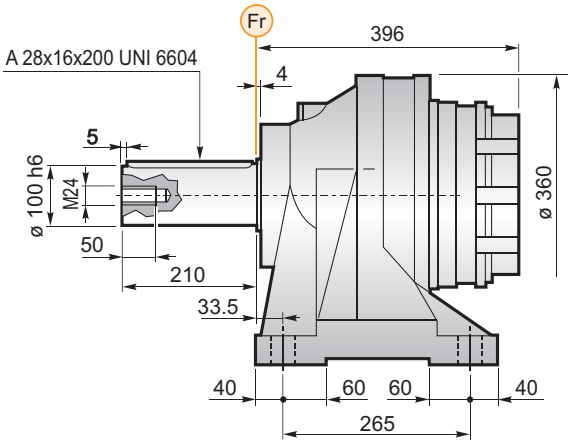


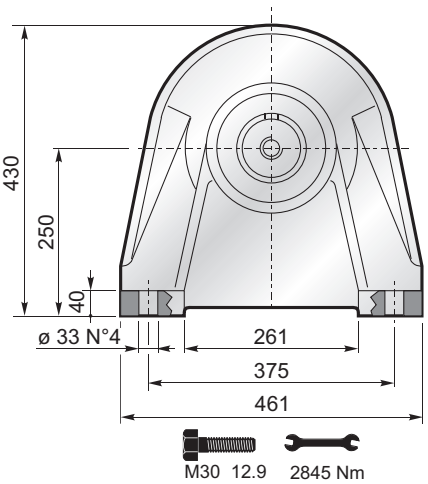


M_{max} = 35 kNm

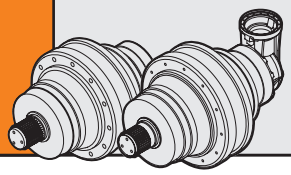
La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

CPC



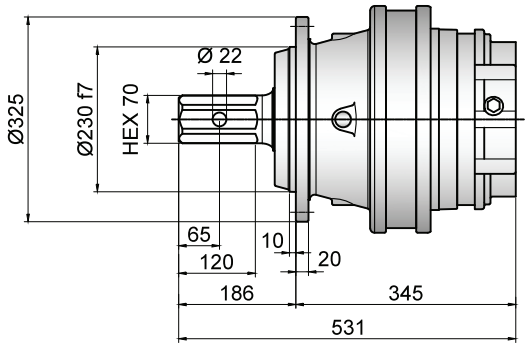


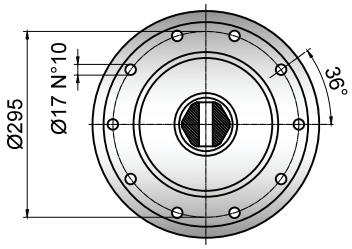
FL YZ BS FF KB GA → B-80



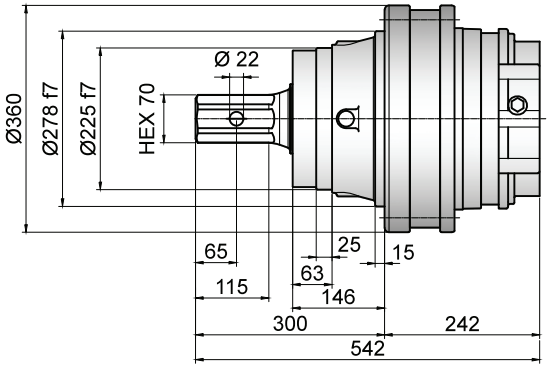
1800

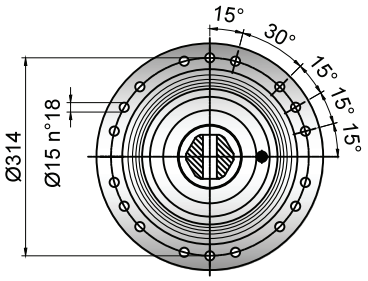
MFE



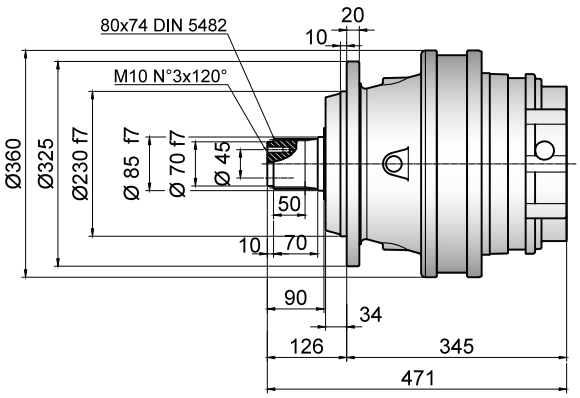


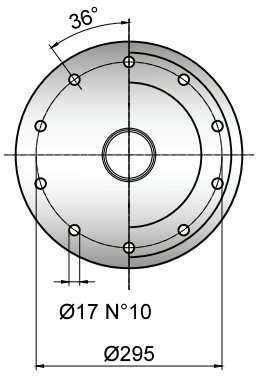
ME

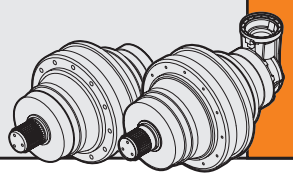


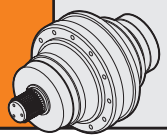


MFS

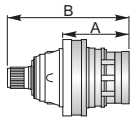




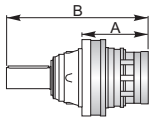




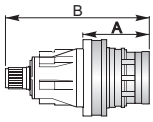
1800



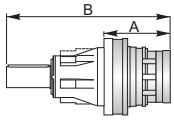
PG ...MS	A	B	RA	RB	EF	EDF
PG 1802	242	482		•		
PG 1803	301.5	541.5	•	o	•	
PG 1804	345.5	585.5	•			•



PG ...MC	A	B	RA	RB	EF	EDF
PG 1802	242	602		•		
PG 1803	301.5	661.5	•	o	•	
PG 1804	345.5	705.5	•			•



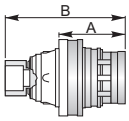
PG ...PS	A	B	RA	RB	EF	EDF
PG 1802	242	607		•		
PG 1803	301.5	666.5	•	o	•	
PG 1804	345.5	710.5	•			•



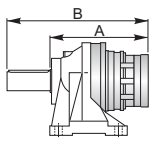
PG ...PC	A	B	RA	RB	EF	EDF
PG 1802	242	707		•		
PG 1803	301.5	766.5	•	o	•	
PG 1804	345.5	810.5	•			•



PG ...F	A	B	RA	RB	EF	EDF
PG 1802	232	300		•		
PG 1803	291.5	359.5	•	o	•	
PG 1804	335.5	403.5	•			•

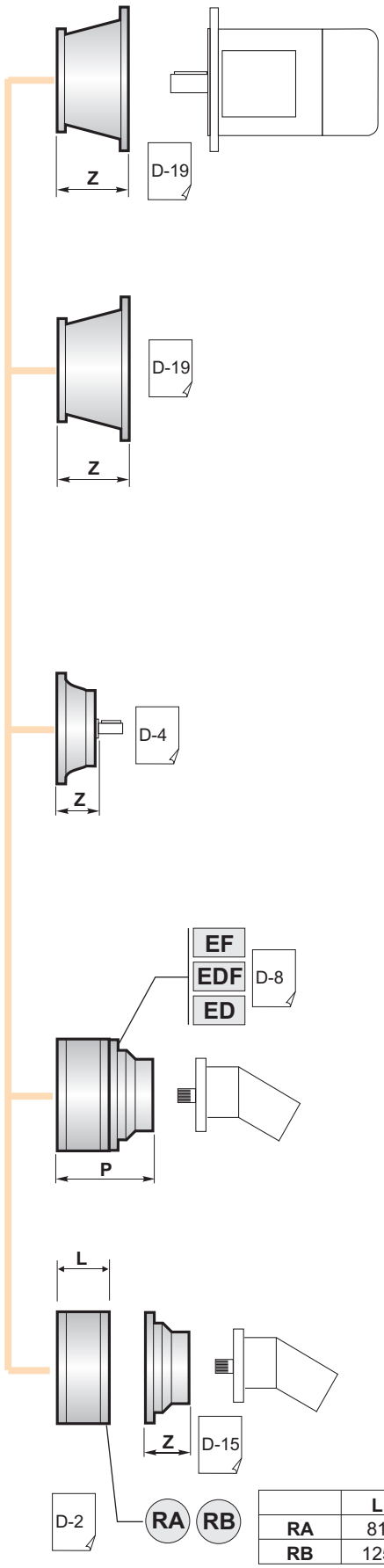


PG ...FS	A	B	RA	RB	EF	EDF
PG 1802	242	493		•		
PG 1803	301.5	552.5	•	o	•	
PG 1804	345.5	596.5	•			•



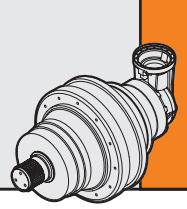
PG ...CPC	A	B	RA	RB	EF	EDF
PG 1802	396	606		•		
PG 1803	455.5	665.5	•	o	•	
PG 1804	503.5	713.5	•			•

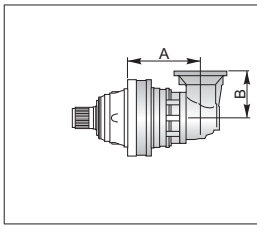
A+13.5	B+13.5	o



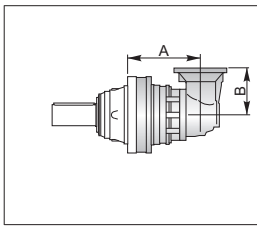
	L
RA	81
RB	125

chaumea mechanics on demand

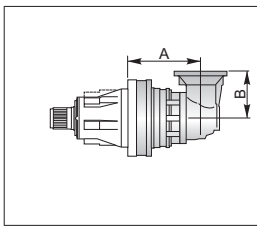




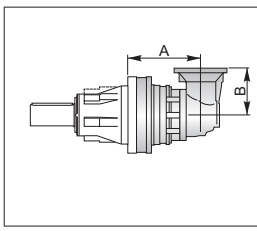
PGA ...MS	A	B	RA	RB	EF
PGA 1802	277	315		•	
PGA 1803	334	240	•	o	•
PGA 1804	407	240	•		•



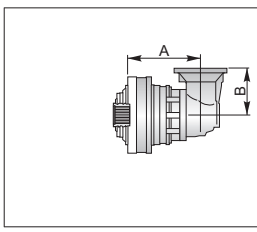
PGA ...MC	A	B	RA	RB	EF
PGA 1802	277	315		•	
PGA 1803	334	240	•	o	•
PGA 1804	407	240	•		•



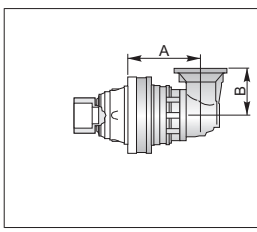
PGA ...PS	A	B	RA	RB	EF
PGA 1802	277	315		•	
PGA 1803	334	240	•	o	•
PGA 1804	407	240	•		•



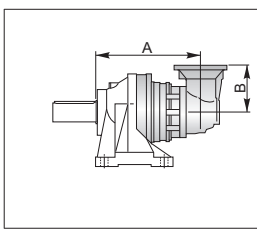
PGA ...PC	A	B	RA	RB	EF
PGA 1802	277	315		•	
PGA 1803	334	240	•	o	•
PGA 1804	407	240	•		•



PGA ...F	A	B	RA	RB	EF
PGA 1802	267	315		•	
PGA 1803	324	240	•	o	•
PGA 1804	397	240	•		•

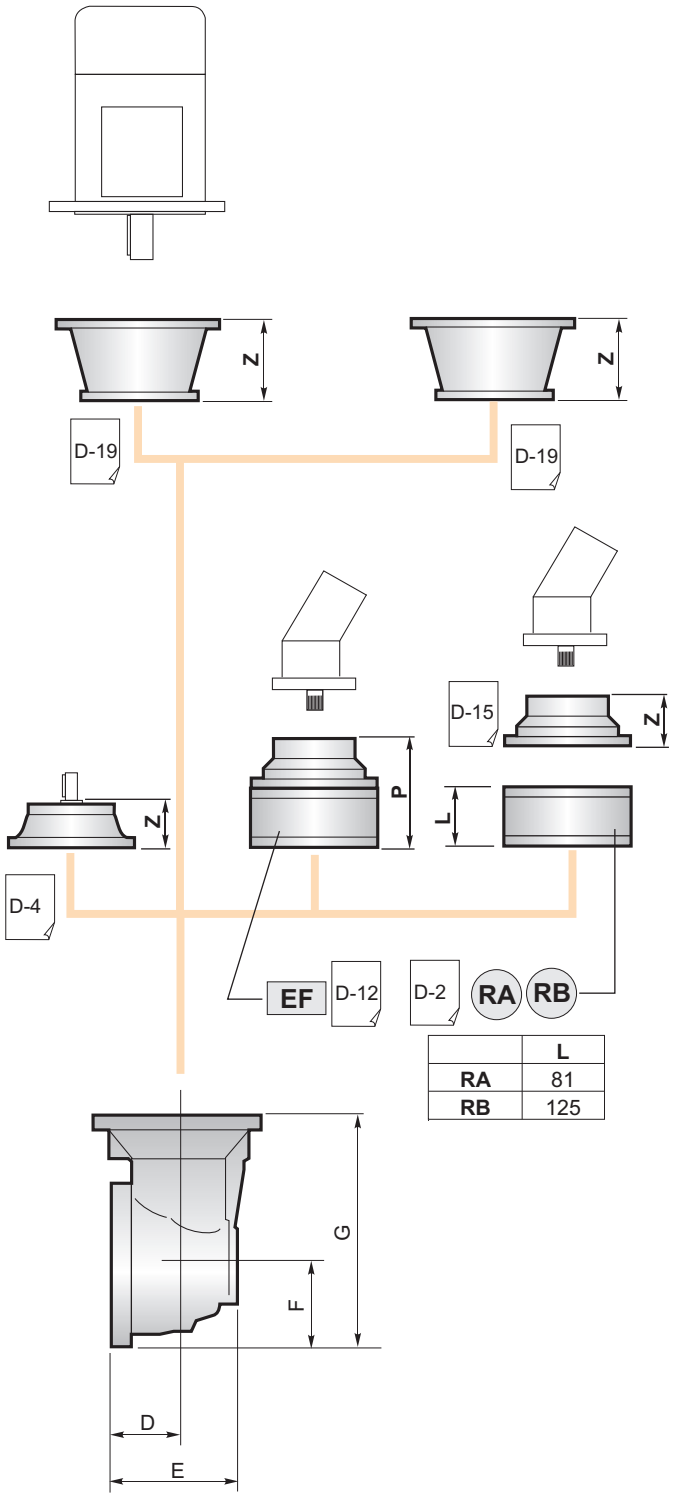


PGA ...FS	A	B	RA	RB	EF
PGA 1802	277	315		•	
PGA 1803	334	240	•	o	•
PGA 1804	407	240	•		•



PGA ...CPC	A	B	RA	RB	EF
PGA 1802	431	315		•	
PGA 1803	484	240	•	o	•
PGA 1804	543.5	240	•		•

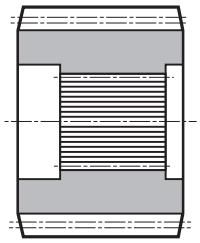
	B+16.5	o



	L
RA	81
RB	125

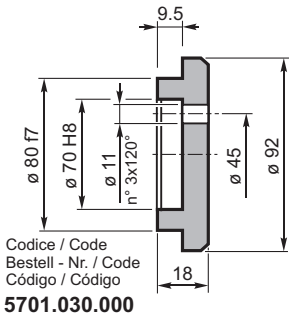
	D	E	F	G
PGA 1802	88	256	235	550
PGA 1803	88	164	140	380
PGA 1804	88	164	140	380

YZ
Pignoni / Pinion
Ritzel / Pignon
Piñones / Pinhões

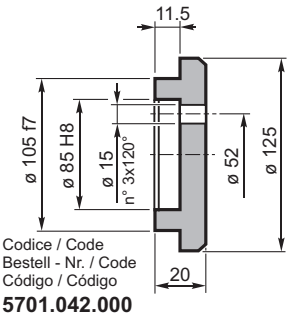


Su richiesta / On request
Auf Anfrage / Sur demande
Bajo demanda / Sob consulta

FF
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente

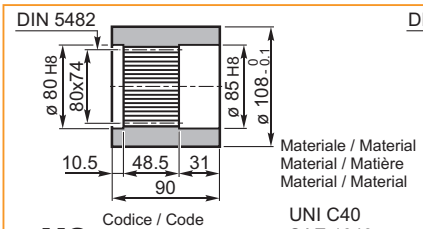


Codice / Code
Bestell - Nr. / Code
Código / Código
5701.030.000



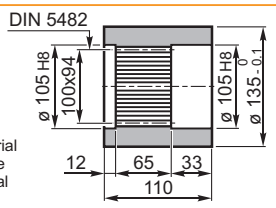
Codice / Code
Bestell - Nr. / Code
Código / Código
5701.042.000

BS
Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



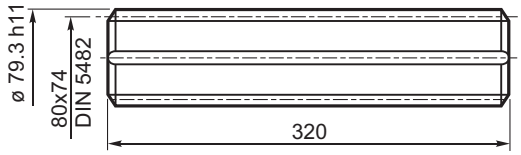
MS
Codice / Code
Bestell - Nr. / Code
Código / Código
1716.103.076

Materiale / Material
Material / Matière
Material / Material
UNI C40
SAE 1040
DIN Ck40



PS
Codice / Code
Bestell - Nr. / Code
Código / Código
1718.112.041

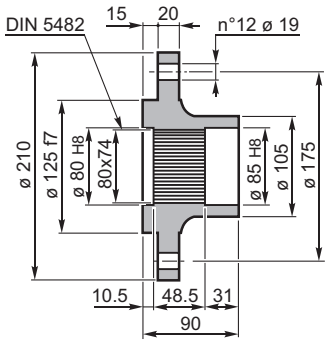
KB
Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada



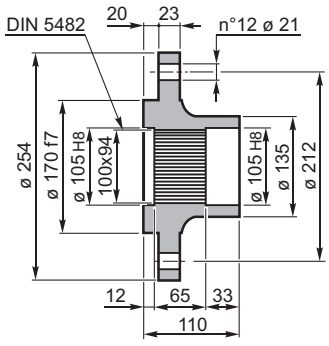
Materiale / Material
Material / Matière
Material / Material
UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

Codice / Code
Bestell - Nr. / Code
Código / Código
1703.406.042

FL
Flangia / Flange
Flansch / Bride
Brida / Flange

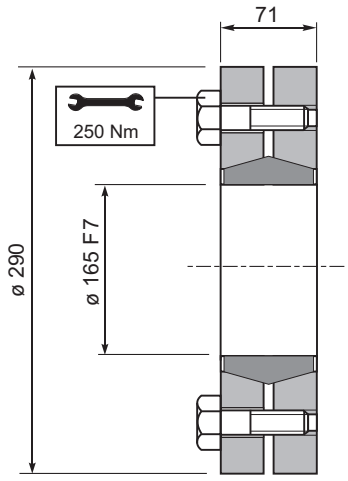


MS
Codice / Code
Bestell - Nr. / Code
Código / Código
1716.105.098



PS
Codice / Code
Bestell - Nr. / Code
Código / Código
1718.104.098

GA
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração

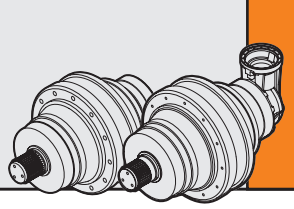


Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

35 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.165.000

haumea mechanics on demand



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

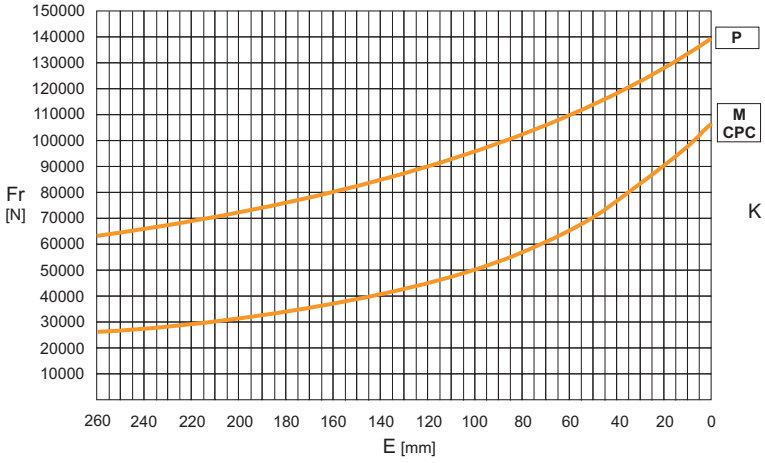
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

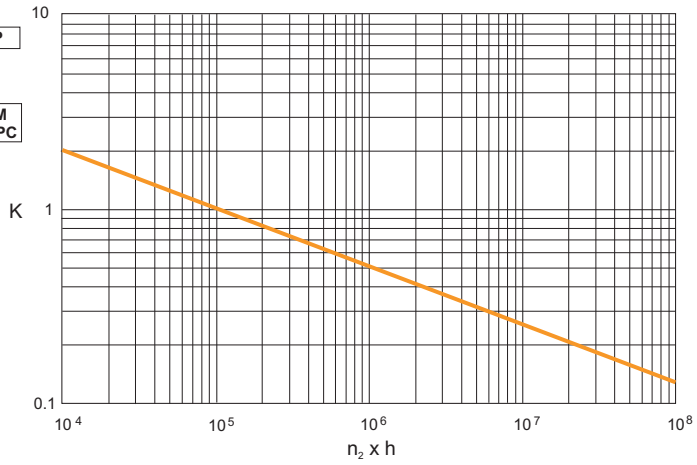
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

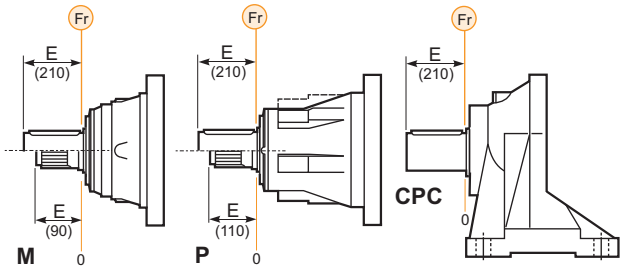
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M - CPC* - P





	n x h				
	10^5	10^4	10^6	10^7	10^8
M - P	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

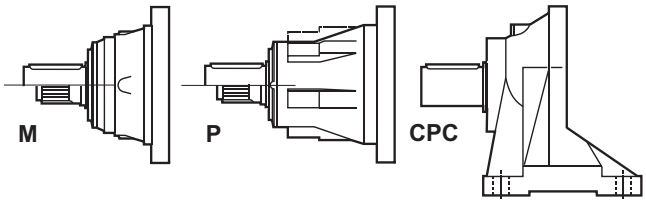
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

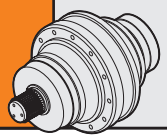
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

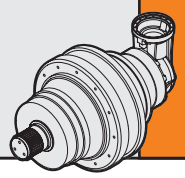
Fa [N]	M - CPC	P	
	45000	85000	←
	65000	85000	→





2500

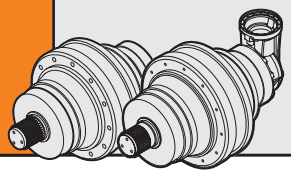
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 2501	**4.00**	34.75	30.76	26.18	23.17	1500	50	183	-	244	147	155
	5.20	26.87	23.78	20.24	17.91							
	6.25	20.73	18.35	15.62	13.82							
PG 2502	**14.67**	24.11	21.35	18.15	16.09	2800	30	210	-	271	174	182
	17.71	22.01	19.49	16.57	14.69							
	19.07	26.87	23.78	20.24	17.91							
	23.03	26.87	23.78	20.24	17.91							
	26.00	24.01	21.25	18.08	16.00							
	31.25	20.73	18.35	15.62	13.82							
	36.25	20.73	18.35	15.62	13.82							
	43.75	19.11	16.91	14.41	12.74							
PG 2503	**55.41**	24.11	21.35	18.15	16.09	2800	20	222	-	283	186	194
	60.50	24.11	21.35	18.15	16.09							
	72.03	26.87	23.78	20.24	17.91							
	87.00	26.87	23.78	20.24	17.91							
	94.99	26.87	23.78	20.24	17.91							
	107.25	24.01	21.25	18.08	16.00							
	114.40	26.86	23.77	20.24	17.91							
	118.98	26.87	23.78	20.24	17.91							
	134.33	24.01	21.25	18.08	16.00							
	156.00	24.01	21.25	18.08	16.00							
	166.96	24.28	21.54	18.30	16.19							
	188.50	24.01	21.25	18.08	16.00							
	218.66	20.31	17.97	15.29	13.55							
	226.56	20.73	18.35	15.62	13.82							
	262.81	20.73	18.35	15.62	13.82							
	317.19	19.11	16.91	14.41	12.74							
PG 2504	**337.75**	26.87	23.78	20.24	17.91	2800	15	228	-	289	192	200
	372.84	26.87	23.78	20.24	17.91							
	407.11	26.87	23.78	20.24	17.91							
	423.04	26.87	23.78	20.24	17.91							
	459.64	24.01	21.25	18.08	16.00							
	493.23	22.01	19.49	16.57	14.69							
	575.71	24.01	21.25	18.08	16.00							
	600.60	24.01	21.25	18.08	16.00							
	670.22	24.01	21.25	18.08	16.00							
	723.94	24.01	21.25	18.08	16.00							
	807.86	24.01	21.25	18.08	16.00							
	873.60	24.01	21.25	18.08	16.00							
	934.96	24.28	21.54	18.30	16.19							
	1031.17	24.07	21.24	17.94	16.05							
	1126.96	24.28	21.54	18.30	16.19							
	1272.38	24.01	21.25	18.08	16.00							
	1352.00	24.01	21.25	18.08	16.00							
	1446.96	24.28	21.54	18.30	16.19							
	1529.30	20.73	18.35	15.62	13.82							
	1633.67	24.01	21.25	18.08	16.00							
	1773.98	20.73	18.35	15.62	13.82							
	1885.00	20.73	18.35	15.62	13.82							
	1963.54	20.73	18.35	15.62	13.82							
	2277.71	20.73	18.35	15.62	13.82							



	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 2502	**12.29**	27.63	24.55	18.65	15.16							
	15.97	26.87	23.78	20.24	17.91							
	19.20	20.73	18.35	15.62	13.82	2000	30	279	-	340	242	250
	24.27	22.48	21.15	19.52	16.58							
	29.17	20.73	18.35	15.62	13.82							
PGA 2503	**50.67**	22.01	20.04	16.60	13.48							
	61.19	22.01	19.49	16.57	14.69							
	65.87	26.87	23.78	19.94	16.20							
	79.55	26.87	23.78	20.24	17.91							
	89.82	24.01	21.25	18.08	16.00							
	95.62	20.73	18.35	15.62	13.82							
	104.19	20.31	17.97	15.29	13.55	2800	20	247	-	308	211	219
	125.23	20.73	18.35	15.62	13.82							
	151.14	19.11	16.91	14.41	12.74							
	164.20	20.07	17.97	15.29	13.55							
	197.36	20.73	18.35	15.62	13.82							
	238.19	19.11	16.91	14.41	12.74							
PGA 2504	**248.83**	26.87	23.78	20.24	17.91							
	271.70	26.87	23.78	20.24	17.91							
	301.66	24.11	21.35	18.15	16.09							
	340.31	26.87	23.78	20.24	17.91							
	395.20	26.86	23.77	20.24	17.91							
	464.06	24.01	21.25	18.08	16.00							
	498.30	22.01	19.49	16.57	14.69							
	538.91	24.01	21.25	18.08	16.00							
	583.92	24.01	21.25	18.08	16.00							
	651.18	24.01	21.25	18.08	16.00	2800	15	262	-	323	226	234
	731.37	24.01	21.25	18.08	16.00							
	752.27	26.87	23.78	20.24	17.91							
	849.33	24.01	21.25	18.08	16.00							
	908.99	24.28	21.54	18.30	16.19							
	1026.28	24.01	21.25	18.08	16.00							
	1190.48	20.31	17.97	15.29	13.55							
	1430.87	20.73	18.35	15.62	13.82							
	1726.91	19.11	16.91	14.41	12.74							

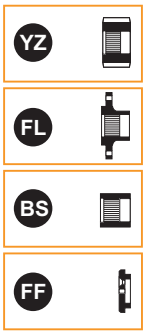


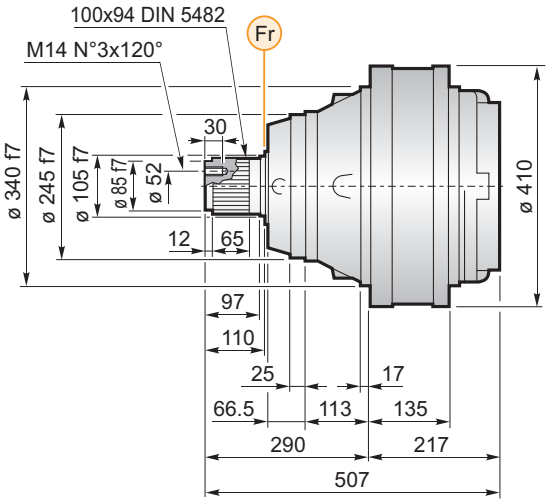
$$M_{max} = M_c \times 2 \quad (n_2 \times h = 20.000)$$

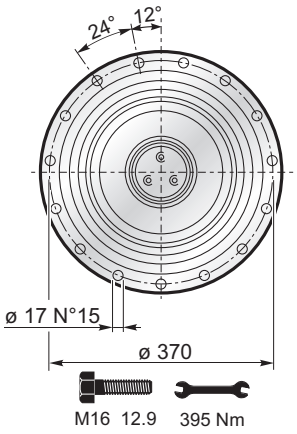


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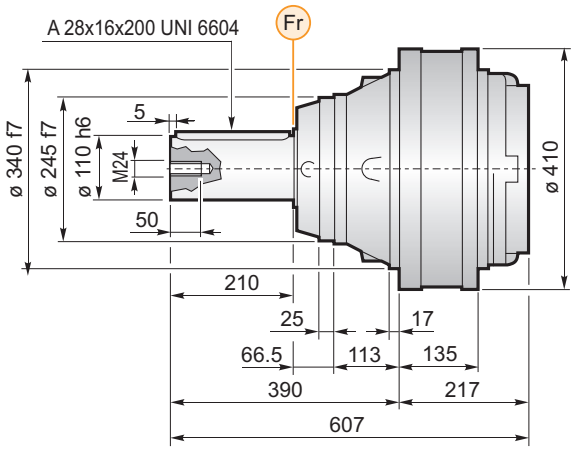
MS

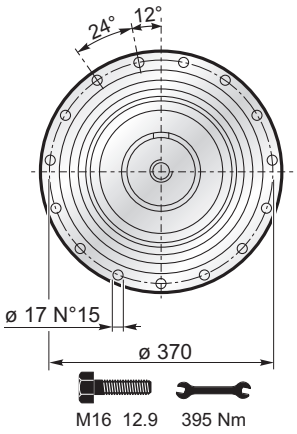




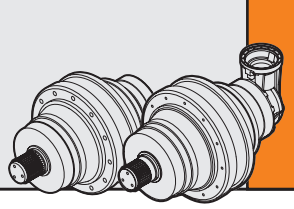


MC



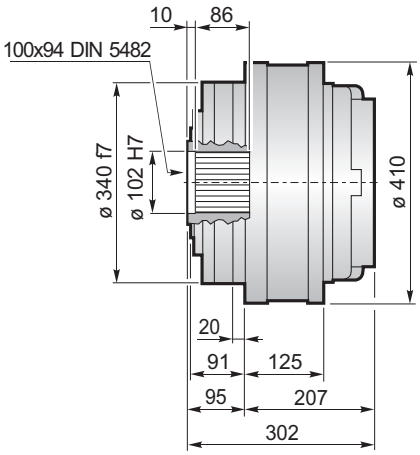


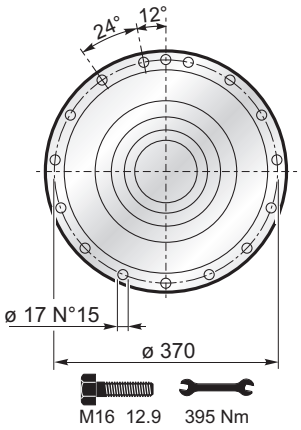
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F

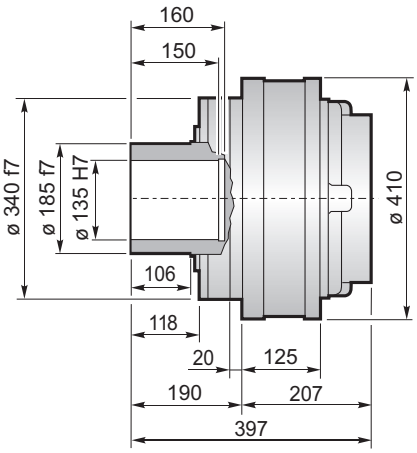
KB

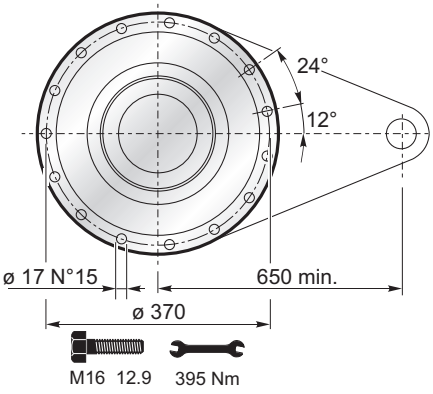


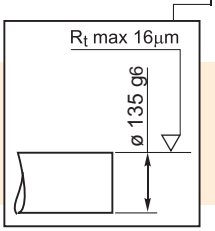


FS

GA



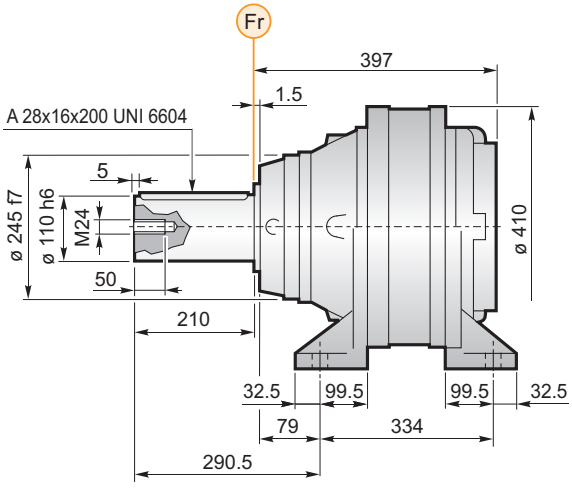


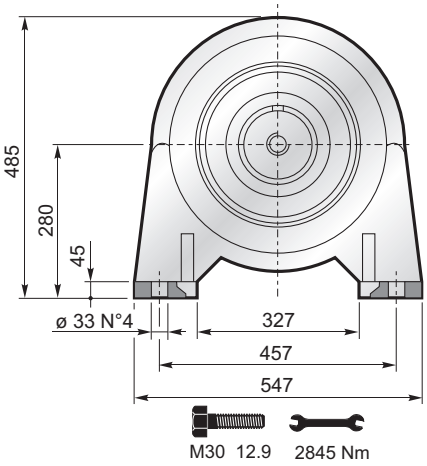


M_{max} = 52 kNm

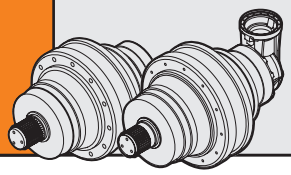
La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

CPC



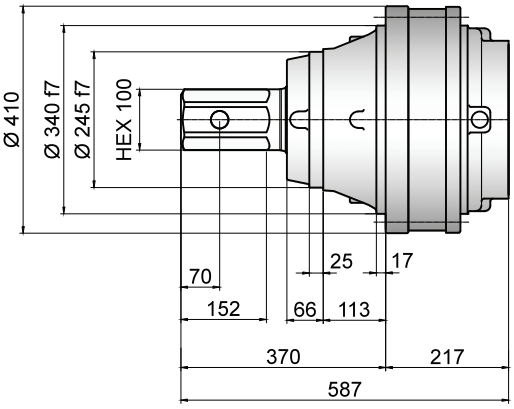


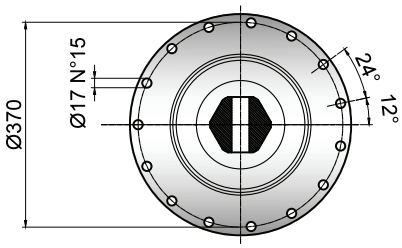
FL YZ BS FF KB GA → B-90

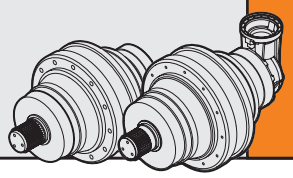


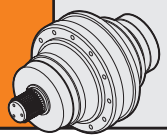
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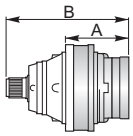
ME


Ø 410
Ø 340 f7
Ø 245 f7
HEX 100
70
152
66
113
25
17
370
217
587

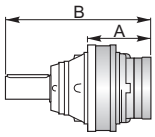

Ø370
Ø17 N°15
24°
12°



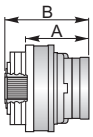




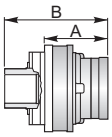
PG ...MS	A	B	RA	RB	EF	EDF
PG 2501	217	507				
PG 2502	311	601		•		
PG 2503	370.5	660.5	•	o	•	
PG 2504	418.5	708.5	•			•



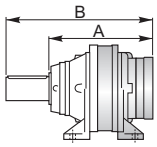
PG ...MC	A	B	RA	RB	EF	EDF
PG 2501	217	607				
PG 2502	311	701		•		
PG 2503	370.5	760.5	•	o	•	
PG 2504	418.5	808.5	•			•



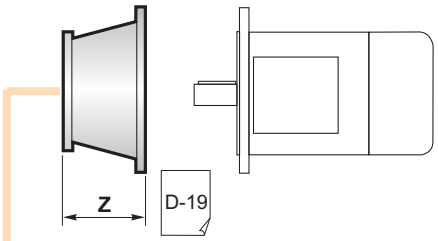
PG ...F	A	B	RA	RB	EF	EDF
PG 2501	207	302				
PG 2502	301	396		•		
PG 2503	360.5	455.5	•	o	•	
PG 2504	408.5	503.5	•			•

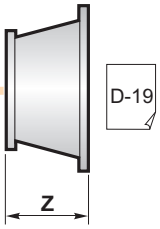


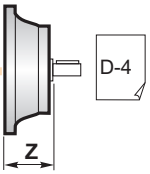
PG ...FS	A	B	RA	RB	EF	EDF
PG 2501	207	397				
PG 2502	301	491		•		
PG 2503	360.5	550.5	•	o	•	
PG 2504	408.5	598.5	•			•

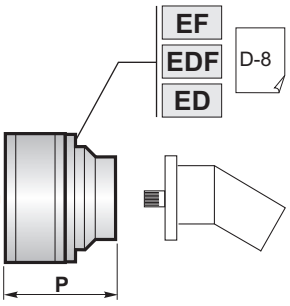


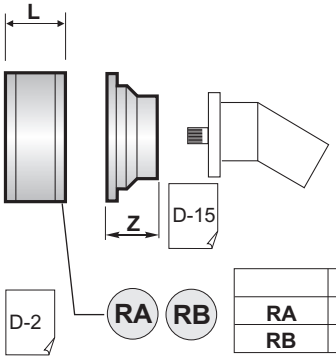
PG ...CPC	A	B	RA	RB	EF	EDF
PG 2501	397	607				
PG 2502	491	701		•		
PG 2503	550.5	760.5	•	o	•	
PG 2504	598.5	808.5	•			•







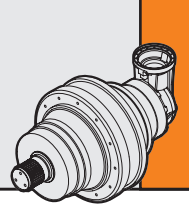


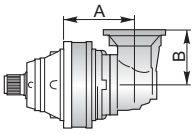


	L
RA	81
RB	125

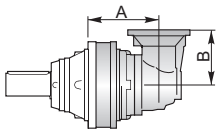
A+13.5	B+13.5	o

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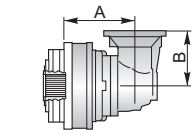




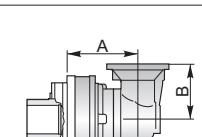
PGA ...MS	A	B	RA	RB	EF
PGA 2502	297	315			
PGA 2503	399	240			
PGA 2504	472	240			



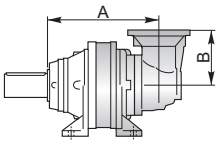
PGA ...MC	A	B	RA	RB	EF
PGA 2502	297	315			
PGA 2503	399	240			
PGA 2504	472	240			



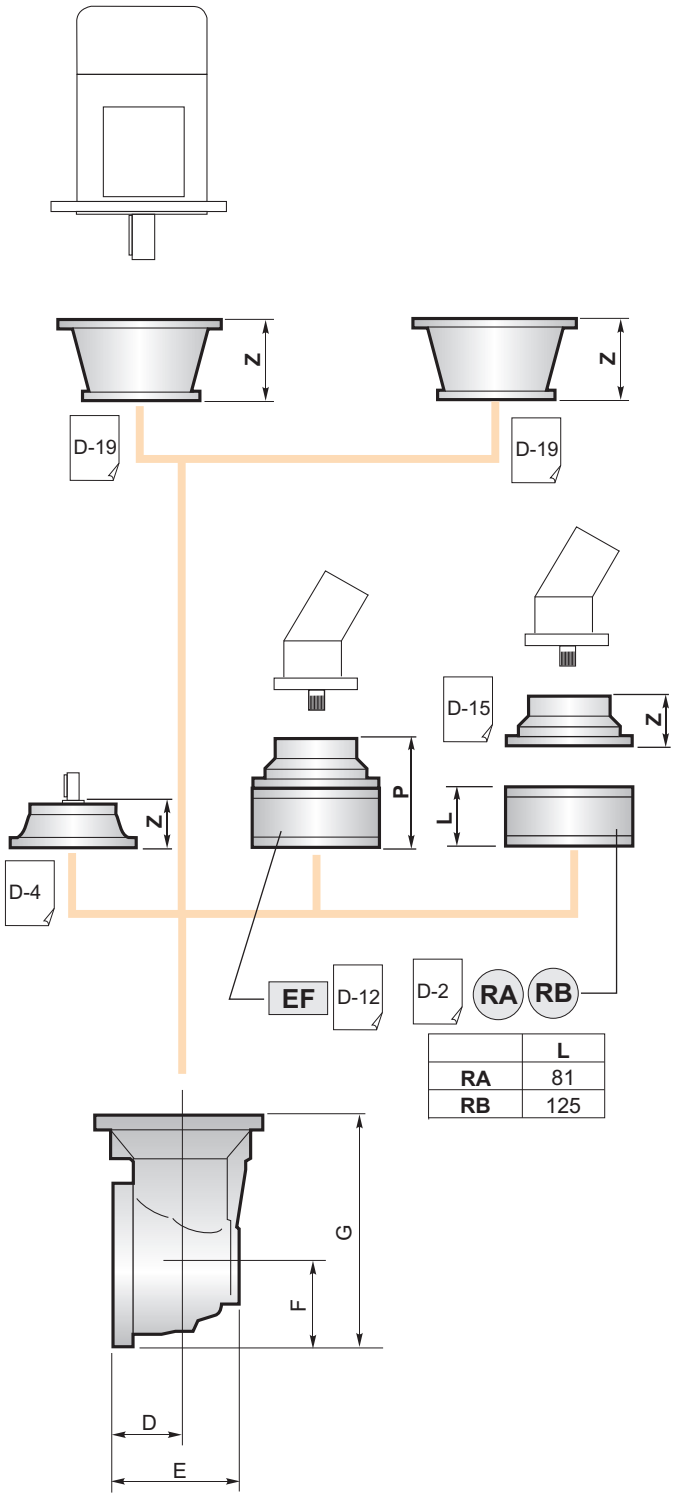
PGA ...F	A	B	RA	RB	EF
PGA 2502	287	315		•	
PGA 2503	389	240	•	o	
PGA 2504	462	240	•		•



PGA ...FS	A	B	RA	RB	EF
PGA 2502	287	315			
PGA 2503	389	240			
PGA 2504	462	240			



PGA ...CPC	A	B	RA	RB	EF
PGA 2502	477	315			
PGA 2503	579	240			
PGA 2504	638.5	240			



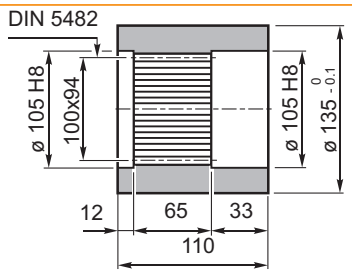
	L
RA	81
RB	125

	D	E	F	G
PGA 2502	88	256	235	550
PGA 2503	88	164	140	380
PGA 2504	88	164	140	380

	B+16.5	o

BS

Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada

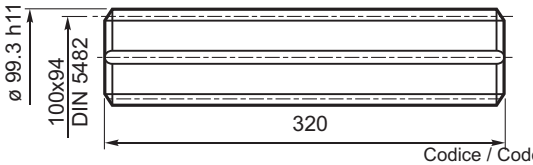


Materiale / Material
Material / Matière
Material / Material
UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código
1718.112.041

KB

Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada

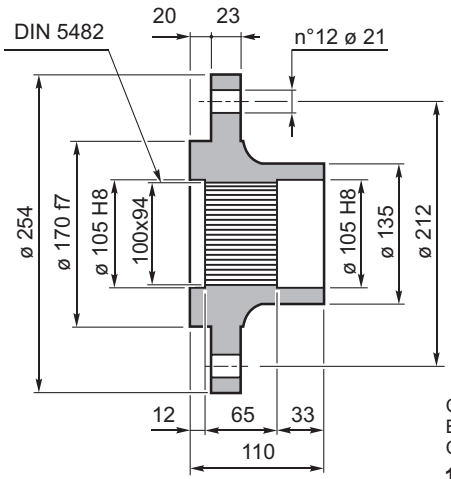


Materiale / Material
Material / Matière
Material / Material
UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

Codice / Code
Bestell - Nr. / Code
Código / Código
1703.407.042

FL

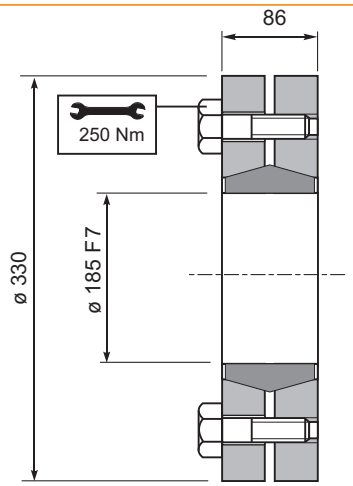
Flangia / Flange
Flansch / Bride
Brida / Flange



Codice / Code
Bestell - Nr. / Code
Código / Código
1718.104.098

GA

Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



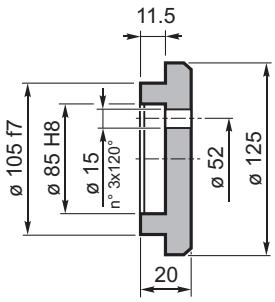
Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

52 kNm

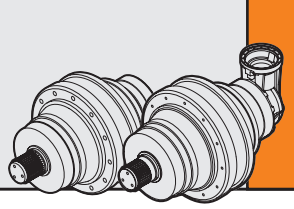
Codice / Code
Bestell - Nr. / Code
Código / Código
9015.185.000

FF

Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código
5701.042.000



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

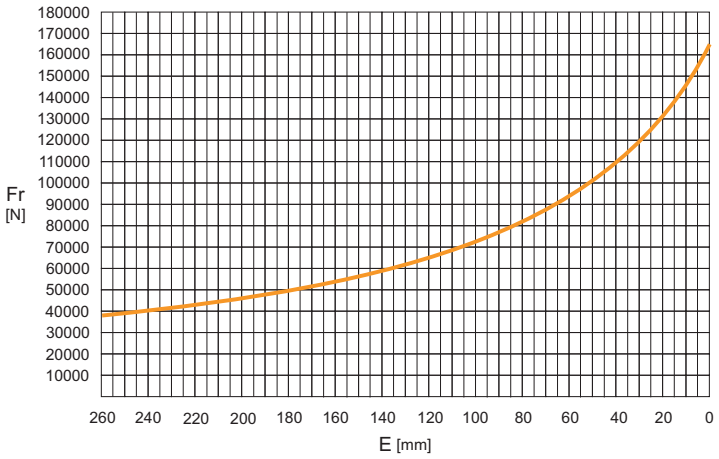
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

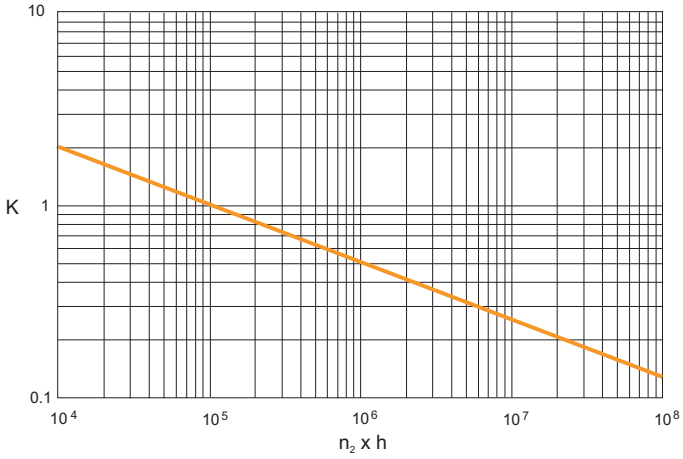
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

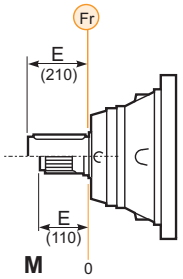
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

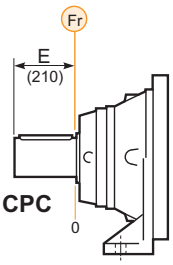
M - CPC





	n x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			





CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

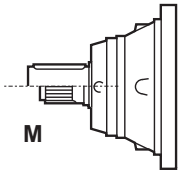
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

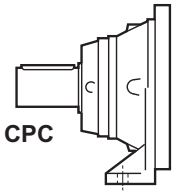
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

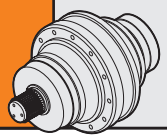
CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

Fa [N]	M	CPC	
	75000	75000	←
	95000	95000	→

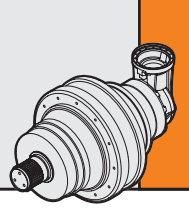






3000

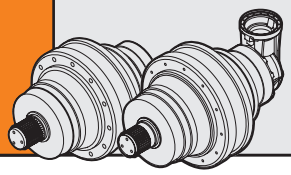
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 3002	**14.22**	34.75	30.76	26.18	23.17							
	17.14	34.75	30.76	26.18	23.17							
	22.40	28.02	24.80	21.09	18.69	2000	34	237	-	298	196	204
	29.12	26.87	23.78	20.24	17.91							
	35.10	26.56	23.51	20.00	17.70							
PG 3003	**53.73**	34.75	30.76	26.18	23.17							
	64.76	34.75	30.76	26.18	23.17							
	73.48	34.75	30.76	26.18	23.17							
	88.57	34.75	30.76	26.18	23.17							
	102.86	34.75	30.76	26.18	23.17							
	124.29	28.88	25.55	21.73	19.29	2800	23	253	-	314	212	220
	134.40	28.02	24.80	21.09	18.69							
	150.45	26.87	23.78	20.24	17.91							
	181.35	26.56	23.51	20.00	17.70							
	211.12	26.87	23.78	20.24	17.91							
PG 3004	**230.26**	34.75	30.76	26.18	23.17							
	251.43	34.75	30.76	26.18	23.17							
	300.88	33.31	29.42	25.04	22.13							
	314.92	34.75	30.76	26.18	23.17							
	328.53	34.75	30.76	26.18	23.17							
	362.67	34.75	30.76	26.18	23.17							
	379.59	34.75	30.76	26.18	23.17							
	396.00	34.75	30.76	26.18	23.17							
	411.50	34.75	30.76	26.18	23.17							
	440.82	34.75	30.76	26.18	23.17	2800	17	261	-	322	220	228
	477.32	34.45	30.49	25.92	22.87							
	517.44	28.02	24.80	21.09	18.69							
	576.00	34.75	30.76	26.18	23.17							
	623.70	28.02	24.80	21.09	18.69							
	694.29	34.75	30.76	26.18	23.17							
	752.64	28.02	24.80	21.09	18.69							
	838.93	28.88	25.55	21.73	19.29							
	1015.56	26.87	23.78	20.24	17.91							
	1425.06	26.87	23.78	20.24	17.91							



	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 3003	**43.68**	34.75	30.76	26.18	23.17							
	52.65	34.75	30.76	26.18	23.17							
	66.37	34.75	30.76	26.18	23.17							
	80.00	34.75	30.76	26.18	23.17	2800	23	336	-	397	299	307
	104.53	28.02	24.80	21.09	18.69							
	135.89	26.87	23.78	20.24	17.91							
	163.80	26.56	23.51	20.00	17.70							
PGA 3004	**202.67**	34.75	30.76	26.18	23.17							
	253.85	34.75	30.76	26.18	23.17							
	305.97	34.75	30.76	26.18	23.17							
	352.59	34.75	30.76	26.18	23.17							
	385.00	34.75	30.76	26.18	23.17							
	464.59	31.64	28.03	23.84	21.15							
	503.07	28.02	24.80	21.09	18.69							
	560.00	34.75	30.76	26.18	23.17	2800	17	293	-	354	252	260
	603.97	26.87	23.78	20.24	17.91							
	676.67	28.88	25.55	21.73	19.29							
	731.73	28.02	24.80	21.09	18.69							
	819.13	26.87	23.78	20.24	17.91							
	951.25	26.87	23.78	20.24	17.91							
	1149.43	26.87	23.78	20.24	17.91							
	1385.48	26.56	23.51	20.00	17.70							

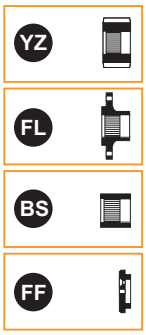


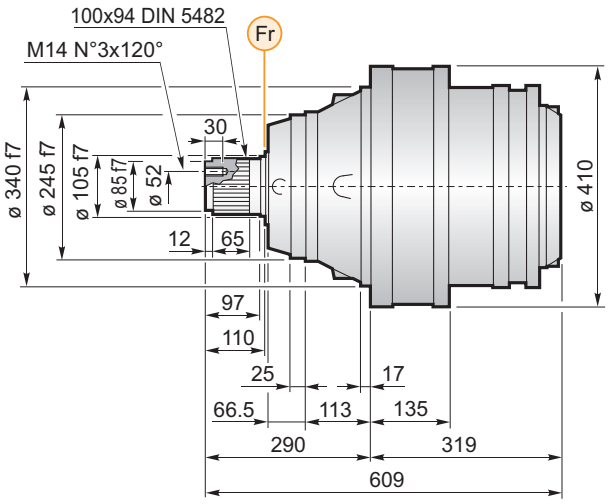
$$M_{max} = M_c \times 2 \quad (n_2 \times h = 20.000)$$

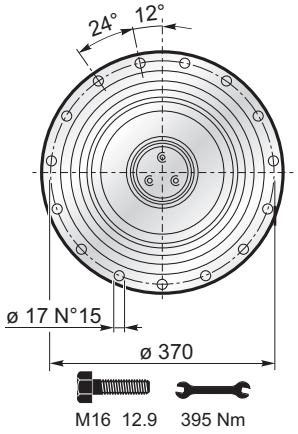


3000

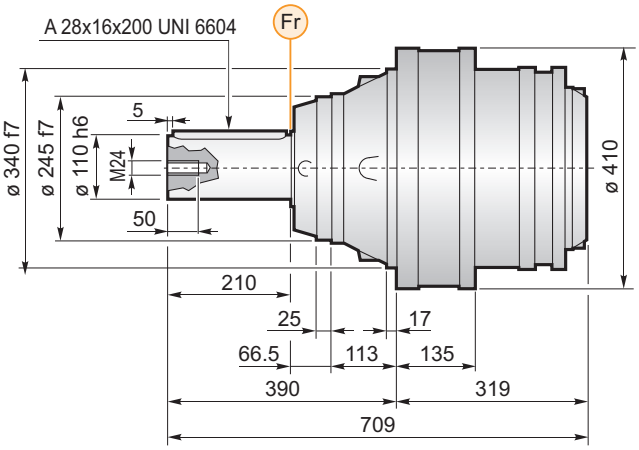
MS

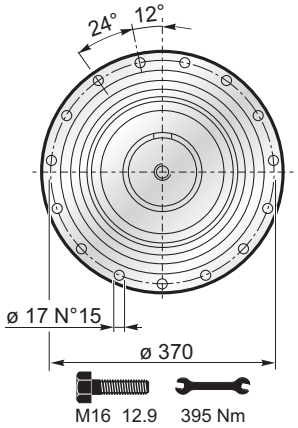




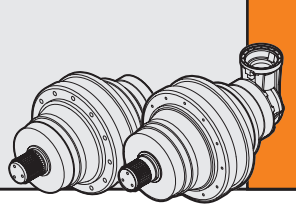


MC



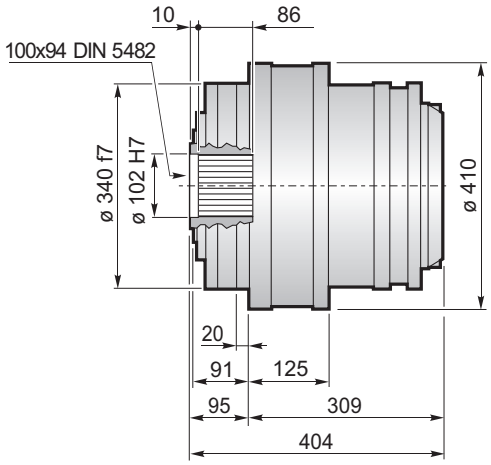


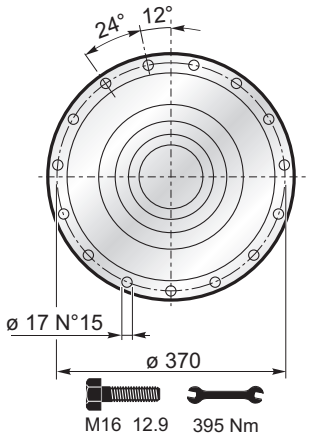
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F

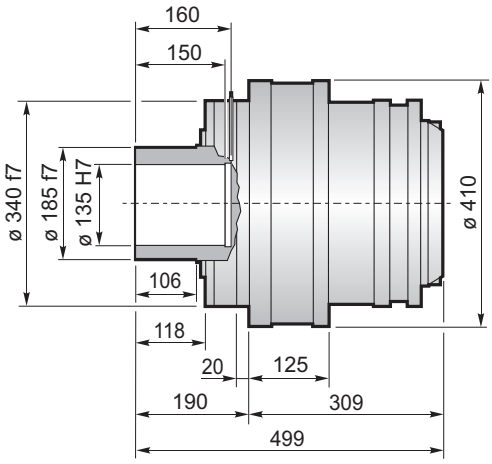
KB →

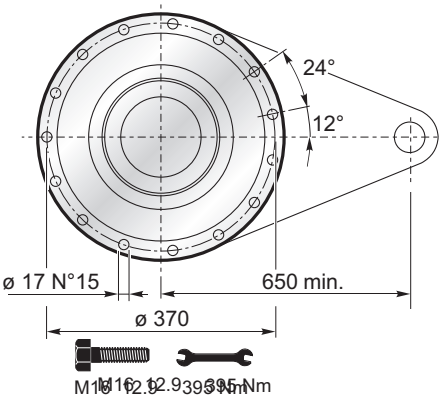


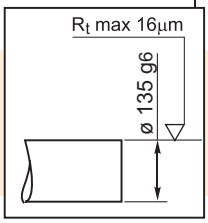


FS

GA →



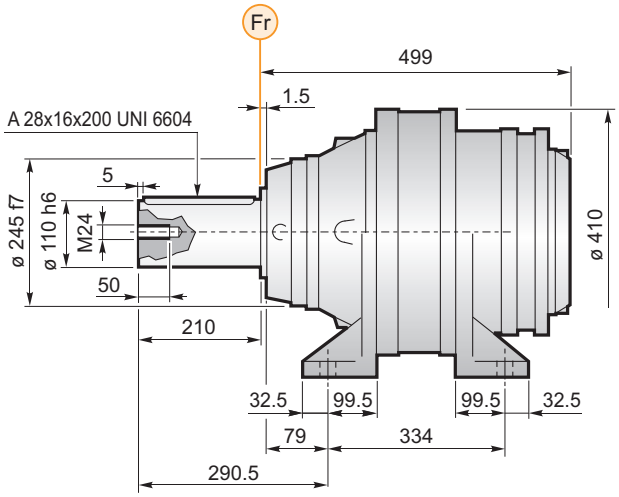


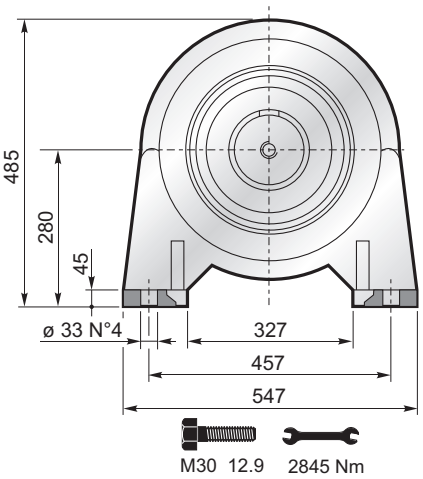


M_{max} = 52 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

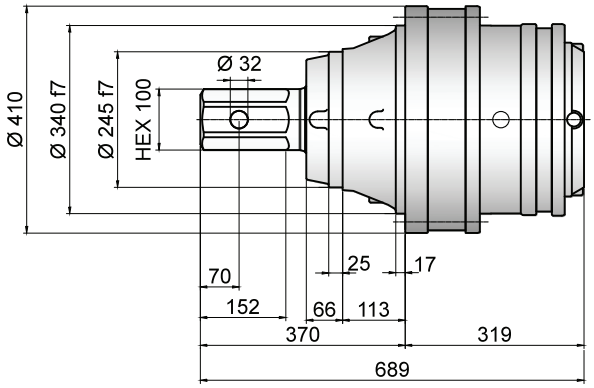
CPC

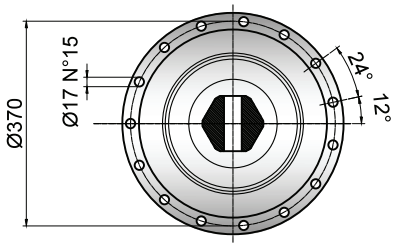




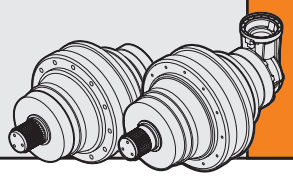
FL YZ BS FF KB GA → B-100

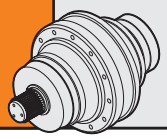
ME

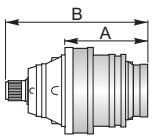




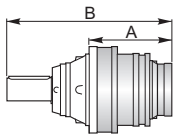
haumea® mechanics on demand



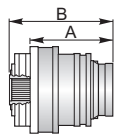




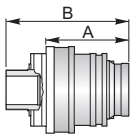
PG ...MS	A	B	RA	RB	EF	EDF
PG 3002	319	609		•		
PG 3003	390.5	680.5	•	o	•	
PG 3004	451.5	741.5	•			•



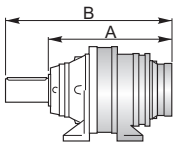
PG ...MC	A	B	RA	RB	EF	EDF
PG 3002	319	709		•		
PG 3003	390.5	780.5	•	o	•	
PG 3004	451.5	841.5	•			•



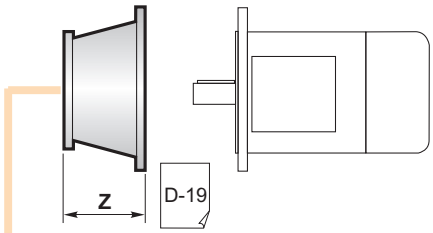
PG ...F	A	B	RA	RB	EF	EDF
PG 3002	309	404		•		
PG 3003	380.5	475.5	•	o	•	
PG 3004	441.5	536.5	•			•

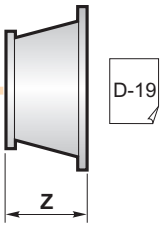


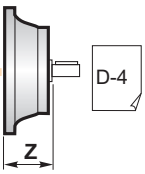
PG ...FS	A	B	RA	RB	EF	EDF
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PG 3003	380.5	570.5	•	o	•	
PG 3004	441.5	631.5	•			•

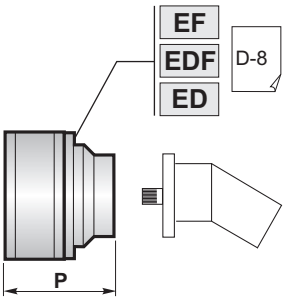


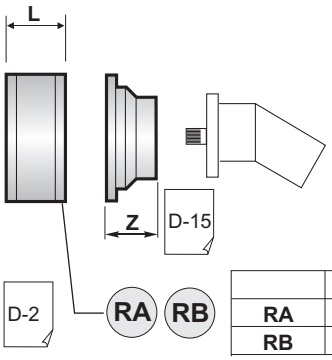
PG ...CPC	A	B	RA	RB	EF	EDF
PG 3002	499	709		•		
PG 3003	570.5	780.5	•	o	•	
PG 3004	631.5	841.5	•			•







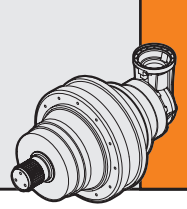


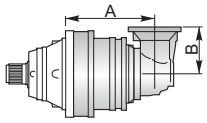


	L
RA	81
RB	125

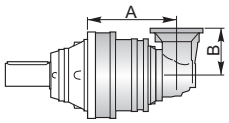
A+13.5	B+13.5	o

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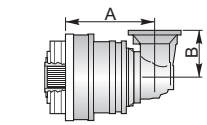




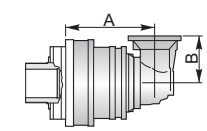
PGA ...MS	A	B	RA	RB	EF
PGA 3003	407	240	•	o	•
PGA 3004	478.5	240	•	o	•



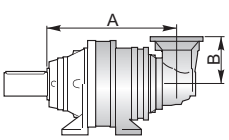
PGA ...MC	A	B	RA	RB	EF
PGA 3003	407	240	•	o	•
PGA 3004	478.5	240	•	o	•



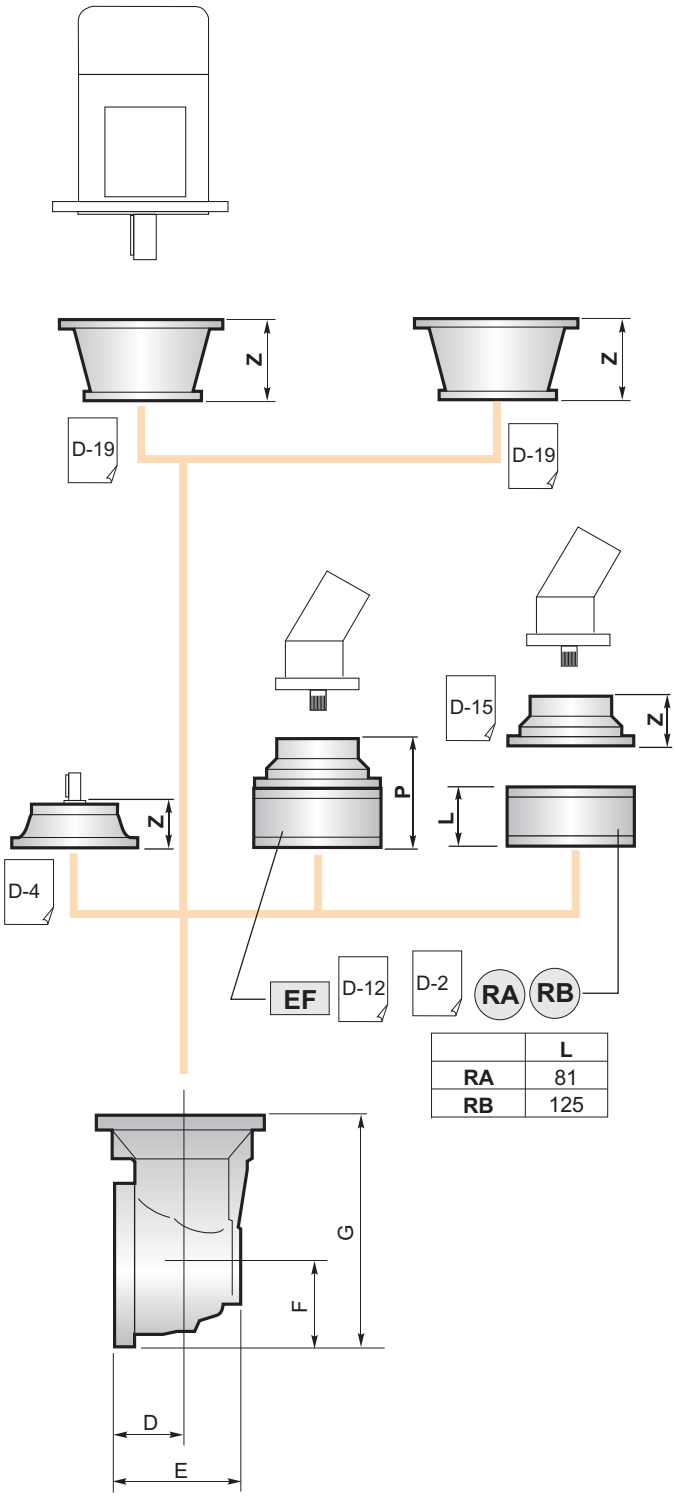
PGA ...F	A	B	RA	RB	EF
PGA 3003	397	240	•	o	•
PGA 3004	468.5	240	•	o	•



PGA ...FS	A	B	RA	RB	EF
PGA 3003	397	240	•	o	•
PGA 3004	468.5	240	•	o	•



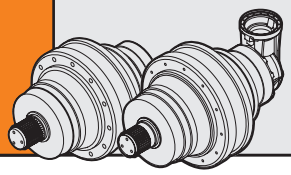
PGA ...CPC	A	B	RA	RB	EF
PGA 3003	585.5	240	•	o	•
PGA 3004	657	240	•	o	•



	L
RA	81
RB	125

	D	E	F	G
PGA 3003 (CC500)	88	256	235	550
PGA 3004 (CC100)	88	164	140	380

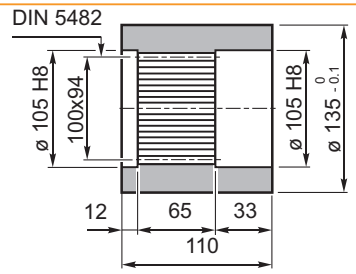
A+16.5	B	o



3000

BS

Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada

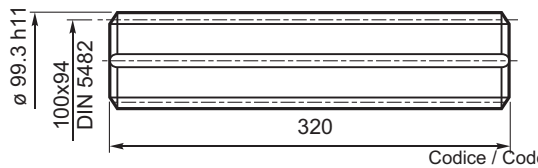


Materiale / Material
Material / Matière
Material / Material
UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código
1718.112.041

KB

Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada

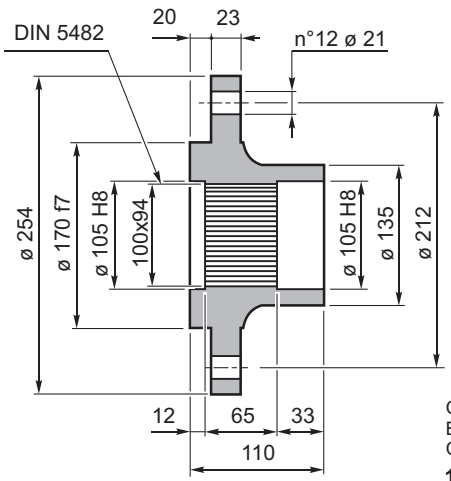


Materiale / Material
Material / Matière
Material / Material
UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

Codice / Code
Bestell - Nr. / Code
Código / Código
1703.407.042

FL

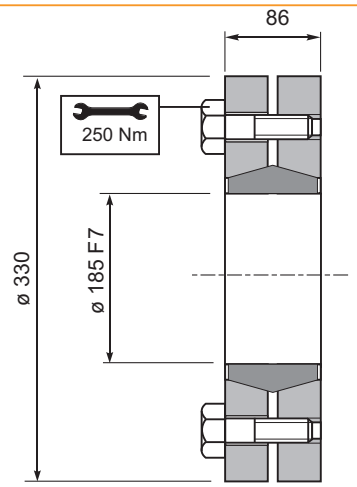
Flangia / Flange
Flansch / Bride
Brida / Flange



Codice / Code
Bestell - Nr. / Code
Código / Código
1718.104.098

GA

Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



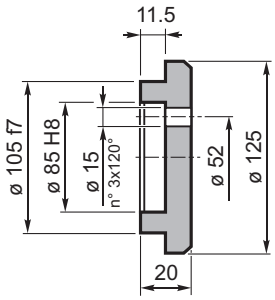
Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

52 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.185.000

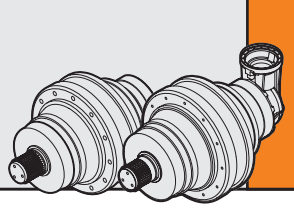
FF

Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código
5701.042.000

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CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

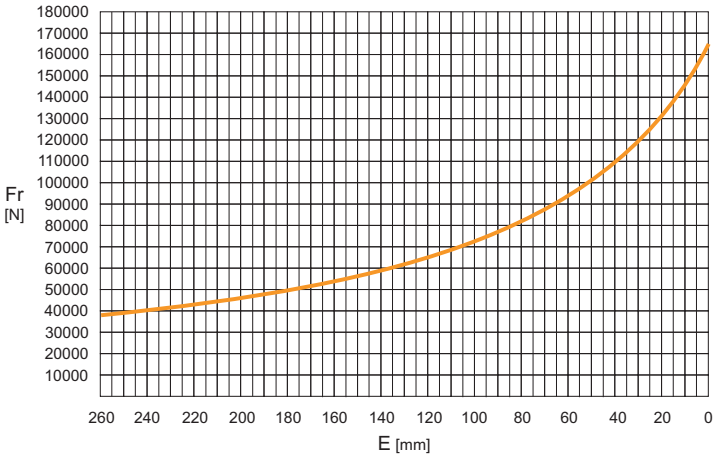
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

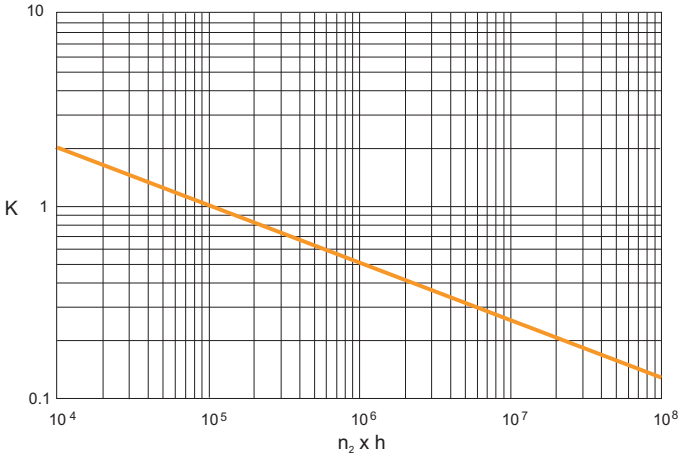
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

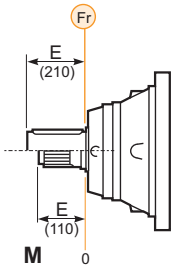
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

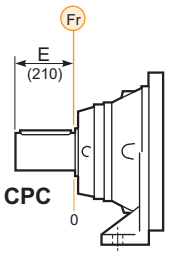
M - CPC*





	n x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			





CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

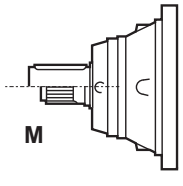
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

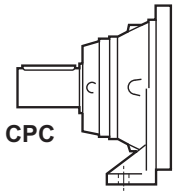
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

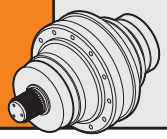
CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

Fa [N]	M	CPC	
	75000	75000	←
	95000	95000	→



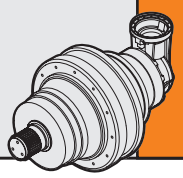




3500

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 3501	**4.00**	42.37	37.50	31.91	28.25	1500	54	193	-	254	157	165
	4.71	36.11	31.96	27.20	24.07							
PG 3502	**14.22**	41.95	37.11	31.58	27.96							
	17.14	36.05	31.92	27.17	24.04							
	20.17	36.11	31.96	27.20	24.07	2000	34	243	-	304	207	215
	26.35	32.04	28.36	24.12	21.37							
	31.76	24.46	21.65	18.42	16.30							
PG 3503	**53.73**	41.95	37.11	31.58	27.96							
	58.67	41.95	37.11	31.58	27.96							
	64.76	36.05	31.92	27.17	24.04							
	70.71	36.05	31.92	27.17	24.04							
	83.19	36.11	31.96	27.20	24.07							
	88.57	36.05	31.92	27.17	24.04							
	102.86	36.05	31.92	27.17	24.04	2800	23	259	-	320	223	231
	121.01	36.11	31.96	27.20	24.07							
	136.16	32.04	28.36	24.12	21.37							
	158.12	32.04	28.36	24.12	21.37							
	162.40	28.02	24.80	21.09	18.69							
	191.06	32.04	28.36	24.12	21.37							
	230.29	24.46	21.65	18.42	16.30							
PG 3504	**191.03**	41.95	37.11	31.58	27.96							
	208.59	41.95	37.11	31.58	27.96							
	230.26	41.95	37.11	31.58	27.96							
	251.43	41.95	37.11	31.58	27.96							
	277.55	36.05	31.92	27.17	24.04							
	303.06	36.05	31.92	27.17	24.04							
	328.53	35.81	31.63	26.92	23.79							
	362.67	36.05	31.92	27.17	24.04							
	379.59	36.05	31.92	27.17	24.04							
	440.82	36.05	31.92	27.17	24.04	2800	17	267	-	328	231	239
	496.00	35.56	31.47	26.75	23.60							
	576.00	36.05	31.92	27.17	24.04							
	626.65	33.02	29.21	24.85	22.05							
	694.29	36.05	31.92	27.17	24.04							
	762.48	32.04	28.36	24.12	21.37							
	816.81	36.11	31.96	27.20	24.07							
	986.97	33.02	29.21	24.85	22.05							
	1067.29	32.04	28.36	24.12	21.37							
	1289.65	32.04	28.36	24.12	21.37							

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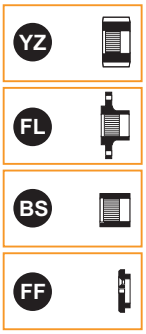
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 3502	**12.29**	27.63	24.55	18.65	15.16	2000	34	285	-	346	248	256
	14.45	32.10	27.51	20.90	16.98							
	18.67	17.69	16.65	15.36	13.80							
	21.96	20.52	19.31	17.82	15.46							
PGA 3503	**43.68**	41.95	37.11	31.58	27.96	2800	23	342	-	403	305	313
	52.65	36.05	31.92	27.17	24.04							
	66.37	41.95	37.11	31.58	27.96							
	80.00	36.05	31.92	27.17	24.04							
	94.12	36.11	31.96	27.20	24.07							
	122.98	32.04	28.36	24.12	21.37							
PGA 3504	**185.61**	41.95	37.11	31.58	27.96	2`800	17	299	-	360	263	271
	202.67	41.95	37.11	31.58	27.96							
	223.72	36.05	31.92	27.17	24.04							
	244.29	36.05	31.92	27.17	24.04							
	298.64	36.11	31.96	27.20	24.07							
	319.41	34.61	32.28	29.44	27.46							
	352.59	36.05	31.92	27.17	24.04							
	385.00	36.05	31.92	27.17	24.04							
	414.81	36.11	31.96	27.20	24.07							
	464.59	31.64	28.03	23.84	21.15							
	546.58	36.11	31.96	27.20	24.07							
	591.84	32.04	28.36	24.12	21.37							
	658.82	36.11	31.96	27.20	24.07							
	741.30	32.04	28.36	24.12	21.37							
	884.18	28.02	24.80	21.09	18.69							
	1040.21	32.04	28.36	24.12	21.37							
	1253.82	24.46	21.65	18.42	16.30							

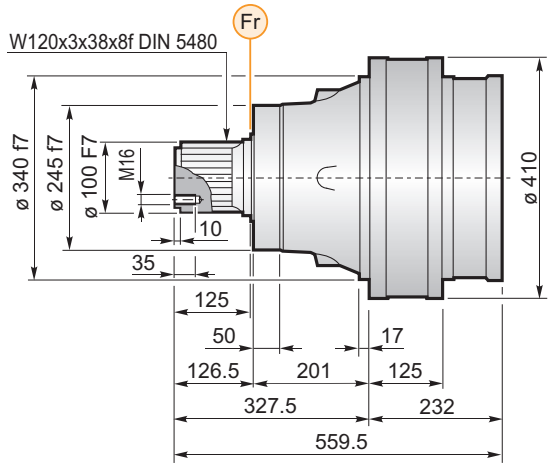
I rapporti contrassegnati possono essere forniti solo in versione **M**; per ulteriori informazioni contattare il sevizio tecnico COMER.
Ratios marked can only be supplied in version **M**; for more information please contact COMER technical service.

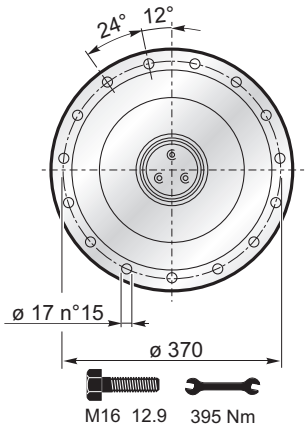
(n_2 x h = 20.000)

$M_{max} = M_c \times 1.65$

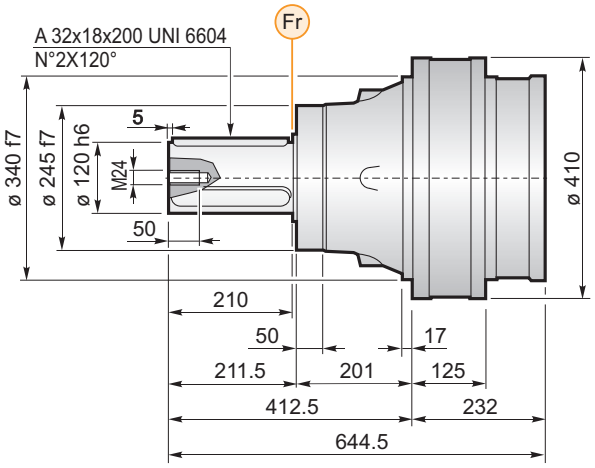
MS

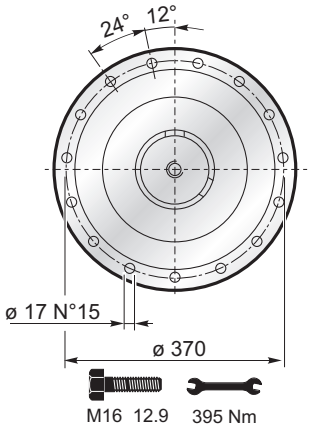

YZ
FL
BS
FF

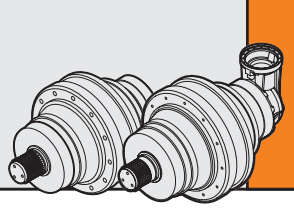

W120x3x38x8f DIN 5480
Fr
ø 340 f7
ø 245 f7
ø 100 F7
M16
10
35
125
50
17
126.5
201
125
327.5
232
559.5
ø 410


24°
12°
ø 17 n°15
ø 370
M16 12.9 395 Nm

MC

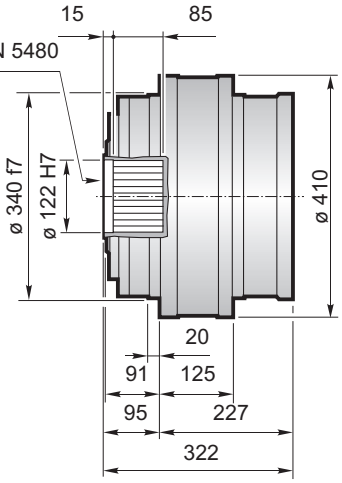

A 32x18x200 UNI 6604
N°2X120°
Fr
ø 340 f7
ø 245 f7
ø 120 h6
M24
5
50
210
50
17
211.5
201
125
412.5
232
644.5
ø 410

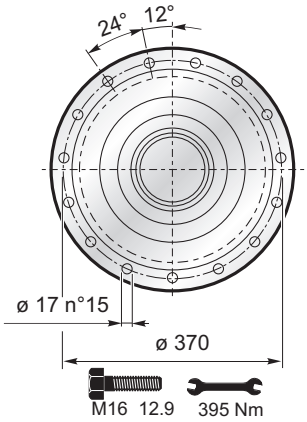

24°
12°
ø 17 N°15
ø 370
M16 12.9 395 Nm



F

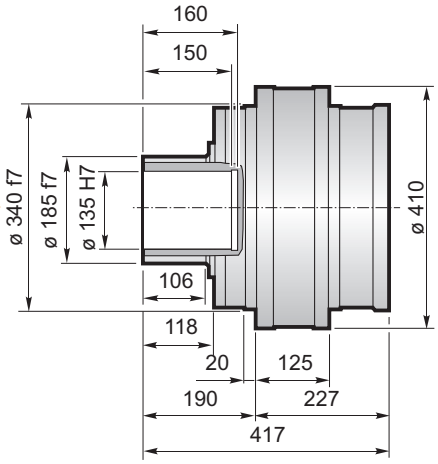
KB

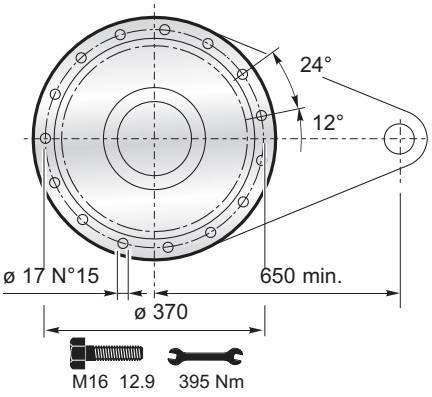


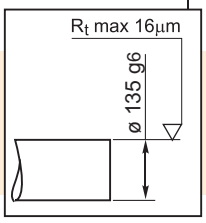


FS

GA



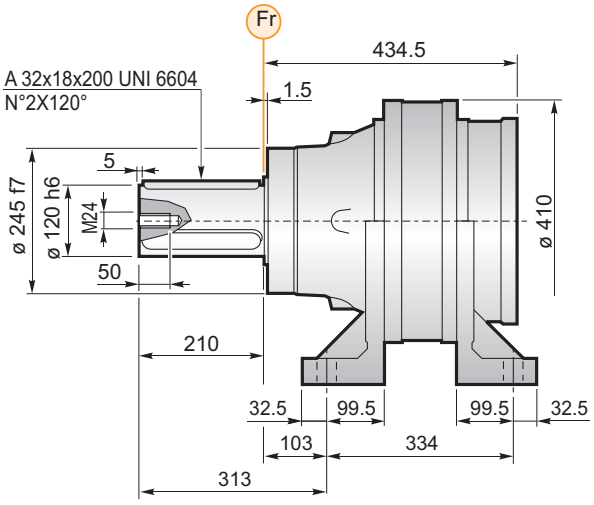


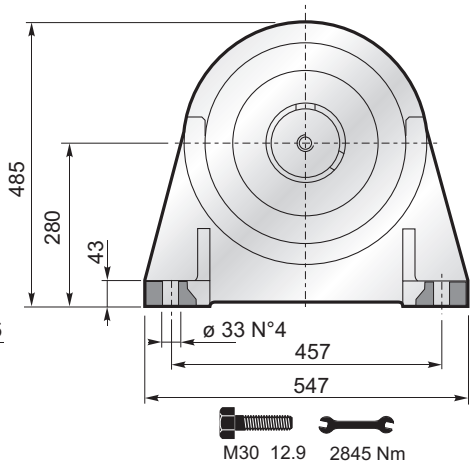


M_{max} = 52 kNm

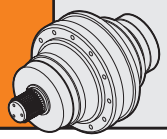
La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

CPC

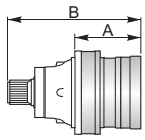




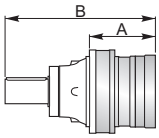
FL YZ BS FF KB GA → B-108



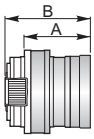
3500



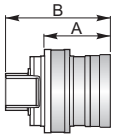
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG 3501	232	559.5				
PG 3502	319	646.5		•		
PG 3503	390.5	718	•	o	•	
PG 3504	451.5	779	•			•



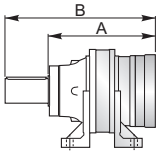
	PG ...MC					
	A	B	RA	RB	EF	EDF
PG 3501	232	644.5				
PG 3502	319	731.5		•		
PG 3503	390.5	803	•	o	•	
PG 3504	451.5	864	•			•



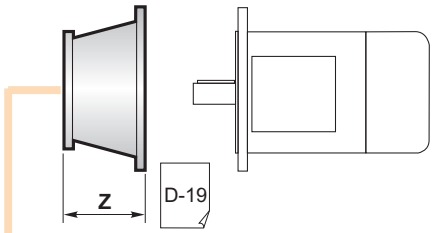
	PG ...F					
	A	B	RA	RB	EF	EDF
PG 3501	227	322				
PG 3502	314	409		•		
PG 3503	385.5	480.5	•	o	•	
PG 3504	446.5	541.5	•			•

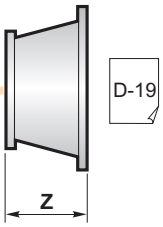


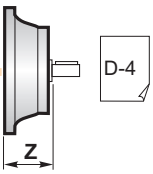
	PG ...FS					
	A	B	RA	RB	EF	EDF
PG 3501	227	417				
PG 3502	314	504		•		
PG 3503	385.5	575.5	•	o	•	
PG 3504	446.5	636.5	•			•

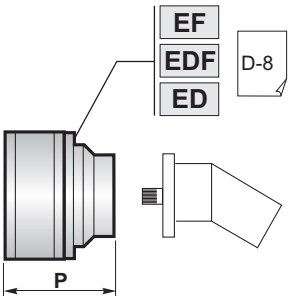


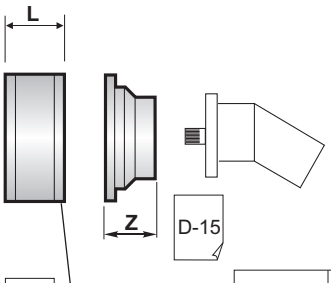
	PG ...CPC					
	A	B	RA	RB	EF	EDF
PG 3501	434.5	644.5				
PG 3502	521.5	731.5		•		
PG 3503	593	803	•	o	•	
PG 3504	654	864	•			•







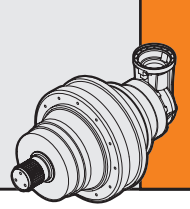


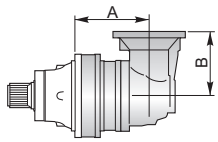


	L
RA	81
RB	125

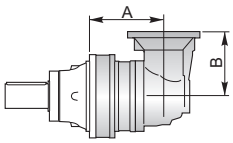
A+13.5	B+13.5	o

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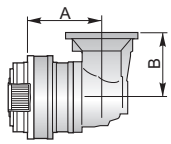




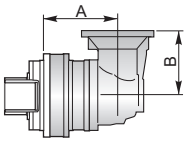
PGA ...MS	A	B	RA	RB	EF
PGA 3502	297	315		•	
PGA 3503	454	240	•	o	•
PGA 3504	492	240	•		•



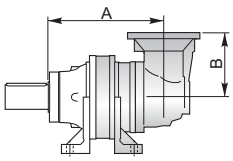
PGA ...MC	A	B	RA	RB	EF
PGA 3502	297	315		•	
PGA 3503	454	240	•	o	•
PGA 3504	492	240	•		•



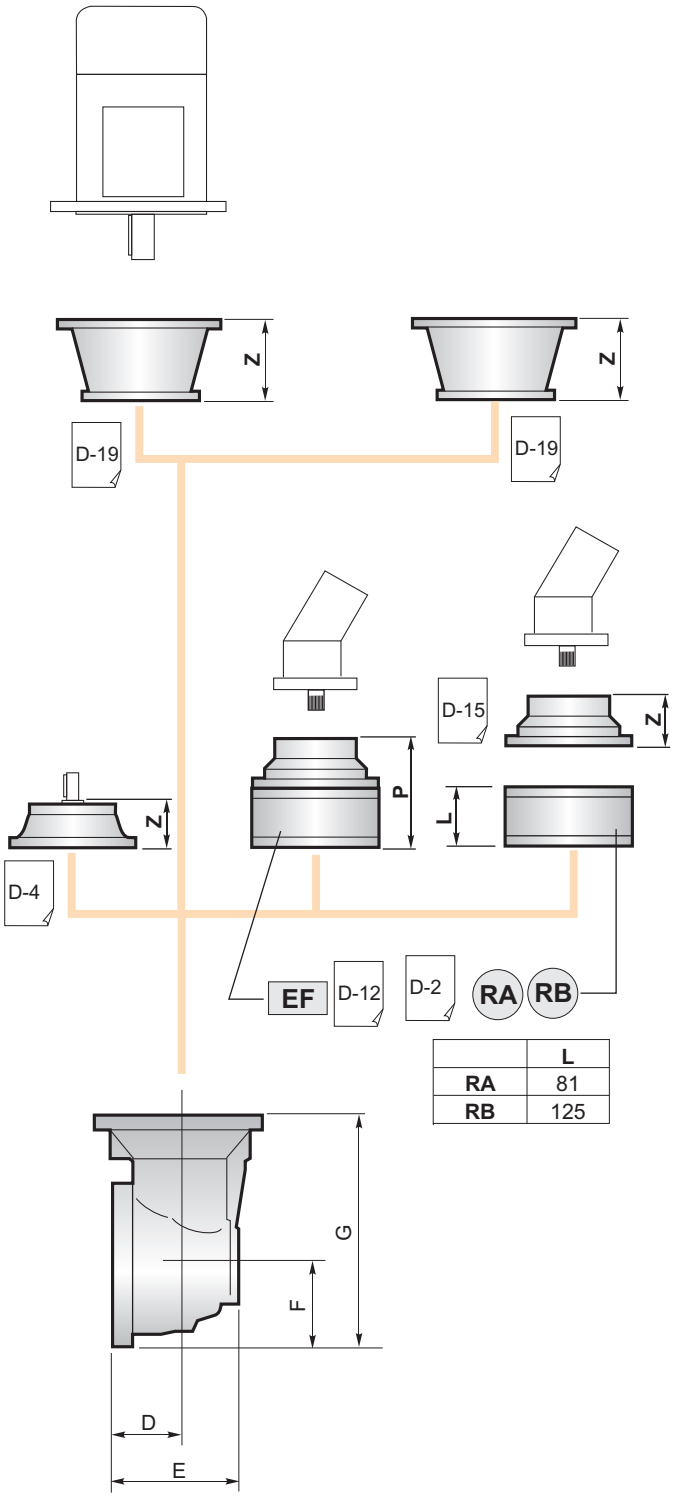
PGA ...F	A	B	RA	RB	EF
PGA 3502	287	315		•	
PGA 3503	444	240	•	o	•
PGA 3504	482	240	•		•



PGA ...FS	A	B	RA	RB	EF
PGA 3502	287	315		•	
PGA 3503	444	240	•	o	•
PGA 3504	482	240	•		•



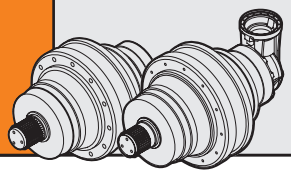
PGA ...CPC	A	B	RA	RB	EF
PGA 3502	499.5	315		•	
PGA 3503	656.5	240	•	o	•
PGA 3504	694.5	240	•		•



	L
RA	81
RB	125

	D	E	F	G
PGA 3502	88	256	235	550
PGA 3503	88	256	235	550
PGA 3504	88	164	140	380

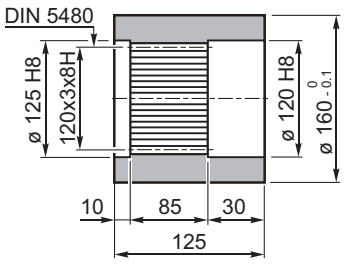
A	B+16.5	o



3500

BS

Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



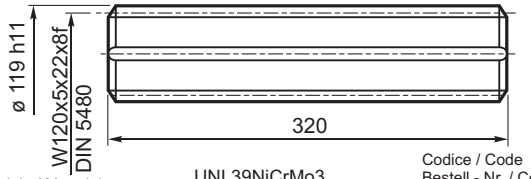
Materiale / Material
Material / Matière
Material / Material

UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código
1719.104.076

KB

Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada



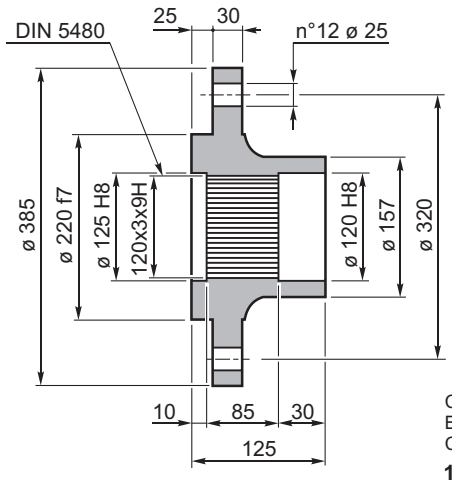
Materiale / Material
Material / Matière
Material / Material

UNI 39NiCrMo3
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

Codice / Code
Bestell - Nr. / Code
Código / Código
1703.588.042

FL

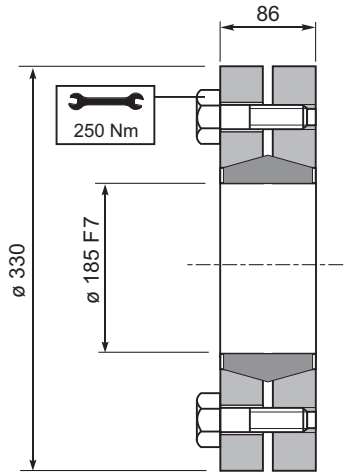
Flangia / Flange
Flansch / Bride
Brida / Flange



Codice / Code
Bestell - Nr. / Code
Código / Código
1719.103.098

GA

Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



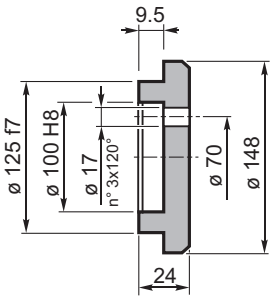
Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

52 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.185.000

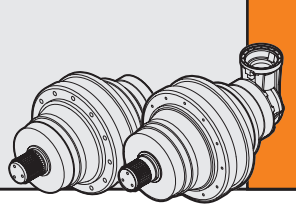
FF

Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código
5701.005.000

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CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

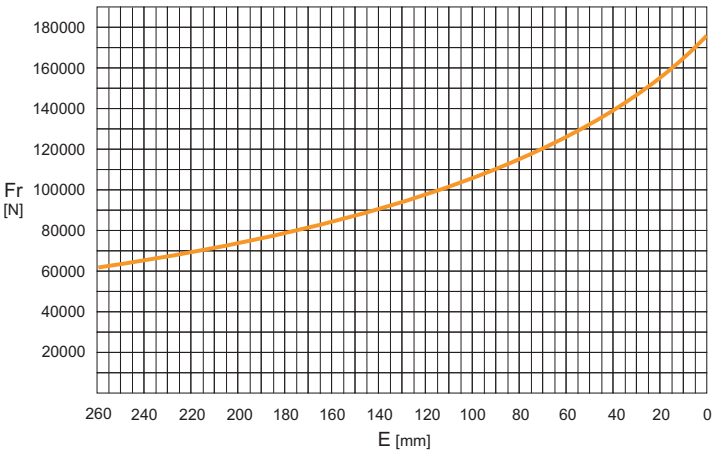
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

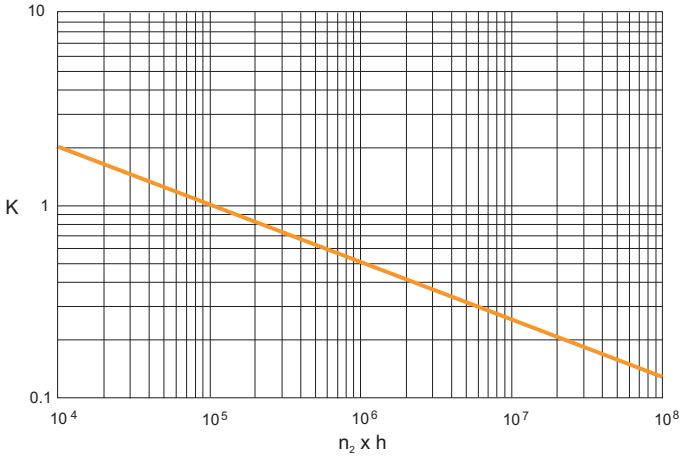
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

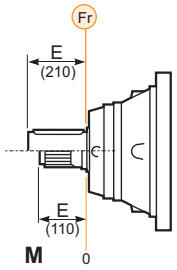
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

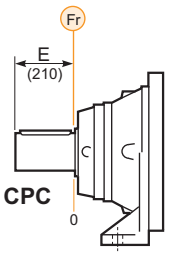
M - CPC*





	n x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			





CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

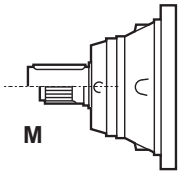
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

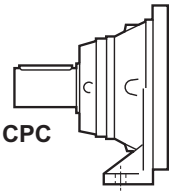
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

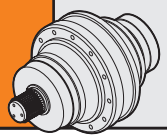
CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

Fa [N]	M	CPC	
	80000	80000	←
	100000	100000	→

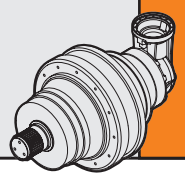






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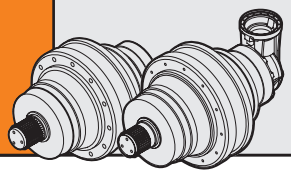
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 5001	**3.95**	68.69	60.80	51.74	45.80							
	5.06	50.28	44.50	37.87	33.52	1200	60	314	-	418	256	269
	6.00	40.11	35.50	30.21	26.74							
PG 5002	**14.06**	61.30	54.25	46.15	40.85							
	16.95	53.41	47.27	40.22	35.62							
	21.70	50.28	44.50	37.87	33.52							
	25.71	40.11	35.50	30.21	26.74	2000	38	373	-	477	315	328
	28.35	50.07	44.32	37.71	33.39							
	33.60	40.11	35.50	30.21	26.74							
	40.50	40.11	35.50	30.21	26.74							
PG 5003	**53.12**	47.97	42.49	36.17	32.01							
	64.03	53.41	47.27	40.22	35.62							
	74.25	50.28	44.50	37.87	33.52							
	81.96	50.28	44.50	37.87	33.52							
	89.50	50.28	44.50	37.87	33.52							
	107.10	50.07	44.32	37.71	33.39							
	116.94	50.07	44.32	37.71	33.39							
	130.18	44.82	39.71	33.76	29.96	2800	25	389	-	493	331	344
	146.48	50.07	44.32	37.71	33.39							
	154.29	40.11	35.50	30.21	26.74							
	170.10	50.07	44.32	37.71	33.39							
	205.54	43.72	38.68	32.90	29.20							
	243.60	40.11	35.50	30.21	26.74							
	293.63	40.11	35.50	30.21	26.74							
PG 5004	**318.21**	50.28	44.50	37.87	33.52							
	351.28	50.28	44.50	37.87	33.52							
	383.56	50.28	44.50	37.87	33.52							
	415.80	50.07	44.32	37.71	33.39							
	459.00	50.07	44.32	37.71	33.39							
	520.80	50.07	44.32	37.71	33.39							
	557.91	44.82	39.71	33.76	29.96							
	599.76	50.07	44.32	37.71	33.39							
	627.75	50.28	44.50	37.87	33.52							
	722.93	48.50	42.92	36.48	32.19	2800	20	397	-	501	339	352
	789.37	50.07	44.32	37.71	33.39							
	878.71	44.82	39.71	33.76	29.96							
	952.56	50.07	44.32	37.71	33.39							
	1044.00	40.11	35.50	30.21	26.74							
	1148.18	50.07	44.32	37.71	33.39							
	1258.39	40.11	35.50	30.21	26.74							
	1387.38	43.72	38.68	32.90	29.20							
	1644.30	40.11	35.50	30.21	26.74							
	1981.97	40.11	35.50	30.21	26.74							



	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 5002	**12.15**	27.34	24.35	18.51	15.04	2000	38	364	-	468	306	319
	15.55	34.34	28.95	22.00	17.87							
	18.43	40.11	32.60	24.78	20.13							
	23.63	21.94	20.64	19.05	16.27							
	28.00	25.61	24.10	22.24	18.33							
PGA 5003	**62.18**	26.28	23.93	19.16	15.56	2800	25	410	-	514	293	306
	76.50	31.44	28.63	22.15	17.99							
	97.94	38.93	34.65	26.33	21.39							
	118.05	38.08	33.69	28.67	24.38							
	139.91	40.11	35.50	30.21	26.74							
	220.50	25.89	24.15	22.03	20.55							
PGA 5004	**241.51**	51.01	45.19	38.50	34.04	2800	20	429	-	533	371	384
	289.01	40.85	36.16	30.77	27.25							
	309.17	50.28	44.50	37.87	33.52							
	366.43	40.11	35.50	30.21	26.74							
	395.26	40.85	36.16	30.77	27.25							
	459.01	40.85	36.16	30.77	27.25							
	497.35	40.85	36.16	30.77	27.25							
	554.64	35.67	31.56	26.84	23.82							
	587.62	50.07	44.32	37.71	33.39							
	636.69	50.07	44.32	37.71	33.39							
	708.75	44.82	39.71	33.76	29.96							
	797.48	50.07	44.32	37.71	33.39							
	855.85	38.08	33.69	28.67	25.39							
	945.16	40.11	35.50	30.21	26.74							
	1139.25	40.11	35.50	30.21	26.74							
	1326.27	40.11	35.50	30.21	26.74							

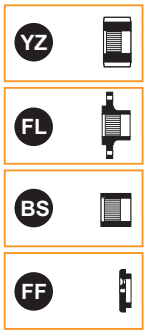


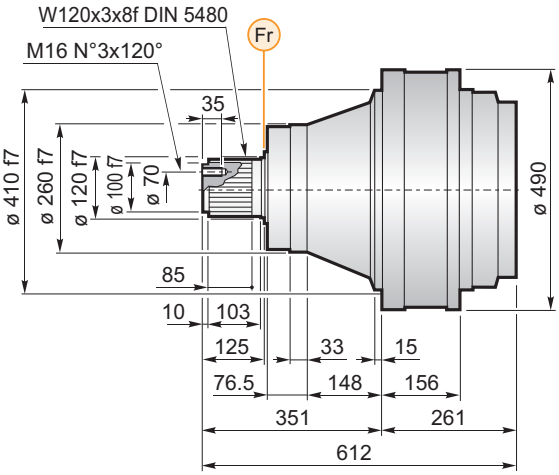
$$M_{max} = M_c \times 2 \quad (n_2 \times h = 20.000)$$

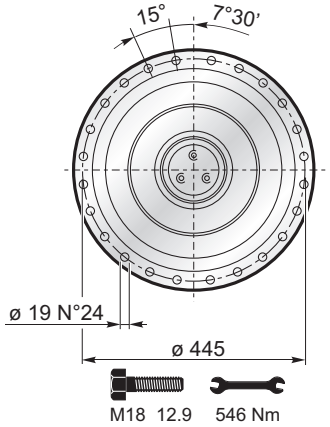


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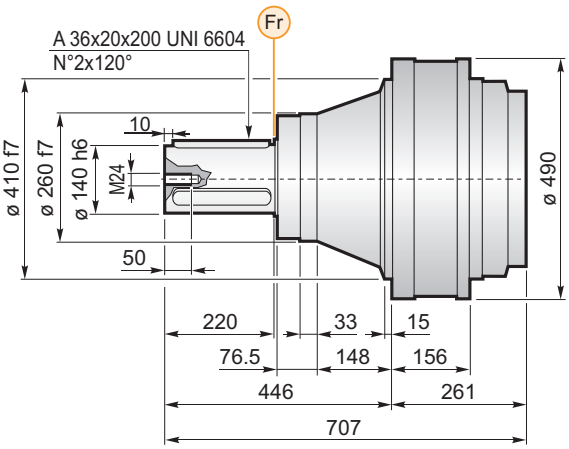
MS

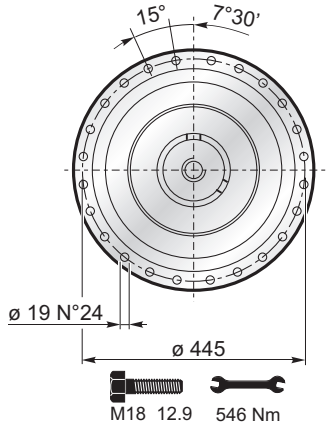




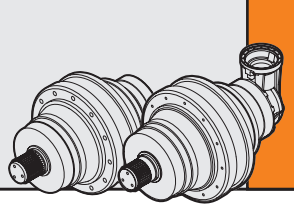


MC



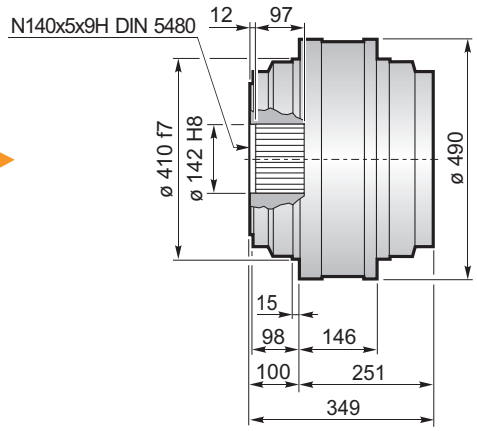


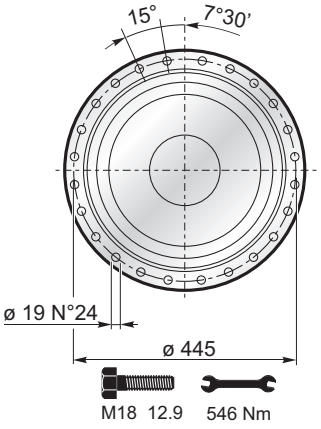
haumea mechanics on demand



F

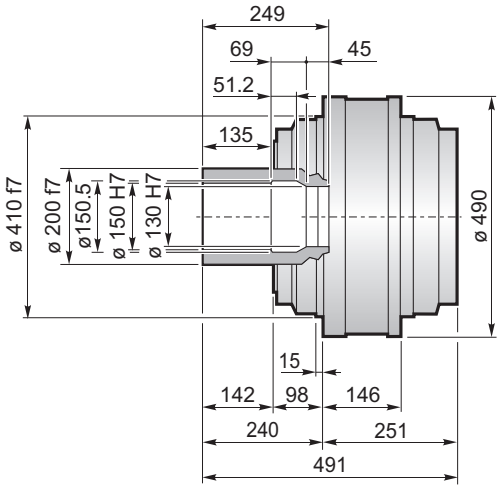
KB →

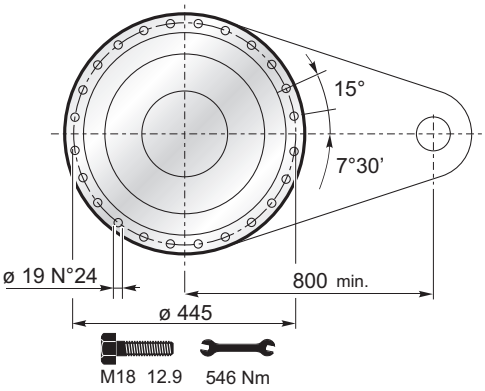


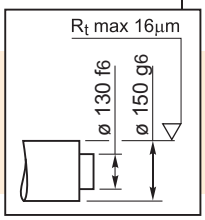


FS

GA →



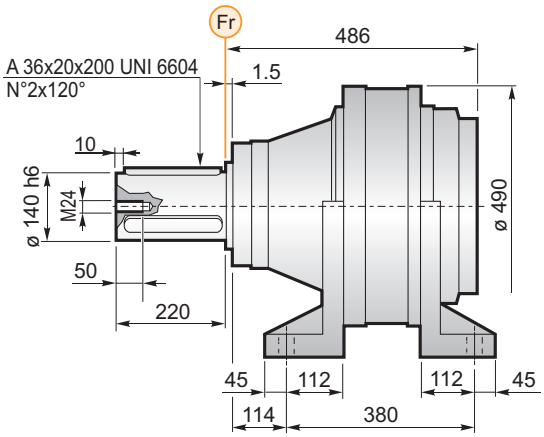


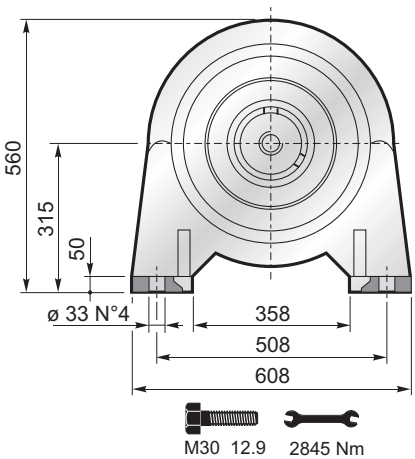


M_{max} = 92.5 kNm

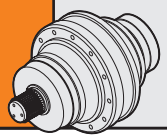
La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

CPC

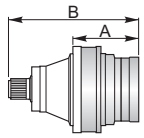




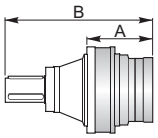
FL YZ BS FF KB GA → B-116



5000



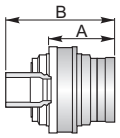
PG ...MS	A	B	RA	RB	EF	EDF
PG 5001	261	612				
PG 5002	368	719		•		
PG 5003	439.5	790.5	•	o	•	
PG 5004	500.5	851.5	•			•



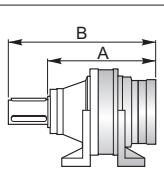
PG ...MC	A	B	RA	RB	EF	EDF
PG 5001	261	707				
PG 5002	368	814		•		
PG 5003	439.5	885.5	•	o	•	
PG 5004	500.5	946.5	•			•



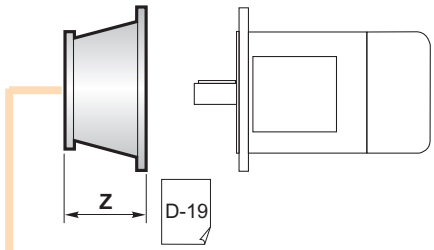
PG ...F	A	B	RA	RB	EF	EDF
PG 5001	251	349				
PG 5002	358	456		•		
PG 5003	429.5	527.5	•	o	•	
PG 5004	490.5	588.5	•			•

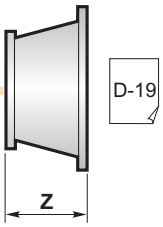


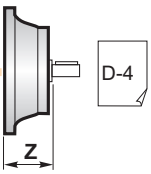
PG ...FS	A	B	RA	RB	EF	EDF
PG 5001	251	491				
PG 5002	358	598		•		
PG 5003	429.5	669.5	•	o	•	
PG 5004	490.5	730.5	•			•

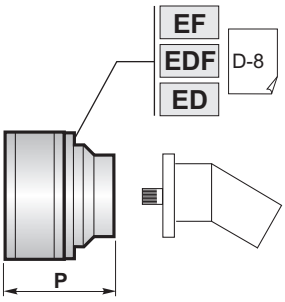


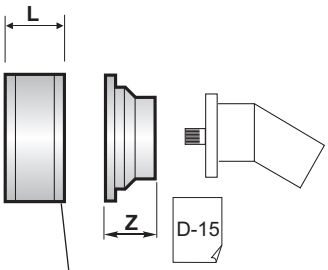
PG ...CPC	A	B	RA	RB	EF	EDF
PG 5001	486	706				
PG 5002	593	813		•		
PG 5003	664.5	884.5	•	o	•	
PG 5004	725.5	945.5	•			•







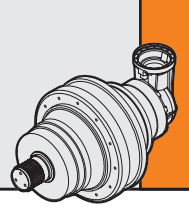


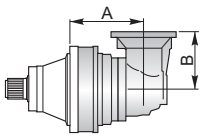


	L
RA	81
RB	125

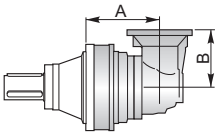
A+13.5	B+13.5	o

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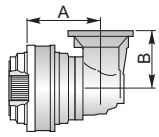




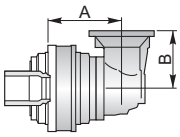
PGA ...MS	A	B	RA	RB	EF
PGA 5002	442	315		•	
PGA 5003	456	240	•	o	•
PGA 5004	541	240	•		•



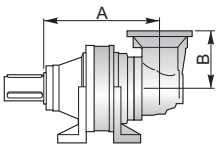
PGA ...MC	A	B	RA	RB	EF
PGA 5002	442	315		•	
PGA 5003	456	240	•	o	•
PGA 5004	541	240	•		•



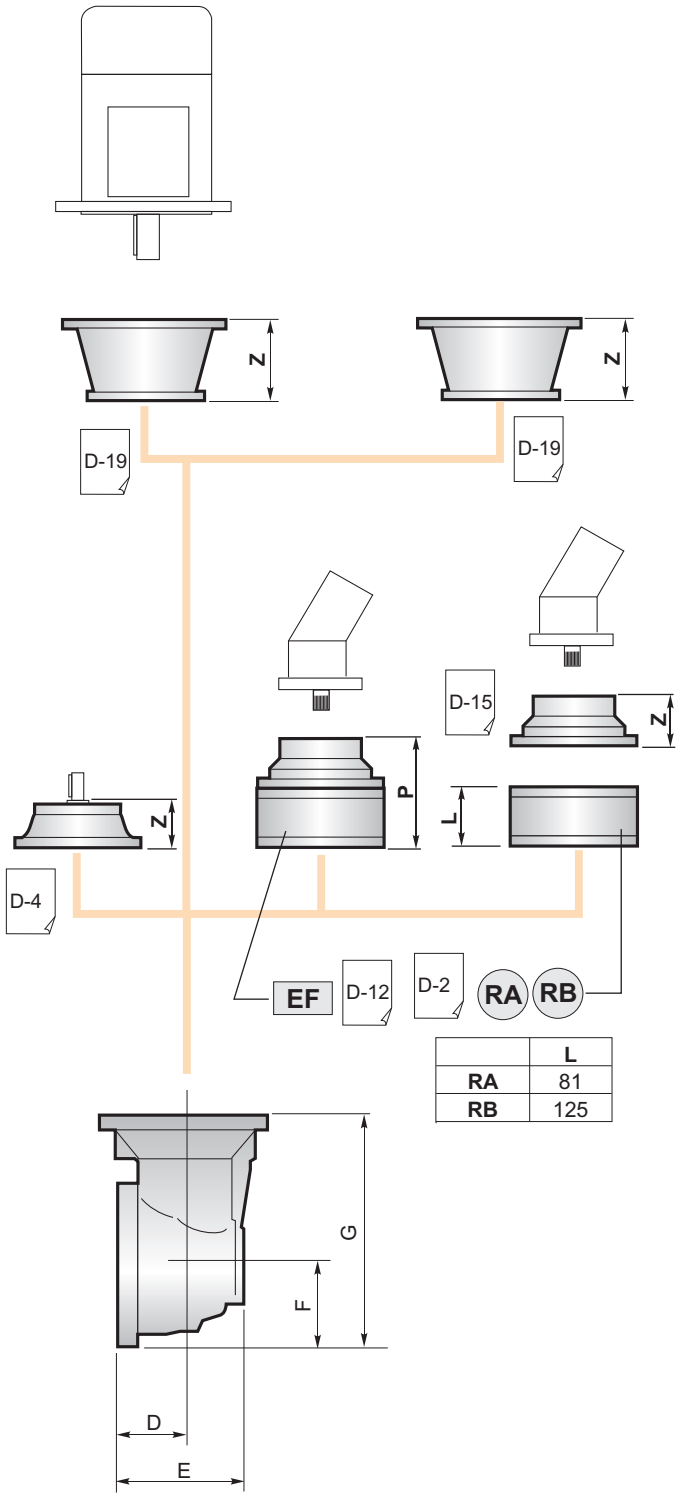
PGA ...F	A	B	RA	RB	EF
PGA 5002	432	315		•	
PGA 5003	446	240	•	o	•
PGA 5004	531	240	•		•



PGA ...FS	A	B	RA	RB	EF
PGA 5002	432	315		•	
PGA 5003	446	240	•	o	•
PGA 5004	531	240	•		•



PGA ...CPC	A	B	RA	RB	EF
PGA 5002	667	315		•	
PGA 5003	681	240	•	o	•
PGA 5004	766	240	•		•



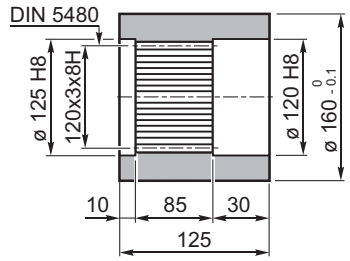
	L
RA	81
RB	125

	D	E	F	G
PGA 5002	88	256	235	550
PGA 5003	88	164	140	380
PGA 5004	88	164	140	380

	B+16.5	o

BS

Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



Materiale / Material
Material / Matière
Material / Material

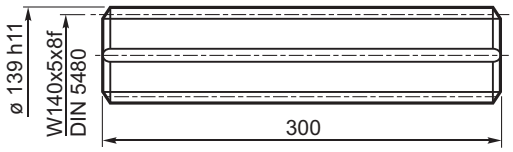
UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código

1719.104.076

KB

Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada



Materiale / Material
Material / Matière
Material / Material

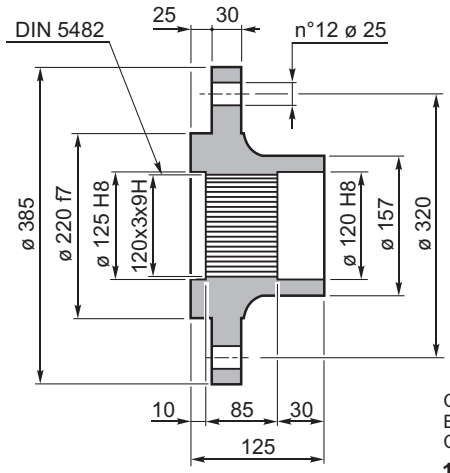
UNI 16CrNi4
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

Codice / Code
Bestell - Nr. / Code
Código / Código

1703.564.042

FL

Flangia / Flange
Flansch / Bride
Brida / Flange

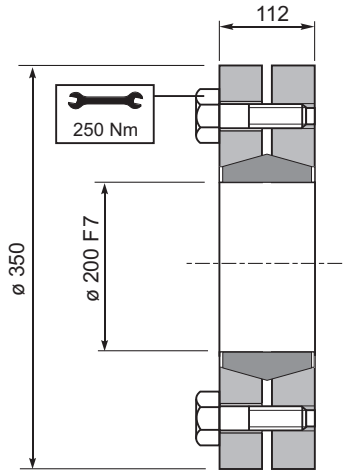


Codice / Code
Bestell - Nr. / Code
Código / Código

1719.103.098

GA

Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

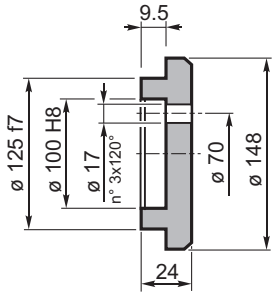
92,5 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código

9015.200.000

FF

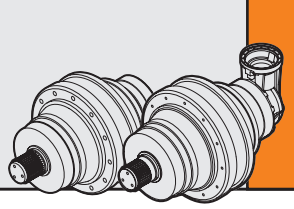
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código

5701.005.000

haumea mechanics on demand



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

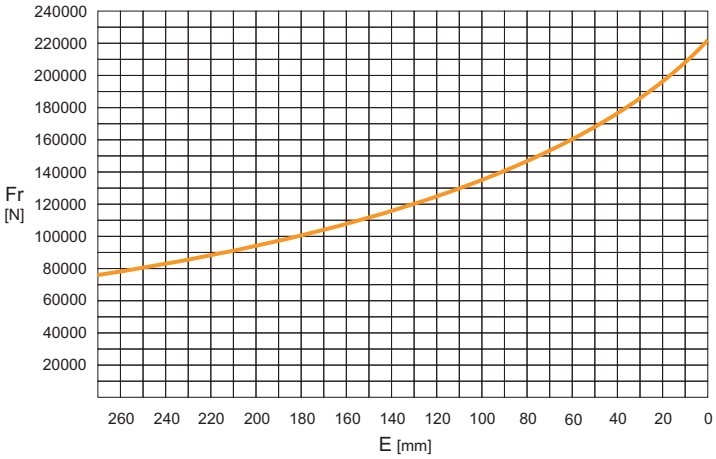
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

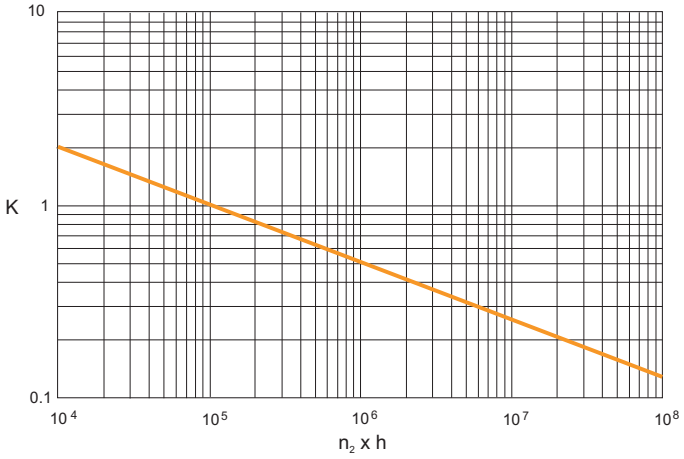
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

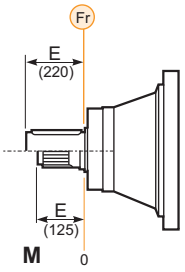
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

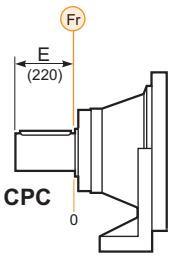
M - CPC*





	n x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			





CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

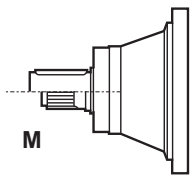
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

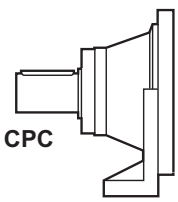
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

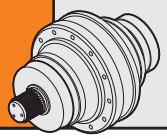
CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

Fa [N]	M	CPC	
	80000	80000	←
	120000	120000	→

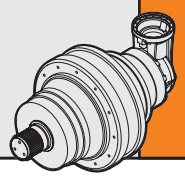






6500

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	**20.000**	**50.000**	**100.000**	[min^{-1}]	[kW]	**M**	**P**	**CPC**	**F**	**FS**
PG 6501	**3.83**	78.31	69.31	58.98	52.21	1000	60	334	-	438	276	290
PG 6502	**15.30**	78.31	69.31	58.98	52.21	1500	50	450	-	554	392	406
	19.90	78.31	69.31	58.98	52.21							
	23.91	60.75	53.78	45.77	40.50							
PG 6503	**56.12**	70.68	62.57	53.21	47.15	2500	35	477	-	581	419	433
	67.78	64.53	57.14	48.58	43.05							
	72.95	78.31	69.31	58.98	52.21							
	88.11	78.31	69.31	58.98	52.21							
	99.48	70.37	62.30	53.00	46.92							
	115.39	59.53	52.67	44.81	39.72							
	138.70	60.75	53.78	45.77	40.50							
	167.39	56.01	49.57	42.23	37.34							
PG 6504	**211.99**	70.68	62.57	53.21	47.15	2800	25	489	-	593	431	445
	231.48	70.68	62.57	53.21	47.15							
	275.59	78.31	69.31	58.98	52.21							
	300.92	78.31	69.31	58.98	52.21							
	332.86	78.31	69.31	58.98	52.21							
	363.45	78.31	69.31	58.98	52.21							
	410.35	70.37	62.30	53.00	46.92							
	455.23	78.31	69.31	58.98	52.21							
	513.97	70.37	62.30	53.00	46.92							
	596.87	70.37	62.30	53.00	46.92							
	638.79	71.09	63.07	53.59	47.39							
	721.22	70.37	62.30	53.00	46.92							
	836.61	59.53	52.67	44.81	39.72							
	1005.54	60.75	53.78	45.77	40.50							

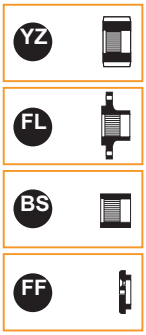


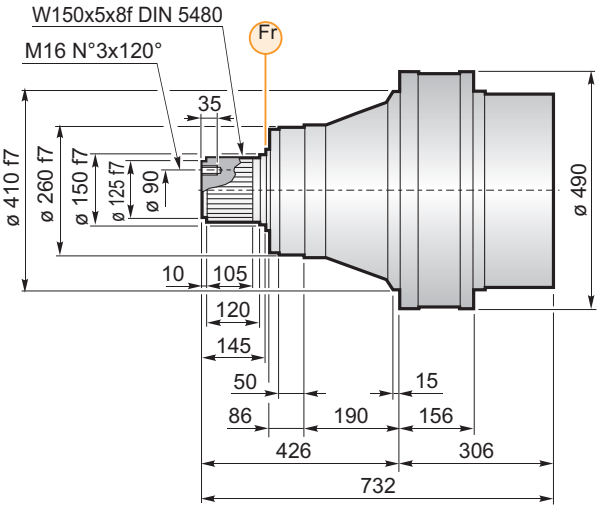
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 6503	**47.01**	74.97	60.91	46.29	37.61	2500	35	539	-	643	481	495
	61.11	78.31	69.31	55.62	45.19							
	71.42	58.38	54.93	42.18	34.24							
	92.85	74.16	66.76	50.68	41.15							
	111.59	60.75	53.78	45.77	40.50							
PGA 6504	**193.86**	66.72	54.20	41.19	33.46	2800	25	514	-	618	456	470
	234.14	64.53	57.14	47.01	38.19							
	252.01	78.31	65.13	49.49	40.20							
	304.38	78.31	69.31	56.48	45.89							
	343.65	70.37	62.30	53.00	46.92							
	413.04	60.75	53.78	45.77	40.50							
	479.13	60.75	53.78	45.77	40.50							
	576.57	57.69	53.78	45.77	40.50							
	650.97	60.75	53.78	45.77	40.50							
	755.12	60.75	53.78	45.77	40.50							
	911.35	56.01	49.57	42.23	37.34							

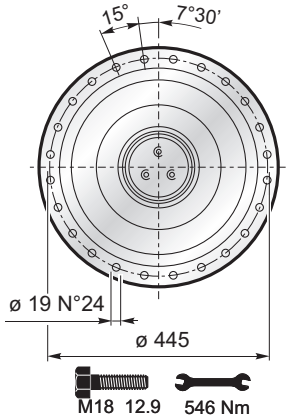


$$M_{max} = M_c \times 2 \quad (n_2 \times h = 20.000)$$

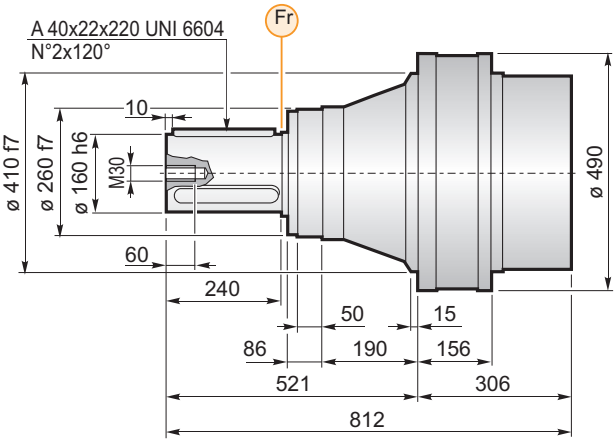
MS

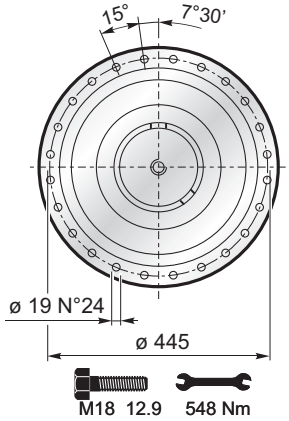

YZ
FL
BS
FF

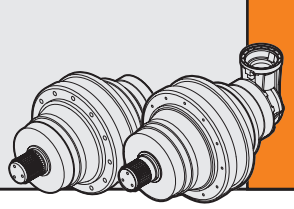

W150x5x8f DIN 5480
M16 N°3x120°
Fr
35
ø 410 f7
ø 260 f7
ø 150 f7
ø 125 f7
ø 90
ø 490
10
105
120
145
50
15
86
190
156
426
306
732


15°
7°30'
ø 19 N°24
ø 445
M18 12.9
546 Nm

MC

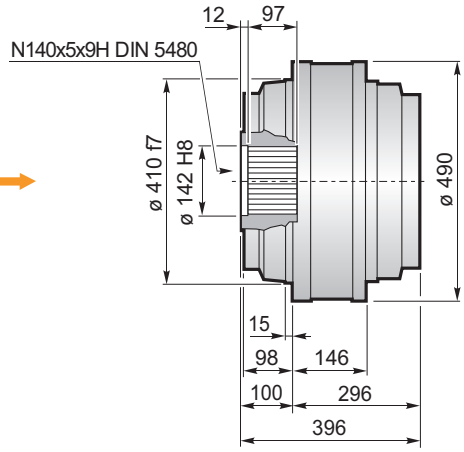

A 40x22x220 UNI 6604
N°2x120°
Fr
10
ø 410 f7
ø 260 f7
ø 160 h6
M30
ø 490
60
240
50
15
86
190
156
521
306
812

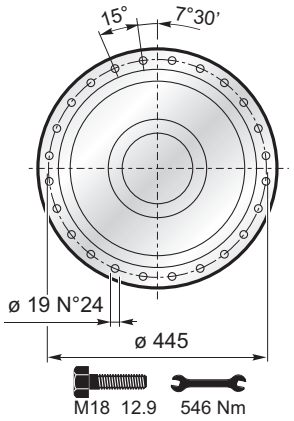

15°
7°30'
ø 19 N°24
ø 445
M18 12.9
548 Nm



F

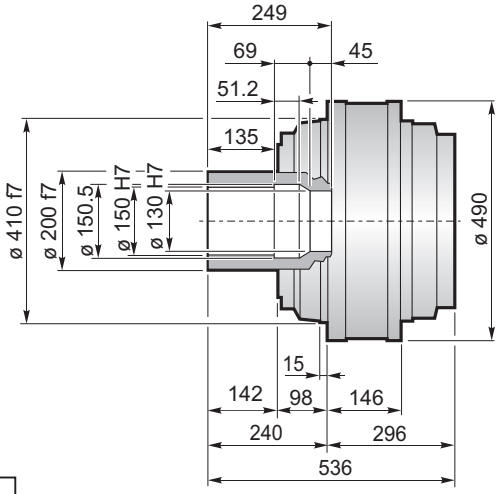
KB

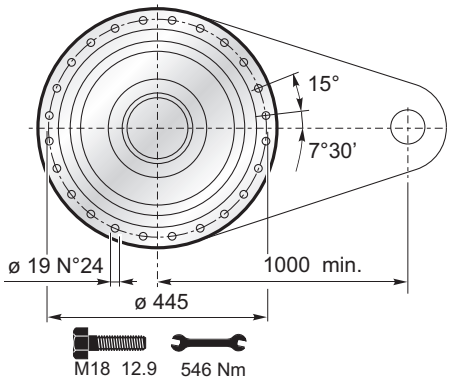


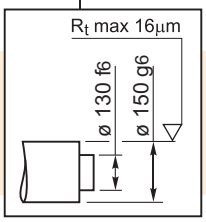


FS

GA



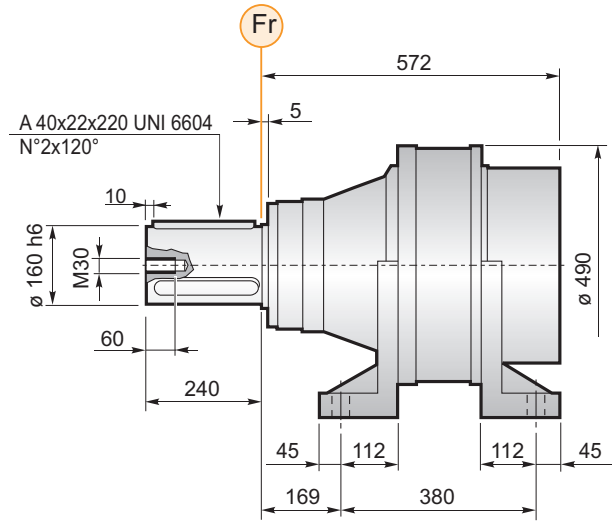


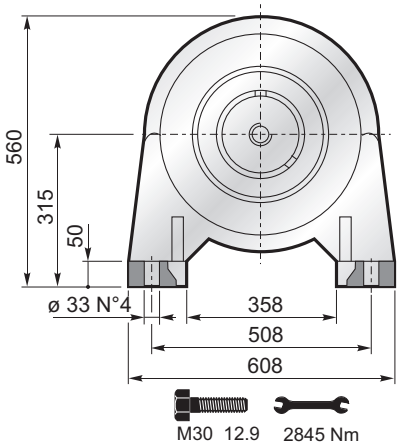


M_{max} = 92.5 kNm

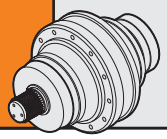
La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

CPC

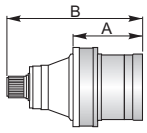




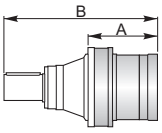
FL YZ BS FF KB GA → B-124



6500



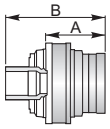
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG 6501	306	732				
PG 6502	488	914				
PG 6503	582	1008		•		
PG 6504	641.5	1067.5	•	o	•	



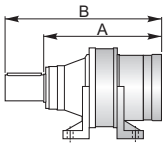
	PG ...MC					
	A	B	RA	RB	EF	EDF
PG 6501	306	812				
PG 6502	488	994				
PG 6503	582	1088		•		
PG 6504	641.5	1147.5	•	o	•	



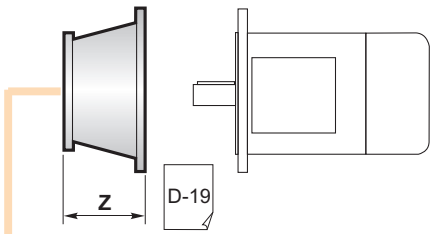
	PG ...F					
	A	B	RA	RB	EF	EDF
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PG 6502	478	578				
PG 6503	572	672		•		
PG 6504	631.5	631.5	•	o	•	

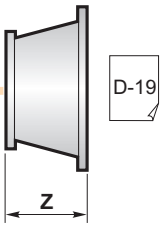


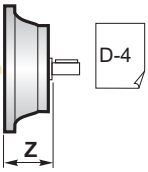
	PG ...FS					
	A	B	RA	RB	EF	EDF
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PG 6502	478	718				
PG 6503	572	812		•		
PG 6504	631.5	871.5	•	o	•	

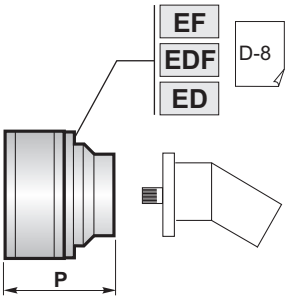


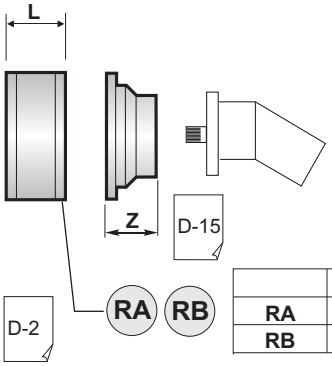
	PG ...CPC					
	A	B	RA	RB	EF	EDF
PG 6501	572	812				
PG 6502	754	994				
PG 6503	848	1088		•		
PG 6504	907.5	1147.5	•	o	•	







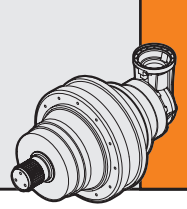


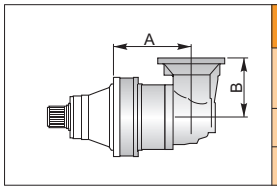


	L
RA	81
RB	125

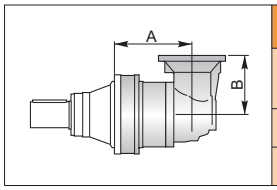
A+13.5	B+13.5	o

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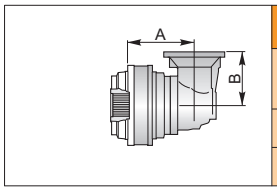




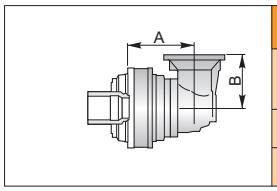
PGA ...MS	A	B	RA	RB	EF
PGA 6503	568	315		•	
PGA 6504	670	240	•	o	•



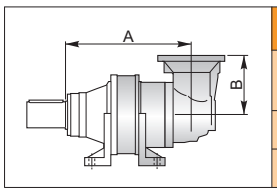
PGA ...MC	A	B	RA	RB	EF
PGA 6503	568	315		•	
PGA 6504	670	240	•	o	•



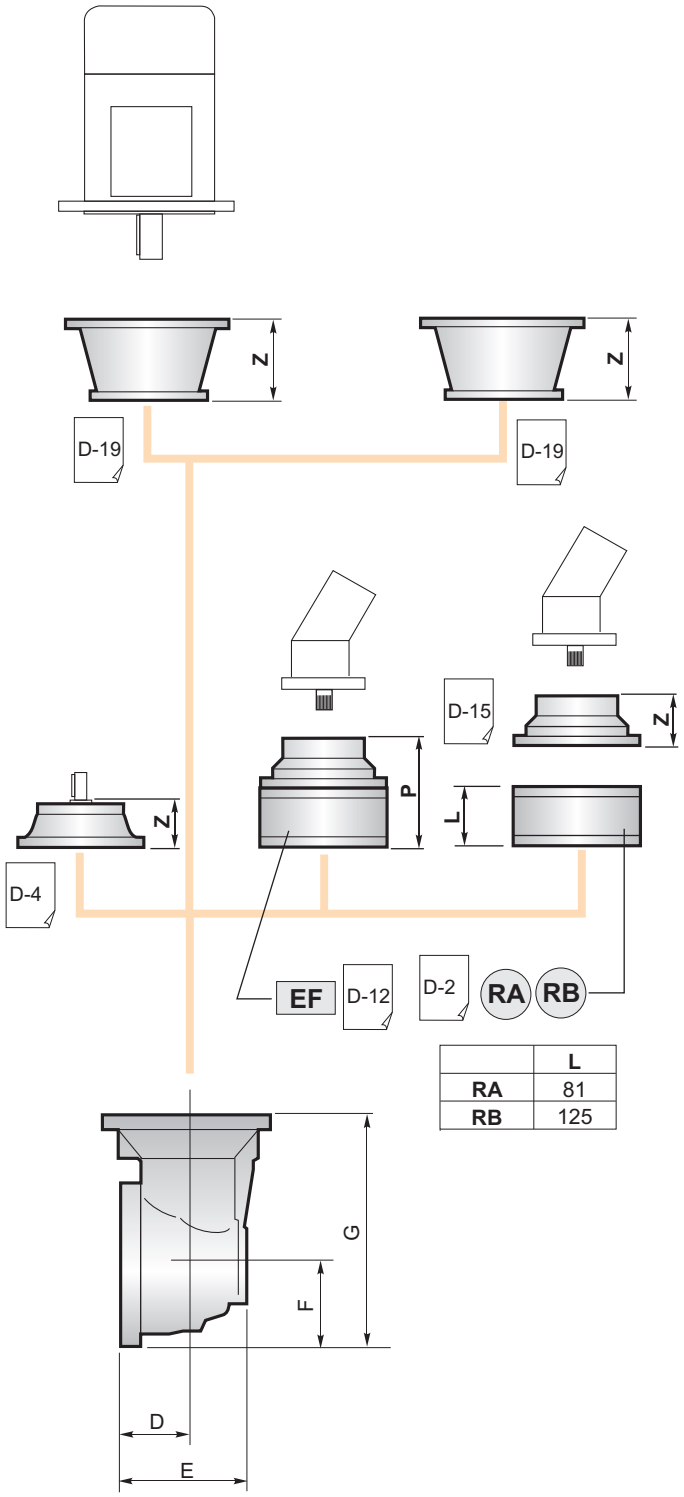
PGA ...F	A	B	RA	RB	EF
PGA 6503	558	315		•	
PGA 6504	660	240	•	o	•



PGA ...FS	A	B	RA	RB	EF
PGA 6503	558	315		•	
PGA 6504	660	240	•	o	•



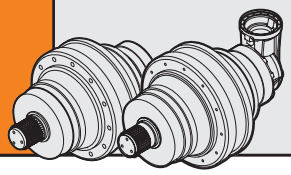
PGA ...CPC	A	B	RA	RB	EF
PGA 6503	834	315		•	
PGA 6504	936	240	•	o	•



	L
RA	81
RB	125

	D	E	F	G
PGA 6503	88	256	235	550
PGA 6504	88	164	140	380

	B+16.5	o

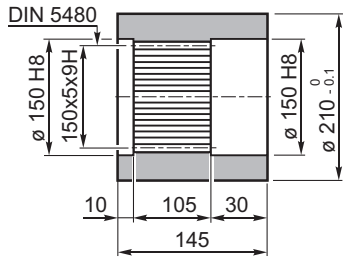


6500

BS

Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada





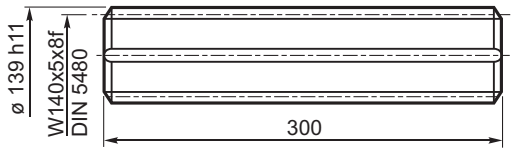
Materiale / Material
Material / Matière
Material / Material
UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código
1720.102.076

KB

Barra scanalata / Splined rod
Außenverzahnte Welle / Arbre cannelé
Barra ranurada / Barra estriada





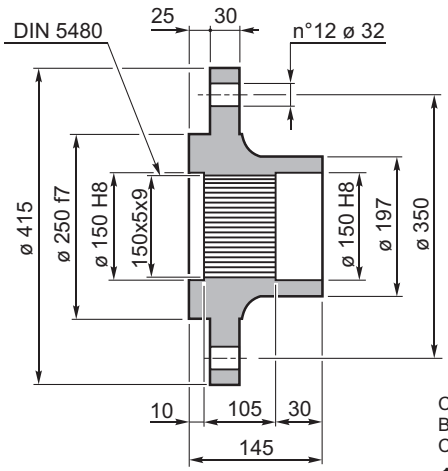
Materiale / Material
Material / Matière
Material / Material
UNI 16CrNi4
bonificato / hardened and tempered
vergütet / bonifié
bonificado / endurecido e temperado

Codice / Code
Bestell - Nr. / Code
Código / Código
1703.564.042

FL

Flangia / Flange
Flansch / Bride
Brida / Flange

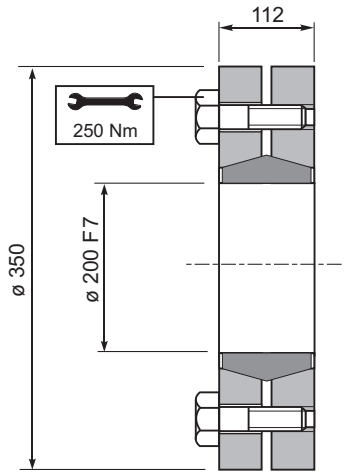




Codice / Code
Bestell - Nr. / Code
Código / Código
1720.106.098

GA

Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

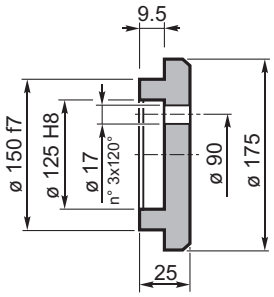
92,5 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código
9015.200.000

FF

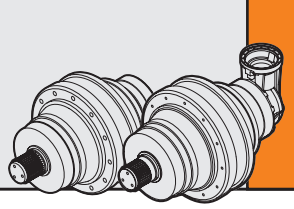
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente





Codice / Code
Bestell - Nr. / Code
Código / Código
5701.043.000

haumea mechanics on demand



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

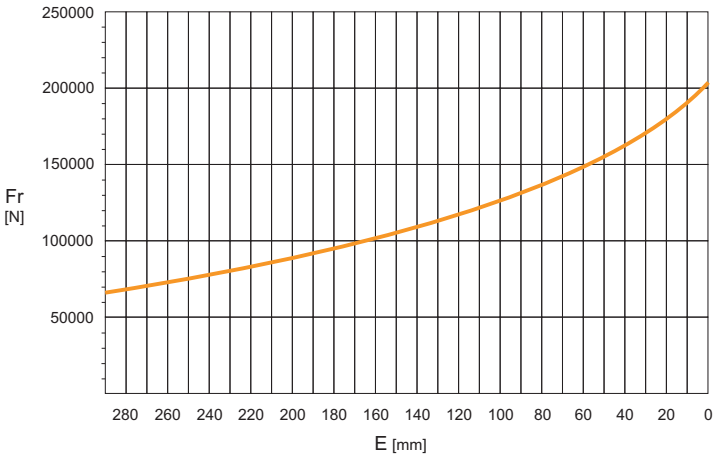
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

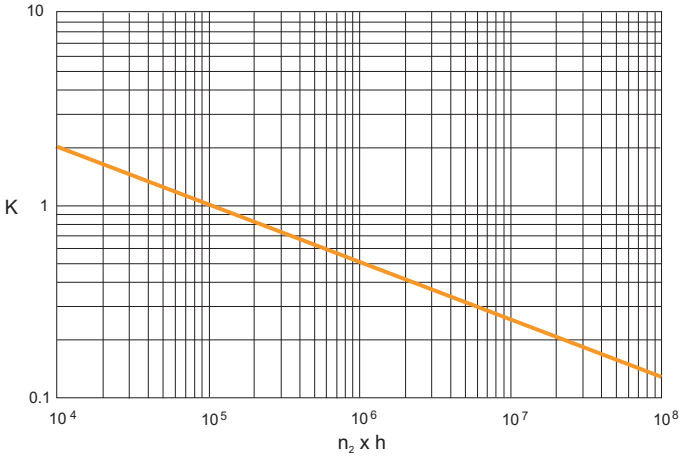
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

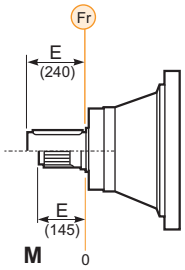
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

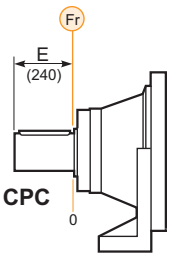
M - CPC*





	n x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			





CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

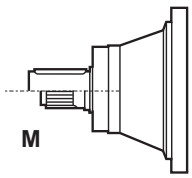
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

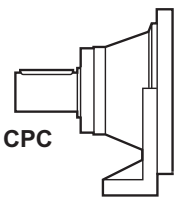
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

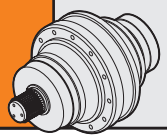
CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

Fa [N]	M	CPC	
	50000	50000	←
	100000	100000	→

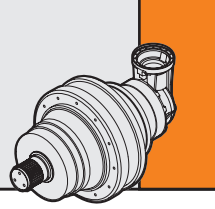






9000

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 9001	**4.04**	111.85	99.00	84.25	74.57	750	80	519	-	691	423	445
	5.12	89.26	79.00	67.23	59.50							
PG 9002	**16.17**	106.58	94.34	80.30	71.06	1500	65	635	.	807	539	561
	20.47	89.26	79.00	67.23	59.50							
	21.03	82.41	72.93	62.08	54.93							
	26.61	89.26	79.00	67.23	59.50							
	31.99	77.20	68.34	58.17	51.47							
PG 9003	**59.30**	73.98	65.49	55.69	49.35	2500	45	662	-	834	566	588
	75.06	89.26	79.00	67.23	59.50							
	93.12	82.41	72.93	62.08	54.93							
	97.58	89.26	79.00	67.23	59.50							
	105.13	73.65	65.20	55.47	49.10							
	117.85	89.26	79.00	67.23	59.50							
	133.06	89.26	79.00	67.23	59.50							
	141.65	77.20	68.34	58.17	51.47							
	159.93	77.20	68.34	58.17	51.47							
	185.51	77.20	68.34	58.17	51.47							
PG 9004	**224.04**	73.98	65.49	55.69	49.35	2800	30	673	-	845	577	599
	244.63	73.98	65.49	55.69	49.35							
	283.56	89.26	79.00	67.23	59.50							
	309.62	89.26	79.00	67.23	59.50							
	351.77	82.41	72.93	62.08	54.93							
	402.50	89.26	79.00	67.23	59.50							
	445.22	89.26	79.00	67.23	59.50							
	468.39	82.01	72.61	61.74	54.71							
	504.15	89.26	79.00	67.23	59.50							
	548.87	89.26	79.00	67.23	59.50							
	585.46	89.26	79.00	67.23	59.50							
	687.47	89.26	79.00	67.23	59.50							
	798.35	89.26	79.00	67.23	59.50							
	854.43	89.26	79.00	67.23	59.50							
	964.68	89.26	79.00	67.23	59.50							
	1113.09	77.20	68.34	58.17	51.47							
	1344.98	77.20	68.34	58.17	51.47							
PG 9005	**1431.12**	89.26	79.00	67.23	59.50	2800	26	679	-	851	583	605
	1579.81	89.26	79.00	67.23	59.50							
	1662.02	89.26	79.00	67.23	59.50							
	1787.26	89.26	79.00	67.23	59.50							
	1908.08	89.26	79.00	67.23	59.50							
	2064.28	89.26	79.00	67.23	59.50							
	2154.29	89.26	79.00	67.23	59.50							
	2493.23	89.26	79.00	67.23	59.50							
	3429.96	89.26	79.00	67.23	59.50							
	4470.78	89.26	79.00	67.23	59.50							
	5402.19	89.26	79.00	67.23	59.50							
	6511.57	89.26	79.00	67.23	59.50							
	7405.04	89.26	79.00	67.23	59.50							
	8360.53	89.26	79.00	67.23	59.50							

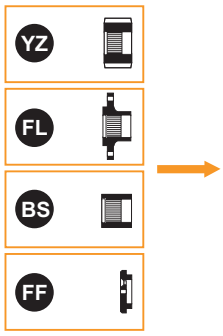


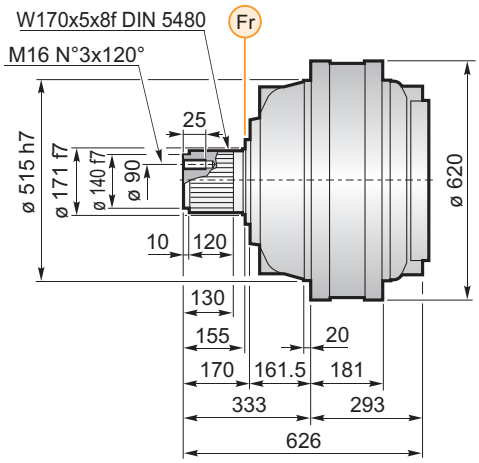
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	**20.000**	**50.000**	**100.000**	[min^{-1}]	[kW]	**M**	**P**	**CPC**	**F**	**FS**
PGA 9003	**49.68**	77.93	63.32	48.12	39.09	2500	45	699	-	871	603	625
	62.87	89.26	74.67	56.74	46.10							
	81.74	89.26	79.00	67.23	55.40							
	98.12	78.00	69.39	52.68	42.77							
	124.19	89.26	79.00	62.13	50.44							
	149.26	77.20	68.34	58.17	51.47							
PGA 9004	**247.44**	67.54	59.80	48.86	39.69	2800	30	720	-	892	624	646
	266.33	82.41	67.70	51.44	41.79							
	313.17	82.01	72.61	57.62	46.81							
	337.08	89.26	79.00	60.66	49.28							
	407.13	89.26	79.00	67.23	56.25							
	489.33	77.20	68.34	58.17	51.47							
	724.43	70.28	65.55	59.79	54.65							
	840.34	75.66	66.94	56.95	50.48							
	1010.02	77.20	68.34	58.17	51.47							

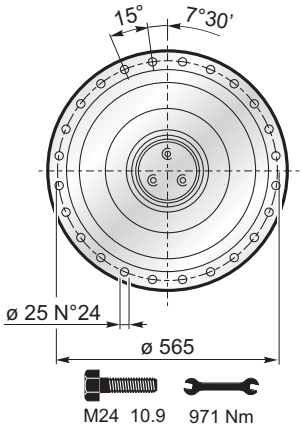


$$M_{max} = M_c \times 2 \quad (n_2 \times h = 20.000)$$

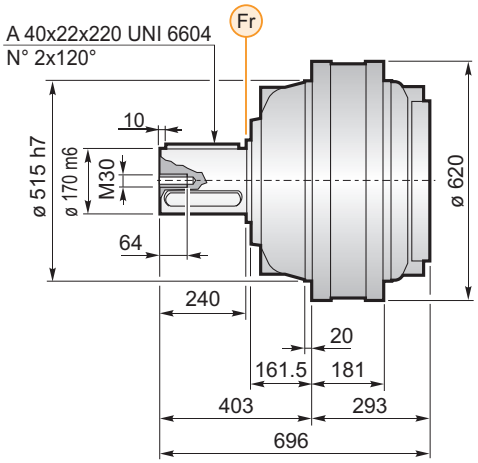
MS

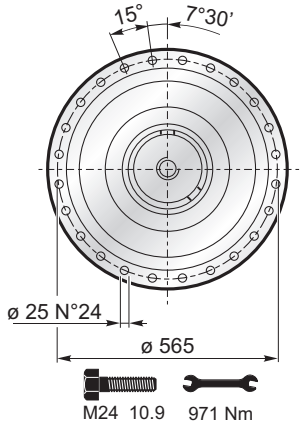

YZ
FL
BS
FF

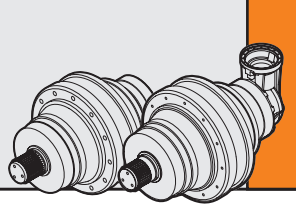

W170x5x8f DIN 5480
M16 N°3x120°
Fr
25
ø 515 h7
ø 171 f7
ø 140 f7
ø 90
ø 620
10
120
130
155
20
170
161.5
181
333
293
626


15°
7°30'
ø 25 N°24
ø 565
M24 10.9 971 Nm

MC

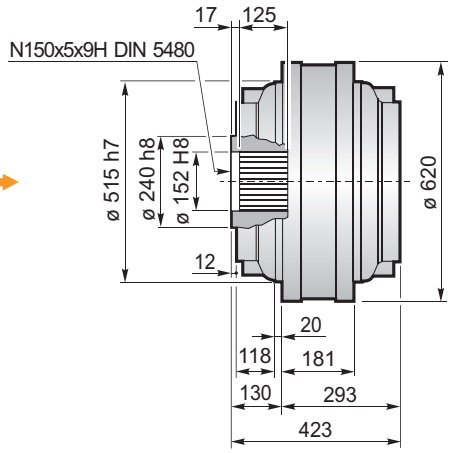

A 40x22x220 UNI 6604
N° 2x120°
Fr
10
ø 515 h7
ø 170 m6
M30
ø 620
64
240
20
161.5
181
403
293
696

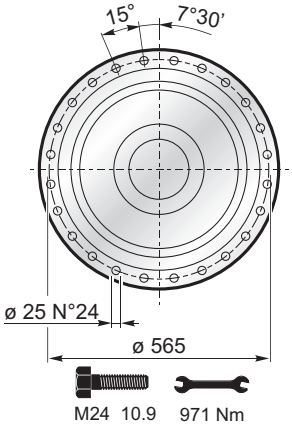

15°
7°30'
ø 25 N°24
ø 565
M24 10.9 971 Nm



F

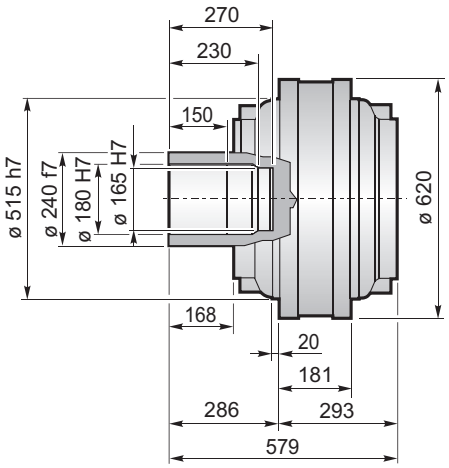
KB

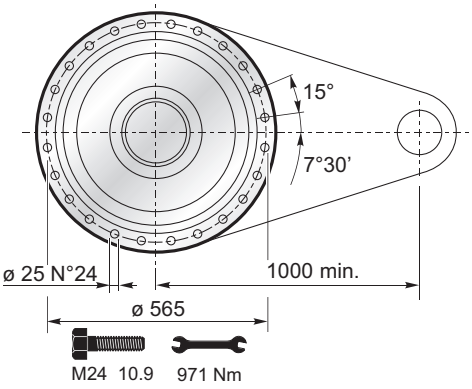


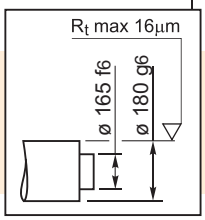


FS

GA



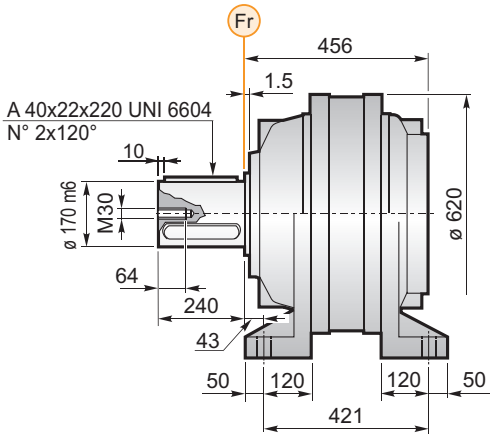


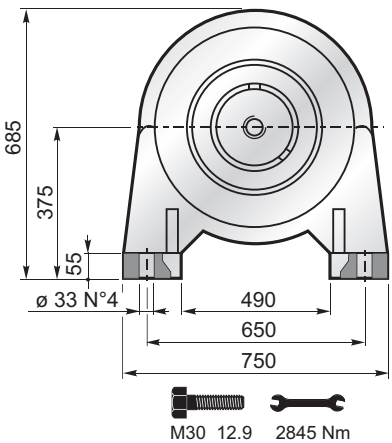


M_{max} = 176 kNm

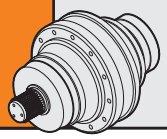
La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

CPC

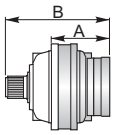




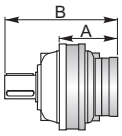
FL YZ BS FF KB GA → B-132



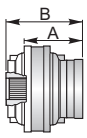
9000



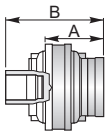
PG ...MS	A	B	RA	RB	EF	EDF
PG 9001	293	626				
PG 9002	475	808				
PG 9003	569	902		•		
PG 9004	628.5	961.5	•	o	•	



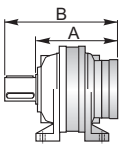
PG ...MC	A	B	RA	RB	EF	EDF
PG 9001	293	696				
PG 9002	475	878				
PG 9003	569	972		•		
PG 9004	628.5	1031.5	•	o	•	



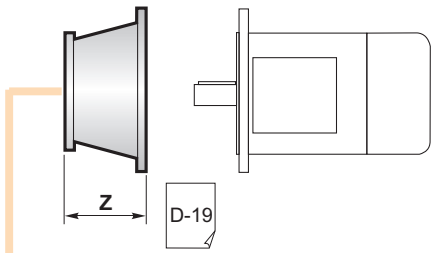
PG ...F	A	B	RA	RB	EF	EDF
PG 9001	293	423				
PG 9002	475	605				
PG 9003	569	699		•		
PG 9004	628.5	758.5	•	o	•	

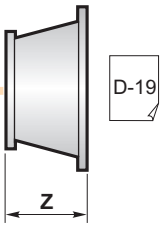


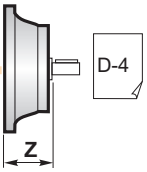
PG ...FS	A	B	RA	RB	EF	EDF
PG 9001	293	579				
PG 9002	475	761				
PG 9003	569	855		•		
PG 9004	628.5	914.5	•	o	•	

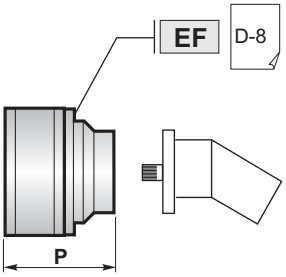


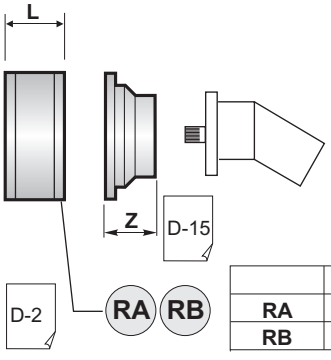
PG ...CPC	A	B	RA	RB	EF	EDF
PG 9001	456	696				
PG 9002	638	878				
PG 9003	732	972		•		
PG 9004	791.5	1031.5	•	o	•	







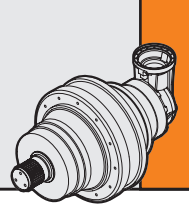


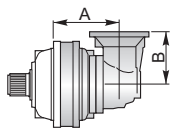


	L
RA	81
RB	125

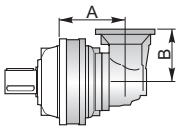
A+13.5	B+13.5	o

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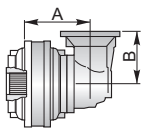




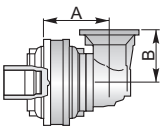
PGA ...MS					
	A	B	RA	RB	EF
PGA 9003	555	315		•	
PGA 9004	657	240	•	o	•



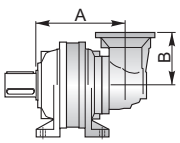
PGA ...MC					
	A	B	RA		EF
PGA 9003	555	315		•	
PGA 9004	657	240	•	o	•



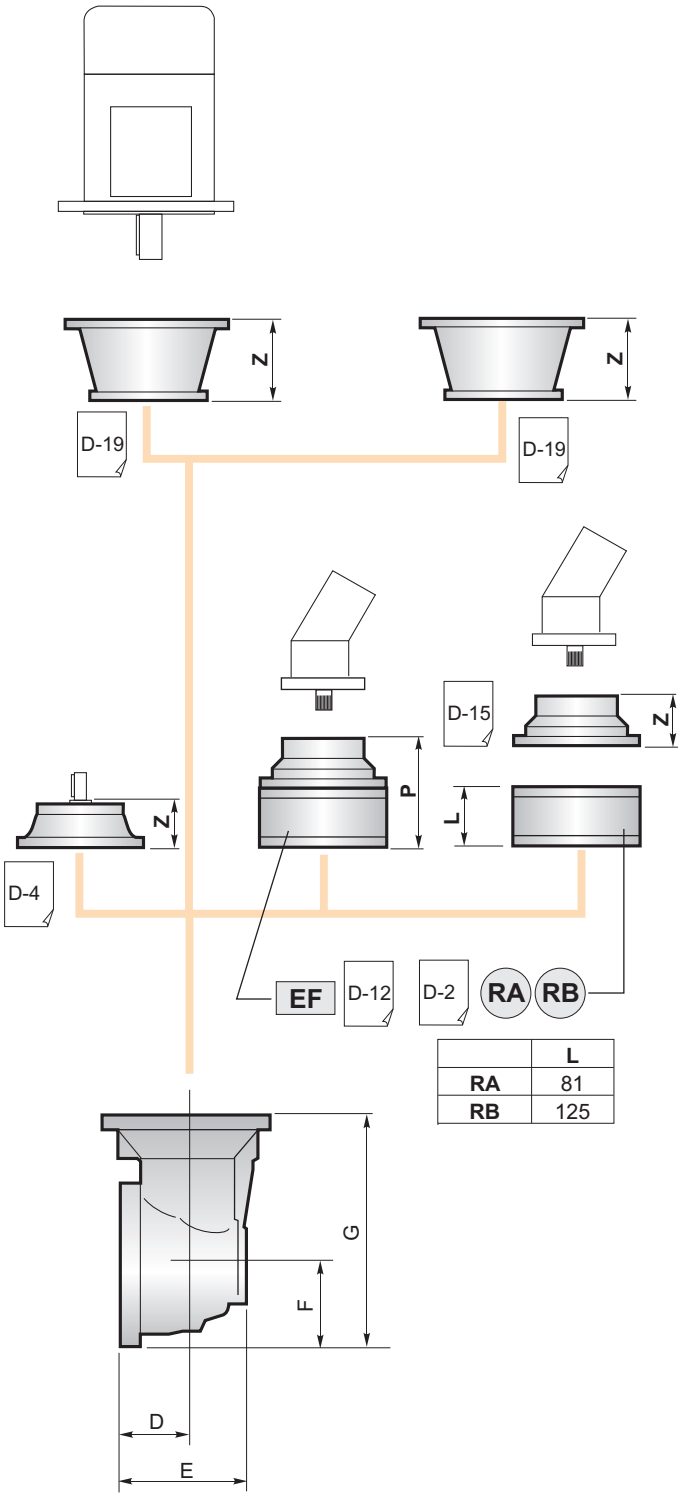
PGA ...F					
	A	B	RA	RB	EF
PGA 9003	555	315		•	
PGA 9004	657	240	•	o	•



PGA ...FS					
	A	B	RA	RB	EF
PGA 9003	555	315		•	
PGA 9004	657	240	•	o	•



PGA ...CPC					
	A	B	RA	RB	EF
PGA 9003	718	315		•	
PGA 9004	820	240	•	o	•



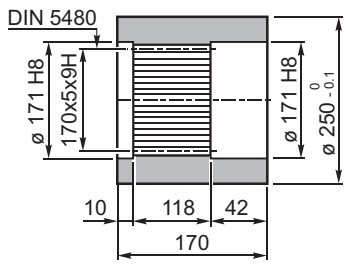
	L
RA	81
RB	125

	D	E	F	G
PGA 9003	88	256	235	550
PGA 9004	88	164	140	380

	B+16.5	o

BS

Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



Materiale / Material
Material / Matière
Material / Material

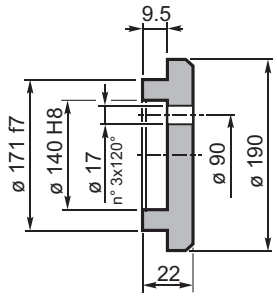
UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código

1721.115.076

FF

Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente

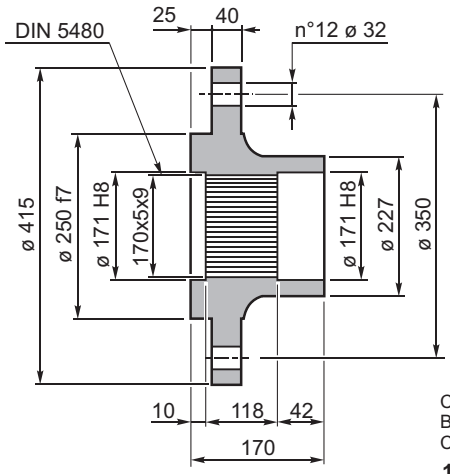


Codice / Code
Bestell - Nr. / Code
Código / Código

5701.044.000

FL

Flangia / Flange
Flansch / Bride
Brida / Flange

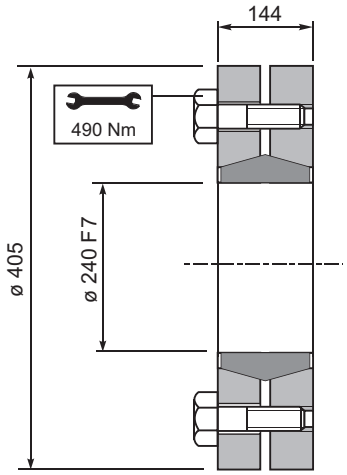


Codice / Code
Bestell - Nr. / Code
Código / Código

1721.133.098

GA

Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



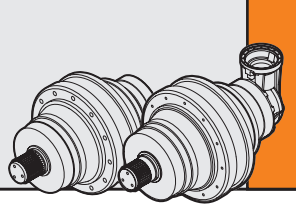
Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

176 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código

9015.240.000

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CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

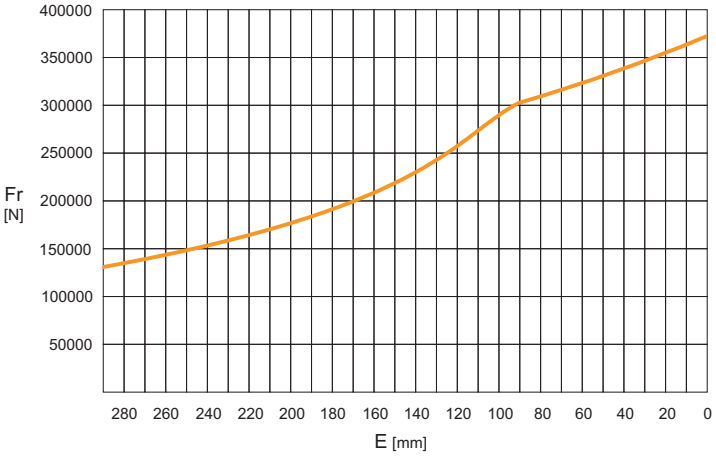
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

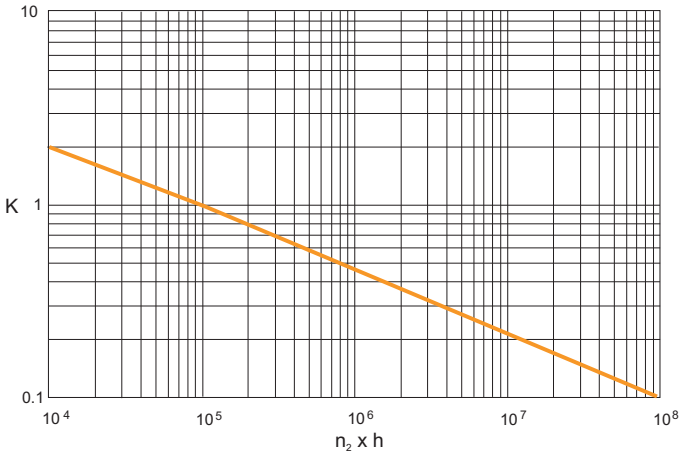
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

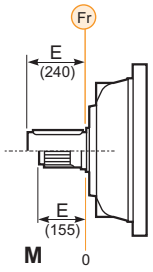
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

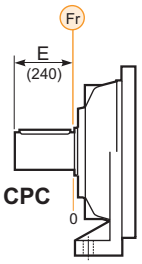
M - CPC*





	n x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			
***CPC**	Fr • 0.75	Fr • K • 0.75			





CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

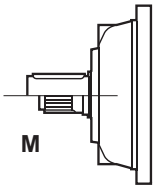
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

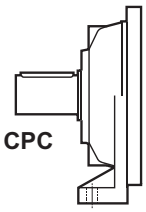
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

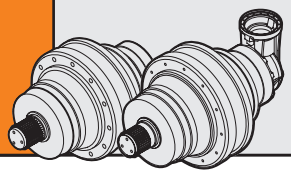
CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

Fa [N]	M	CPC	
	40000	40000	←
	70000	70000	→

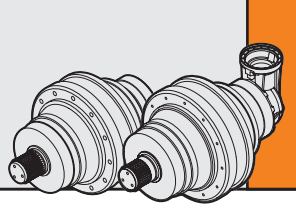


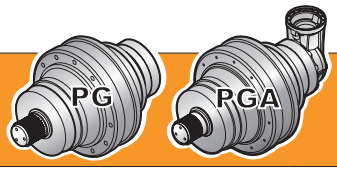




9000

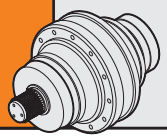
SCHEDE TECNICHE RIDUTTORI
/ PLANETARY GEARS TECHNICAL SHEETS



			i	Mc (n_2h 20.000) [kNm]	
B	**(100 ÷ 9000)**		**(3.56 ÷ 8360.53)**	**(0.45 ÷ 99.00)**	**B-1**
C	**(12000 ÷ 61000)**		**(3.43 ÷ 8938.38)**	**(55.6 ÷ 858.1)**	**C-1**
	12000	**PG**	4.09 ÷ 5665.81	94.3 ÷ 163.4	**C-2**
		PGA	50.25 ÷ 5566.69	55.6 ÷ 120.8	
	16000	**PG**	3.83 ÷ 8729.66	116.7 ÷ 212.5	**C-10**
		PGA	59.55 ÷ 7033.95	65.6 ÷ 146.3	
	21000	**PG**	3.68 ÷ 8127.84	114.2 ÷ 238.2	**C-18**
		PGA	60.00 ÷ 7897.21	71.8 ÷ 181.1	
	26000	**PG**	3.68 ÷ 8018.87	185.9 ÷ 288.7	**C-26**
		PGA	182.81 ÷ 6021.84	155.3 ÷ 224.2	
	31000	**PG**	3.43 ÷ 8522.08	128.4 ÷ 364.4	**C-34**
		PGA	264.13 ÷ 6399.72	203.9 ÷ 309.8	
	40000	**PG**	3.43 ÷ 8938.38	262.2 ÷ 452.7	**C-42**
		PGA	263.81 ÷ 6279.06	257.0 ÷ 338.9	
	45000	**PG**	3.83 ÷ 4952.48	305.8 ÷ 567.4	**C-50**
		PGA	634.60 ÷ 3187.80	342.6 ÷ 444.8	
	53000	**PG**	3.84 ÷ 7890.76	394.1 ÷ 727.2	**C-58**
		PGA	819.22 ÷ 5079.11	386.5 ÷ 463.5	
	61000	**PG**	3.84 ÷ 3175.35	448.6 ÷ 858.1	**C-62**
		PGA	863.53 ÷ 2116.90	401.0 ÷ 463.5	

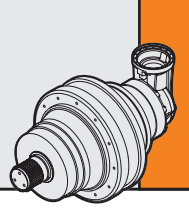
Le pagine che seguono riportano i dati tecnici prestazionali e dimensionali dei riduttori Serie PG-PGA. Per facilitare la ricerca della grandezza desiderata riportiamo la tabella sopraindicata con i dati indicativi e i riferimenti alle pagine.

The following pages show the technical information on performances and dimensions of the PG-PGA planetary the research and the selection of the required size you can refer to the above table, including some technical data and the corresponding page.



12000

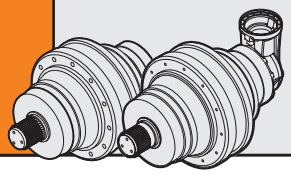
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 12001	**4.09**	181.5	163.4	142.3	129.4							
	5.25	134.2	120.8	105.2	98.6	750	102	650	-	-	615	642
	6.23	105.4	94.9	82.7	79.0							
PG 12002	**16.36**	131.2	116.1	98.8	87.5							
	19.25	111.8	98.9	84.2	74.5							
	21.00	134.2	120.8	105.2	98.6	1200	60	762	-	-	727	754
	24.71	134.2	120.8	103.4	91.5							
	29.32	105.4	94.9	82.7	79.0							
PG 12003	**58.17**	129.9	114.9	97.8	86.6							
	68.43	111.8	98.9	84.2	74.5							
	74.67	134.2	120.8	105.2	98.6							
	90.00	134.2	120.8	103.3	91.4							
	117.60	106.6	94.3	80.2	71.1	2000	45	797	-	-	762	789
	139.55	105.4	94.9	82.7	79.0							
	164.18	105.4	94.9	82.7	79.0							
	197.89	105.4	94.8	80.6	71.4							
PG 12004	**219.75**	129.9	114.9	97.8	86.6							
	239.95	129.9	114.9	97.8	86.6							
	258.53	111.8	98.9	84.2	74.5							
	282.07	134.2	120.8	105.2	98.6							
	308.00	134.2	120.8	105.2	98.6							
	340.00	134.2	120.8	103.3	91.4							
	385.78	134.2	120.8	103.5	91.7							
	448.00	120.4	106.7	90.7	80.5	2800	33	812	-	-	777	804
	485.10	106.6	94.3	80.2	71.1							
	540.00	134.2	120.8	103.3	91.4							
	607.60	106.6	94.3	80.2	71.1							
	652.50	109.9	97.2	82.7	73.4							
	705.60	106.6	94.3	80.2	71.1							
	816.31	105.4	94.8	80.6	71.4							
	1190.30	105.4	94.9	82.7	79.0							
PG 12005	**781.33**	129.9	114.9	97.8	86.6							
	853.14	129.9	114.9	97.8	86.6							
	941.78	129.9	114.9	97.8	86.6							
	1002.93	134.2	120.8	105.2	98.6							
	1095.11	134.2	120.8	105.2	98.6							
	1208.89	134.2	120.8	105.2	98.6							
	1371.65	134.2	120.8	103.5	91.7							
	1579.61	126.7	111.9	95.2	84.1							
	1724.80	134.2	120.3	102.4	90.5	2800	27	822	-	-	787	814
	1904.00	134.2	120.8	103.3	91.4							
	2160.36	134.2	120.8	103.5	91.7							
	2604.00	134.2	120.8	103.3	91.4							
	3024.00	134.2	120.8	103.3	91.4							
	3402.56	106.6	94.3	80.2	71.1							
	4037.70	105.4	94.9	82.7	79.0							
	5665.81	105.4	94.9	82.7	79.0							



	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 12003	**50.25**	78.6	63.8	48.5	39.4	2000	45	845	-	-	810	837
	59.12	88.0	71.5	54.3	44.2							
	64.50	93.6	76.0	57.8	46.9							
	75.88	104.8	85.2	64.7	52.6							
	90.05	105.4	94.9	73.0	59.3							
	116.29	91.1	78.2	59.3	48.2							
PGA 12004	**200.95**	68.4	55.6	42.2	34.3	2800	33	870	-	-	835	862
	284.96	87.4	71.0	53.9	43.8							
	368.95	104.7	85.0	64.6	52.5							
	434.05	105.4	94.9	72.4	58.8							
	482.09	105.4	94.9	77.9	63.3							
	567.16	105.4	94.9	82.7	70.9							
	683.63	105.4	94.8	80.6	71.4							
	771.75	74.2	69.2	61.3	54.2							
PGA 12005	**893.10**	111.8	98.9	84.2	74.5	2`800	25	855	-	-	820	847
	1064.00	134.2	120.8	105.2	98.6							
	1174.55	134.2	120.8	103.3	91.4							
	1282.50	134.2	120.8	103.3	91.4							
	1453.28	111.6	98.8	84.1	74.4							
	1676.89	134.2	120.8	105.2	95.4							
	1865.45	134.2	120.8	103.3	91.4							
	2021.25	134.2	120.8	103.3	91.4							
	2196.65	105.4	94.9	82.7	79.0							
	2439.11	120.4	106.7	90.7	80.5							
	2610.75	105.4	94.9	82.7	79.0							
	2940.00	134.2	120.8	103.3	91.4							
	3146.89	105.4	94.9	82.7	79.0							
	3405.19	105.4	94.9	82.7	79.0							
	3552.50	109.9	97.2	82.7	73.4							
	4114.61	105.4	94.9	82.7	79.0							
	4959.57	105.4	94.9	82.7	79.0							
	5566.69	105.4	94.8	80.6	71.4							

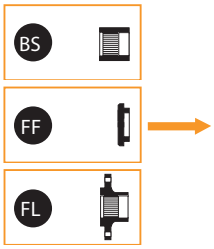
(n_2 x h = 20.000)

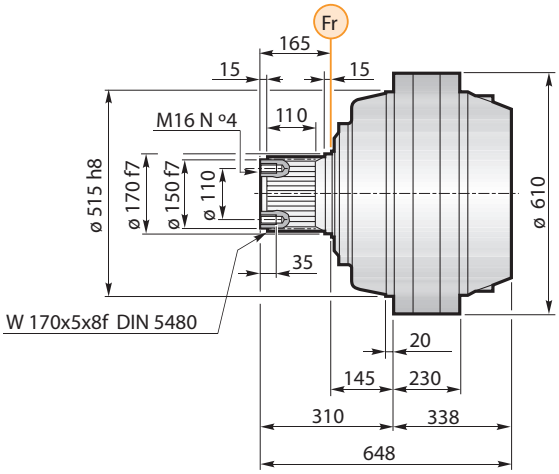
$$M_{max} = M_c \times 1.7$$

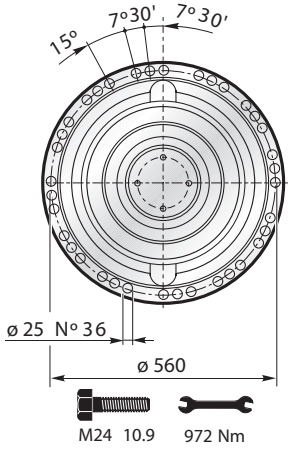


12000

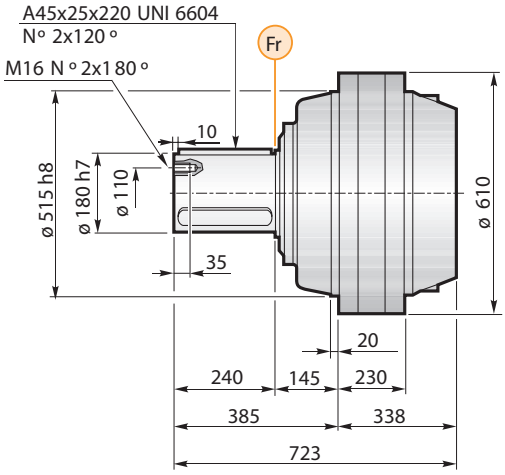
MS

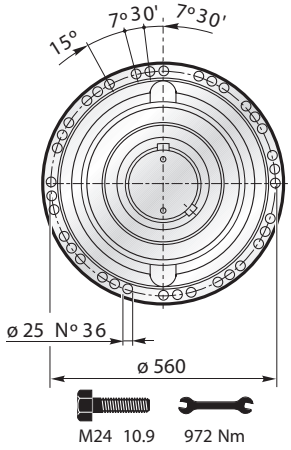




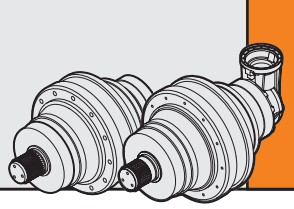


MC

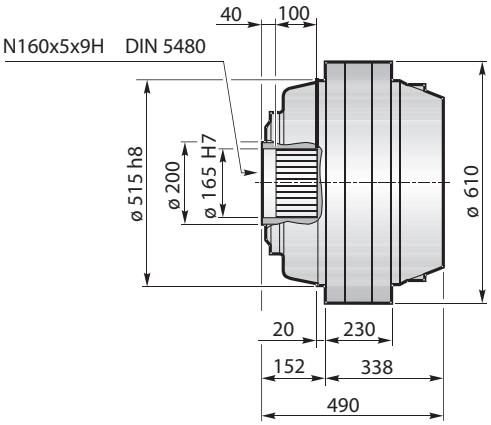


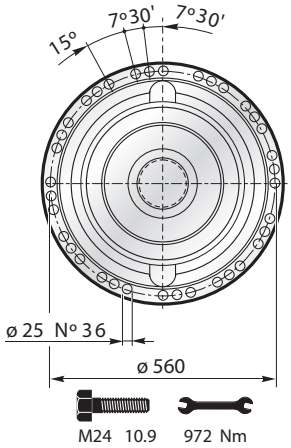


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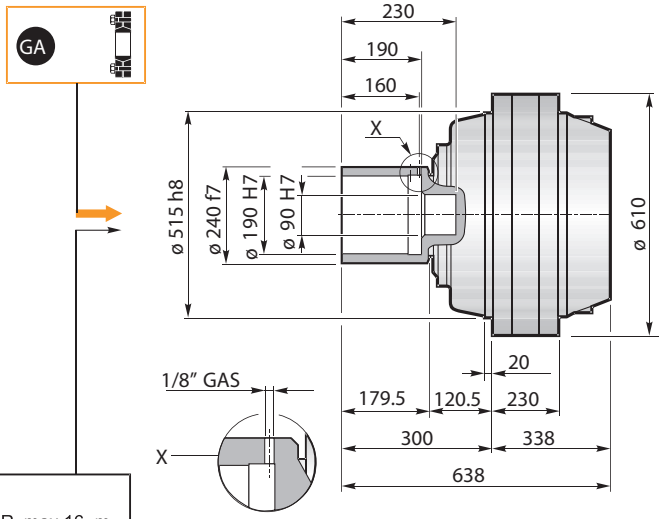


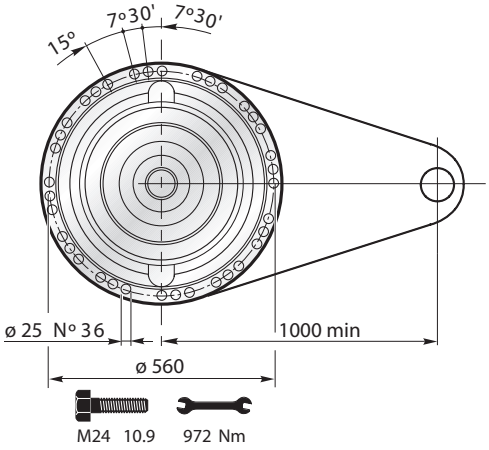
F

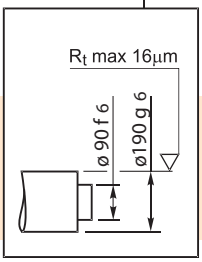




FS



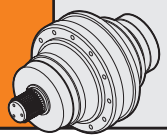




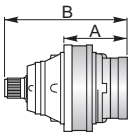
M_{max} 236 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

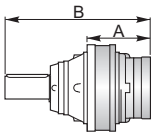
FL BS FF GA → 7#.



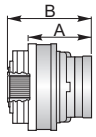
12000



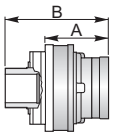
PG ...MS	A	B	RA	RB	EF	EDF
PG12002	535	845				
PG12003	622	932		•		
PG12004	693.5	1003.5	•	o	•	
PG12005	754.5	1064.5	•			•



PG ...MC	A	B	RA	RB	EF	EDF
PG12002	535	920				
PG12003	622	1007		•		
PG12004	693.5	1078.5	•	o	•	
PG12005	754.5	1139.5	•			•

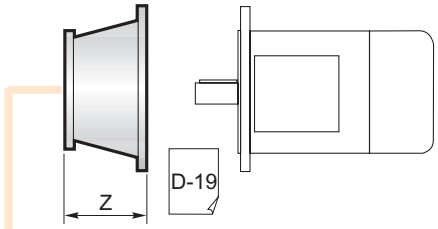


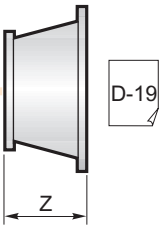
PG ...F	A	B	RA	RB	EF	EDF
PG12002	535	687				
PG12003	622	774		•		
PG12004	693.5	845.5	•	o	•	
PG12005	754.5	906.5	•			•

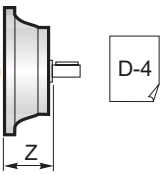


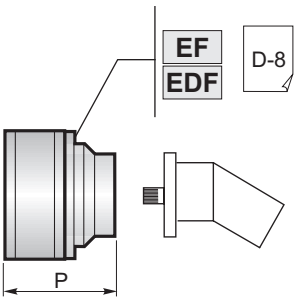
PG ...FS	A	B	RA	RB	EF	EDF
PG12002	535	835				
PG12003	622	922		•		
PG12004	693.5	993.5	•	o	•	
PG12005	754.5	1054.5	•			•

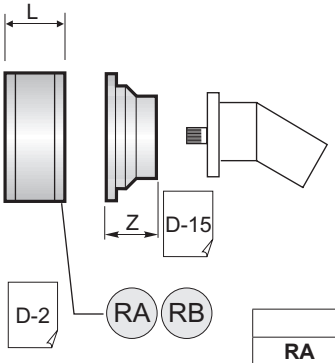
A	B	•
A+13.5	B+13.5	o





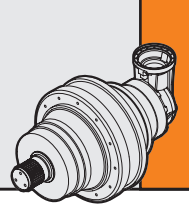


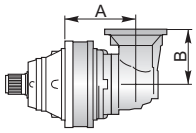




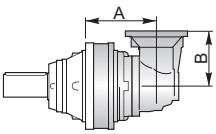
	L
RA	81
RB	125

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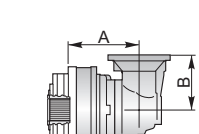




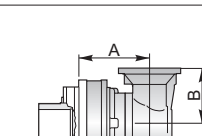
PGA ...MS	A	B	RA	RB	EF	EDF
PGA12003	600	315		•		
PGA12004	757	315		•		
PGA12005	795	240	•	o	•	



PGA ...MC	A	B	RA	RB	EF	EDF
PGA12003	600	315		•		
PGA12004	757	315		•		
PGA12005	795	240	•	o	•	

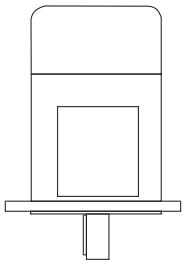


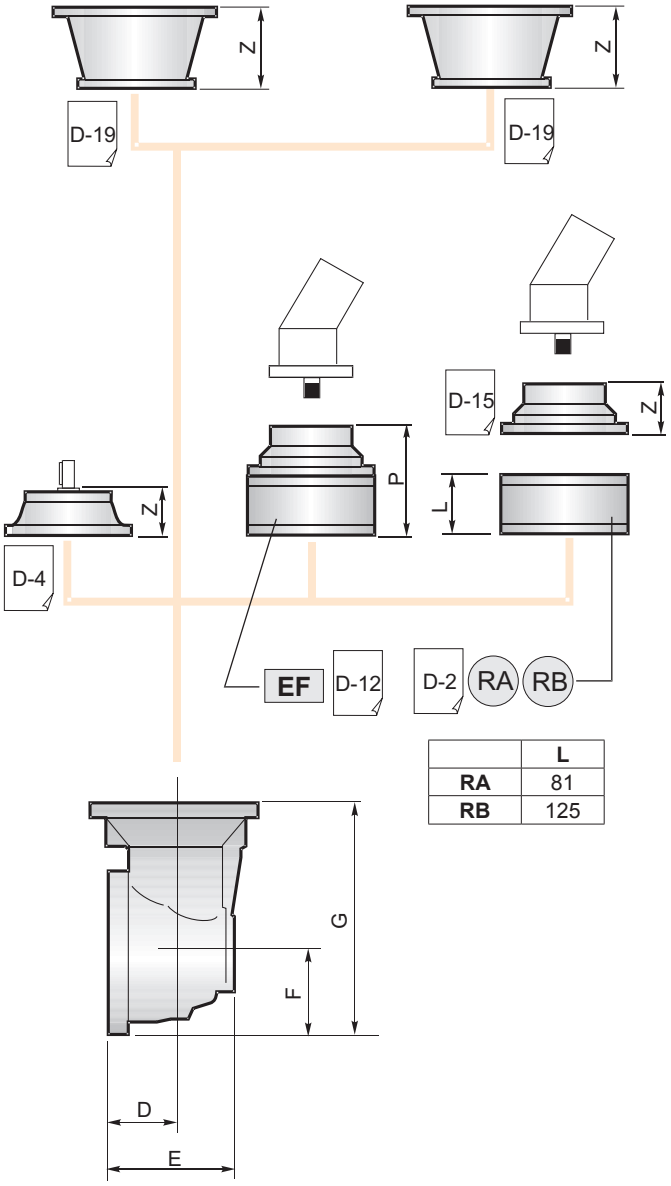
PGA ...F	A	B	RA	RB	EF	EDF
PGA12003	600	315		•		
PGA12004	757	315		•		
PGA12005	795	240	•	o	•	



PGA ...FS	A	B	RA	RB	EF	EDF
PGA12003	600	315		•		
PGA12004	757	315		•		
PGA12005	795	240	•	o	•	

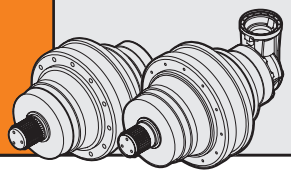
B	•
B+13.5	o





	L
RA	81
RB	125

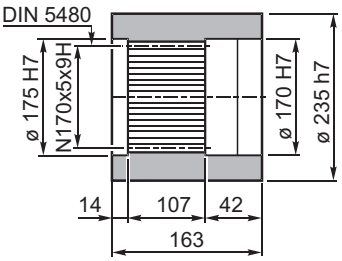
	D	E	F	G
PGA12003	88	256	235	550
PGA12004	88	256	235	550
PGA12005	88	164	140	380



12000

BS

Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



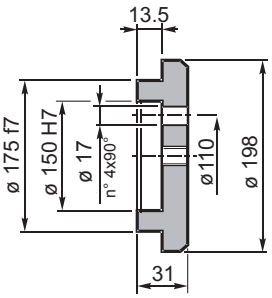
Materiale / Material
Material / Matière
Material / Material

UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código

FF

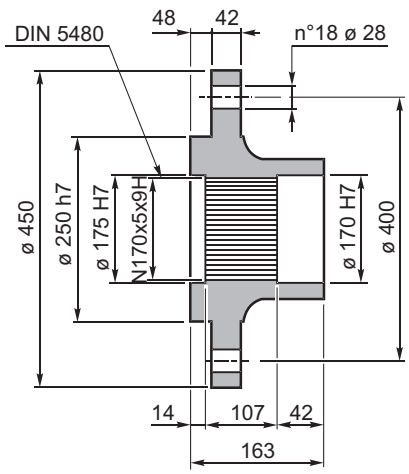
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código

FL

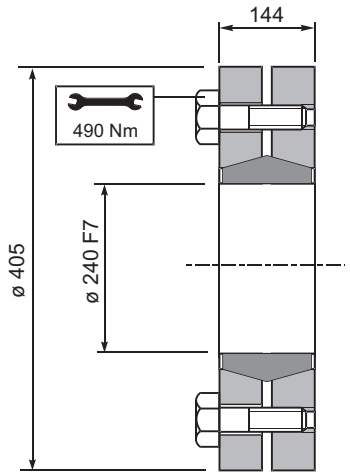
Flangia / Flange
Flansch / Bride
Brida / Flange



Codice / Code
Bestell - Nr. / Code
Código / Código

GA

Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração

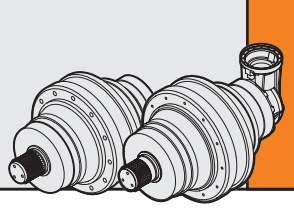


Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

236 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código

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CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

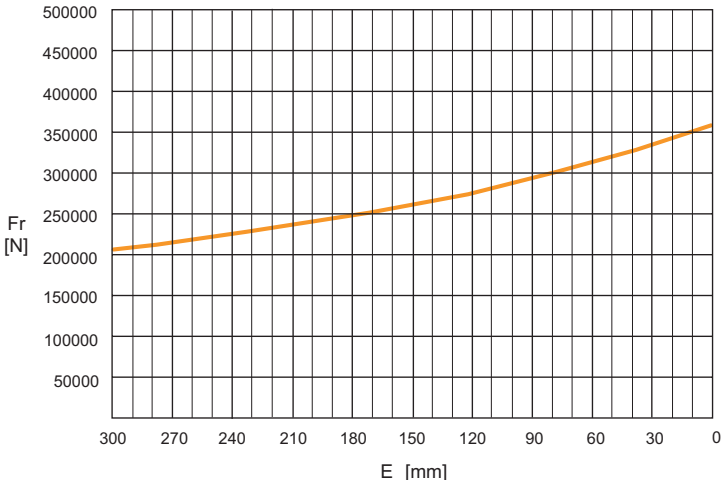
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

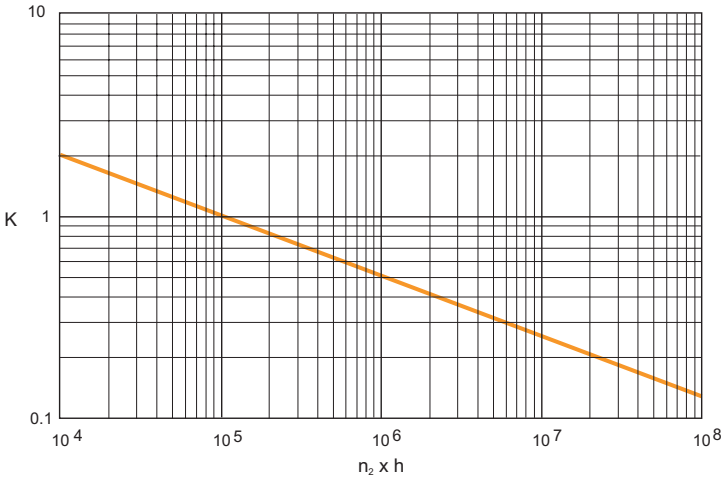
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

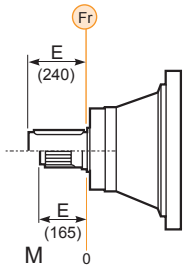
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M





	n_2 x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

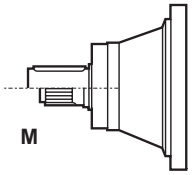
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

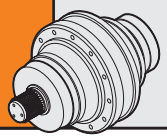
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

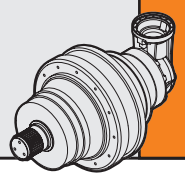
Fa [N]	M	
	75000	←
	65250	→





16000

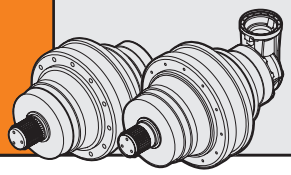
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 16001	**3.83**	236.0	212.5	185.0	171.5	200	109	690	-	-	655	672
	4.40	204.0	183.7	159.9	150.8							
PG 16002	**15.15**	201.5	178.3	151.8	134.3	1200	67	922	-	-	887	914
	17.40	204.0	183.7	159.9	150.6							
	19.39	147.5	130.5	111.1	98.3							
	22.28	165.3	146.3	124.5	110.2							
	26.40	131.9	116.7	99.3	87.9							
PG 16003	**53.85**	179.7	159.1	135.3	119.8	2000	47	965	-	-	930	957
	61.87	201.5	178.3	151.7	134.3							
	74.57	175.6	155.4	132.2	117.1							
	83.10	147.5	130.5	111.1	98.3							
	95.46	165.3	146.3	124.5	110.2							
	108.58	146.8	130.0	110.6	97.9							
	124.74	164.6	145.7	124.0	109.8							
	147.84	131.9	116.7	99.3	87.9							
	178.20	131.9	116.7	99.3	87.9							
PG 16004	**233.72**	157.8	139.8	119.0	105.3	2800	37	980	-	-	945	972
	260.44	147.5	130.5	111.1	98.3							
	326.70	165.3	146.3	124.5	110.2							
	360.64	165.3	146.3	124.5	110.2							
	393.79	165.3	146.3	124.5	110.2							
	429.34	147.5	130.5	111.1	98.3							
	493.23	165.3	146.3	124.5	110.2							
	514.55	164.6	145.7	124.0	109.8							
	572.79	147.4	130.6	111.1	98.6							
	644.49	164.6	145.7	124.0	109.8							
	678.86	131.9	116.7	99.3	87.9							
	748.44	164.6	145.7	124.0	109.8							
	820.29	131.9	116.7	99.3	87.9							
	904.37	143.8	127.3	108.2	96.0							
	1069.20	131.9	116.7	99.3	87.9							
	1291.95	131.9	116.7	99.3	87.9							
PG 16005	**1093.71**	167.8	148.7	126.7	112.0	2800	30	990	-	-	955	982
	1207.35	175.6	155.4	132.2	117.1							
	1318.32	167.8	148.7	126.7	112.0							
	1400.14	165.3	146.3	124.5	110.2							
	1545.61	165.3	146.3	124.5	110.2							
	1651.22	137.2	121.6	103.4	91.6							
	1722.60	136.0	120.2	102.3	90.4							
	1829.52	164.6	145.7	124.0	109.8							
	2019.60	155.1	137.0	116.6	103.0							
	2205.23	165.3	146.3	124.5	110.2							
	2404.28	147.5	130.5	111.1	98.3							
	2661.12	164.6	145.7	124.0	109.8							
	2762.10	165.3	146.3	124.5	110.2							
	3329.32	165.3	146.3	124.5	109.9							
	4350.31	164.6	145.7	124.0	109.8							
	5051.97	164.6	145.7	124.0	109.8							
	6104.46	143.8	127.3	108.2	96.0							
	8720.66	131.9	116.7	99.3	87.9							



	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 16003	**59.55**	88.5	71.9	54.6	44.4	2500	42	1005	-	-	970	997
	70.58	99.6	81.0	61.5	50.0							
	81.09	109.8	89.2	67.8	55.1							
	90.48	72.4	65.6	49.8	40.4							
	107.24	84.6	73.8	56.1	45.5							
	123.20	96.0	81.4	61.8	50.2							
PGA 16004	**251.31**	160.1	130.0	98.7	80.1	2500	35	1038	-	-	1003	1030
	321.72	147.5	130.5	111.1	95.3							
	383.13	164.6	145.7	124.0	109.8							
	445.50	165.3	146.3	124.5	110.2							
	506.71	146.8	130.0	110.6	97.9							
	582.12	164.6	145.7	124.0	109.8							
	689.92	131.9	116.7	99.3	87.9							
	723.87	117.6	104.1	88.6	78.4							
	831.60	131.9	116.7	99.3	87.9							
PGA 16005	**1128.60**	165.3	146.3	124.5	110.2	2800	27	1023	-	-	988	1015
	1330.99	137.2	121.6	103.4	91.6							
	1417.03	146.8	130.0	110.6	97.9							
	1547.27	146.8	130.0	110.6	97.9							
	1674.75	140.7	131.3	117.5	95.3							
	1777.55	164.6	145.7	124.0	109.8							
	1866.23	147.5	130.5	111.1	98.3							
	2004.14	134.3	118.9	101.1	89.6							
	2226.42	164.6	145.7	124.0	109.8							
	2438.54	146.8	130.0	110.6	97.9							
	2685.38	165.3	146.3	124.5	110.2							
	3054.33	146.8	130.0	110.6	97.9							
	4074.84	164.6	145.7	124.0	109.8							
	4466.00	131.9	116.7	99.3	87.9							
	5821.20	131.9	116.7	99.3	87.9							
	7033.95	131.9	116.7	99.3	87.9							

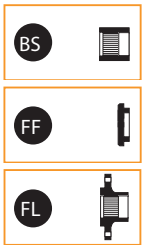
(n_2 x h = 20.000)

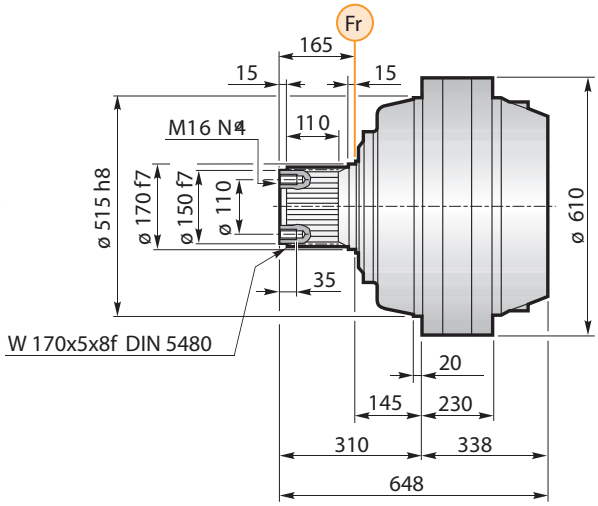
$$M_{max} = M_c \times 1.6$$

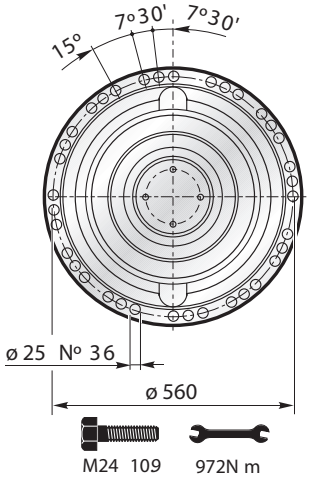


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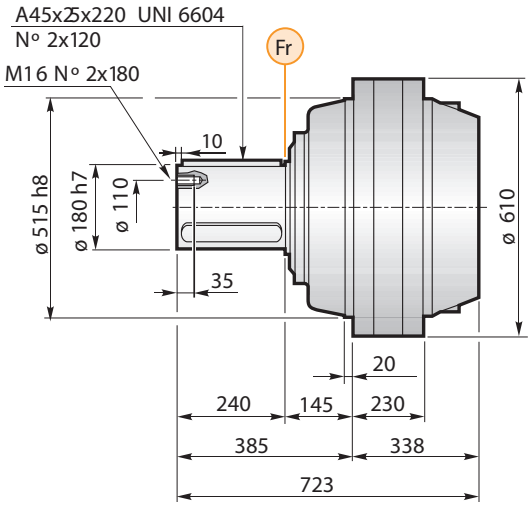
MS

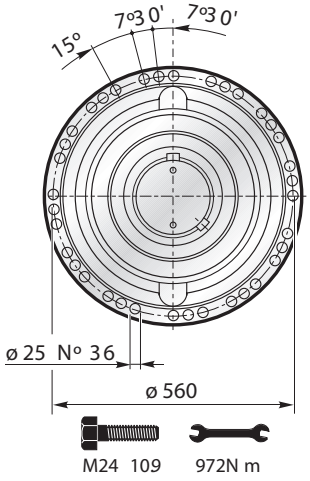




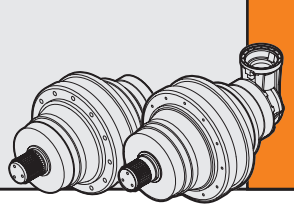


MC

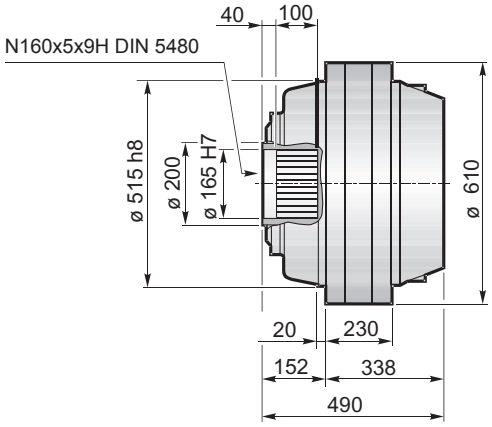


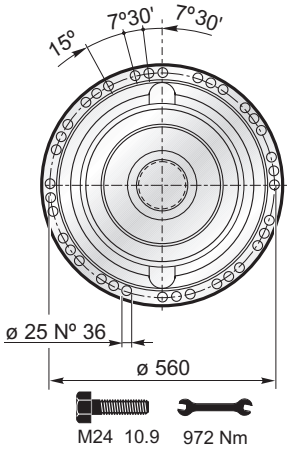


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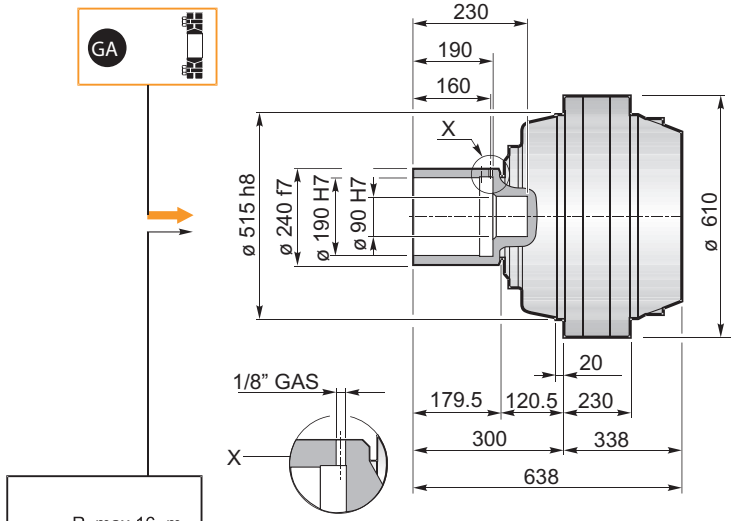


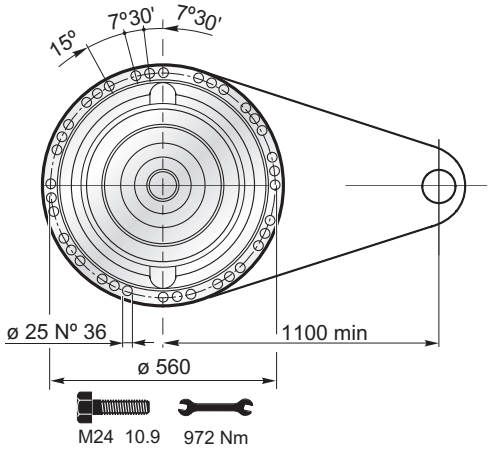
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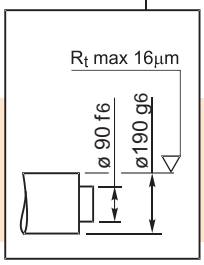




FS



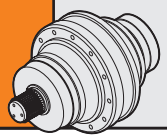




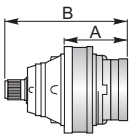
M_{max} = 236 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

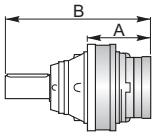
FL BS FF GA → C-16



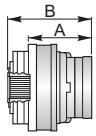
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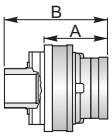
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG16001	416.5	726.5				
PG16002	637.5	947.5				
PG16003	744.5	1054.5		•		
PG16004	816	1126	•	o	•	
PG16005	877	1187	•			•



	PG ...MC					
	A	B	RA	RB	EF	EDF
PG16001	416.5	801.5				
PG16002	637.5	1022.5				
PG16003	744.5	1129.5		•		
PG16004	816	1201	•	o	•	
PG16005	877	1262	•			•

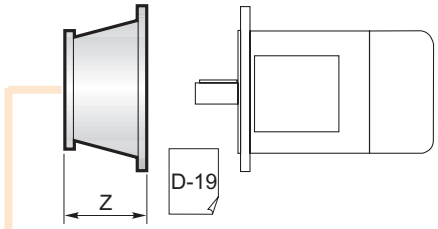


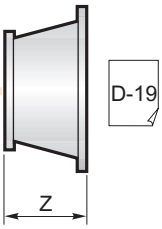
	PG ...F					
	A	B	RA	RB	EF	EDF
PG16001	416.5	568.5				
PG16002	637.5	789.5				
PG16003	744.5	896.5		•		
PG16004	816	968	•	o	•	
PG16005	877	1029	•			•

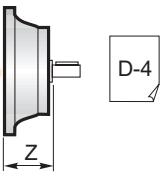


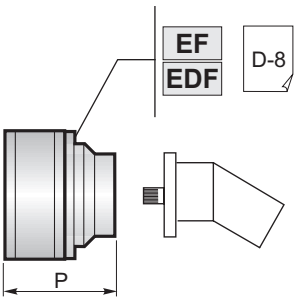
	PG ...FS					
	A	B	RA	RB	EF	EDF
PG16001	416.5	716.5				
PG16002	637.5	937.5				
PG16003	744.5	1044.5		•		
PG16004	816	1116	•	o	•	
PG16005	877	1177	•			•

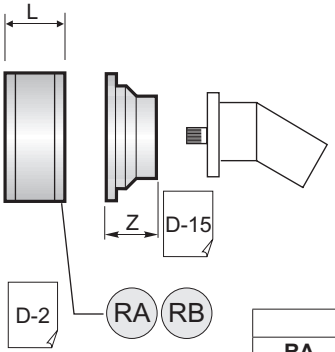
A	B	•
A+13.5	B+13.5	o





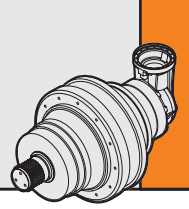


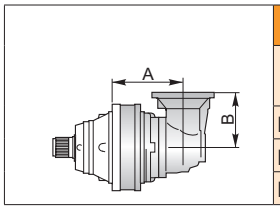




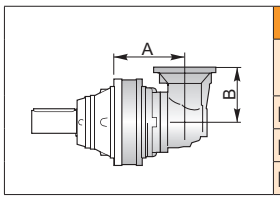
	L
RA	81
RB	125

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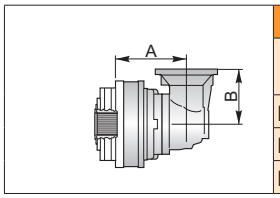




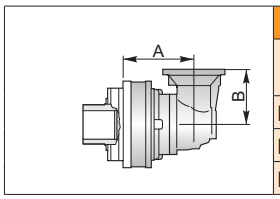
PGA ...MS	A	B	RA	RB	EF	EDF
PGA16003	818.5	315		•		
PGA16004	879.5	315	•	o	•	
PGA16005	917.5	240	•			•



PGA ...MC	A	B	RA	RB	EF	EDF
PGA16003	818.5	315		•		
PGA16004	879.5	315	•	o	•	
PGA16005	917.5	240	•			•

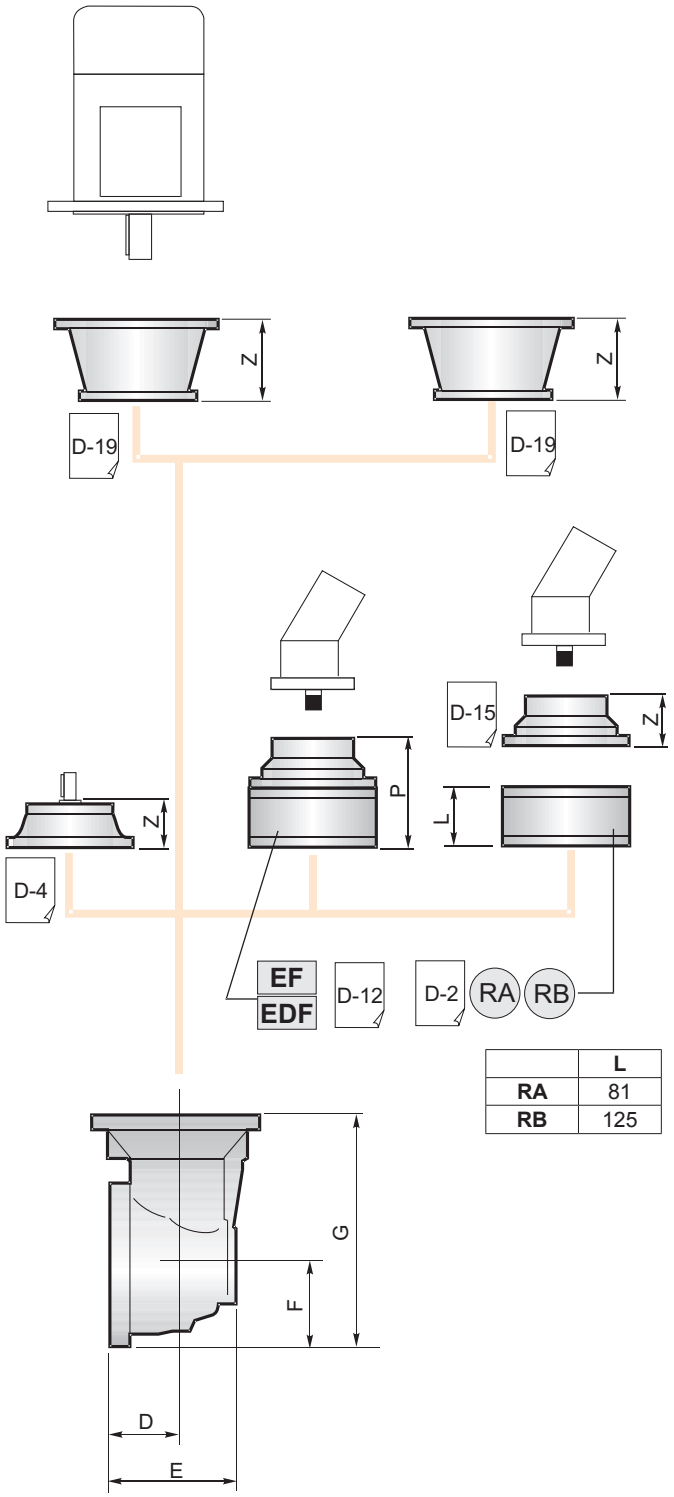


PGA ...F	A	B	RA	RB	EF	EDF
PGA16003	818.5	315		•		
PGA16004	879.5	315	•	o	•	
PGA16005	917.5	240	•			•



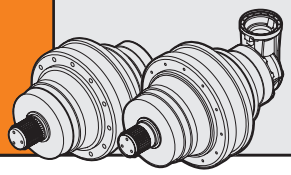
PGA ...FS	A	B	RA	RB	EF	EDF
PGA16003	818.5	315		•		
PGA16004	879.5	315	•	o	•	
PGA16005	917.5	240	•			•

B	•
B+16.5	o



	L
RA	81
RB	125

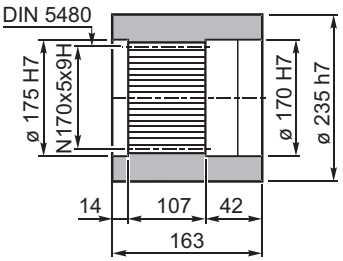
	D	E	F	G
PGA16003	88	256	235	550
PGA16004	88	256	235	550
PGA16005	88	164	140	380



16000

BS

Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



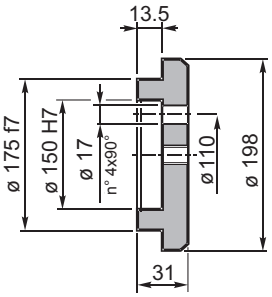
Materiale / Material
Material / Matière
Material / Material

UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código

FF

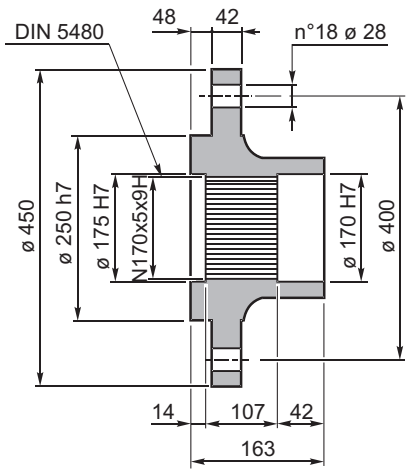
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código

FL

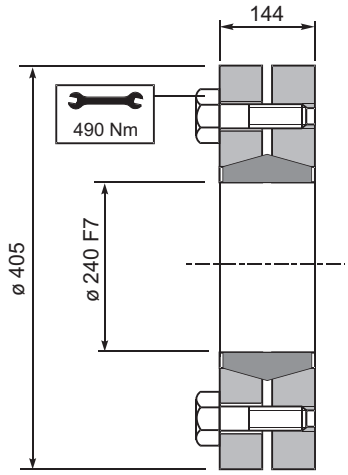
Flangia / Flange
Flansch / Bride
Brida / Flange



Codice / Code
Bestell - Nr. / Code
Código / Código

GA

Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração

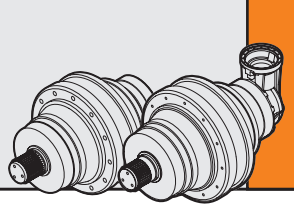


Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

236 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código

haumea® mechanics on demand



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

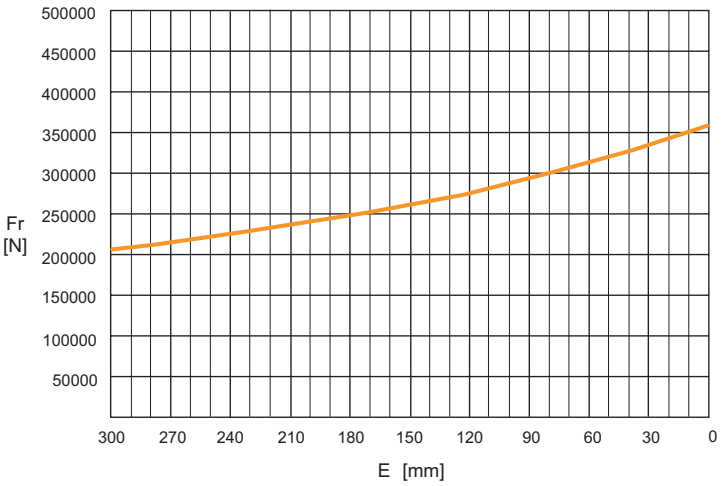
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

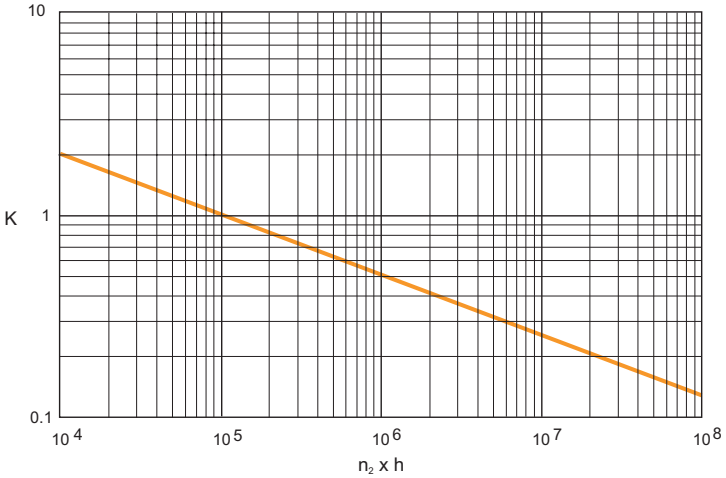
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

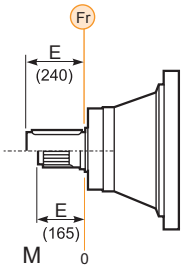
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M





	n_2 x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

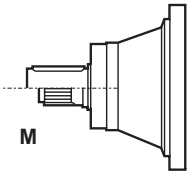
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

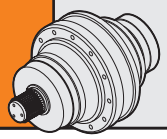
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

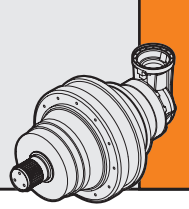
Fa [N]	M
←	75000
→	65250





21000/2100H

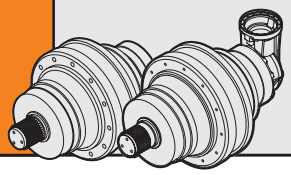
		i	Mc [kNm]				n_{1max}	Pt	Kg				
			n_2 x h	n_2 x h	n_2 x h	n_2 x h							
			10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 21001		**3.68**	279.3	238.2	181.0	147.0	200	133	930	-	-	880	1002
		4.94	201.1	181.1	157.6	142.0							
PG 21002	H	**14.08**	222.2	196.7	167.4	147.0	1200	72	1124 (1144-H)	-	-	1074 (1094-H)	1096 (1116-H)
		19.54	201.1	181.1	157.6	142.0							
		25.01	181.9	161.0	137.0	121.3							
		29.64	145.1	128.4	109.3	96.7							
PG 21003	H	**56.32**	222.2	196.7	167.4	147.0	2000	52	1184 (1261-H)	-	-	1134 (1211-H)	1156 (1233-H)
	H	**73.22**	222.2	196.7	167.4	147.0							
		83.72	193.1	170.9	145.5	128.8							
	H	**98.28**	201.1	181.1	157.6	142.0							
		107.18	181.9	161.0	137.0	121.3							
	H	**118.13**	201.1	181.1	157.6	142.0							
		140.05	181.1	160.3	136.4	120.8							
		165.98	145.1	128.4	109.3	96.7							
		200.07	145.1	128.4	109.3	96.7							
PG 21004	H	**249.42**	183.2	162.2	137.9	122.2	2800	40	1200 (1288-H)	-	-	1150 (1238-H)	1177 (1265-H)
	H	**334.82**	201.1	181.1	157.6	142.0							
	H	**389.71**	172.4	152.6	129.9	114.9							
	H	**433.14**	201.1	181.1	157.6	142.0							
	H	**491.42**	201.1	181.1	157.6	142.0							
		529.07	181.1	160.3	136.4	120.8							
	H	**570.05**	201.1	181.1	157.6	142.0							
		625.97	142.1	125.7	107.0	94.8							
	H	**685.16**	201.1	181.1	157.6	142.0							
		723.59	181.1	160.3	136.4	120.8							
		793.14	129.1	114.2	97.1	86.2							
	H	**826.91**	201.1	179.4	152.8	135.1							
		920.96	145.1	128.4	109.3	96.7							
		1015.36	158.2	140.0	119.1	105.7							
		1200.42	145.1	128.4	109.3	96.7							
		1450.51	145.1	128.4	109.3	96.7							
PG 21005	H	**1486.55**	201.1	181.1	157.6	142.0	2800	32	1208 (1300-H)	-	-	1158 (1250-H)	1185 (1277-H)
	H	**1559.32**	201.1	181.1	154.5	136.8							
	H	**1675.25**	222.2	196.7	167.4	147.0							
	H	**1729.88**	201.1	181.1	157.6	142.0							
	H	**1795.45**	201.1	181.1	157.6	142.0							
	H	**1856.49**	201.1	181.1	157.6	142.0							
	H	**1945.45**	222.2	196.7	167.4	147.0							
	H	**2008.89**	201.1	181.1	157.6	142.0							
	H	**2105.40**	172.4	152.6	129.9	114.9							
	H	**2196.48**	199.8	176.8	150.5	133.2							
	H	**2268.10**	201.1	181.1	154.5	136.8							
		2314.39	147.7	130.8	111.3	98.5							
	H	**2427.41**	201.1	181.1	156.0	138.0							
		2475.87	181.9	161.0	137.0	121.3							
	H	**2539.02**	201.1	181.1	157.6	142.0							
	H	**2654.08**	199.8	176.8	150.5	133.2							
		3155.64	201.1	181.1	157.6	142.0							
	H	**4132.86**	201.1	181.1	157.6	142.0							
	H	**5995.12**	201.1	179.4	152.8	135.1							
		6853.65	158.2	140.0	119.1	105.7							
		8122.84	145.1	128.4	109.3	96.7							



		i	Mc [kNm]				n_{1max}	Pt	Kg				
			n_2 x h	n_2 x h	n_2 x h	n_2 x h							
			10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 21003		60.00	88.9	72.3	54.9	44.6	2500	48	1206	-	-	1156	1178
		76.81	105.7	85.9	65.3	53.0							
		91.04	119.1	96.8	73.5	59.7							
		103.04	81.6	71.8	54.5	44.3							
		116.71	91.4	78.3	59.5	48.3							
		138.32	106.7	88.2	67.0	54.4							
PGA 21004	H	232.21	201.1	181.1	141.6	115.1	2500	40	1266 (1343-H)	-	-	1216 (1293-H)	1238 (1315-H)
	H	341.67	204.7	166.2	126.2	102.4							
		390.71	193.1	170.9	138.6	112.5							
	H	458.66	201.1	181.1	155.0	125.9							
	H	551.28	201.1	181.1	157.6	142.0							
		592.80	145.1	128.4	109.3	96.7							
		653.56	181.1	160.3	136.4	120.8							
		774.59	145.1	128.4	109.3	96.7							
		933.66	145.1	128.4	109.3	96.7							
PGA 21005	H	1120.11	220.9	179.5	136.4	110.8	2800	31	1246 (1334-H)	-	-	1196 (1284-H)	1218 (1306-H)
	H	1264.64	199.8	176.8	148.5	120.6							
		1398.76	181.9	161.0	137.0	121.3							
	H	1496.32	201.1	181.1	157.6	135.7							
		1527.32	181.9	161.0	137.0	121.3							
	H	1697.64	201.1	181.1	157.6	142.0							
	H	1756.74	146.7	136.8	121.5	98.6							
		1827.71	181.1	160.3	136.4	120.8							
	H	1969.26	201.1	181.1	157.6	142.0							
		2204.48	178.5	161.0	137.0	115.5							
		2267.53	147.7	130.8	111.3	98.5							
	H	2358.23	189.2	176.5	149.3	121.1							
		2499.66	181.1	160.3	136.4	120.8							
	H	2675.52	201.1	181.1	157.6	132.3							
	H	3103.61	201.1	181.1	157.6	142.0							
		3501.23	162.2	143.7	122.2	108.4							
	H	4502.08	201.1	179.4	152.8	135.1							
		5528.05	158.2	140.0	119.1	105.7							
		7897.21	145.1	128.4	109.3	96.7							

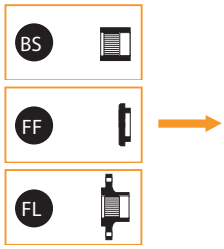
(n_2 x h = 20.000)

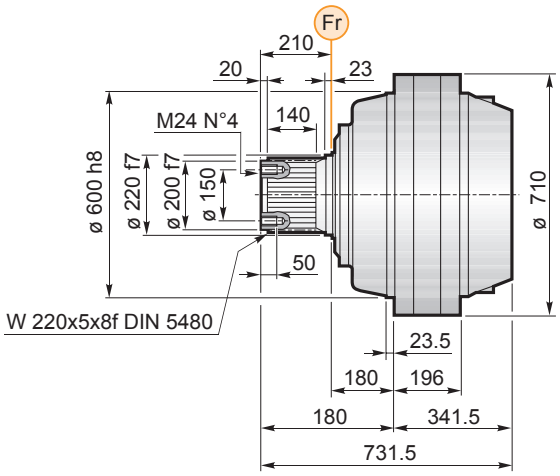
$M_{max} = M_c \times 1.7$

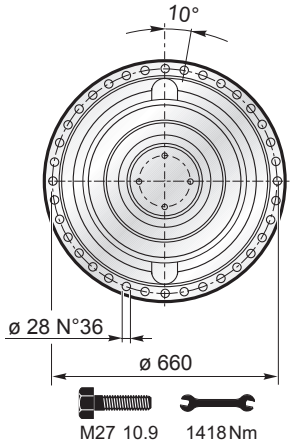


21000/2100H

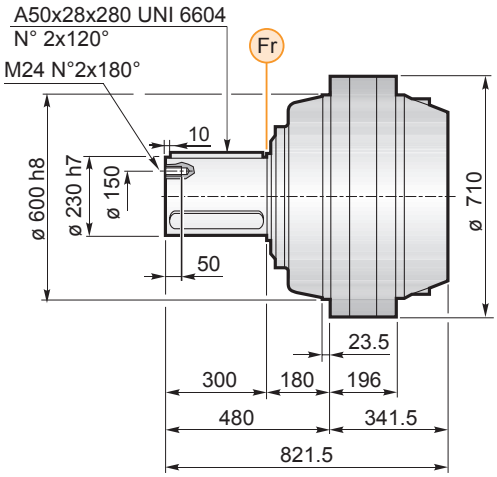
MS

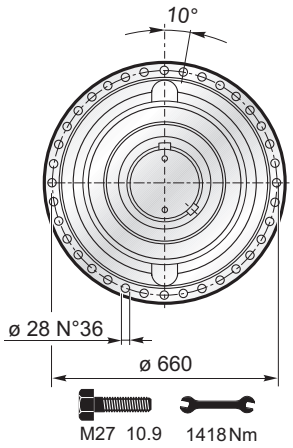


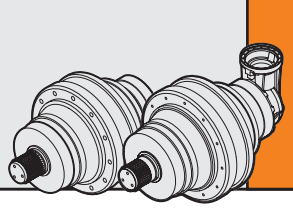




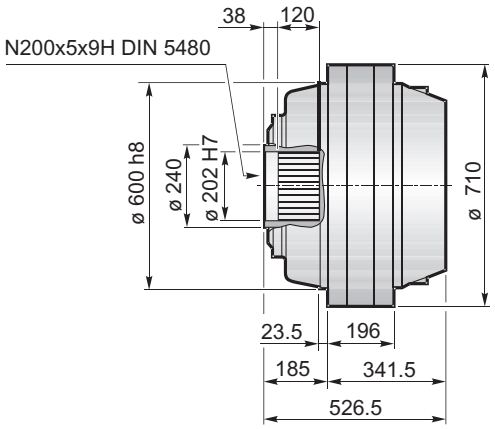
MC

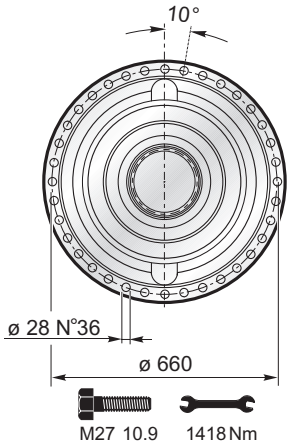




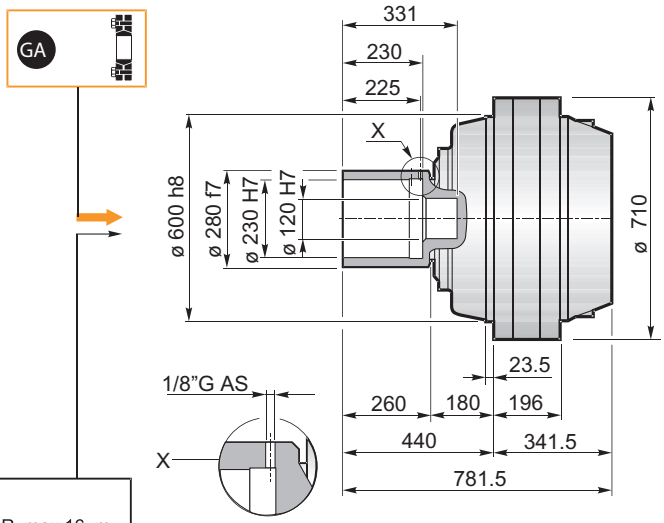


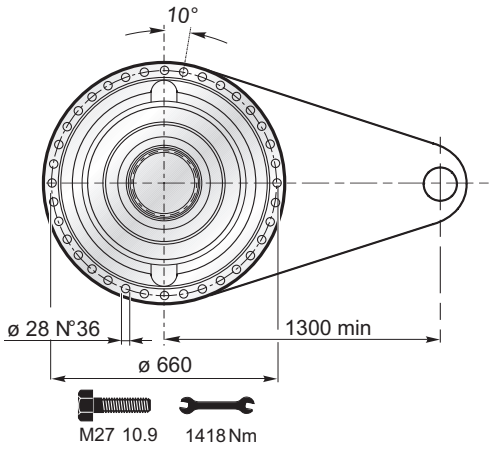
F

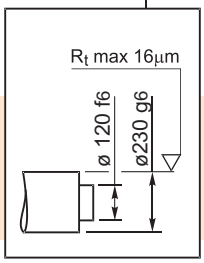




FS



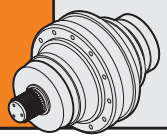




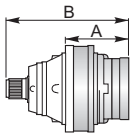
M_{max} 407kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

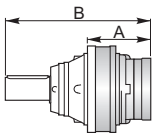
FL BS FF GA → C-24



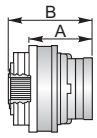
21000/21000H



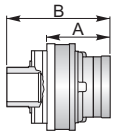
	PG ...MS						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PG21001	341.5	731.5					341.5	731.5				
PG21002	562.5	952.5					607.5	997.5				
PG21003	669.5	1059.5		•			789.5	1179.5				
PG21004	741	1131	•	o	•		883.5	1273.5		•		
PG21005	802	1192	•			•	943	1333	•	o	•	



	PG ...MC						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PG21001	341.5	821.5					341.5	821.5				
PG21002	562.5	1042.5					607.5	1087.5				
PG21003	669.5	1149.5		•			789.5	1269.5		•		
PG21004	741	1221	•	o	•		883.5	1363.5	•	o	•	
PG21005	802	1282	•			•	943	1423	•			•

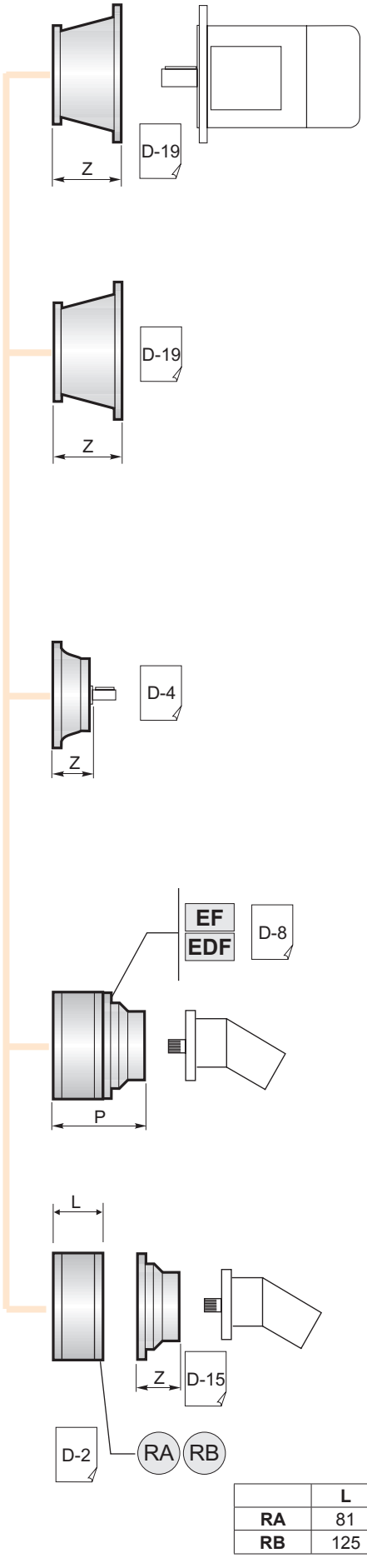


	PG ...F						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PG21001	341.5	526.5					341.5	526.5				
PG21002	562.5	747.5					607.5	792.5				
PG21003	669.5	854.5		•			789.5	974.5		•		
PG21004	741	926	•	o	•		883.5	1068.5	•	o	•	
PG21005	802	987	•			•	943	1128	•			•



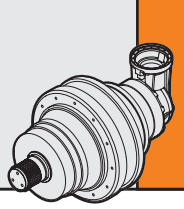
	PG ...FS						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PG21001	341.5	781.5					341.5	781.5				
PG21002	562.5	1002.5					607.5	1047.5				
PG21003	669.5	1109.5		•			789.5	1229.5		•		
PG21004	741	1181	•	o	•		883.5	1323.5	•	o	•	
PG21005	802	1242	•			•	943	1383	•			•

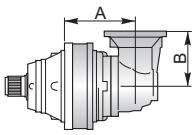
A	B	•
A+13.5	B+13.5	o



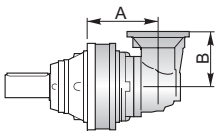
	L
RA	81
RB	125

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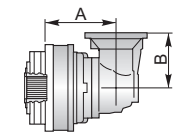




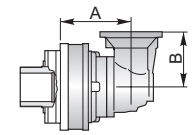
	PGA ...MS						Vers. H				
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF
PGA21003	818.5	315		•							
PGA21004	832.5	315	•	o	•		869,5	315		•	
PGA21005	917.5	240	•			•	971,5	240	•	o	•



	PGA ...MC						Vers. H				
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF
PGA21003	818.5	315		•							
PGA21004	832.5	315	•	o	•		869,5	1349.5		•	
PGA21005	917.5	240	•			•	971,5	1451.5	•	o	•

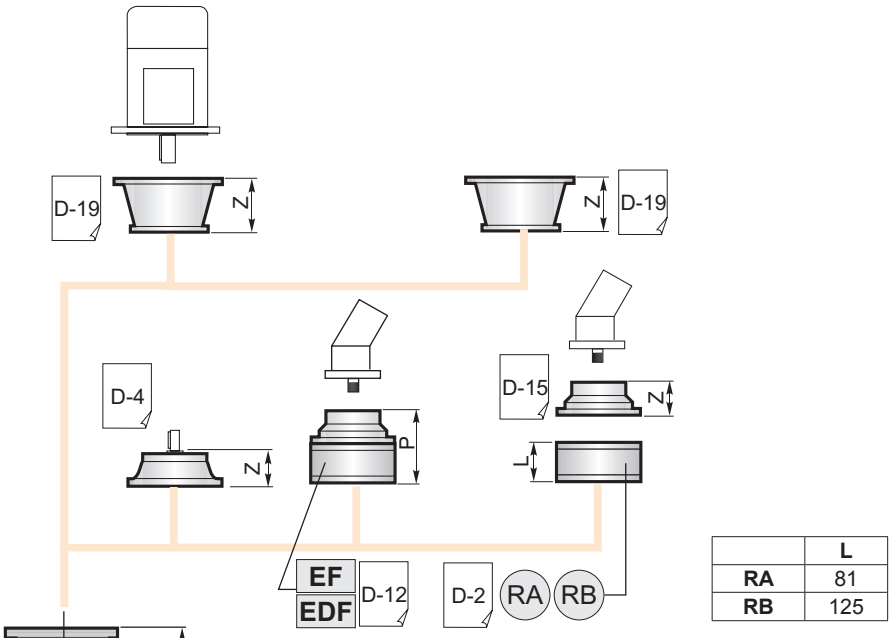


	PGA ...F						Vers. H				
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF
PGA21003	818.5	315		•							
PGA21004	832.5	315	•	o	•		869,5	315		•	
PGA21005	917.5	240	•			•	971,5	240	•	o	•

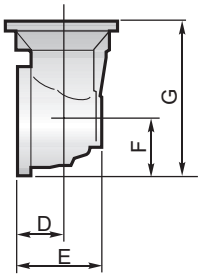


	PGA ...FS						Vers. H				
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF
PGA21003	818.5	315		•							
PGA21004	832.5	315	•	o	•		869,5	315		•	
PGA21005	917.5	240	•			•	971,5	240	•	o	•

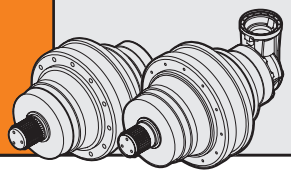
B	•
B+16.5	o



	L
RA	81
RB	125



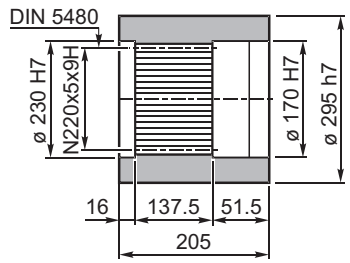
	D	E	F	G
PGA21003	88	256	235	550
PGA21003H				
PGA21004	88	256	235	550
PGA21004H				
PGA21005	88	164	140	380
PGA21005H				



21000/2100H

BS

Boccola scanalata / Splined bushing
Innenverzahnte Buchse / Moyeu cannelé
Casquillo ranurado / Bucha estriada



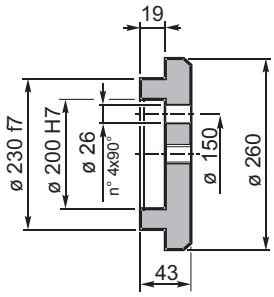
Materiale / Material
Material / Matière
Material / Material

UNI C40
SAE 1040
DIN Ck40

Codice / Code
Bestell - Nr. / Code
Código / Código

FF

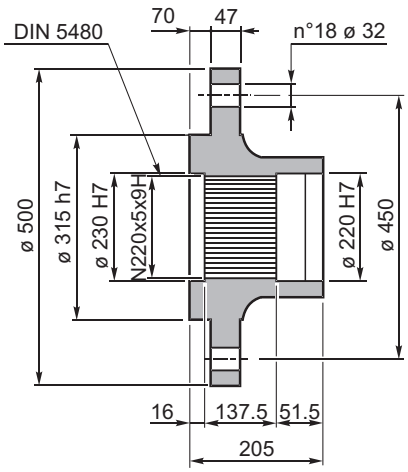
Fondello di arresto / Stop bottom plate
Endscheibe / Bouchon de fermeture
Tapón de detención / Fundo de batente



Codice / Code
Bestell - Nr. / Code
Código / Código

FL

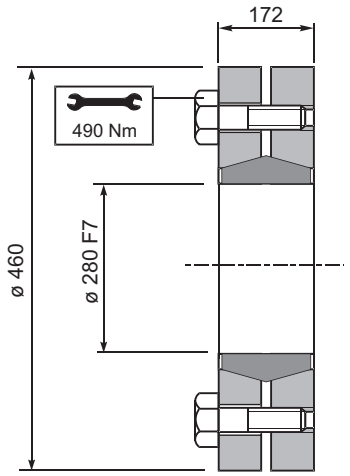
Flangia / Flange
Flansch / Bride
Brida / Flange



Codice / Code
Bestell - Nr. / Code
Código / Código

GA

Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração

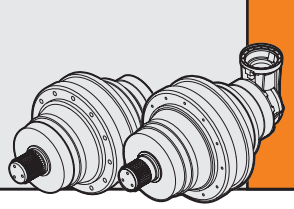


Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

407 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código

chaumea® mechanics on demand



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

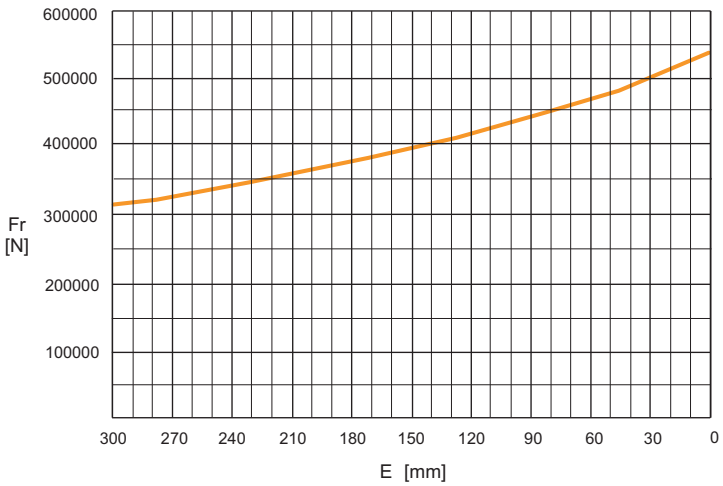
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

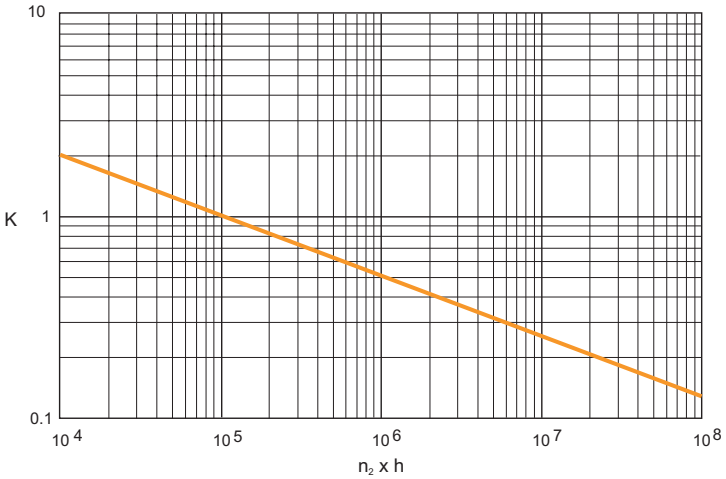
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

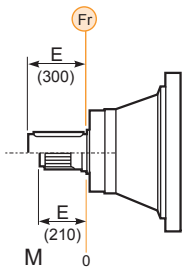
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M





	n_2 x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

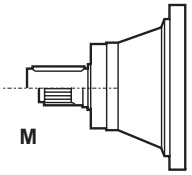
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

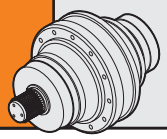
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

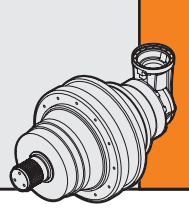
Fa [N]	M
	113600 ←
	113600 →





26000

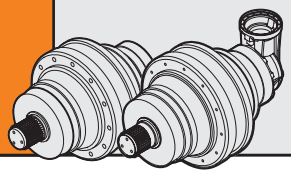
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 26001	**3.68**	320.6	288.7	251.3	220.5	200	136	980	-	-	920	958
	4.94	230.9	207.9	181.0	173.1							
PG 26002	**14.88**	317.4	280.9	239.1	211.6	1200	83	1303	-	-	1243	1281
	18.83	253.3	224.2	190.8	168.9							
	25.28	230.9	207.9	181.0	173.1							
PG 26003	**59.52**	302.5	267.7	227.9	201.7	2000	60	1419	-	-	1359	1397
	75.33	253.3	224.2	190.8	168.9							
	79.90	230.9	207.9	181.0	173.1							
	97.93	253.3	224.2	190.8	168.9							
	103.87	230.9	207.9	181.0	173.1							
	117.71	219.1	193.9	165.1	146.1							
	131.46	230.9	207.9	181.0	173.1							
	158.01	230.9	207.9	181.0	173.1							
PG 26004	**218.24**	210.0	185.9	158.1	140.1	2800	46	1446	-	-	1386	1424
	276.22	253.3	224.2	190.8	168.9							
	333.61	232.8	206.1	175.3	155.3							
	380.85	230.9	207.9	181.0	173.1							
	433.70	253.3	224.2	190.8	168.9							
	489.66	253.3	224.2	190.8	168.9							
	521.27	219.1	193.9	165.1	146.1							
	579.36	230.9	207.9	181.0	173.1							
	624.21	230.0	203.6	173.3	153.3							
	682.69	219.1	193.9	165.1	146.1							
	724.09	230.0	203.6	173.3	153.3							
	790.04	230.9	207.9	181.0	173.1							
	873.90	212.1	187.7	159.9	141.4							
	920.23	221.4	195.9	166.9	147.6							
	1106.05	230.9	207.9	181.0	171.7							
PG 26005	**1139.39**	253.3	224.2	190.8	168.9	2800	40	1458	-	-	1398	1436
	1260.31	232.8	206.1	175.3	155.3							
	1356.53	253.3	224.2	190.8	168.9							
	1427.12	253.3	224.2	190.8	168.9							
	1571.02	230.9	207.9	181.0	173.1							
	1691.83	230.9	207.9	181.0	173.1							
	1757.78	230.9	207.9	180.7	159.8							
	1849.81	253.3	224.2	190.8	168.9							
	1967.74	230.9	207.9	181.0	173.1							
	2085.70	230.9	207.9	181.0	173.1							
	2188.69	230.9	207.9	181.0	173.1							
	2240.76	253.3	224.2	190.8	168.9							
	2313.83	230.9	207.9	181.0	173.1							
	2401.53	230.9	207.9	181.0	173.1							
	2483.17	230.9	207.9	181.0	173.1							
	2602.17	253.3	224.2	190.8	168.9							
	3144.29	253.3	224.2	190.8	168.9							
	4200.36	230.9	207.9	181.0	173.1							
	5073.16	230.9	207.9	181.0	173.1							
	5973.57	202.1	178.9	152.4	134.7							
	8018.87	230.9	207.9	181.0	171.7							



	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 26004	**182.81**	194.0	157.6	119.8	97.3	2500	40	1529	-	-	1469	1507
	231.38	228.8	185.9	141.3	114.8							
	300.79	253.3	223.3	169.7	137.9							
	351.55	208.8	169.5	128.7	104.5							
	383.44	230.0	203.6	173.3	153.3							
	457.01	250.9	203.7	154.7	125.6							
	485.31	230.9	207.9	181.0	173.1							
	549.29	219.1	193.9	165.1	142.8							
	613.49	230.9	207.9	181.0	154.3							
	737.37	230.9	207.9	181.0	173.1							
PGA 26005	**910.58**	191.1	155.3	118.0	95.8	2800	35	1500	-	-	1440	1478
	1012.06	205.8	167.2	127.0	103.2							
	1240.46	237.3	192.8	146.5	119.0							
	1380.08	214.7	190.0	157.8	128.2							
	1498.22	253.3	220.0	167.2	135.8							
	1547.08	230.9	207.9	171.0	138.9							
	1691.54	253.3	224.2	182.0	147.9							
	1746.70	230.9	207.9	181.0	151.2							
	1909.93	230.0	203.6	173.3	153.3							
	2001.43	230.9	207.9	181.0	166.3							
	2156.37	230.0	203.6	173.3	153.3							
	2270.71	230.9	207.9	181.0	173.1							
	2358.40	219.1	193.9	165.1	146.1							
	2501.39	230.0	203.6	173.3	153.3							
	2634.02	230.9	207.9	181.0	173.1							
	2846.34	202.1	178.9	152.4	134.7							
	3398.49	230.0	203.6	173.3	153.3							
	4151.28	230.9	207.9	181.0	173.1							
	5010.17	221.4	195.9	166.9	147.6							
	6021.84	230.9	207.9	181.0	171.7							

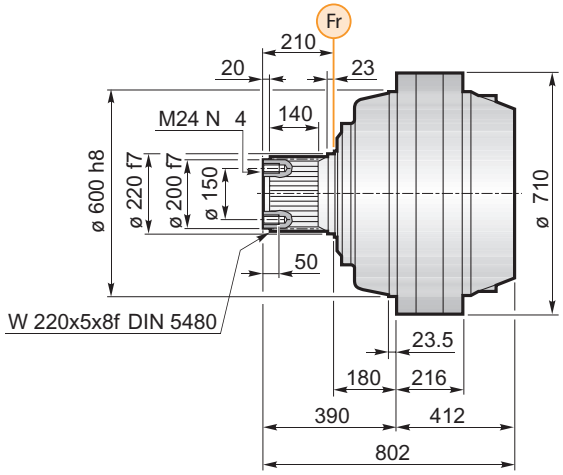
(n_2 x h = 20.000)

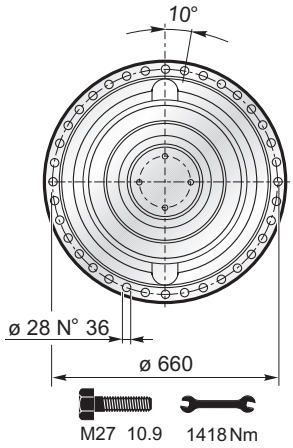
$$M_{max} = M_c \times 1.9$$



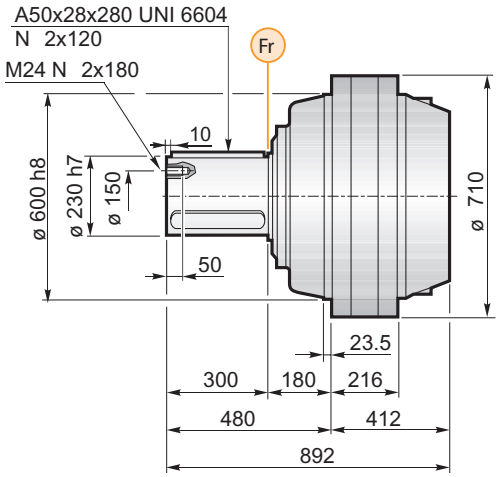
26000

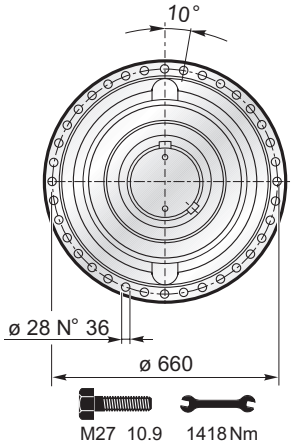
MS

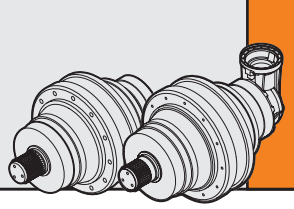

Fr
210
20
23
M24 N 4
140
ø 600 h8
ø 220 f7
ø 200 f7
ø 150
ø 710
50
W 220x5x8f DIN 5480
23.5
180
216
390
412
802


10°
ø 28 N° 36
ø 660
M27 10.9
1418 Nm

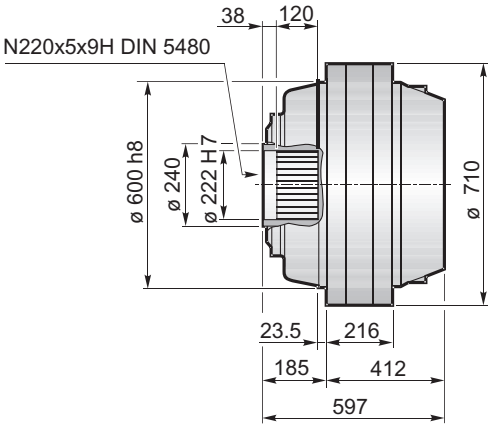
MC

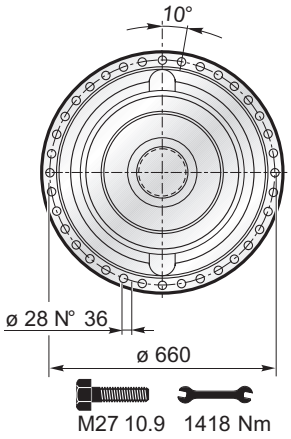

A50x28x280 UNI 6604
N 2x120
M24 N 2x180
Fr
10
ø 600 h8
ø 230 h7
ø 150
ø 710
50
23.5
300
180
216
480
412
892


10°
ø 28 N° 36
ø 660
M27 10.9
1418 Nm

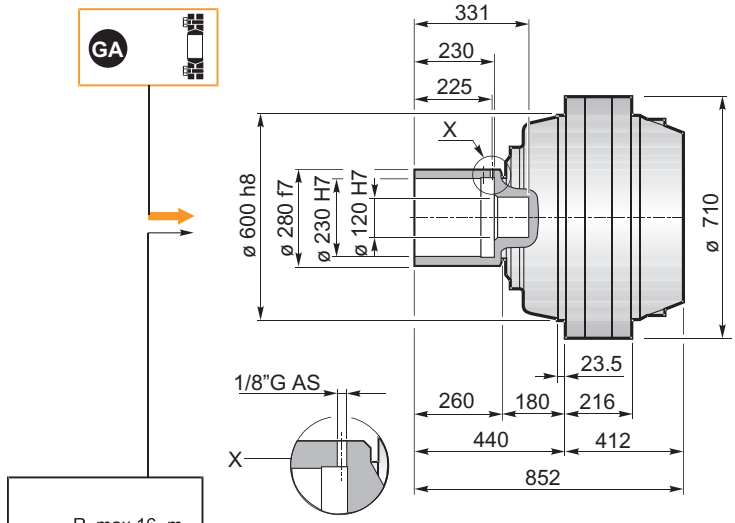


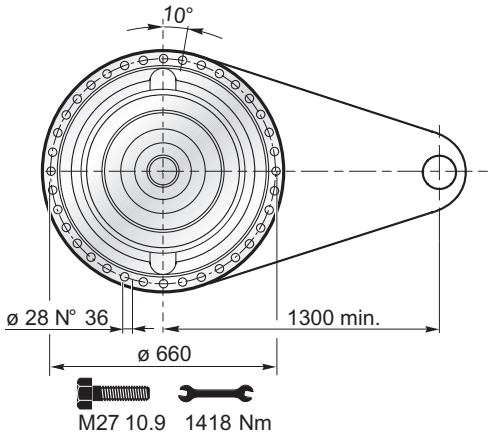
F

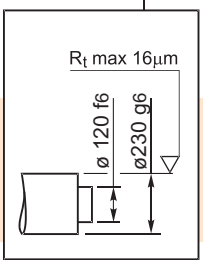




FS



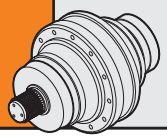




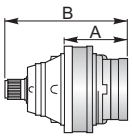
M_{max} 407 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

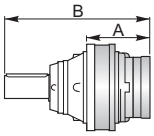
BS FF GA → C-32



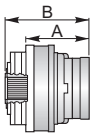
26000



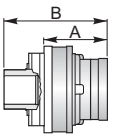
PG ...MS						
	A	B	RA	RB	EF	EDF
PG26001	412	802				
PG26002	667	1057				
PG26003	849	1239				
PG26004	943	1333		•		
PG26005	1002.5	1392.5	•	o	•	



PG ...MC						
	A	B	RA	RB	EF	EDF
PG26001	412	892				
PG26002	667	1147				
PG26003	849	1329				
PG26004	943	1423		•		
PG26005	1002.5	1482.5	•	o	•	

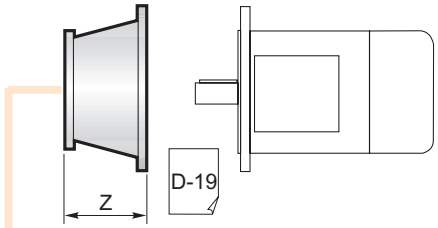


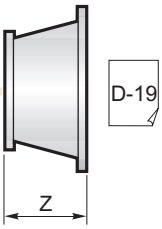
PG ...F						
	A	B	RA	RB	EF	EDF
PG26001	412	597				
PG26002	667	852				
PG26003	849	1034				
PG26004	943	1128		•		
PG26005	1002.5	1187.5	•	o	•	

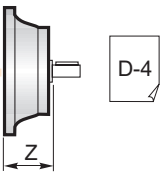


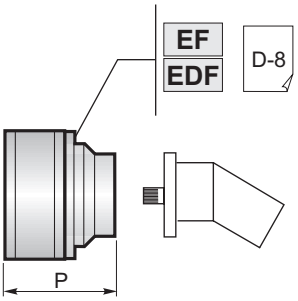
PG ...FS						
	A	B	RA	RB	EF	EDF
PG26001	412	852				
PG26002	667	1107				
PG26003	849	1289				
PG26004	943	1383		•		
PG26005	1002.5	1442.5	•	o	•	

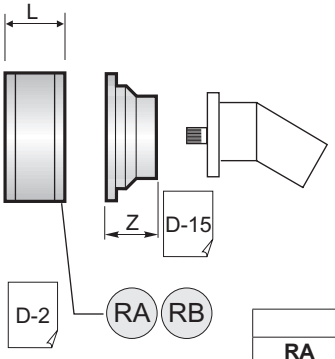
A	B	•
A+13.5	B+13.5	o





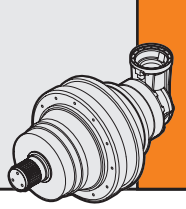


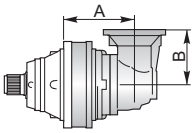




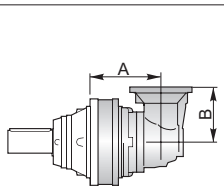
	L
RA	81
RB	125

haumea mechanics on demand

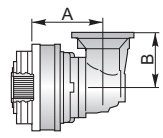




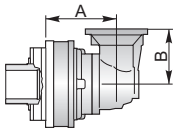
PGA ...MS	A	B	RA	RB	EF	EDF
PGA26004	929	315		•		
PGA26005	1031	240	•	o	•	



PGA ...MC	A	B	RA	RB	EF	EDF
PGA26004	929	315		•		
PGA26005	1031	240	•	o	•	

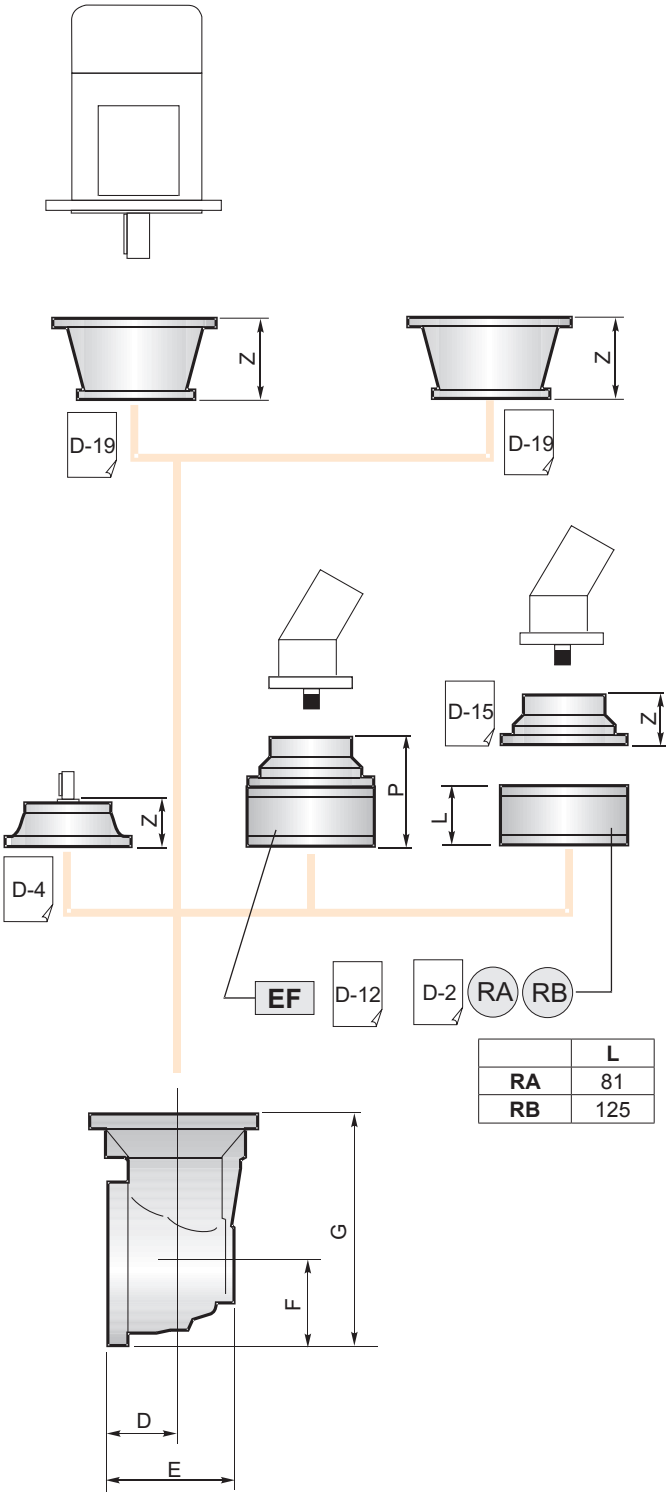


PGA ...F	A	B	RA	RB	EF	EDF
PGA26004	929	315		•		
PGA26005	1031	240	•	o	•	



PGA ...FS	A	B	RA	RB	EF	EDF
PGA26004	929	315		•		
PGA26005	1031	240	•	o	•	

B	•
B+16.5	o

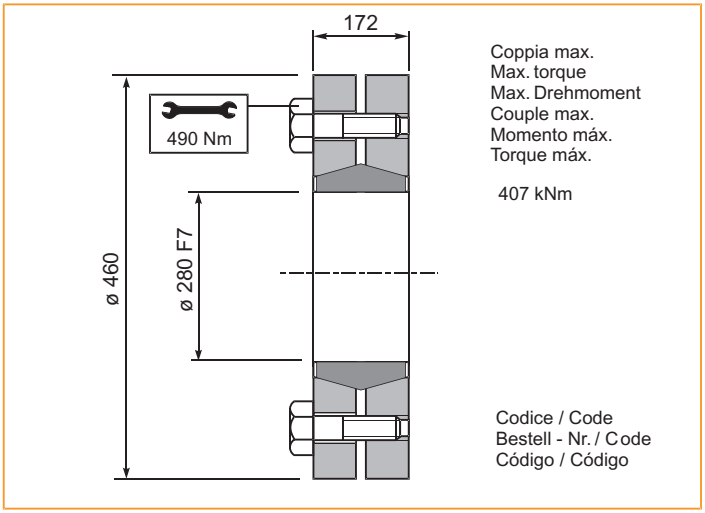


	L
RA	81
RB	125

	D	E	F	G
PGA26004	88	256	235	550
PGA26005	88	164	140	380

GA

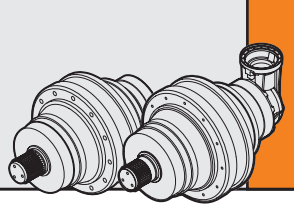
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

407 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

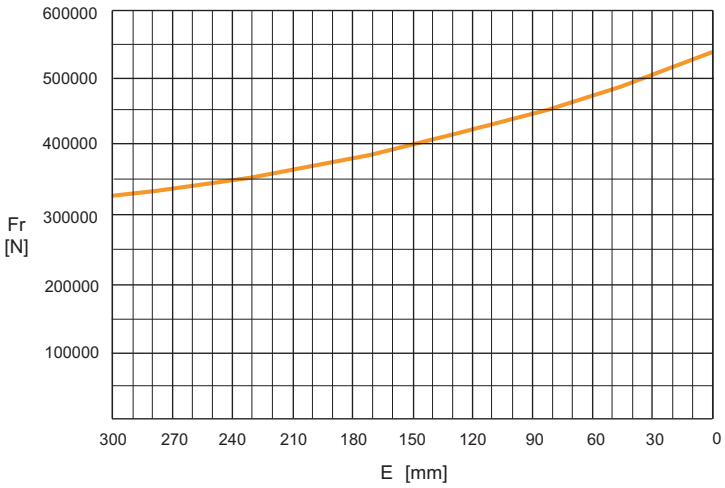
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

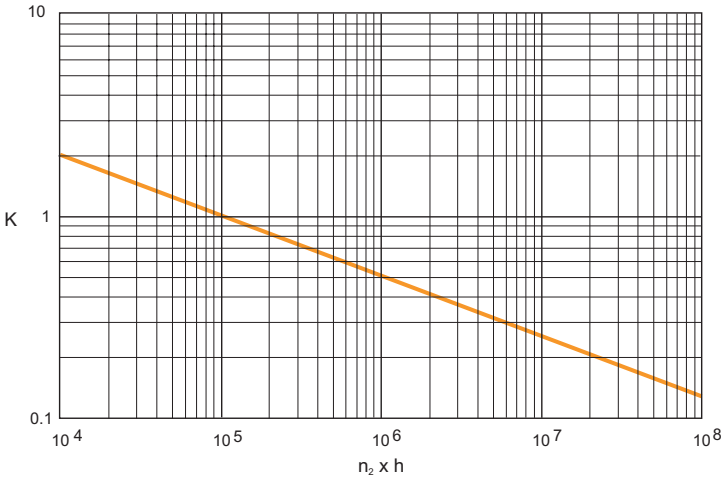
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

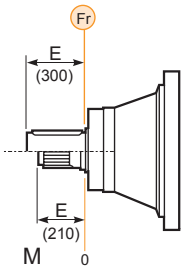
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M





	n_2 x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

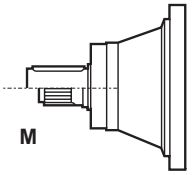
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

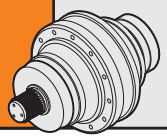
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

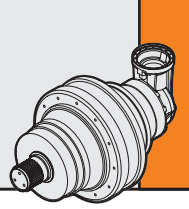
Fa [N]	M
	160500 ←
	113600 →





31000/31000H

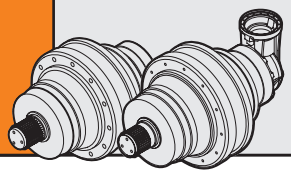
		i	Mc [kNm]				n_{1max}	Pt	Kg				
			n_2 x h	n_2 x h	n_2 x h	n_2 x h							
			10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 31001		**3.43**	344.1	309.8	269.7	242.9	200	214	1900	-	-	1750	1858
		4.09	404.7	364.4	317.2	285.5							
		5.25	302.9	272.7	237.4	222.5							
PG 31002	H	**14.03**	344.1	309.8	269.7	242.9	750	110	2208 (2280-H)	-	-	2058 (2130-H)	2166 (2238-H)
		16.54	346.3	306.5	260.8	230.9							
	H	**18.01**	344.1	309.8	269.7	242.9							
		21.23	302.9	272.7	237.4	222.5							
	H	**25.48**	340.1	306.2	266.6	254.8							
		29.64	145.1	128.4	109.3	96.7							
PG 31003	H	**56.11**	344.1	309.8	264.6	234.2	1500	81	2382 (2464-H)	-	-	2232 (2314-H)	2340 (2422-H)
		66.15	330.0	292.1	248.6	220.0							
	H	**72.03**	344.1	309.8	269.7	242.9							
	H	**84.74**	344.1	309.8	269.7	242.9							
		107.47	302.9	272.7	237.4	222.5							
	H	**129.71**	302.9	272.7	237.4	222.5							
		139.71	302.9	272.7	237.4	222.5							
		167.92	293.6	259.9	221.2	195.7							
PG 31004	H	**199.52**	344.1	307.7	261.8	231.8	2800	65	2402 (2514-H)	-	-	2252 (2359-H)	2360 (2467-H)
	H	**256.11**	344.1	309.8	269.7	242.9							
	H	**308.70**	344.1	309.8	269.7	242.9							
		394.06	302.9	272.7	237.4	222.5							
	H	**433.06**	302.9	272.7	237.4	222.5							
		488.86	302.9	272.7	236.1	208.9							
	H	**555.88**	302.9	272.7	237.4	222.5							
		618.72	302.9	272.7	237.4	222.5							
		698.56	302.9	272.7	237.4	222.5							
		743.66	293.6	259.9	221.2	195.7							
		839.61	293.6	259.9	221.2	195.7							
		973.95	293.6	259.9	221.2	195.7							
PG 31005	H	**1154.57**	346.1	306.4	260.7	230.7	280	55	2438 (2549-H)	-	-	2288 (2399-H)	2396 (2507-H)
	H	**1273.39**	344.1	309.8	269.7	242.9							
	H	**1391.67**	346.1	306.4	260.7	230.7							
		1529.06	302.9	272.7	236.1	208.9							
	H	**1594.95**	344.1	309.8	269.7	242.9							
		1669.60	302.9	272.7	236.1	208.9							
	H	**1743.10**	346.1	306.4	260.7	230.7							
		1846.79	302.9	272.7	236.1	208.9							
		1935.27	302.9	272.7	237.4	222.5							
	H	**2024.24**	346.1	306.4	260.7	230.7							
		2113.14	302.9	272.7	237.4	222.5							
	H	**2277.65**	307.1	271.8	231.1	204.8							
		2364.35	302.9	270.7	230.6	203.9							
		2525.76	302.9	272.7	236.1	208.9							
		2646.76	302.9	272.7	237.4	222.5							
	H	**2767.06**	302.9	272.7	237.4	222.5							
		2855.65	302.9	272.7	234.9	208.2							
		3609.22	302.9	272.7	237.4	222.5							
		4485.75	302.9	272.7	237.4	222.5							
		5064.55	302.9	272.7	237.4	222.5							
	H	**6347.48**	302.9	272.7	237.4	222.5							
		8522.08	270.8	239.7	204.2	180.6							



		i	Mc [kNm] n_2 x h 10.000	Mc [kNm] n_2 x h 20.000	Mc [kNm] n_2 x h 50.000	Mc [kNm] n_2 x h 100.000	n_{1max} [min^{-1}]	Pt [kW]	Kg M	Kg P	Kg CPC	Kg F	Kg FS
PGA 31004		**264.13**	251.0	203.9	155.0	125.9	2500	56	2498 (2580-H)	-	-	2348 (2430-H)	2456 (2538-H)
		339.05	298.9	242.9	184.6	150.0							
		429.11	302.9	272.7	217.7	176.8							
		515.76	293.6	259.9	221.2	195.7							
	H	**605.29**	302.9	248.0	188.3	152.9							
		651.99	302.9	261.2	198.3	161.0							
		783.64	293.6	259.9	221.2	183.1							
PGA 31005	H	**931.09**	344.1	307.7	239.5	194.4	2800	48	2518 (2630-H)	-	-	2368 (2480-H)	2476 (2588-H)
	H	**1036.22**	346.1	306.4	260.7	230.7							
	H	**1195.16**	344.1	309.8	269.7	231.6							
	H	**1338.25**	345.5	305.9	260.4	230.4							
	H	**1457.55**	326.3	288.8	245.6	217.7							
	H	**1574.41**	346.1	306.4	260.7	230.7							
		1688.78	294.5	239.3	181.8	147.7							
		1769.68	302.9	247.2	187.9	152.6							
	H	**1829.33**	302.9	272.7	237.4	222.5							
		1906.68	280.2	248.1	197.9	160.8							
	H	**2020.94**	302.9	272.7	237.4	222.5							
		2137.41	302.9	272.7	214.4	174.2							
	H	**2214.57**	326.3	288.8	245.6	217.7							
		2413.20	302.9	272.7	233.4	189.6							
		2569.00	293.6	259.9	221.2	195.7							
		2900.48	293.6	259.9	221.2	195.7							
		3364.56	293.6	259.9	221.2	195.7							
		4571.23	293.6	259.9	221.2	192.5							
		5302.63	293.6	259.9	221.2	195.7							
		6399.72	270.8	239.7	204.2	180.6							

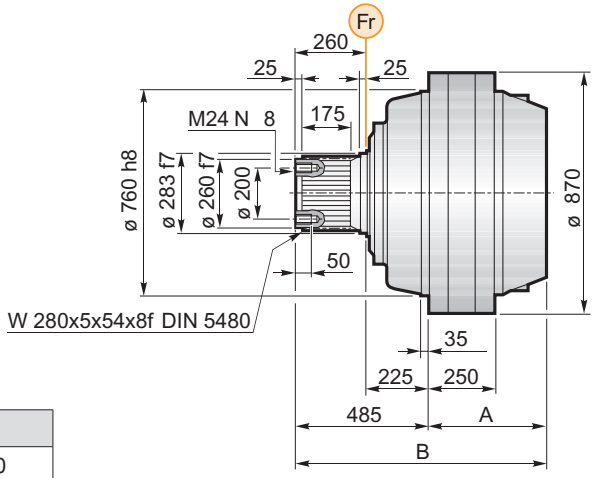
(n_2 x h = 20.000)

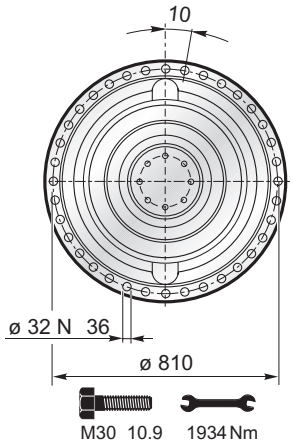
$$M_{max} = M_c \times 1.8$$



31000/31000H

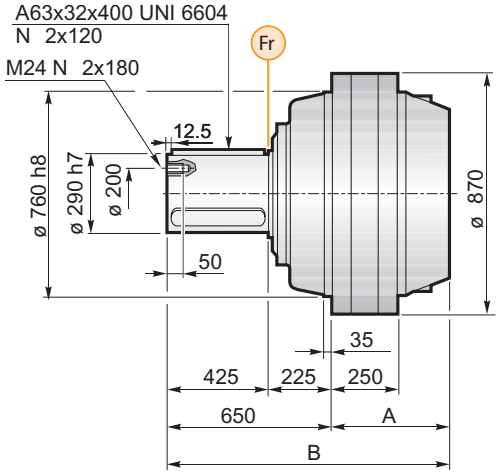
MS

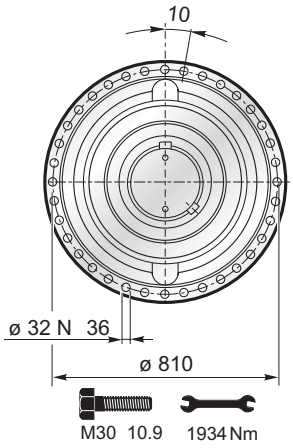




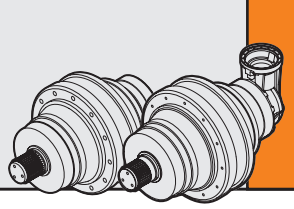
MS	A	B
PG31000	485	970
PG31000H	497.5	982.5

MC

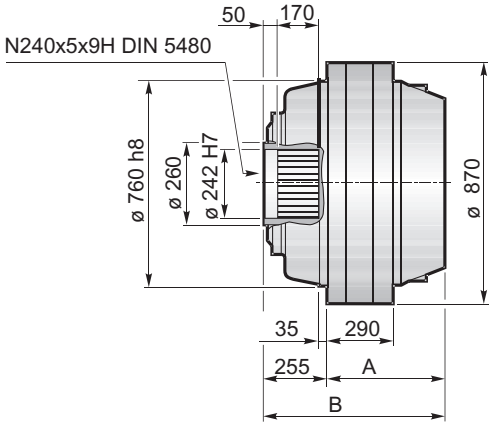


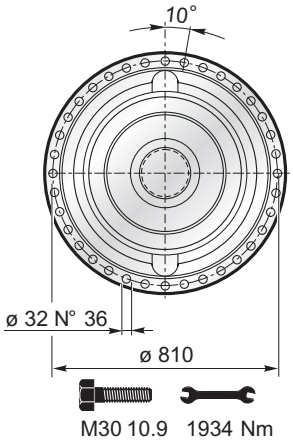


MC	A	B
PG31000	485	1135
PG31000H	497.5	1147.5



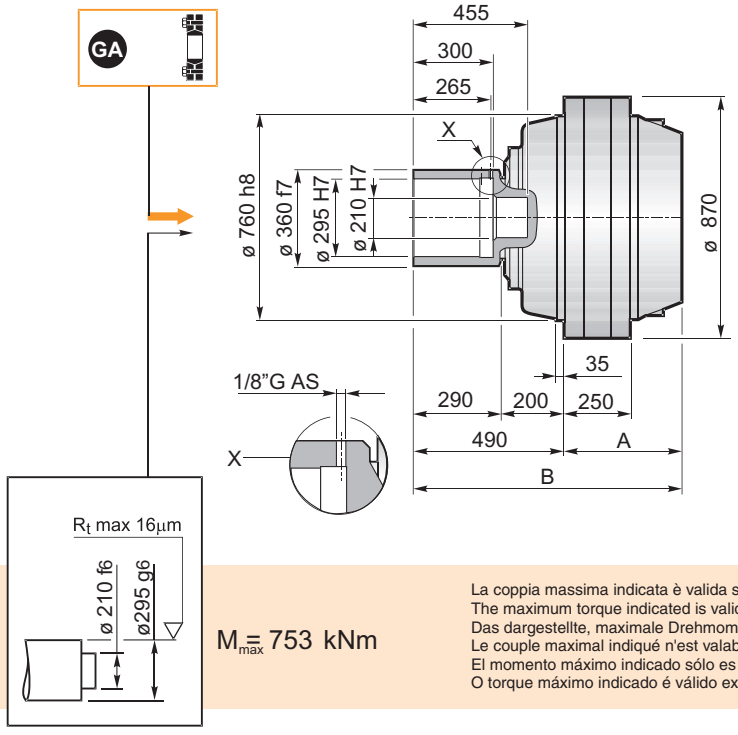
F

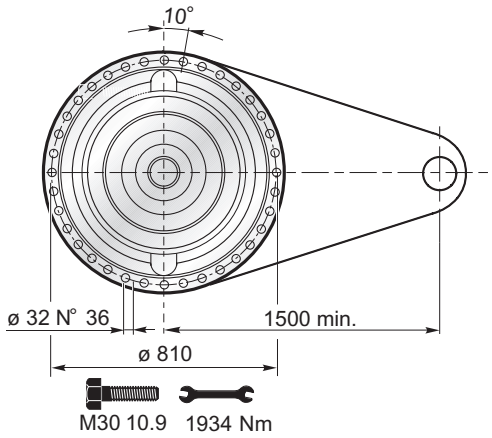




F	A	B
PG31000	485	740
PG31000H	497.5	752.5

FS



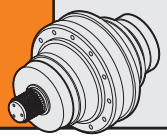


M_{max} = 753 kNm

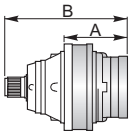
La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

FS	A	B
PG31000	485	975
PG31000H	497.5	987.5

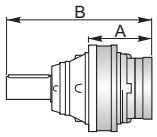
BS FF GA → C-40



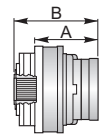
31000/31000H



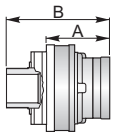
	PG ...MS						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PG31001	485	970					497.5	982.5				
PG31002	740	1225					766	1251				
PG31003	922	1407					943	1428				
PG31004	1016	1501		•			1050	1535		•		
PG31005	1075.5	1560.5	•	o	•		1121.5	1606.5	•	o	•	



	PG ...MC						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PG31001	485	1135					497.5	1147.5				
PG31002	740	1390					766	1416				
PG31003	922	1572					943	1593				
PG31004	1016	1666		•			1050	1700		•		
PG31005	1075.5	1725.5	•	o	•		1121.5	1771.5	•	o	•	

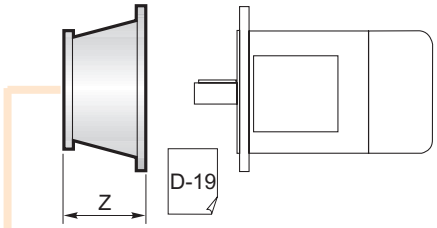


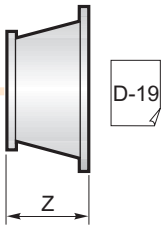
	PG ...F						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PG31001	485	740					497.5	752.5				
PG31002	740	995					766	1021				
PG31003	922	1177					943	1198				
PG31004	1016	1271		•			1050	1305		•		
PG31005	1075.5	1330.5	•	o	•		1121.5	1376.5	•	o	•	

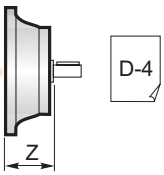


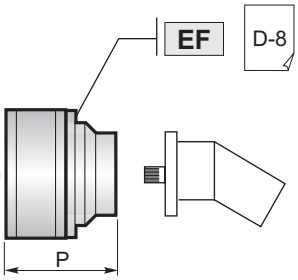
	PG ...FS						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PG31001	485	975					497.5	987.5				
PG31002	740	1230					766	1256				
PG31003	922	1412					943	1433				
PG31004	1016	1506		•			1050	1540		•		
PG31005	1075.5	1565.5	•	o	•		1121.5	1611.5	•	o	•	

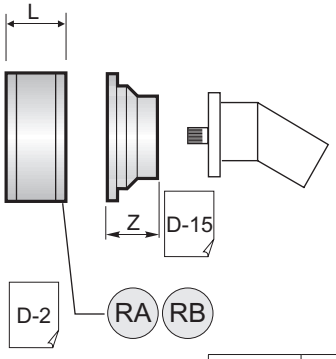
A	B	•
A+13.5	B+13.5	o





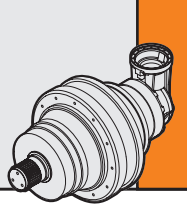


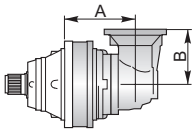




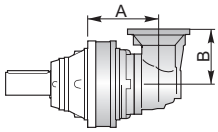
	L
RA	81
RB	125

chaumea mechanics on demand

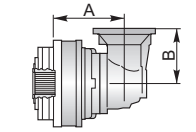




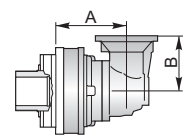
	PGA...MS						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PGA31004	1002	315		•			1028	315		•		
PGA31005	1104	240	•	o	•		1138	240	•	o	•	



	PGA ...MC						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PGA31004	1002	315	•	o	•		1028	315		•		
PGA31005	1104	240	•			•	1138	240	•	o	•	



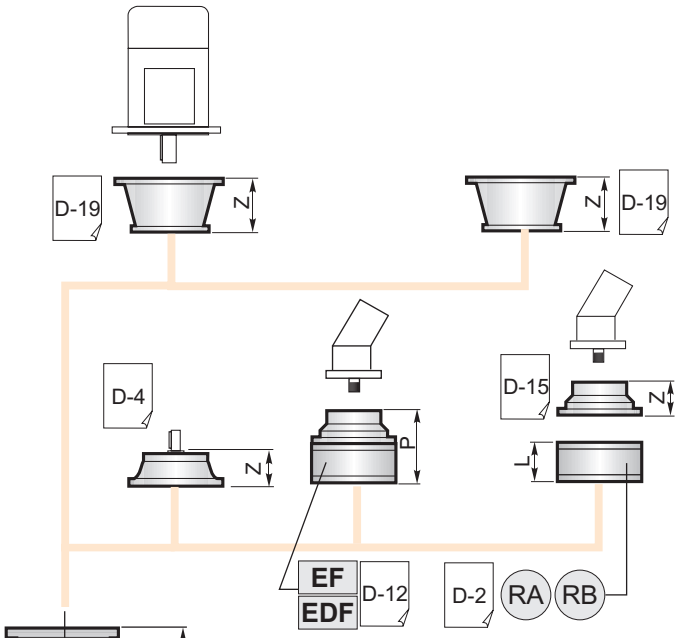
	PGA ...F						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PGA31004	1002	315	•	o	•		1028	315		•		
PGA31005	1104	240	•			•	1138	240	•	o	•	



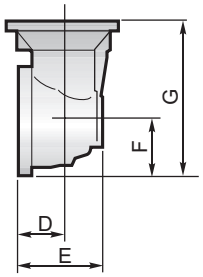
	PGA ...FS						Vers. H					
	A	B	RA	RB	EF	EDF	A	B	RA	RB	EF	EDF
PGA31004	1002	315	•	o	•		1028	315		•		
PGA31005	1104	240	•			•	1138	240	•	o	•	

⚠

B	•
B+16.5	o



	L
RA	81
RB	125

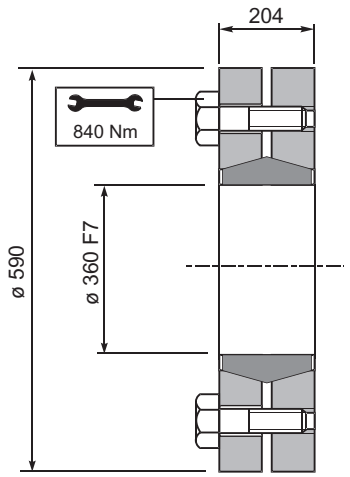


	D	E	F	G
PGA31004 **PGA31004H**	88	256	235	550
PGA31005 **PGA31005H**	88	256	235	550

GA

Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração

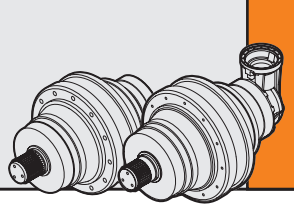




Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

753 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

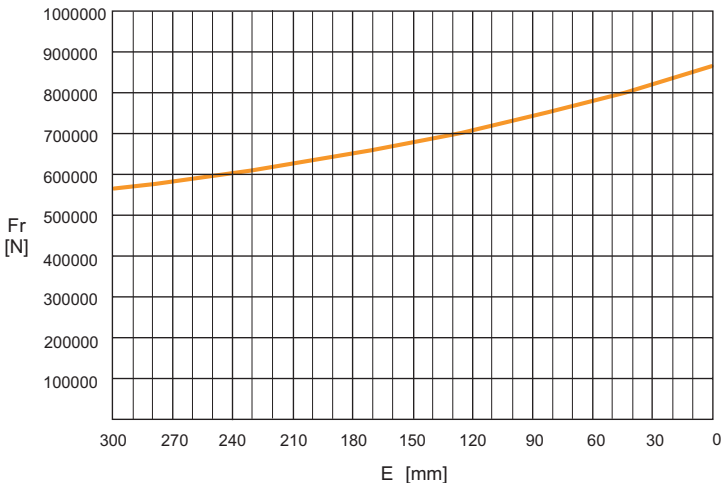
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

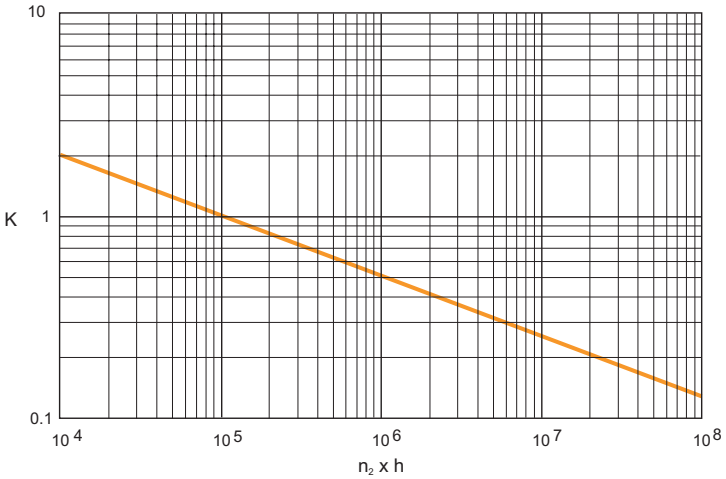
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

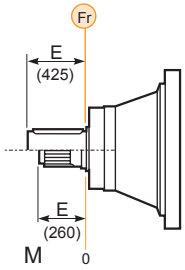
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M





	n_2 x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

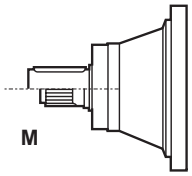
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

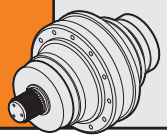
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

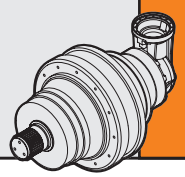
Fa [N]	M
←	240000
→	160500





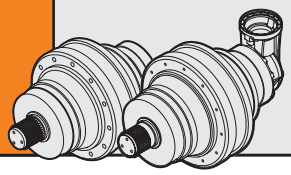
40000

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 40001	**3.43**	426.9	384.4	334.7	301.4	200	224	2030	-	-	1880	1988
	4.09	502.7	452.7	394.1	336.8							
	5.25	376.4	338.9	295.0	276.5							
PG 40002	**14.03**	426.9	384.4	334.7	301.4	750	130	2400	-	-	2250	2358
	16.73	502.7	452.7	394.1	336.8							
	18.01	372.5	335.4	292.0	273.7							
	21.47	432.8	389.7	339.3	318.0							
	27.56	376.4	338.9	295.0	276.5							
	32.71	376.4	338.9	295.0	276.5							
PG 40003	**56.11**	351.3	310.9	264.6	234.2	1500	75	2512	-	-	2362	2470
	66.91	406.1	359.5	305.9	270.8							
	72.03	372.5	335.4	292.0	273.7							
	85.89	376.4	338.9	295.0	276.5							
	110.25	376.4	338.9	295.0	276.5							
	129.71	376.4	338.9	295.0	276.5							
	153.92	291.2	262.2	228.3	218.2							
	182.65	291.2	262.2	228.3	218.2							
PG 40004	**237.91**	402.0	355.7	302.7	268.0	2800	68	2547	-	-	2397	2505
	256.11	372.5	335.4	292.0	273.7							
	305.39	376.4	338.9	295.0	276.5							
	392.00	376.4	338.9	295.0	276.5							
	433.06	376.4	338.9	295.0	276.5							
	472.50	376.4	338.9	295.0	276.5							
	555.88	376.4	338.9	295.0	276.5							
	617.40	376.4	338.9	295.0	270.3							
	726.35	376.4	338.9	295.0	276.5							
	744.19	309.5	273.9	233.0	206.2							
	875.51	353.8	313.1	266.4	235.7							
	1038.94	291.2	262.2	228.3	218.2							
PG 40005	**1153.68**	376.4	338.9	295.0	276.5	2800	55	2562	-	-	2412	2520
	1259.72	376.4	338.9	295.0	276.5							
	1390.60	376.4	338.9	295.0	276.5							
	1518.41	376.4	338.9	295.0	276.5							
	1577.83	376.4	338.9	295.0	276.5							
	1679.37	346.1	306.4	260.7	230.7							
	1742.22	376.4	338.9	295.0	276.5							
	1832.32	373.0	330.4	281.0	249.3							
	1949.06	376.4	338.9	295.0	276.5							
	2025.33	376.4	338.9	295.0	276.5							
	2100.00	376.4	338.9	295.0	276.5							
	2293.01	376.4	338.9	295.0	276.5							
	2382.75	376.4	338.9	295.0	276.5							
	2546.78	376.4	338.9	295.0	270.3							
	2668.73	340.4	301.2	256.2	227.3							
	2767.06	376.4	338.9	295.0	276.5							
	2872.06	376.4	338.9	295.0	276.5							
	3611.50	353.8	313.1	266.4	235.7							
	4476.15	376.4	338.9	295.0	270.3							
	5253.09	353.8	313.1	266.4	235.7							
	6347.48	353.8	313.1	266.4	235.7							
	8938.38	291.2	262.2	228.3	218.2							



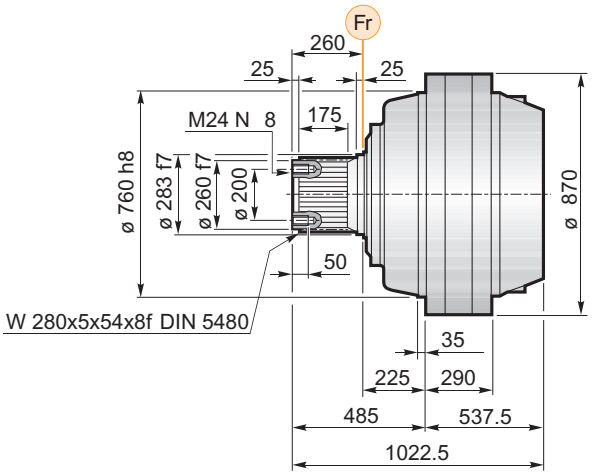
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 40005	**925.43**	367.8	325.5	277.0	245.2	2500	52	2663	-	-	2513	2621
	1103.50	376.4	338.9	295.0	276.5							
	1204.00	376.4	338.9	295.0	276.5							
	1330.11	376.4	338.9	295.0	276.5							
	1451.25	376.4	338.9	295.0	276.5							
	1574.41	346.1	306.4	260.7	230.7							
	1676.63	376.4	338.9	295.0	276.5							
	1738.01	376.4	333.8	283.9	251.6							
	1829.33	376.4	338.9	295.0	276.5							
	1896.30	376.4	338.9	295.0	270.3							
	2020.94	376.4	338.9	295.0	276.5							
	2152.16	376.4	338.9	295.0	276.5							
	2230.94	376.4	338.9	295.0	276.5							
	2485.97	291.2	262.2	228.3	218.2							
	2594.12	376.4	338.9	295.0	276.5							
	2881.20	376.4	338.9	295.0	270.3							
	3389.65	376.4	338.9	295.0	276.5							
	4085.74	353.8	313.1	266.4	235.7							
	5753.44	291.2	262.2	228.3	218.2							
	6279.06	290.2	257.0	218.6	193.5							

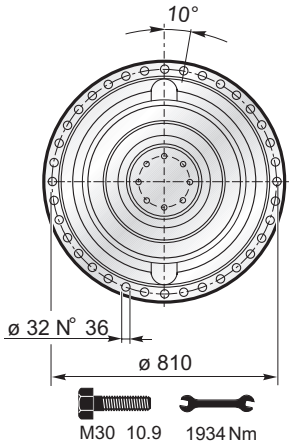
$$M_{max} = M_c \times 1.5 \quad (n_2 \times h = 20.000)$$



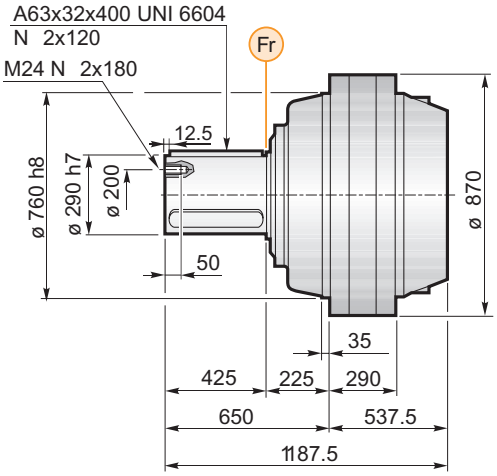
40000

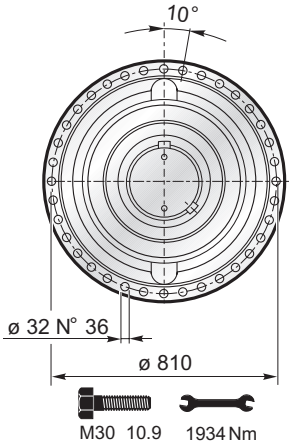
MS

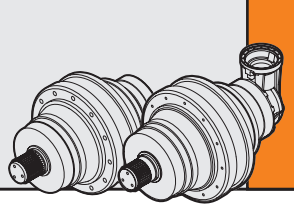

Fr
260
25
25
M24 N 8
175
ø 760 h8
ø 283 f7
ø 260 f7
ø 200
ø 870
50
W 280x5x54x8f DIN 5480
35
225
290
485
537.5
1022.5


10°
ø 32 N° 36
ø 810
M30 10.9
1934 Nm

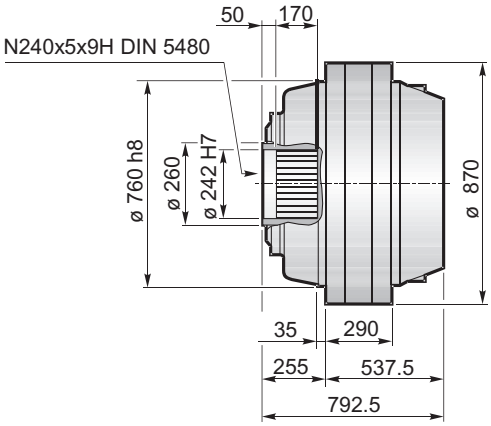
MC

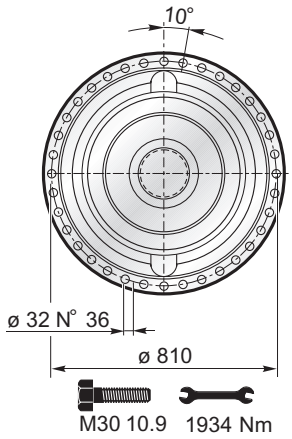

A63x32x400 UNI 6604
N 2x120
M24 N 2x180
Fr
12.5
ø 760 h8
ø 290 h7
ø 200
ø 870
50
35
425
225
290
650
537.5
1187.5


10°
ø 32 N° 36
ø 810
M30 10.9
1934 Nm

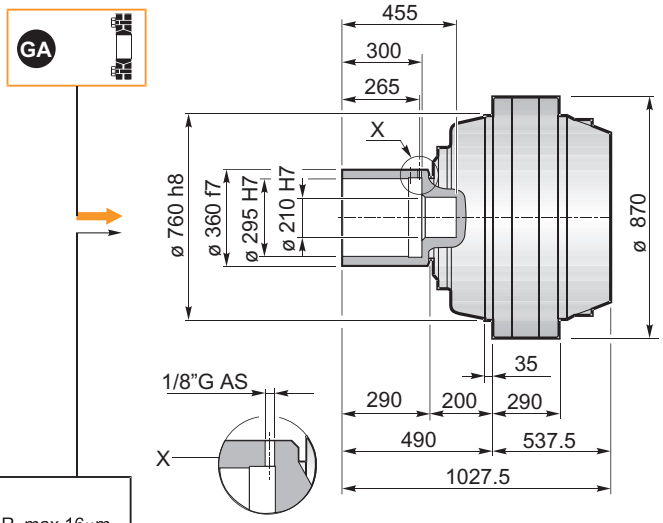


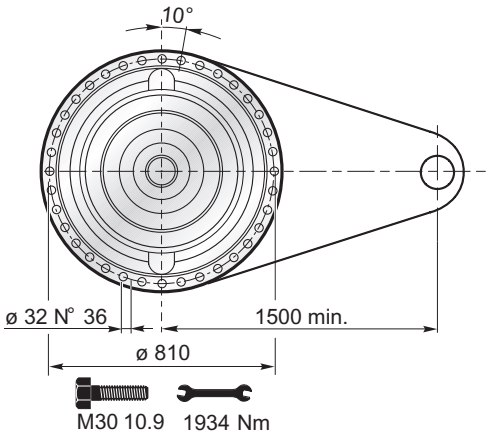
F

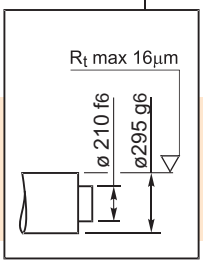




FS



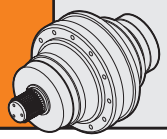




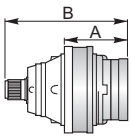
M_{max} 753 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

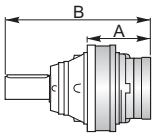
BS FF GA → C-48



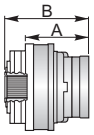
40000



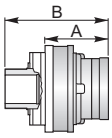
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG40001	537.5	1022.5				
PG40002	806	1291				
PG40003	1003	1488				
PG40004	1090	1575		•		
PG40005	1161.5	1646.5	•	o	•	



	PG ...MS					
	A	B	RA	RB	EF	EDF
PG40001	537.5	1187.5				
PG40002	806	1456				
PG40003	1003	1653				
PG40004	1090	1740		•		
PG40005	1161.5	1811.5	•	o	•	

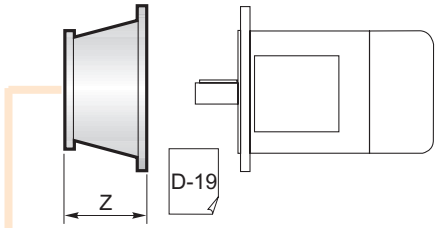


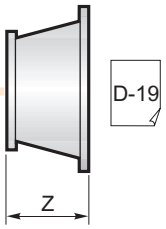
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG40001	537.5	792.5				
PG40002	806	1061				
PG40003	1003	1258				
PG40004	1090	1345		•		
PG40005	1161.5	1416.5	•	o	•	

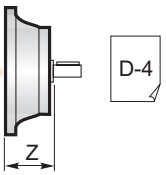


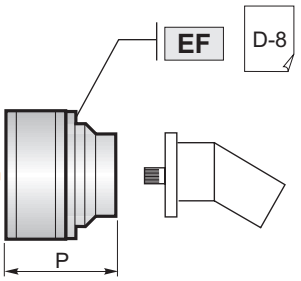
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG40001	537.5	1027.5				
PG40002	806	1296				
PG40003	1003	1493				
PG40004	1090	1580		•		
PG40005	1161.5	1651.5	•	o	•	

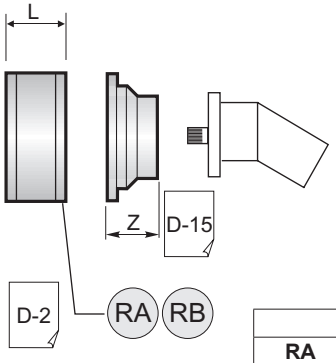
A	B	•
A+13.5	B+13.5	o





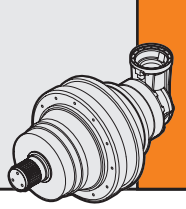


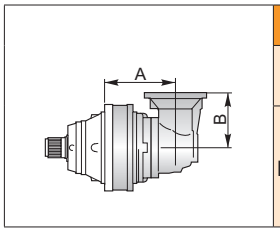




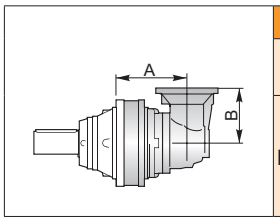
	L
RA	81
RB	125

haumea mechanics on demand

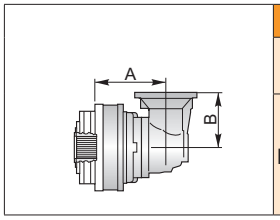




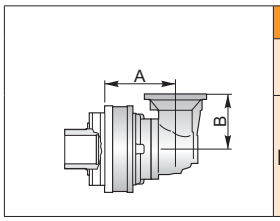
PGA ...MS						
	A	B	RA	RB	EF	EDF
PGA40005	1178	240	•	o	•	



PGA ...MC						
	A	B	RA	RB	EF	EDF
PGA40005	1178	240	•	o	•	

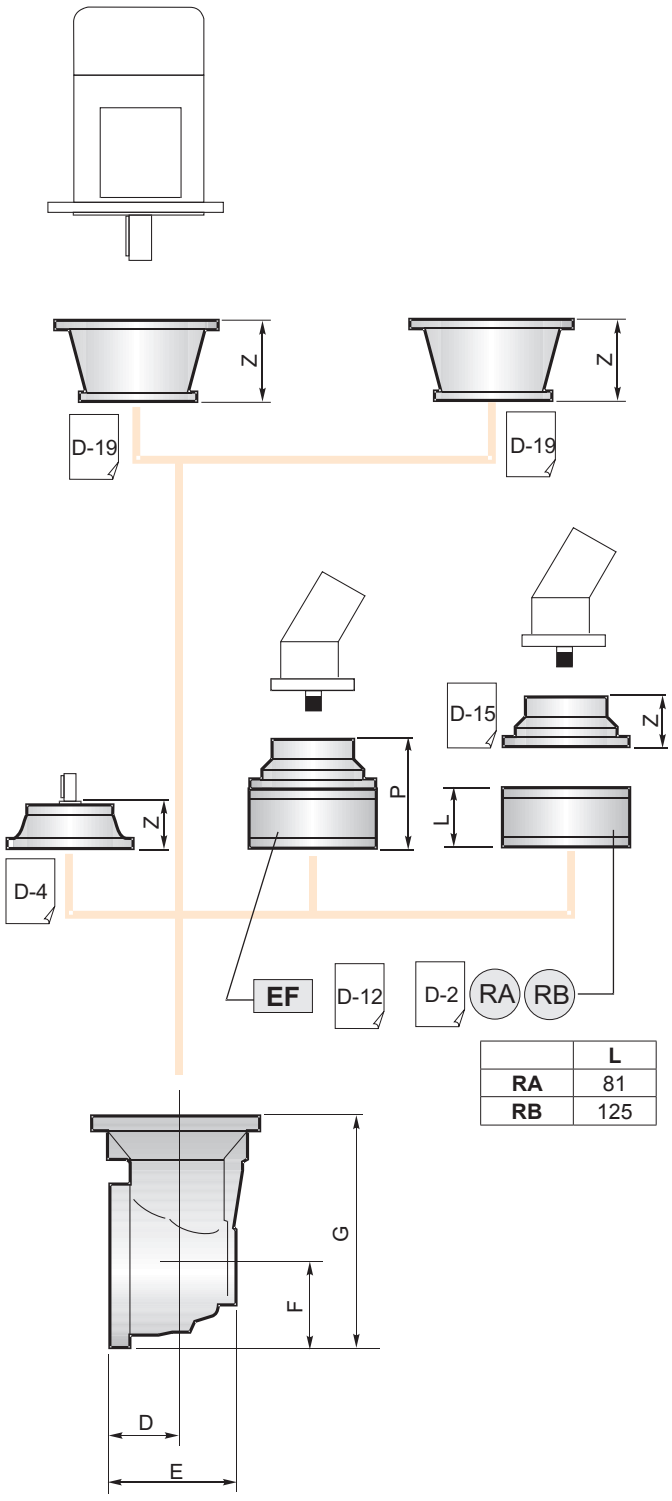


PGA ...F						
	A	B	RA	RB	EF	EDF
PGA40005	1178	240	•	o	•	



PGA ...FS						
	A	B	RA	RB	EF	EDF
PGA40005	1178	240	•	o	•	

B	•
B+16.5	o

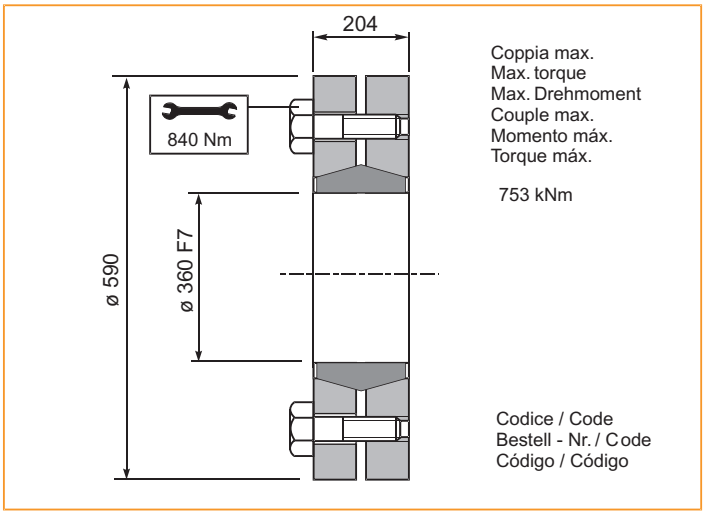


	L
RA	81
RB	125

	D	E	F	G
PGA40005	88	256	235	550

GA

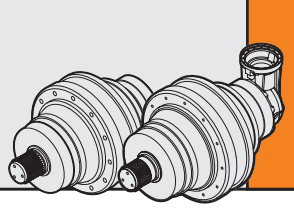
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

753 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

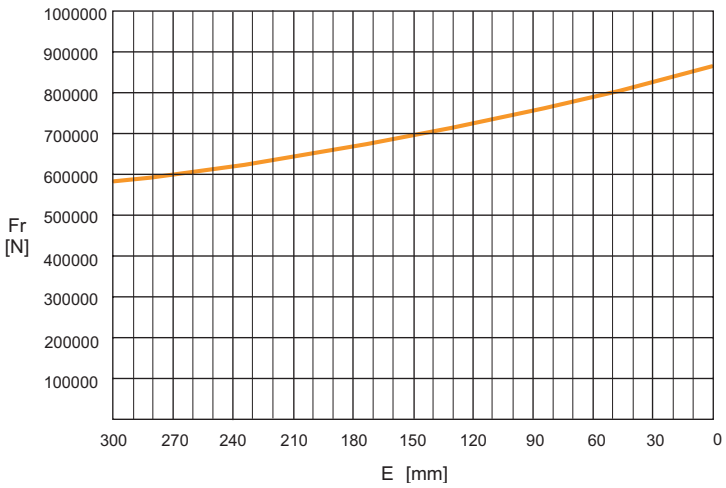
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

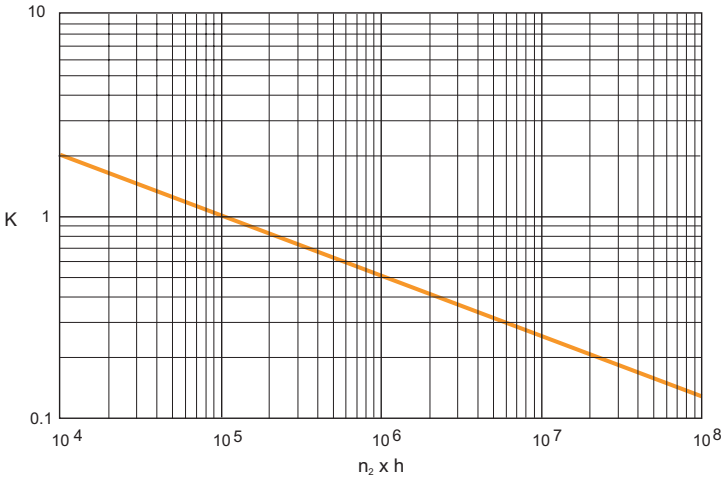
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

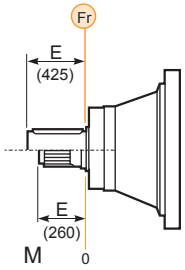
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M





	n_2 x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

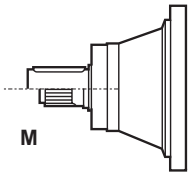
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

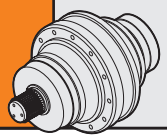
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

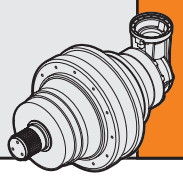
Fa [N]	M
←	240000
→	160500





45000

	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 45001	3.83	630.2	567.4	493.9	452.0	200	224	2030	-	-	1880	1918
PG 45002	14.69	630.2	567.4	493.9	452.0	750	133	2435	-	-	2285	2323
	16.87	629.4	566.8	493.4	452.0							
PG 45003	58.11	591.8	523.8	445.7	394.6	1500	90	2551	-	-	2401	2439
	66.70	629.4	566.8	493.4	442.0							
	74.39	433.2	383.4	326.2	288.8							
	85.39	485.3	429.5	365.5	323.5							
	101.20	387.1	342.6	291.6	258.1							
PG 45004	237.16	591.3	523.3	445.2	394.1	2800	73	2578	-	-	2428	2466
	285.86	515.2	456.0	388.0	343.6							
	318.82	433.2	383.4	326.2	288.8							
	365.95	485.3	429.5	365.5	323.5							
	416.59	431.2	381.6	324.7	287.6							
	478.17	483.0	427.5	363.8	322.1							
	566.72	387.1	342.6	291.6	258.1							
	683.10	387.1	342.6	291.6	258.1							
PG 45005	780.54	413.6	366.3	311.8	276.0	2800	59	2592	-	-	2442	2480
	895.92	463.4	410.4	349.4	309.2							
	940.83	459.9	407.0	346.3	306.7							
	1079.90	515.2	456.0	388.0	343.6							
	1252.35	485.3	429.5	365.5	323.5							
	1382.46	485.3	429.5	365.5	323.5							
	1509.53	485.3	429.5	365.5	323.5							
	1647.22	433.2	383.4	326.2	288.8							
	1890.72	485.3	429.5	365.5	323.5							
	1972.45	483.0	427.5	363.8	322.1							
	2152.37	431.2	381.6	324.7	287.6							
	2470.55	483.0	427.5	363.8	322.1							
	2602.29	387.1	342.6	291.6	258.1							
	2869.02	483.0	427.5	363.8	322.1							
	3144.43	387.1	342.6	291.6	258.1							
	3466.73	422.3	373.7	317.8	282.0							
	4098.60	387.1	342.6	291.6	258.1							
	4314.66	345.5	305.8	260.3	230.4							
	4952.48	387.1	342.6	291.6	258.1							

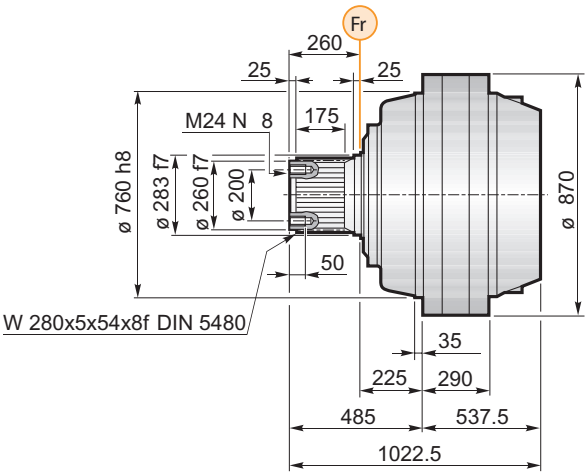


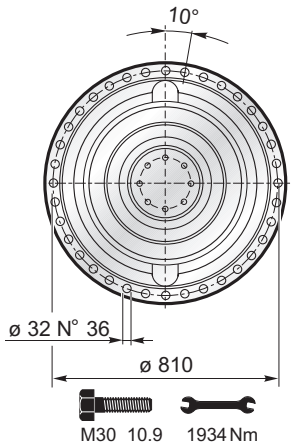
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	**20.000**	**50.000**	**100.000**	[min^{-1}]	[kW]	**M**	**P**	**CPC**	**F**	**FS**
PGA 45005	**634.60**	436.2	354.4	269.3	218.8	2500	52	2698	-	-	2548	2586
	728.41	480.4	390.3	296.6	241.0							
	764.92	459.9	403.9	306.9	249.4							
	877.99	515.2	444.8	338.0	274.6							
	932.49	485.3	429.5	352.6	286.5							
	1123.98	485.3	429.5	365.5	323.5							
	1234.33	433.2	383.4	291.7	236.8							
	1334.00	499.7	405.7	308.0	250.1							
	1468.67	483.0	427.5	363.8	322.1							
	1707.75	485.3	429.5	365.5	297.3							
	1944.08	431.2	381.6	324.7	287.6							
	2231.46	483.0	427.5	363.8	322.1							
	2644.69	387.1	342.6	291.6	258.1							
	3187.80	387.1	342.6	291.6	258.1							

(n_2 x h = 20.000)

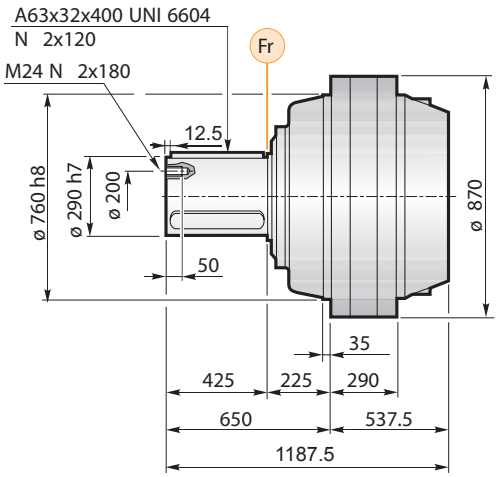
$$M_{max} = M_c \times 1.2$$

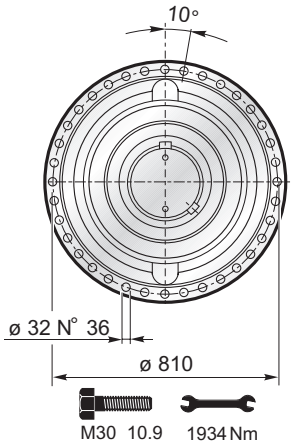
MS

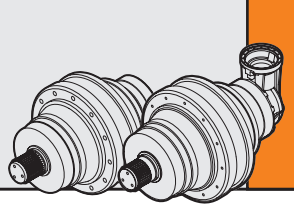

Fr
260
25
25
175
M24 N 8
ø 760 h8
ø 283 f7
ø 260 f7
ø 200
ø 870
50
W 280x5x54x8f DIN 5480
35
225
290
485
537.5
1022.5


10°
ø 32 N° 36
ø 810
M30 10.9
1934 Nm

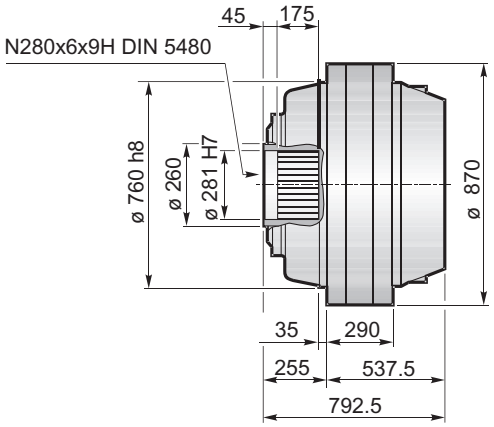
MC

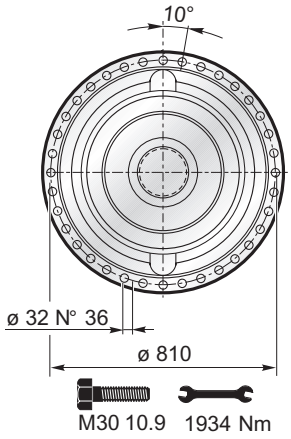

A63x32x400 UNI 6604
N 2x120
Fr
M24 N 2x180
12.5
ø 760 h8
ø 290 h7
ø 200
ø 870
50
35
425
225
290
650
537.5
1187.5


10°
ø 32 N° 36
ø 810
M30 10.9
1934 Nm

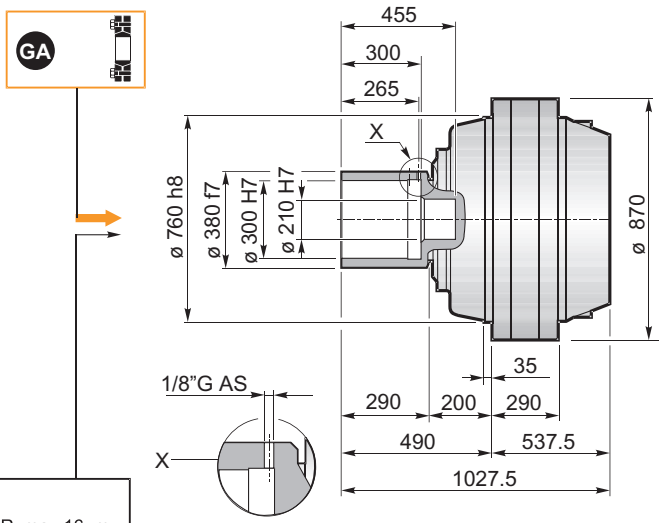


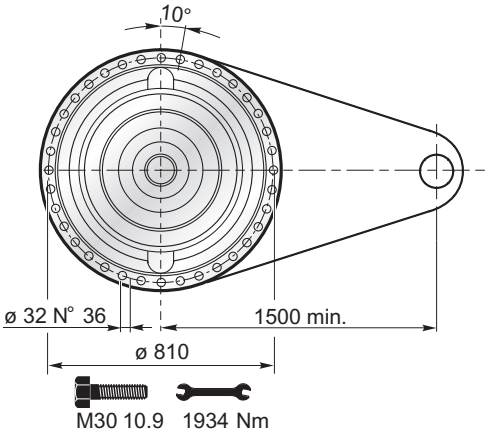
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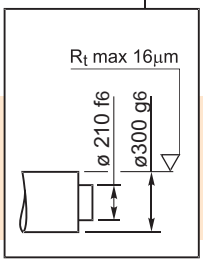




FS



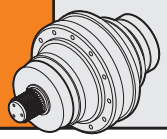




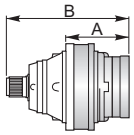
M_{max} = 739 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

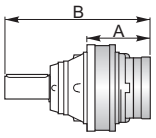
BS FF GA → C-56



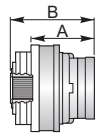
45000



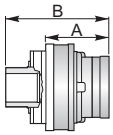
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG45001	537.5	1022.5				
PG45002	884.5	1369.5				
PG45003	1105.5	1590.5				
PG45004	1212.5	1697.5		•		
PG45005	1284	1769	•	o	•	



	PG ...MS					
	A	B	RA	RB	EF	EDF
PG45001	537.5	1187.5				
PG45002	884.5	1534.5				
PG45003	1105.5	1755.5				
PG45004	1212.5	1862.5		•		
PG45005	1284	1934	•	o	•	

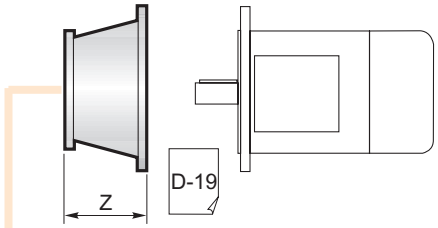


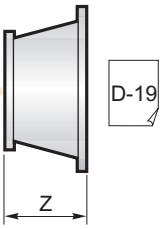
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG45001	537.5	797.5				
PG45002	884.5	1144.5				
PG45003	1105.5	1365.5				
PG45004	1212.5	1472.5		•		
PG45005	1284	1544	•	o	•	

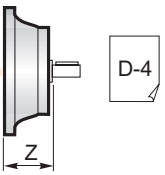


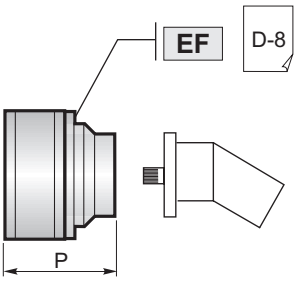
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG45001	537.5	1027.5				
PG45002	884.5	1374.5				
PG45003	1105.5	1595.5				
PG45004	1212.5	1702.5		•		
PG45005	1284	1774	•	o	•	

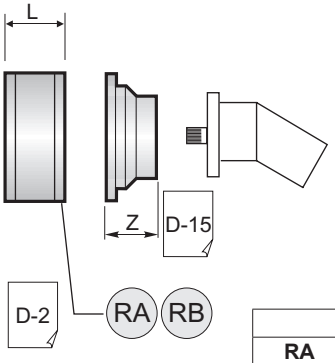
A	B	•
A+13.5	B+13.5	o





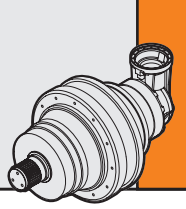


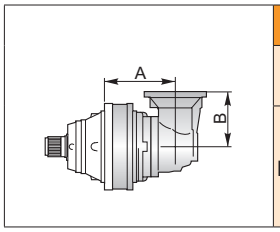




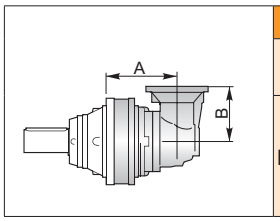
	L
RA	81
RB	125

haumea mechanics on demand

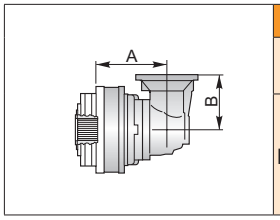




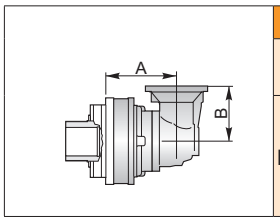
PGA ...MS						
	A	B	RA	RB	EF	EDF
PGA45005	1300.5	240	•	o	•	



PGA ...MC						
	A	B	RA	RB	EF	EDF
PGA45005	1178	240	•	o	•	

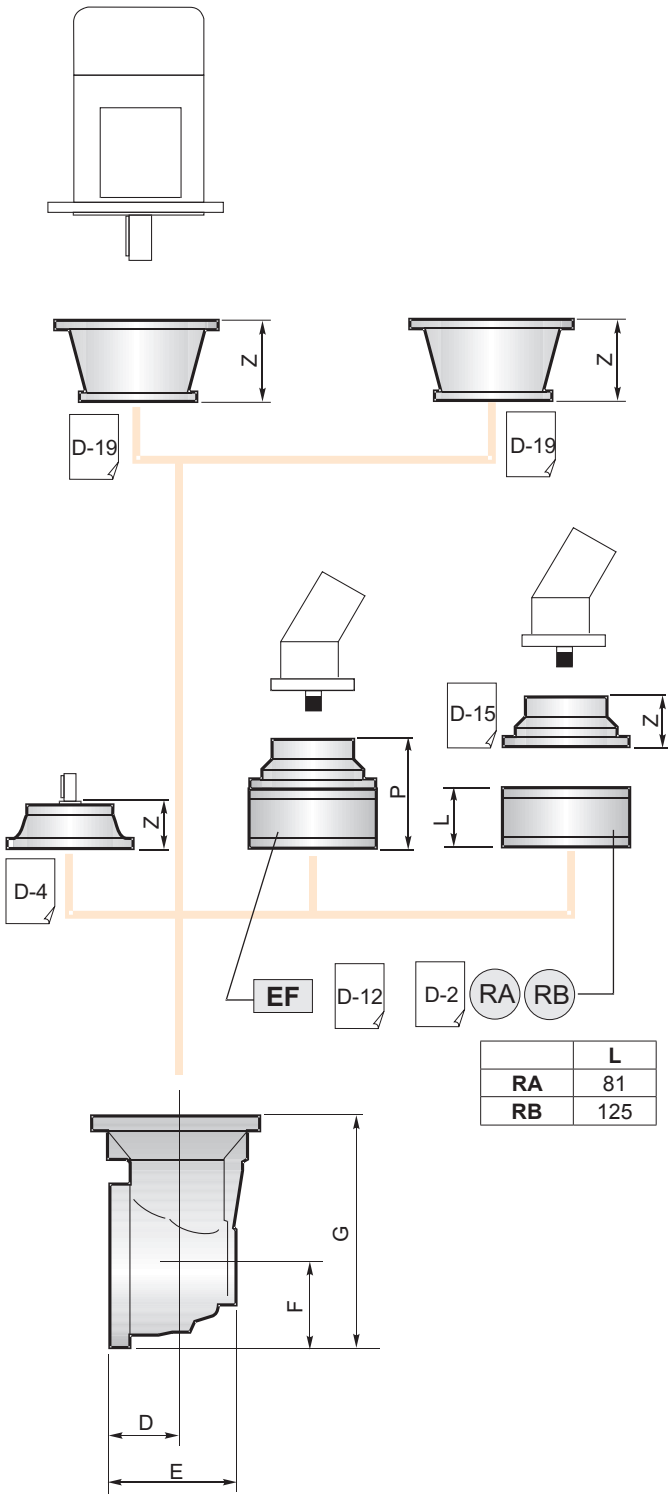


PGA ...F						
	A	B	RA	RB	EF	EDF
PGA45005	1178	240	•	o	•	



PGA ...FS						
	A	B	RA	RB	EF	EDF
PGA45005	1178	240	•	o	•	

B	•
B+16.5	o

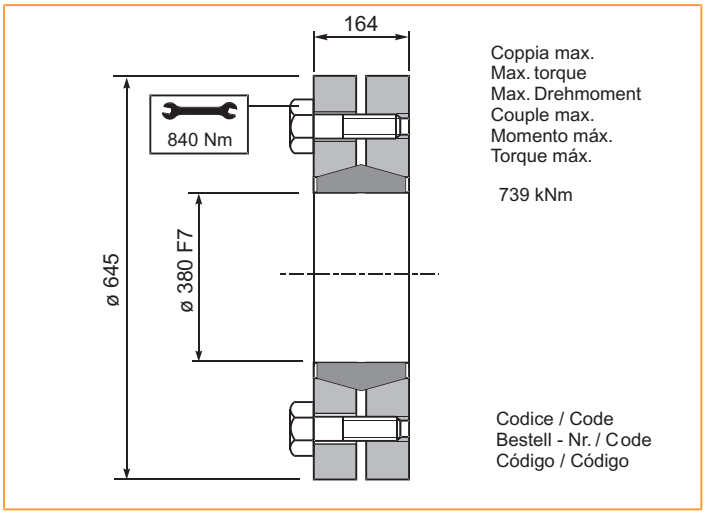


	L
RA	81
RB	125

	D	E	F	G
PGA45005	88	256	235	550

GA

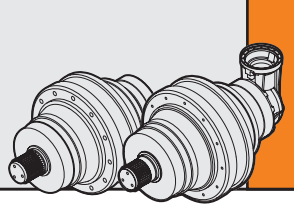
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



Coppia max.
Max. torque
Max. Drehmoment
Couple max.
Momento máx.
Torque máx.

739 kNm

Codice / Code
Bestell - Nr. / Code
Código / Código



CARICHI RADIALI (Fr)
Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2$xh desiderato.

RADIAL LOADS (Fr)
The following curves show the radial loads and the K factors to obtain the required $n_2$xh value.

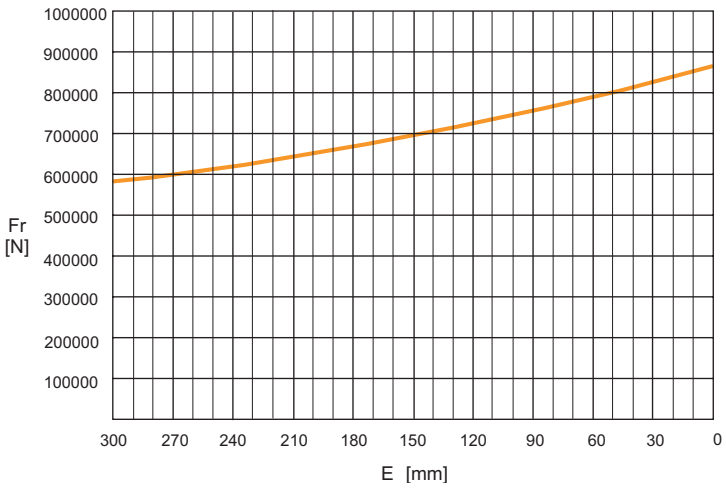
RADIALLAST (Fr)
In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2$xh verglichen werden.

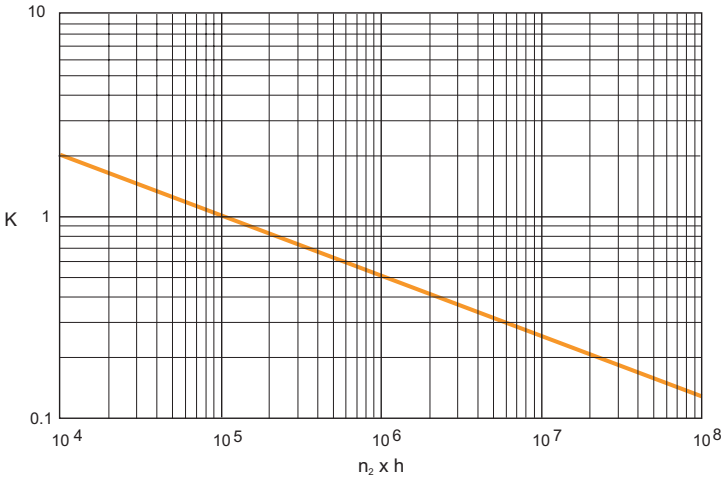
CHARGES RADIALES (Fr)
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2$xh désirée.

CARGAS RADIALES (Fr)
En los siguientes diagramas se indican las cargas radiales y los coeficientes K para obtener el valor requerido $n_2$xh.

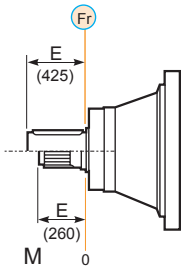
CARGAS RADIAIS (Fr)
Nos diagramas seguintes são indicadas as cargas radiais e os coeficientes K para obter o valor $n_2$xh desejado.

M





	n_2 x h				
	10^5	10^4	10^6	10^7	10^8
M	Fr	Fr • K			



CARICHI ASSIALI (Fa)
I valori dei carichi assiali indicati in tabella sono riferiti alle versioni e alla direzione di applicazione del carico.

AXIAL LOADS (Fa)
The values of the axial loads in the table refer to the output versions and load direction of application.

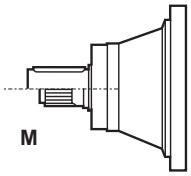
AXIALLAST (Fa)
Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

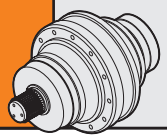
CHARGES AXIALES (Fa)
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

CARGAS AXIALES (Fa)
Los valores de las cargas axiales indicados en la tabla se refieren a las versiones y a la dirección de aplicación de la carga.

CARGAS AXIAIS (Fa)
Os valores das cargas axiais indicadas na tabela referemse às versões e à direção de aplicação da carga.

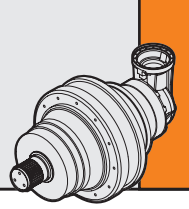
Fa [N]	M	
	240000	←
	160500	→





53000

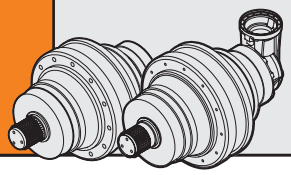
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PG 53001	**3.84**	807.6	727.2	633.1	571.3	100	324	-	-	-	3200	3257
	5.44	458.3	412.7	359.3	338.1							
PG 53002	**14.13**	715.0	609.9	463.3	376.3	200	185	-	-	-	3710	3767
	18.97	514.7	463.5	403.5	363.4							
	26.87	458.3	412.7	359.3	338.1							
PG 53003	**55.88**	573.0	507.2	431.6	376.3	1200	125	-	-	-	3905	3962
	75.02	514.7	463.5	403.5	363.4							
	96.03	514.7	463.5	402.6	356.4							
	106.27	458.3	412.7	359.3	338.1							
	136.05	458.3	412.7	359.3	338.1							
	161.24	458.3	412.7	359.3	338.1							
PG 53004	**198.69**	511.1	452.4	384.8	340.6	2000	92	-	-	-	3964	4021
	239.50	445.3	394.1	335.4	297.0							
	266.72	514.7	463.5	403.5	363.4							
	321.50	514.7	463.5	403.5	363.4							
	411.57	514.7	463.5	402.6	356.4							
	455.46	458.3	412.7	359.3	338.1							
	537.79	514.7	463.5	400.8	354.9							
	595.13	458.3	412.7	359.3	338.1							
	691.04	458.3	412.7	359.3	338.1							
	761.87	458.3	412.7	359.3	338.1							
	902.95	458.3	412.7	359.3	338.1							
	1088.38	458.3	412.7	359.3	338.1							
PG 53005	**1214.55**	514.7	463.5	403.5	363.4	2800	75	-	-	-	3985	4042
	1326.18	514.7	463.5	403.5	362.3							
	1408.49	514.7	463.5	402.6	356.4							
	1486.43	458.3	412.7	359.3	338.1							
	1554.83	514.7	463.5	402.6	356.4							
	1640.86	458.3	412.7	359.3	338.1							
	1752.98	458.3	411.1	349.6	309.7							
	1861.79	458.3	412.7	359.3	325.4							
	1952.27	458.3	412.7	359.3	338.1							
	2031.64	514.7	463.5	400.8	354.9							
	2126.46	514.7	463.5	402.6	356.4							
	2218.38	514.7	463.5	400.8	354.9							
	2364.88	458.3	412.7	359.3	338.1							
	2499.24	458.3	412.7	359.3	338.1							
	2660.01	453.9	401.7	341.8	302.7							
	2778.57	514.7	463.5	400.8	354.9							
	2878.16	458.3	412.7	359.3	338.1							
	3226.73	514.7	463.5	400.8	354.9							
	4489.57	458.3	412.7	359.3	338.1							
	5010.01	458.3	412.7	359.3	338.1							
	6546.41	458.3	412.7	359.3	338.1							
	7890.76	458.3	412.7	359.3	338.1							



	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	20.000	50.000	100.000	[min^{-1}]	[kW]	M	P	CPC	F	FS
PGA 53005	819.22	514.7	423.8	322.0	261.6							
	864.55	458.3	412.7	334.4	271.7							
	987.46	514.7	463.5	367.0	298.2							
	1160.57	458.3	412.7	359.3	333.9							
	1244.71	476.1	386.5	293.4	238.2							
	1334.06	458.3	412.7	359.3	338.1							
	1398.90	458.3	412.7	359.3	338.1							
	1500.32	514.7	440.5	334.4	271.5							
	1593.45	514.7	459.5	348.8	283.2							
	1743.17	458.3	412.7	359.3	338.1	2500	73	-	-	-	4086	4143
	1827.89	458.3	412.7	359.3	338.1							
	1920.67	514.7	463.5	397.5	322.7							
	2125.46	458.3	412.7	359.3	338.1							
	2340.02	458.3	412.7	359.3	338.1							
	2509.68	514.7	463.5	400.8	354.9							
	2820.56	458.3	412.7	359.3	338.1							
	3224.83	458.3	412.7	359.3	338.1							
	4213.78	458.3	412.7	359.3	338.1							
	5079.11	458.3	412.7	359.3	338.1							

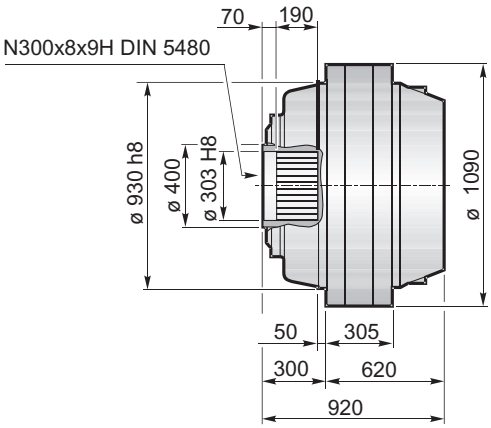
(n_2 x h = 20.000)

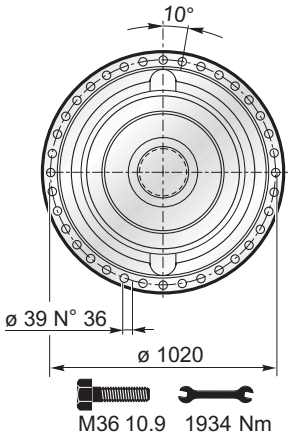
$$M_{max} = M_c \times 1.6$$



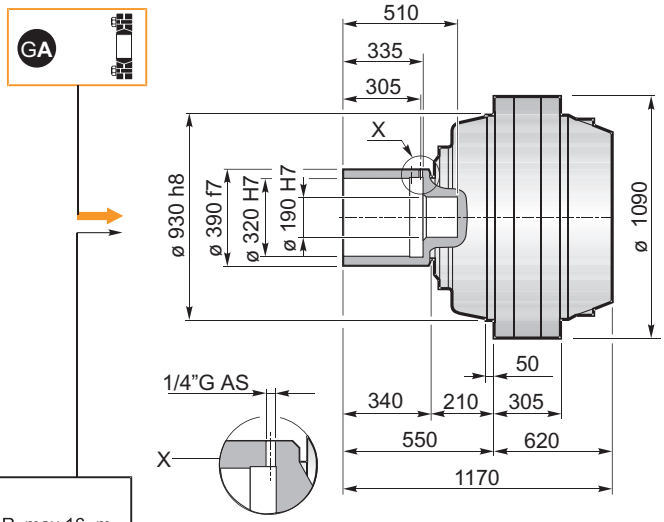
53000

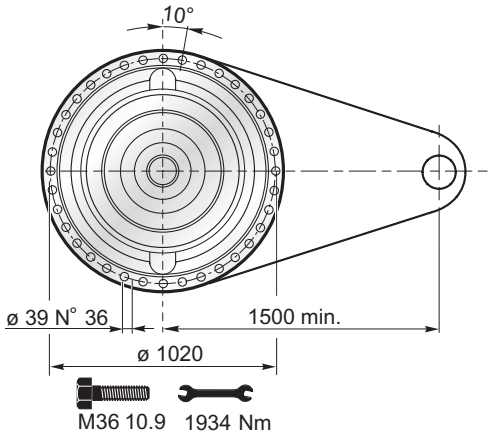
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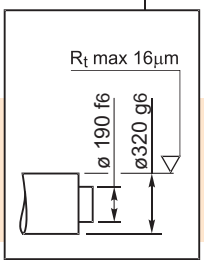




FS







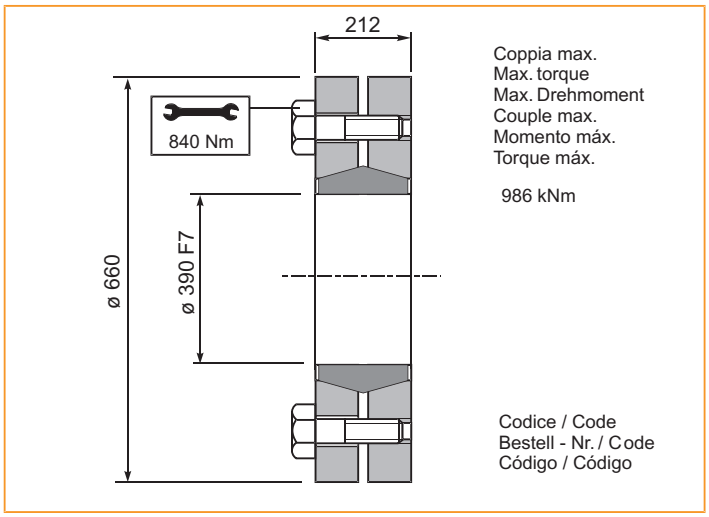
M_{max} = 986 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
Das dargestellte, maximale Drehmoment gilt nur mit von Planetary Drives gelieferter Schrumpfscheibe
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par Planetary Drives
El momento máximo indicado sólo es válido con discos de contracción suministrados por Planetary Drives
O torque máximo indicado é válido exclusivamente com discos de contração fornecidos pela Planetary Drives

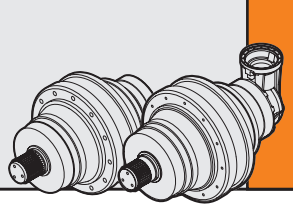
GA

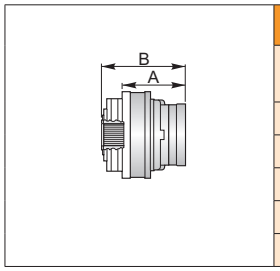
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



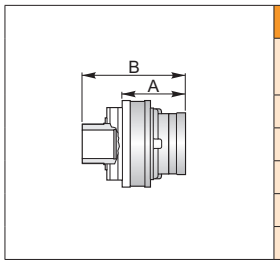


haumea mechanics on demand



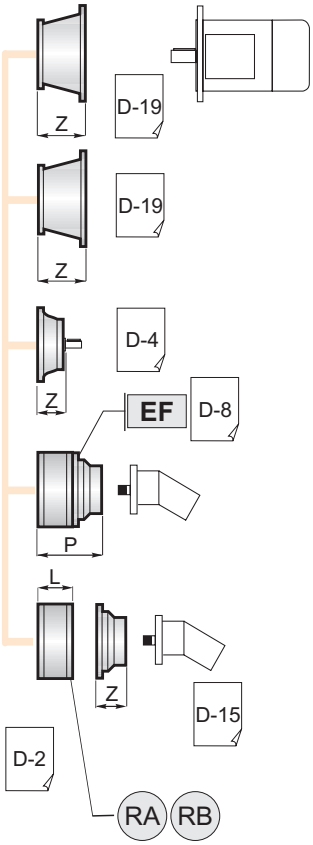


PG ...F						
	A	B	RA	RB	EF	EDF
PG53001	620	920				
PG53002	903.5	1203.5				
PG53003	1124.5	1424.5				
PG53004	1231.5	1531.5		•		
PG53005	1303	1603	•	o	•	

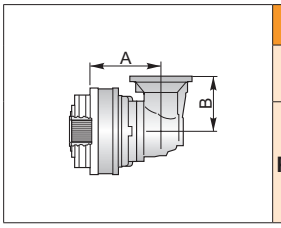


PG ...FS						
	A	B	RA	RB	EF	EDF
PG53001	620	1170				
PG53002	903.5	1453.5				
PG53003	1124.5	1674.5				
PG53004	1231.5	1781.5		•		
PG53005	1303	1853	•	o	•	

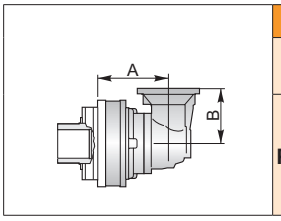
A	B	•
A+13.5	B+13.5	o



	L
RA	81
RB	125

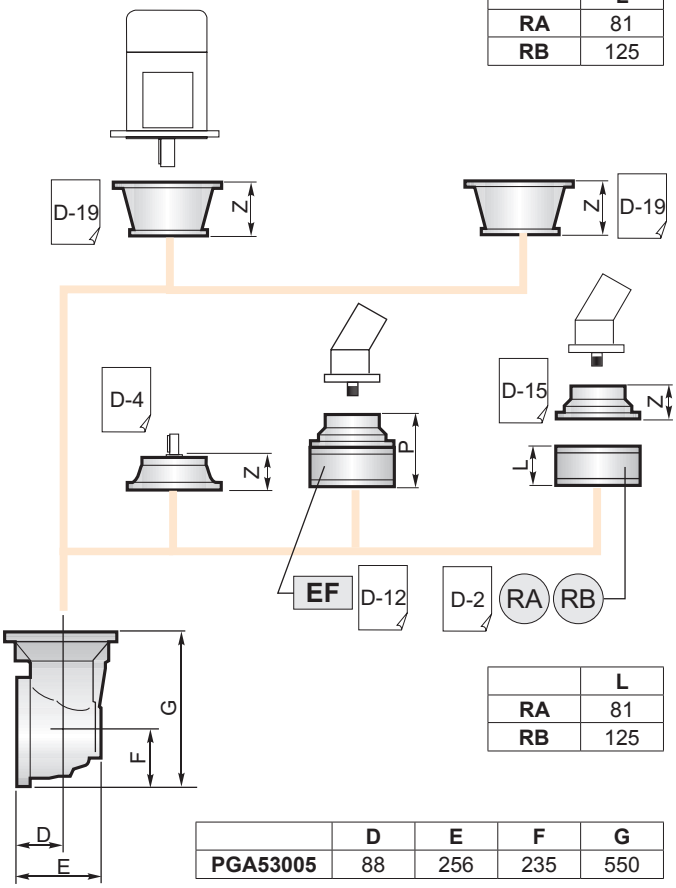


PGA ...F						
	A	B	RA	RB	EF	
PGA53005	1366.5	315	•	o	•	



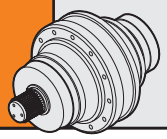
PGA ...FS						
	A	B	RA	RB	EF	
PGA53005	1366.5	315	•	o	•	

B	•
B+16.5	o



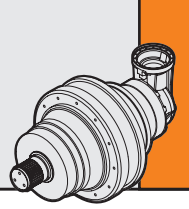
	L
RA	81
RB	125

	D	E	F	G
PGA53005	88	256	235	550



61000

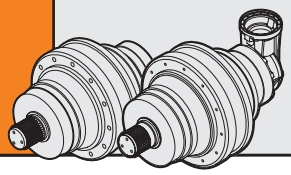
	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	**20.000**	**50.000**	**100.000**	[min^{-1}]	[kW]	**M**	**P**	**CPC**	**F**	**FS**
PG 61001	**3.84**	953.0	858.1	747.1	692.6	100	324	-	-	-	3200	3257
PG 61002	**14.13**	715.0	609.9	463.3	376.3	200	185	-	-	-	3710	3767
	18.97	514.7	463.5	403.5	363.4							
PG 61003	**54.07**	653.2	578.1	463.3	376.3	1200	129	-	-	-	3982	4039
	72.58	514.7	463.5	403.5	363.4							
PG 61004	**216.27**	653.2	578.1	463.3	376.3	2000	98	-	-	-	4041	4098
	281.15	653.2	578.1	463.3	376.3							
	290.32	514.7	463.5	403.5	363.4							
	337.92	506.8	448.6	381.8	337.8							
	377.41	514.7	463.5	403.5	363.4							
	453.62	514.7	463.5	403.5	363.4							
PG 61005	**792.99**	590.0	522.3	444.1	376.3	2800	81	-	-	-	4062	4119
	957.76	538.6	476.9	405.5	359.3							
	1030.88	653.2	578.1	463.3	376.3							
	1245.09	653.2	578.1	463.3	376.3							
	1405.75	587.4	520.0	442.4	376.3							
	1663.28	514.7	463.5	403.5	363.4							
	1887.06	514.7	463.5	403.5	363.4							
	1959.94	506.8	448.6	381.8	337.8							
	2631.00	514.7	463.5	403.5	363.4							
	3175.35	514.7	463.5	403.5	363.4							



	i	Mc [kNm]				n_{1max}	Pt	Kg				
		n_2 x h	n_2 x h	n_2 x h	n_2 x h							
		10.000	**20.000**	**50.000**	**100.000**	[min^{-1}]	[kW]	**M**	**P**	**CPC**	**F**	**FS**
PGA 61005	**863.53**	541.2	439.7	334.1	271.5	2500	75	-	-	-	4163	4220
	1037.90	506.8	448.6	380.0	308.8							
	1159.20	514.7	463.5	403.5	333.6							
	1312.03	493.9	401.0	304.5	247.2							
	1393.26	514.7	463.5	403.5	363.4							
	1576.96	506.8	448.6	346.3	281.1							
	1761.26	514.7	463.5	374.1	303.8							
	2116.90	514.7	463.5	403.5	345.5							

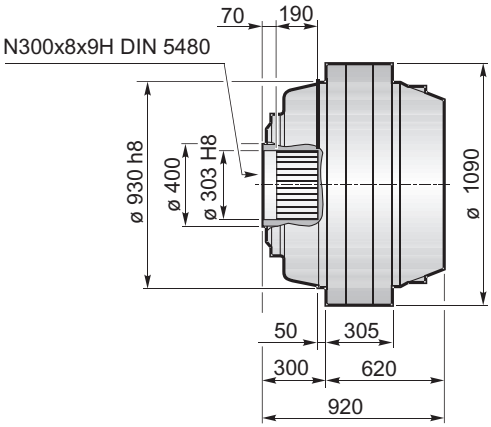
(n_2 x h = 20.000)

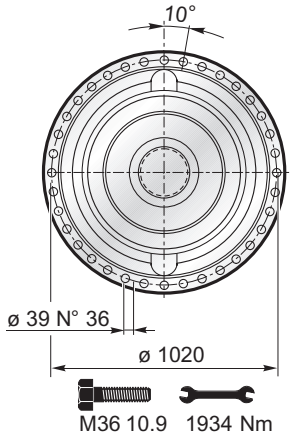
$M_{max} = M_c \times 1.5$



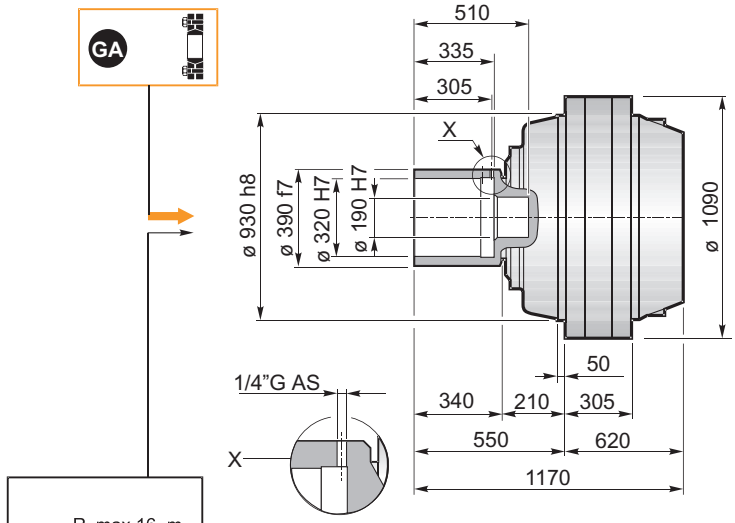
61000

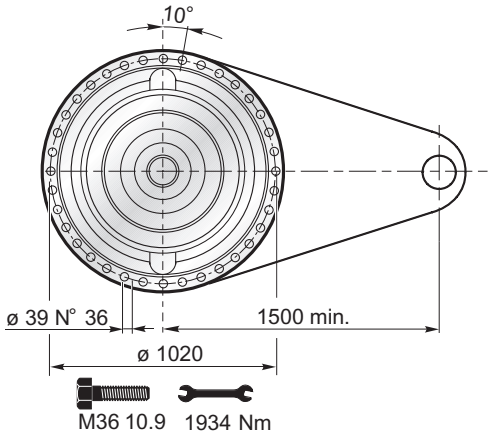
F

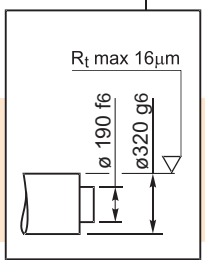




FS







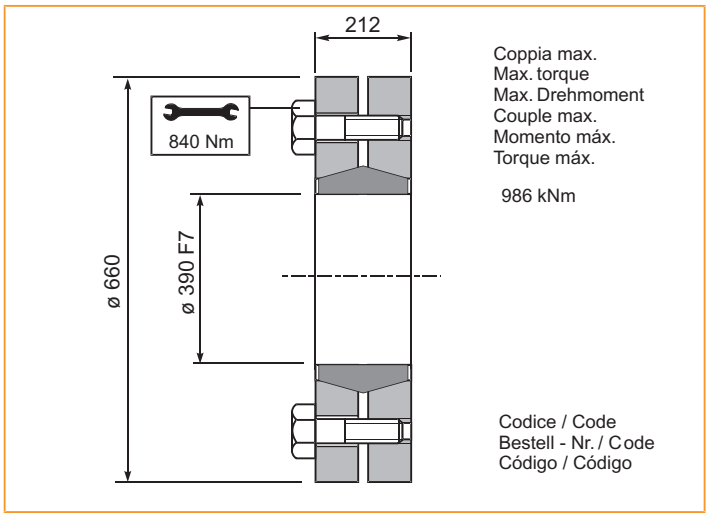
M_{max} 986 kNm

La coppia massima indicata è valida solo con calettatori forniti da Planetary Drives
The maximum torque indicated is valid only with shrink discs supplied by Planetary Drives
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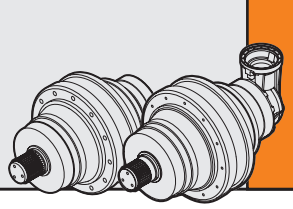
GA

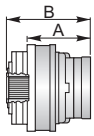
Giunto di attrito / Shrink disc
Schrumpfscheibe / Frette de serrage
Disco de contracción / Disco de contração



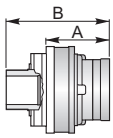


haumea mechanics on demand



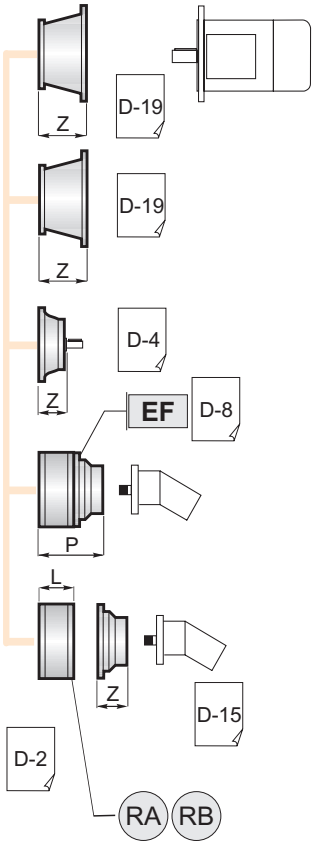


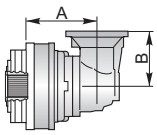
PG ...F						
	A	B	RA	RB	EF	EDF
PG61001	620	920				
PG61002	903.5	1203.5				
PG61003	1124.5	1424.5				
PG61004	1231.5	1531.5		•		
PG61005	1303	1603	•	o	•	



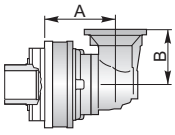
PG ...FS						
	A	B	RA	RB	EF	EDF
PG61001	620	1170				
PG61002	903.5	1453.5				
PG61003	1124.5	1674.5				
PG61004	1231.5	1781.5		•		
PG61005	1303	1853	•	o	•	

A	B	•
A+13.5	B+13.5	o





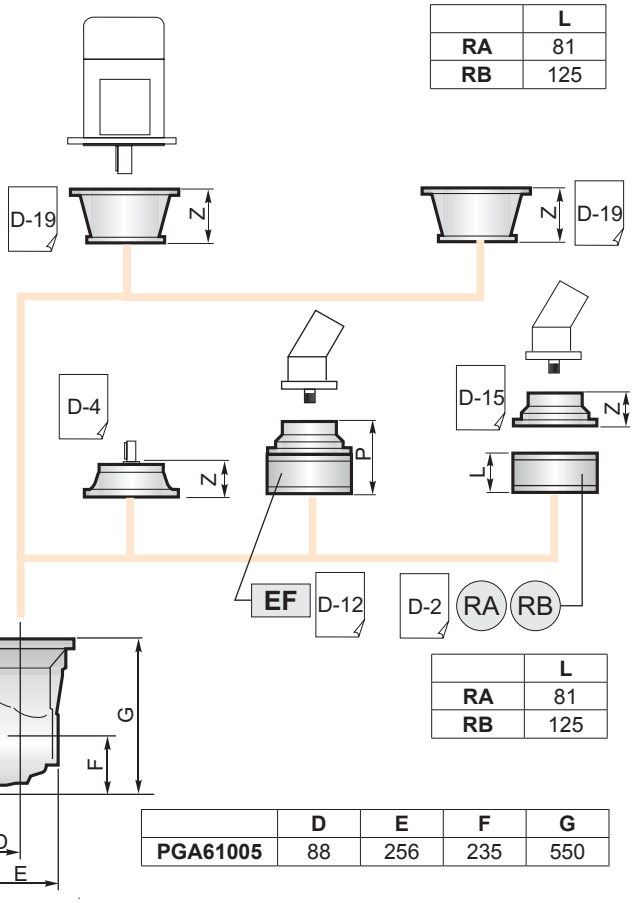
PGA ...F						
	A	B	RA	RB	EF	
PGA61005	1366.5	315	•	o	•	



PGA ...FS						
	A	B	RA	RB	EF	
PGA61005	1366.5	315	•	o	•	

B	•
B+16.5	o

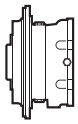
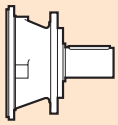
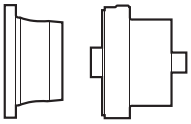
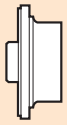
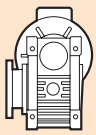
	L
RA	81
RB	125



	L
RA	81
RB	125

	D	E	F	G
PGA61005	88	256	235	550

D

		D-1
	Freni modulari Modular brakes Bremsmodule Freins modulaires Frenos modulares Freios modulares	D-2
	Alberi entrata Input shafts Antriebswellen Arbre d'entrées Ejes de entrada Eixos de entrada	D-4
	Entrate dirette Direct inputs Standardantriebs Entrée directes Entradas directas Entradas diretas	D-8
	Predisposizioni per motori idraulici Hydraulic motor couplings Anbauvorrichtung fuer hydraulikmotore Adaptations pour moteurs hydraulique Acoplamientos para motores hidráulicos Predisposições para motores hidráulicos	D-16
	Predisposizioni per motori elettrici Electric motor couplings Anbauvorrichtung für Elektromotore Adaptations pour moteurs electriques Acoplamientos para motores eléctricos Predisposições para motores elétricos	D-19
	Predisposizioni per riduttori a vite senza fine Worm gearbox adaptors Anschluss für Schneckengetriebe Adaptation pour reducteurs a vis sans fin Acoplamiento para reductores de tornillo sin fin Predisposições para redutores de rosca sem fim	D-20

FRENI MODULARI
/ MODULAR BRAKES

I freni in dotazione ai riduttori epicicloidali Planetary Drives sono di tipo idraulico, con dischi a bagno d'olio, adatti esclusivamente alla fre- natura statica, ovvero di parcheggio.
I freni hanno la lubrificazione separata da quella del riduttore epicicloidale. In fase di immissione del lubrificante bisognerà quindi provvedere anche al riempimento del freno, mediante un apposito foro adduzione olio posto sullo stesso.

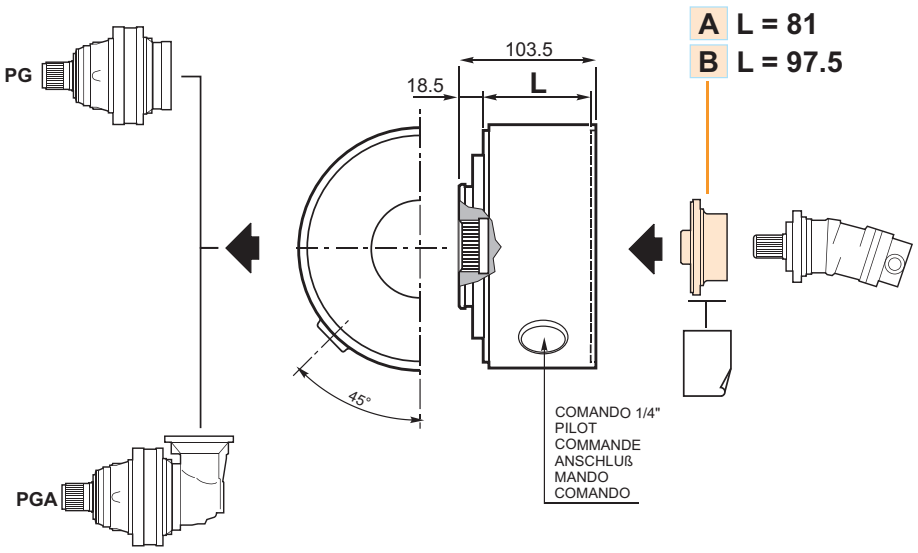
Il lubrificante consigliato è un ISO VG 32. Normalmente possono andar bene gli olii idraulici.

Planetary Drives planetary reduction units are equipped with hydraulic brakes with oil-bath disks, expressly designed for static or parking braking.
The lubrication for the brakes is separated from the lubrication of the planetary gear units. Thus, during the lubricant inlet phase, it is necessary to pour the fluid also into the brake through the proper hole mounted on its casing.

We suggest to use lubricant ISO VG 32 (however, hydraulic lubricants can be used as well).

	RA
PG 100	1-2-3-4
PG 160	1-2-3-4
PG 250	1-2-3-4
PG 500	1-2-3-4
PG 700	2-3-4
PG 1000	2-3-4
PG 1600	2-3-4
PG 1800	3-4
PG 2500	3-4
PG 3000	3-4
PG 3500	3-4
PG 5000	3-4
PG 6500	4
PG 9000	4
PG 12000	4-5
PG 16000	4-5
PG 21000	4-5
PG 21000 H	4-5
PG 26000	5
PG 31000	5
PG 31000 H	5
PG 40000	5
PG 45000	5
PG 53000	5
PG 61000	—

	RA
PGA 100	2-3-4
PGA 160	2-3-4
PGA 250	2-3-4
PGA 500	2-3-4
PGA 700	2-3-4
PGA 1000	2-3-4
PGA 1600	3-4
PGA 1800	3-4
PGA 2500	3-4
PGA 3000	3-4
PGA 3500	3-4
PGA 5000	3-4
PGA 6500	4
PGA 9000	4
PGA 12000	4-5
PGA 16000	5
PGA 21000	5
PGA 21000 H	5
PGA 26000	5
PGA 31000	5
PGA 31000 H	—
PGA 40000	—
PGA 45000	—
PGA 53000	—
PGA 61000	—



RA							
	Cfs_{min} [Nm]	Pa_{min} [bar]	Codice / Code Code / Bestell Nr.	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
RA 10	90	17	4706.000.500	300	0.4	0.2	14
RA 16	140	23	4706.001.500				
RA 25	220	19	4706.002.500				
RA 35	330	23	4706.003.500				
RA 45	430	33	4706.004.500				
RA 55	550	39	4706.006.500				

N.B.: i numeri 1-2-3-4-5 indicano il numero di stadi dei riduttori.

N.B.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.

N.B.: Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.

Nota: los números 1-2-3-4-5 indican el número de etapas de los reductores.

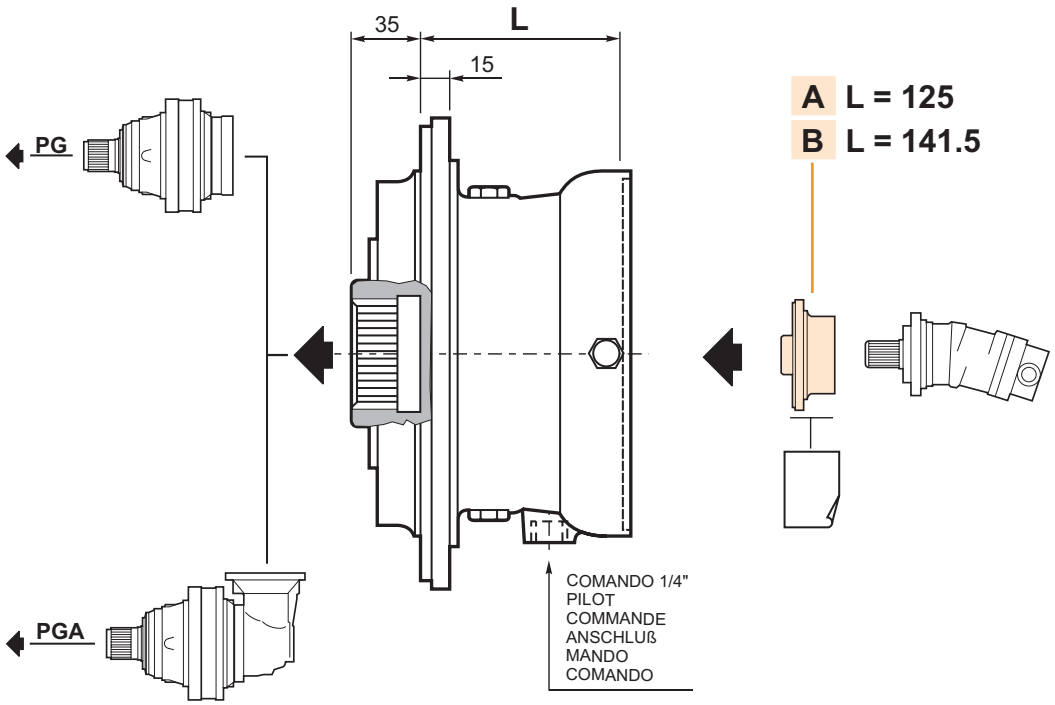
N.B. Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.

OBS.: os números 1-2-3-4-5 indicam o número de estágios do redutor.

FRENI MODULARI
/ MODULAR BRAKES

	RB
PG 100	—
PG 160	—
PG 250	1
PG 500	1
PG 700	1-2
PG 1000	1-2
PG 1600	1-2
PG 1800	2-3
PG 2500	2-3
PG 3000	2-3
PG 3500	2-3
PG 5000	2-3
PG 6500	3-4
PG 9000	3-4
PG 12000	3-4
PG 16000	3-4
PG 21000	3-4
PG 21000 H	4-5
PG 26000	4-5
PG 31000	4-5
PG 31000 H	4-5
PG 40000	4-5
PG 45000	4-5
PG 53000	4-5
PG 61000	5

	RB
PGA 100	—
PGA 160	—
PGA 250	—
PGA 500	—
PGA 700	—
PGA 1000	—
PGA 1600	2
PGA 1800	—
PGA 2500	2
PGA 3000	—
PGA 3500	2-3
PGA 5000	2
PGA 6500	3
PGA 9000	3
PGA 12000	3
PGA 16000	3-4
PGA 21000	3-4
PGA 21000 H	3-4
PGA 26000	4
PGA 31000	4
PGA 31000 H	4-5
PGA 40000	4-5
PGA 45000	5
PGA 53000	5
PGA 61000	5



RB							
	Cfs_{min} [Nm]	Pa_{min} [bar]	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt]		Kg
					V1	B5	
RB 25	250	22	4705.300.500	300	0.6	0.3	21
RB 40	400	35	4705.301.500				
RB 63	650	50	4705.302.500				
RB 80	800	38	4705.303.500				
RB 100	1000	45	4705.304.500				
RB 125	1250	45	4705.305.500				
RB 160	1500	45	4705.306.500				
RB 180	1700	50	4705.307.500				

N.B.: i numeri 1-2-3-4-5 indicano il numero di stadi dei riduttori.

N.B.: Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.

N.B. Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.

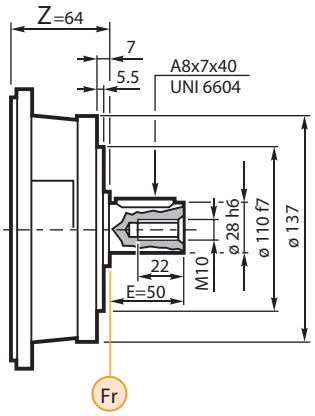
N.B.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.

Nota: los números 1-2-3-4-5 indican el número de etapas de los reductores.

OBS.: os números 1-2-3-4-5 indicam o número de estágios do redutor

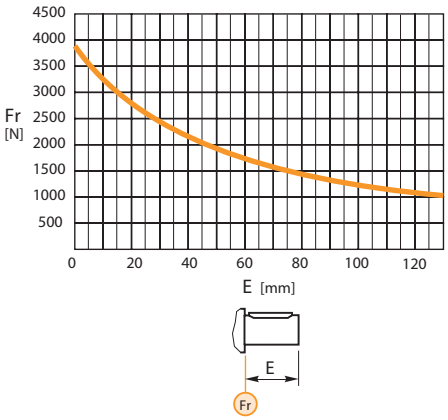
ALBERI ENTRATA
/ INPUT SHAFTS

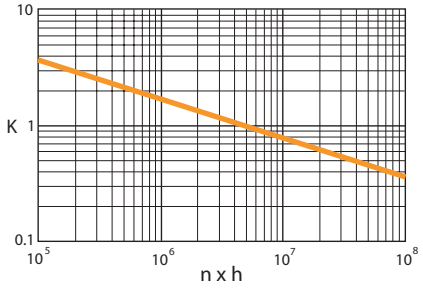
EL C 28



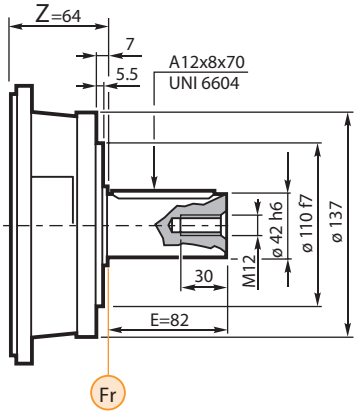
Peso Weight Gewicht Poids Peso Peso	Kg 5.5

Codice / Code
Bestell - Nr. / Code
Código / Código
Nr. 4708.517.400



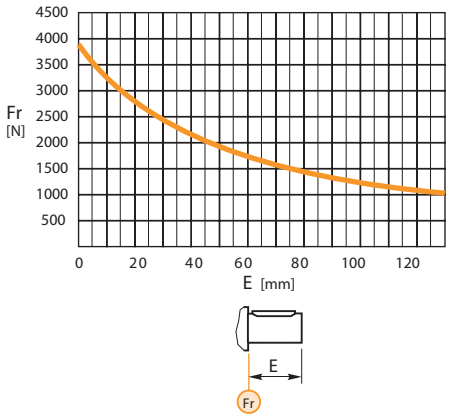


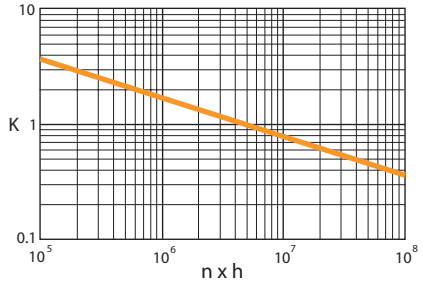
EL C 42



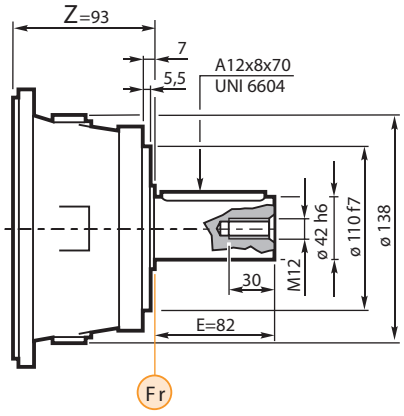
Peso Weight Gewicht Poids Peso Peso	Kg 6.0

Codice / Code
Bestell - Nr. / Code
Código / Código
Nr. 4708.507.400



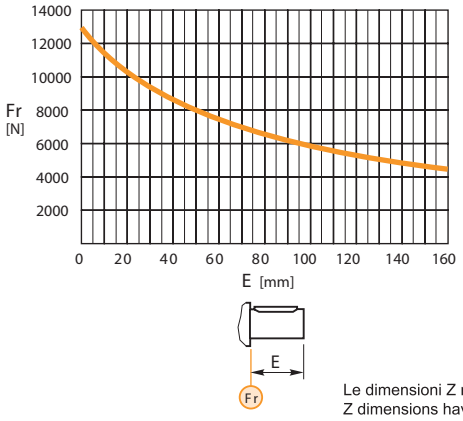


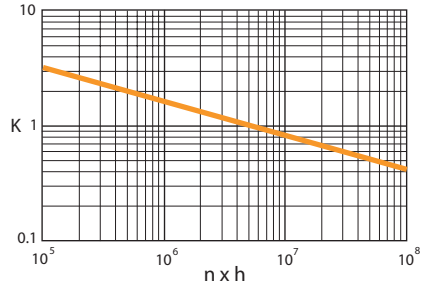
EML42



Peso Weight Gewicht Poids Peso Peso	Kg 9.0

Codice / Code
Bestell - Nr. / Code
Código / Código
Nr. 4708.505.400

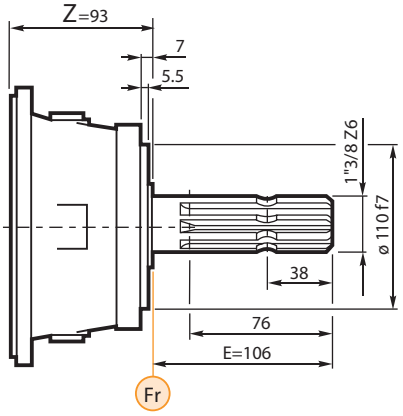


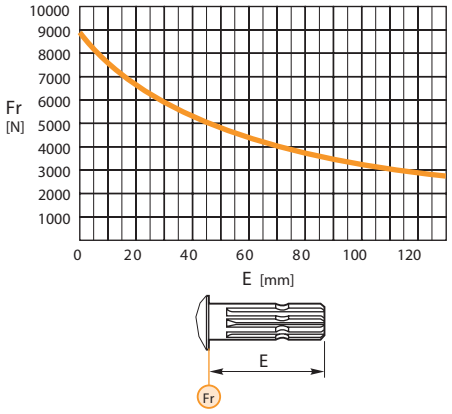


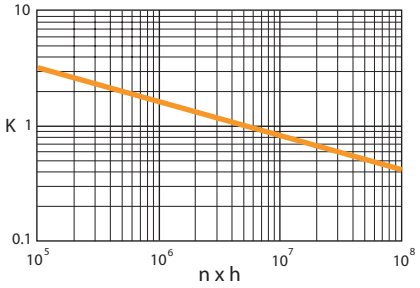
Le dimensioni Z riportate vanno verificate con la tabella a pag. D-7.
Z dimensions have to be verified in the table on page D-7.
Das Mass Z wird in der entsprechenden Tabelle auf der Seite D-7 festgestellt.
Les dimensions de Z sont à verifier dans le tableau à page D-7.
Las dimensiones Z indicadas tienen que verificarse con la tabla de la Pág. D-7.
As dimensões Z indicadas devem ser verificadas com a tabela da pág. D-7.

haumea mechanics on demand

EML1"3/8 Z=6





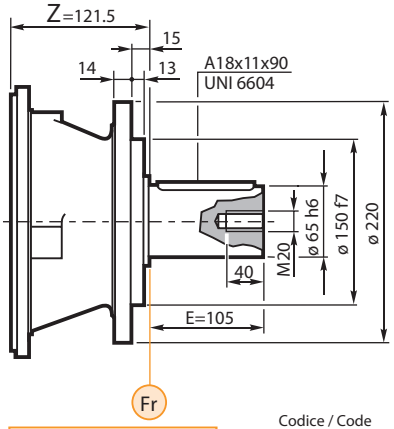


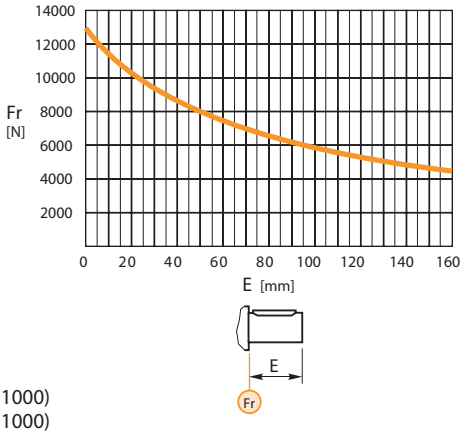
Peso Weight Gewicht Poids Peso Peso	Kg 9.0

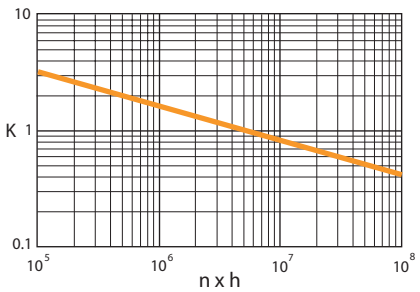
Codice / Code
Bestell - Nr. / Code
Código / Código

Nr. 4708.508.400

EM65





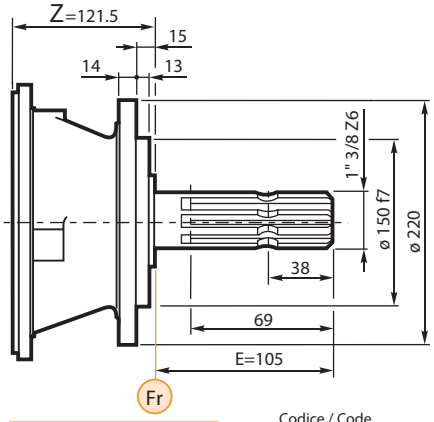


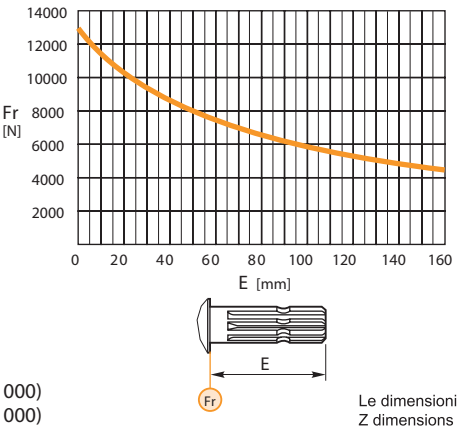
Peso Weight Gewicht Poids Peso Peso	Kg 17

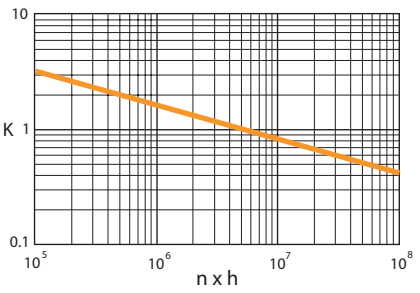
Codice / Code
Bestell - Nr. / Code
Código / Código

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Nr. 4714.501.400 (size > 1000)

EM1"3/8 Z=6







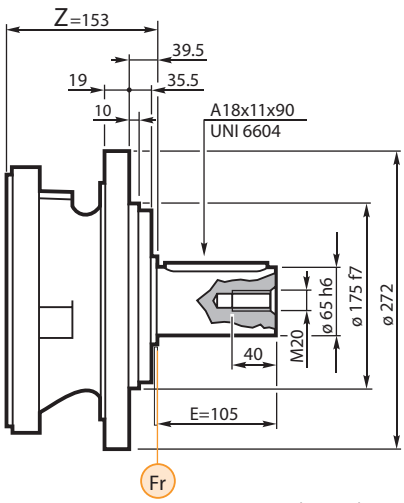
Peso Weight Gewicht Poids Peso Peso	Kg 17

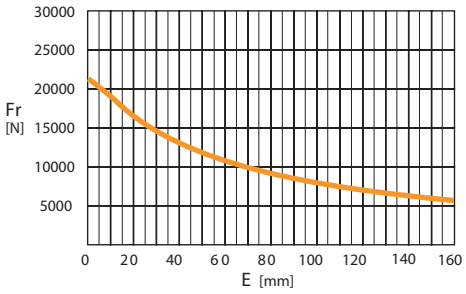
Codice / Code
Bestell - Nr. / Code
Código / Código

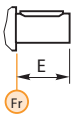
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Nr. 4714.504.400 (size > 1000)

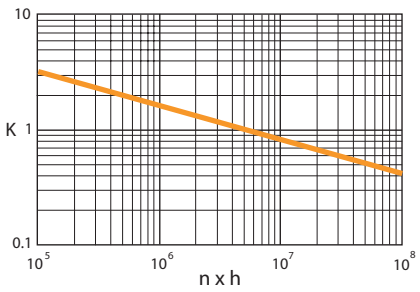
Le dimensioni Z riportate vanno verificate con la tabella a pag. D-7.
Z dimensions have to be verified in the table on page D-7.
Das Mass Z wird in der entsprechenden Tabelle auf der Seite D-7 festgestellt.
Les dimensions de Z sont à verifier dans le tableau à page D-7.
Las dimensiones Z indicadas tienen que verificarse con la tabla de la Pág. D-7.
As dimensões Z indicadas devem ser verificadas com a tabela da pág. D-7.

EP65







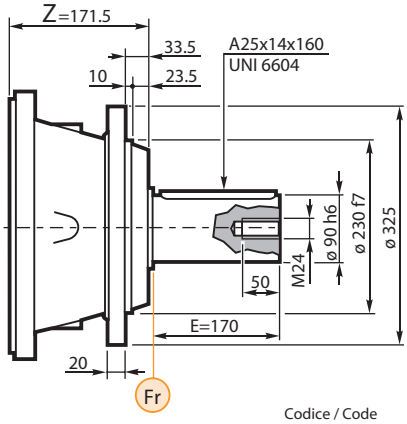


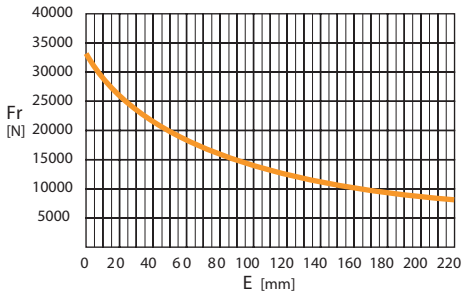
Peso Weight Gewicht Poids Peso Peso	Kg 26

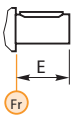
Codice / Code
Bestell - Nr. / Code
Código / Código

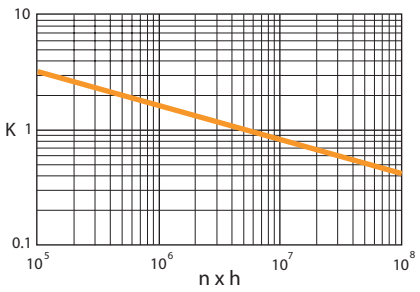
Nr. 4712.503.400 (size < 1000)
Nr. 4714.503.400 (size > 1000)

ET90









Peso Weight Gewicht Poids Peso Peso	Kg 48

Codice / Code
Bestell - Nr. / Code
Código / Código

Nr. 4716.500.400 (size < 2500)
Nr. 4717.500.400 (size > 2500)

Le dimensioni Z riportate vanno verificate con la tabella a pag. D-7.
Z dimensions have to be verified in the table on page D-7.
Das Mass Z wird in der entsprechenden Tabelle auf der Seite D-7 festgestellt.
Les dimensions de Z sont à verifier dans le tableau à page D-7.
Las dimensiones Z indicadas tienen que verificarse con la tabla de la Pág. D-7.
As dimensões Z indicadas devem ser verificadas com a tabela da pág. D-7.

ALBERI ENTRATA
/ INPUT SHAFTS

	EL-EML	EM-EP		ET		
	Z	Z	Z+13.5	Z	Z+15	Z+31
PG 100	1-2-3-4	—	—	—	—	—
PG 160	1-2-3-4	—	—	—	—	—
PG 250	1-2-3-4	—	1	—	—	—
PG 500	1-2-3-4	—	1	—	—	—
PG 700	2-3-4	1	2	—	—	—
PG 1000	2-3-4	1	2	—	—	—
PG 1600	2-3-4	1	2	—	—	—
PG 1800	3-4	2	3	—	—	—
PG 2500	3-4	2	3	—	1	—
PG 3000	3-4	2	3	—	—	2
PG 3500	3-4	2	3	—	—	2
PG 5000	3-4	2	3	1	—	2
PG 6500	4	3	4	—	2	—
PG 9000	4	3	4	—	2	—
PG 12000	4-5	3	4	—	2	3
PG 16000	4-5	3	4	2	—	3
PG 21000	4-5	3	4	2	—	3
PG 21000 H	5	4	5	—	3	—
PG 26000	5	4	5	—	3	—
PG 31000	5	4	5	—	3	—
PG 31000 H	5	4	5	—	3	4
PG 40000	5	4	5	—	3	4
PG 45000	5	4	5	—	3	4
PG 53000	5	4	5	3	—	4
PG 61000	5	4	5	3	—	4

	EL-EML	EM-EP		ET
	Z	Z	Z+16	
PGA 100	2-3-4	—	—	—
PGA 160	2-3-4	—	—	—
PGA 250	2-3-4	—	2-3-4	—
PGA 500	2-3-4	—	2-3-4	—
PGA 700	2-3-4	—	2-3-4	—
PGA 1000	2-3-4	—	2-3-4	—
PGA 1600	3-4	2	3-4	—
PGA 1800	3-4	—	3-4	—
PGA 2500	3-4	2	3-4	—
PGA 3000	4	—	3-4	—
PGA 3500	4	2-3	4	—
PGA 5000	4	—	2-3-4	—
PGA 6500	4	2	3-4	—
PGA 9000	4	2	3-4	—
PGA 12000	4-5	3	4-5	—
PGA 16000	5	3-4	5	—
PGA 21000	5	3-4	5	—
PGA 21000 H	5	3-4	5	—
PGA 26000	5	4	5	—
PGA 31000	5	4	5	—
PGA 31000 H	—	4-5	—	—
PGA 40000	—	4-5	—	—
PGA 45000	—	5	—	—
PGA 53000	—	5	—	—
PGA 61000	—	5	—	—

N.B.: i numeri 1-2-3-4-5 indicano il numero di stadi dei riduttori.

N.B.: Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.

N.B. Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.

N.B.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.

Nota: los números 1-2-3-4-5 indican el número de etapas de los reductores.

OBS.: os números 1-2-3-4-5 indicam o número de estágios do redutor.

ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
/DIRECT INPUT MOTOR ADAPTORS WITH BRAKE

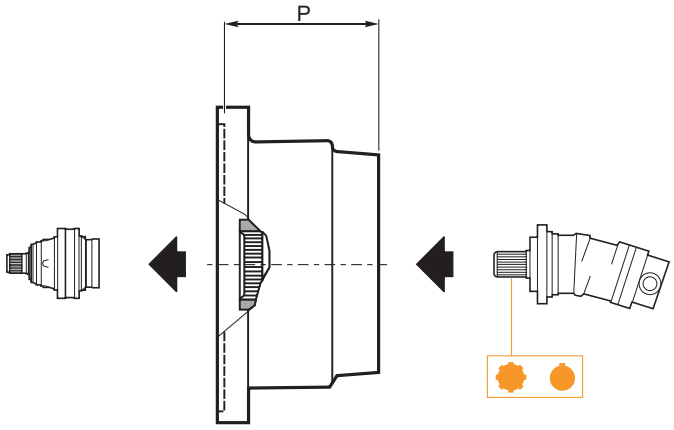
Le tabelle seguenti indicano l'applicabilità delle entrate dirette EDF, EF sui riduttori PG, PGA.

The following tables show how to apply direct inputs EDF, EF on PG, PGA planetary gear units.

	ED
PG 100	1-2-3-4
PG 160	1-2-3-4
PG 250	2-3-4
PG 500	2-3-4
PG 700	3-4
PG 1000	3-4
PG 1600	3-4
PG 1800	4
PG 2500	4
PG 3000	4
PG 3500	4
PG 5000	4
PG 6500	—
PG 9000	—

	ED
PG 12000	5
PG 16000	5
PG 21000	5
PG 21000 H	—
PG 26000	—
PG 31000	—
PG 31000 H	—
PG 40000	—
PG 45000	—
PG 53000	—
PG 61000	—

N.B.: i numeri 1-2-3-4-5 indicano il numero di stadi dei riduttori.
N.B.: Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.
N.B.: Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.
N.B.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.
Nota: los números 1-2-3-4-5 indican el número de etapas de los reductores.
OBS.: os números 1-2-3-4-5 indicam o número de estágios do redutor.



ED		
	P	Codice / Code Bestell Nr. / Code Código / Código
ED SAE A 2-4 F 16/32 DP 9TH	62	4708.550.700
ED SAE A 2-4 F 16/32 DP 13TH	62	4708.551.700
ED SAE A 2-4 F 12/24 DP 14TH	78	4708.552.700
ED SAE A 2-4 F 12/24 DP 14TH	78	4708.553.700
ED SAE A 2-4 F 1" 6B	62	4708.554.700
ED SAE A 2-4 F 1" 6B	78	4708.555.700
ED SAE A 2-4 F 25x22 DIN 5482	62	4708.556.700

ED		
	P	Codice / Code Bestell Nr. / Code Código / Código
ED SAE A 2-4 F D. 19.5 CH 4.8	62	4708.530.700
ED SAE A 2-4 F D. 25 CH 8	62	4708.531.700
ED SAE A 2-4 F D. 25.4 CH 6.35	78	4708.532.700
ED SAE A 2-4 F D. 25.4 CH 6.35	62	4708.533.700
ED SAE A 2-4 F D. 31.75 CH 7.96	62	4708.534.700
ED SAE A 2-4 F D. 31.75 CH 7.96	78	4708.535.700
ED SAE A 2-4 F D. 32 CH 10	62	4708.536.700

ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
/DIRECT INPUT MOTOR ADAPTORS WITH BRAKE

Le tabelle seguenti indicano l'applicabilità delle entrate dirette EDF, EF sui riduttori PG, PGA.

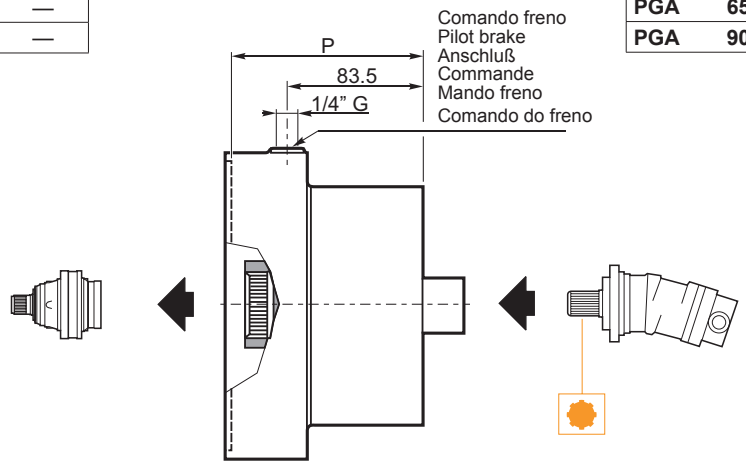
The following tables show how to apply direct inputs EDF, EF on PG, PGA planetary gear units

	ED	EDF
PG 100	—	1-2-3-4
PG 160	—	1-2-3-4
PG 250	1	2-3-4
PG 500	1	2-3-4
PG 700	2	3-4
PG 1000	2	3-4
PG 1600	2	3-4
PG 1800	3	4
PG 2500	3	4
PG 3000	3	4
PG 3500	3	4
PG 5000	3	4
PG 6500	4	—
PG 9000	4	—

	ED	EDF
PG 12000	4	5
PG 16000	4	5
PG 21000	4	5
PG 21000 H	5	—
PG 26000	5	—
PG 31000	5	—
PG 31000 H	5	—
PG 40000	5	—
PG 45000	5	—
PG 53000	5	—
PG 61000	—	—

	ED
PGA 100	2-3-4
PGA 160	2-3-4
PGA 250	2-3-4
PGA 500	2-3-4
PGA 700	2-3-4
PGA 1000	2-3-4
PGA 1600	3-4
PGA 1800	3-4
PGA 2500	3-4
PGA 3000	3-4
PGA 3500	4
PGA 5000	4
PGA 6500	4
PGA 9000	4

	ED
PGA 12000	4-5
PGA 16000	5
PGA 21000	5
PGA 21000 H	5
PGA 26000	5
PGA 31000	5
PGA 31000 H	—
PGA 40000	—
PGA 45000	—
PGA 53000	—
PGA 61000	—



EDF

	Cfs$_{min}$ [Nm]	Pa$_{min}$ [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P$_{max}$ [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EDF 10 per/for GLC-OMSS-HPRC	110	13	118	4708.100.710	300	0.3	0.15	20
EDF 16 per/for GLC-OMSS-HPRC	160	17	118	4708.101.710				
EDF 20 per/for GLC-OMSS-HPRC	220	23	118	4708.102.710				
EDF 25 per/for GLC-OMSS-HPRC	260	17	118	4708.103.710				
EDF 35 per/for GLC-OMSS-HPRC	360	17	118	4708.104.710				
EDF 45 per/for GLC-OMSS-HPRC	470	23	118	4708.105.710				
EDF 55 per/for GLC-OMSS-HPRC	600	27	118	4708.106.710				

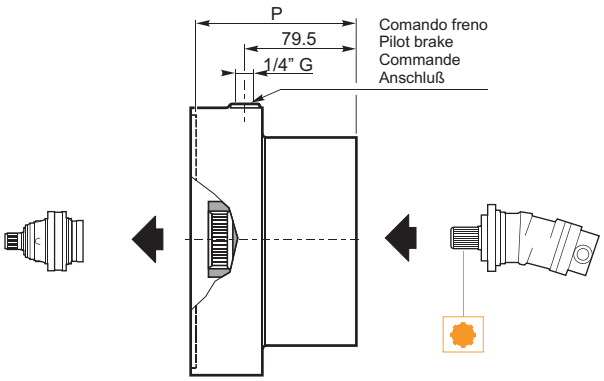
EDF

	Cfs$_{min}$ [Nm]	Pa$_{min}$ [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P$_{max}$ [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EDF 10 per/for EATON 2000 BEARINGLESS	110	13	118	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EDF 16 per/for EATON 2000 BEARINGLESS	160	17	118					
EDF 20 per/for EATON 2000 BEARINGLESS	220	23	118					
EDF 25 per/for EATON 2000 BEARINGLESS	260	17	118					
EDF 35 per/for EATON 2000 BEARINGLESS	360	17	118					
EDF 45 per/for EATON 2000 BEARINGLESS	470	23	118					
EDF 55 per/for EATON 2000 BEARINGLESS	600	27	118					

ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
/DIRECT INPUT MOTOR ADAPTORS WITH BRAKE

Le tabelle seguenti indicano l'applicabilità delle entrate dirette EDF, EF sui riduttori PG, PGA.

The following tables show how to apply direct inputs EDF, EF on PG, PGA planetary gear units.



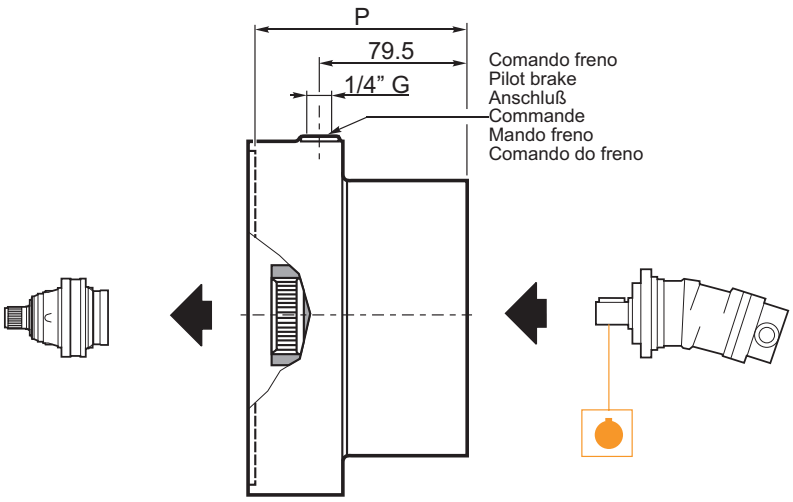
EDF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código.	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EDF 10 SAE A 2-4 F 16/32 DP 9TH	110	13	114	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EDF 16 SAE A 2-4 F 16/32 DP 9TH	160	17	114					
EDF 20 SAE A 2-4 F 16/32 DP 9TH	220	23	114					
EDF 25 SAE A 2-4 F 16/32 DP 9TH	260	17	114					
EDF 25 SAE A 2-4 F 16/32 DP 9TH	360	17	114					
EDF 45 SAE A 2-4 F 16/32 DP 9TH	470	23	114					
EDF 55 SAE A 2-4 F 16/32 DP 9TH	600	27	114					

EDF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EDF 10 SAE A 2-4 F 16/32 DP 13TH	110	13	114	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EDF 16 SAE A 2-4 F 16/32 DP 13TH	160	17	114					
EDF 20 SAE A 2-4 F 16/32 DP 13TH	220	23	114					
EDF 25 SAE A 2-4 F 16/32 DP 13TH	260	17	114					
EDF 35 SAE A 2-4 F 16/32 DP 13TH	360	17	114					
EDF 45 SAE A 2-4 F 16/32 DP 13TH	470	23	114					
EDF 55 SAE A 2-4 F 16/32 DP 13TH	600	27	114					

EDF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código.	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EDF 10 SAE A 2-4 F 12/24 DP 14TH	110	13	114	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EDF 16 SAE A 2-4 F 12/24 DP 14TH	160	17	114					
EDF 20 SAE A 2-4 F 12/24 DP 14TH	220	23	114					
EDF 25 SAE A 2-4 F 12/24 DP 14TH	260	17	114					
EDF 35 SAE A 2-4 F 12/24 DP 14TH	360	17	114					
EDF 45 SAE A 2-4 F 12/24 DP 14TH	470	23	114					
EDF 55 SAE A 2-4 F 12/24 DP 14TH	600	27	114					

EDF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EDF 10 SAE A 2-4 F 1" 6B	110	13	114	4708.080.710	300	0.3	0.15	20
EDF 16 SAE A 2-4 F 1" 6B	160	17	114	4708.081.710				
EDF 20 SAE A 2-4 F 1" 6B	220	23	114	4708.082.710				
EDF 25 SAE A 2-4 F 1" 6B	260	17	114	4708.083.710				
EDF 35 SAE A 2-4 F 1" 6B	360	17	114	4708.084.710				
EDF 45 SAE A 2-4 F 1" 6B	470	23	114	4708.085.710				
EDF 55 SAE A 2-4 F 1" 6B	600	27	114	4708.086.710				

ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
/DIRECT INPUT MOTOR ADAPTORS WITH BRAKE



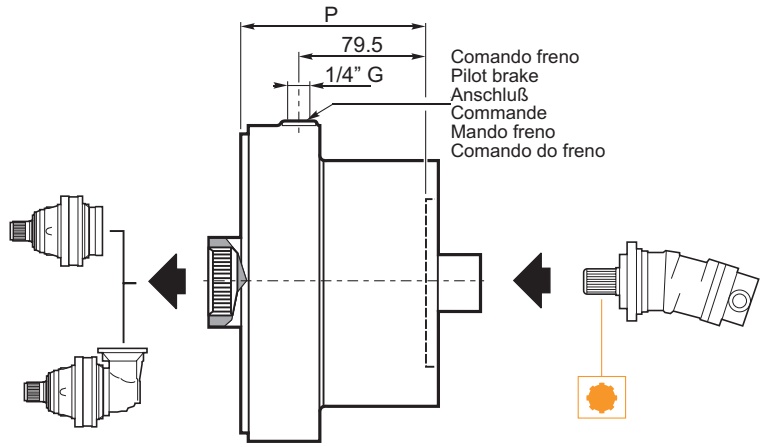
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	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código.	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EDF 10 SAE A 2-4 F D. 25 CH 8	110	13	114	4708.010.710	300	0.3	0.15	20
EDF 16 SAE A 2-4 F D. 25 CH 8	160	17	114	4708.011.710				
EDF 20 SAE A 2-4 F D. 25 CH 8	220	23	114	4708.012.710				
EDF 25 SAE A 2-4 F D. 25 CH 8	260	17	114	4708.013.710				
EDF 35 SAE A 2-4 F D. 25 CH 8	360	17	114	4708.014.710				
EDF 45 SAE A 2-4 F D. 25 CH 8	470	23	114	4708.015.710				
EDF 55 SAE A 2-4 F D. 25 CH 8	600	27	114	4708.016.710				

EDF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EDF 10 SAE A 2-4 F D. 25.4 CH 6.35	110	13	114	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EDF 16 SAE A 2-4 F D. 25.4 CH 6.35	160	17	114					
EDF 20 SAE A 2-4 F D. 25.4 CH 6.35	220	23	114					
EDF 25 SAE A 2-4 F D. 25.4 CH 6.35	260	17	114					
EDF 35 SAE A 2-4 F D. 25.4 CH 6.35	360	17	114					
EDF 45 SAE A 2-4 F D. 25.4 CH 6.35	470	23	114					
EDF 55 SAE A 2-4 F D. 25.4 CH 6.35	600	27	114					

EDF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EDF 10 SAE A 2-4 F D. 31.75 CH 7.96	110	13	114	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EDF 16 SAE A 2-4 F D. 31.75 CH 7.96	160	17	114					
EDF 20 SAE A 2-4 F D. 31.75 CH 7.96	220	23	114					
EDF 25 SAE A 2-4 F D. 31.75 CH 7.96	260	17	114					
EDF 35 SAE A 2-4 F D. 31.75 CH 7.96	360	17	114					
EDF 45 SAE A 2-4 F D. 31.75 CH 7.96	470	23	114					
EDF 55 SAE A 2-4 F D. 31.75 CH 7.96	600	27	114					

EDF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EDF 10 SAE A 2-4 F D. 32 CH 10	110	13	114	4708.040.710	300	0.3	0.15	20
EDF 16 SAE A 2-4 F D. 32 CH 10	160	17	114	4708.041.710				
EDF 20 SAE A 2-4 F D. 32 CH 10	220	23	114	4708.042.710				
EDF 25 SAE A 2-4 F D. 32 CH 10	260	17	114	4708.043.710				
EDF 35 SAE A 2-4 F D. 32 CH 10	360	17	114	4708.044.710				
EDF 45 SAE A 2-4 F D. 32 CH 10	470	23	114	4708.045.710				
EDF 55 SAE A 2-4 F D. 32 CH 10	600	27	114	4708.046.710				

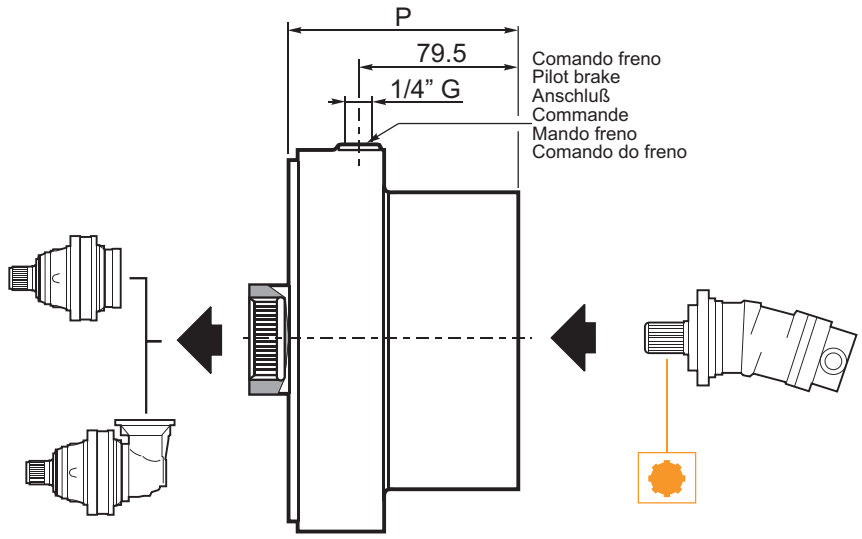
ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
/DIRECT INPUT MOTOR ADAPTORS WITH BRAKE



EF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EF 10 per/for GLC-OMSS-HPRC	110	13	118	4702.015.060	300	0.3	0.15	20
EF 16 per/for GLC-OMSS-HPRC	160	17	118	4702.015.061				
EF 20 per/for GLC-OMSS-HPRC	220	23	118	4702.015.062				
EF 25 per/for GLC-OMSS-HPRC	260	17	118	4702.015.063				
EF 35 per/for GLC-OMSS-HPRC	360	17	118	4702.015.064				
EF 45 per/for GLC-OMSS-HPRC	470	23	118	4702.015.065				
EF 55 per/for GLC-OMSS-HPRC	600	27	118	4702.015.066				

EF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EF 10 per/for EATON 2000 BEARINGLESS	110	13	118	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EF 16 per/for EATON 2000 BEARINGLESS	160	17	118					
EF 20 per/for EATON 2000 BEARINGLESS	220	23	118					
EF 25 per/for EATON 2000 BEARINGLESS	260	17	118					
EF 35 per/for EATON 2000 BEARINGLESS	360	17	118					
EF 45 per/for EATON 2000 BEARINGLESS	470	23	118					
EF 55 per/for EATON 2000 BEARINGLESS	600	27	118					

ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
/DIRECT INPUT MOTOR ADAPTORS WITH BRAKE



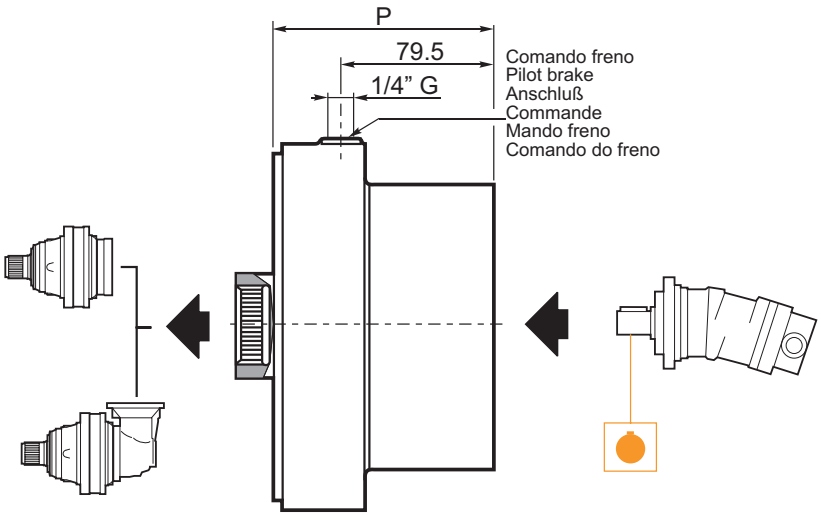
EF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EF 10 SAE A 2-4 F 16/32 DP 9TH	110	13	114	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EF 16 SAE A 2-4 F 16/32 DP 9TH	160	17	114					
EF 20 SAE A 2-4 F 16/32 DP 9TH	220	23	114					
EF 25 SAE A 2-4 F 16/32 DP 9TH	260	17	114					
EF 35 SAE A 2-4 F 16/32 DP 9TH	360	17	114					
EF 45 SAE A 2-4 F 16/32 DP 9TH	470	23	114					
EF 55 SAE A 2-4 F 16/32 DP 9TH	600	27	114					

EF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EF 10 SAE A 2-4 F 16/32 DP 13TH	110	13	114	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EF 16 SAE A 2-4 F 16/32 DP 13TH	160	17	114					
EF 20 SAE A 2-4 F 16/32 DP 13TH	220	23	114					
EF 25 SAE A 2-4 F 16/32 DP 13TH	260	17	114					
EF 35 SAE A 2-4 F 16/32 DP 13TH	360	17	114					
EF 45 SAE A 2-4 F 16/32 DP 13TH	470	23	114					
EF 55 SAE A 2-4 F 16/32 DP 13TH	600	27	114					

EF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EF 10 SAE A 2-4 F 12/24 DP 14TH	110	13	114	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EF 16 SAE A 2-4 F 12/24 DP 14TH	160	17	114					
EF 20 SAE A 2-4 F 12/24 DP 14TH	220	23	114					
EF 25 SAE A 2-4 F 12/24 DP 14TH	260	17	114					
EF 35 SAE A 2-4 F 12/24 DP 14TH	360	17	114					
EF 45 SAE A 2-4 F 12/24 DP 14TH	470	23	114					
EF 55 SAE A 2-4 F 12/24 DP 14TH	600	27	114					

EF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EF 10 SAE A 2-4 F 1" 6B	110	13	114	4702.015.040	300	0.3	0.15	20
EF 16 SAE A 2-4 F 1" 6B	160	17	114	4702.015.041				
EF 20 SAE A 2-4 F 1" 6B	220	23	114	4702.015.042				
EF 25 SAE A 2-4 F 1" 6B	260	17	114	4702.015.043				
EF 35 SAE A 2-4 F 1" 6B	360	17	114	4702.015.044				
EF 45 SAE A 2-4 F 1" 6B	470	23	114	4702.015.045				
EF 55 SAE A 2-4 F 1" 6B	600	27	114	4702.015.046				

ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
/DIRECT INPUT MOTOR ADAPTORS WITH BRAKE



EF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EF 10 SAE A 2-4 F D. 25 CH 8	110	13	114	4702.014.010	300	0.3	0.15	20
EF 16 SAE A 2-4 F D. 25 CH 8	160	17	114	4702.014.011				
EF 20 SAE A 2-4 F D. 25 CH 8	220	23	114	4702.014.012				
EF 25 SAE A 2-4 F D. 25 CH 8	260	17	114	4702.014.013				
EF 35 SAE A 2-4 F D. 25 CH 8	360	17	114	4702.014.014				
EF 45 SAE A 2-4 F D. 25 CH 8	470	23	114	4702.014.015				
EF 55 SAE A 2-4 F D. 25 CH 8	600	27	114	4702.014.016				

EF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EF 10 SAE A 2-4 F D. 25.4 CH 6.35	110	13	114	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EF 16 SAE A 2-4 F D. 25.4 CH 6.35	160	17	114					
EF 20 SAE A 2-4 F D. 25.4 CH 6.35	220	23	114					
EF 25 SAE A 2-4 F D. 25.4 CH 6.35	260	17	114					
EF 35 SAE A 2-4 F D. 25.4 CH 6.35	360	17	114					
EF 45 SAE A 2-4 F D. 25.4 CH 6.35	470	23	114					
EF 55 SAE A 2-4 F D. 25.4 CH 6.35	600	27	114					

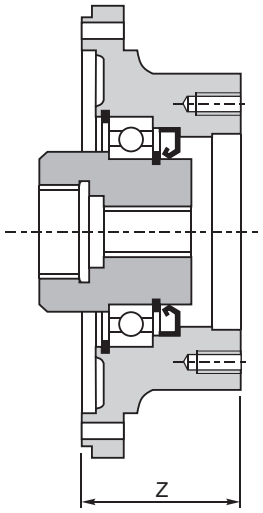
EF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EF 10 SAE A 2-4 F D. 31.75 CH 7.96	110	13	114	A richiesta On request Auf Anfrage Sur demande Bajo demanda Sob consulta	300	0.3	0.15	20
EF 16 SAE A 2-4 F D. 31.75 CH 7.96	160	17	114					
EF 20 SAE A 2-4 F D. 31.75 CH 7.96	220	23	114					
EF 25 SAE A 2-4 F D. 31.75 CH 7.96	260	17	114					
EF 35 SAE A 2-4 F D. 31.75 CH 7.96	360	17	114					
EF 45 SAE A 2-4 F D. 31.75 CH 7.96	470	23	114					
EF 55 SAE A 2-4 F D. 31.75 CH 7.96	600	27	114					

EF								
	Cfs_{min} [Nm]	Pa_{min} [bar]	P	Codice / Code Bestell Nr. / Code Código / Código	P_{max} [bar]	OIL [lt] V1	OIL [lt] B5	Kg
EF 10 SAE A 2-4 F D. 32 CH 10	110	13	114	4702.014.040	300	0.3	0.15	20
EF 16 SAE A 2-4 F D. 32 CH 10	160	17	114	4702.014.041				
EF 20 SAE A 2-4 F D. 32 CH 10	220	23	114	4702.014.042				
EF 25 SAE A 2-4 F D. 32 CH 10	260	17	114	4702.014.043				
EF 35 SAE A 2-4 F D. 32 CH 10	360	17	114	4702.014.044				
EF 45 SAE A 2-4 F D. 32 CH 10	470	23	114	4702.014.045				
EF 55 SAE A 2-4 F D. 32 CH 10	600	27	114	4702.014.046				

PREDISPOSIZIONI PER MOTORI IDRAULICI
/HYDRAULIC MOTOR ADAPTORS

	A	B		C	D	
	Z	Z	Z+13.5	Z+15	Z	Z+31
PG 100	1-2-3-4	—	—	—	—	—
PG 160	1-2-3-4	—	—	—	—	—
PG 250	1-2-3-4	—	1	—	—	—
PG 500	1-2-3-4	—	1	—	—	—
PG 700	2-3-4	1	2	—	—	—
PG 1000	2-3-4	1	2	—	—	—
PG 1600	2-3-4	1	2	—	—	—
PG 1800	3-4	2	3	—	—	—
PG 2500	3-4	2	3	1	—	—
PG 3000	3-4	2	3	—	—	2
PG 3500	3-4	2	3	—	—	2
PG 5000	3-4	2	3	—	1	2
PG 6500	4	3	4	2	—	—
PG 9000	4	3	4	2	—	—
PG 12000	4-5	3	4	2	—	3
PG 16000	4-5	3	4	—	2	3
PG 21000	4-5	3	4	—	2	3
PG 21000 H	5	4	5	3	—	—
PG 26000	5	4	5	3	—	—
PG 31000	5	4	5	3	—	—
PG 31000 H	5	4	5	3	—	4
PG 40000	5	4	5	3	—	4
PG 45000	5	4	5	—	3	4
PG 53000	5	4	5	—	3	4
PG 61000	—	—	5	4	—	—

	A	B		C	D	
	Z	Z	Z+16			
PGA 100	2-3-4	—	—	—	—	
PGA 160	2-3-4	—	—	—	—	
PGA 250	2-3-4	—	2-3-4	—	—	
PGA 500	2-3-4	—	2-3-4	—	—	
PGA 700	2-3-4	—	2-3-4	—	—	
PGA 1000	2-3-4	—	2-3-4	—	—	
PGA 1600	2-3-4	—	2-3-4	—	—	
PGA 1800	3-4	2	3-4	—	—	
PGA 2500	3-4	2	3-4	—	—	
PGA 3000	3-4	—	3-4	—	—	
PGA 3500	4	2-3	4	—	—	
PGA 5000	4	—	2-3-4	—	—	
PGA 6500	4	—	3-4	—	—	
PGA 9000	4	—	3-4	—	—	
PGA 12000	5	3-4	5	—	—	
PGA 16000	5	3-4	5	—	—	
PGA 21000	5	3-4	5	—	—	
PGA 21000 H	5	3-4	5	—	—	
PGA 26000	5	4	5	—	—	
PGA 31000	5	4	5	—	—	
PGA 31000 H	—	4-5	—	—	—	
PGA 40000	—	4-5	—	—	—	
PGA 45000	—	5	—	—	—	
PGA 53000	—	5	—	—	—	
PGA 61000	—	5	—	—	—	



COMER INDUSTRIES (AXIAL PUMP)			
Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
M2-AMVCS 34-40-50-55/32 DP TH13	52	4702.013.001	A
M2-AMVCS 34-40-50-55/32 DP TH15	52	4702.013.003	
AMF 24-34	81	4702.013.070	
AMF 55	81	4702.013.060	

COMER INDUSTRIES (GEOLINK)			
Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
GHL/GFS/GFS ∅ 25 CH8	61.5	4702.012.012	A
GHL/GFS/GFS ∅ 25.4 CH6.35	61.5	4702.012.014	
GHL/GFS/GFS SAE 1"6B	61.5	4702.013.013	
GHL/GFS/GFS 25x22 DIN 5482 TH14	61.5	4702.013.011	
GLS ∅ 32 CH10	77.5	4702.012.019	
GLC	38	4702.013.006	
GWS/GWP/GWR - ED	61	4708.502.700	
GWS/GWP/GWR - EDF	61	4708.505.700	

SAUER - DANFOSS			
Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
OMM ∅ CH5	70.5	4702.012.035	A
OMP - OMR ∅ 25	61.5	4702.012.012	
OMP - OMR ∅ 25.4	61.5	4702.012.014	
OMP - OMR SAE 1"6B	61.5	4702.013.013	
OMS ∅ 32	77.5	4702.012.019	
OMS 12/24 DP TH14	77.5	4702.013.039	
OMSS	38	4702.013.006	
OMT ∅ 40	134	4702.012.031	
OMTS	78	4702.013.032	

N.B. I numeri 1-2-3-4-5 indicano il numero di stadi dei riduttori.
N.B.: Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.
Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.
N.B.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.
Nota: los números 1-2-3-4-5 indican el número de etapas de los reductores.
OBS.: os números 1-2-3-4-5 indicam o número de estágios do redutor.

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PREDISPOSIZIONI PER MOTORI IDRAULICI
/HYDRAULIC MOTOR ADAPTORS

DINAMIC OIL

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
AH100/BH150/BH175/BH200 28x34 UNI 8953	55.5	4702.013.024	A
CH250/DH300/DH 35032x38 UNI 8953	138	4702.053.003	B
PH250/PH300 32x38 UNI 8953	130	4702.053.016	
PH800 46x50 UNI 8953	118	4702.053.020	
PH800/PH1250/MH1000 46x50 UNI 8953	148	4702.073.001	C
PH800/PH1250/MH1000 46x50 UNI 8953	148	4702.083.001	D

EATON (CHAR-LYNN)

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
A-H-S ∅ 25	61.5	4702.012.012	A
A-H-S ∅ 25.4	61.5	4702.012.014	
A-H-S SAE 1"6B	61.5	4702.013.013	
SERIE 2000			
BEARINGLESS	52	4702.013.033	
∅ 32 CH10	77	4702.012.019	
∅ 31.75 CH7.96	61.5	4702.012.017	
12/24 DP TH14	77.5	4702.013.038	
SERIE 4000			
BEARINGLESS	78	4702.013.045	
∅ 40 CH12	78	4702.012.027	
∅ 31.75 CH7.96	78	4702.012.020	
12/24 DP TH17	78	4702.013.016	
SERIE 6000			
∅ 40 CH12	78	4702.012.027	
12/24 DP TH14	77.5	4702.013.038	

EATON

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
MF-MV25 16/32 DP TH13	52	4702.013.001	A
MF-MV25 16/32 DP TH15	52	4702.013.003	
MF-MV (33/39/46) 16/32 DP TH21	78	4702.013.017	
MF-MV54 16/32 DP TH23	78	4702.013.018	
MF-MV (33/39/46/54) 12/24 DP TH14	78	4702.013.015	
MF-MV25 ∅ 22.22 CH6.25	52	4702.012.001	

HAGGLUNDS-ABEX DENISON

MMotore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
M3D/M1D/M4E/12/24 DP TH14	78	4702.013.015	A
M3B/M3B1/TM3B 16/32 DP TH9	61.5	4702.013.010	
M1C/M4C/M4SC 16/32 DP TH13	52	4702.013.001	
M4C/M4SC ∅ 22.22 CH4/75	67	4702.012.003	

REXROTH BOSCH GROUP (HYDROMATIK)

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
A2FM (10/12/16) W25x1.25 DIN 5480 TH18	61.5	4702.013.009	A
A2FM (23/28/32) W25x1.25 DIN 5480 TH18	81	4702.013.062	
A2FM (23/28/32) W30x2 DIN 5480 TH14	81	4702.013.063	
A2FM (45/56) W30x2 DIN 5480 TH14	78	4702.013.019	
A2FM 45W 32x2 DIN 5480 TH14	78	4702.013.020	
A2FM (56/83) W35x2 DIN 5480 TH16	78	4702.013.021	
A2FM 80 W35x2 DIN 5480 TH16	81.5	4702.013.071	
A2FM (80/90) W40x2 DIN 5480 TH18	81.5	4702.013.064	
A2FM 107 W40x2 DIN 5480 TH18	88.5	4702.013.065	
A2FM 107 W40x2 DIN 5480 TH18	112	4702.053.007	B
A2FM (107/125) W45x2 DIN 5480 TH21	112	4702.053.006	
A2FM 160 W45x2 DIN 5480 TH21	112	4702.053.009	
A2FM (160/180) W50x2 DIN 5480 TH24	112	4702.053.008	
A6VM55 W35x2 DIN 5480 TH16	78	4702.013.021	A
A6VM55 W30x2 DIN 5480 TH14	78	4702.013.019	
A6VM80 W35x2 DIN 5480 TH16	81.5	4702.013.071	
A6VM80 W40x2 DIN 5480 TH18	81.5	4702.013.064	
A6VM107 W40x2 DIN 5480 TH18	88.5	4702.013.065	
A6VM107 W40x2 DIN 5480 TH18	112	4702.053.007	B
A6VM107 W45x2 DIN 5480 TH21	112	4702.053.006	
A6VM160 W45x2 DIN 5480 TH21	112	4702.053.009	

ITALGROUP

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
IAM 100/150 26x32 UNI 8953	72.5	4702.013.052	A
IAM 200/250/300 32x38 UNI 8953	130	4702.053.016	B
IAM 400/450/500/600 36x42 UNI 8953	143	4702.053.017	
IAM 700/800/900/1000/1100 46x50 UNI 8953	118	4702.053.020	
IAM 700/800/900/1000/1100 46x50 UNI 8953	148	4702.073.002	C
IAM 700/800/900/1000/1100 46x50 UNI 8953	148	4702.083.002	D
IAM 1400/1600/1800/2000 62x72 UNI 8953	179	4702.053.021	B
IAM 1400/1600/1800/2000 62x72 UNI 8953	148	4702.073.003	C
IAM 1400/1600/1800/2000 62x72 UNI 8953	148	4702.083.003	D

LINDE

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
MF43M 16/32 DP TH15	52	4702.013.003	A
MF63M 12/24 DP TH14	78	4702.013.015	
BMF35 25x22 DIN 5482 TH14	81	4702.013.070	
BMF50 30x27 DIN 5482 TH16	81	4702.013.060	
BMF75 35x31 DIN 5482 TH18	98	4702.013.061	
BMF 105 40x36 DIN 5482 TH20	90.5	4702.013.068	

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PREDISPOSIZIONI PER MOTORI IDRAULICI
/HYDRAULIC MOTOR ADAPTORS

SAUER - DANFOSS (SAUER-SUNSTRAND)

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
SERIE 90 (FLANGE SAE)			
90M032/042 16/32 DP TH13	52	4702.013.001	A
90M032/042 16/32 DP TH15	52	4702.013.003	
90M055 16/32 DP TH21	78	4702.013.017	
90M075/100 16/32 DP TH23	78	4702.013.018	
90M130 16/32 DP TH27	112	4702.053.012	B
SERIE 40 (FLANGE SAE)	52	4702.013.001	A
MMF025 16/32 DP TH13	52	4702.013.001	
MMF035/MMV035 16/32 DP TH15	52	4702.013.003	
MMF046/MMV046 16/32 DP TH13	52	4702.013.001	
MMF046/MMV046 16/32 DP TH15	52	4702.013.003	
SERIE 51 (FLANGE SAE)			
51V060 (C6) 13/32 DP TH21	78	4702.013.017	A
51V060 (S1) 12/24 DP TH14	78	4702.013.015	
51V080 (C7) 16/32 DP TH23	78	4702.013.018	
51V080 (S1) 12/24 DP TH14	78	4702.013.015	
51V110 (C8) 16/32 DP TH27	112	4702.053.012	B
51V110 (F1) 8/16 DP TH13	112	4702.053.005	
OMF/SMF18 16/32 DP TH13	52	4702.013.001	A
OMV/SMV 16/32 DP TH13	67	4702.013.067	
SMF2 (033/052/070) 16/32 DP TH21	78	4702.013.017	
SMF3 (049/066) 16/32 DP TH21	78	4702.013.017	

SAI

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
SAI M05 28x34 UNI 8953	73.5	4702.013.041	A
SAI M05 35x2 DIN 5480 TH16	73.5	4702.013.044	
SAI M1 28x34 UNI 8953	55.5	4702.013.022	
SAI M1 35x2 DIN 5480 TH16	55.5	4702.013.040	
SAI M2 36x40 UNI 8953	78.5	4702.013.066	
SAI M2/M3 36x40 UNI 8953	137	4702.053.010	B
SAI M4 56x65 UNI 8953	96	4702.053.025	

SAE J744C

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
SAE A 16/32 DP TH9	61.5	4702.013.010	A
SAE B 16/32 DP TH13	52	4702.013.001	
SAE BB 16/32 DP TH15	52	4702.013.003	
SAE C 12/24 DP TH14	78	4702.013.015	
SAE CC 12/24 DP TH17	78	4702.013.016	
SAE D 8/16 DP TH13	112	4702.053.005	B

STAFFA

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
HMC 030	142	4702.052.001	B

SAMHYDRAULIC

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
AG/AR ∅ 25 CH8	61.5	4702.012.012	A
AG/AR ∅ 25.4 CH6.35	61.5	4702.012.014	
AG/AR ∅ 25x22 DIN 5482 TH14	61.5	4702.013.011	
AG/AR SAE 1"6B	61.5	4702.013.013	
AGS/ARS ∅ 25 CH8	61.5	4702.012.026	
AGS/ARS ∅ 32 CH10	77.5	4702.012.019	
AGS/ARS SAE 1"6B	61.5	4702.013.012	
HPR ∅ 32 CH10	77.5	4702.012.019	
HPRC	38	4702.013.006	

PARKER (TRW TORQMOTOR)

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
MF/MAC/MAF/MAB ∅ 25 CH8	61.5	4702.012.012	A
MF/MAC/MAF/MAB ∅ 25.4 CH6.35	61.5	4702.013.014	
MF/MAC/MAF/MAB SAE 1"6B	61.5	4702.013.013	
MAB/MAE ∅ 31.75 CH7.96	77.5	4702.012.016	
ME 12/24 DP TH14	77.5	4702.013.047	

EATON (VICKERS)

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
25M 16/32 DP TH13	52	4702.013.001	A
35M-45M 12/24 DP TH14	78	4702.013.015	
MVE-MFE19 16/32 DP TH15	52	4702.013.003	
35M-45M ∅ 31.75	78	4702.012.020	

PARKER (VOLVO)

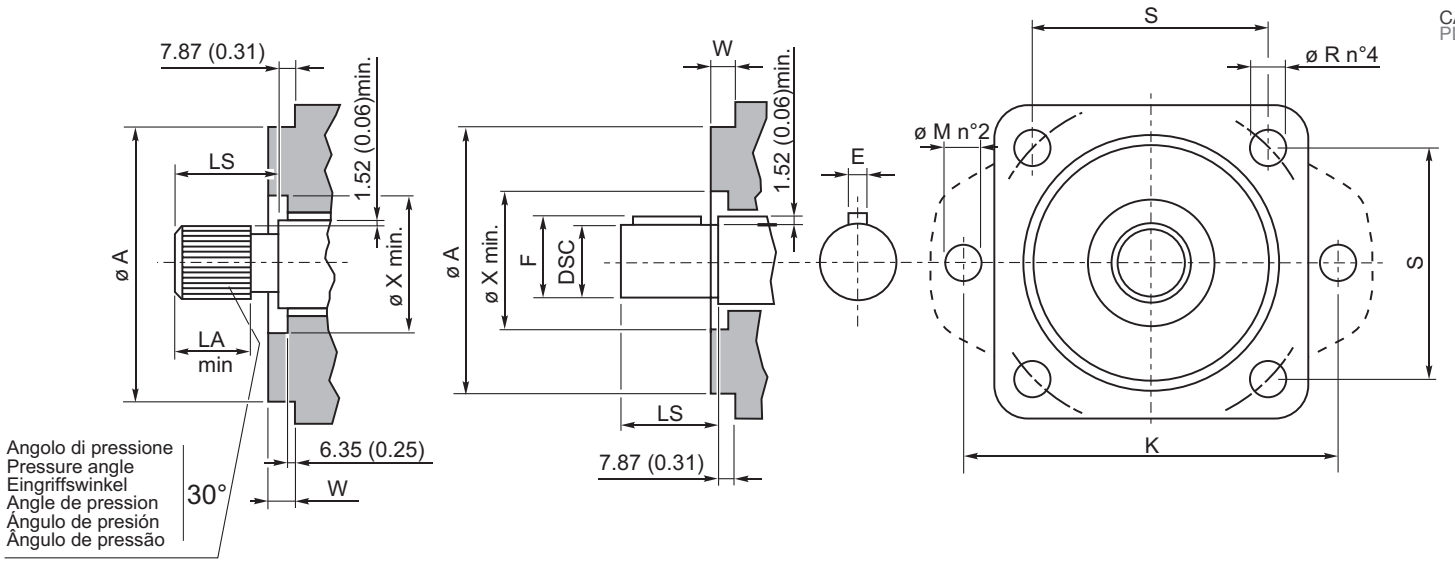
Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
F11/10 (M-C-K) ∅ 20 CH6	81	4702.012.065	A
F11/10 (C-T) W20x1.25 DIN 5480 TH14	49	4702.013.046	
F11/19 (M-C-D) W25x1.25 DIN 5480 TH18	77	4702.013.068	
F11/39/58 (M-C-D) W30x2 DIN 5480 TH14	81.5	4702.013.030	
F11/78 (M-C-D) W40x2 DIN 5480 TH18	88.5	4702.013.065	
F11/110 (M-C-D) W40x2 DIN 5480 TH18	88.5	4702.013.034	
F11/110 (M-C-D) W40x2 DIN 5480 TH18	112	4702.053.018	B
F12/30 (M-F-Z) W25x1.25 DIN 5480 TH18	81	4702.013.062	A
F12/40 (M-F-D) W32x2 DIN 5480 TH14	78	4702.013.020	
F12/80 (M-I-D) W40x2 DIN 5480 TH18	81.5	4702.013.064	
V11 (60/80) (M-S-S) 12/24 DP TH14	78	4702.013.015	
V12/60 (M-I-C) W30x2 DIN 5480 TH14	78	4702.013.019	
V12/60 (M-I-D) W35x2 DIN 5480 TH16	78	4702.013.021	
V12-110 (U-S) S8/16 DP TH13	112	4702.053.005	B
V12/110 (M-I-D) W45x2 DIN 5480 TH21	112	4702.053.006	

WHITE

Motore tipo / Motor type Motortyp / Moteur type Tipos de motor / Tipos de motor	Z	Codice / Code Bestell Nr. / Code Código / Código	
HS-RS ∅ 25	61.5	4702.012.012	A
HS-RS ∅ 1"6B	61.5	4702.013.013	
RE ∅ 32	77.5	4702.012.019	
RE ∅ 31.75	77.5	4702.012.016	

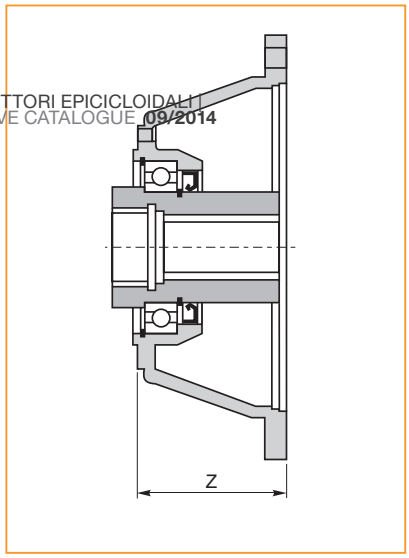
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FLANGIATURE PER MOTORI A NORME SAEJ 744C
/SAEJ 744C STD HYDRAULIC MOTOR ADAPTORS



	A	W	X_{min}	K	M	S	R	Albero scanalato Splined shaft Zahnwelle Arbre cannelé Eje ranurado Eixo estriado			Albero cilindrico Parallel shaft Zylinderwelle Arbre cylindrique Eje cilíndrico Eixo cilíndrico			
								DP	LS	LA_{min}	DSC	LS	F	E
SAE A-A	50.80	6.35	—	350.04	10.31	—	—	20/40	19.05	5.08	12.70	19.05	14.07	3.175
	(2.00)	(0.25)	—	(13.785)	(0.406)	—	—	9T	(0.750)	(0.20)	(0.50)	(0.750)	(0.554)	(0.125)
SAE A	82.55	6.35	—	106.37	11.10	—	—	16/32	23.83	7.62	15.87	23.83	17.60	3.97
	(3.250)	(0.25)	—	(4.188)	(0.438)	—	—	9 T	(0.938)	(0.30)	(0625)	(0.938)	(0.693)	(0.1563)
SAE B	101.60	9.65	50.8	146.05	14.30	89.81	14.27	16/32	33.32	10.16	22.22	33.32	24.94	6.35
	(4.00)	(0.38)	(2.00)	(5.75)	(0.562)	(3.536)	(0.562)	13 T	(1.312)	(0.40)	(0.875)	(1.312)	(0.982)	(0.250)
SAE B-B	101.60	9.65	50.8	146.05	14.30	89.81	14.27	16/32	38.10	12.70	25.40	38.10	28.10	6.35
	(4.00)	(0.38)	(2.00)	(5.75)	(0.562)	(3.536)	(0.562)	15 T	(1.500)	(0.50)	(1.000)	(1.500)	(1.106)	(0.250)
SAE C	127	12.70	63.5	180.98	17.50	114.50	14.27	12/24	47.63	15.24	31.75	47.63	35.20	7.94
	(5.00)	(0.50)	(2.50)	(7.125)	(0.688)	(4.508)	(0.562)	14 T	(1.875)	(0.60)	(1.250)	(1.875)	(1.386)	(0.3125)
SAE C-C	127	12.70	63.5	180.98	17.50	114.50	14.27	12/24	53.98	17.78	38.10	53.98	42.26	9.53
	(5.00)	(0.50)	(2.50)	(7.125)	(0.688)	(4.508)	(0.562)	17 T	(2.125)	(0.70)	(1.500)	(2.125)	(1.664)	(0.375)
SAE D	152.40	12.70	69.85	228.60	20.60	161.65	20.63	8/16	66.67	20.32	44.45	66.67	49.30	11.11
	(6.00)	(0.50)	(2.75)	(9.00)	(0.812)	(6.364)	(0.812)	13 T	(2.625)	(0.80)	(1.750)	(2.625)	(1.941)	(0.4375)
SAE E	165.10	15.875	69.85	317.50	26.97	224.51	20.63	8/16	66.67	20.32	44.45	66.67	49.30	11.11
	(6.50)	(0.625)	(2.75)	(12.5)	(1.062)	(8.839)	(0.812)	13 T	(2.625)	(0.80)	(1.750)	(2.625)	(1.941)	(0.4375)
SAE F	177.80	15.875	69.85	317.50	26.87	247.52	26.98	8/16	79.38	25.40	—	79.38	—	—
	(7.00)	(0.625)	(2.75)	(12.5)	(1.062)	(9.745)	(1.062)	15T	(3.125)	(1.00)	—	(3.129)	—	—

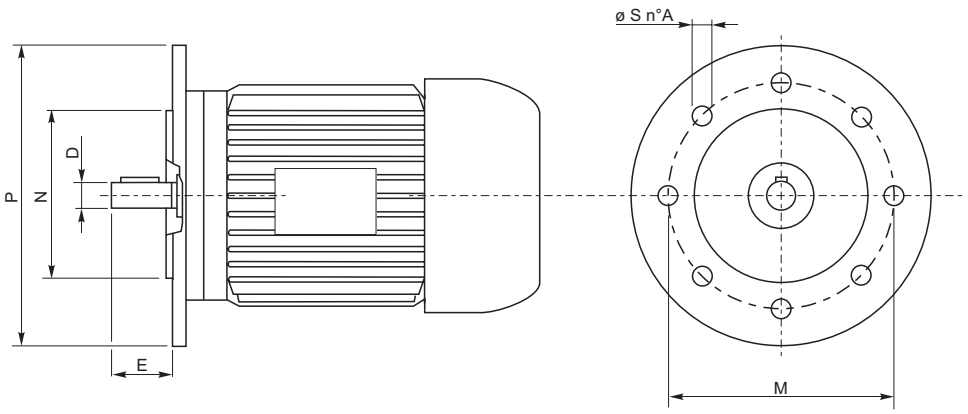
PREDISPOSIZIONI PER MOTORI ELETTRICI
/ ELECTRIC MOTOR ADAPTORS



UNEL/IEC B5			
	Z	Codice / Code Bestell Nr. / Code Código / Código.	
H63	36	4702.011.005	A
H71	36	4702.011.006	
H80	56	4702.011.001	
H90	56	4702.011.002	
H100/112	66	4702.011.003	
H132	100	4702.011.004	
H160	139	4702.011.047	
H180	139	4702.011.048	
H160	118	4702.051.001	B
H180	118	4702.051.002	
H200	148	4702.051.015	
H225	139	4702.051.016	
H250	148.5	4702.051.024	
H280	148.5	4702.051.025	
H160	150	4702.071.001	C
H180	150	4702.071.002	
H200	150	4702.071.003	
H225	139	4702.071.004	
H250	139	4702.071.005	
H280	139	4702.071.006	
H160	150	4702.081.001	D
H180	150	4702.081.002	
H200	150	4702.081.003	
H225	139	4702.081.004	
H250	139	4702.081.005	
H280	139	4702.081.006	

NEMA C			
	Z	Codice / Code Bestell Nr. / Code Código / Código.	
143TC-145TC 182TC-184TC	80	4702.011.008	A
182TC-184TC 213TC-215TC	88.5	4702.011.009	
213TC-215TC	88.5	4702.011.010	
286TC	139	4702.051.006	B
326TC	149	4702.051.007	
365TS	149	4702.051.010	

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	N° poli - Number of poles - Anzahl Pole Numero poles - N° de polos - Nº de pólos									D	E	P	M	N	S	A
	2			4			6									
	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]	[kW]							
63	0.18		0.25	0.12		0.18	0.06		0.09	11	23	140	115	95	9.5	4
71	0.37		0.55	0.25		0.37	0.18		0.25	14	30	160	130	110	9.5	4
80	0.75		1.1	0.55		0.75	0.37		0.55	19	40	200	165	130	11.5	4
90	1.5		2.2	1.1		1.5	0.75		1.1	24	50	200	165	130	11.5	4
100/112	3		4	2.2	3	4	1.5		2.2	28	60	250	215	180	14	4
132	5.5		7.5	5.5		7.5	3	4	5.5	38	80	300	265	230	14	4
160	11	15	18.5	11		15	7.5		11	42	110	350	300	250	18	4
180	22			18.5		22	15			48	110	350	300	250	18	4
200	30		37	30			18.5		22	55	110	400	350	300	18	4
225	45			37		45	30			60 (55-2p)	140	450	400	350	18	8
250	55			55			37			65 (60-2p)	140	550	500	450	18	8
280	75		90	75		90	45		55	75 (65-2p)	140	550	500	450	18	8

PREDISPOSIZIONE PER RIDUTTORI VITE SENZA FINE
/ WORM GEARBOX ADAPTORS

HAUMEA può fornire i riduttori combinati nelle seguenti configurazioni:

1) Completi di riduttore a vite senza fine.
2) Predisposti per riduttori a vite senza fine.

Inoltre ricordiamo che i riduttori epicicloidali hanno la lubrificazione separata da quella del riduttore a vite senza fine.

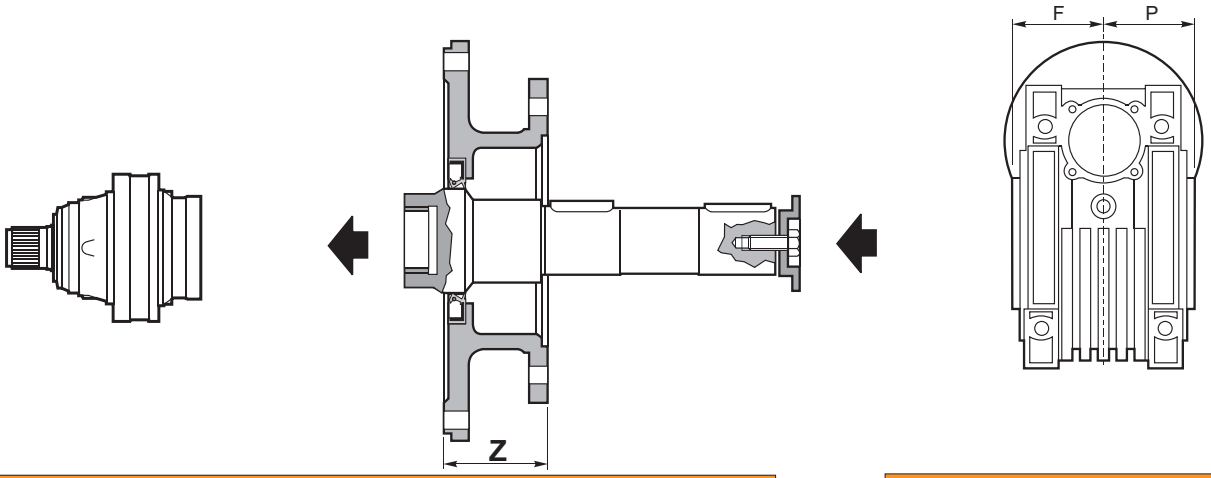
HAUMEA can supply the combined reduction units as follows:

1) Complete of worm reduction units.
2) Preset for worm reduction units.

Furthermore, we would like to remind you that the lubrication of the planetary gear units is separated from the lubrication of the worm reduction units.

fin.

lo sin fin.



PREDISPOSIZIONI PER RIDUTTORI VITE SENZA FINE
WORM GEARBOX ADAPTORS
ANSCHLUSS FÜR SCHNECKENGETRIEBE
ADAPTATIONS POUR REDUCTEURS A VIS SANS FIN
ACOPLAMIENTO PARA REDUCTORES DE TORNILLO SIN FIN
PREDISPOSIÇÕES PARA REDUTORES DE ROSCA SEM FIM

Tipo - Type - Type - Typ - Tipos - Tipos	Z	Codice / Code Bestell Nr. / Code Código / Código	
NMRV 50 / NRV 50	82	4702.017.004	A
NMRV 63 / NRV 63	82	4702.017.005	
NMRV 75 / NRV 75	57	4702.017.006	
NMRV 90 / NRV 90	57	4702.017.007	
NMRV 110 / NRV 110	64	4702.057.002	B
NMRV 130 / NRV 130	64	4702.057.001	

	A	B	
	Z	Z	Z+13.5
PG 100	1-2-3-4	—	—
PG 160	1-2-3-4	—	—
PG 250	1-2-3-4	—	1
PG 500	1-2-3-4	—	1
PG 700	2-3-4	1	2
PG 1000	2-3-4	1	2
PG 1600	2-3-4	1	2
PG 1800	3-4	2	3
PG 2500	3-4	2	3
PG 3000	3-4	2	3
PG 3500	3-4	2	3
PG 5000	3-4	2	3
PG 6500	4	3	4
PG 9000	4	3	4

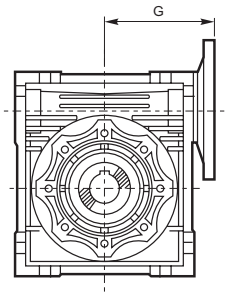
	A	B	
	Z	Z	Z+13.5
PG 12000	4-5	3	4
PG 16000	4-5	3	4
PG 21000	4-5	3	4
PG 21000 H	5	4	5
PG 26000	5	4	5
PG 31000	5	4	5
PG 31000 H	5	4	5
PG 40000	5	4	5
PG 45000	5	4	5
PG 53000	5	4	5
PG 61000	—	5	—

RIDUTTORI VITE SENZA FINE
WORM REDUCTION UNITS
SCHNECKENGETRIEBE
REDUCTEURS A VIS SANS FIN
REDUCTORES DE TORNILLO SIN FIN
REDUTORES DE ROSCA SEM FIM

Tipo - Type - Type Typ - Tipos - Tipos	F	P
NMRV 50 / NRV 50	46	46
NMRV 63 / NRV 63	56	56
NMRV 75 / NRV 75	60	60
NMRV 90 / NRV 90	70	70
NMRV 110 / NRV 110	77.5	77.5
NMRV 130 / NRV 130	85	85

N.B. I numeri 1-2-3-4-5 indicano il numero di stadi dei riduttori.
N.B.: Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.
Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.
N.B.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.
Nota: los números 1-2-3-4-5 indican el número de etapas de los reductores.
OBS.: os números 1-2-3-4-5 indicam o número de estágios do redutor.

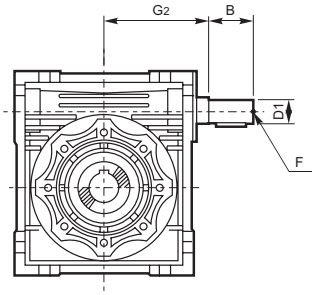
PREDISPOSIZIONE PER RIDUTTORI VITE SENZA FINE
/ WORM GEARBOX ADAPTORS



NMRV

RIDUTTORI VITE SENZA FINE / WORM REDUCTION UNITS SCHNECKENGETRIEBE / REDUCTEURS A VIS SANS FIN REDUCTORES DE TORNILLO SIN FIN / REDUTORES DE ROSCA SEM FIM	
Tipo - Type - Type - Typ - Tipo - Tipo	G
NMRV 50 PAM 63 71 80	80
NMRV 63 PAM 71 80 90	95
NMRV 75 PAM 71 80 90 112	112.5
NMRV 90 PAM 80 90 100 112	129.5
NMRV 110 PAM 80 90 100 112 132	160
NMRV 130 PAM 90 100 112 132	180

Riduttore vite senza fine con predisposizione per motore elettrico (PAM/IEC).
Worm gear reduction unit with input adaptor for electric motor (PAM/IEC).
Schneckengetriebe vorgesehen für Elektromotoranbau (PAM/IEC).
Réducteur à vis sans fin avec prédisposition pour moteur éléctrique (PAM/IEC).
Reductor de tornillo sin fin con acoplamiento para motor eléctrico (PAM/IEC).
Redutor de rosca sem fim com predisposição para motor elétrico (PAM/IEC).



NRV

SPORGENZA ALBERO DI ENTRATA / INPUT SHAFT LENGTH ANTRIEBSWELLENÄNGE/ ARBRE D'ENTREE MALE SALIENTE EJE DE ENTRADA / SALIÊNCIA DO EIXO DE ENTRADA				
Tipo - Type - Type - Typ - Tipo - Tipo	G2	B	D1 (J6)	F
NRV 50	72	30	14	M6
NRV 63	90	40	19	M6
NRV 75	105	50	24	M8
NRV 90	125	50	24	M8
NRV 110	142	60	28	M10
NRV 130	162	80	30	M10

Riduttore vite senza fine con albero maschio in ingresso.
Worm gear reduction unit with male input shaft.
Schneckengetriebe mit Zapfwelle am Eingang.
Réducteur à vis sans fin avec arbre mâle en entrée.
Reductor de tornillo sin fin con eje macho en entrada.
Redutor de rosca sem fim com eixo macho na entrada.

Per la selezione del riduttore vite senza fine contattare il Servizio Tecnico Commerciale Comer Industries.

To select the worm reduction unit please contact the Comer Industries Technical-Commercial Service Department.

Für die auswahl des Schneckengetriebes kontaktieren sie bitte dem Kundenservice (Sales) von Comer Industries.

Pour choisir le réducteur à vis sans fin, s'addresser an Service Technico-Commercial Comer Industries.

Para la elección del reductor de tornillo sin fin se aconseja ponerse en contacto con el Servicio Técnico-Comercial de Comer Industries.

Para a seleção do redutor de rosca sem fim, entre em contato com o Serviço Técnico Comercial da Comer Industries.

Posizioni di montaggio

Positions de montage

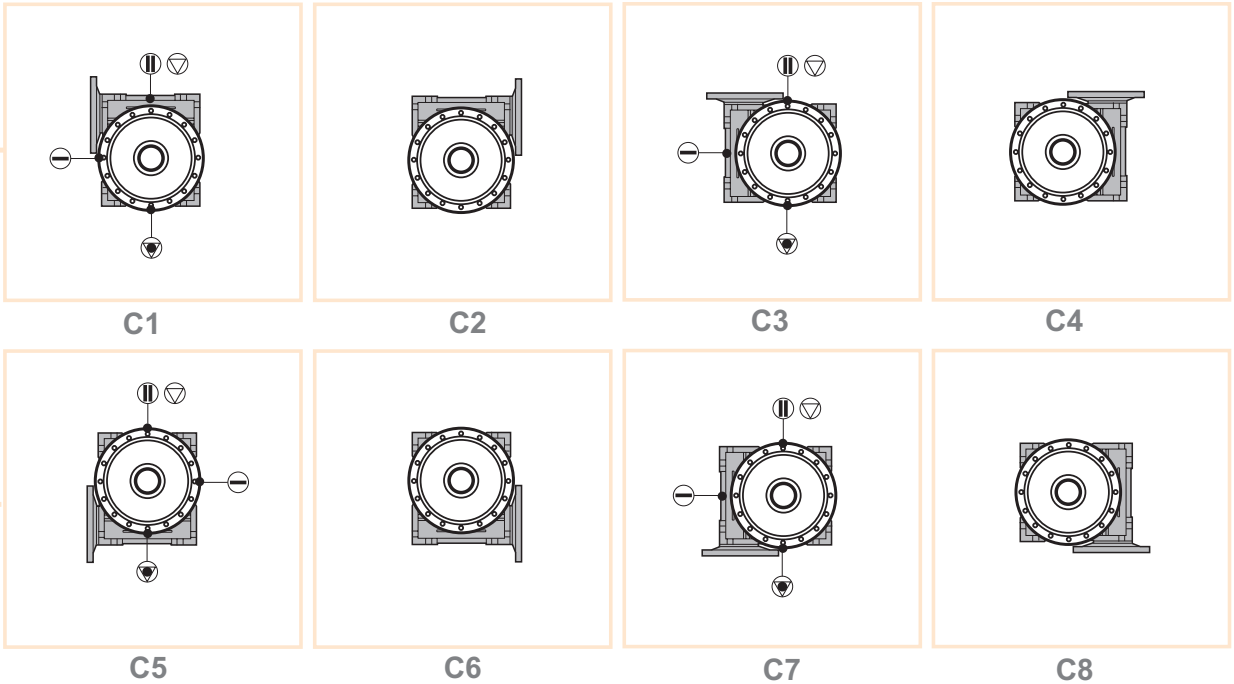
Mounting positions

Posiciones de montaje

Einbauposition

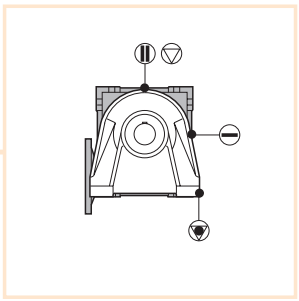
Posições de montagem

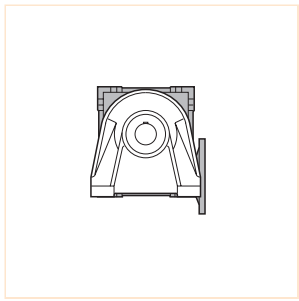
F
M
P
FS

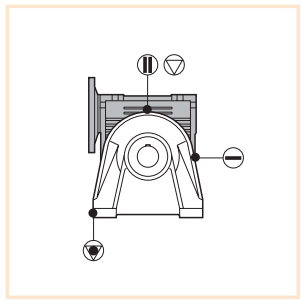


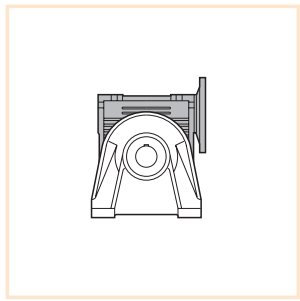
PREDISPOSIZIONE PER RIDUTTORI VITE SENZA FINE
/ WORM GEARBOX ADAPTORS

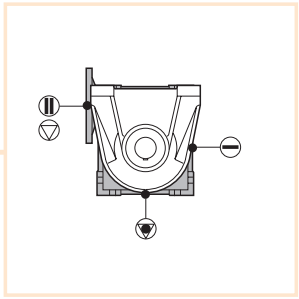
CPC

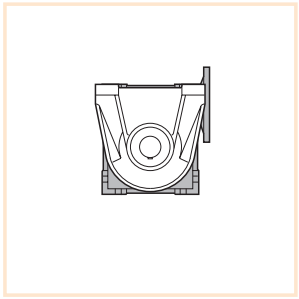

C9

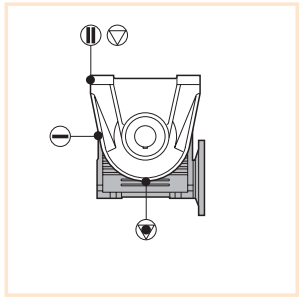

C10

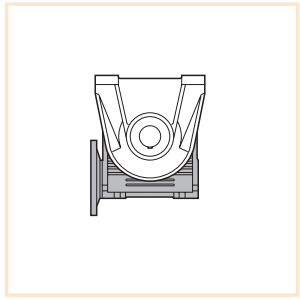

C11

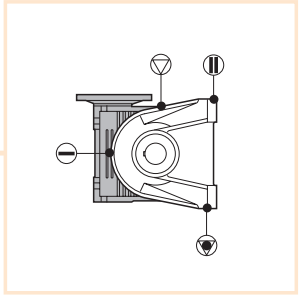

C12

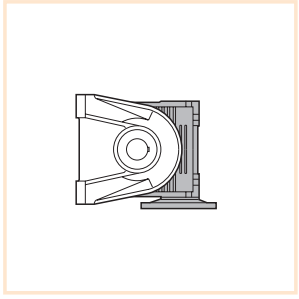

C13

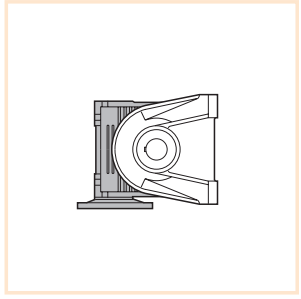

C14

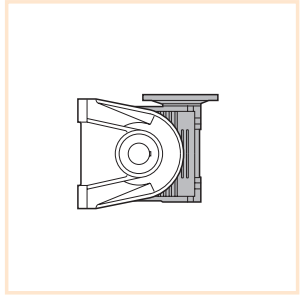

C15

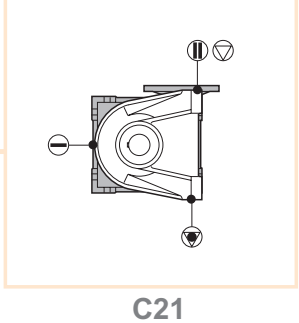

C16

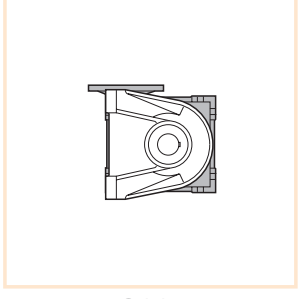

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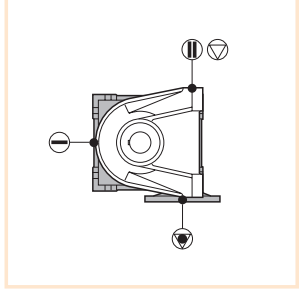

C18

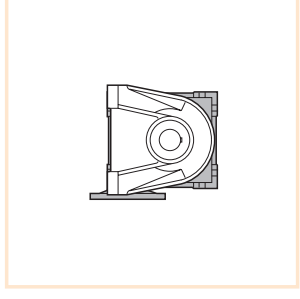

C19


C20


C21


C22


C23


C24

Tappi olio **Oil plugs** **Ölstopfen** **Bouchons huile** **Tapón de aceite** **Bujão de óleo**	Tappo sfiato Vent plug Entlüftungstopfen Bouchon à évent Tapón de venteo Bujão de respiro	Tappo carico Filling plug Einfüllstopfen Bouchon remplissage Tapón de carga Bujão de enchimento	Tappo livello Level plug Ölstandstopfen Bouchon jauge Tapón de nivel Bujão de nível	Tappo scarico Drain plug Ablassstopfen Bouchon vidange Tapón de descarga Bujão de descarga

N.B.
L'orientamento della foratura della flangia di fissaggio è come illustrato nelle schede dei dati dimensionali dei riduttori

N.B.
L'oriéntation de la flasque de montage est indiquée dans chaque fiche technique réducteur

N.B.
The mounting flange orientation is shown in each planetary gears techincal sheets

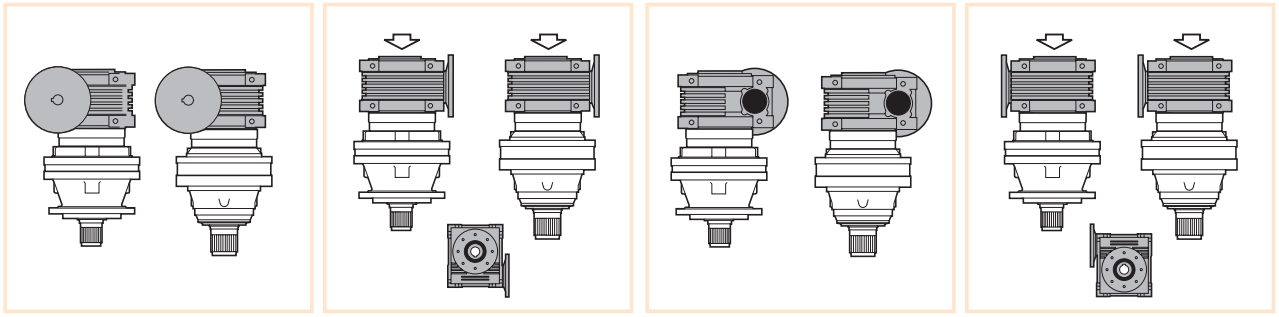
N.B.
La orientación del perforado de la brida de fijación se ilustra en las fichas de los datos dimensionales de los reductores

N.B.
Die Ausfuehrung der Befestigungs- vorrichtung (Flansch, Bohrung) ist in den Datenblaettern der Getriebe auf den ersichtlich

N.B.
A orientação da furação do flange de fixação é a ilustrada nas fichas de dados técnicos dimensionais dos redutores

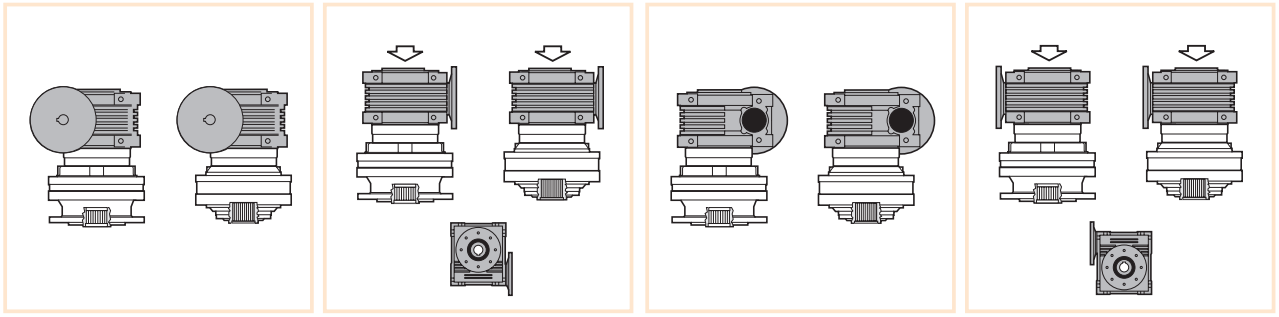
PREDISPOSIZIONE PER RIDUTTORI VITE SENZA FINE
/ WORM GEARBOX ADAPTORS

M-P



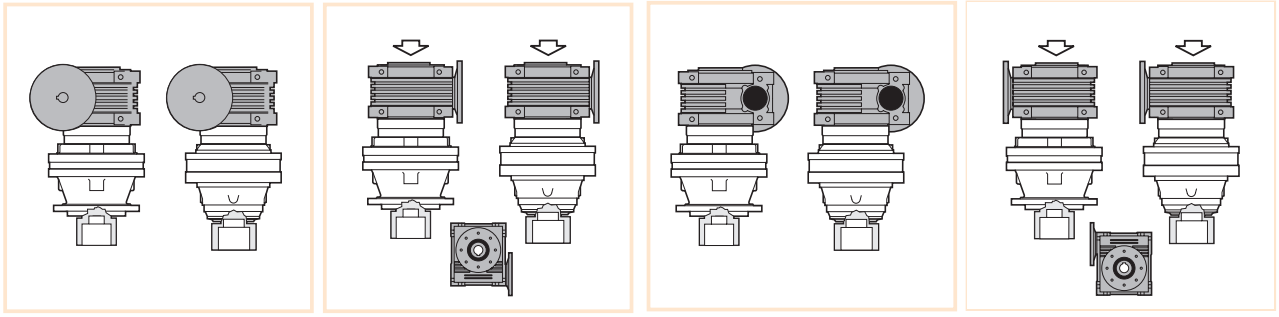
C25 C26 C27 C28

F



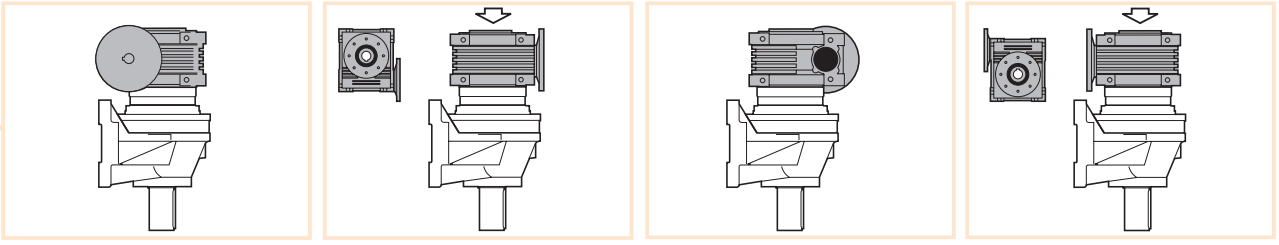
C25 C26 C27 C28

FS

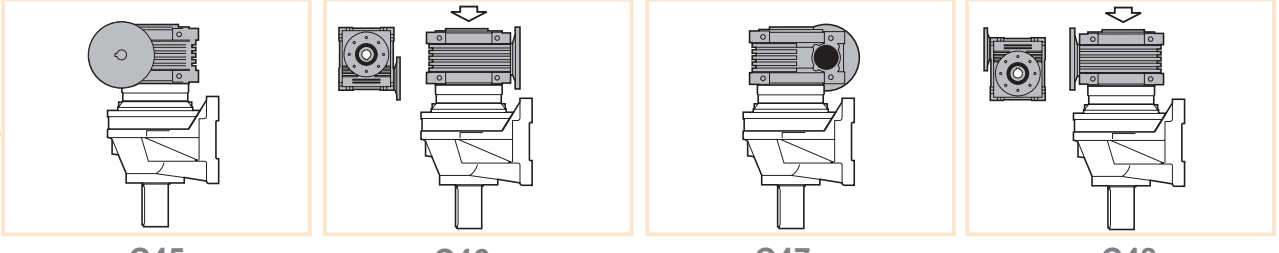


C25 C26 C27 C28

CPC



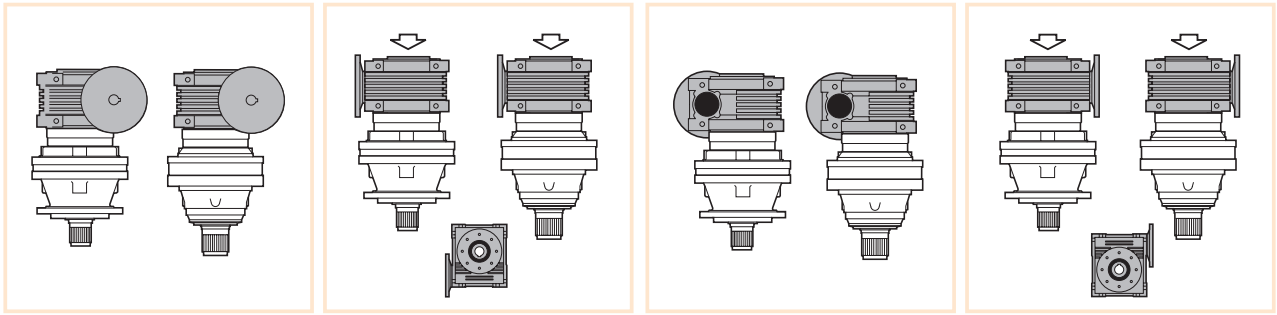
C41 C42 C43 C44



C45 C46 C47 C48

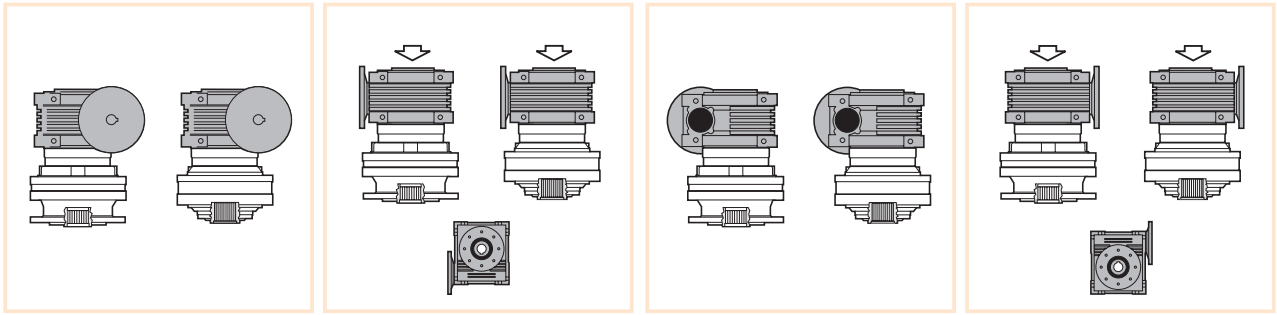
PREDISPOSIZIONE PER RIDUTTORI VITE SENZA FINE
/ WORM GEARBOX ADAPTORS

M-P



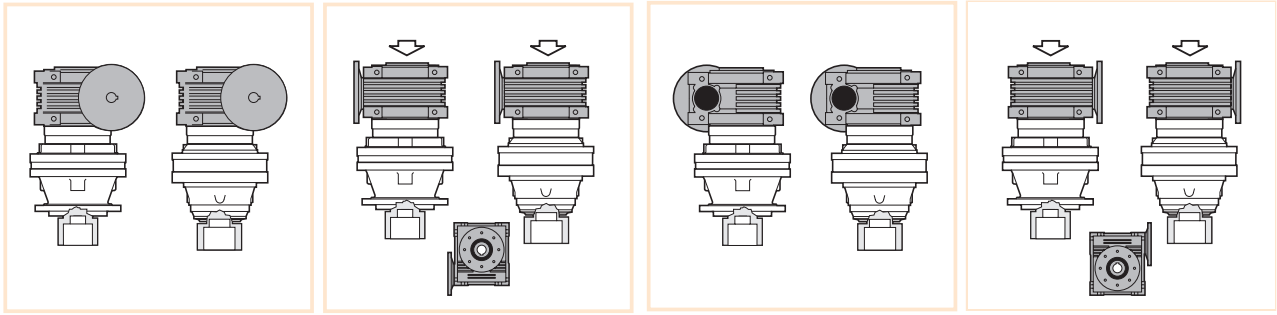
C29 C30 C31 C32

F



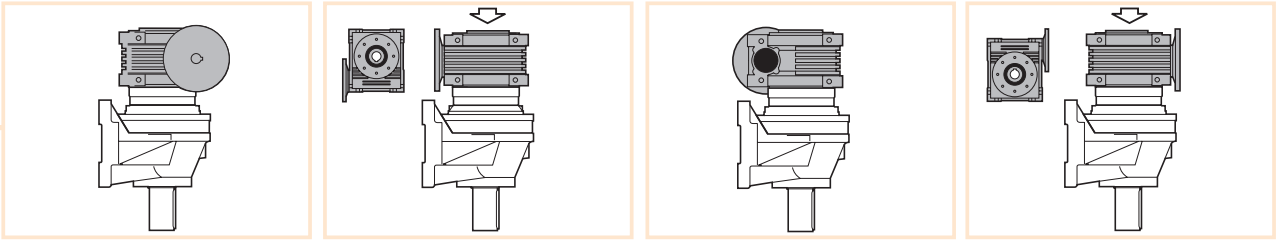
C29 C30 C31 C32

FS

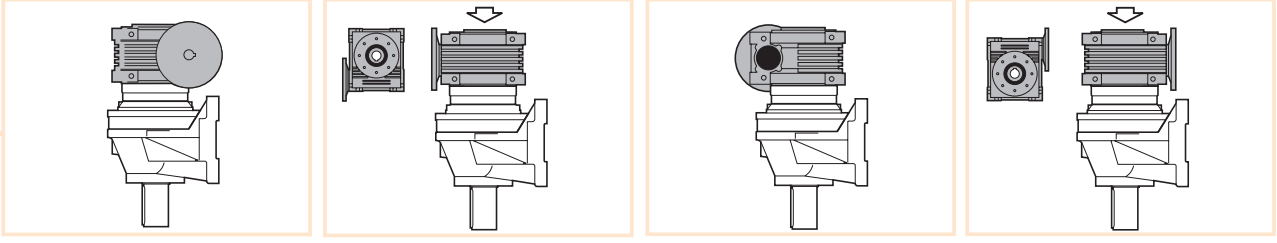


C29 C30 C31 C32

CPC



C49 C50 C51 C52

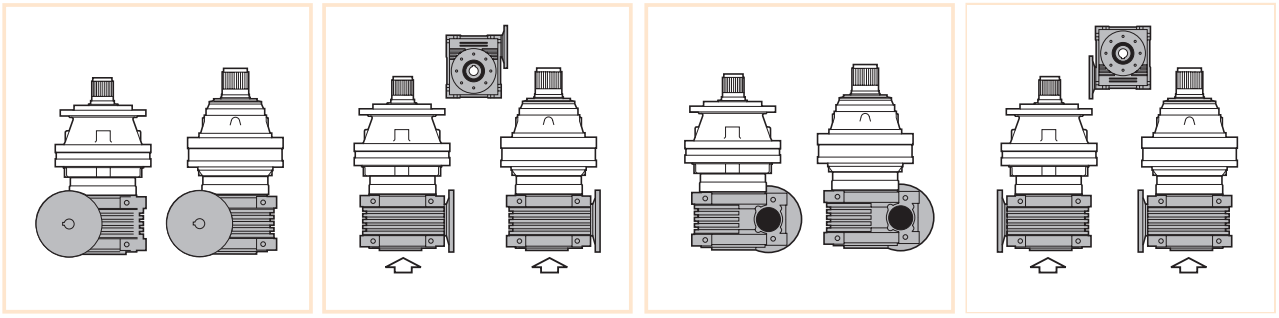


C53 C54 C55 C56

chaumea mechanics on demand

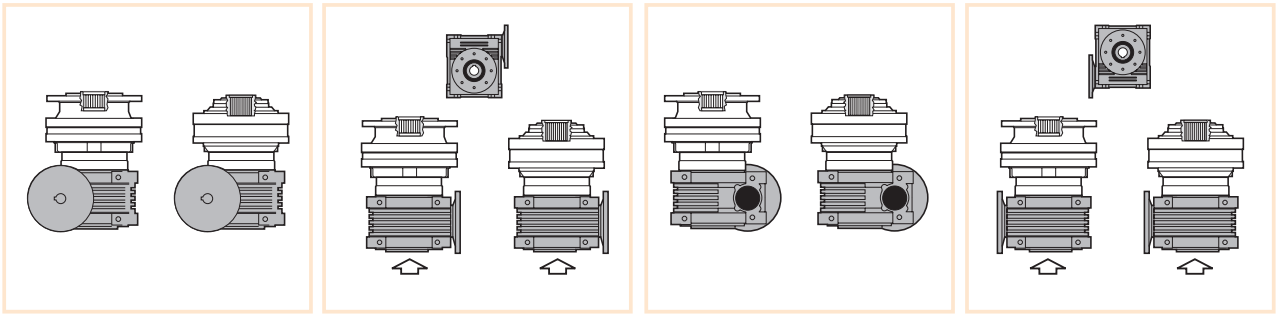
PREDISPOSIZIONE PER RIDUTTORI VITE SENZA FINE
/ WORM GEARBOX ADAPTORS

M-P



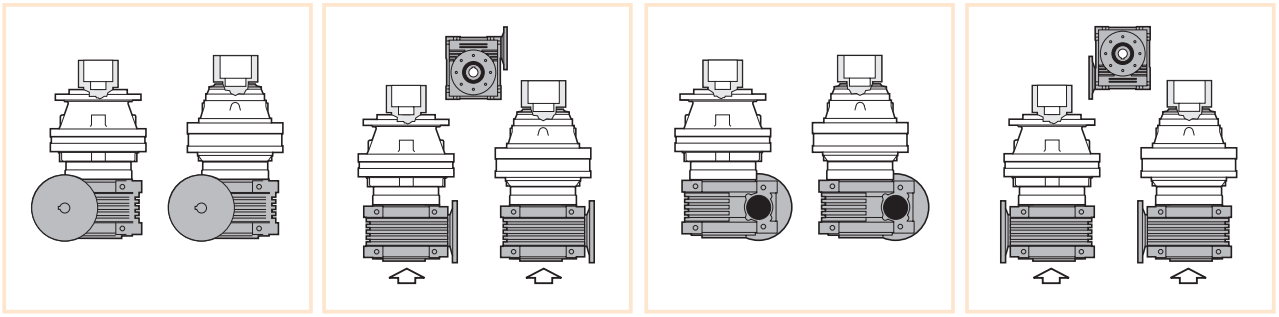
C33 C34 C35 C36

F



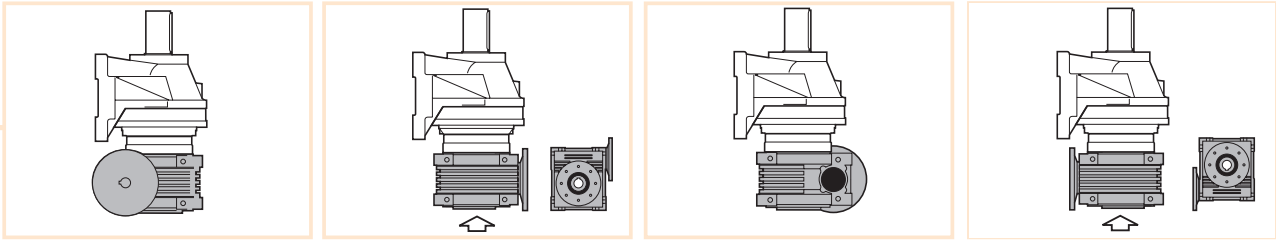
C33 C34 C35 C36

FS

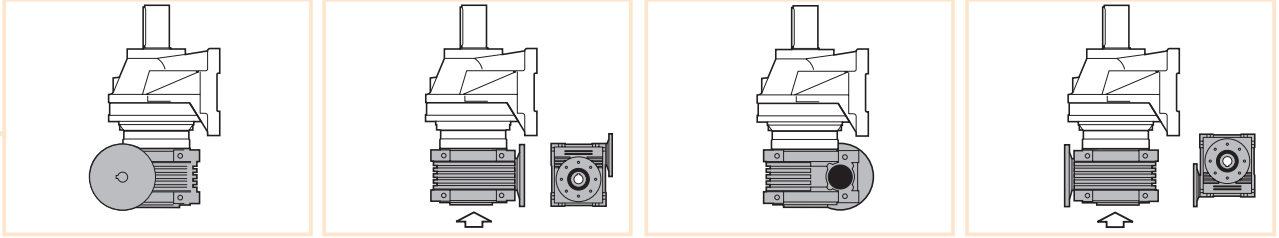


C33 C34 C35 C36

CPC



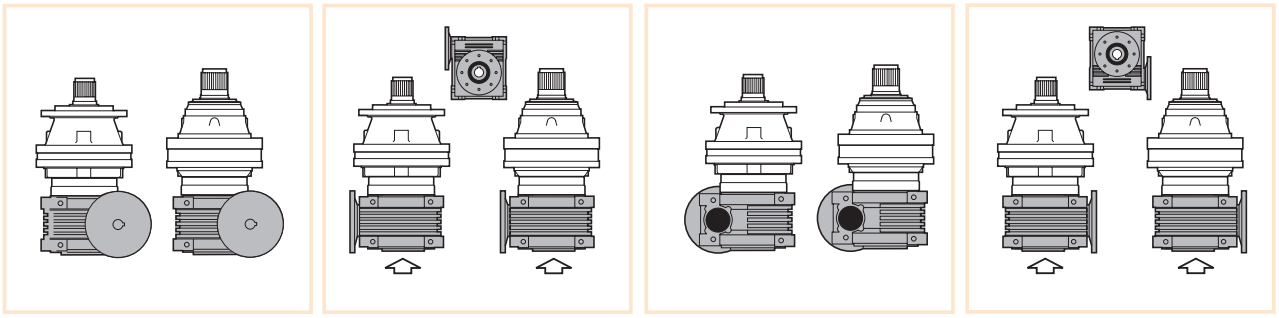
C57 C58 C59 C60



C61 C62 C63 C64

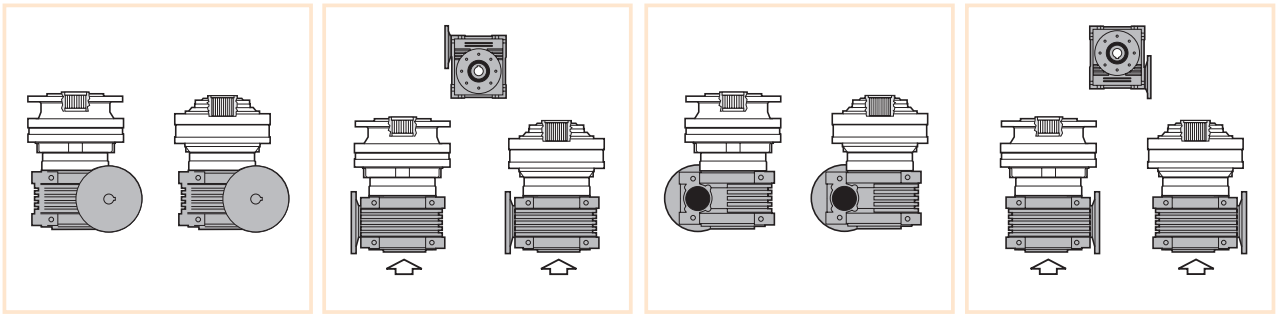
PREDISPOSIZIONE PER RIDUTTORI VITE SENZA FINE
/ WORM GEARBOX ADAPTORS

M-P



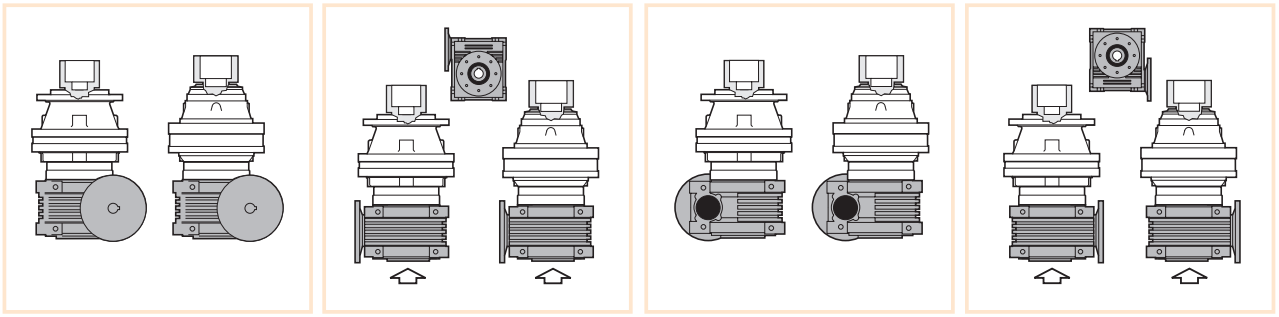
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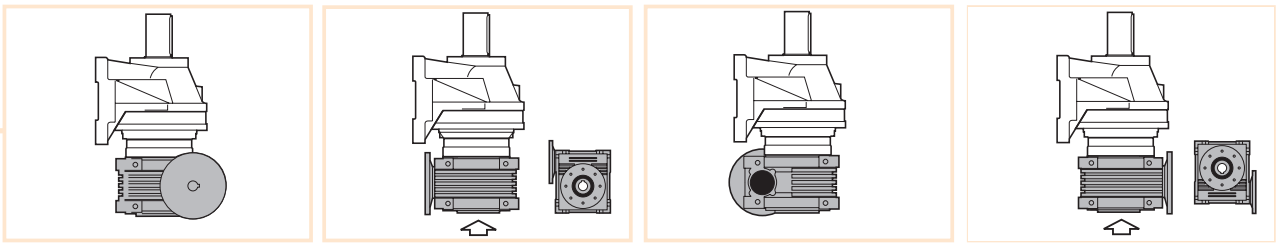
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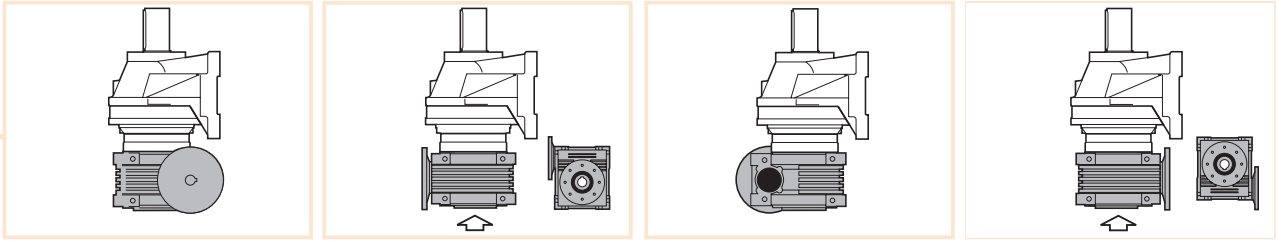


C37 C38 C39 C40

CPC



C65 C66 C67 C68



C69 C70 C71 C72

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