



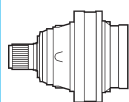
PLANETARY
D R I V E
S Y S T E M S

PG / PGA
SERIES



COMER
Group

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SCHEDE TECNICHE RIDUTTORI
PLANETARY GEARS TECHNICAL SHEETS
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PG PGA	LEGENDA Dati Tecnici Technical Details Données Techniques Technische Daten	LEGEND Dimensioni Dimensions Massen	LEGENDE Accessori Uscita Output Fittings Accessoires de Sortie Abtriebsbauteile	LEGENDE Carichi Radiali Radial Loads Charges Radiales Radiallast	40
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3000	114	116	120	121	114
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9000	146	148	152	153	146
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L'AZIENDA THE COMPANY LA SOCIÉTÉ DAS UNTERNEHMEN

La **SOM S.p.A.** nasce verso la fine degli anni '50 a Reggio Emilia per costruire componenti meccanici destinati ai settori agricolo ed industriale.

SOM S.p.A. was founded towards the end of the 1950's in Reggio Emilia. Its objective is to manufacture mechanical components for the industrial and agricultural sectors.

La Société **SOM S.p.A.** a été créée vers la fin des années 50 à Reggio Emilia dans le but de fabriquer des composants mécaniques destinés aux machines des secteurs agricole et industriel.

SOM S.p.A. wurde Ende der 50er Jahre in Reggio Emilia gegründet, schon seinerzeit wurden mechanische Bauteile für die Bereiche Landwirtschaft und Industrie hergestellt.

Dopo la metà degli anni '80 l'azienda entra a far parte del **GRUPPO COMER**, una realtà industriale di primaria importanza nel settore della componentistica per la trasmissione di potenza.

In the latter part of the 80's, the company joined the **COMER GROUP**, a primary industrial group in the field of components for power transmission.

Ce n'est qu'après 1985 que la Société a fait partie de **COMER GROUP** qui est une réalité industrielle leader dans le secteur des composants pour la transmission de puissance.

In der zweiten Hälfte der 80er Jahre wurde **SOM** Mitglied der **COMER GROUP**, einer bedeutenden Unternehmensgruppe im Bereich der Produktion von Antriebskomponenten.

Questo nuovo assetto societario, unitamente alla definizione di una chiara linea strategica aziendale, portano la **SOM S.p.A.** ad operare con successo nel settore dei RIDUTTORI EPICICLOIDALI per applicazioni industriali mobili ed impianti fissi.

This new company structure, coupled with a clear company strategy, enables **SOM S.p.A.** to work with success in the field of **PLANETARY GEAR UNITS** for mobile industrial applications and fixed installations.

Cette nouvelle organisation de la Société, conjointement à la définition d'une stratégie claire du comportement de l'entreprise, a permis à la Société **SOM S.p.A.** de se développer avec succès dans le domaine des **REDUCTEURS PLANÉTAIRES** pour applications industrielles mobiles et installations fixes.

Diese neue Identität und die klare, kundenorientierte Strategie führten zum Erfolg von **SOM** bei **PLANETENGETRIEBEN** für mobile und stationäre Industrieanwendungen.

SOM S.p.A. è oggi un'azienda dinamica, flessibile, innovativa, che vanta un'ampia conoscenza delle applicazioni industriali, un'elevata capacità progettuale, una gamma ampia, versatile ed evoluta: peculiarità che consentono a **SOM** di servire la clientela in modo personalizzato e completo. Per questo alcuni dei maggiori costruttori internazionali di applicazioni industriali hanno stabilito durature collaborazioni con la nostra azienda.

Today, **SOM S.p.A.** is an agile, flexible, innovative, versatile enterprise that boasts of its ample industrial application knowledge, high design ability and extensive range of products. These qualities allow **SOM** to better serve its customers, in a complete and customized way. For this reason some of the major international manufacturers of industrial equipment have established long-term relationships with our company.

SOM S.p.A. est aujourd'hui une entreprise souple, flexible, novatrice, possédant une large connaissance des applications industrielles, une grande capacité d'étude, une gamme de produits vaste, diversifiée et à l'avant garde: caractéristiques qui permettent à **SOM** de servir sa clientèle d'une manière personnalisée et complète. Et c'est aussi pour cette raison que quelques-uns des plus grands constructeurs internationaux de machines industrielles ont établi une collaboration durable avec notre entreprise.

SOM ist heute ein vielseitig tätiges, flexibles und innovatives Unternehmen, das sich auf umfassende Kenntnisse industrieller Applikationen, umfangreiche Planungskapazitäten sowie eine breite, anpassungsfähige und hochentwickelte Produktpalette berufen kann: Eigenschaften, die es **SOM** ermöglichen, die Kundschaft bedarfsgerecht und umfassend zu bedienen. Aus diesem Grund stützen sich einige der wichtigsten internationalen Hersteller von Maschinen und Industrieanlagen auf eine dauerhafte Zusammenarbeit mit unserem Unternehmen.



Certificazione DNV del Sistema di Qualità SOM
DNV Certification of the SOM Quality System
Certification DNV du Système de Qualité SOM
DNV Wiederbeurkundung des Qualitätssystems SOM

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.

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

L'utilisation du réducteur planétaire pour la transmission de puissance est une solution moderne répondant aux exigences de dimensions réduites, de simplicité dans la construction et de fiabilité pour l'utilisateur.

Im Vergleich zum Stirnradgetriebe, bei dem nur ein Zahn die Kräfte überträgt, wird das Moment am Zentralrad des Planetengetriebes auf drei Zahneingriffe aufgeteilt.

Diese Konstruktion führt zu kleinen Getriebeabmessungen, kompakter Bauweise und einem geringen Eigengewicht.

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.

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.

La famille de réducteurs planétaires PG se présente sur le marché avec 21 types de base, sélectionnés en fonction des couples transmissibles sur l'arbre de sortie qui vont de 0.05 à 65 kNm.

Die Planetengetriebe der Serie PG werden in 21 Grundgrößen mit Abtriebsdrehmomenten von 0.05 kNm bis zu 65 kNm hergestellt.

La modularità del prodotto SOM permette l'accoppiamento ai riduttori epicicloidali di coppie coniche, riduttori vite senza fine, freni idraulici, diversi tipi di alberi di ingresso, nonché di flange per l'accoppiamento diretto a motori idraulici o elettrici.

In fact, the SOM 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 choice of coupling flanges for hydraulic or electric motors.

La construction modulaire du produit SOM permet d'accoupler les réducteurs planétaires avec des couples coniques, des vis sans fin, des freins hydrauliques ou bien avec divers types d'arbres d'entrée, ainsi qu'avec des brides pour la fixation directe sur moteurs hydrauliques ou électriques.

Die modulare Konstruktion der SOM-Produkte erlaubt die Kombination mit Kegelradgetrieben, Schneckengetrieben, hydraulischen Bremsen, unterschiedlichen Ausführungen von Antriebswellen und Motorflanschen für hydraulische und elektrische Motore.

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 SOM 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.

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 SOM 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.

La possibilité de monter en série des étages de différents rapports permettant d'obtenir une très vaste gamme de rapports de réduction (de 3:1 à 7:1 pour les réducteurs mono-étages et jusqu'à 10.000:1 et plus pour les réducteurs à 5 étages de réduction) est un autre grand avantage résultant de la conception modulaire des réducteurs SOM.

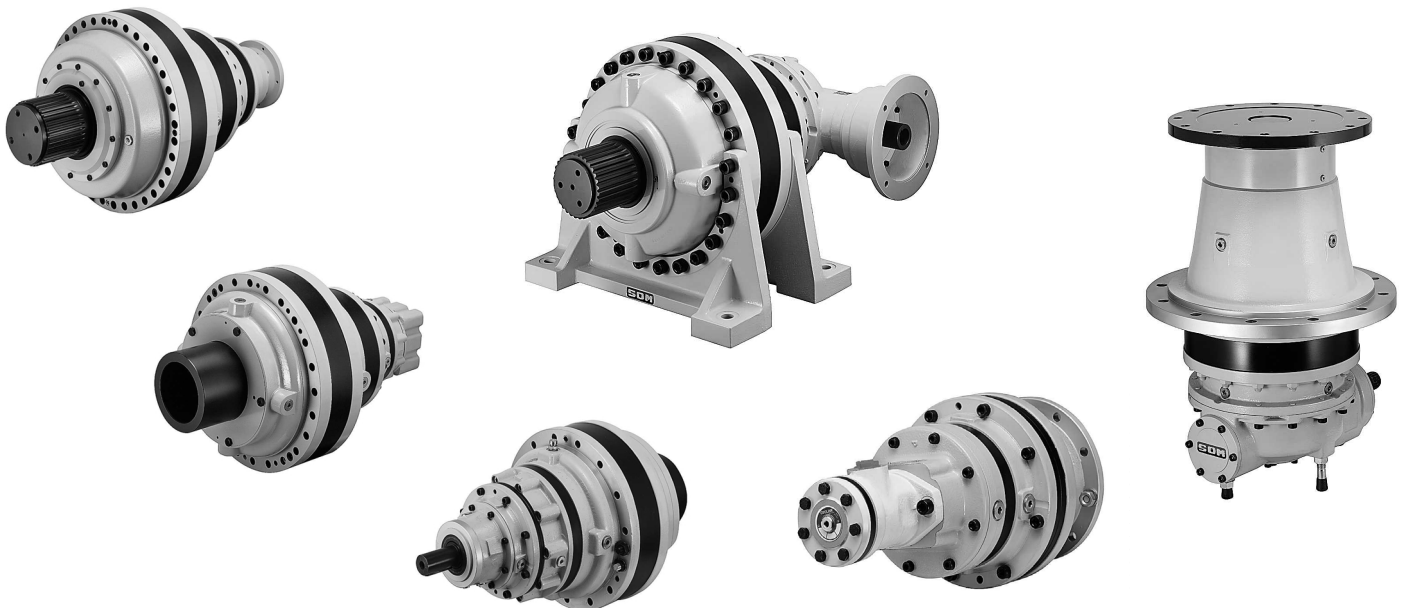
Der Antrieb ist mit allen gängigen Hydraulikmotoren, aber auch mit freiem Wellenende oder Flansch für den Antrieb durch Elektromotore zu realisieren. Im Hydraulikbetrieb wird eine wartungsfreie und geräuscharme Federdruck - Lamellenbremse als Haltebremse eingesetzt.

Le diverse opzioni di albero e flangiatura in uscita semplificano l'installazione del riduttore su applicazioni mobili e impianti fissi industriali.

The wide selection of output shafts and flanges simplifies the reduction unit mounting operation on industrial machinery or plants.

La possibilité de disposer de plusieurs options en ce qui concerne l'arbre et le bridage côté sortie du réducteur simplifie le montage de ce dernier sur les machines ou sur les équipements industriels.

Die verfügbaren Formen hinsichtlich der Wellen und Flansche des Abtriebs erlauben den Einbau der Getriebe in diversen mobilen und stationären Applikationen.



LE APPLICAZIONI THE APPLICATIONS LES APPLICATIONS DIE EINSATZBEREICHE

Dai primi impieghi limitati soprattutto alle macchine movimento terra, SOM 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, SOM 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.

Depuis les premières applications qui se limitaient principalement aux engins des travaux publics, SOM a étendu et développé les possibilités d'emploi dans le domaine industriel. Les applications sont maintenant de plus en plus fréquentes dans les complexes chimiques, alimentaires et écologiques ainsi que sur les machines outils, les machines pour le travail du marbre, les dispositifs de transport et de relevage et toutes les machines mobiles en général.

Die SOM-Planetengetriebe kommen überwiegend im Bereich mobiler Baumaschinen zum Einsatz, in den letzten Jahren verstärkt auch in industriellen Anwendungen, wie Förder- und Hubsystemen, Krananlagen, im Schiffsbau, in der Offshore-Technik, Stahlverarbeitung, Anlagen der Chemie, im Bereich alternativer Energien, Umwelttechnik und der Nahrungsmitteltechnologie, um nur einige Schwerpunkte aufzuzeigen.



Applicazioni marine - comando eliche direzionali
Marine applications - directional propellers control
Application marines-contrôle des propulseurs directionnels
Schiffsbau - Drehwerk fuer Ruder- und Propellersteuerung



Pompe per calcestruzzo
Concrete pumps
Pompes à béton
Betonpumpe



Autogru
Off-road mobile cranes
Grues mobiles tout-terrain
Autokraene

Carri miscelatori orizzontali
Horizontal feed mixers
Mélangeuses horizontales
Horizontal-Futtermischwagen



Gru e sistemi di sollevamento
Cranes and hoisting systems
Grues et systèmes de leverage
Kraene und Hubsysteme



Generatori eolici
Wind power generators
Eoliennes
Windkraftanlagen

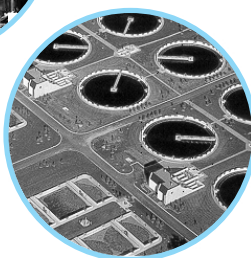




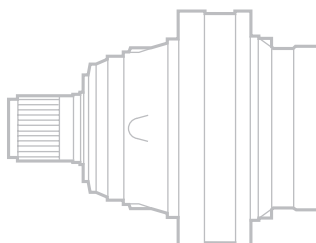
Carri miscelatori verticali
Vertical feed mixers
Mélangeuses verticales
Vertikal-Futtermischwagen



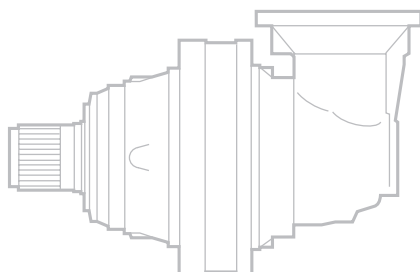
Gru gommata e cingolate
Mobile cranes
Grues mobiles
Mobilkraene



Trattamento acque
Water treatment
Traitement des eaux
Wasseraufbereitung



Gru per edilizia
Tower cranes
Grues de chantier
Turmkraene



Impianti fissi industriali
Stationary equipments
Equipements fixes
Stationaere Industrieanlagen



Impianti trasformazione ferro/acciaio
Steel/iron processing equipments
Broyeurs industriels
Anlagen der Stahlerzeugung



Giostre
Park rides
Manèges
Vergnuegungseinrichtungen



Macchine enologiche, presse per uva
Wine-making machines, grape presses
Pressoirs à vin
Weinherstellung - Pressen



CARATTERISTICHE TECNICHE TECHNICAL INFORMATION CARACTERISTIQUES TECHNIQUES TECHNISCHE EIGENSCHAFTEN

CARATTERISTICHE TECNICHE

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 $n_{1\max}$ [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 SOM 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 M_c [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).

GENERAL TECHNICAL INFORMATION

The knowledge and correct interpretation of the information given in this catalogue are necessary starting-points for the best selection and use of the products.

It is important to determine some distinctive parameters such as:

REDUCTION RATIO i

This is the ratio of input speed n_1 to output speed n_2 . The value for each planetary gear is shown in the relative technical card.

MAXIMUM INPUT SPEED $n_{1\max}$ [min⁻¹]

This is the maximum speed allowed for each size of planetary gear under conditions of intermittent work. In continuous duty or speeds greater than the ones indicated, please contact the SOM Technical-Commercial Service Department. Maximum input values for each type of planetary gear are depicted in the single technical card.

EFFICIENCY

The efficiency is usually high in planetary transmission; i.e., the average value ranges between 0.97 and 0.98 for each reduction stage. This approximate value decreases under conditions of high speed or in applications with bevel gears.

CONTINUOUS TORQUE M_c [kNm]

This is the torque value related to the maximum value of the stress on the gears according to the international standards ISO 6336.

This conventional torque value corresponds to the unlimited theoretic life of the gears, taking into consideration the bending stress as well as the surface strength of the tooth (Hertz pressure).

CARACTERISTIQUES TECHNIQUES

La connaissance et la bonne interprétation des données contenues dans ce catalogue sont les conditions indispensables qui permettent de choisir et d'employer correctement les produits présentés.

Il est donc important de définir certains paramètres caractéristiques:

LE RAPPORT DE TRANSMISSION i

C'est le rapport effectif entre la vitesse d'entrée n_1 et la vitesse de sortie n_2 . Il est indiqué sur la fiche technique de chaque type de réducteurs.

LA VITESSE MAXIMALE D'ENTRÉE $n_{1\max}$ [min⁻¹]

C'est la vitesse maximale admise pour chaque famille de réducteurs, dans des conditions de fonctionnement intermittent. Pour des applications en service continu ou bien pour des vitesses supérieures à celles qui sont indiquées, le Service Technico-Commercial est à votre disposition pour des explications supplémentaires. La vitesse maximale d'entrée est indiquée sur la fiche technique de chaque type de réducteur.

LE RENDEMENT

Il est généralement élevé dans la transmission planétaire: 0,97-0,98 en moyenne pour chaque étage de réduction. Cette donnée indicative peut être inférieure dans le cas de fonctionnements à des vitesses très élevées et dans le cas de réducteurs en version angulaire.

LE COUPLE CONTINU M_c [kNm]

C'est le couple dont la valeur des contraintes sur les engrenages est égale à la valeur limite selon les normes internationales ISO 6336.

Cette valeur conventionnelle correspond à une durée théorique illimitée des engrenages, tenant compte aussi bien de la contrainte de flexion que de la résistance de la surface de la dent (pression de Hertz).

TECHNISCHE EIGENSCHAFTEN

Die Kenntnis der Anforderung, sowie die korrekte Umsetzung der im Katalog gelieferten Daten sind Voraussetzung für die gezielte Auswahl und somit den erfolgreichen Einsatz des entsprechenden Produktes.

Es ist deshalb wichtig, die folgenden Bestimmungsfaktoren festzulegen:

ÜBERSETZUNG i

Es handelt sich um den Quotienten aus Antriebsdrehzahl n_1 und Abtriebsdrehzahl n_2 . Sie wird für jedes Getriebemodell im jeweiligen technischen Datenblatt angegeben.

MAXIMAL ZULÄSSIGE ANTRIEBSDREHZAH $n_{1\max}$ [min⁻¹]

Im Dauerbetrieb mit Antriebsdrehzahlen, die die angegebenen Werte überschreiten, halten Sie bitte Rücksprache mit dem Kundenservice (Sales) von SOM. Die Werte der zulässigen Eingangsdrehzahl sind für jedes Getriebemodell im technischen Datenblatt angegeben.

WIRKUNGSRAD

Der Wirkungsgrad des Planetengetriebes liegt pro Planetenstufe bei 98%; d.h. bei einem dreistufigem Getriebe $\eta_{\text{gesamt}} = 0,98 \times 0,98 \times 0,98 = 94\%$.

DAUERDREHMOMENT M_c [kNm]

Dieser allgemein festgelegte Wert entspricht einer theoretisch unbegrenzten Lebensdauer der Zahnräder, wobei sowohl die Biegespannung als auch die zulässige Hertzsche Pressung auf die Zahnflankenoberfläche berücksichtigt werden. Es handelt sich um das Limit der Beanspruchung an die Verzahnung gemäss der Norm ISO 6336.

CARATTERISTICHE TECNICHE TECHNICAL INFORMATION CARACTERISTIQUES TECHNIQUES TECHNISCHE EIGENSCHAFTEN



Ai fini della scelta del riduttore questo valore va posto in riferimento alla **COSTANTE DI DURATA** $n_x h$ 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 M_c corrispondenti ad un valore $n_2 x h$ prefissato.

In regard to the selection of the planetary gear, this value represents the **CONSTANT OF LIFETIME** $n_x h$ as shown in Curve 1 where:

n = output speed (min^{-1})
 h = working time (hours)

In order to simplify your consultation, the single product technical cards show the M_c values referring to a fixed $n_2 x h$ value.

Dans le choix du réducteur, cette valeur représente la **CONSTANTE DE DUREE** $n \times h$ indiquée dans le Diagramme 1.

n = vitesse de sortie (min^{-1})
 h = durée de fonctionnement (heures)

Pour simplifier la consultation, les fiches techniques des produits montrent les valeurs de M_c qui correspondent à une valeur $n_2 x h$ prédéterminée.

Um eine korrekte Auswahl des Getriebes zu treffen, muß dieser Wert in Bezug zur **LEBENS-DAUER- KONSTANTE** $n_x h$ gesetzt werden (Diagramm 1).

n = Drehzahl an der Ausgangswelle (min^{-1})
 h = Betriebsdauer (Stunden)

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.

MAXIMUM TORQUE

$M_{\max}$ [kNm]

This is the maximum output torque that the planetary unit can transmit in a short time without causing damage to the internal components and structure. This value must be considered as the maximum output torque due to working or starting peaks and never as the continuous working torque. It also must be carefully evaluated in those applications with a high number of starts or setting ups.

The $M_{\max}$ value is shown in the single product technical cards.

LE COUPLE MAXIMAL

$M_{\max}$ [kNm]

C'est le couple maximal que le réducteur peut transmettre pendant une durée brève, sans provoquer de dommages à ses composants internes et à sa structure. Cette valeur doit être considérée comme étant le couple maximum enregistré lors de pointes ou de mises en marche mais jamais comme un couple continu de fonctionnement. Ce couple doit être particulièrement bien calculé lorsqu'il s'agit de transmissions comportant un nombre de mises en marche ou de démarrages élevé. La valeur de $M_{\max}$ est indiquée dans chaque fiche technique de produit.

MAXIMALES DREHMOMENT

$M_{\max}$ [kNm]

Es handelt sich um den maximal zulässigen Wert des Drehmoments, den das Getriebe kurzzeitig übertragen kann, ohne daß Schäden auftreten. Dieser Wert ist als maximales Drehmoment bei kurzzeitigen Spitzenbelastungen zu betrachten und niemals als Drehmoment bei Dauerbetrieb; er muß außerdem jeweils entsprechend dem Lastkollektiv gewertet werden.

Der Wert $M_{\max}$ wird in den technischen Datenblättern des entsprechenden Getriebetyps ausgewiesen.

TEMPERATURA DI FUNZIONAMENTO

Le temperature dell'olio a cui i riduttori possono funzionare sono quelle comprese tra -20°C e $+90^{\circ}\text{C}$. 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 SOM.

WORKING TEMPERATURE

The working oil temperature of the planetary gears should range between -20°C and $+90^{\circ}\text{C}$. Temperatures falling outside this range could be accepted only if special lubricants and gaskets are used. For further information, please contact the SOM Technical-Commercial Service Department.

LA TEMPERATURE DE FONCTIONNEMENT

La température de l'huile à laquelle les réducteurs peuvent fonctionner est comprise entre -20°C et $+90^{\circ}\text{C}$. Des températures hors de cette fourchette sont acceptables à condition de prendre des précautions concernant le type de lubrifiant et les joints utilisés. Ces précautions sont à déterminer selon les cas, en accord avec le Service Technico-Commercial SOM.

BETRIEBSTEMPERATUR

Die Getriebe können bei einer Umgebungstemperatur zwischen -20°C und $+90^{\circ}\text{C}$ betrieben werden. Ein Betrieb bei Temperaturen außerhalb dieses Bereiches ist möglich, vorausgesetzt daß besondere Maßnahmen in Bezug auf verwendete Schmierstoffe und Dichtungen beachtet werden. Diese Maßnahmen können im Einzelfall in Abstimmung mit dem Kundenservice (Sales) von SOM entschieden werden.

POTENZA TERMICA

P_t [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 P_t riportati nelle singole schede tecniche di prodotto sono valori massimi espressi alle seguenti condizioni di impiego:

- servizio continuo
- velocità $n_1 = 1500 \text{ min}^{-1}$

THERMAL POWER

P_t [kW]

The thermal power is the maximum power the planetary unit can transmit in continuous duty with normal turbulence lubrication and without exceeding an oil temperature of 90°C . The P_t values shown in the single product technical card indicate the maximum values at the following duty conditions:

- continuous duty
- speed $n_1 = 1500 \text{ min}^{-1}$

LA PUISSANCE THERMIQUE

P_t [kW]

C'est la puissance maximale transmissible par le réducteur en service continu avec lubrification normale par barbotage, sans que l'huile dépasse la température de 90°C .

Les valeurs de P_t indiquées dans chaque fiche technique sont des valeurs maximales relevées dans les conditions d'emploi suivantes:

- service continu
- vitesse $n_1 = 1500 \text{ min}^{-1}$

THERMISCHE LEISTUNG

P_t [kW]

Es handelt sich um die maximale Leistung, die das Getriebe bei Dauerbetrieb und normaler Schmierweise übertragen kann, ohne daß die Öltemperatur von 90°C überschritten wird.

Die in den jeweiligen technischen Datenblättern aufgeführten P_t - Werten sind Maximalwerte unter den folgenden Betriebsbedingungen:

- Dauerbetrieb ohne Unterbrechungen
- Drehzahl $n_1 = 1500 \text{ min}^{-1}$





CARATTERISTICHE TECNICHE TECHNICAL INFORMATION CARACTERISTIQUES TECHNIQUES TECHNISCHE EIGENSCHAFTEN

- olio ISO VG 150
- posizione di montaggio orizzontale
- temperatura ambiente 20°C.

- oil ISO VG 150
- horizontal mounting position
- room temperature 20°C.

- huile ISO VG 150
- position de montage horizontale
- température ambiante 20°C.

- Öl ISO VG 150
- waagerechte Einbaulage
- Umgebungstemperatur+20°C

Qualora la potenza richiesta ecceda i valori indicati nella scheda tecnica del riduttore sarà necessario prevedere un sistema di raffreddamento del lubrificante.

If the required power exceeds the values indicated in the planetary gear technical card, a lubricant cooling system is needed.

Si la puissance requise dépasse les valeurs indiquées sur la fiche technique du réducteur, il est nécessaire de prévoir l'installation d'un système de refroidissement du lubrifiant.

Sollte die geforderte Leistung die im technischen Datenblatt des Getriebes aufgeführten Werte übersteigen, wird ein Schmiermittel-Kühlsystem erforderlich.

Per i riduttori con piedi (dalla grandezza PG 100 alla grandezza PG 1600) il valore di Pt può essere incrementato del 15%.

For foot mounted reduction units (from PG 100 serie to PG 1600 serie) the Pt value can be increased by 15%.

En ce qui concerne les réducteurs à pattes, (de la grandeur PG 100 à la grandeur PG 1600) la valeur Pt peut être augmentée de 15%.

Der Pt- Wert der Getriebe in Fussaussführung kann um 15% erhöht werden.

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:

If the duty characteristics differ, you can apply a corrective factor fk to the Pt values as indicated in the following Table 1:

Dans le cas où les caractéristiques d'emploi seraient différentes, on peut appliquer un facteur correctif fk (voir Tableau 1 ci-dessous):

Weichen die Einsatzbedingungen von den Normbedingungen ab, können die Pt- Werte durch den Korrekturfaktor fk korrigiert werden (vgl. nachstehend aufgeführte Tabelle 1):

$$Pt_1 = Pt \times fk$$

Fattore di adeguamento della capacità termica fk / Thermal power adjustment factor fk Facteur d'adaptation de la capacité thermique fk / Anpassungsfaktor Wärmekapazität fk					
Tempo % di funzionamento Work time % Temps % de fonctionnement Betriebszeit in %	Temperatura ambiente °C / Room temperature °C / T° Ambiente °C / Raumtemperatur In 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

Tabella 1 / Table 1 / Tableau 1 / Tabelle 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.

NOTE. Please note that the Pt refers to the power actually transmitted by the planetary gear unit. Do not mistake it with the power of the motor mounted on it which for various reasons could be greater.

N.B. Pt se réfère à la puissance effectivement transmise par le réducteur; il ne faut donc pas la confondre avec la puissance du moteur sur lequel le réducteur est installé, puissance qui, pour différentes raisons, peut être supérieure.

ANMERKUNG: Es wird darauf hingewiesen, daß sich der Pt-Wert auf die tatsächlich vom Getriebe übertragene Leistung bezieht; sie darf nicht mit der Leistung des eingebauten Motors verwechselt werden, die höher sein könnte.

Per ulteriori dettagli si prega di contattare il Servizio Tecnico-Commerciale SOM.

For further details please contact the SOM Technical-Commercial Service Department.

Pour de plus amples détails, s'adresser au Service Technico-Commercial SOM.

Für weitere Rückfragen wenden Sie sich bitte an den Kundenservice (Sales) von SOM.

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

SERVICE FACTOR fs

Service factor fs is a multiplication coefficient introduced into the formula for the selection of the planetary gear. In that formula it takes into account the application load conditions. It is defined in Table 2.

FACTEUR DE SERVICE fs

C'est un facteur de multiplication qui est introduit dans la formule servant à choisir le réducteur. Il permet de tenir compte des conditions de charge de l'application et est défini dans le Tableau 2.

BETRIEBSFAKTOR fs

Es handelt sich um einen Multiplikationskoeffizienten, der in die Formel eingesetzt wird. Damit soll den nach Einsatzform unterschiedlichen Belastungen Rechnung getragen werden; er wird in Tabelle 2 aufgeführt.

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. 202.

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
 $n \times h = 5 \times 10^6$ 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 SOM.

Nell'ambito del continuo sviluppo e miglioramento del prodotto, la SOM 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 assorbita
- d) ciclo di lavoro

MOTORE

- e) tipo e caratteristiche del motore
- f) potenza e/o coppia erogata
- g) velocità di funzionamento

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 on each gear box size; the load values relevant to input shafts are shown at page 202.

Radial and axial loads are the maximum values permitted but must not occur simultaneously.

The values of permitted loads Fr, Fa are referred to a bearing duration according to ISO 281 standard and corresponding to:

$n \times h = 10^5$ for output shafts
 $n \times h = 5 \times 10^6$ 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 SOM Technical-Commercial Service Department.

SOM S.p.A. is continuously improving its product and will undertake the necessary technical and dimensional changes without needing a previous notice to the market.

PLANETARY UNIT SELECTION

In a mechanical transmission system, a planetary unit is a device positioned between the prime mover and the driven equipment.

The stress it is subject to during operation is strictly related to the characteristics of the prime mover and the driven equipment (power absorption and working cycle).

The knowledge of the transmission system as a whole is a necessary condition for the best planetary unit selection. It is necessary to know:

DRIVEN EQUIPMENT

- 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) power and/or torque supplied
- g) working speed

CHARGES SUR L'ARBRE DE SORTIE ET D'ENTREE
Fr ; Fa [N]

Fr = charge radiale
Fa = charge axiale

Les valeurs des charges applicables sur l'arbre de sortie sont indiquées dans les diagrammes correspondants à chaque famille de réducteur; les valeurs des charges qui se réfèrent aux arbres d'entrée se trouvent à la page 202.

Les charges radiales et axiales maximales ne sont pas cumulables.

La valeur des charges admissibles Fr , Fa se réfère à une durée des coussinets ISO 281, correspondant à:

$n \times h = 10^5$ pour arbres de sortie
 $n \times h = 5 \times 10^6$ pour arbres d'entrée

Les réducteurs version F sont normalement utilisés pour transmettre un couple sans charges radiales; par conséquent, les charges maximales Fr et Fa ne sont pas indiquées.

Pour de plus amples informations, s'adresser au Service Technico-Commercial SOM.

SOM se réserve le droit d'apporter, sans préavis, les modifications de type technique et dimensionnel jugées nécessaires au développement et à l'amélioration constant de ses produits.

SELECTION DU REDUCTEUR

Dans un système de transmission mécanique, le réducteur est un organe situé entre le moteur et la machine à entraîner. Les sollicitations auxquelles il est soumis pendant le fonctionnement dépendent strictement des caractéristiques du moteur ainsi que de la machine à entraîner (absorption de puissance et cycle de travail).

La connaissance de tout le système de transmission est une condition indispensable pour une sélection correcte du réducteur. Il faut connaître:

MACHINE A ENTRAINÉE

- a) type de service
- b) vitesse de rotation
- c) absorption de puissance et/ou couple
- d) cycle de travail

MOTEUR

- e) type et caractéristiques du moteur
- f) puissance et/ou couple produits
- g) vitesse de fonctionnement

BELASTUNG DER ABTRIEBSWELLE UND ANTRIEBSWELLE Fr ; Fa [N]

Fr = Radiallast
Fa = Axiallast

Die Belastbarkeit der Abtriebswelle ergibt sich aus den jeder Getriebegröße zugeordneten Diagrammen. Dagegen sind die Werte der Antriebswelle auf der S. 202 ersichtlich.

Die zulässigen Maximalwerte der Radial- und Axialbelastungen dürfen nicht gleichzeitig auftreten.

Der Wert der zulässigen Belastung durch Fr und Fa bezieht sich auf eine Betriebsdauer nach ISO 281, das entspricht:

$n \times h = 10^5$ fuer Abtriebswelle
 $n \times h = 5 \times 10^6$ fuer Antriebswelle

Die Getriebe in Ausführung F werden in der Regel für die Übertragung von Drehmomenten ohne Radialbelastung eingesetzt. Deshalb werden Fr und Fa nicht angegeben. Für weitere Rückfragen wenden Sie sich bitte an den Kundenservice (Sales) von SOM.

Im Rahmen der ständigen Weiterentwicklung und Verbesserung der Produkte behält sich SOM das Recht vor, erforderliche technische Änderungen ohne ausdrückliche Vorankündigung durchzuführen.

GETRIEBEAUSWAHL

In einem mechanischen System ist das Getriebe eine Einheit zwischen Motor und anzugetriebener Maschine. Die Belastungen die auf dem Getriebe während des Betriebes wirken, sind eine Funktion sowohl der Motor- als auch der Maschinenkennlinie (Leistungsaufnahme und Lastkollektiv).

Die Kenntnis des gesamten Antriebssystems ist Voraussetzung für die korrekte Auswahl des Getriebes. Man sollte folgende Daten berücksichtigen:

ANZUTREIBENDE MASCHINE

- a) Einsatz
- b) Drehgeschwindigkeit
- c) Leistung und/oder
- d) Lastkollektiv

MOTOR

- e) Typ und Eigenschaften des Motors
- f) Leistung und/oder Drehmoment
- g) Drehgeschwindigkeit



CARATTERISTICHE TECNICHE **TECHNICAL INFORMATION** **CARACTERISTIQUES TECHNIQUES** **TECHNISCHE EIGENSCHAFTEN**

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:

- velocità in ingresso al riduttore $\leq n_1 \text{ max}$
- coppia di lavoro $\leq M_c$
- carichi applicati all'albero in uscita e in entrata $\leq F_r ; F_a$
- potenza da trasmettere $\leq P_t$ (se in servizio continuo)
- temperatura ambiente

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

By means of this information it becomes possible to proceed to an initial planetary unit selection after determining:

- reduction ratio i
- working torque M [kNm]
- loads on planetary unit output and input shaft Fr; Fa [N]

Subsequently, we are to verify some distinctive parameters of the planetary unit as follows:

- input rotation speed $\leq n_1 \text{ max}$
- working torque $\leq M_c$
- loads on output and input shafts $\leq F_r ; F_a$
- horsepower to be transmitted $\leq P_t$ (if under continuous duty)
- room temperature

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

Ces informations nous permettent une première sélection du réducteur après avoir déterminé:

- le rapport de transmission i
- le couple de travail M [kNm]
- les charges sur l'arbre de sortie et d'entrée du réducteur Fr; Fa [N]

Par la suite il faudra vérifier certains paramètres distinctifs des réducteurs, notamment:

- Vitesse d'entrée $\leq n_1 \text{ max}$
- Couple de travail $\leq M_c$
- Charges sur l'arbre de sortie et d'entrée $\leq F_r ; F_a$
- Puissance à transmettre $\leq P_t$ (si le service est continu)
- température ambiante

Les relations I et V peuvent être immédiatement vérifiées, alors que pour les relations II, III et IV on doit procéder comme suit:

Diese Daten ermöglichen eine erste Auswahl des Getriebes und zwar nach der Festlegung von:

- Übersetzung i
- Arbeitsdrehmoment M [kNm]
- Belastung an der Abtriebs- und Antriebswelle Fr, Fa [N]

Danach sind folgende Parameter zu überprüfen:

- Getriebedrehzahl $\leq n_1 \text{ max}$
- Betriebsdrehmoment $\leq M_c$
- Belastungen auf der Abtriebswelle und Antriebswelle $\leq F_r ; F_a$
- Wärmeleistung $\leq P_t$ (Dauerbetrieb)
- Umgebungstemperatur

Die Parameter I und V kann man ohne weiteres prüfen. Was II, III und IV betrifft, ist wie folgt vorzugehen:

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.

VERIFICATION OF THE PLANETARY UNIT ACCORDING TO THE TORQUE

Calculation of the equivalent working torque Me [kNm]

When loads are intermittent (see Histogram 1), it is necessary to determine the value of the equivalent working torque.

We adopt the principle of cumulative load and determine the torque value which produces the same fatigue after the number of cycles (nxh) required by the project, by means of the following formula:

VERIFICATION DU REDUCTEUR PAR RAPPORT AU COUPLE

Calcul du couple equivalent Me [kNm]

Lorsque les charges sont intermittentes (voir Histogramme 1), il faut déterminer la valeur du couple équivalent.

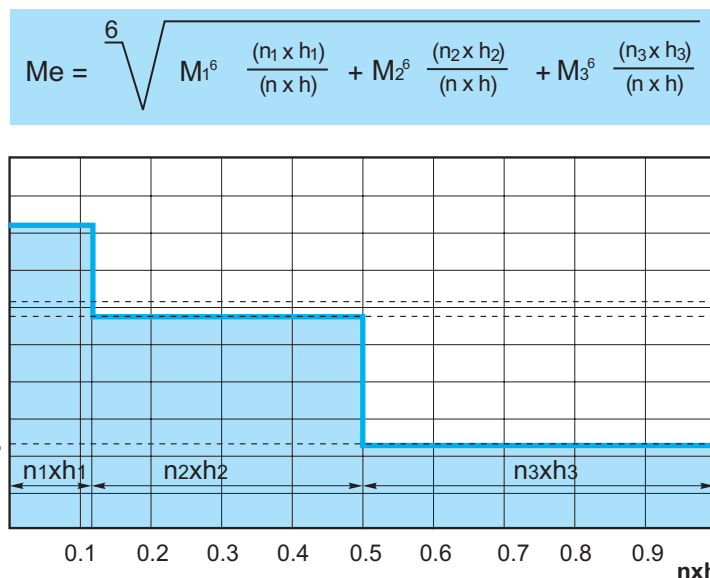
On adopte le principe du cumul des charges et, au moyen de la formule ci-dessous, on trouve la valeur du couple qui détermine le même niveau d'usure pour le nombre de cycles (nxh) requis par le projet.

ÜBERPRÜFUNG DES GETRIEBES AUFGRUND DES DREHMOMENTS

Berechnung des äquivalenten Drehmoments Me [kNm]

Wenn die Belastung während der Einsatzdauer variiert (siehe z.B. Diagramm 1), soll man einen Durchschnittswert ermitteln.

Nach dem Lastkollektiv wird das Drehmoment mit der unten angegebenen Formel berechnet.



Istogramma 1
Histogram 1
Histogramme 1
Histogramm 1

Fattore di durata fh

Nelle applicazioni industriali o di norma quando il numero di cicli di lavoro previsto n_{xh} supera 2×10^4 , si rende necessario introdurre un fattore di durata f_h (con l'ausilio del Diagramma 1) per adeguare il valore della coppia di catalogo M_c ad un valore che permetta di raggiungere il numero di cicli (n_{xh}) designato a progetto.

Duration factor fh

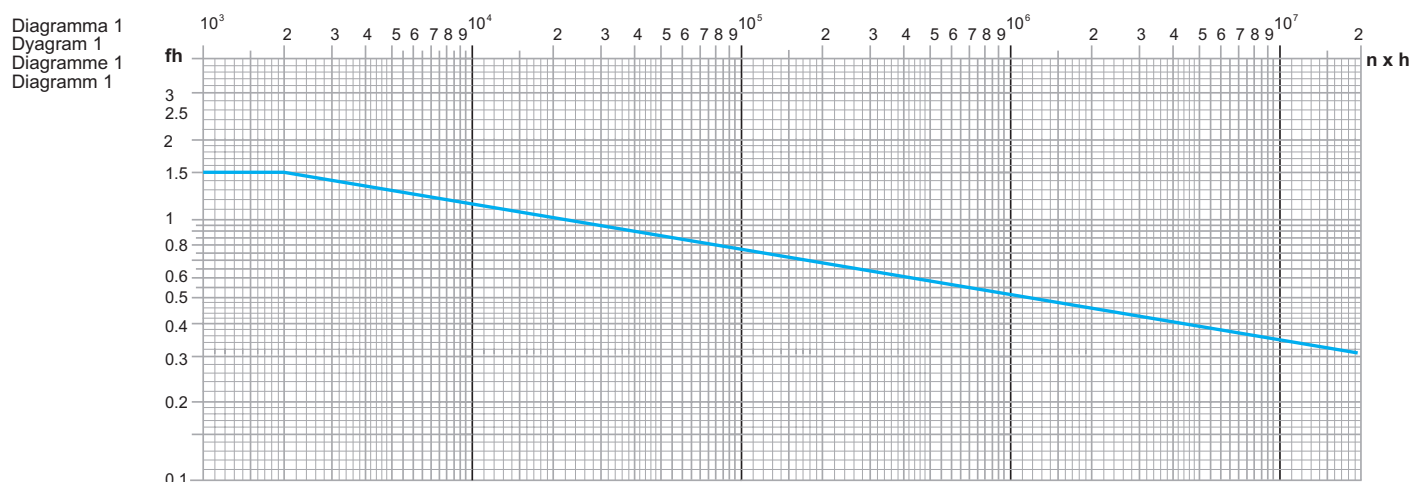
On industrial installations and whenever the number of working cycles n_{xh} exceeds 2×10^4 , it becomes necessary to consider a duration factor f_h (see Curve 1) in order to adapt the M_c torque shown on catalogue to a new value which allows the machine to operate at the number of cycles (n_{xh}) required by the project.

Le facteur de duree fh

Dans toutes les applications du secteur industriel ou lorsque le nombre de cycles de travail n_{xh} dépasse 2×10^4 , il devient nécessaire d'adopter un facteur de durée f_h (voir Diagramme 1) dans le but de modifier la valeur du couple M_c du catalogue et d'obtenir une valeur qui permette à la machine une fiabilité en rapport au nombre de cycles (n_{xh}) requis par le projet.

Lebensdauerfaktor fh

Sollte die sich nach dem Einsatz ergebende Anzahl von Arbeitszyklen den Wert 2×10^4 übersteigen, dann ist mit Hilfe des Diagramms 1 f_h auszuwählen. Auf diese Weise wird der Katalogwert M_c an die tatsächliche Vorgabe n_{xh} angepasst.



Determinazione del fattore di 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 f_s . La Tabella 2 indica i fattori f_s in funzione del tipo di applicazione.

Service factor fs

The effect of shocks deriving from intermittent motions and overloads during starts and stops, must be calculated introducing a service factor f_s . Table 2 indicates service factors f_s in relation to the type of operation.

Le facteur de service fs

Les effets des surcharges résultant de l'irrégularité dans le mouvement ainsi que des mises en marche et des arrêts doivent être calculés en introduisant un facteur de service f_s . Le Tableau 2 indique les facteurs f_s selon le type de service.

Betriebsfaktor fs

Die Stöße die auf Unregelmäßigkeit des Betriebes zurückzuführen sind, sowie die Spitzenbelastungen während des Einschaltoder Bremsvorgangs werden mittels des Betriebsfaktors berücksichtigt. Die Tabelle 2 zeigt die Betriebsfaktoren f_s eingestuft nach Einsatzbedingungen.

	Condizioni di carico / Load classifications / Conditions de charge / Belastungskennwert											
	U Uniforme / Uniform Uniforme / Gleichmässig				M Moderato / Moderate Moyenne / Mittelschwer				H Pesante / Heavy Lourde / Schwer			
Ore-giorno / Hours-day Heures-jour / Stunden pro Tag	< 1.0	1 - 4	4 - 8	8 - 24	< 1.0	1 - 4	4 - 8	8 - 24	< 1.0	1 - 4	4 - 8	8 - 24
Avviamenti-ora Start-time Demarrages par heure Starts pro Stunde												
< 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 / Tableau 2 / Tabelle 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.

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

Les valeurs sont pour motorisation par moteurs hydrauliques et électriques. Vous adresser au Service Technico-Commercial SOM dans le cas d'utilisation d'autres types de moteurs (à combustion interne).

Die Werte gelten bei Betrieb mit Hydraulik- und Elektromotor. Wenn die Einheiten unter abweichenden Bedingungen verwendet bzw. werden abweichende Motortypen (Verbrennungsmotoren) verwendet, setzen Sie sich bitte mit unserem Kundenservice (sales) in Verbindung.



CARATTERISTICHE TECNICHE TECHNICAL INFORMATION CARACTERISTIQUES TECHNIQUES TECHNISCHE EIGENSCHAFTEN

La Tabella 3 a fine paragrafo indica alcuni esempi di classificazione delle condizioni di carico.

La relazione II è verificata dalla formula:

Table 3 at the end of this chapter, shows some examples of load classifications.

Relation II can be verified by means of the following formula:

Le Tableau 3 à la fin du chapitre indique quelques exemples de condition de charge en fonction du type d'application.

La relation II peut être vérifiée par cette formule:

Die Tabelle 3 am Abschnittsende zeigt einige Beispiele der Einstufung nach Einsatzbedingungen.

Die Relation II wird mit folgender Formel überprüft:

$$M_e \times f_s \leq M_c \times f_h$$

Si richiede inoltre che
 $M_p \leq M_{\max}$

M_p = coppia di picco in funzionamento

It is also required that
 $M_p \leq M_{\max}$

M_p = working peak torque

Il est nécessaire que
 $M_p \leq M_{\max}$

M_p = couple maximum de travail

Bedingung ist daß
 $M_p \leq M_{\max}$

M_p = Spitzenmoment während des Betriebes

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:

VERIFICATION OF THE PLANETARY UNIT ACCORDING TO OUTPUT SHAFT LOADS

Equivalent working loads Fre; Fae [N]

Just as we calculated the equivalent working torque, when loads are intermittent, we must determine the value of average equivalent loads. As before we adopt the principle of cumulative load and determine the load value which produces the same fatigue on bearings after the number of cycles (nxh) required by the project by means of the following formula:

VERIFICATION DU REDUCTEUR PAR RAPPORT AUX CHARGES SUR L'ARBRE DE SORTIE

Calcul des charges équivalentes Fre; Fae [N]

De même que pour le calcul du couple équivalent, lorsque les charges sont intermittentes il faut déterminer la valeur de la charge moyenne équivalente. On adopte le principe du cumul des charges et, au moyen de la formule qui suit, on trouve la valeur de la charge qui détermine le même niveau d'usure pour le nombre de cycles (nxh) requis par le projet:

ÜBERPRÜFUNG DER GETRIEBEAUSWAHL NACH DER AUF DER ABTRIEBSWELLE WIRKENDEN BELASTUNGEN

Berechnung der equivalentbelastung Fre; Fae [N]

Wie bereits bei der Berechnung des Drehmoments, soll man die äquivalente Wellenbelastung ermitteln. Unter Berücksichtigung des Lastkollektivs wird mittels der unten angegebenen Formel die Haltbarkeit der Lagerung gewährleistet. Formel die resultierende Kraft Fe ermittelt:

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

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:

Service factor fs

Service factor fs can be calculated by means of Tables 2 and 3 in the same manner as calculating the torque.

Relation III can be verified by means of the following formulas:

Le facteur de service fs

De même que pour la vérification du couple, on peut déterminer la valeur du facteur de service fs au moyen des Tableaux 2 et 3.

La relation III peut être vérifiée par ces formules:

Betriebsfaktor fs

Den Betriebsfaktor fs ermittelt man mit Hilfe der Tabelle 2 und 3 mit der gleichen Vorgehensweise wie bei der entsprechenden Momentenberechnung.

Die Relation III wird mit folgender Formel überprüft:

$$F_{re} \times f_s \leq F_r \times f_h \\ F_{ae} \times f_s \leq F_a \times f_h$$

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]

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. 202-205).
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

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

Exemple de diagramme de durée de vie d'un roulement pour des versions d'arbre d'entrée et/ou de sortie.

Grafisches Beispiel einer Kurve der Lagerung im Antrieb/Abtrieb

RADIAL LOADS Fr [N]

This chapter is intended to support the catalogue user to determine the max allowable radial load and/or bearing life time on input and output shaft versions for selected gearbox.

How to determine the admissible radial load of an input or output shaft knowing the required bearing life time and the load position.

Known parameters:

- Input or output version
Input:
EL, EML, EM, EP, ET
Output:
MS, MC, PS, PC
- Load position E [mm]
(Distance from output shaft shoulder to load position)
- Required bearing life time [h]
- Shaft speed [min⁻¹]

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

1. Select the bearing life chart for selected input or output version of the selected gearbox (radial loads curves for output shaft version are shown in single planetary gears technical sheets, while the curves for input versions are on pages 202-205).
2. Find on the chart the radial load (Fr) capacity of the selected shaft version referred to the load position E.

CHARGES RADIALES Fr [N]

Ce chapitre a pour intention de donner un complément à l'utilisateur du catalogue pour déterminer la charge radiale maxi admissible et / ou la durée de vie des roulements des versions d'arbres d'entrée et sortie pour le réducteur sélectionné.

Comment déterminer la charge radiale d'une version d'arbre d'entrée ou de sortie connaissant la durée de vie demandée au roulement et la position de la charge.

Paramètres connus:

- Version d'entrée ou de sortie
Entrée:
EL, EML, EM, EP, ET
Sortie:
MS, MC, PS, PC
- Position de la charge E [mm]
(distance entre la base de l'arbre et la position de la charge)
- Durée de vie demandée au roulement [h]
- Vitesse de l'arbre [min⁻¹]

Pour déterminer la capacité de charge radiale admissible de la version d'entrée ou de sortie sélectionnée, basée sur les paramètres connus, suivre les étapes suivantes:

1. Choisir le graphique de durée de vie du roulement pour sélectionner la version d'entrée ou de sortie du réducteur retenu.
(Les diagrammes avec les valeurs des charges radiales pour les versions de sortie se trouvent dans chaque fiche technique réducteur; les diagrammes pour les versions des arbres d'entrée sont indiquées à la page 202-205).
2. Choisir le graphique de la capacité de charge radiale (Fr) de la version d'arbre sélectionnée en se référant à la position de la charge E.

RADIALLAST Fr [N]

Dieser Abschnitt soll dem Benutzer des Katalogs in den nachfolgenden Punkten Unterstützung bieten: die Feststellung der max. übertragbaren Radiallast und/oder der Lebensdauer der Lagerungen an An- und Abtriebswelle der gewünschten Getriebeausführung.

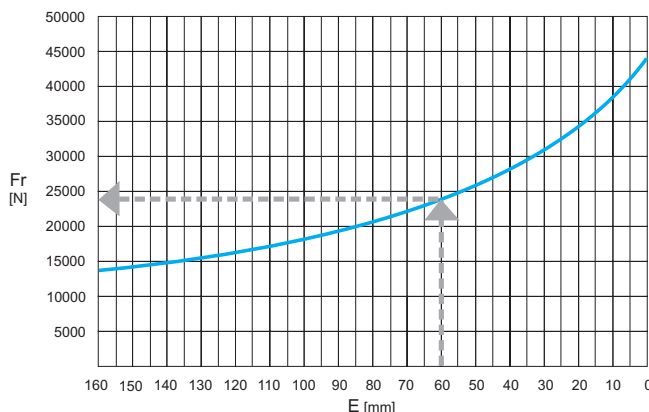
Wie wird die Radiallast einer Vollwelle in An- oder Abtrieb festgestellt, wenn die geforderte Lebensdauer der Lager und der Eingriffspunkt der Last bekannt sind

Bekannte Parameter:

- Ausführung
Antriebswelle:
EL, EML, EM, EP, ET
Abtriebswelle:
MS, MC, PS, PC
- Abstand E [mm]
(Abstand des Lasteingriffspunktes vom Wellenan-satz)
- Geforderte Lebensdauer der Lager [h]
- Drehgeschwindigkeit [min⁻¹]

Um die Radiallast der An- oder Abtriebswelle auf der Basis der vorgenannten, bekannten Parameter zu bestimmen, ist jetzt gemäss dem folgenden Ablauf vorzugehen:

1. Auswählen der entsprechenden Grafik (Lebensdauer der Lager an An-oder Abtriebswelle) gemäss gewünschter Ausführung.
Die entsprechenden Diagramme der übertragbaren Radiallast im Abtrieb sind in den modellspezifischen Datenblättern ersichtlich, dagegen sind die Diagramme bezüglich des Antriebs auf den Seiten 202 – 205 zu finden.
2. Den Radiallast-Wert (Fr) feststellen, der mit dem vorgegebenen Abstand X korrespondiert.





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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:

3. Fr will be the max load acceptable by the shaft on the E position for a bearing life time h of:

3. Fr sera la charge maxi acceptable par l'arbre placée en E pour une durée de vie h de roulement telle que:

3. Der festgestellte Wert (Fr) ist die max. tragbare Radiallast in Verbindung zum Abstand E bei einer Lebensdauer der Lager h von:

Albero di uscita

Output version

Arbre de sortie

Abtriebswelle

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

Albero di entrata

Input version

Arbre d'entrée

Antriebswelle

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

h = Durata di vita dei cuscinetti [h]
n₁ = Velocità di rotazione dell'albero entrata [min⁻¹]
n₂ = Velocità di rotazione dell'albero uscita [min⁻¹]

h = Bearings life time [h]
n₁ = Input shaft speed [min⁻¹]
n₂ = Output shaft speed [min⁻¹]

h = durée de vie des roulements [h]
n₁ = vitesse de l'arbre d'entrée [min⁻¹]
n₂ = vitesse de l'arbre de sortie [min⁻¹]

h = Lebensdauer der Lager [h]
n₁ = Drehgeschwindigkeit der Antriebswelle [min⁻¹]
n₂ = Drehgeschwindigkeit der Abtriebswelle [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:

If calculated bearing life time won't match customer required life time, you must determinate the radial load correction factor that would allow bearings to match the required life time following the below procedure:

Si la durée de vie calculée du roulement n'est pas égale à la durée de vie demandée, il est nécessaire de déterminer le facteur de correction de la charge radiale qu'il faut de vie demandée suivant la procédure ci-après:

Für den Fall, dass die so kalkulierte Lebensdauer nicht mit der geforderten Lebensdauer übereinstimmt, wird der Korrekturkoeffizient K der Radiallast eingesetzt. Dieses wird mit dem nachfolgenden Ablauf erreicht:

4. Determinare il numero di cicli che l'albero compierà durante la durata di vita richiesta:
 $n_x h = n_{1-2} [\text{min}^{-1}] \times h [\text{h}]$.
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. 202-205).

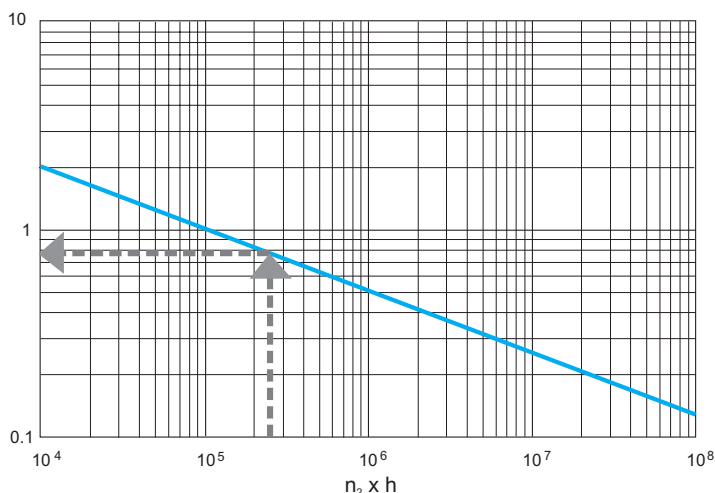
4. Determinate no. of cycles that shaft will run during required life:
 $n_x h = n_{1-2} [\text{min}^{-1}] \times h [\text{h}]$
5. Check on the radial load correction factor chart the K value corresponding to the calculated no. of cycles.
(radial loads correction factors curves for output shaft version are shown in single planetary gears technical sheets, while the curves for input versions are on pages 202-205).

4. Déterminer le nb (apice) de cycles accomplis par l'arbre durant la vie demandée:
 $n_x h = n_{1-2} [\text{min}^{-1}] \times h [\text{h}]$
5. Contrôles dans le graphique de facteur de correction de la charge radiale la valeur K correspondant au n° de cycles calculés.
(les diagrammes avec les valeurs de corrections des charges radiales pour les versions de sortie se trouvent dans chaque fiche technique réducteur; les diagrammes pour les versions des arbres d'entrée sont indiquées à la page 202-205).

4. Bestimmung von Anzahl der Zyklen über die geforderte Lebensdauer der Lager:
 $n_x h = n_{1-2} [\text{min}^{-1}] \times h [\text{h}]$
5. Feststellen des Korrekturkoeffizienten (K) der Radiallast in der entsprechenden Grafik - korrespondierend mit dem Punkt 1.
Die entsprechenden Diagramme des Korrekturkoeffizienten im Bezug auf die tragbare Radiallast im Abtrieb sind in den modellspezifischen Datenblättern ersichtlich, dagegen sind die Diagramme bezüglich des Antriebs auf den Seiten 202 - 205 zu finden.

Esempio di diagramma del coefficiente di correzione del carico radiale.
Example of radial load correction factor chart for input and/or output shaft versions

Exemple de diagramme du facteur de correction pour des versions d'arbres d'entrée et/ou de sortie
Grafisches Beispiel des Korrekturkoeffizienten der Radiallast K



- | | | | |
|--|---|--|---|
| <p>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:</p> | <p>6. Now you can determinate what it would be the acceptable radial load Fr_{nxh} on the known load position to match the customer required bearing life time applying the following formula:</p> | <p>6. Maintenant vous pouvez déterminer ce que serait la charge radiale acceptable Fr_{nxh} à l'endroit de la position de la charge E connue, égale à la durée de vie des roulements demandés, en appliquant la formule suivante:</p> | <p>6. Jetzt kann einwandfrei bestimmt werden, welche Radiallast Fr_{nxh} (auf der Basis des vorgegebenen Abstands E) annehmbar ist, um die geforderte Lebensdauer der Lager garantieren zu können:</p> |
|--|---|--|---|

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

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.

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

Comment déterminer la durée de vie des roulements d'une version d'arbre d'entrée ou de sortie en connaissant la charge radiale appliquée et sa position.

Wie wird die Lebensdauer der Lager einer Vollwelle in An- oder Abtrieb festgestellt, wenn die Radiallast und der entsprechende Eingriffspunkt vorgegeben sind.

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}]

Known parameters:

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

Paramètres connus:

- Version d'entrée ou de sortie
Entrée:
EL, EML, EM, EP, ET
Sortie:
MS, MC, PS, PC
- Position de la charge E [mm]
(distance entre l'épaulement de l'arbre en sortie de fondrière de sa boîte et la position de la charge)
- Charge radiale appliquée [kN]
- Vitesse de l'arbre [min^{-1}]

Bekannte Parameter:

- Ausführung
Antriebswelle:
EL, EML, EM, EP, ET
Abtriebswelle:
MS, MC, PS, PC
- Abstand E [mm]
(Abstand des Lasteingriffspunktes vom Wellenan-satz)
- Applizierte Radiallast [kN]
- Drehgeschwindigkeit [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:

To determinate the bearing life time of selected input or output version, based on known parameters, follow the below steps:

Pour déterminer la durée de vie de roulements de la version d'entrée ou de sortie sélectionnée, basée sur les paramètres connus, suivre les étapes ci/après:

Um die Lebensdauer der Lager der An- oder Abtriebswelle auf der Basis der vorgenannten, bekannten Parameter zu bestimmen, ist jetzt gemäß dem folgenden Ablauf vorzugehen:

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

1. Select the bearing life chart for selected input or output version of the selected gearbox
2. Find on the chart the radial load (Fr) capacity of the selected shaft version referred to the load position E
3. Determine the radial load correction factor K applying the following formula:

1. Consulter le diagramme de vie du roulement pour sélectionner la version d'entrée ou de sortie du réducteur retenu
2. Trouver dans le graphique la capacité de charge radiale (Fr) de la version d'arbre sélectionnée on se référant à la position de la charge E
3. Déterminer le facteur de correction de charge radiale K en appliquant la formule suivante:

1. Auswählen der entsprechenden Grafik (Lebensdauer dem Lager an Anoder Abtriebswelle) gemäß gewünschter Ausführung
2. Den Radiallast-Wert (Fr) feststellen, der mit dem vorgegebenen Abstand E korrespondiert
3. Den Korrektorkoeffizienten K der Radiallast nach der folgenden Formel bestimmen:

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

Fr_{ap} = Carico radiale applicato [kN]

Fr_{ap} = Applied radial load [kN]

Fr_{ap} = Charge radiale appliquée [kN]

Fr_{ap} = applizierte Radiallast [kN]

4. Una volta determinato il fattore K individuare sul grafico del fattore di correzione del carico radiale il valore di n_{xh} corrispondente.

4. Once you have determinate the K factor check on the radial load correction factor chart the number of cycles (n_{xh}) corresponding to the K value carried out on step 3.

4. Une fois le facteur K déterminée dans le graphique du facteur de correction des charges radiales le nb de cycles (n_{xh}) correspondant à la valeur K trouvée à l'étape 3.

4. Den ermittelten Koeffizienten K der Radiallast in der entsprechenden Darstellung mit dem korrespondierenden Wert n_{xh} in Verbindung setzen.



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5. Infine per determinare la durata di vita dei cuscinetti riferito al carico radiale applicato ed alla sua posizione E applicare la seguente formula:

5. To finally determinate the bearing life time based on the applied radial load apply the following formula:

5. Déterminer en fin la durée de vie des roulements basée sur la charge radiale appliquée grâce à la formule suivante:

5. Jetzt kann einwandfrei bestimmt werden, welche Lebensdauer der Lager in Verbindung zur vorgegebenen Radiallast (auf der Basis des vorgegebenen Abstands E) annehmbar ist. Dazu ist die nachfolgende Formel einzusetzen:

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

**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.

VERIFICATION OF THE PLANETARY UNIT ACCORDING TO THE THERMAL POWER
Pt [kW]

When the gear unit is running at an output speed greater than 20 min^{-1} under continuous duty or with stops between applications thus not permitting the dissipation of heat, ensure that the actual transmitted power does not exceed the power indicated in the technical card relative to the single type of gear unit.

Possible limitations to the maximum input speed with respect to larger size reduction gears must be taken into account, as shown on the product technical card.

VERIFICATION DU REDUCTEUR EN FONCTION DE LA PUISSANCE THERMIQUE
Pt [kW]

Lorsque le réducteur est utilisé à une vitesse de sortie supérieure à 20 min^{-1} et en service continu, ou bien que les arrêts de fonctionnement entre un enclenchement et l'autre ne sont pas suffisamment longs pour permettre la dispersion normale de la chaleur, il faut vérifier que la puissance effectivement transmise ne dépasse pas celle indiquée sur la fiche technique de chaque type de réducteur. En ce qui concerne les réducteurs de grosses dimensions, il existe des limitations à la vitesse maxi d'entrée dont il faut tenir compte. Elles sont indiquées sur la fiche technique du réducteur.

ÜBERPRÜFUNG DES GETRIEBES AUFGRUND DER THERMISCHEN LEISTUNG
Pt [kW]

Wird das Getriebe im Dauerbetrieb bei Raumtemperatur und mit einer Abtriebsdrehzahl von über 20 min^{-1} eingesetzt bzw. mit Unterbrechungen zwischen den Einschaltungen, die zu kurz sind, um die normale Wärmeableitung zu gewährleisten, muß kontrolliert werden, daß die tatsächlich übertragene Leistung nicht den Wert überschreitet, der in den jeweiligen Getriebetypen zugeordneten technischen Datenblättern verzeichnet ist. Bei großen Getrieben können zulässige Höchstwerte für die Eingangsgeschwindigkeit vorgeschrieben sein, die generell im technischen Datenblatt des jeweiligen Getriebetyps aufgeführt sind.

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, la SOM S.p.A. è lieta di mettere a disposizione il proprio servizio tecnico per le verifiche che si rendano necessarie.

The technical information given in this catalogue is an initial guide to the planetary unit selection and is not intended to replace the knowledge and experience of the installing technical staff which is responsible for the correct planetary unit selection. In a spirit of complete co-operation with its customers, SOM S.p.A. is pleased to be at your disposal for any necessary verification.

Les données techniques contenues dans ce catalogue ne sont qu'un premier guide à la sélection des réducteurs et ne prétendent aucunement remplacer la compétence et l'expérience des techniciens d'installation qui seuls peuvent déterminer correctement le réducteur à installer. Dans l'esprit de la meilleure collaboration possible avec les clients, SOM S.p.A. est heureuse de mettre à votre disposition son service technique pour effectuer les vérifications pouvant être nécessaires.

Die im Katalog enthaltenen technischen Informationen sollen eine Hilfe zur möglichst einfachen Auswahl der Getriebe sein. Unser Kundenservice (sales) steht Ihnen für jegliche Überprüfung, Auswahl der Getriebe und Beantwortung sonstiger technischer Fragen zur Verfügung.

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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 classification symbols may be modified after giving exact details of operating conditions.

Legend:

U = Uniform load
M = Moderate shock load
H = Heavy shock load

CONDITIONS DE CHARGE

Les conditions de charge peuvent varier en fonction des conditions de fonctionnement réelles des réducteurs.

Legende:

U = Charge uniforme
M = Charge moyenne
H = Charge lourde

BELASTUNGSKENNWERT

Die Änderung des erforderlichen Belastungskennwertes kann ggf. nach Angabe der genauen Betriebsbedingungen erfolgen.

Legende:

U = gleichmäßige Belastung
M = mittlere Belastung
H = schwere Belastung

Tabella 3 / Table 3 / Tableau 3 / Tabelle 3

Compressori, ventilatori	Blowers, ventilators	Compresseurs, ventilateurs	Gebläse, Förderer			
Compressori (assiali e radiali)	Blowers (axial and radial)	Compresseurs (axiaux et radiaux)	Gebläse	U		
Ventilatori a torre di raffreddamento	Cooling tower fans	Ventilateurs à tour de réfrigération	Kühlturmlüfter		M	
Ventilatori a tiraggio indotto	Induced draught fans	Ventilateurs à tirage induit	Saugzuggebläse		M	
Compressori a pistoni rotanti	Rotary piston blowers	Compresseurs rotatifs	Drehkolbengebläse		M	
Compressoriturbo	Turbo blowers	Turbocompresseurs	Turbogebälse	U		
Industria chimica	Chemical industry	Industrie chimique	Chemische industrie			
Agitatori (materiali liquidi)	Agitators (liquid material)	Agitateurs pour liquides	Rührwerke (leichte Flüssigkeit)	U		
Agitatori (materiali semi-liquidi)	Agitators (semi-liquid material)	Agitateurs pour semi-liquides	Rührwerke		M	
Centrifughe (pesanti)	Centrifuges (heavy)	Centrifugeuses (lourdes)	Zentrifugen (schwer)		M	
Centrifughe (leggere)	Centrifuges (light)	Centrifugeuses (légères)	Zentrifugen (leicht)	U		
Tamburi di raffreddamento	Cooling drums	Tambours refroidisseurs	Kühltrommel		M	
Tamburi di essiccazione	Drying drums	Tambours de séchage	Trockentrommel		M	
Miscelatori	Mixers	Mélangeurs	Mischer		M	
Compressori	Compressors	Compresseurs	Verdichter, Kompressoren			
Compressori a pistone	Piston compressors	Compresseurs rotatifs	Kolbenkompressoren			H
Compressori turbo	Turbo compressors	Turbocompresseurs	Turbokompressoren		M	
Convogliatori	Conveyors	Convoyeurs	Förderanlagen			
Nastro trasportatore a piastre	Apron conveyors	Bandes transporteuses à plaques	Plattenbänder		M	
Sollevatori zavorra	Ballast elevators	Élévateurs de lest	Hebewerk		M	
Convogliatori nastro a sacca	Band pocket conveyors	Convoyeurs de ruban à poches	Gurtaschenbecherwerke		M	
Convogliatori a nastro (materie voluminose)	Belt conveyors (bulk material)	Transporteurs à bandes (matériel volumineux)	Fördermaschinen (Schüttgut)		M	
Convogliatori (merce a pezzi)	Belt conveyors (piece goods)	Transporteurs à bandes (pièces détachées)	Fördermaschinen (Stückgut)			H
Convogliatori a tazza per farinacei	Bucket conveyors for flour	Convoyeurs à godets pour farine	Mehlbecherwerke	U		
Convogliatori a catena	Chain conveyors	Bandes transporteuses à chaînes	Kettenförderanlagen		M	
Convogliatori circolari	Circular conveyors	Convoyeurs circulaires	Kreisförderer		M	
Montacarichi	Hoists	Monte-charge	Lastaufzüge			H
Montacarichi inclinati	Inclined hoists	Monte-charge inclinés	Schrägaufzüge			H
Convogliatore a nastro d'acciaio	Steel belt conveyors	Bandes transporteuses à ruban en acier	Stahlbandförderer		M	
Sollevatori per persone	Passenger lifts	Ascenseurs	Personenaufzüge		M	
Trasportatori a coclea	Screw conveyors	Transporteurs à vis sans fin	Schneckenförderer		M	
Trasportatore a nastro concavo	Trough chain conveyors	Transporteurs à bande concave	Trogkettenförderer		M	
Trasportatore a verricello	Winches hauling	Transporteurs à treuil	Förderwinden		M	
Gru	Cranes	Grues	Bagger, Kräne			
Meccanismo del braccio di trivellazione	Derricking jib gear	Mécanisme du bras de forage	Bohrvorrichtung		M	
Meccanismo di montacarico	Hoist gear	Mécanisme du montecharges	Hebewerke	U		
Meccanismo girevole	Slewing gear	Mécanisme de rotation	Schwenkwerke		M	
Meccanismo di traslazione	Travelling gear	Mécanisme de translation	Fahrwerke			H
Draghe	Dredgers	Dragues	Begger			
Convogliatori a tazza	Bucket conveyors	Dragues à godets	Eimerkettenbagger			H
Ruote a tazza	Bucket wheels	Roues à godets	Schaufelräder			H
Teste portautensili	Cutter heads	Têtes porte-outils	Schneidköpfe			H
Verricelli per manovre	Manoeuvring winches	Treuil à manoeuvrer	Manövrierwinden		M	
Pompe	Pumps	Pompes	Saugpumpen		M	
Meccanismo girevole	Slewing gear	Mécanismes de rotation	Schwenkwerke		M	
Meccanismo di traslazione (mezzo cingolato)	Travelling gear (caterpillar)	Mécanismes de translation moyens chenillés	Fahrwerke (Raupe)			H
Meccanismo di traslazione (rotaie)	Travelling gear (rails)	Mécanismes de translation (rails)	Fahrwerke (Schiene)		M	



**CARATTERISTICHE TECNICHE
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TECHNISCHE EIGENSCHAFTEN**

CONDIZIONI DI CARICO

LOAD CLASSIFICATION

CONDITIONS DE CHARGE

BELASTUNGSKENNWERT

Tabella 3 / Table 3 / Tableau 3 / Tabelle 3

Macchinari per industria alimentare	Food industry machinery	Machines pour l'industrie alimentaire	Nahrungsmittelmaschinen			
Macchine per il riempimento di bottiglie e contenitori	Bottling and container filling machines	Machines pour le remplissage des bouteilles	Abfüllmaschinen	U		
Frantumatori di canna	Cane crushers	Broyeurs de canne	Zuckerrohrbecher		M	
Coltelli per canna	Cane knives	Couteaux de canne	Zuckerrohrschneider			H
Macina per canna	Cane mills	Moulins de canne	Zuckerrohrmühlen		M	
Impastatrice	Kneading machines	Malaxeurs	Knetmaschinen		M	
Vasche per macerazione (cristallizzanti)	Mash tubs (crystallizers)	Cuves de macération (cristallisantes)	Maischen			H
Macchinari per imballaggio	Packaging machines	Machines pour l'emballage	Verpackungsmaschinen		U	
Taglierine per barbabietole da zucchero	Sugar beet cutters	Coupeuses pour betteraves à sucre	Zuckerrübenschneider	M		
Macchine per il lavaggio di barbabietole da zucchero	Sugar beet washing machines	Machines pour le lavage de betteraves à sucre	Zuckerrübenwäscher	M		
Macchinari per costruzione	Building machinery	Engins btp	Baumaschinen			
Betoniere	Concrete mixers	Bétonnières	Betonmischmaschinen		M	
Montacarichi	Hoists	Monte-charge	Bauaufzüge		M	
Macchinari per costruzione strade	Road construction machinery	Machines pour la construction de routes	Strassenbaumaschinen		M	
Generatori e trasformatori	Generators, transformers	Générateurs et transformateurs	Generatoren, Umformer			
Trasformatori di frequenza	Frequency transformers	Transformateurs de fréquence	Frequenzumformer			H
Generatori	Generators	Générateurs	Generatoren			H
Generatori per saldatrici	Welding generators	Générateurs pour machines à souder	Schweißgeneratoren			H
Lavanderie	Laundries	Laveries	Wäschereimaschinen			
Invertitori	Tumblers	Inverseurs	Trommeltrockner		M	
Lavatrici	Washing machines	Machines à laver	Waschmaschinen		M	
Stiratrici	Pressing machines	Machines à repasser	Bügelmaschinen		M	
Laminatori per metalli	Metal rolling mills	Laminoirs a métaux	Walzwerke			
Cesoie per laminatoi	Billet shears	Cisailles pour laminoirs	Blechscheren			H
Trasmissioni a catena	Chain transfers	Transmissions par chaîne	Kettenschlepper		M	
Laminatoi a freddo	Cold rolling mills	Laminoirs à froid	Kaltwalzwerke			H
Impianti per fusione continua	Continuous casting plant	Installations de fusion continue	Stranggussanlagen			H
Basamenti refrigeranti	Cooling beds	Bases de réfrigération	Kühlbetten		M	
Cesoie per spuntatura	Cropping shears	Cisailles à ébouter	Schopfscheren			H
Laminatoi per piatti medi e pesanti	Heavy and medium plate mills	Laminoirs pour plats moyens et lourds	Plattenwalz-werk			H
Treni sbozzatori e lingotti	Descaling machines	Trains ébaucheurs et lingots	Blocktransportanlagen			H
Manipolatori	Manipulators	Manipulateurs	Verschiebvorrichtungen			H
Trancia lamiera	Ingot pushers	Coupe-tôles	Blechpressen			H
Raddrizzatore rulli	Plate tilters	Machines à dresser les rouleaux	Rollenrichtmaschinen		M	
Tavole a rulli (pesante)	Roller tables (heavy)	Tables à rouleaux (lourdes)	Rollgänge (schwer)			H
Tavole a rulli (leggera)	Roller tables (light)	Tables à rouleaux (légères)	Rollgänge (leicht)			H
Macchine saldatrici a tubo	Tube welding machines	Machines à souder les tubes	Rohrschweißmaschinen		M	
Macchine avvolgitrici (guarnizioni e fili)	Winding machines (strip and wire)	Enrouleuses (garnitures et fils)	Wickler		M	
Banchi da disegno a filo	Wire drawing banches	Bancs traceurs à fil	Drahtzüge		M	
Macchine per la lavorazione del metallo	Metal working machines	Machines pour le travail des métaux	Metallbearbeitungsmaschinen			
Contralberi, alberi in linea	Countershafts, line shafts	Contre-arbres, arbres en ligne	Vorgelege	U		
Pressa per stampaggio a caldo	Forging presses	Presses à mouler à chaud	Schmiedepressen			H
Martelli	Hammers	Marteaux	Hämmer			H
Guide ausiliarie, macchine utensili	Machine tools, auxiliary drives	Machines outils, glissières auxiliaires	Werkzeugmaschinen Hilfsantriebe	U		
Guide principali, macchine utensili	Machine tools, main drives	Machines outils, glissières principales	Werkzeugmaschinen Hauptantriebe		M	
Macchine per la piallatura di metalli	Metal planing machines	Raboteuses à métaux	Hobelmaschinen			H
Raddrizzatrice per la lamiera	Plate straightening machines	Machines à dresser les tôles	Blechrichtmaschinen			H
Pressa	Presses	Presses	Pressen			H
Pressa per stampi	Punch presses	Presses à estamper	Stanzen			H
Cesoie	Shears	Cisailles	Scheren			M
Macchine per piegatrici di metallo	Sheet metal bending machines	Plieuses	Blechbiegemaschinen			M

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TECHNISCHE EIGENSCHAFTEN**



CONDIZIONI DI CARICO LOAD CLASSIFICATION CONDITIONS DE CHARGE BELASTUNGSKENNWERT

Tabella 3 / Table 3 / Tableau 3 / Tabelle 3

Industria petrolifera	Oil industry	Industrie pétrolière	Ölindustrie			
Pompe conduttrici	Pipeline pumps	Pompes pour pipeline	Pumpen		M	
Attrezzatura trapanatrice rotante	Rotary drilling equipment	Trépans	Bohrvorrichtungen			H
Macchine per la carta	Paper machines	Industrie papetière	Papiermaschinen			
Calandre	Calenders	Calandres	Kalander			H
Manicotto	Couches	Fourreaux	Gautschen			H
Tamburo essicatore	Drying cylinders	Tambours de séchoir	Trockenzylinder			H
Cilindro essicatore	Glazing cylinders	Cylindres de séchoir	Glättzylinder			H
Raffinatrice	Pulpers	Raffineurs	Holländer			H
Sfibratore per pasta	Pulp grinders	Défibreurs de pâte	Holzschleifer			H
Rulli aspiranti	Suction rolls	Rouleaux aspirants	Saugwalzen			H
Presse aspiranti	Suction presses	Presses aspirantes	Saugpressen			H
Presse a umido	Wet presses	Presses humides	Nasspressen			H
Battitoi	Willows	Battoirs	Reisswolf			H
Macchinari per la plastica	Plastic industry machinery	Machines pour matières plastiques	Kunststoffmaschinen			
Calandre	Calenders	Calandres	Kalander		M	
Frantoi	Crushers	Broyeurs	Zerkleinerungsmaschinen		M	
Estrusori	Extruders	Extrudeuses	Extruder		M	
Miscelatori	Mixers	Mélangeurs	Mischer		M	
Pompe	Pumps	Pompes	Pumpen			
Pompa centrifuga (liquidi leggeri)	Centrifugal pumps (light liquids)	Pompes centrifuges (liquides légers)	Kreiselpumpen (zähe Flüssigkeit)	U		
Pompa centrifuga (liquidi viscosi)	Centrifugal pumps (viscous liquids)	Pompe centrifuges (liquides denses)	Kreiselpumpen (leichte Flüssigkeit)			H
Pompe a piston	Piston pumps	Pompes à pistons	Kolbenpumpen			H
Pompe a pulsante	Plunger pumps	Pompes à poussoir	Plungerpumpen			H
Pompe a pressione	Pressure pumps	Pompes de surcompression	Presspumpen			H
Macchinari per la gomma	Rubber machinery	Machines pour caoutchouc	Gummimaschinen			
Calandre	Calenders	Calandres	Kalander		M	
Estrusori	Extruders	Extrudeuses	Extruder			H
Miscelatori	Mixers	Mélangeurs	Mischer		M	
Impastatrice	Pug mills	Malaxeurs	Knetwerke			H
Laminatoi	Rolling mills	Laminoirs	Walzwerke			H
Macchine per la lavorazione della pietra e dell'argilla	Stone and clay working machines	Machines a travailler la pierre et l'argile	Steine, Erden			
Mulino a martelli	Hammer mills	Moulins à marteaux	Hammermühlen			H
Laminatoi per raffinare	Beater mills	Laminoirs à raffiner	Walzwerk			H
Interruttore	Breakers	Interrupteurs	Brecher			H
Presse per mattoni	Brick presses	Presses pour briques	Ziegelpressen			H
Forno rotante	Rotary ovens	Fours rotatifs	Drehöfen			H
Laminatoi a tubo	Tube mills	Laminoirs à tubes	Rohrmühlen			H
Macchine tessili	Textile machines	Machines pour l'industrie textile	Textilmaschinen			
Dosatori	Batchers	Doseurs	Dosierer		M	
Telai per tessitura	Looms	Métiers à tisser	Webstühle		M	
Macchine per la stampa e la tintura	Printing and dyeing machines	Machines pour l'impression et la teinture	Druckerei-Färbereimaschinen		M	
Vasca per la concia	Tanning vats	Cuves de traitement	Gerbwanne		M	
Battitoi	Willows	Battoirs	Reisswolf		M	
Trattamenti ad acqua	Water treatment	Traitement des eaux	Wasseraufbereitung			
Aeratori	Aerators	Aérateurs	Kreiselbelüfter		M	
Pompa a vite	Screw pumps	Pompes à vis	Wasserschnecken		M	
Macchine per la lavorazione del legno	Wood working machines	Machines a travailler le bois	Holzbearbeitungsmaschinen			
Scortecciatrici	Barkers	Machines à décortiquer	Sägegatter			H
Macchine per la piallatura	Planing machines	Raboteuses	Hobelmaschinen		M	
Telaio per seghe	Saw frames	Métiers à scies	Entrindungstrommel			H
Macchine per la lavorazione del legno	Wood working machines	Machines à bois	Holzbearbeitungsmaschinen	U		



INSTALLAZIONE - MANUTENZIONE INSTALLATION - MAINTENANCE INSTALLATION - ENTRETIEN EINBAU-WARTUNG

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.

IGENERAL MOUNTING AND MAINTENANCE INSTRUCTIONS

In order to ensure proper running and long life, the planetary unit must be mounted correctly. Always ensure that all mounting faces are flat and that the axis of the holes for spigot, which must have a tolerance H8, are perpendicular to the mounting face.

To fasten gear unit use the bolt and nuts shown under each technical drawings in the product technical cards. Make sure that all the fixing holes on the flanges are used.

We recommend to protect the gear units mounted in open air from bad weather by treating them with anticorrosive agents and to protect the oil seals with water-repellent grease.

In operations in which there could be malfunctions due to accidental overloading a mechanical or hydraulic safety device must be used in order to safeguard the transmission.

The assembly of the gear unit to the motors, electric or hydraulic, is usually done by means of direct flanges when no particularly critical conditions exist which could cause damage after installation.

In connection with this, where the installation of heavy motors (over Kg 100) is required, please get in touch with our Technical-Commercial Service Department, to evaluate the proper mounting position.

In alternative, we suggest to separately mount the two units and to connect them by means of a coupling or pulley.

REGLES GENERALES D'INSTALLATION ET D'ENTRETIEN

Il est indispensable d'effectuer un montage correct de la structure sur laquelle le groupe doit être fixé pour garantir un bon fonctionnement et une longue durée des réducteurs. Il faut donc vérifier que les surfaces de montage de ces structures soient usinées avec des centrages à tolérance H8 et qu'elles soient parfaitement planes et perpendiculaires à l'axe du réducteur.

Pour effectuer la fixation du réducteur utiliser les boulons indiqués au dessous de chaque réducteur dans les fiches techniques de produit. En outre, utiliser tous les trous de fixations prévus sur les brides des réducteurs.

Lorsque les groupes sont installés en plein air, il est conseillé de protéger les réducteurs des intempéries lorsque cela est possible, de les traiter avec des produits anti-corrosion et de protéger les joints d'étanchéité avec de la graisse hydrofuge.

Dans le cas de fonctionnements à risques de surcharge accidentelle ou, carrément, de blocage de la transmission, il faut prévoir un dispositif de sécurité hydraulique ou mécanique pour protéger le réducteur.

L'assemblage des réducteurs aux moteurs, principalement électriques ou hydrauliques, se fait normalement par l'intermédiaire d'une bride directe lorsqu'il n'y a aucune condition critique pouvant provoquer des dommages après l'installation.

A ce propos, si des moteurs très lourds, de plus de 100 Kg, doivent être couplés aux réducteurs, nous vous conseillons de vous adresser à notre Service Technico-Commercial qui vous aidera à mieux étudier l'application en fonction de la position de montage.

En alternative, nous vous conseillons d'effectuer un montage séparé des deux éléments et de les relier entre eux par un accouplement ou bien par des poulies.

ALLGEMEINE VORSCHRIFTEN FÜR EINBAU UND WARTUNG

Der korrekte Einbau des Getriebes in die entsprechende Vorrichtung der Applikation ist Voraussetzung, um einen einwandfreien und dauerhaften Betrieb zu gewährleisten. Vorallem die Oberflächen der Zentrierungen/ Aufnahme sind in einer Toleranz h8 zu fertigen, damit die einwandfreie Übereinstimmung mit der Getriebeachse garantiert wird.

Für die Befestigung sind die Schrauben zu verwenden, die in der Zeichnung/ Teileliste des Modells vorgesehen sind. Dazu sind alle vorgesehenen Befestigungsbohrungen zu verwenden.

Für im Freien betriebene Maschinen wird empfohlen, das Getriebe soweit wie möglich vor Witterungseinflüssen zu schützen sowie mit Rostschutzmittel zu behandeln. Die Dichtringe sind mit wasserabweisendem Fett zu versehen.

Bei Betriebsbedingungen, unter denen Dauerstörungen aufgrund unvorhergesehener Überlastungen auftreten könnten oder gar die Getriebewelle blockiert werden könnte, empfiehlt sich der Einbau eines hydraulischen oder mechanischen Sicherheitssystems zum Schutz des Getriebes.

Der Anbau des Getriebes an Elektro- oder Hydraulikmotoren erfolgt normalerweise direkt über Flansche, wenn keine außergewöhnliche Situation vorliegt, die nach erfolgtem Einbau Schäden verursachen könnte.

Ist es jedoch erforderlich, sehr schwere Motoren anzubauen, deren Gewicht 100 kg überschreitet, wird empfohlen, sich an unseren Kundenservice (sales) zu wenden, um die beste Einbauposition zu ermitteln.

Alternativ dazu kann ein separater Einbau der beiden Teile erfolgen, die dann über Kuppelungen oder Riemenscheiben verbunden werden.

GRUPPI CON FISSAGGIO A FLANGIA AVANZATA O SENZA FLANGIA	UNITS WITH FLANGE CLAMPING OR WITHOUT FLANGE MOUNTING	GROUPES AVEC FIXATION PAR BRIDE AVANCEE OU SANS BRIDE	EINHEITEN MIT BEFESTIGUNG DURCH VORGESCHOBENEN FLANSCH BZW. OHNE FLANSCH
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.	Planetary units with male output shaft (M-P) For these units, when the loads are 50% greater than the ones indicated in the single product technical card, we suggest the use of both spigots on the side flange. In all other cases, especially when toothed pinions are mounted, both spigots on splined output shafts must be used. In applications where heavy external load conditions simultaneously acting on the output and input exist, please contact our Technical-Commercial Service Department.	Reducteurs avec arbre lent male (M-P) Lorsque les charges de ces groupes dépassent de 50% celles indiquées sur les fiches des produits, nous vous conseillons d'utiliser les deux centrages prévus sur la carcasse, côté sortie. Dans tous les cas cependant, il faut utiliser les centrages des arbres cannelés et surtout lors de montage avec des pignons. Si de fortes charges extérieures agissent simultanément sur la sortie et sur l'entrée dans les applications prévues, vous adresser à notre Service Technico-Commercial.	Getriebe mit Abtriebswelle (M-P) Werden bei Einheiten dieser Art Leistungen angelegt, die die Werte der den jeweiligen Produkten zugeordneten technischen Datenblätter um 50% überschreiten, wird empfohlen, beide Zentrierungen, die am Gehäuse abtriebsseitig vorhanden sind, zu verwenden. Dagegen gilt grundsätzlich in allen Fällen: vorhandene Zentrierungen an den Nutwellen verwenden, vor allem, wenn Ritzel montiert werden. Bei Betriebsbedingungen, unter denen starke äußere Belastungen gleichzeitig am Abtrieb und Antrieb wirken, wird empfohlen, sich an unseren Kundenservice zu wenden.
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.	Planetary units with female output shaft (F) These planetary units cannot accept external loads in any direction. Therefore always ensure that the shaft is concentric and in-line with the axis of the driven shaft.	Reducteurs avec arbre lent femelle (F) Le type de construction de ces réducteurs permet de transmettre le couple pure. Il faut donc veiller en particulier à la coaxialité et à l'orthogonalité dans le couplage avec l'arbre conduit.	Getriebe mit innenverzahnter Hohlwelle (F) Diese Getriebeausführung kann weder Radial- noch Axialkräfte übertragen. Es muß deshalb besonders sorgfältig darauf geachtet werden, daß der Anbau an die Hohlwelle koaxial und rechtwinklig erfolgt.
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.	Foot mounted planetary units (CPC) The fastening conditions with respect to the concentricity and alignment as discussed in the beginning of this section, apply also 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 planetary unit and the machine. Ensure that the mounted gear unit is not subject to vibrations.	Reducteurs a carcasse avec pieds (CPC) Pour ces groupes aussi il est nécessaire de vérifier les conditions de fixation concernant la coaxialité et l'orthogonalité (voir début du chapitre). De plus, il faut contrôler avec soin l'alignement du groupe avec la machine à entraîner. Si vous avez quelque doute sur la réussite parfaite de cette opération, choisir un accouplement non rigide entre réducteur et machine tel que, par exemple, un joint élastique. Lors de son installation, faire aussi en sorte que le réducteur ainsi monté ne subisse aucun phénomène de vibration.	Getriebe mit Befestigungsfüssen (CPC) Auch bei diesen Einheiten gelten die zu Beginn des Kapitels erwähnten Vorschriften in Bezug auf einen koaxialen und rechtwinkligen Anbau. Außerdem muß die Ausrichtung der Einheit mit der zu bewegenden Maschine entsprechend kontrolliert werden. Sollte dieses nicht einwandfrei garantiert werden können, ist zwischen Getriebe und Maschine eine flexible Verbindung einzubauen, z.B. eine elastische Kupplung. Beim Einbau ist zu beachten, daß das auf diese Weise angebaute Getriebe keinen Vibrationen ausgesetzt werden darf.



INSTALLAZIONE - MANUTENZIONE
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EINBAU-WARTUNG

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.

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 "stringere" 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 intrasversamenti.

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 SOM in tolleranza h6.

Seguire, inoltre, le indicazioni riportate a lato di ogni disegno.

Reduction gears for shaft mounting (FS)

Before installing these planetary units, you must prepare the torque arm by respecting the minimum lengths as shown on the drawing for each single unit.

Furthermore, we recommend to cushion the reaction constraint using rubber elements and/or shock absorbers.

For a correct application in case of particular mounting conditions due to the use of very heavy motors or to heavy radial load on the input, please contact our Technical -Commercial Service Department. These particular load conditions, together with the rotation reaction torque, could considerably reduce the lifetime of the bearings, and compromise the tightening of the shrink disc or affecting the shaft resistance.

Before tightening the shrink disc, properly degrease the internal surface of the planetary unit shaft and its coupling male shaft.

Then proceed to tighten the screws in a gradual and uniform manner without discontinuance.

To remove the unit, gradually, unscrew the screws in the same order that you fasten them; i.e., without discontinuance.

We advise to give each screw one third turn during the first loosening sequence in order to avoid possible misalignments.

Then proceed to completely unfasten the unit, always in a gradual manner without completely removing the screw from the threads.

We suggest to use tolerance h6 for the male shafts to be connected to the SOM units.

Furthermore, we suggest to follow the instructions shown besides each drawings.

Reducteur à montage à frette (FS)

Pour pouvoir installer ces réducteurs, il faut avoir un bras de réaction respectant les longueurs minimales indiquées sur le plan de chaque groupe.

De plus, il est conseillé d'amortir le lien de réaction au moyen d'éléments en caoutchouc et/ou d'amortisseurs.

Dans le cas de conditions de montage particulières dans lesquelles il faut utiliser des moteurs très lourds ou bien lorsqu'il se produit une charge radiale extérieure en entrée, vous adresser à notre Service Technico-Commercial pour vérifier l'application. Ces conditions de charge, ajoutées à la charge de réaction à la rotation, peuvent réduire sensiblement la durée des roulements, compromettre l'efficacité du serrage de la frette ou agir sur la résistance de l'arbre.

Avant de serrer la frette, il faut bien dégraisser la surface interne de l'arbre du réducteur ainsi que son arbre mâle de couplage correspondant.

Serrer ensuite les vis graduellement et uniformément, avec une séquence continue.

Pour enlever le réducteur, il faut dévisser graduellement les vis de la même manière qu'elles ont été vissées, c'est à dire avec une séquence continue et graduelle.

Il est conseillé de dévisser de 1/3 de tour chaque vis avant de procéder à la séquence de desserrage, et ce afin d'éviter les éventuelles mises de travers.

Débloquer ensuite les vis totalement, mais toujours graduellement et sans arriver à l'extraction des vis des filets.

Il est conseillé de réaliser l'arbre mâle à coupler aux groupes SOM avec une tolérance h6.

De plus, il est conseillé de suivre les indications qui sont à côté de chaque dessin.

Getriebe mit Hohlwelle für Anbau einer Schrumpfscheibe (FS)

Für den Einbau dieser Getriebe sollte die Achsstrebe die Mindestlänge aufweisen, die in der Zeichnung der jeweiligen Einheit angegeben ist.

Außerdem wird empfohlen, die Achsverbindung mit Gummi- und/oder stoßdämpfenden Elementen abzufedern.

Bei besonderen Montagebedingungen, bei denen der Anbau von sehr schweren Motoren vorgesehen ist oder Zugkräfte von außen am Eingang wirken, sollten Sie sich an unseren Kundenservice (sales) wenden, um den Anbau zu überprüfen. Summieren sich Sonderbelastungen dieser Art und Radialkräfte, kann die Lebensdauer der Lager erheblich eingeschränkt werden sowie die Wirksamkeit der Kupplungsspannung reduziert und die Lebensdauer der Welle beeinflusst werden.

Vor dem Anziehen der Reibschlußverbindung wird empfohlen, die Innenfläche der Getriebewelle und die entsprechende Zapfwelle von Fett zu befreien.

Danach die Schrauben langsam und gleichmäßig, ohne Unterbrechung, anziehen.

Zum Lösen der Verbindung sind die Schrauben auf dieselbe Weise, gleichmäßig und ohne Unterbrechung zu lösen.

Es wird empfohlen, jede Schraube um eine Drittel-Drehung im ersten Lockervorgang zu lösen, damit eine eventuelle Verschiebung verhindert wird.

Danach die Schrauben vollständig lösen, jedoch immer gleichmäßig und ohne sie aus den Gewinden zu nehmen.

Die an die SOM-Getriebe anzuschließende Welle sollte eine Toleranz von h6 aufweisen.

Ansonsten sind die Daten in den technischen Zeichnungen zu beachten.

In generale, i riduttori SOM vengono forniti privi di lubrificante.

Generally, SOM planetary units are supplied without lubricant.

Les réducteurs SOM sont généralement vendus sans lubrifiant.

HINWEIS: sämtliche SOM-Getriebe werden ohne Ölfüllung ausgeliefert.





LUBRIFICAZIONE

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. 30).
- Quando il gruppo è montato in posizione orizzontale bisogna riempirlo fino alla mezzeterra, 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.

LUBRICATION

A correct lubrication is required for the proper running of the planetary units.

We thus recommend the following to conditions to be met during the 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 Chapter MOUNTING POSITIONS (page 30).
- Horizontally mounted units must be filled 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.
- In case of right angle, the bevel gear is connected in such a way that the oil is circulating freely; we suggest to carry out the filling operation on both ends but not simultaneously and while the unit is on the ground, in accordance with the correct mounting position. This procedure would speed up the operation and would 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 we recommend the use of an expansion tank which is supplied upon request. This tank must be positioned above the highest point of the planetary unit and is designed to collect possible oil expansions or to ensure that the units mounted in difficult-to-reach places get filled up.

LUBRIFICATION

Une lubrification correcte est indispensable pour obtenir un bon fonctionnement des réducteurs.

Il est donc conseillé d'effectuer les contrôles suivants en phase d'installation:

- En fonction de la position de montage spécifiée lors de la commande, vérifier que les bouchons de service soient montés correctement, selon les indications du Chapitre POSITIONS DE MONTAGE (page 30).
- Lorsque le groupe est monté en position horizontale, il faut le remplir à moitié de lubrifiant, indépendamment de la configuration linéaire ou angulaire. Contrôler le niveau du lubrifiant à l'oeil nu en dévissant le bouchon se trouvant dans la région médiane ou bien limitrophe de cette dernière, c'est à dire à peine au dessus.
- Dans le cas de groupes angulaires, la couple conique est reliée de manière à ce que le lubrifiant puisse circuler librement; il convient cependant d'effectuer le remplissage au sol, selon la correcte position de montage, en introduisant le lubrifiant des deux côtés, l'un après l'autre, de façon à faciliter le remplissage et, en même temps, à être sûr que la quantité nécessaire a bien été introduite dans le cas où le lubrifiant mettrait un certain temps pour passer d'une chambre à l'autre.
- Faire particulièrement attention aux groupes montés en position verticale car ils doivent être entièrement remplis au moyen de coudes et rallonges dont le groupe est équipé. En ce qui concerne ces positions, il est conseillé d'utiliser un réservoir d'expansion fourni à part, sur demande. Le réservoir doit être placé au dessus du point le plus haut du réducteur et son rôle est de permettre aux éventuelles expansions du lubrifiant d'y pénétrer ou bien de garantir une remise à niveau sûre dans le cas de groupes montés dans des positions inaccessibles.

SCHMIERUNG

Nur eine korrekte Schmierung gewährleistet den problemlosen Betrieb des Getriebes.

Es wird deshalb empfohlen, bei der Installation folgende Bedingungen zu überprüfen:

- Kontrollieren, ob je nach bestimmter Montageposition die Einfüllstutzen korrekt montiert sind, vgl. dazu die Angaben im Abschnitt EINBAULAGE (Seite 30).
- Ist das Getriebe waagrecht montiert, muß es bis zur Mitte aufgefüllt werden; Sichtkontrolle des Ölstandes vornehmen, indem der Öleinfüllstopfen abgeschraubt wird. Bei Winkelgetrieben ist der rechtwinklige Teil so angebaut, daß das Öl ungehindert zirkulieren kann; es empfiehlt sich jedoch, das Öl am Boden einzufüllen, wobei es auf beiden Seiten geöffnet, aber nicht gleichzeitig eingefüllt wird; der Vorgang wird dadurch beschleunigt und man kann gleichzeitig sicher sein, die erforderliche Ölmenge einzufüllen, da das Öl Zeit braucht, um von einer Kammer in die andere zu fließen.
- Besondere Sorgfalt ist bei Getrieben erforderlich, die senkrecht montiert werden; sie müssen mit Hilfe der beigelegten Kniestücke und Verlängerungen vollständig aufgefüllt werden. Für diese Einbauposition wird die Verwendung eines Ausgleichsbehälter empfohlen, der auf Anfrage separat geliefert wird. Das Gefäß muß oberhalb des höchsten Getriebepunktes positioniert werden und soll überschüssige Ölmengen aufnehmen bzw. bei Getrieben in unzugänglichen Positionen ein sicheres Einfüllen gewährleisten.



LUBRIFICAZIONE LUBRICATION LUBRIFICATION SCHMIERUNG

- 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. 200).
- I gruppi con servizio continuo 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.
- Brakes and assembled motor connections form a separate chamber from the planetary unit thus you need to fill them up separately, see Chapter BRAKES (page 200).
- Units running on continuous duty are subject to overheating due to the high quantity of oil. If this is the case, we recommend using an oil with a lower viscosity.
- Les freins et les dispositifs de couplage au moteur forment une chambre séparée du reste du réducteur; il faut donc les remplir séparément du réducteur, voir FREINS (page 200).
- Les groupes avec fonctionnement en service continu sont sujets à la surchauffe en raison de la très grande quantité de lubrifiant qu'ils contiennent: dans ces cas, il est conseillé d'employer des lubrifiants ayant une viscosité inférieure.
- Die montierten Bremsen und Motoranschlüsse bilden eine vom restlichen Getriebe - ausführung getrennte Kammer; diese muß deshalb getrennt vom Getriebe aufgefüllt werden, siehe Abschnitt BREMSSEN (Seite 200).
- Außerdem kommt es bei Getrieben, die im Dauerbetrieb arbeiten, aufgrund der darin enthaltenen großen Ölmengen leicht zu Überhitzung; in diesem Fall wird die Verwendung von Öltypen mit niedrigerem Viskositätsgrad empfohlen.

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.

Please note that the oil quantities shown in the catalogue are approximate and are subject to changes caused by the planetary unit configuration: ratios, brake, motor connections and output adapters.

Les quantités d'huile indiquées dans les tableaux du catalogue pour chaque dimensionnement sont purement indicatives et elles peuvent varier en fonction de la configuration du réducteur: type de rapport, frein, accouplement au moteur et support en sortie.

Die in den Tabellen den einzelnen Größen zugeordneten Ölmengen sind Richtwerte, die je nach Getriebeausführung und damit je nach Übersetzung, Bremse, Motoranschluß und Ausgangswelle variieren.

Durante il funzionamento la temperatura delle superfici esterne non deve superare gli 80°C.

During normal running, the temperature of the outer casing should not exceed 80°C.

Pendant le fonctionnement du réducteur, la température de ses surfaces extérieures ne doit pas dépasser 80°C.

Beim Betrieb sollte die Gehäusetemperatur von außen 80°C nicht überschreiten.

Se si verificano temperature superiori contattare il Servizio Tecnico-Commerciale SOM.

Should the temperature exceed 80°C then contact the SOM. Technical-Commercial Service Department.

Si vous constatez des températures supérieures, vous adresser au Service Technico-Commercial SOM.

Sollten höhere Temperaturen auftreten, wenden Sie sich bitte an den Kundenservice (sales) von SOM.

CAMBIO OLIO

OIL CHANGES

VIDANGE

ÖLWECHSEL

- 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.
- The first oil change should be done after 100 working hours.
- Subsequent oil changes should take place after 2000 hours or at least once a year.
- In order to avoid sludge deposits, change the oil whilst the gear unit is still warm.
- Clean all plugs.
- For an effective oil change, the unit should be flushed through with a liquid detergent recommended by the lubricant supplier.
- Check periodically for oil leaks and the oil level while the unit is idling. If needed, top up the unit with the same type of oil.
- **Attention:** if the quantity of oil used during topping up is greater than 10 percent of the oil capacity then check again for leaks.
- Faire la première vidange après 100 heures de fonctionnement.
- Exécuter les vidanges suivantes toutes les 2000 heures ou bien au moins une fois par an.
- La vidange du réducteur doit se faire lorsque l'huile est encore chaude de façon à éviter les dépôts de cambouis.
- Nettoyer les bouchons.
- Laver l'intérieur du réducteur avec un détergent conseillé par le fournisseur du lubrifiant avant d'effectuer le remplissage.
- Contrôler périodiquement qu'il n'y ait pas de pertes d'huile et que, lorsque le groupe est arrêté, l'huile atteigne bien le niveau prévu. Si nécessaire, rétablir ce niveau avec de l'huile du même type que celle se trouvant dans le réducteur.
- **Attention:** une remise à niveau avec plus de 10% de la quantité totale de l'huile contenue dans le réducteur peut être un signe de fuite dans ce dernier.
- Der erste Ölwechsel sollte nach 100 Betriebsstunden vorgenommen werden.
- Weitere Ölwechsel sollten nach 2000 Betriebsstunden bzw. mindestens einmal jährlich erfolgen.
- Das Öl bitte bei noch warmen Getriebe ablassen. Auf diese Weise werden Ablagerungen vermieden.
- Ölstopfen reinigen.
- Vor dem Auffüllen mit neuem Öl, das Getriebe innen mit einem vom Schmierstoffhersteller empfohlenen Reinigungsmittel auswaschen.
- Getriebe regelmäßig auf Dichtigkeit prüfen sowie sicherstellen, daß bei Stillstand das Öl bis zum vorgesehenen Ölstand reicht. Sofern erforderlich, ist Öl nachzufüllen; der Öltyp muß mit dem im Getriebe bereits enthaltenen Öl unbedingt übereinstimmen.
- **Achtung:** Eine Nachfüllmenge, die 10% der Gesamtmenge übersteigt, könnte auf eine Undichtigkeit des Getriebes hinweisen.

Lubrificante	Lubricant	Lubrifiant	Schmierstoff
SOM 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).	SOM recommends using EP additive oil with anti-foaming properties. In case the planetary unit is subject to severe temperature changes, we advise the use of EP additive synthetic oil (such as Mobilgear SHC XMP 220 PAO Synthetic Oil, EP, ISO VG 220 fully compatible with mineral oils).	SOM conseille d'utiliser des huiles pour engrenages avec additifs EP antimousse. Lorsque le réducteur est soumis à de grands écarts de température, il est conseillé d'utiliser des huiles à base synthétique avec additifs EP (type Mobilgear SHC XMP 220 Huile Synthétique PAO, EP, ISO VG 220 compatible avec huiles minerales).	SOM empfiehlt Getriebeölytypen mit EP- Zusatz und Antischaum-Eigenschaft. Ist das Getriebe starken Temperaturschwankungen ausgesetzt, wird die Verwendung von synthetischen Ölytypen mit EP- Zusatz empfohlen. (Mobilgear SHC XMP 220 SYNTHETIKOEL PAO, EP, ISO VG 220 kompatibel mit Mineraloelen)..
A tale riguardo la Tabella N° 4 riporta alcuni tipi di olii commerciali che rispondono alle caratteristiche richieste in funzione della temperatura ambiente.	In this regard, Table N° 4 shows some types of commercially available oils that meet the lubrication requirements according to the different environment temperatures.	Le Tableau N° 4 indique certains types d'huiles vendues dans le commerce et qui correspondent aux caractéristiques requises, en fonction de la température ambiante.	Dazu sind in Tabelle Nr. 4 einige im Handel erhältliche Ölytypen aufgeführt, deren Eigenschaften unterschiedlichen Raumtemperaturen angepaßt sind.

In generale, i riduttori SOM vengono forniti privi di lubrificante.	Generally, SOM planetary units are supplied without lubricant.	Les réducteurs SOM sont généralement vendus sans lubrifiant.	HINWEIS: saemtliche SOM-Getriebe werden ohne Oelfüllung ausgeliefert.
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Scelta del lubrificante in funzione della temperatura ambiente Lubricant choice according to the different environment temperatures. Choix du lubrifiant en fonction de la température ambiante. Auswahl des Schmiermittels in Bezug auf die Umgebungstemperatur

	LUBRIFICANTE / LUBRICANT / LUBRIFIANT / SCHMIERMITTEL			
	Temperatura ambiente / Environment temperatures / Température ambiante / Umgebungstemperatur			
	-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 Huile minerale Mineraloel	Mobilgear XMP 150	Mobilgear XMP 320	
	Olio Sintetico PAO, EP, ISO VG 220 Synthetic oil Huile synthétique Synthetikoel	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

Tabella 4 / Table 4 / Tableau 4 / Tabelle 4



**LUBRIFICAZIONE
LUBRICATION
LUBRIFICATION
SCHMIERUNG**

**Quantita' di lubrificante con-
tenuto nei riduttori [l]**

**Lubricant quantity inside the
planetary drives [l]**

**Quantité de lubrifiant dans
les réducteurs [l]**

**Fuellmenge Getriebeschmie-
rung [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

NB. The lubricant quantities shown in the table are advisable, but we recommend to check them during the filling operation, referring to the level plug.

N.B. Le quantité de lubrifiant marquée est à titre indicatif et doit être contrôlée en phase de remplissage en vérifiant le niveau par le bouchon de niveau.

P.S. Die angegebenen Schmiermittelmengen sind indikativ und sind während der Befuellung anhand der Oelstandsstopfen zu ueberpruefen.

**LUBRIFICAZIONE
LUBRICATION
LUBRIFICATION
SCHMIERUNG**



Quantita' di lubrificante con-
tenuto nei riduttori [l]

Lubricant quantity inside the
planetary drives [l]

Quantité de lubrifiant dans
les réducteurs [l]

Fuellmenge Getriebeschmie-
rung [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



**LUBRIFICAZIONE
LUBRICATION
LUBRIFICATION
SCHMIERUNG**

Quantita' di lubrificante con- Lubricant quantity inside the Quantit  de lubrifiant dans Fuellmenge Getriebeschmie-
tenuto nei riduttori [l] planetary drives [l] les r ducteurs [l] rung [l]

	M		P		CPC		F		FS	
										
PG 14001	15.0	—	—	—	—	—	16.4	—	16.4	—
PG 14002	16.4	32.8	—	—	—	—	16.4	32.8	16.4	32.8
PG 14003	17.6	35.2	—	—	—	—	17.6	35.2	17.6	35.2
PG 14004	18.1	36.2	—	—	—	—	18.1	36.2	18.1	36.2
PG 14005	18.4	36.8	—	—	—	—	18.4	36.8	18.4	36.8
PGA 14004	20.6	41.2	—	—	—	—	20.6	41.2	20.6	41.2
PGA 14005	20.1	40.2	—	—	—	—	20.1	40.2	20.1	40.2
PG 180001	21.0	—	—	—	—	—	21.0	—	21.0	—
PG 18002	23.4	46.8	—	—	—	—	23.4	46.8	23.4	46.8
PG 18003	24.8	49.6	—	—	—	—	24.8	49.6	24.8	49.6
PG 18004	25.2	50.4	—	—	—	—	25.2	50.4	25.2	50.4
PG 18005	25.5	51.0	—	—	—	—	25.5	51.0	25.5	51.0
PGA 18003	26.4	52.8	—	—	—	—	26.4	52.8	26.4	52.8
PGA 18004	27.8	55.6	—	—	—	—	27.8	55.6	27.8	55.6
PGA 18005	27.2	54.4	—	—	—	—	27.2	54.4	27.2	54.4
PG 22001	21.0	—	—	—	—	—	21.0	—	21.0	—
PG 22002	23.4	46.8	—	—	—	—	23.4	46.8	23.4	46.8
PG 22003	24.8	49.6	—	—	—	—	24.8	49.6	24.8	49.6
PG 22004	25.2	50.4	—	—	—	—	25.2	50.4	25.2	50.4
PG 22005	25.5	51.0	—	—	—	—	25.5	51.0	25.5	51.0
PGA 22003	26.4	52.8	—	—	—	—	26.4	52.8	26.4	52.8
PGA 22004	27.8	55.6	—	—	—	—	27.8	55.6	27.8	55.6
PGA 22005	27.2	54.4	—	—	—	—	27.2	54.4	27.2	54.4
PG 33001	42.5	—	—	—	—	—	42.5	—	42.5	—
PG 33002	46.5	93.0	—	—	—	—	46.5	93.0	46.5	93.0
PG 33003	47.9	95.8	—	—	—	—	47.9	95.8	47.9	95.8
PG 33004	48.7	97.4	—	—	—	—	48.7	97.4	48.7	97.4
PG 33005	49.1	98.2	—	—	—	—	49.1	98.2	49.1	98.2
PGA 33004	50.9	101.8	—	—	—	—	50.9	101.8	50.9	101.8
PGA 33005	50.7	101.4	—	—	—	—	50.7	101.4	50.7	101.4
PG 40001	42.5	—	—	—	—	—	42.5	—	42.5	—
PG 40002	46.5	93.0	—	—	—	—	46.5	93.0	46.5	93.0
PG 40003	47.9	95.8	—	—	—	—	47.9	95.8	47.9	95.8
PG 40004	48.7	97.4	—	—	—	—	48.7	97.4	48.7	97.4
PG 40005	49.1	98.2	—	—	—	—	49.1	98.2	49.1	98.2
PGA 40004	50.9	101.8	—	—	—	—	50.9	101.8	50.9	101.8
PGA 40005	50.7	101.4	—	—	—	—	50.7	101.4	50.7	101.4
PG 55001	50.0	—	—	—	—	—	50.0	—	50.0	—
PG 55002	60.0	120.0	—	—	—	—	60.0	120.0	60.0	120.0
PG 55003	62.5	125.0	—	—	—	—	62.5	125.0	62.5	125.0
PG 55004	63.5	127.0	—	—	—	—	63.5	127.0	63.5	127.0
PG 55005	64.0	128.0	—	—	—	—	64.0	128.0	64.0	128.0
PGA 55004	65.5	131.0	—	—	—	—	65.5	131.0	65.5	131.0
PGA 55005	66.5	133.0	—	—	—	—	66.5	133.0	66.5	133.0
PG 65001	50.0	—	—	—	—	—	60.0	—	50.0	—
PG 65002	60.0	120.0	—	—	—	—	60.0	120.0	60.0	120.0
PG 65003	62.5	125.0	—	—	—	—	62.5	125.0	62.5	125.0
PG 65004	63.5	127.0	—	—	—	—	63.5	127.0	63.5	127.0
PG 65005	64.0	128.0	—	—	—	—	64.0	128.0	64.0	128.0
PGA 65005	65.5	131.0	—	—	—	—	65.5	131.0	65.5	131.0

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 applications with planetary gearboxes mounted in vertical position, we suggest the use of an oil reservoir which can absorb eventual oil expansions and/or ensure a safe topping up in accessible positions. This fitting is supplied upon specific request.

Vase d'expansion

Pour les applications où nous devons considérer les positions de montage verticales nous conseillons l'utilisation d'un vase d'expansion qui permet une éventuelle expansion de l'huile ou qui garanti un remplissage dans des positions inaccessibles. Cet accessoire peut être fourni sur demande.

Ausgleichsbehälter

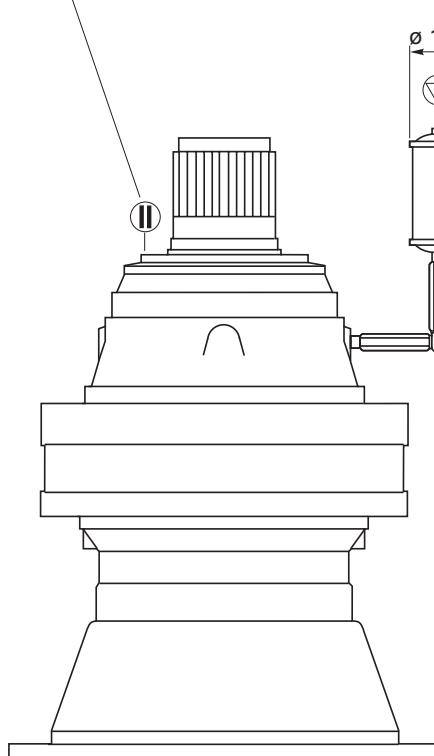
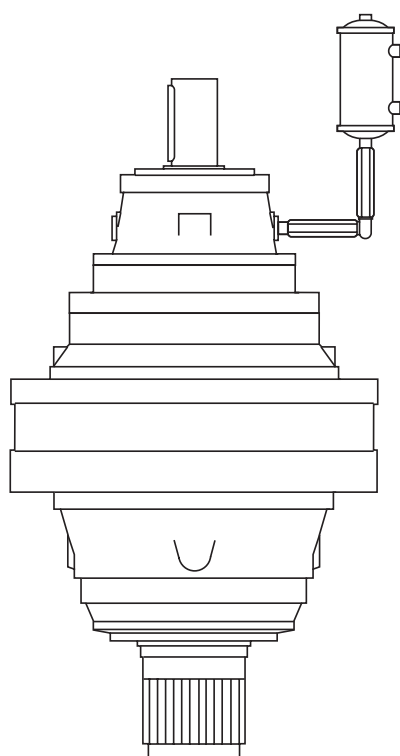
Fuer die vertikalen Einbaupositionen ist die Ausruestung mit einem Oelausgleichsbehaelter zu empfehlen. Dadurch ist gegeben, dass eventuelle Oeluebertritte vermieden und eine einfache Befuellung ermoeoglicht wird. Der Behaelter ist auf Nachfrage lieferbar.

Spurgo aria e livello olio effettivo nel riduttore
Air drain and oil level in the gearbox
Reniflard et niveau d'huile dans le réducteur
Entlüften und Ölstand

Carico e sfiato
Filling and breathing
Remplissage à évent
Einfüllen und Entlüften

Livello
Level
Niveau
Ölstand

Vaso di espansione
Expansion tank
Reservoir d'huile
Ausgleichsbehälter



ø 102

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**LUBRIFICAZIONE
LUBRICATION
LUBRIFICATION
SCHMIERUNG**

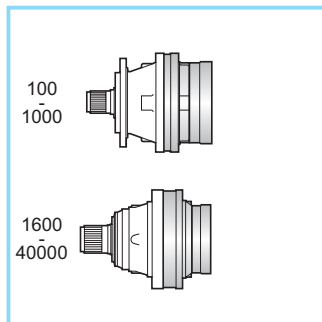
Posizioni di montaggio

Mounting positions

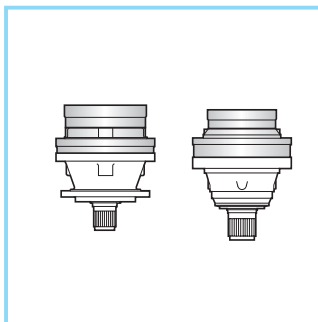
Positions de montage

Einbauposition

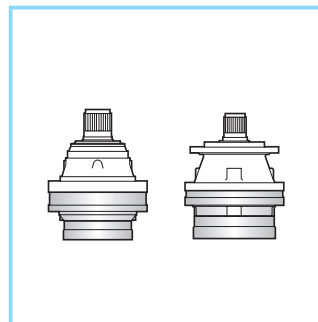
M-P



B5

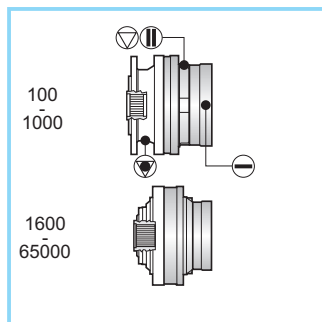


V1

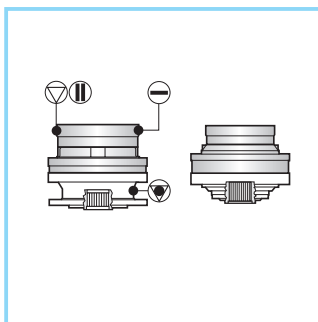


V3

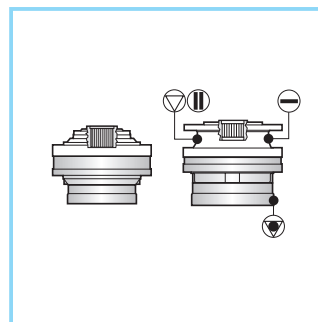
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B5

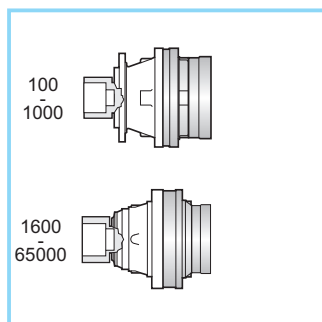


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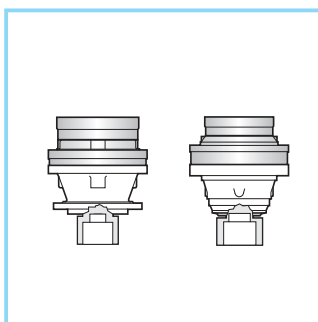


V3

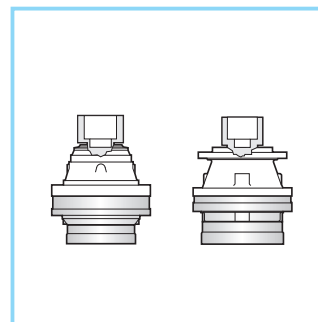
FS



B5

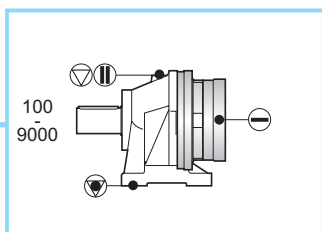


V1

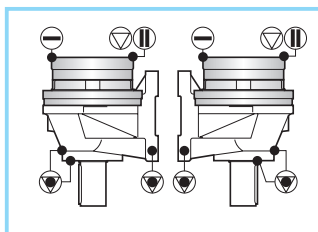


V3

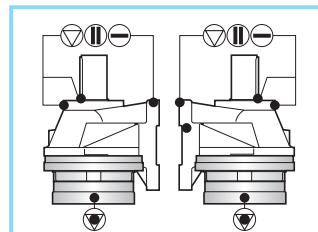
CPC



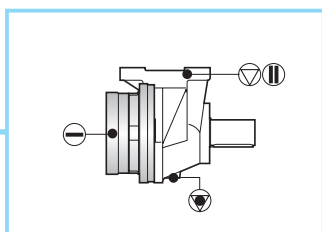
B3



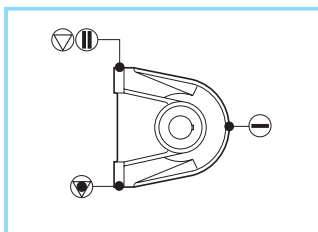
V2



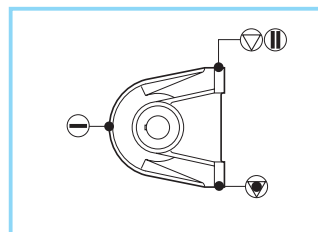
V4



B4



B6



B7

**Tappi olio
Oil plugs
Bouchons huile
Ölstopfen**

⌚ Tappo sfiato
Vent plug
Bouchon à évent
Entlüftungstopfen

⬇ Tappo carico
Filling plug
Bouchon remplissage
Einfüllstopfen

⊖ Tappo livello
Level plug
Bouchon jauge
Ölstandstopfen

⬇ Tappo scarico
Drain plug
Bouchon vidange
Ablassstopfen

N.B.

L'orientamento della foratura della flangia di fissaggio è come illustrato nelle schede dei dati dimensionali dei riduttori (pag. 44-196).

The mounting flange orientation is shown in each planetary gears technical sheets (page 44-196).

L'orientation de la flasque de montage est indiquée dans chaque fiche technique réducteur (page 44-196).

Die Ausfuehrung der Befestigungsvorrichtung (Flansch, Bohrung) ist in den Datenblaettern der Getriebe auf den Seiten 44-196 ersichtlich.

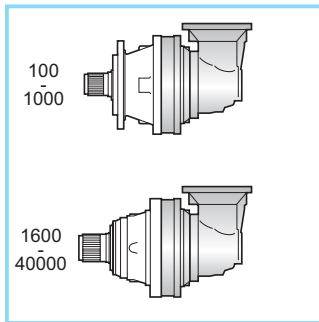
Posizioni di montaggio

Mounting positions

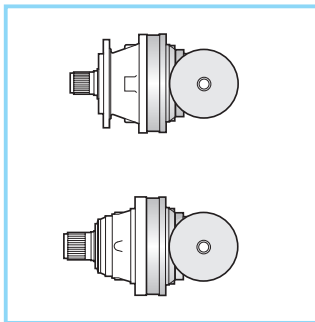
Positions de montage

Einbauposition

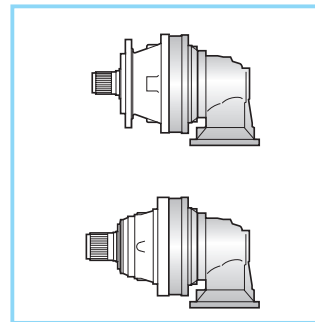
M-P



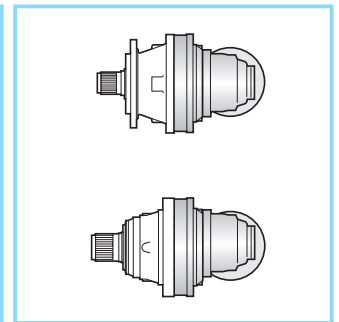
B51



B55

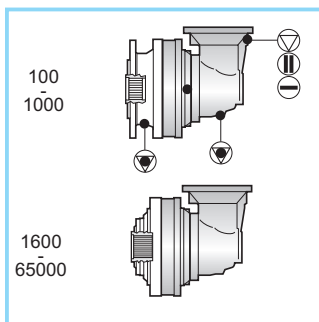


B53

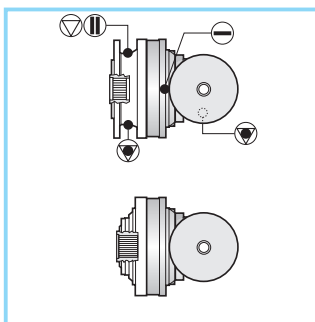


B54

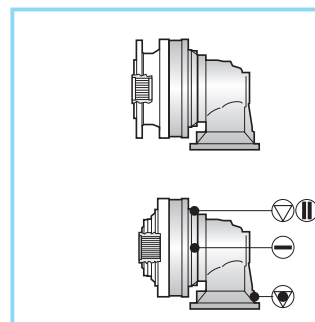
F



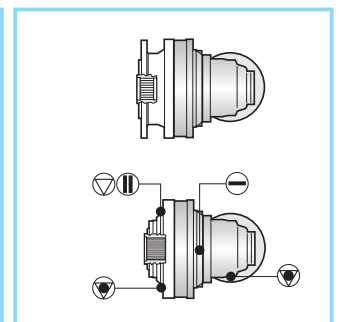
B51



B55

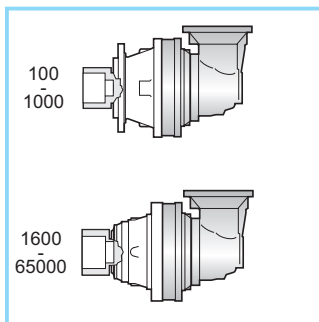


B53

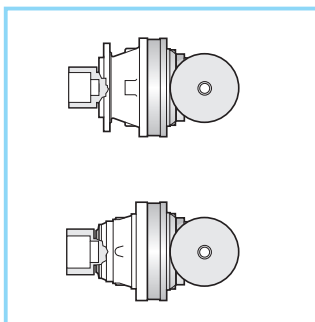


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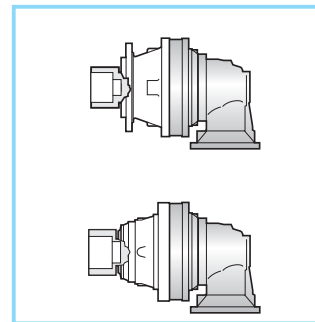
FS



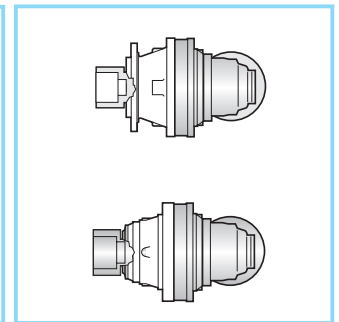
B51



B55

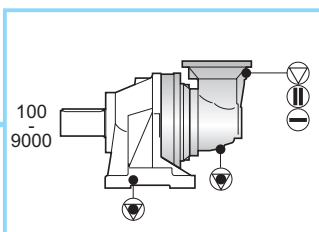


B53

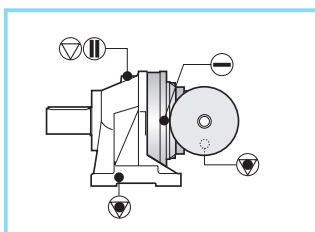


B54

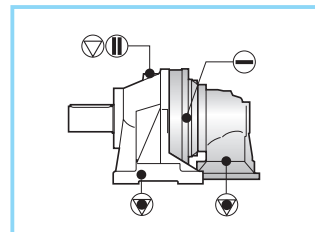
CPC



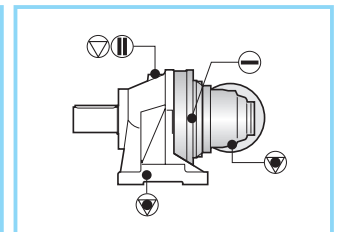
B56



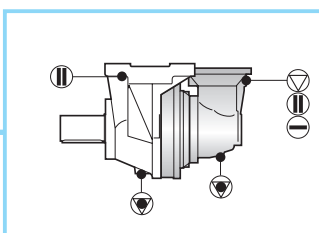
B60



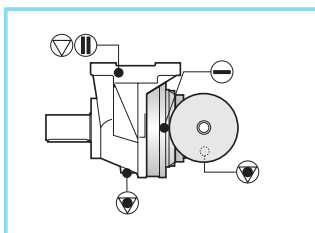
B58



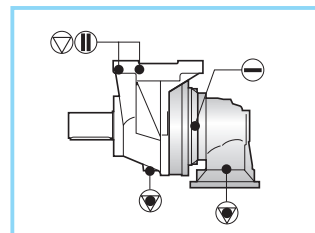
B62



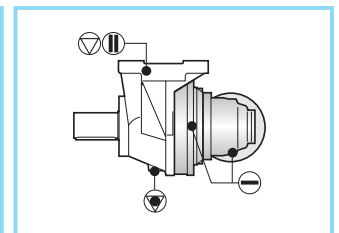
B57



B61



B59



B63



**LUBRIFICAZIONE
LUBRICATION
LUBRIFICATION
SCHMIERUNG**

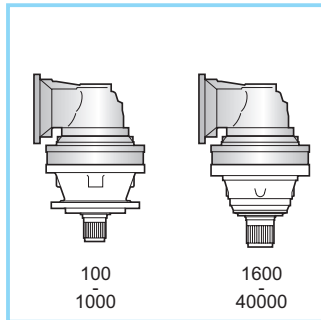
Posizioni di montaggio

Mounting positions

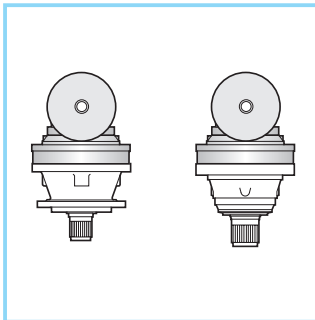
Positions de montage

Einbauposition

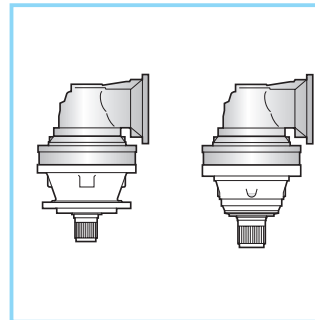
M-P



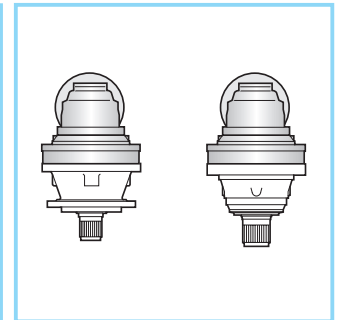
V15



V16

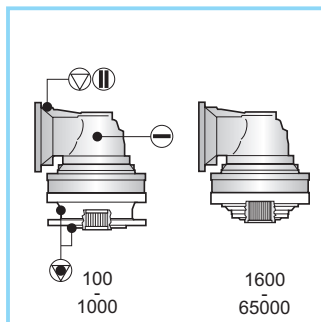


V17

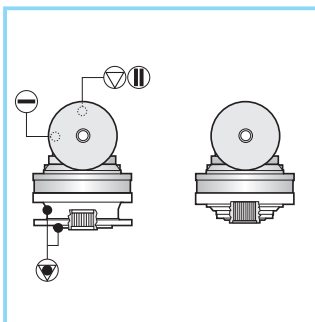


V18

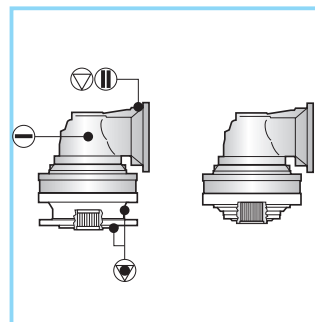
F



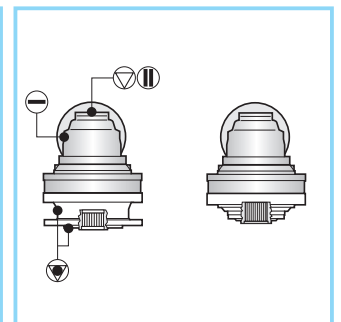
V15



V16

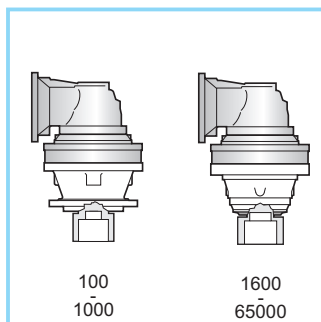


V17

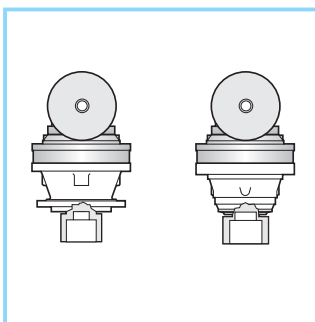


V18

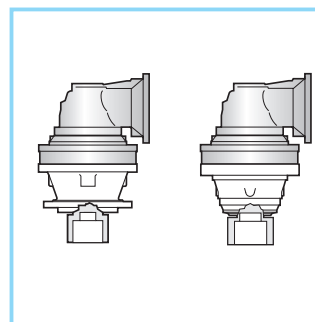
FS



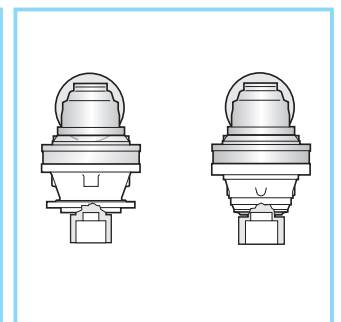
V15



V16

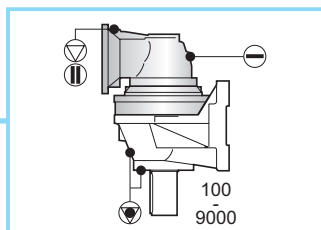


V17

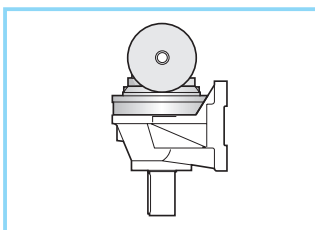


V18

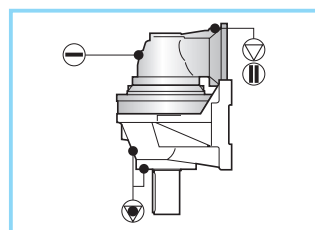
CPC



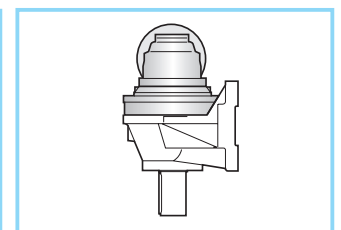
V53



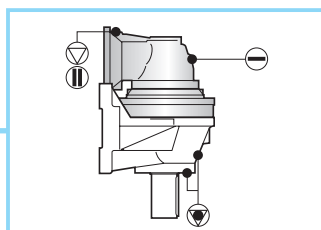
V52



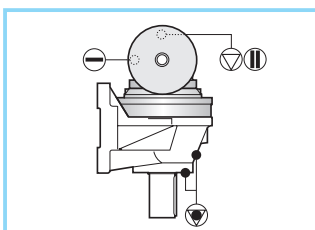
V54



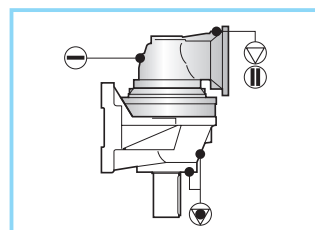
V55



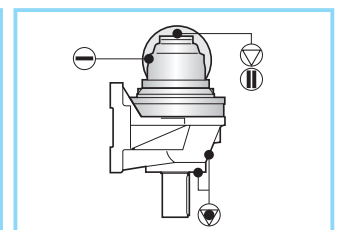
V49



V48



V50



V51

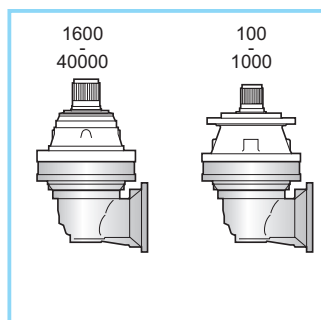
Posizioni di montaggio

Mounting positions

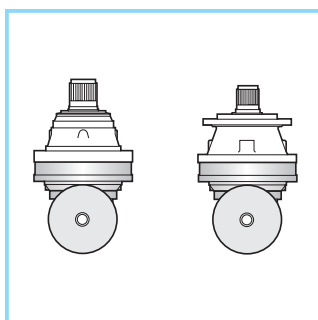
Positions de montage

Einbauposition

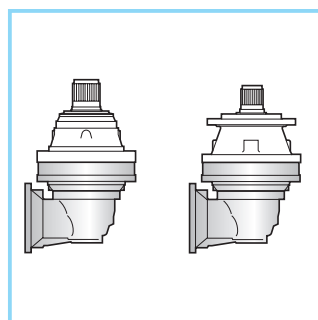
M-P



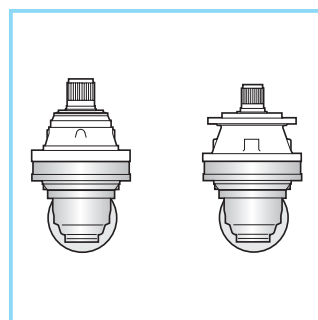
V35



V36

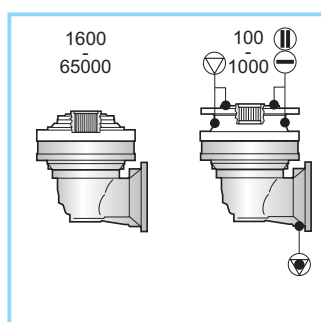


V37

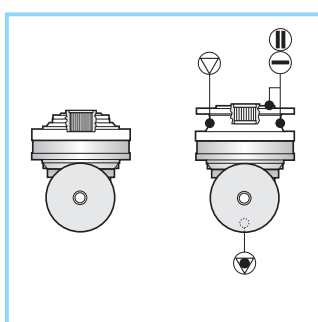


V38

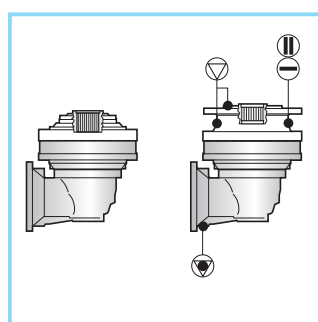
F



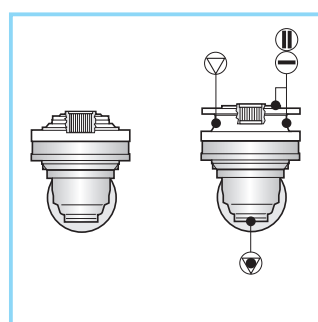
V35



V36

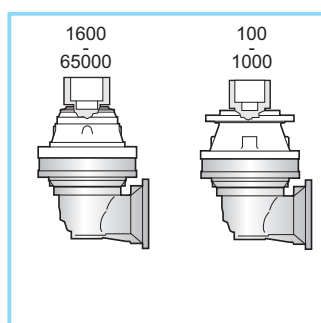


V37

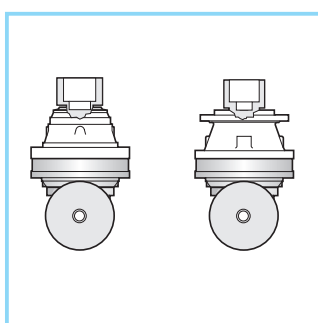


V38

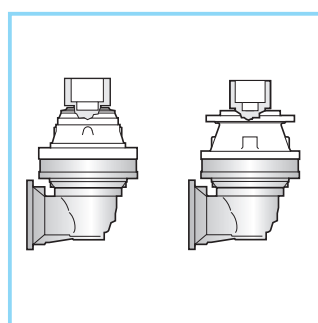
FS



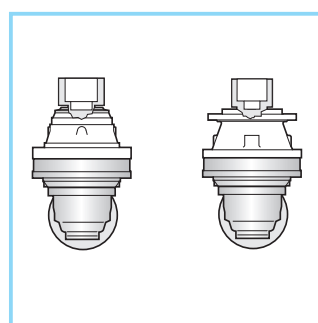
V35



V36

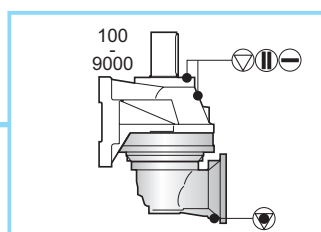


V37

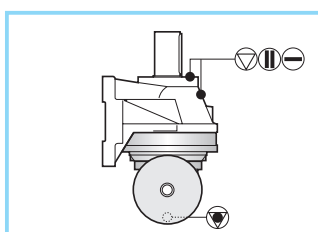


V38

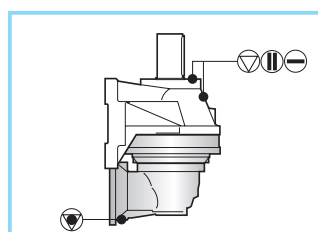
CPC



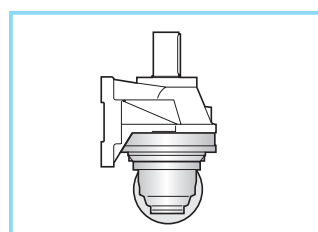
V42



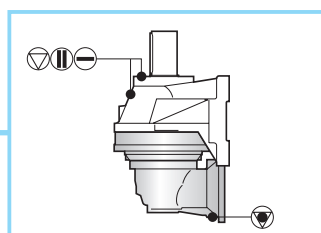
V40



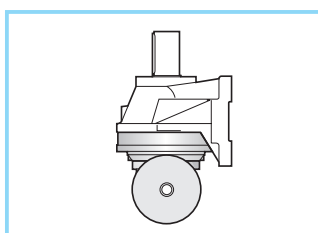
V41



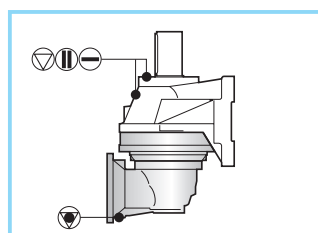
V43



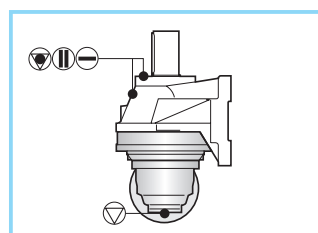
V46



V44



V45

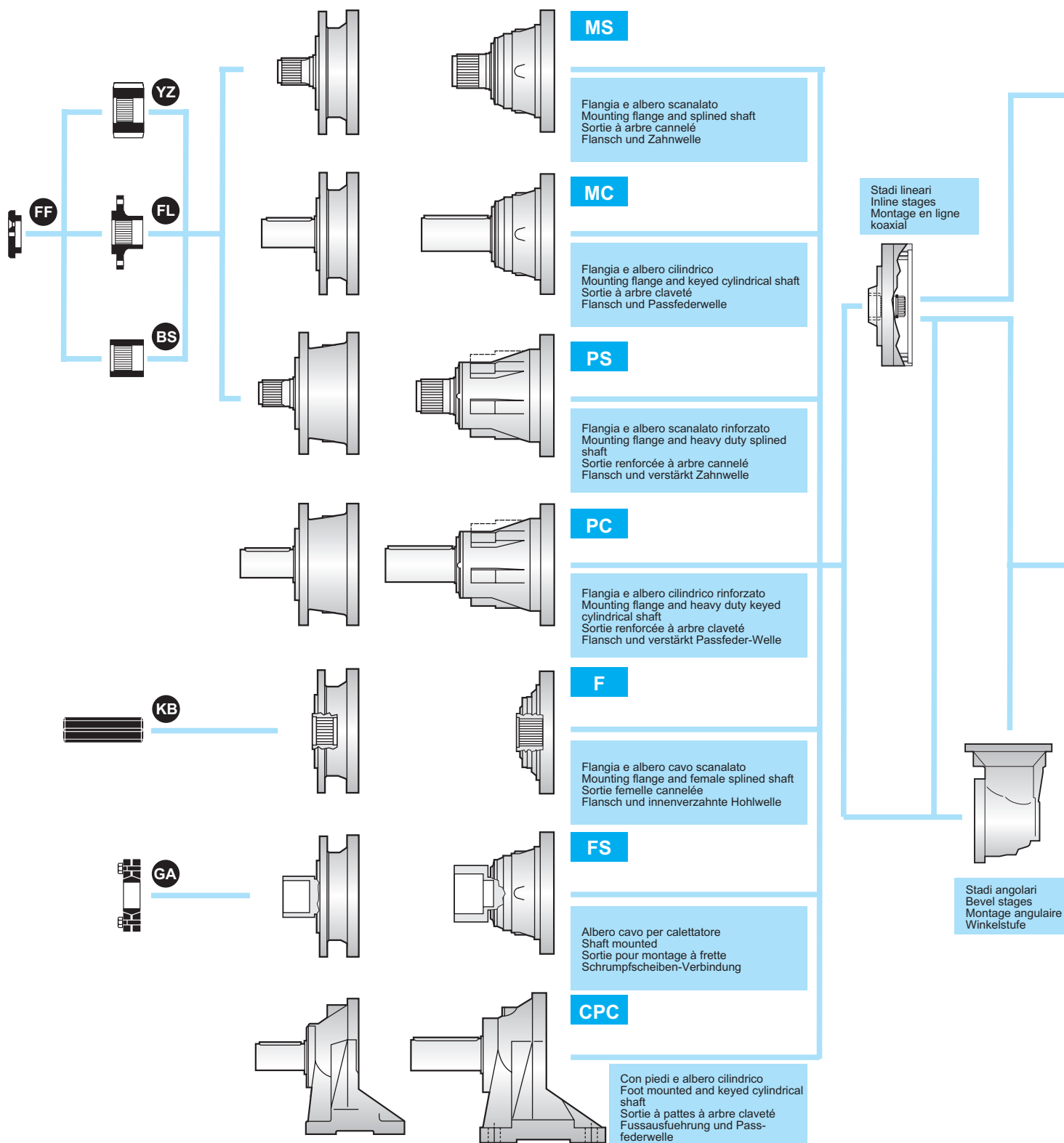


V47

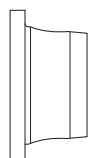
**ACCESSORI USCITA
OUTPUT FITTINGS
ACCESSOIRES DE SORTIE
ABTRIEBSBAUTEILE**

**VERSIONI USCITA
OUTPUT TYPES
TYPES DE SORTIE
ABTRIEBSWELLEN**

**FORMA COSTRUTTIVA
TYPE OF REDUCTION UNIT
TYPE DU REDUCTEUR
PLANETENSTUFEN**



ACCESSORI ENTRATA
INPUT FITTINGS
ACCESSOIRES D'ENTREE
ANTRIEBSBAUTEILE



ED

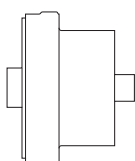
Entrate dirette senza freno con attacco motore
Direct input motor adaptor without brake
Entrée standard sans frein pour adaptation moteur
Standardantrieb ohne Bremse mit Motorflansch

206

EDF

Entrate dirette con freno e attacco motore
Direct input motor adaptor with brake
Entrée directe avec frein pour adaptation moteur
Motorflansch mit integrierter Bremse

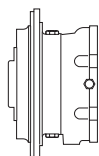
207



EF

Entrate dirette con freno e attacco motore
Direct input motor adaptor with brake
Entrée directe avec frein pour adaptation moteur
Motorflansch mit integrierter Bremse

207

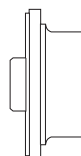


RA

RB

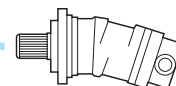
Freno
Brake
Frein
Bremse

200

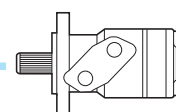


213

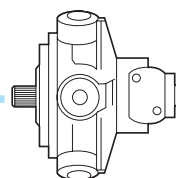
Predisposizione motore idraulico
Hydraulic motor coupling
Adaptation moteur hydraulique
Motorflansch Hydraulikmotor



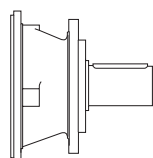
Motore a pistoni assiali
Axial pistons motor
Moteur à pistons axiaux
Axialkolbenmotor



Motore orbitale
Orbit motor
Moteur orbital
Umlaufmotoren

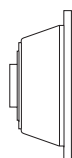


Motore a pistoni radiali
Radial pistons motor
Moteur à pistons radiales
Radialkolbenmotor



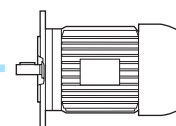
Albero entrata
Input shaft
Arbre d'entrée
Antriebswelle

202

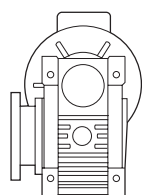


Predisposizione motore elettrico
Electric motor coupling
Adaptation moteur électrique
Motorflansch Elektromotor

217



Motore elettrico
Electric motor
Moteur électrique
Elektromotor



Predisposizione rid. vite senza fine
Worm gearbox adaptor
Adaptation réducteur à vis sans fin
Motorflansch Schneckengetriebe

219



DESIGNAZIONE PRODOTTO
PRODUCT IDENTIFICATION
DESIGNATION PRODUIT
PRODUKTBESCHREIBUNG

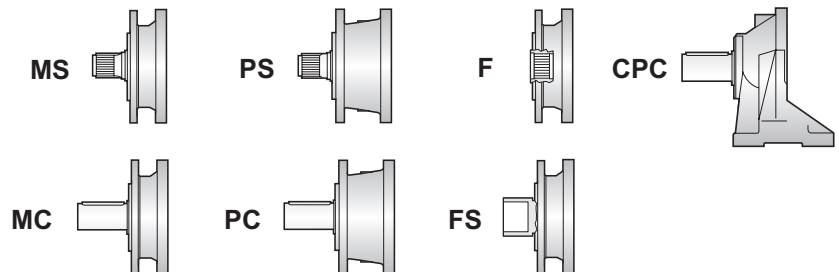
RIDUTTORE / GEAR UNIT / REDUCTEUR / GETRIEBE

P G 1 4 0 0 5 M S 1 0 1 3 . 1 6

RAPPORTO / RATIO
RAPPORT / VERHÄLTNIS

i Vedi schede tecniche / See technical sheets
Voir fiches techniques / Siehe Datenblätter

VERSIONE E ALBERODI USCITA / OUTPUT TYPE AND SHAFT
VERSION ET ARBRE DE SORTIE / ABTRIEBSBAUTEILE UND ABTRIEBSWELLE



N° STADI / N° STAGES
N^b ETAGES / N° STUFEN

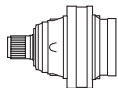
1, 2, 3, 4, 5

GRANDEZZA / SIZE
TAILLE / GRÖSSE

100, 160, 250, 500, 700, 1000, 1600, 1800, 2500, 3000, 3500, 5000, 6500, 9000, 14000, 18000, 22000, 33000, 40000, 55000, 65000

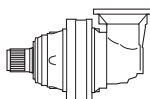
FORMA COSTRUTTIVA / TYPE OF REDUCTION UNIT
TYPE DU REDUCTEUR / BAUFORM GETRIEBESTUFEN

PG



Riduttore con stadi lineari / Inline stages gear unit / Réducteur avec montage en ligne / koaxiale Ausfuehrung

PGA



Riduttore con stadi angolari / Bevel stages gear unit
Réducteur avec montage angulaire / Ausfuehrung mit Winkelstufe

Esempio di ordinazione:
Example of order:
Exemple de commande:
Beispiel Bestellbeschreibung:

PG 14005 MS 1013.16

SOM

DESIGNAZIONE PRODOTTO
PRODUCT IDENTIFICATION
DESIGNATION PRODUIT
PRODUKTBESCHREIBUNG



ACCESSORI / FITTINGS / ACCESSOIRES / BAUTEILE

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

USCITA / OUTPUT
SORTIE / ABTRIEB

ENTRATA / INPUT
ENTREE / ANTRIEB

POSIZIONE DI MONTAGGIO
MOUNTING POSITION
POSITION DE MONTAGE
EINBAUPOSITION

Vedi schede tecniche / See technical sheets
Voir fiches techniques / Siehe Datenblätter

Freni modulari / Brake
Frein / Bremse

RA
RB

Albero entrata / Input shaft
Arbre d'entrée / Antriebswelle

EL28, EL42, ...

Predisposizione motore elettrico / Electric motor coupling
Adaptation moteur électrique / Motorflansch
Elektromotor

H71, H80, ...

Predisposizione motore idraulico/Hydraulic motor
coupling
Adaptation moteur hydraulique/Motorflansch Hydraulikmotor

SAE A, SAE B, ...

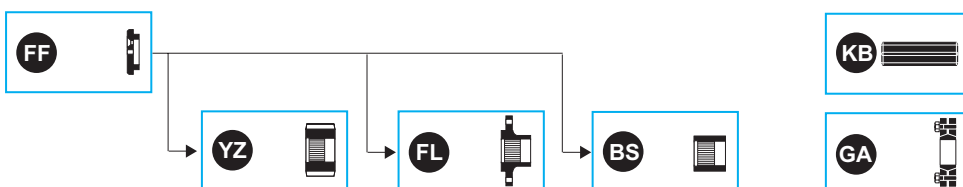
Entrata diretta con freno e attacco motore / Direct input motor adaptor with brake
Entrée directe avec frein pour adaptation moteur / Motorflansch mit integrierter Bremse

EDF
EF

Entrata diretta senza freno e con attacco motore / Direct input motor adaptor without brake
Entrée directe sans frein pour adaptation moteur / Standardantrieb

ED

Accessori di uscita / Output fittings
Accessoires de sortie / Abtriebsbauteile



Esempio di ordinazione:
Example of order:
Exemple de commande:
Beispiel Bestellbeschreibung:

BS FF RA 25 4706.002.500 SAE A 4702.012.012 V1



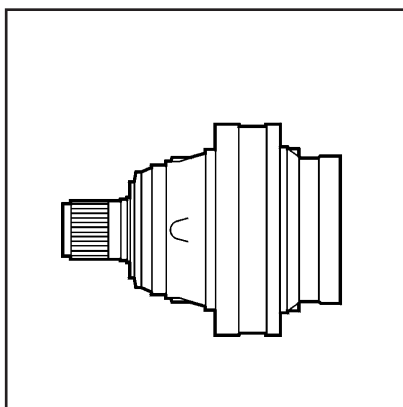


**SIMBOLOGIA
LEGEND
SYMBLES
LEGENDE**

Cfs	[Nm]	Coppia frenante statica	Static braking torque	Couple de freinage statique	Bremsmoment, statisch
Fa	[N]	Carico assiale	Axial load	Charge axiale	Axiallast
fh		Fattore di durata	Duration factor	Facteur de durée	Lebensdauerfaktor
fk		Fattore di adeguamento della capacità termica	Thermal power adjustment factor	Facteur d'adaptation de la capacité thermique	Anpassungsfaktor Waerme-kapazitaet
Fr	[N]	Carico radiale	Radial load	Charge radiale	Radiallast
fs		Fattore di servizio	Service factor	Facteur de service	Betriebsfaktor
		Rendimento	Efficiency	Rendement	Wirkungsgrad
i		Rapporto di riduzione	Ratio	Rapport	Übersetzung
K		Coefficiente di correzione del carico radiale	Radial load correction factor	Facteur de correction de charge radiale	Korrekturkoeffizient der Radiallast
Kg	[Kg]	Peso	Weight	Poids	Gewicht
Mc	[kNm]	Coppia continua	Continuous torque	Couple continu	Dauerbetriebsmoment
Me	[kNm]	Coppia equivalente	Equivalent working torque	Couple equivalent	Equivalentes Betriebsmoment
M_{max}	[kNm]	Coppia massima	Maximum torque	Couple maximal	Maximales Betriebsmoment
Mp	[kNm]	Coppia di picco	Working peak torque	Couple maximum de travail	Spitzenmoment
n_{1 max}	[min ⁻¹]	Velocità massima in entrata	Maximum input speed	Vitesse maximale d'entrée	Max. zulaessige Antriebsdrehzahl
n₂	[min ⁻¹]	Velocità in uscita	Output speed	Vitesse de sortie	Abtriebsdrehzahl
n_{xh}		Numero cicli	Cycles number	N° de cycles	Anzahl der Zyklen
P_{amin}	[bar]	Pressione di apertura	Opening pressure	Pression d'ouverture	Bremsoeffnungsdruck
P_{max}	[bar]	Pressione massima	Max pressure	Pression maxi	Max. Betriebsdruck Bremse
Pt	[kW]	Potenza termica	Thermal power	Puissance thermique	Thermische Leistung
		Informazioni	Information	Information	Information
		Quantità lubrificante	Oil quantity	Quantité d'huile	Oelmenge

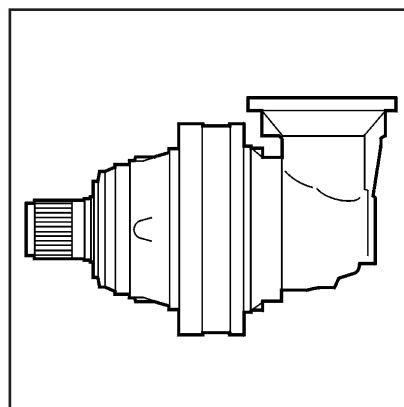
SCHEDE TECNICHE RIDUTTORI
PLANETARY GEARS TECHNICAL SHEETS
FICHES TECHNIQUES REDUCTEURS
TECHNISCHE DATENBLÄTTER GETRIEBE

PG PGA	i	kNm	
100	3,55 - 3422	1,00	42
160	3,55 - 3422	1,60	50
250	3,77 - 2369	2,50	58
500	3,77 - 1845	5,00	66
700	3,66 - 2969	7,00	74
1000	3,55 - 2230	10,00	82
1600	3,55 - 2230	16,00	90
1800	13,00 - 1216	18,00	98
2500	4,00 - 1774	25,00	106
3000	14,20 - 1425	30,00	114
3500	4,00 - 1290	35,00	122
5000	4,00 - 1982	50,00	130
6500	3,83 - 1008	65,00	138
9000	4,00 - 1623	90,00	146
14000	3,83 - 5674	140,00	154
18000	3,91 - 9793	180,00	162
22000	3,68 - 8263	220,00	170
33000	4,09 - 8522	330,00	178
40000	3,83 - 5156	400,00	184
55000	3,84 - 5571	550,00	190
65000	3,84 - 5571	650,00	194



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 drives range of sizes. To simplify the research and the selection of the required size you can refer to the above table, including some technical data and the corresponding page.



Les pages qui suivent se rapportent aux données techniques des réducteurs série PG -PGA. Pour faciliter la sélection de la taille du réducteur envisagée, se référer au tableau ci-dessus pour se reporter à la page correspondante.

Die folgenden Seiten zeigen die technischen Daten bezüglich Leistung und Dimensionen der Produktserien PG-PGA. Um die Suche der gewünschten Groesse zu erleichtern, liefert die vorstehende Tabelle die Groessen in Verbindung zur entsprechenden Katalogseite.



COMER
Group



LEGENDA LEGEND LEGENDE LEGENDE

DATI TECNICI / TECHNICAL DATA / DONNEES TECHNIQUES / TECHNISCHE DATEN

PG 500

Model	Power (kW)	Speed (rpm)	Output (Nm)	Weight (kg)
PG 501	0.12	1400	1.2	1.5
PG 502	0.18	1400	1.8	2.0
PG 503	0.25	1400	2.5	2.5
PG 504	0.37	1400	3.7	3.5

- 1 Tabelle dei dati tecnici relativi ai riduttori PG.
Technical data tables of PG series.
Tableaux des données techniques sur les séries PG.
Tabelle mit den technischen Daten des entsprechenden PG - Getriebetyps.

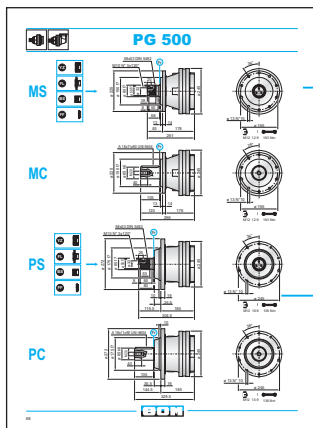
PGA 500

Model	Power (kW)	Speed (rpm)	Output (Nm)	Weight (kg)
PGA 501	0.12	1400	1.2	1.5
PGA 502	0.18	1400	1.8	2.0
PGA 503	0.25	1400	2.5	2.5
PGA 504	0.37	1400	3.7	3.5

- 2 Tabelle dei dati tecnici relativi ai riduttori PGA.
Technical data tables of PGA series.
Tableaux des données techniques sur les séries PGA.
Tabelle mit den technischen Daten des entsprechenden PGA - Getriebetyps.

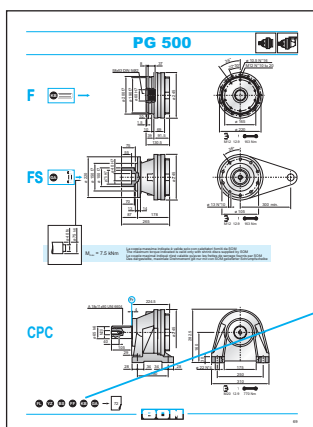
- 3 Indicazione per il calcolo della coppia massima M_{max} .
Determination of the maximum torque M_{max} .
Indications pour calculer le couple maxi M_{max} .
Anweisung zur Berechnung des maximalen Betriebsdrehmoments M_{max} .

DIMENSIONI / DIMENSIONS / DIMENSIONS / MASSE



- 4 Queste pagine riportano le dimensioni delle uscite nelle varie configurazioni disponibili.
These pages show the outputs dimensions in their different possible configurations.
Ces pages montrent les dimensions des sorties dans leurs différentes configurations possibles.
Auf diesen Seiten sind die Masse der diversen Abtriebstypen angegeben.

- 5 Questo simbolo fornisce le indicazioni sulle viti da utilizzare per il fissaggio del riduttore.
This symbol gives information about screws to use to mount the gearbox.
Ce symbole donne l'indication des vis à utiliser pour monter le réducteur.
Dieses Symbol gibt Hinweise zur Befestigung des Getriebes und die einzusetzenden Schrauben.



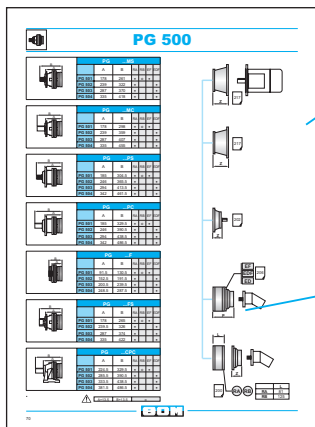
- 6 Simboli riferiti agli accessori applicabili in uscita al riduttore nelle configurazioni disponibili.
Symbols refer to suitable fittings on output in their possible configuration.
Symboles se référant aux accessoires applicables en sortie du réducteur et leurs configurations possibles.
Diese Symbole zeigen die möglichen Optionen im Bezug auf die verfügbaren Abtriebsbauteile.



Diametro della vite
Screw diameter
Diamètre de vis
Durchmesser der Schrauben

Classe di resistenza
Screw quality
Classe de résistance
Schraubenfestigkeitsklasse

Coppia di serraggio consigliata
Screw tightened torque
Couple de serrage conseillé
empfohlenes Anzugsdrehmoment



ENTRATE / GEARBOX INPUTS / ENTREES / ANTRIEB

7

Queste pagine riportano le dimensioni di massimo ingombro del riduttore nelle varie configurazioni disponibili e i tipi di entrate, freni e motorizzazioni applicabili con l'indicazione delle pagine nelle quali reperire ulteriori dati.

These pages show overall dimensions of the gearboxes in their possible configurations plus the type of gearbox inputs, brakes and motor drives applicable with indication of the pages in which to find further information.

Ces pages montrent les dimensions extérieures des réducteurs dans leurs configurations possibles ainsi que les sortes d'entrées, freins et d'adaptations moteurs applicables avec les indications des pages dans lesquelles se trouvent de plus amples informations.

Diese Seiten geben die Aussenmasse der diversen Getriebetypen an. Dazu werden die moeglichen Optionen der verfuegbaren Antriebsformen, Bremsen gezeigt und auf die entsprechenden Katalogseiten hingewiesen.

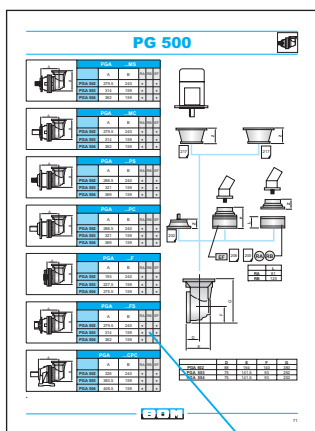
8

Il massimo ingombro del riduttore è ottenuto (come illustrato nei disegni seguenti) sommando alle quote A e B le dimensioni delle entrate utilizzate (L, P, Z) e le eventuali maggiorazioni dimensionali dove indicate.

Maximum gearbox overall dimension is obtained (see scheme below) adding the input dimensions used (L, P, Z) to a and b dimensions, plus possible oversize if indicated.

La dimension extérieure maximum du réducteur est obtenue (voir schéma ci-dessous) en additionnant les dimensions des entrées utilisées (L, P, Z) aux dimensions A et B, plus la cote additionnelle si indiquée.

Das Gesamtausmass des Getriebes wird ermittelt (wie im nachstehenden Schema gezeigt), indem die Angaben aus dem vorgenannten Abtriebsausmass A und B, das Laengenmass des gewaehlten Antriebs (L, P, Z) und eventuellen Aufmasses (wenn angegeben) addiert werden.



9

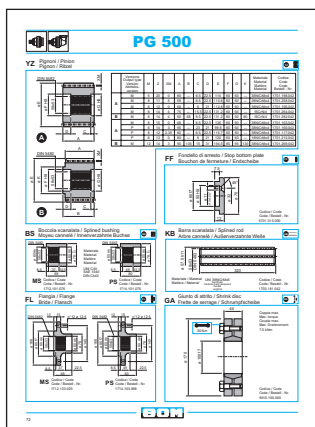
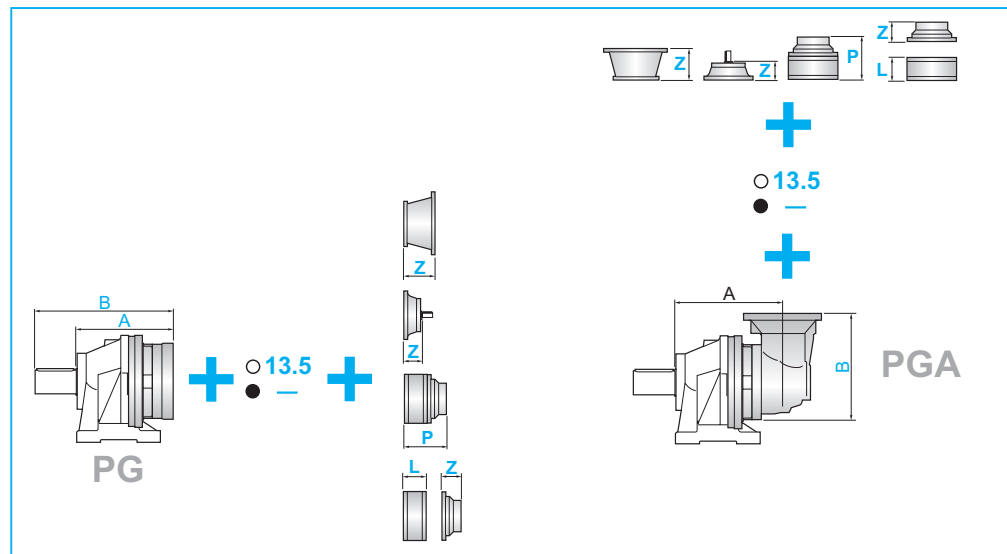
I simboli (•) riportati nelle tabelle indicano l'applicabilità dei freni (RA, RB) e delle entrate ED, EDF, EF.

I simboli (o) indicano ugualmente l'applicabilità degli stessi componenti prevedendo una maggiorazione di lunghezza (come evidenziato nello schema sopra riportato).

The tables, also show the suitability of the brakes (RA and RB) and of the inputs ED, EDF, EF. Symbols marked with (o) in the tables, also show the suitability of the same components increasing the length (as shown in the scheme above).

Les symboles marqués d'un (•) dans les tableaux, montrent l'adaptation des freins (RA et RB) et des entrées ED, EDF, EF. Les symboles marqués d'un (o) dans les tableaux, montrent également l'adaptation des mêmes composants en augmentant la longueur (comme montré dans le schéma ci-dessous).

Das Symbol (•) in der Tabelle gibt an, welcher Bremsentyp (RA, RB) und welche Form der Antriebsvorrichtung ED, EDF oder EF verwendet werden kann. Das Symbol (o) hat dieselbe Funktion. Zusätzlich wird auf ein zu beruecksichtigendes Aufmass hingewiesen (siehe oberes Schema).



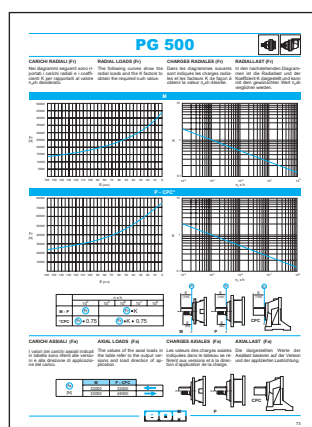
ACCESSORI USCITA OUTPUT ACCESSORIES ACCESSOIRES DE SORTIE ABTRIEBSBAUTEILE

Questa pagina riporta le dimensioni degli accessori disponibili.

This page shows dimensions of the available accessories.

Cette page montre les dimensions des accessoires disponibles.

Diese Seite gibt die Dimensionsmasse der verfuegbaren Abtriebsbauteile an.



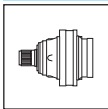
CARICHI RADIALI E ASSIALI RADIAL AND AXIAL LOADS CHARGES RADIALES ET AXIALES RADIALLAST UND AXIALLAST

Questa pagina riporta i diagrammi dai quali si ricavano i carichi radiali sugli alberi in uscita e le tabelle con i valori dei carichi assiali.

This page shows graphs to determine radial loads on output shafts and tables for axial load values.

Cette page montre les diagrammes des charges radiales sur les arbres de sortie et les tableaux avec les valeurs des charges axiales.

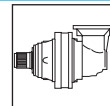
Diese Seite zeigt die Diagramme, aus denen die Werte der Radiallast auf An- oder Abtriebswelle ermittelt werden koennen. Dazu sind hier die Tabellen mit den Werten der Axiallast ersichtlich.



PG 100

	i	Mc [kNm]				n1max [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 101	3.55	1.24	1.10	0.94	0.83	2800	12	13	15	18	11	14
	4.28	1.24	1.10	0.94	0.83							
	5.60	0.90	0.80	0.68	0.60							
	6.75	0.79	0.70	0.60	0.53							
	8.67	0.51	0.45	0.38	0.34							
PG 102	12.6	1.24	1.10	0.94	0.83	2800	8	19	21	24	17	20
	15.2	1.24	1.10	0.94	0.83							
	19.9	1.24	1.10	0.94	0.83							
	23.9	1.24	1.10	0.94	0.83							
	28.9	1.24	1.10	0.94	0.83							
	31.4	0.90	0.80	0.68	0.60							
	37.8	0.90	0.80	0.68	0.60							
	45.5	0.79	0.70	0.60	0.53							
	58.5	0.79	0.70	0.60	0.53							
PG 103	54.1	1.24	1.10	0.94	0.83	2800	5	25	27	30	23	26
	65.3	1.24	1.10	0.94	0.83							
	70.7	1.24	1.10	0.94	0.83							
	78.7	1.24	1.10	0.94	0.83							
	85.3	1.24	1.10	0.94	0.83							
	102.8	1.24	1.10	0.94	0.83							
	111.5	1.24	1.10	0.94	0.83							
	134.3	1.24	1.10	0.94	0.83							
	161.9	1.24	1.10	0.94	0.83							
	172.5	1.24	1.10	0.94	0.83							
	207.9	1.24	1.10	0.94	0.83							
	211.6	0.90	0.80	0.68	0.60							
	255.1	0.90	0.80	0.68	0.60							
	271.7	0.90	0.80	0.68	0.60							
	307.5	0.79	0.70	0.60	0.53							
	327.5	0.90	0.80	0.68	0.60							
	394.8	0.79	0.70	0.60	0.53							
	PG 104	337.3	1.24	1.10	0.94							
365.7		1.24	1.10	0.94	0.83							
396.4		1.24	1.10	0.94	0.83							
440.8		1.24	1.10	0.94	0.83							
477.8		1.24	1.10	0.94	0.83							
531.3		1.24	1.10	0.94	0.83							
575.9		1.24	1.10	0.94	0.83							
624.4		1.24	1.10	0.94	0.83							
694.2		1.24	1.10	0.94	0.83							
752.6		1.24	1.10	0.94	0.83							
836.8		1.24	1.10	0.94	0.83							
907.1		1.24	1.10	0.94	0.83							
966.3		1.24	1.10	0.94	0.83							
1093.4		1.24	1.10	0.94	0.83							
1144.5		1.24	1.10	0.94	0.83							
1185.4		0.90	0.80	0.68	0.60							
1318.0		1.24	1.10	0.94	0.83							
1428.8		0.90	0.80	0.68	0.60							
1692.3		1.24	1.10	0.94	0.83							
3422.1		0.79	0.70	0.60	0.53							

PG 100

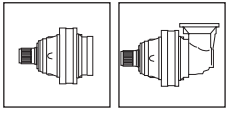


	i	Mc [kNm]				n1max [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 102	10.4	1.24	1.10	0.94	0.83	2800	8	28	30	33	26	29
	12.5	1.24	1.10	0.94	0.83							
	16.4	0.90	0.80	0.68	0.60							
	19.7	0.79	0.70	0.60	0.53							
PGA 103	37.0	1.24	1.10	0.94	0.83	2800	5	34	36	39	32	35
	44.6	1.24	1.10	0.94	0.83							
	53.8	1.24	1.10	0.94	0.83							
	58.4	1.24	1.10	0.94	0.83							
	70.3	1.24	1.10	0.94	0.83							
	84.8	1.24	1.10	0.94	0.83							
	91.9	0.90	0.80	0.68	0.60							
	110.8	0.90	0.80	0.68	0.60							
	133.6	0.79	0.70	0.60	0.53							
	171.5	0.79	0.70	0.60	0.53							
PGA 104	131.8	1.24	1.10	0.94	0.83	2800	1.5	40	42	45	38	41
	158.9	1.24	1.10	0.94	0.83							
	191.5	1.24	1.10	0.94	0.83							
	207.6	1.24	1.10	0.94	0.83							
	230.8	1.24	1.10	0.94	0.83							
	301.7	1.24	1.10	0.94	0.83							
	327.0	1.24	1.10	0.94	0.83							
	363.6	1.24	1.10	0.94	0.83							
	394.2	1.24	1.10	0.94	0.83							
	475.1	1.24	1.10	0.94	0.83							
	515.3	0.90	0.80	0.68	0.60							
	572.7	1.24	1.10	0.94	0.83							
	610.1	1.24	1.10	0.94	0.83							
	735.4	1.24	1.10	0.94	0.83							
	797.2	0.90	0.80	0.68	0.60							
	960.9	0.90	0.80	0.68	0.60							
	1158.2	0.79	0.70	0.60	0.53							
	1233.7	0.90	0.80	0.68	0.60							
	1487.1	0.79	0.70	0.60	0.53							



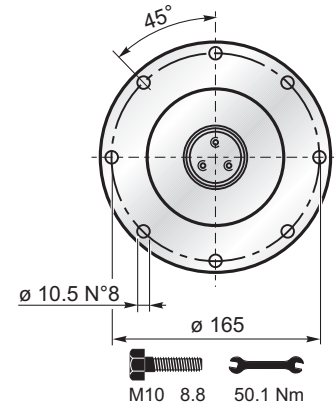
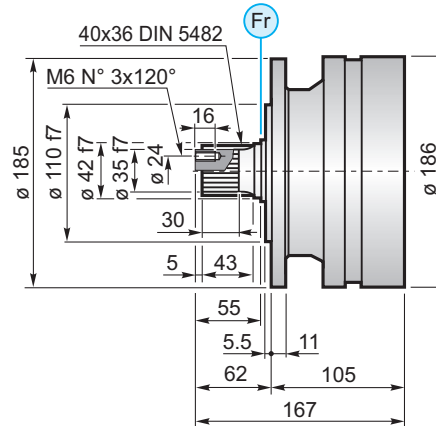
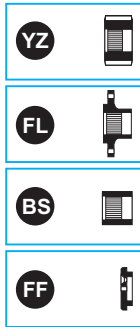
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

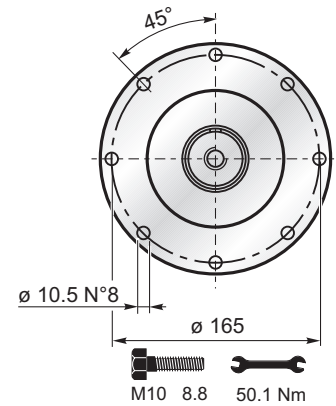
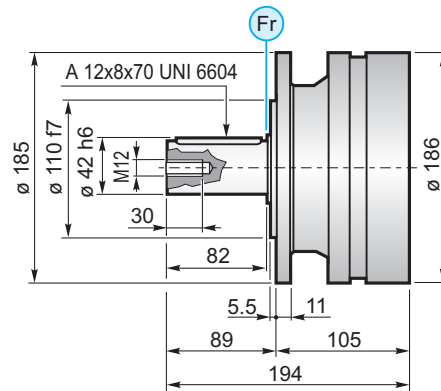


PG 100

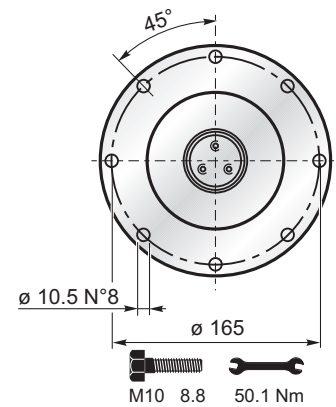
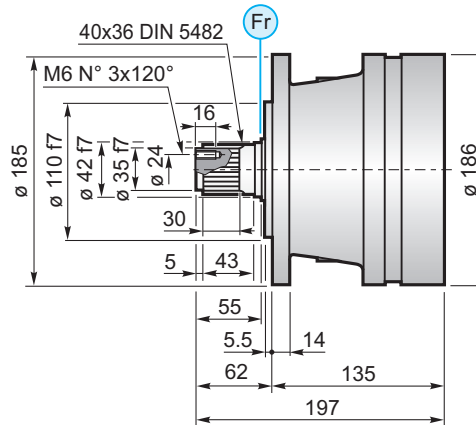
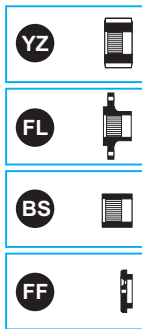
MS



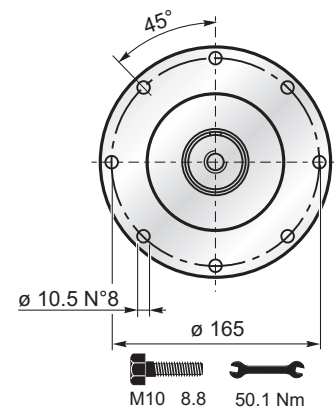
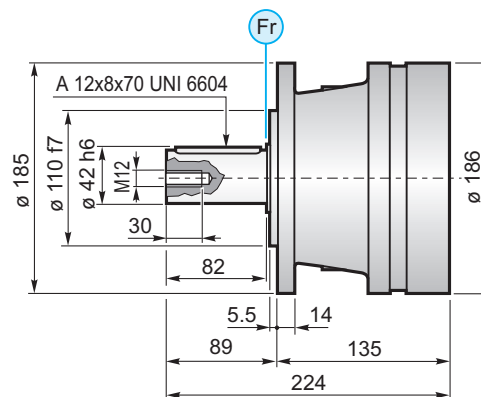
MC



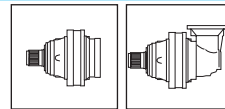
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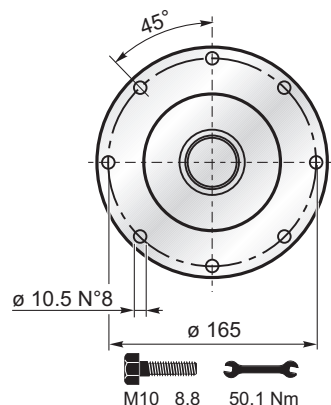
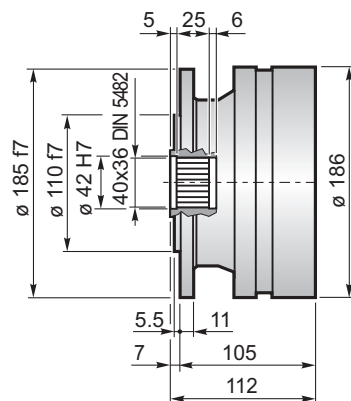
PC



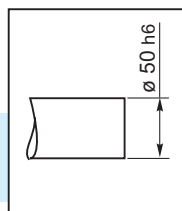
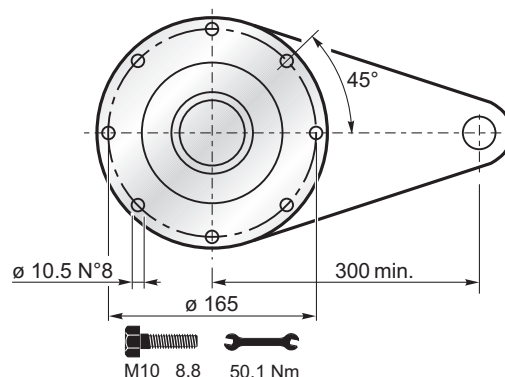
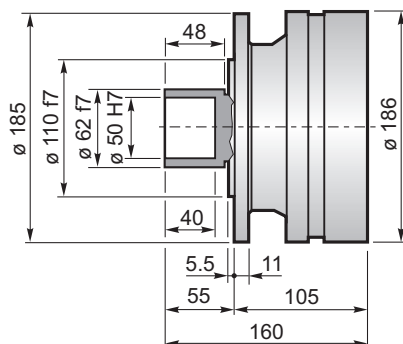
PG 100



F



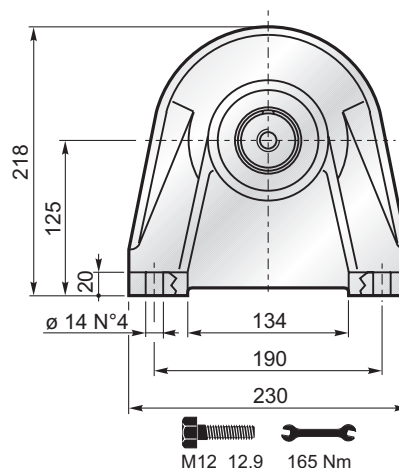
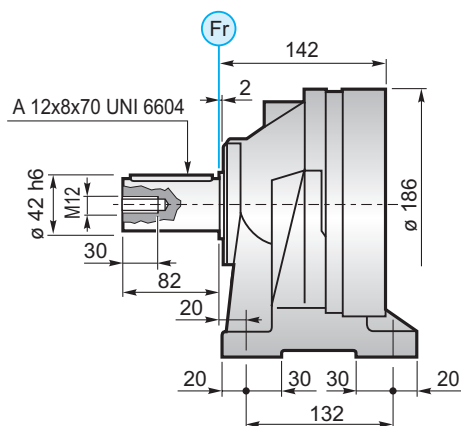
FS



$M_{max} = 2.2 \text{ kNm}$

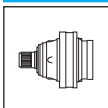
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

CPC



FL YZ BS FF KB GA → 48

SOM



PG 100

	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	•			•

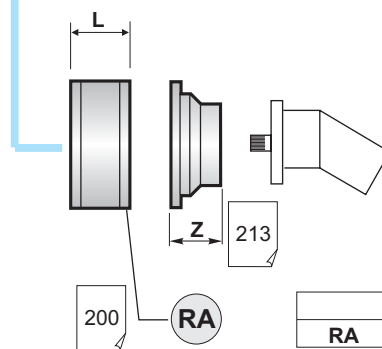
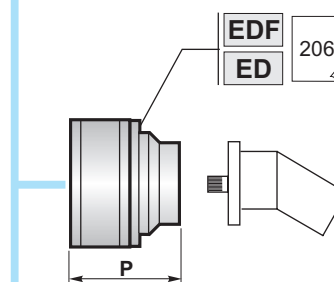
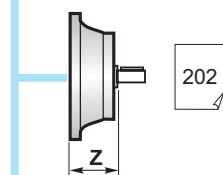
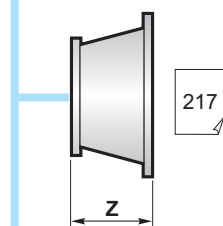
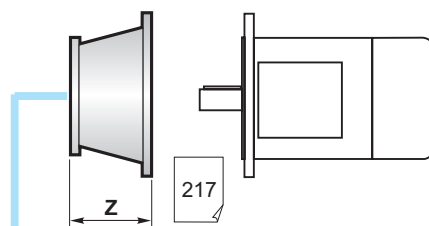
	PG		...PS			
	A	B	RA	RB	EF	EDF
PG 101	135	197	•			•
PG 102	183	245	•			•
PG 103	231	293	•			•
PG 104	271	341	•			•

	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	•			•

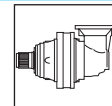
	PG		...FS			
	A	B	RA	RB	EF	EDF
PG 101	105	160	•			•
PG 102	153	208	•			•
PG 103	201	256	•			•
PG 104	249	304	•			•

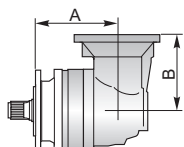
	PG		...CPC			
	A	B	RA	RB	EF	EDF
PG 101	135	224	•			•
PG 102	183	272	•			•
PG 103	231	320	•			•
PG 104	279	368	•			•

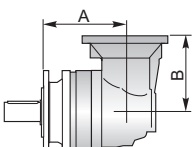


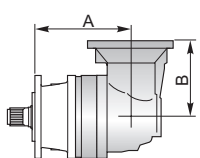
RA	L
RA	81

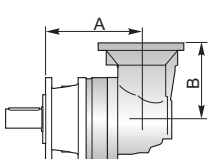
PG 100

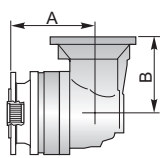


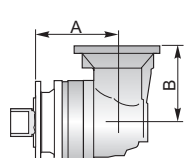
	PGA ...MS					
		A	B	RA	RB	EF
	PGA 102	180	159	•		•
	PGA 103	228	159	•		•
	PGA 104	276	159	•		•

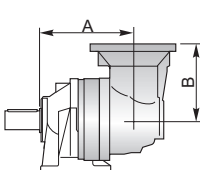
	PGA ...MC					
		A	B	RA	RB	EF
	PGA 102	180	159	•		•
	PGA 103	228	159	•		•
	PGA 104	276	159	•		•

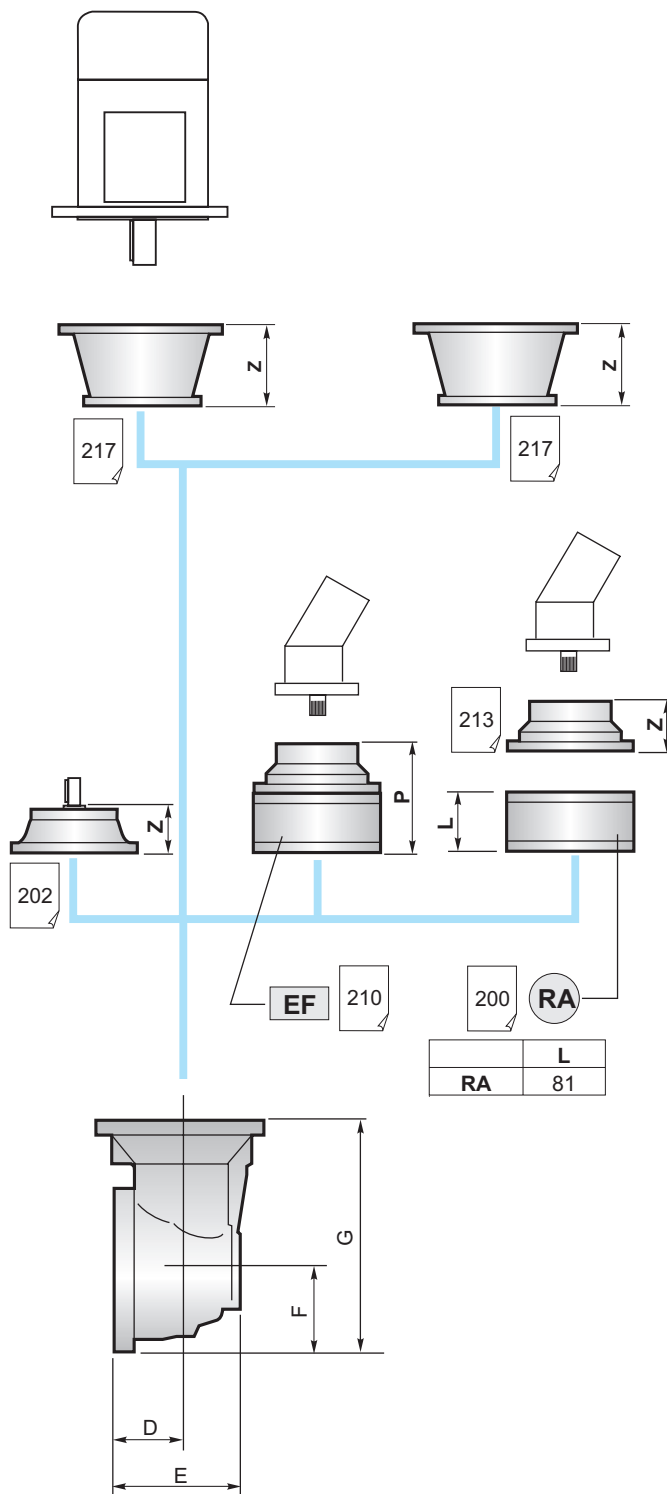
	PGA ...PS					
		A	B	RA	RB	EF
	PGA 102	210	159	•		•
	PGA 103	258	159	•		•
	PGA 104	306	159	•		•

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

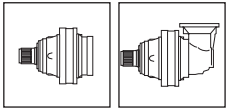
	PGA ...F					
		A	B	RA	RB	EF
	PGA 102	180	159	•		•
	PGA 103	228	159	•		•
	PGA 104	276	159	•		•

	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	•		•

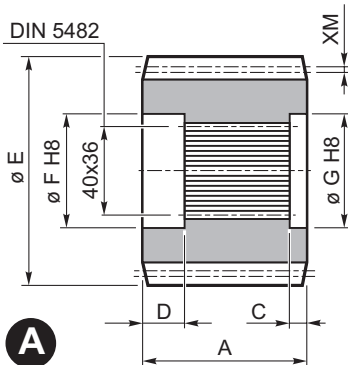


	D	E	F	G
PGA 102	75	141.5	93	252
PGA 103	75	141.5	93	252
PGA 104	75	141.5	93	252

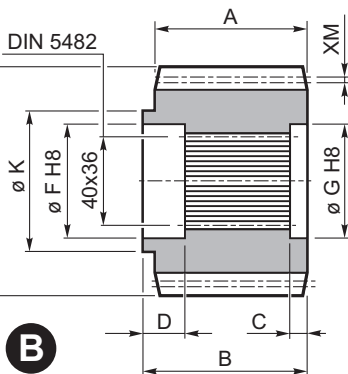


PG 100

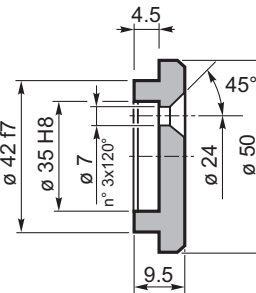
YZ Pignoni / Pinion
Pignon / Ritzel



	Versione Output type Version Abtriebs- version	M	Z	XM	A	B	C	D	E	F	G	K	Materiale Material Matière Material	Codice Code Code Bestell - Nr.
A	M.. - P..	1.9	20	0.049	65	—	6	20.5	84.5	42	42	—	38NiCrMo4	1701.200.042
	M.. - P..	5	16	2.5	55	—	6	20.5	95	42	42	—	38NiCrMo4	1701.259.042
B	M.. - P..	3.5	23	0	40	60.5	6	20.5	87.5	42	42	60	38NiCrMo4	1701.291.042

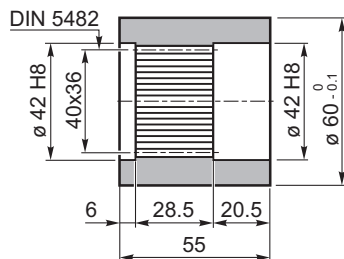


FF Fondello di arresto / Stop bottom plate
Bouchon de fermeture / Endscheibe



Codice / Code
Code / Bestell - Nr.
5701.034.000

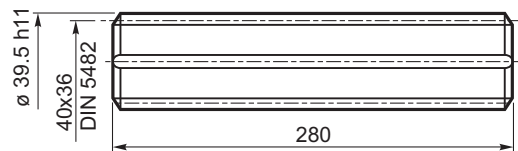
BS Boccola scanalata / Splined bushing
Moyeu cannelé / Innenverzahnte Buchse



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

Codice / Code
Code / Bestell - Nr.
1710.100.076

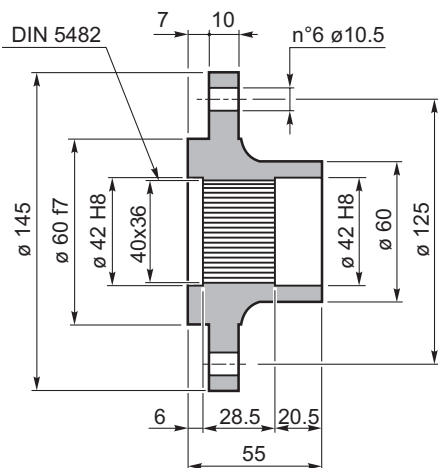
KB Barra scanalata / Splined rod
Arbre cannelé / Außenverzahnte Welle



Materiale / Material
Matière / Material
UNI 39NiCrMo3
bonificato
hardened and tempered
bonifié
verguliet

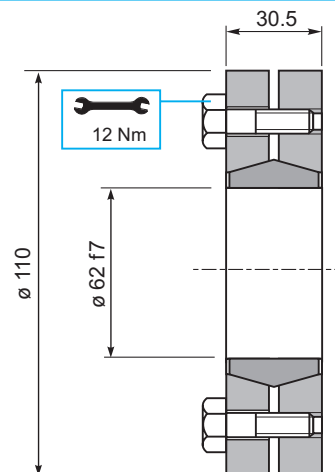
Codice / Code
Code / Bestell - Nr.
1703.179.042

FL Flangia / Flange
Bride / Flansch



Codice / Code
Code / Bestell - Nr.
1710.102.025

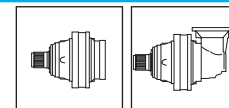
GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
2.2 kNm

Codice / Code
Code / Bestell - Nr.
9015.062.000

PG 100



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

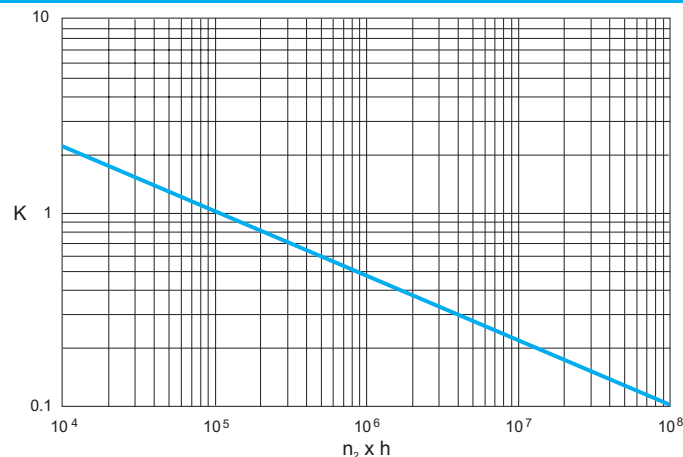
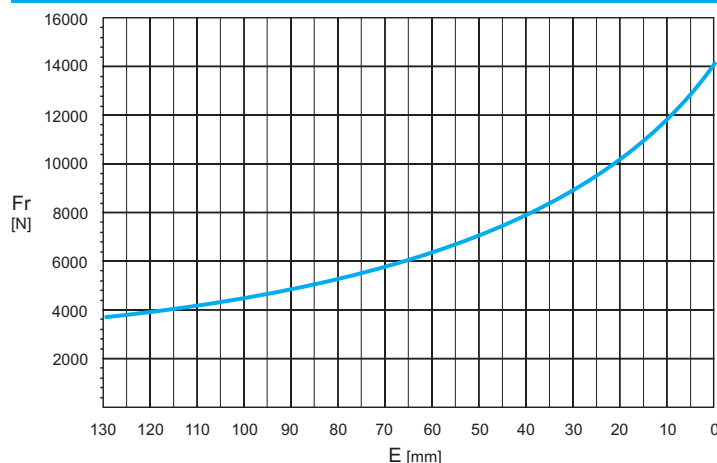
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

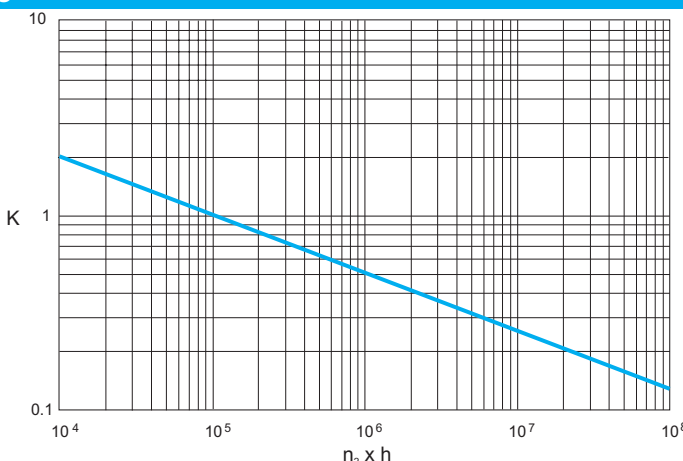
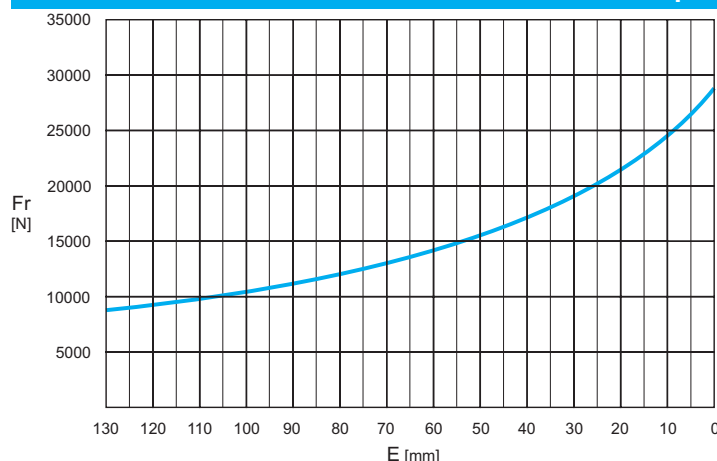
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

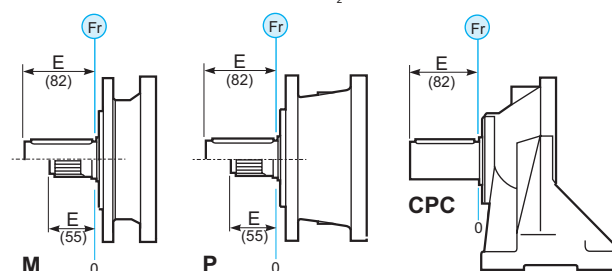
M



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.

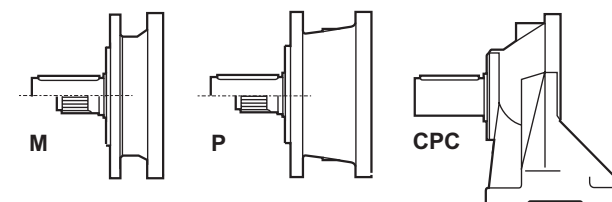
CHARGES AXIALES (Fa)

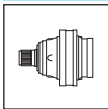
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

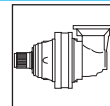




PG 160

	i	M _c [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 161	3.55	1.92	1.70	1.45	1.28	2800	12	15	17	20	13	16
	4.28	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	12.6	1.92	1.70	1.45	1.28	2800	8	21	23	26	19	22
	15.2	1.92	1.70	1.45	1.28							
	19.9	1.92	1.70	1.45	1.28							
	23.9	1.92	1.70	1.45	1.28							
	28.9	1.92	1.70	1.45	1.28							
	31.4	1.37	1.21	1.03	0.91							
	37.8	1.37	1.21	1.03	0.91							
	45.5	1.13	1.00	0.85	0.75							
	58.5	1.13	1.00	0.85	0.75							
PG 163	54.1	1.92	1.70	1.45	1.28	2800	5	27	29	32	25	28
	65.3	1.92	1.70	1.45	1.28							
	70.7	1.92	1.70	1.45	1.28							
	78.7	1.92	1.70	1.45	1.28							
	85.3	1.92	1.70	1.45	1.28							
	102.8	1.92	1.70	1.45	1.28							
	111.5	1.92	1.70	1.45	1.28							
	134.3	1.92	1.70	1.45	1.28							
	161.9	1.92	1.70	1.45	1.28							
	172.5	1.92	1.70	1.45	1.28							
	207.9	1.92	1.70	1.45	1.28							
	211.6	1.37	1.21	1.03	0.91							
	255.1	1.37	1.21	1.03	0.91							
	271.7	1.37	1.21	1.03	0.91							
	307.5	1.13	1.00	0.85	0.75							
	327.5	1.37	1.21	1.03	0.91							
	394.8	1.13	1.00	0.85	0.75							
PG 164	337.3	1.92	1.70	1.45	1.28	2800	1.5	33	35	38	31	34
	365.7	1.92	1.70	1.45	1.28							
	396.4	1.92	1.70	1.45	1.28							
	440.8	1.92	1.70	1.45	1.28							
	477.8	1.92	1.70	1.45	1.28							
	531.3	1.92	1.70	1.45	1.28							
	575.9	1.92	1.70	1.45	1.28							
	624.4	1.92	1.70	1.45	1.28							
	694.2	1.92	1.70	1.45	1.28							
	752.6	1.92	1.70	1.45	1.28							
	836.8	1.92	1.70	1.45	1.28							
	907.1	1.92	1.70	1.45	1.28							
	966.3	1.92	1.70	1.45	1.28							
	1093.4	1.92	1.70	1.45	1.28							
	1144.5	1.92	1.70	1.45	1.28							
	1185.4	1.37	1.21	1.03	0.91							
	1318.0	1.92	1.70	1.45	1.28							
	1428.8	1.37	1.21	1.03	0.91							
	1692.3	1.92	1.70	1.45	1.28							
	3422.1	1.13	1.00	0.85	0.75							

PG 160

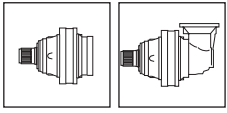


	i	Mc [kNm]				n1max [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 162	10.4	1.92	1.70	1.45	1.28	2800	8	30	32	35	28	31
	12.5	1.92	1.70	1.45	1.28							
	16.4	1.37	1.21	1.03	0.91							
	19.7	1.13	1.00	0.85	0.75							
PGA 163	37.0	1.92	1.70	1.45	1.28	2800	5	36	38	41	34	37
	44.6	1.92	1.70	1.45	1.28							
	53.8	1.92	1.70	1.45	1.28							
	58.4	1.92	1.70	1.45	1.28							
	70.3	1.92	1.70	1.45	1.28							
	84.8	1.92	1.70	1.45	1.28							
	91.9	1.37	1.21	1.03	0.91							
	110.8	1.37	1.21	1.03	0.91							
	133.6	1.13	1.00	0.85	0.75							
	171.5	1.13	1.00	0.85	0.75							
PGA 164	131.8	1.92	1.70	1.45	1.28	2800	1.5	42	44	47	40	43
	158.9	1.92	1.70	1.45	1.28							
	191.5	1.92	1.70	1.45	1.28							
	207.6	1.92	1.70	1.45	1.28							
	230.8	1.92	1.70	1.45	1.28							
	301.7	1.92	1.70	1.45	1.28							
	327.0	1.92	1.70	1.45	1.28							
	363.6	1.92	1.70	1.45	1.28							
	394.2	1.92	1.70	1.45	1.28							
	475.1	1.92	1.70	1.45	1.28							
	515.3	1.37	1.21	1.03	0.91							
	572.7	1.92	1.70	1.45	1.28							
	610.1	1.92	1.70	1.45	1.28							
	735.4	1.92	1.70	1.45	1.28							
	797.2	1.37	1.21	1.03	0.91							
	960.9	1.37	1.21	1.03	0.91							
	1158.2	1.13	1.00	0.85	0.75							
	1233.7	1.37	1.21	1.03	0.91							
	1487.1	1.13	1.00	0.85	0.75							



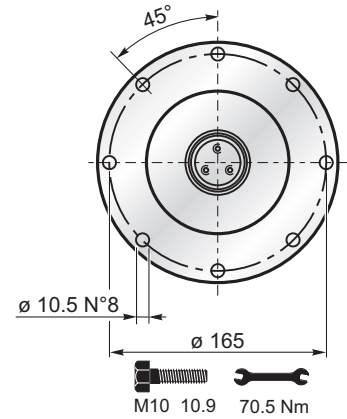
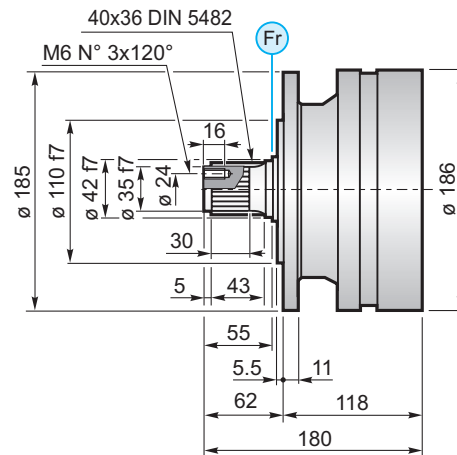
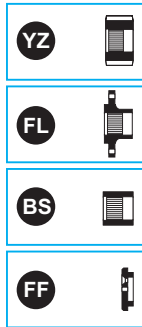
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

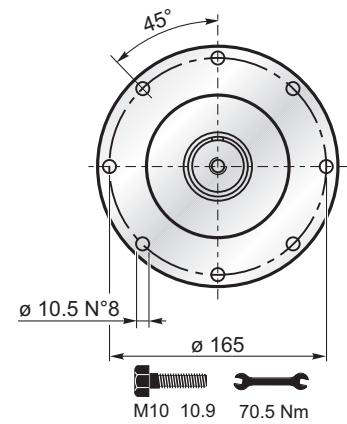
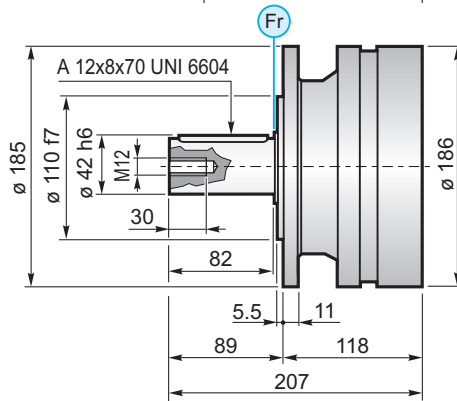


PG 160

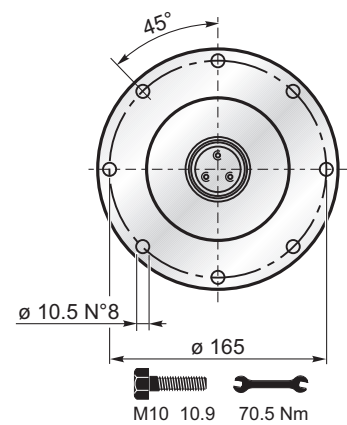
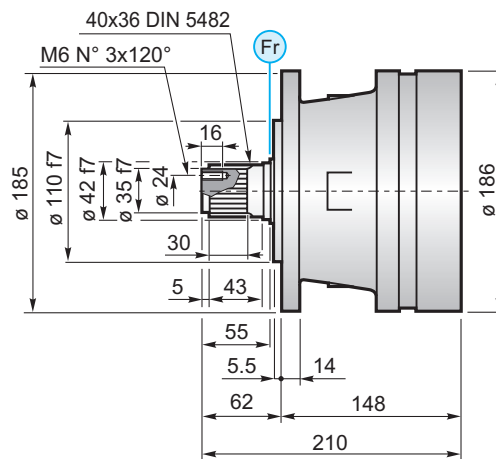
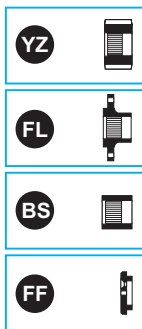
MS



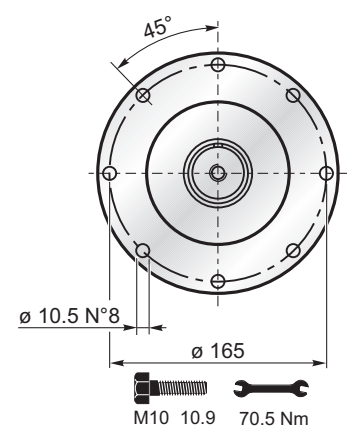
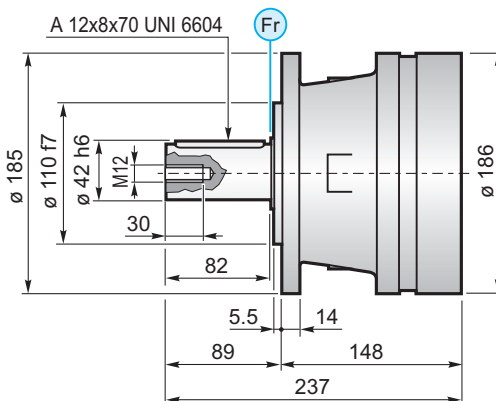
MC



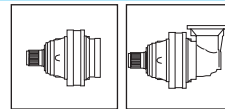
PS



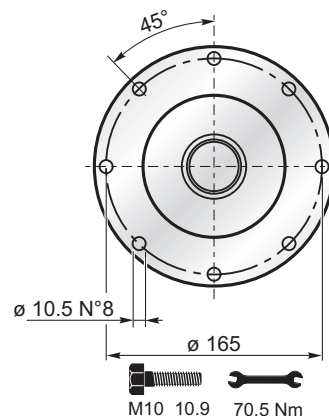
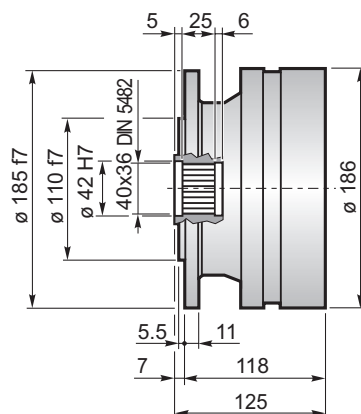
PC



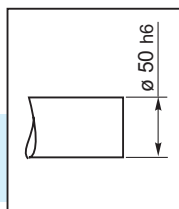
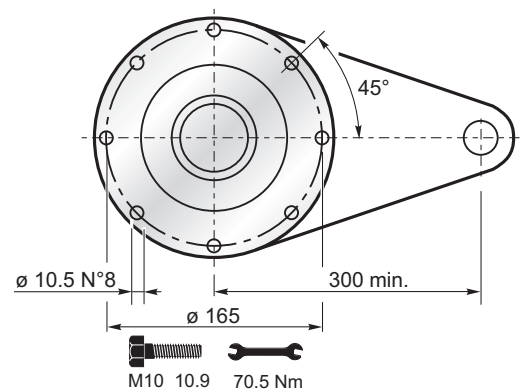
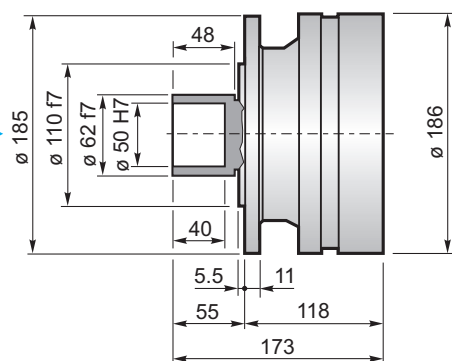
PG 160



F



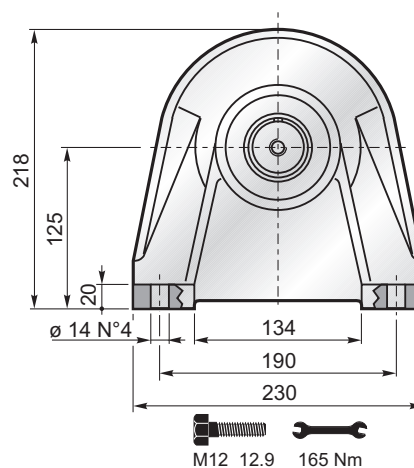
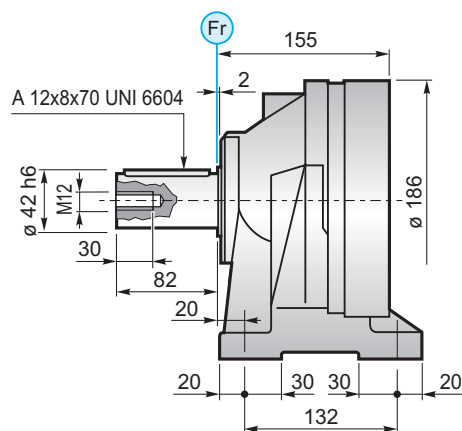
FS



$M_{max} = 2.2 \text{ kNm}$

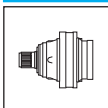
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

CPC



FL YZ BS FF KB GA → 56

SOM



PG 160

	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	•			•

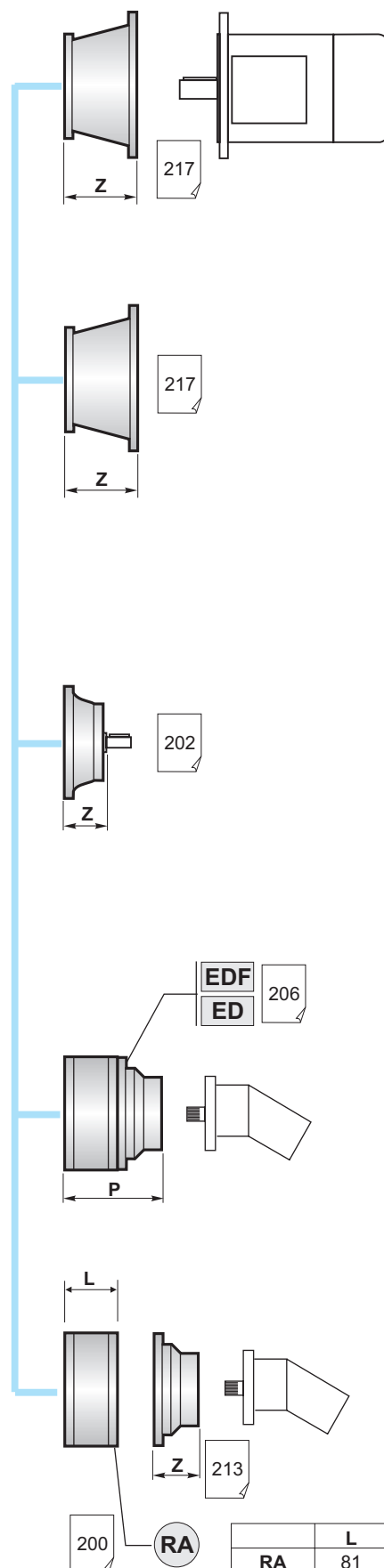
	PG		...PS			
	A	B	RA	RB	EF	EDF
PG 161	148	210	•			•
PG 162	196	258	•			•
PG 163	244	306	•			•
PG 164	292	354	•			•

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

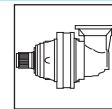
	PG		...F			
	A	B	RA	RB	EF	EDF
PG 161	118	125	•			•
PG 162	166	173	•			•
PG 163	214	221	•			•
PG 164	262	269	•			•

	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	148	237	•			•
PG 162	196	285	•			•
PG 163	244	333	•			•
PG 164	292	381	•			•



PG 160



	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	•		•

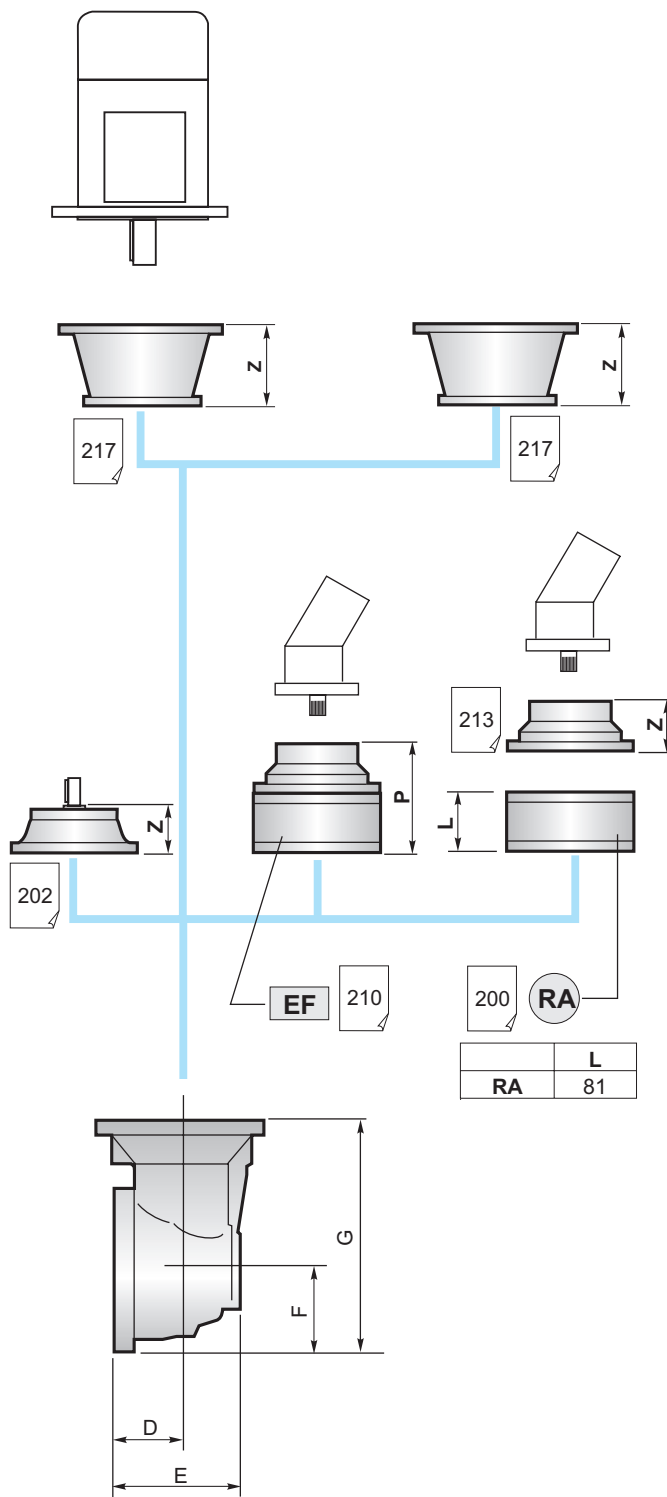
	PGA ...PS					
		A	B	RA	RB	EF
	PGA 162	223	159	•		•
	PGA 163	271	159	•		•
	PGA 164	319	159	•		•

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

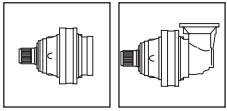
	PGA ...F					
		A	B	RA	RB	EF
	PGA 162	193	159	•		•
	PGA 163	241	159	•		•
	PGA 164	289	159	•		•

	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	•		•

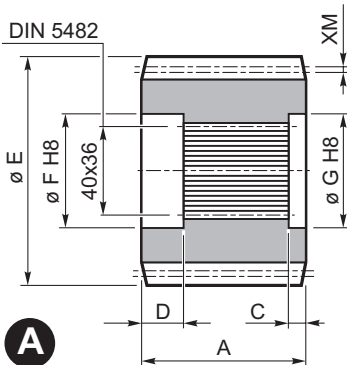


	D	E	F	G
PGA 162	75	141.5	93	252
PGA 163	75	141.5	93	252
PGA 164	75	141.5	93	252

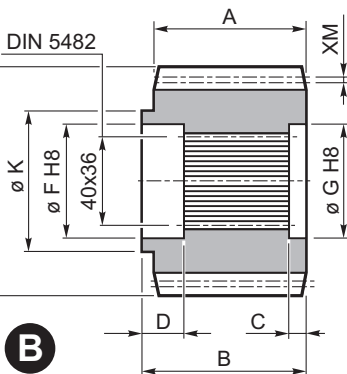


PG 160

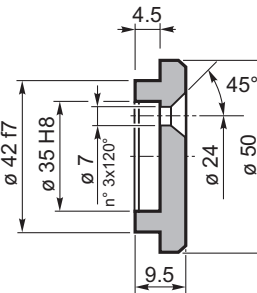
YZ Pignoni / Pinion
Pignon / Ritzel



	Versione Output type Version Abtriebs- version	M	Z	XM	A	B	C	D	E	F	G	K	Materiale Material Matière Material	Codice Code Code Bestell - Nr.
A	M.. - P..	1.9	20	0.049	65	—	6	20.5	84.5	42	42	—	38NiCrMo4	1701.200.042
	M.. - P..	5	16	2.5	55	—	6	20.5	95	42	42	—	38NiCrMo4	1701.259.042
B	M.. - P..	3.5	23	0	40	60.5	6	20.5	87.5	42	42	60	38NiCrMo4	1701.291.042

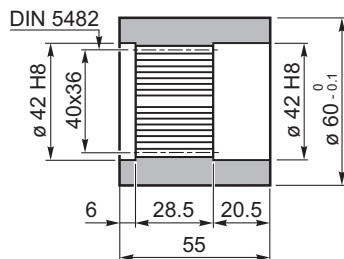


FF Fondello di arresto / Stop bottom plate
Bouchon de fermeture / Endscheibe



Codice / Code
Code / Bestell - Nr.
5701.034.000

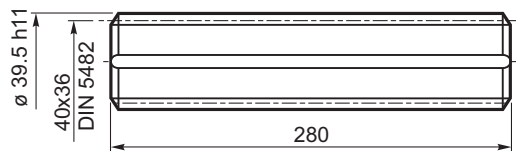
BS Boccola scanalata / Splined bushing
Moyeu cannelé / Innenverzahnte Buchse



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

Codice / Code
Code / Bestell - Nr.
1710.100.076

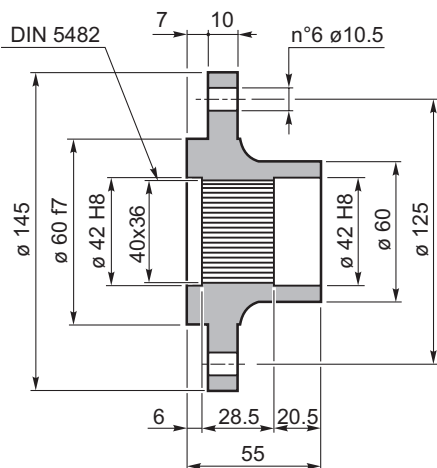
KB Barra scanalata / Splined rod
Arbre cannelé / Außenverzahnte Welle



Materiale / Material
Matière / Material
UNI 39NiCrMo3
bonificato
hardened and tempered
bonifié
vergütet

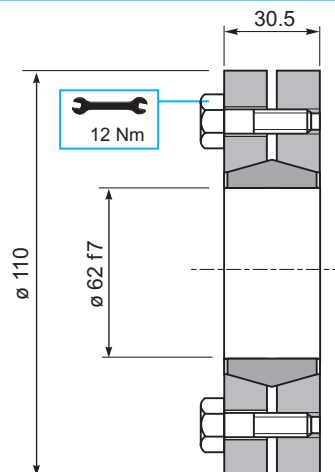
Codice / Code
Code / Bestell - Nr.
1703.179.042

FL Flangia / Flange
Bride / Flansch



Codice / Code
Code / Bestell - Nr.
1710.102.025

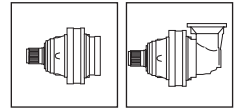
GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
2.2 kNm

Codice / Code
Code / Bestell - Nr.
9015.062.000

SOM



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

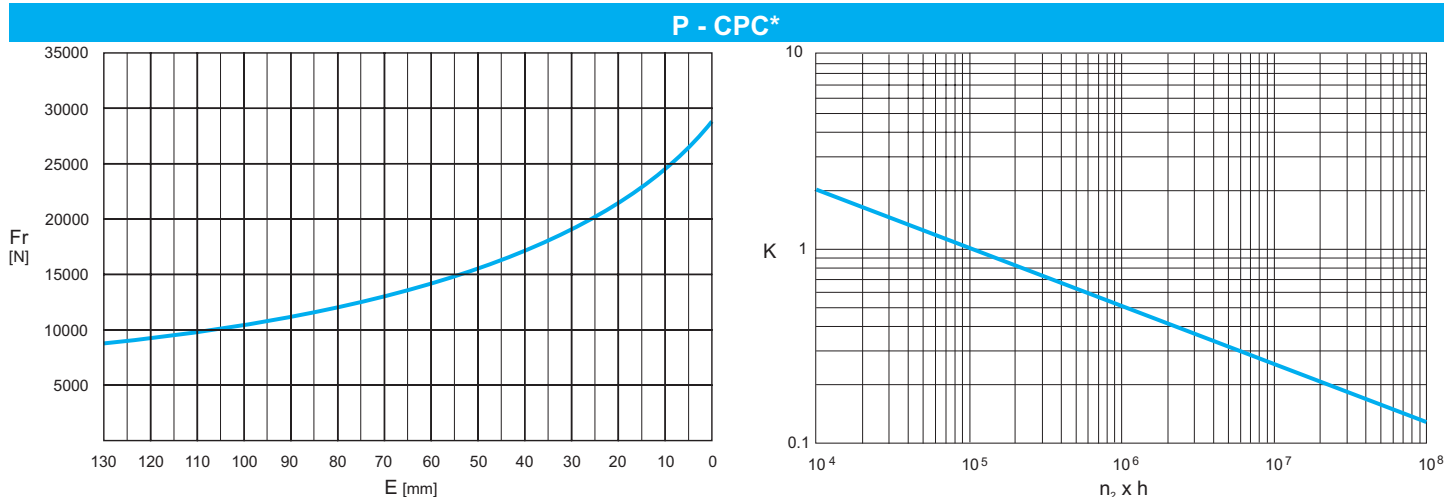
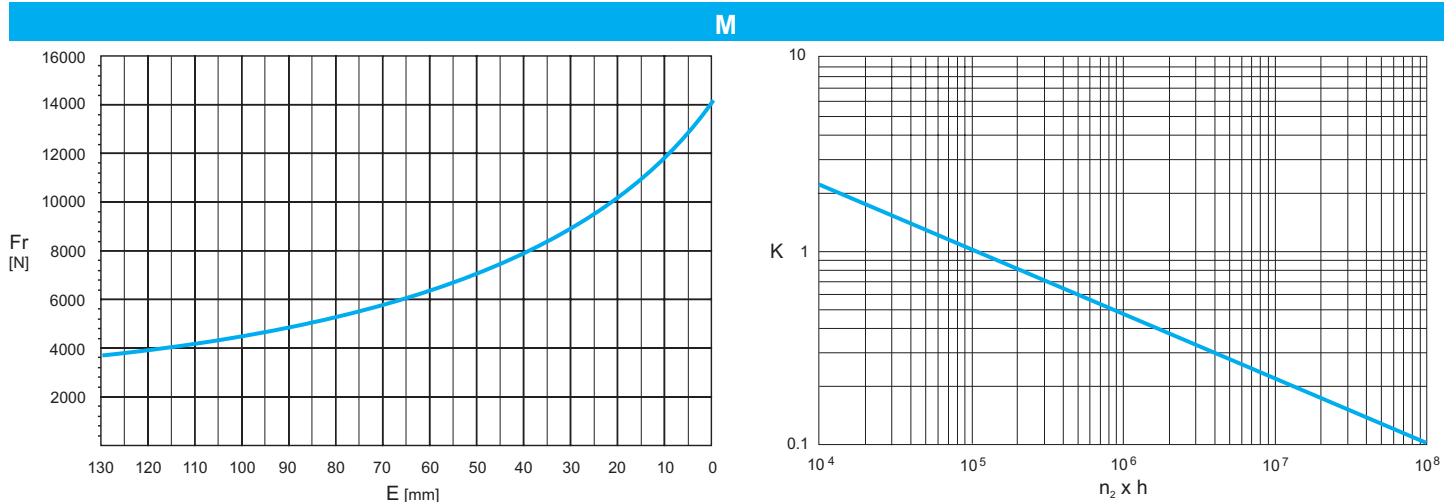
The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

CHARGES RADIALES (Fr)

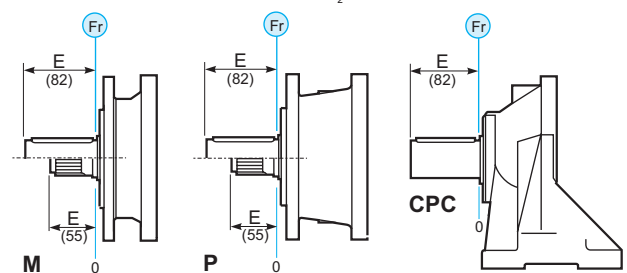
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.



	$n \times h$				
	10^5	10^4	10^6	10^7	10^8
M - P	Fr		$Fr \cdot K$		
*CPC	$Fr \cdot 0.75$		$Fr \cdot K \cdot 0.75$		



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.

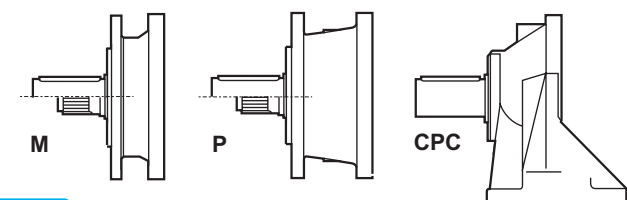
CHARGES AXIALES (Fa)

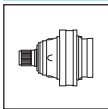
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

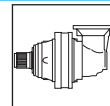




PG 250

	i	Mc [kNm]				n1max [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 251	3.77	3.98	3.52	3.00	2.65	2800	20	29	38	42	20	31
	4.12	3.60	3.19	2.71	2.40							
	5.16	3.01	2.66	2.26	2.00							
	6.00	2.52	2.23	1.90	1.68							
	7.25	1.95	1.73	1.47	1.30							
PG 252	13.4	3.98	3.52	3.00	2.65	2800	12	35	44	48	27	37
	16.1	3.98	3.52	3.00	2.65							
	18.3	3.01	2.66	2.26	2.00							
	23.1	3.60	3.19	2.71	2.40							
	28.9	3.01	2.66	2.26	2.00							
	34.8	3.01	2.66	2.26	2.00							
	40.5	2.52	2.23	1.90	1.68							
	48.9	1.95	1.73	1.47	1.30							
	62.8	1.95	1.73	1.47	1.30							
PG 253	52.1	3.60	3.19	2.71	2.40	2800	8	41	50	54	32	43
	57.5	3.98	3.52	3.00	2.65							
	62.8	3.60	3.19	2.71	2.40							
	75.2	3.98	3.52	3.00	2.65							
	82.1	3.60	3.19	2.71	2.40							
	90.6	3.98	3.52	3.00	2.65							
	98.9	3.60	3.19	2.71	2.40							
	119.3	3.60	3.19	2.71	2.40							
	129.3	3.60	3.19	2.71	2.40							
	149.4	3.01	2.66	2.26	2.00							
	155.9	3.60	3.19	2.71	2.40							
	162.0	3.01	2.66	2.26	2.00							
	173.5	2.52	2.23	1.90	1.68							
	195.2	3.01	2.66	2.26	2.00							
	235.4	3.01	2.66	2.26	2.00							
	273.3	2.52	2.23	1.90	1.68							
	302.2	3.01	2.66	2.26	2.00							
	330.3	1.95	1.73	1.47	1.30							
	424.1	1.95	1.73	1.47	1.30							
PG 254	351.9	3.60	3.19	2.71	2.40	2800	4	47	56	60	38	49
	365.7	3.01	2.66	2.26	2.00							
	388.5	3.98	3.52	3.00	2.65							
	413.8	3.98	3.52	3.00	2.65							
	424.2	3.60	3.19	2.71	2.40							
	468.3	3.98	3.52	3.00	2.65							
	511.4	3.60	3.19	2.71	2.40							
	554.3	3.60	3.19	2.71	2.40							
	611.9	3.98	3.52	3.00	2.65							
	668.2	3.60	3.19	2.71	2.40							
	737.6	3.98	3.52	3.00	2.65							
	805.4	3.60	3.19	2.71	2.40							
	857.9	3.60	3.19	2.71	2.40							
	907.3	3.01	2.66	2.26	2.00							
	1052.4	3.60	3.19	2.71	2.40							
	1121.1	3.60	3.19	2.71	2.40							
	1318.2	3.01	2.66	2.26	2.00							
	1588.9	3.01	2.66	2.26	2.00							
	1845.2	2.52	2.23	1.90	1.68							
	2369.2	2.52	2.23	1.90	1.68							

PG 250

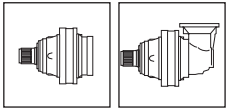


	i	Mc [kNm]				n1max [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 252	12.0	3.60	3.19	2.71	2.40	2800	12	47	56	60	35	49
	15.1	3.01	2.66	2.26	2.00							
	17.5	2.52	2.23	1.90	1.68							
	21.2	1.95	1.73	1.47	1.30							
PGA 253	39.3	3.98	3.52	3.00	2.65	2800	8	53	62	66	45	55
	47.4	3.98	3.52	3.00	2.65							
	53.8	3.01	2.66	2.26	2.00							
	67.7	3.60	3.19	2.71	2.40							
	75.4	2.52	2.23	1.90	1.68							
	84.8	3.01	2.66	2.26	2.00							
	91.1	1.95	1.73	1.47	1.30							
	102.2	3.01	2.66	2.26	2.00							
	118.7	2.52	2.23	1.90	1.68							
	143.5	1.95	1.73	1.47	1.30							
PGA 254	140.0	3.98	3.52	3.00	2.65	2800	4	59	68	72	50	61
	168.8	3.98	3.52	3.00	2.65							
	184.3	3.60	3.19	2.71	2.40							
	220.6	3.98	3.52	3.00	2.65							
	240.9	3.60	3.19	3.71	2.40							
	265.9	3.98	3.52	3.00	2.65							
	290.3	3.60	3.19	2.71	2.40							
	320.5	3.98	3.52	3.00	2.65							
	350.0	3.60	3.19	2.71	2.40							
	422.3	2.52	2.23	1.90	1.68							
	449.4	3.60	3.19	2.71	2.40							
	475.2	3.01	2.66	2.26	2.00							
	509.1	2.52	2.23	1.90	1.68							
	551.9	2.52	2.23	1.90	1.68							
	615.2	1.95	1.73	1.47	1.30							
	665.2	2.52	2.23	1.90	1.68							
	735.5	3.01	2.66	2.26	2.00							
	801.8	2.52	2.23	1.90	1.68							
	1244.0	1.95	1.73	1.47	1.30							



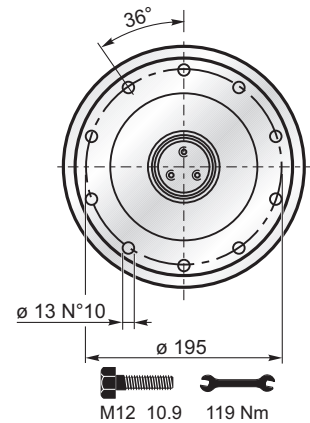
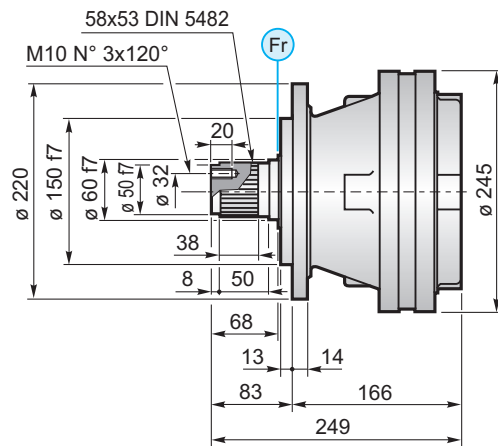
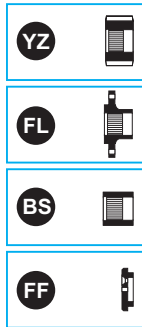
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

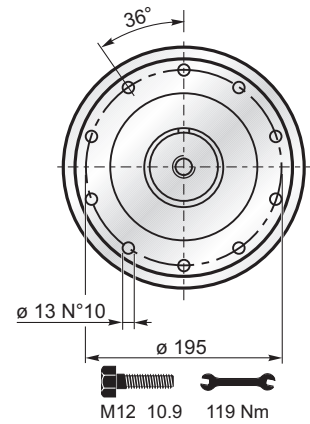
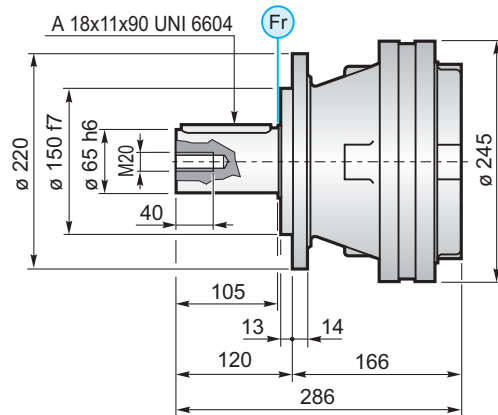


PG 250

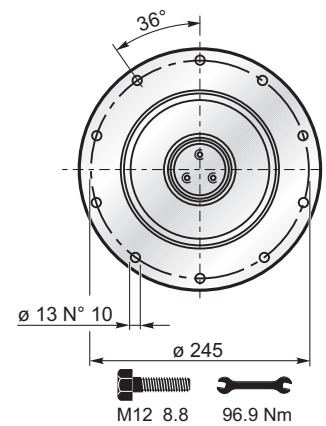
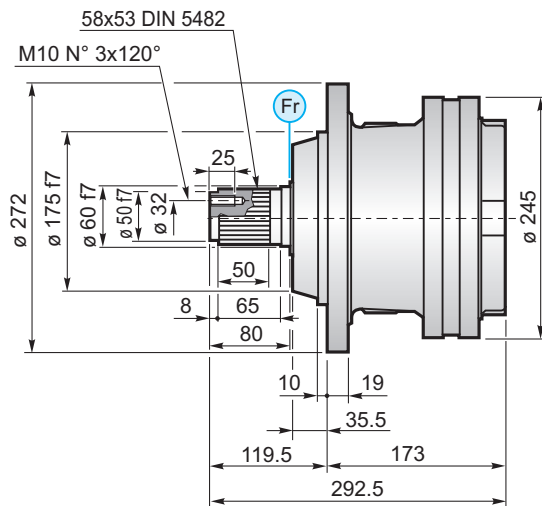
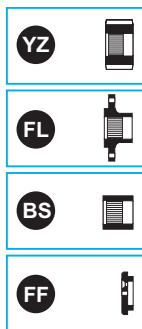
MS



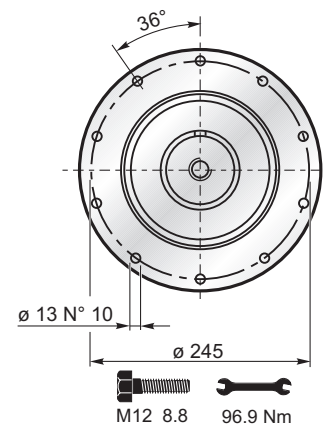
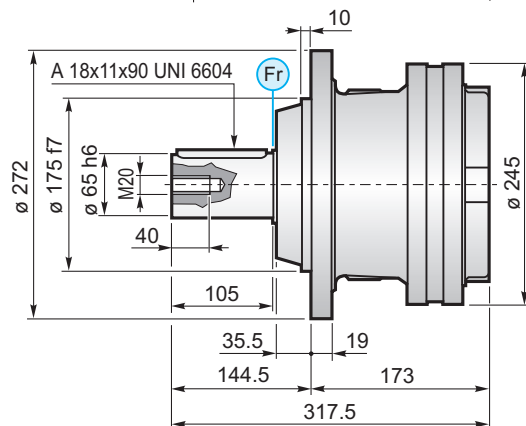
MC



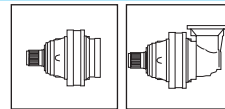
PS



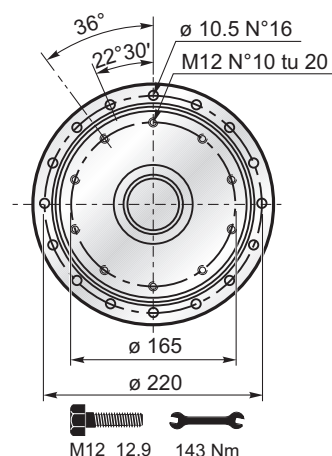
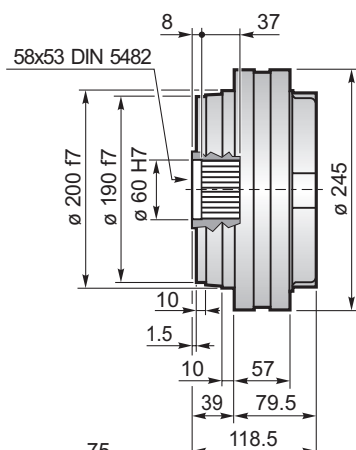
PC



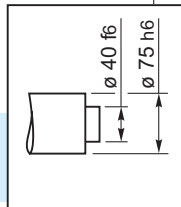
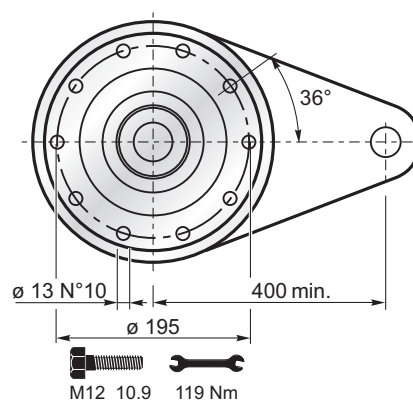
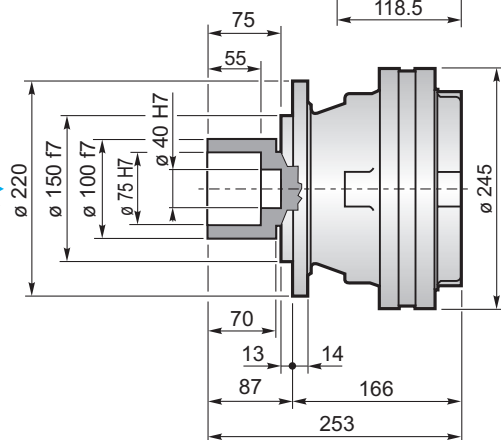
PG 250



F



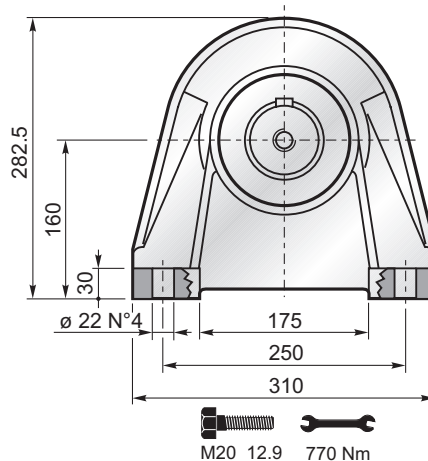
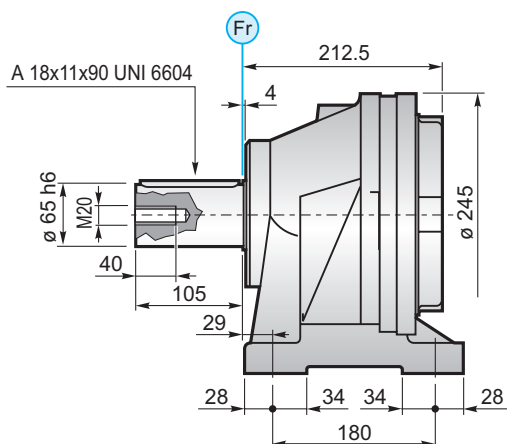
FS



$M_{max} = 7.5 \text{ kNm}$

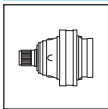
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

CPC



FL YZ BS FF KB GA → 64

SOM



PG 250

	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	•			•

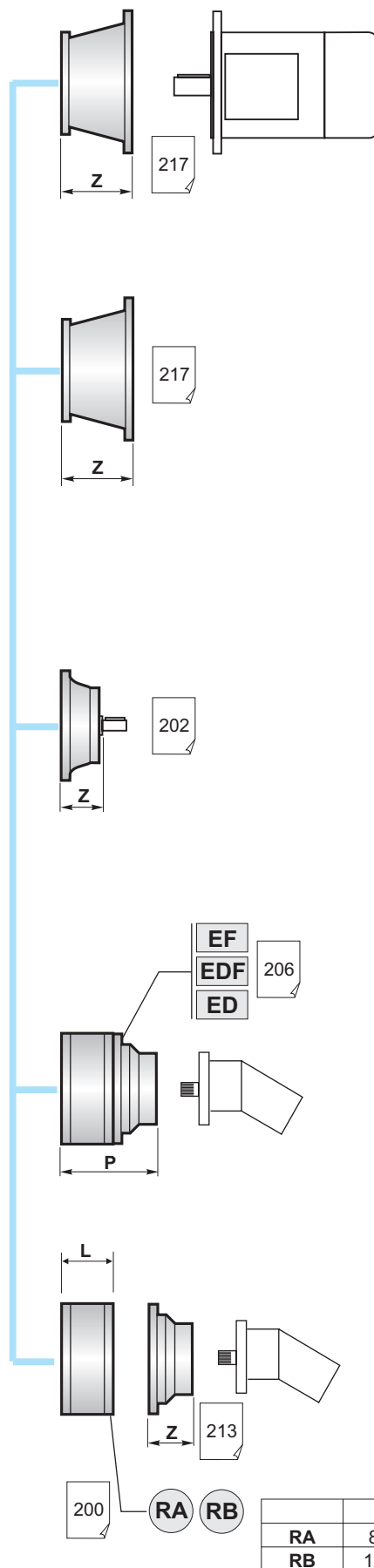
	PG		...F			
	A	B	RA	RB	EF	EDF
PG 251	79.5	118.5	•	o	•	
PG 252	127.5	166.5	•			•
PG 253	175.5	214.5	•			•
PG 254	223.5	262.5	•			•

	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	•			•

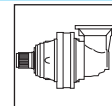


A+13.5	B+13.5	o
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	L
RA	81
RB	125

PG 250



	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	•		•

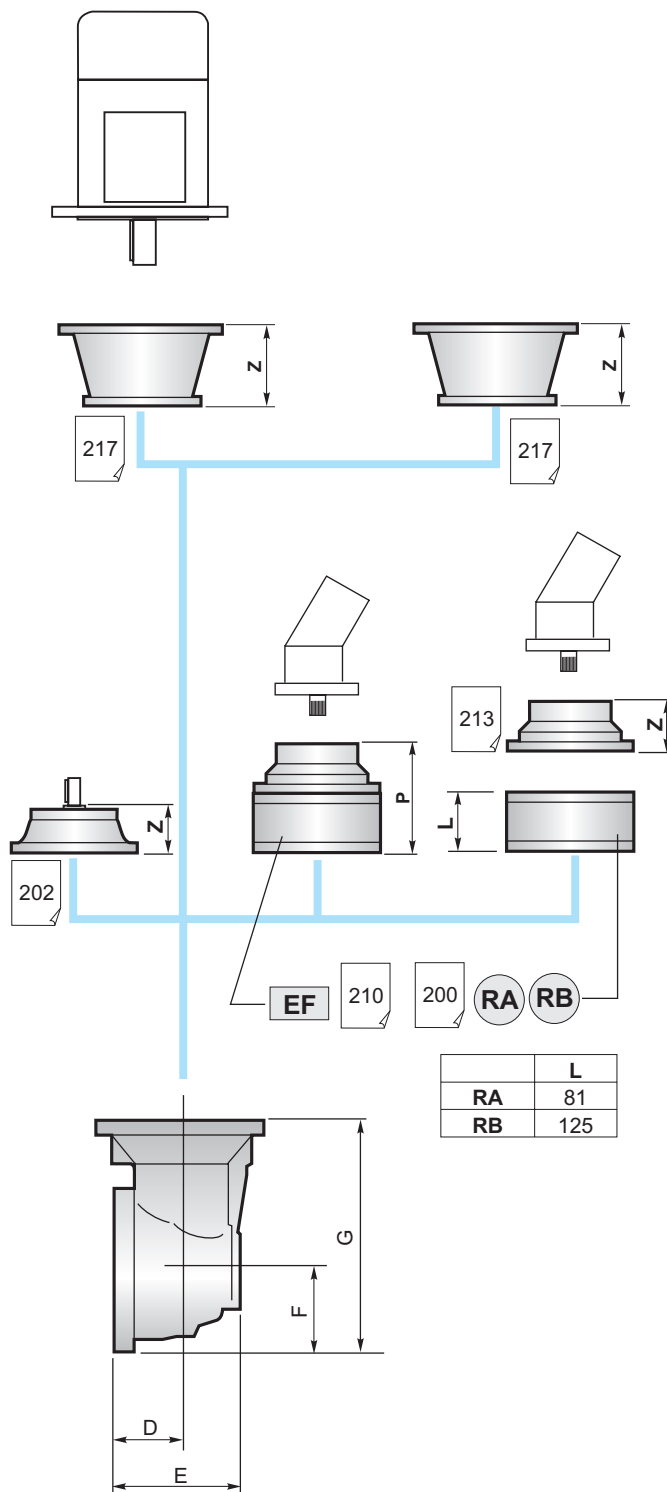
	PGA ...PS					
		A	B	RA	RB	EF
	PGA 252	248	159	•		•
	PGA 253	296	159	•		•
	PGA 254	344	159	•		•

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

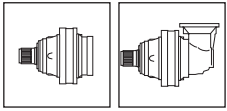
	PGA ...F					
		A	B	RA	RB	EF
	PGA 252	192	159	•		•
	PGA 253	240	159	•		•
	PGA 254	288	159	•		•

	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	•		•

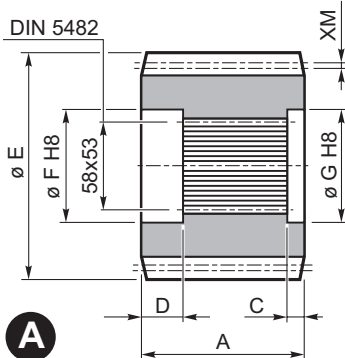


	D	E	F	G
PGA 252	75	141.5	93	252
PGA 253	75	141.5	93	252
PGA 254	75	141.5	93	252



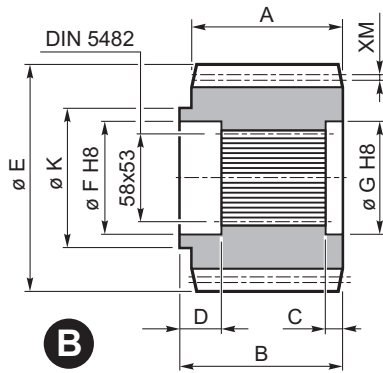
PG 250

YZ Pignoni / Pinion
Pignon / Ritzel



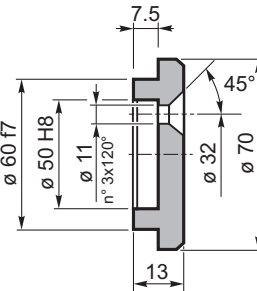
A

	Versione Output type Version Abtriebs- version	M	Z	XM	A	B	C	D	E	F	G	K	Materiale Material Matière Material	Codice Code Code Bestell - Nr.
A	M	8	13	0	68	—	8.5	22.5	120	60	60	—	18NiCrMo5	1701.218.042
	M	8	11	5	68	—	8.5	22.5	110.8	60	60	—	38NiCrMo4	1701.258.042
	M	8	12	0	68	—	8	21	112.8	60	60	—	38NiCrMo4	1701.196.042
B	P	10	14	3.2	103	116	9.5	22.5	162.4	60	60	105	18NiCrMo5	1701.298.042
A	M	8	15	0	68	—	8.5	22.5	136	60	60	—	38NiCrMo4	1701.163.042
	P	6	14	3	95	—	23	21	99.6	60	60	—	38NiCrMo4	1701.160.042
	P	10	11	8	90	—	8.5	22.5	142.1	60	60	—	18NiCrMo5	1701.297.042



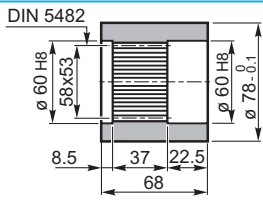
B

FF Fondello di arresto / Stop bottom plate
Bouchon de fermeture / Endscheibe

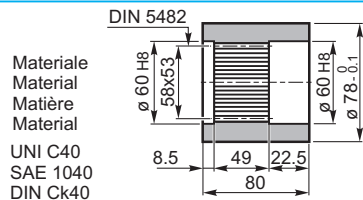


Codice / Code
Code / Bestell - Nr.
5701.015.000

BS Boccola scanalata / Splined bushing
Moyeu cannelé / Innenverzahnte Buchse

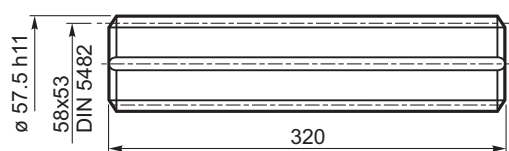


MS Codice / Code
Code / Bestell - Nr.
1712.101.076



PS Codice / Code
Code / Bestell - Nr.
1714.101.076

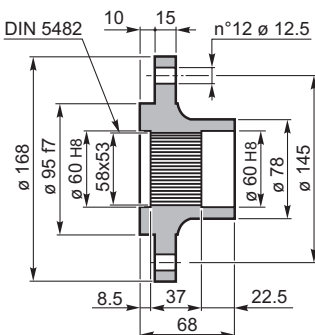
KB Barra scanalata / Splined rod
Arbre cannelé / Außenverzahnte Welle



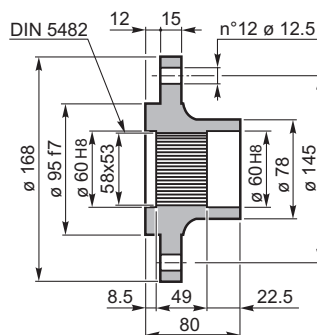
Materiale / Material
Matière / Material
UNI 39NiCrMo3
bonificato
hardened and tempered
bonifié
vergütet

Codice / Code
Code / Bestell - Nr.
1703.181.042

FL Flangia / Flange
Bride / Flansch

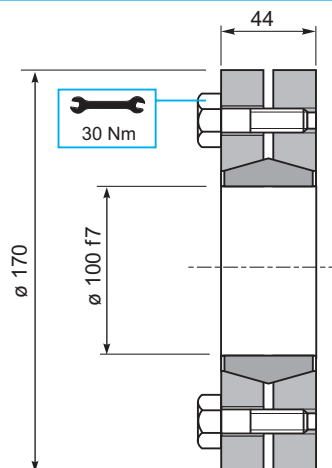


MS Codice / Code
Code / Bestell.n.r.
1712.103.025



PS Codice / Code
Code / Bestell - Nr.
1714.103.098

GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe

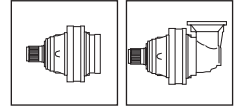


Coppia max.
Max. torque
Couple max.
Max. Drehmoment
7.5 kNm

Codice / Code
Code / Bestell - Nr.
9015.100.000

SOM

PG 250



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

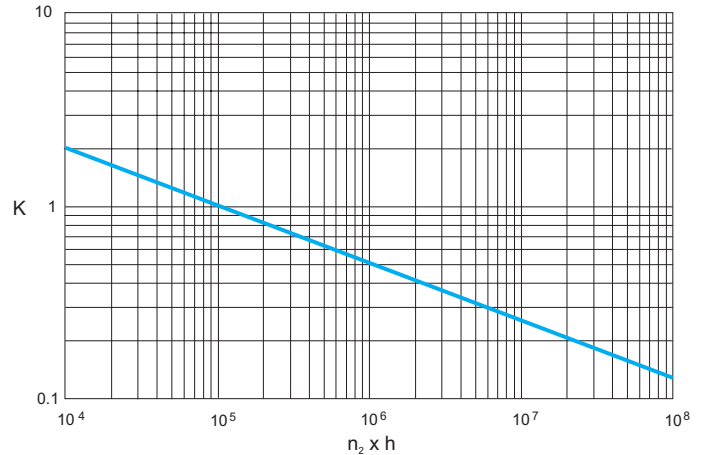
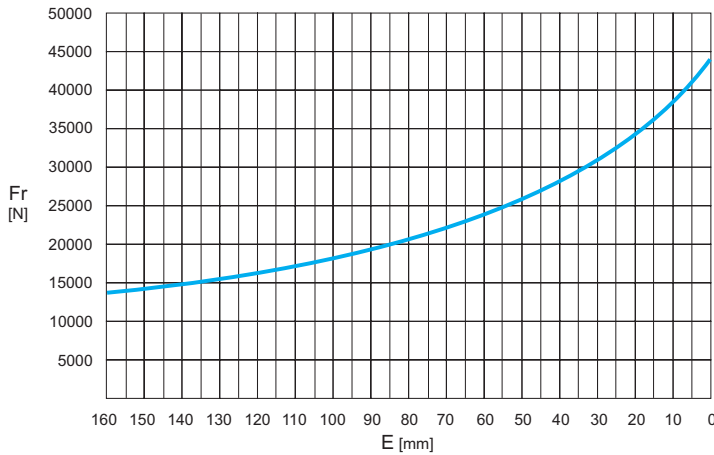
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

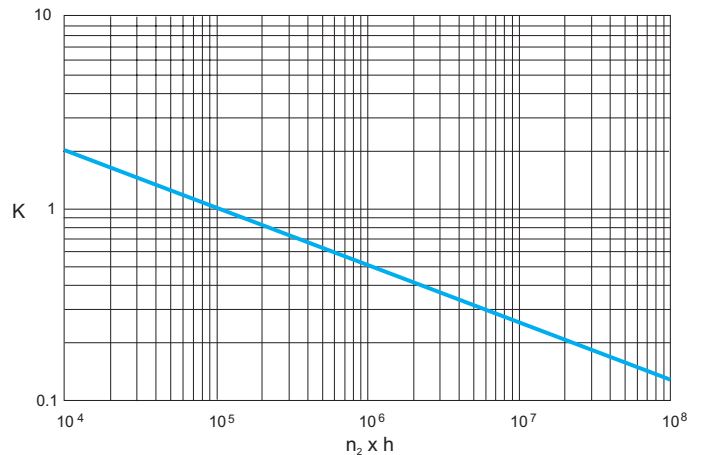
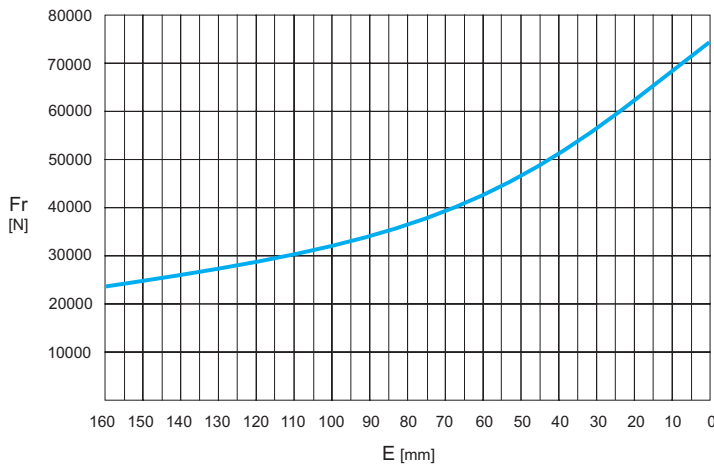
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

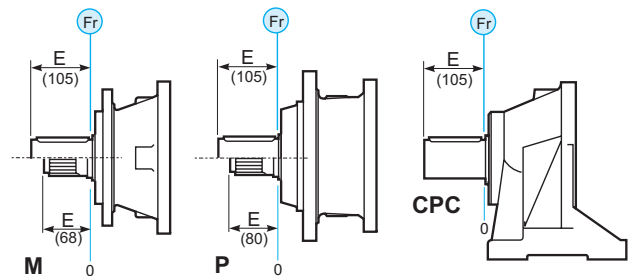
M



P - CPC*



	$n \times h$				
	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.

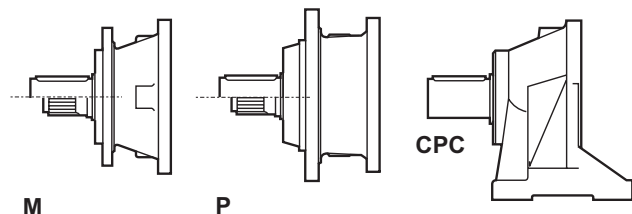
CHARGES AXIALES (Fa)

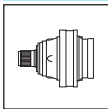
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

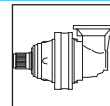




PG 500

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h 10.000	n ₂ x h 20.000	n ₂ x h 50.000	n ₂ x h 100.000			M	P	CPC	F	FS
PG 501	3.77	5.77	5.11	4.35	3.85	2800	20	33	42	46	25	35
	4.12	5.26	4.66	3.97	3.51							
	5.16	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	13.4	5.77	5.11	4.35	3.85	2800	15	41	50	54	32	43
	16.1	5.77	5.11	4.35	3.85							
	18.3	4.30	3.81	3.24	2.87							
	23.1	5.26	4.66	3.97	3.51							
	28.9	4.30	3.81	3.24	2.87							
	34.8	4.30	3.81	3.24	2.87							
	40.5	3.77	3.34	2.84	2.52							
	48.9	2.95	2.61	2.22	1.97							
PG 503	52.1	5.26	4.66	3.97	3.51	2800	10	47	56	60	38	49
	57.5	5.77	5.11	4.35	3.85							
	62.8	5.26	4.66	3.97	3.51							
	75.2	5.77	5.11	4.35	3.85							
	82.1	5.26	4.66	3.97	3.51							
	90.6	5.77	5.11	4.35	3.85							
	98.9	5.26	4.66	3.97	3.51							
	119.3	5.26	4.66	3.97	3.51							
	129.3	5.26	4.66	3.97	3.51							
	149.4	4.30	3.81	3.24	2.87							
	155.9	5.26	4.66	3.97	3.51							
	162.0	4.30	3.81	3.24	2.87							
	173.5	3.77	3.34	2.84	2.52							
	195.2	4.30	3.81	3.24	2.87							
	235.4	4.30	3.81	3.24	2.87							
	273.3	3.77	3.34	2.84	2.52							
	302.2	4.30	3.81	3.24	2.87							
	330.3	2.95	2.61	2.22	1.97							
PG 504	351.9	5.26	4.66	3.97	3.51	2800	6	53	62	66	44	55
	365.7	4.30	3.81	3.24	2.87							
	388.5	5.77	5.11	4.35	3.85							
	413.8	5.77	5.11	4.35	3.85							
	424.2	5.26	4.66	3.97	3.51							
	468.3	5.77	5.11	4.35	3.85							
	511.4	5.26	4.66	3.97	3.51							
	554.3	5.26	4.66	3.97	3.51							
	611.9	5.77	5.11	4.35	3.85							
	668.2	5.26	4.66	3.97	3.51							
	737.6	5.77	5.11	4.35	3.85							
	805.4	5.26	4.66	3.97	3.51							
	857.9	5.26	4.66	3.97	3.51							
	907.3	4.30	3.81	3.24	2.87							
	1052.4	5.26	4.66	3.97	3.51							
	1121.1	5.26	4.66	3.97	3.51							
	1318.2	4.30	3.81	3.24	2.87							
	1588.9	4.30	3.81	3.24	2.87							
	1845.2	3.77	3.34	2.84	2.52							

PG 500

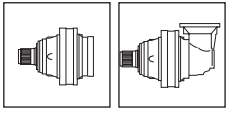


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 502	13.0	5.77	5.11	4.35	3.85	2800	15	51	60	64	43	53
	14.2	5.26	4.66	3.97	3.51							
	17.8	4.30	3.81	3.24	2.87							
	20.5	5.77	5.11	4.35	3.85							
	22.4	5.26	4.66	3.97	3.51							
	28.1	4.30	3.81	3.24	2.87							
	32.6	3.77	3.34	2.84	2.52							
	39.7	2.95	2.61	2.22	1.97							
PGA 503	39.3	5.77	5.11	4.35	3.85	2800	10	59	68	72	50	61
	47.4	5.77	5.11	4.35	3.85							
	53.8	4.30	3.81	3.24	2.87							
	67.7	5.26	4.66	3.97	3.51							
	75.4	3.77	3.34	2.84	2.52							
	84.8	4.30	3.81	3.24	2.87							
	91.1	2.95	2.61	2.22	1.97							
	102.2	4.30	3.81	3.24	2.87							
	118.7	3.77	3.34	2.84	2.52							
	143.5	2.95	2.61	2.22	1.97							
PGA 504	140.0	5.77	5.11	4.35	3.85	2800	6	65	74	78	56	67
	168.8	5.77	5.11	4.35	3.85							
	184.3	5.26	4.66	3.97	3.51							
	220.6	5.77	5.11	4.35	3.85							
	240.9	5.26	4.66	3.97	3.51							
	265.9	5.77	5.11	4.35	3.85							
	290.3	5.26	4.66	3.97	3.51							
	320.5	5.77	5.11	4.35	3.85							
	350.0	5.26	4.66	3.97	3.51							
	422.3	3.77	3.34	2.84	2.52							
	449.4	5.26	4.66	3.97	3.51							
	475.2	4.30	3.81	3.24	2.87							
	509.1	3.77	3.34	2.84	2.52							
	551.9	3.77	3.34	2.84	2.52							
	615.2	2.95	2.61	2.22	1.97							
	665.2	3.77	3.34	2.84	2.52							
	735.5	4.30	3.81	3.24	2.87							
	801.8	3.77	3.34	2.84	2.52							
	1244.0	2.95	2.61	2.22	1.97							



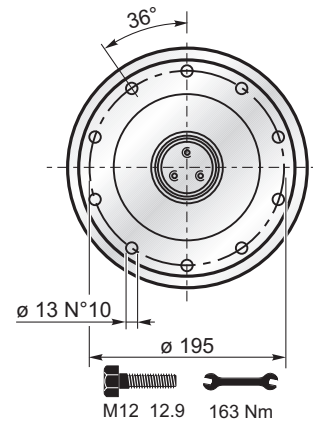
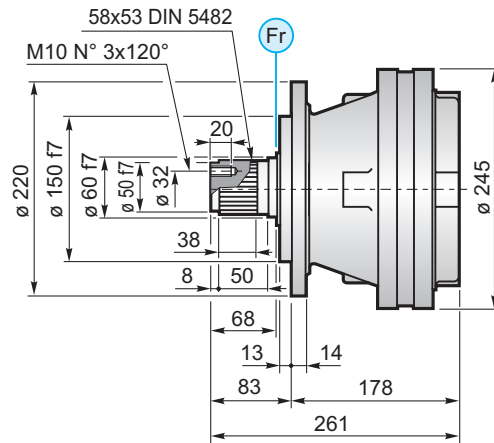
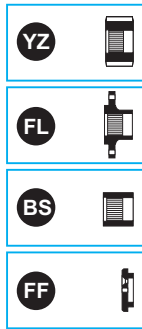
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

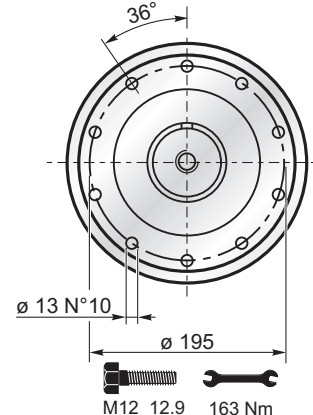
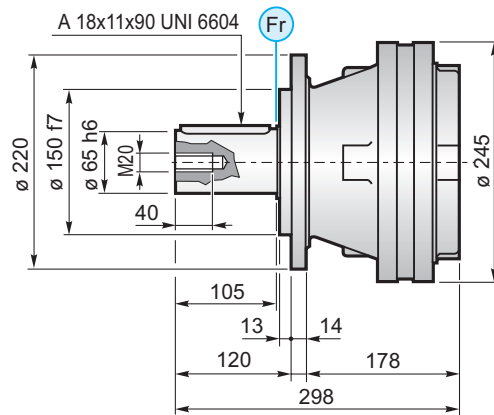


PG 500

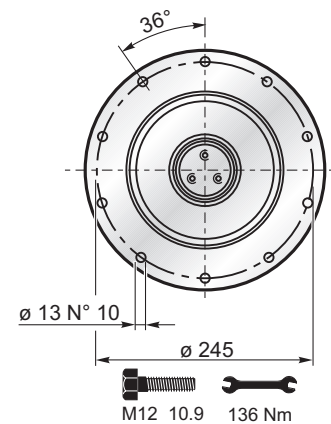
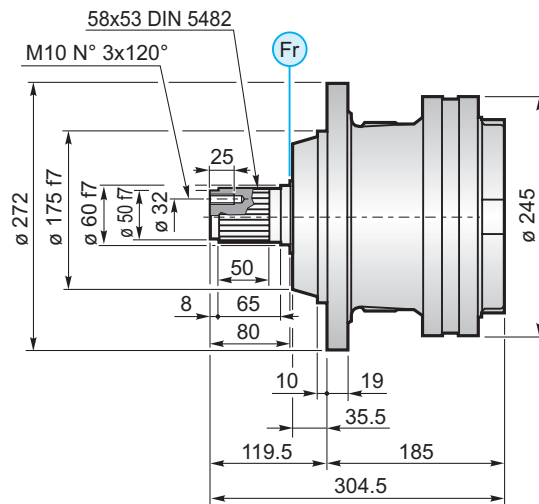
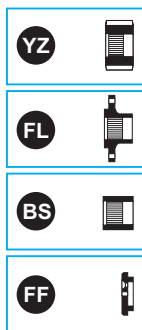
MS



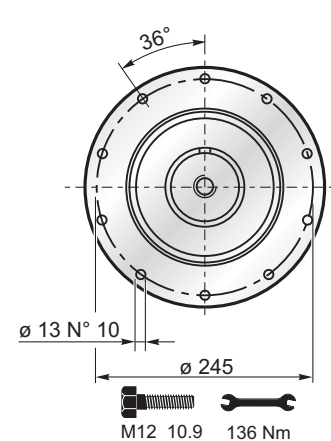
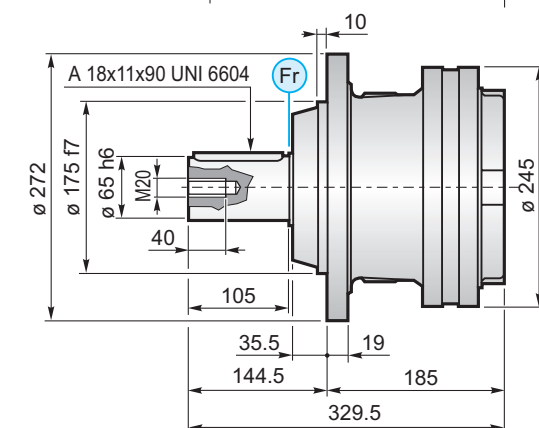
MC



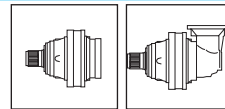
PS



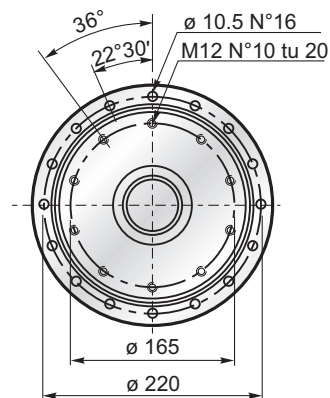
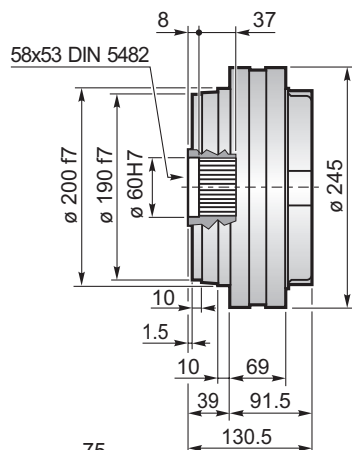
PC



PG 500

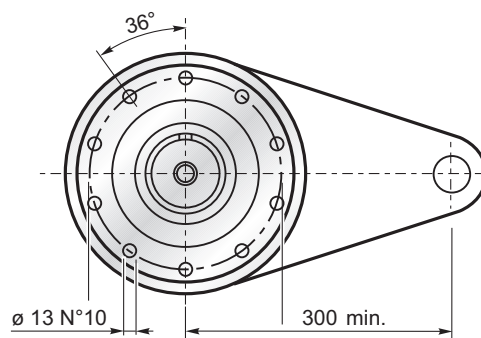
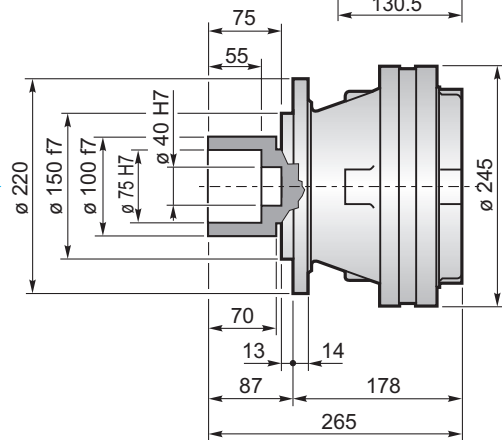
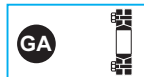


F

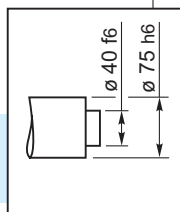


M12 12.9 163 Nm

FS



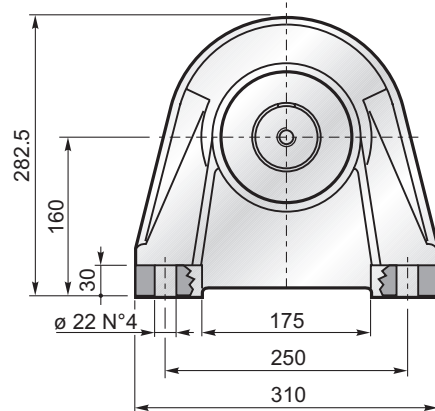
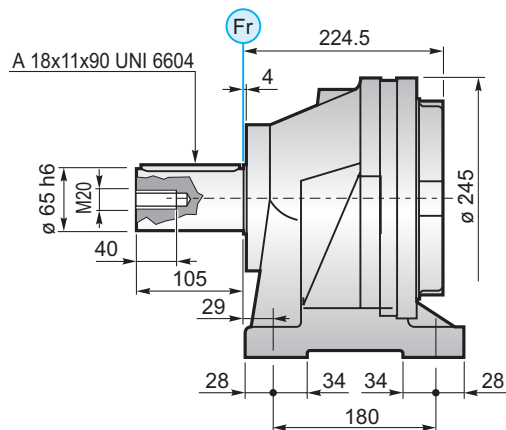
M12 12.9 163 Nm



$M_{max} = 7.5 \text{ kNm}$

La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

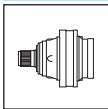
CPC



M20 12.9 770 Nm

FL YZ BS FF KB GA → 72

SOM



PG 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	•			•

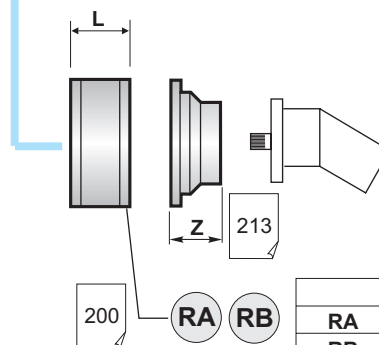
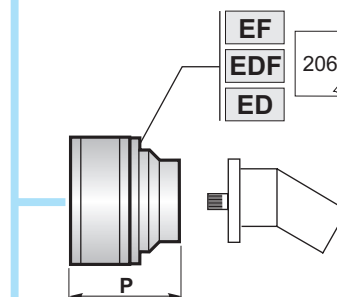
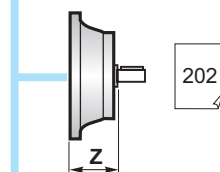
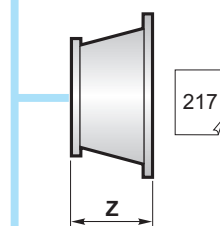
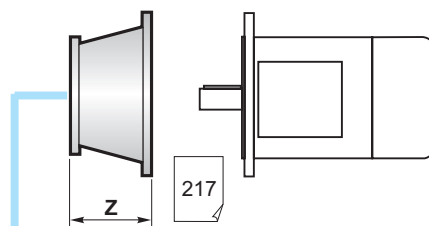
	PG ...F					
	A	B	RA	RB	EF	EDF
PG 501	91.5	130.5	•	o	•	
PG 502	152.5	191.5	•			•
PG 503	200.5	239.5	•			•
PG 504	248.5	287.5	•			•

	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	•			•

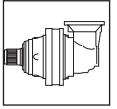


A+13.5	B+13.5	o
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RA	L
81	
RB	
125	

PG 500



	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	•		•

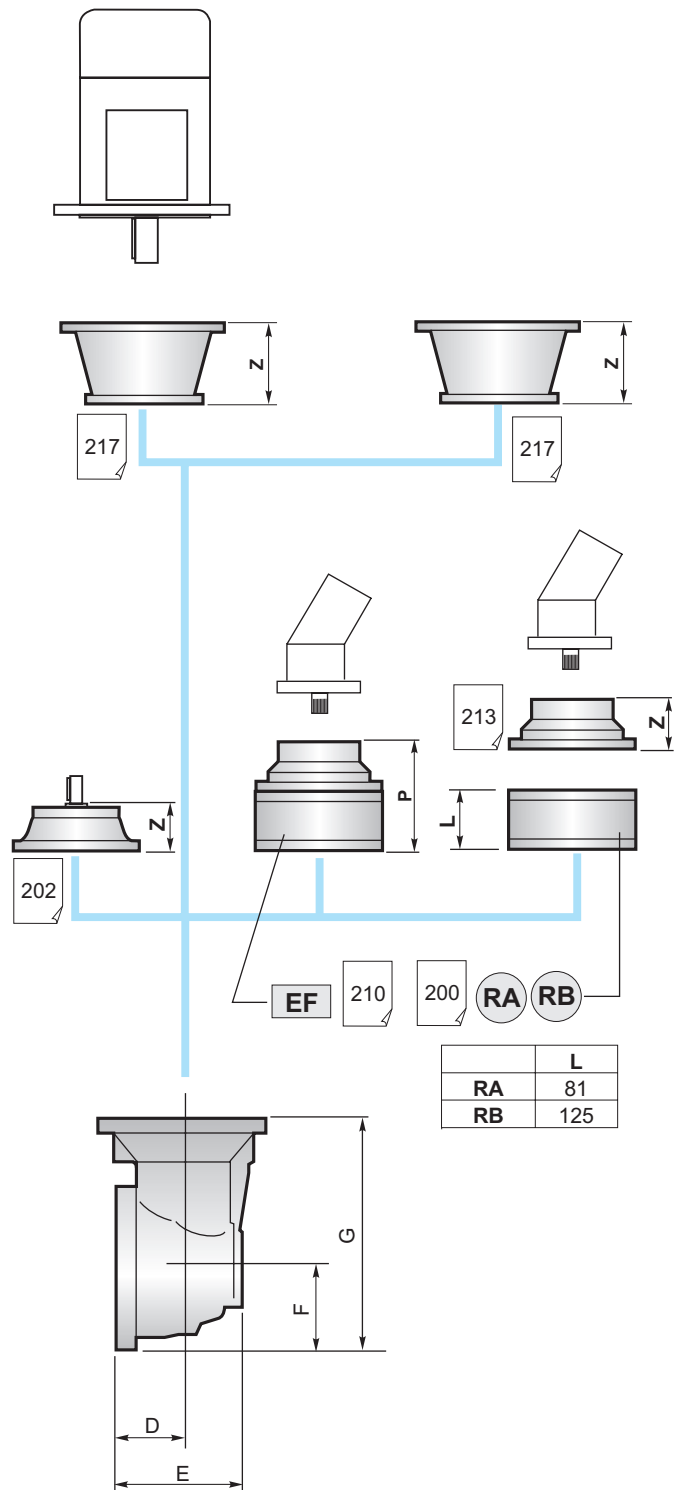
	PGA ...PS					
		A	B	RA	RB	EF
	PGA 502	286.5	240	•		•
	PGA 503	321	159	•		•
	PGA 504	369	159	•		•

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

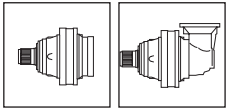
	PGA ...F					
		A	B	RA	RB	EF
	PGA 502	193	240	•		•
	PGA 503	227.5	159	•		•
	PGA 504	275.5	159	•		•

	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	•		•

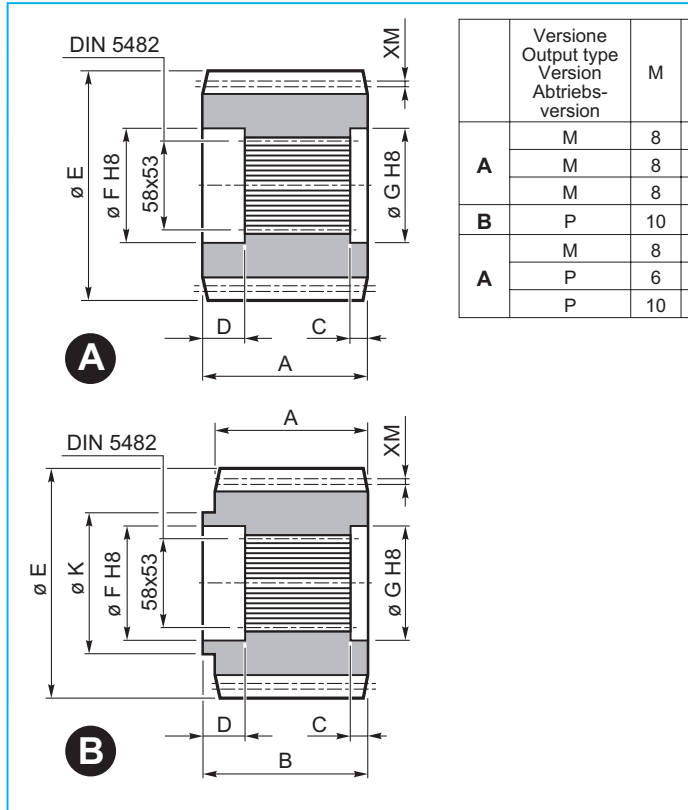


	D	E	F	G
PGA 502	88	164	140	380
PGA 503	75	141.5	93	252
PGA 504	75	141.5	93	252



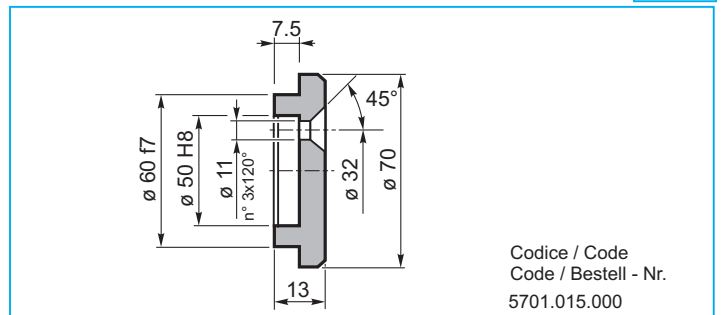
PG 500

YZ Pignoni / Pinion
Pignon / Ritzel

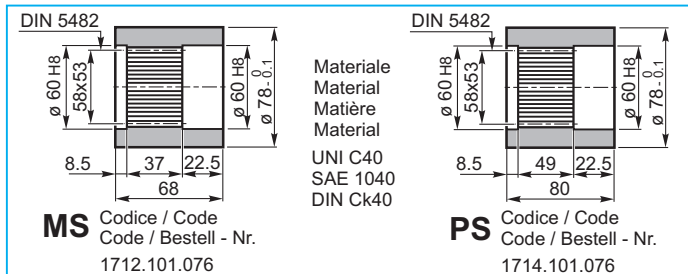


	Versione Output type Version Abtriebs- version	M	Z	XM	A	B	C	D	E	F	G	K	Materiale Material Matière Material	Codice Code Code Bestell - Nr.
A	M	8	13	0	68	—	8.5	22.5	120	60	60	—	18NiCrMo5	1701.218.042
	M	8	11	5	68	—	8.5	22.5	110.8	60	60	—	38NiCrMo4	1701.258.042
	M	8	12	0	68	—	8	21	112.8	60	60	—	38NiCrMo4	1701.196.042
B	P	10	14	3.2	103	116	8.5	22.5	162.4	60	60	105	18NiCrMo5	1701.298.042
A	M	8	15	0	68	—	8.5	22.5	136	60	60	—	38NiCrMo4	1701.163.042
	P	6	14	3	95	—	23	21	99.6	60	60	—	38NiCrMo4	1701.160.042
	P	10	11	8	90	—	8.5	22.5	142.1	60	60	—	18NiCrMo5	1701.297.042

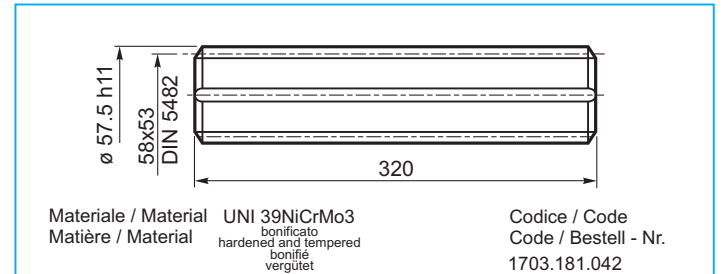
FF Fondello di arresto / Stop bottom plate
Bouchon de fermeture / Endscheibe



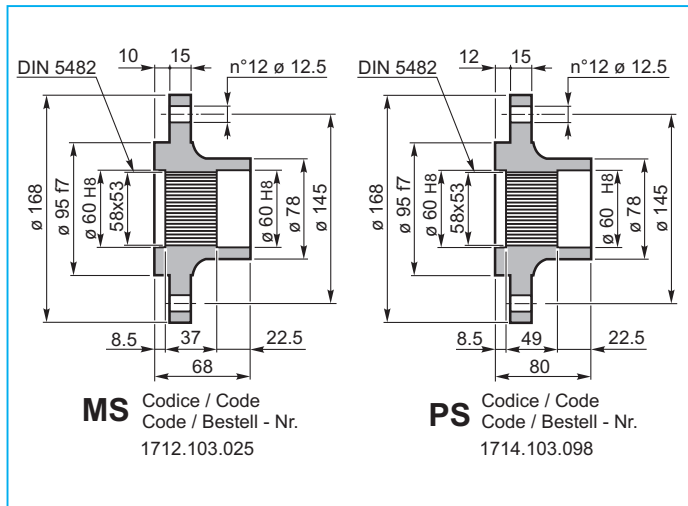
BS Boccola scanalata / Splined bushing
Moyeu cannelé / Innenverzahnte Buchse



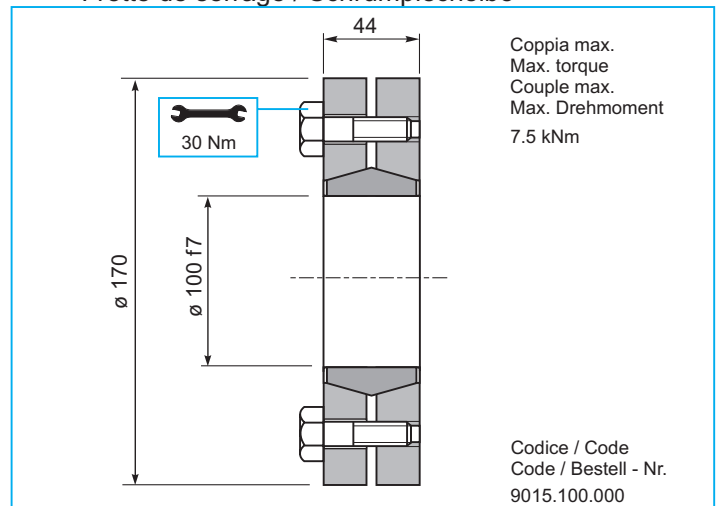
KB Barra scanalata / Splined rod
Arbre cannelé / Außenverzahnte Welle



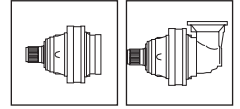
FL Flangia / Flange
Bride / Flansch



GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe



PG 500



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

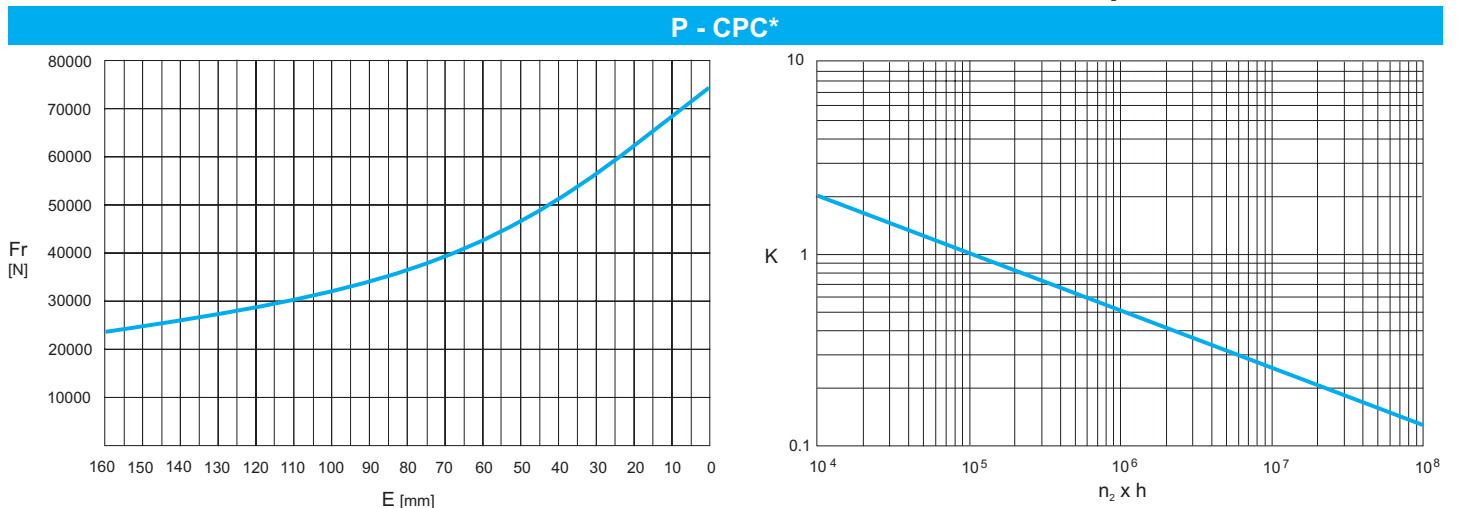
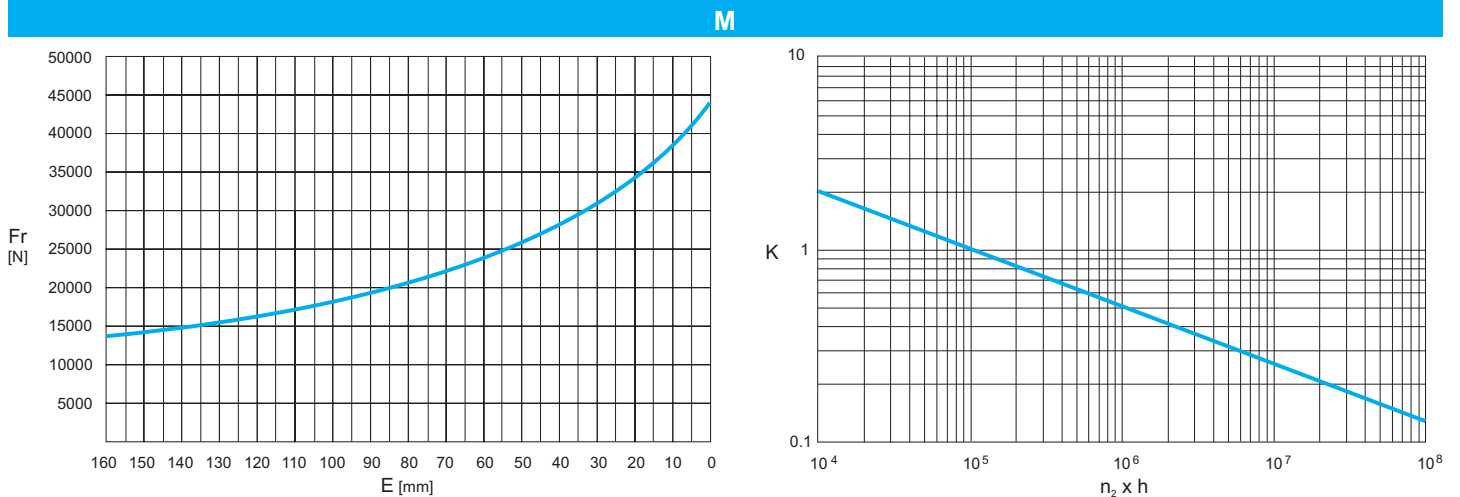
The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

CHARGES RADIALES (Fr)

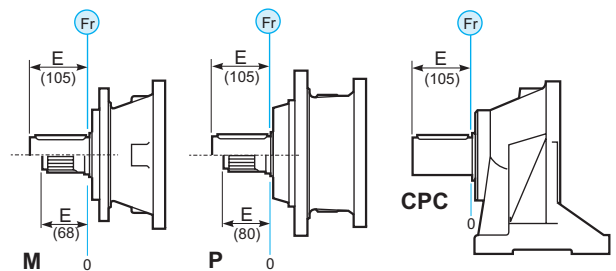
Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.



	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.

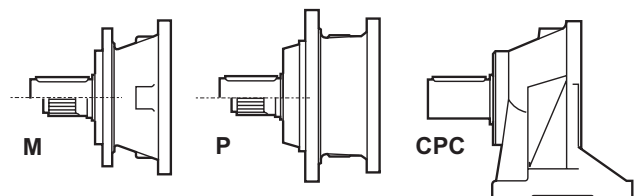
CHARGES AXIALES (Fa)

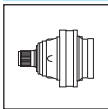
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

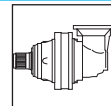




PG 700

	i	M _c [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 701	3.66	7.93	7.02	5.97	5.29	2800	30	—	67	83	49	70
	4.42	7.24	6.41	5.45	4.83							
	5.00	6.36	5.63	4.79	4.24							
	5.80	5.38	4.76	4.05	3.59							
	7.00	4.35	3.85	3.28	2.90							
PG 702	13.8	7.93	7.02	5.97	5.29	2800	18	—	79	95	61	82
	18.2	7.24	6.41	5.45	4.83							
	20.6	6.36	5.63	4.79	4.24							
	22.8	7.24	6.41	5.45	4.83							
	26.5	7.24	6.41	5.45	4.83							
	30.0	6.36	5.63	4.79	4.24							
	36.2	6.36	5.63	4.79	4.24							
	42.0	5.38	4.76	4.05	3.59							
	50.7	4.35	3.85	3.28	2.90							
PG 703	53.7	7.93	7.02	5.97	5.29	2800	14	—	85	101	67	88
	64.8	7.93	7.02	5.97	5.29							
	71.6	7.24	6.41	5.45	4.83							
	78.2	7.24	6.41	5.45	4.83							
	88.3	6.36	5.63	4.79	4.24							
	93.6	7.24	6.41	5.45	4.83							
	102.1	7.93	7.02	5.97	5.29							
	112.9	7.24	6.41	5.45	4.83							
	127.8	7.93	7.02	5.97	5.29							
	139.2	6.36	5.63	4.79	4.24							
	148.7	7.24	6.41	5.45	4.83							
	155.3	6.36	5.63	4.79	4.24							
	174.3	6.36	5.63	4.79	4.24							
	194.8	5.38	4.76	4.05	3.59							
	216.7	7.24	6.41	5.45	4.83							
	244.6	6.36	5.63	4.79	4.24							
	283.8	5.38	4.76	4.05	3.59							
	342.5	4.35	3.85	3.28	2.90							
PG 704	301.1	7.93	7.02	5.97	5.29	2800	8	—	91	107	73	94
	332.4	7.93	7.02	5.97	5.29							
	347.9	7.93	7.02	5.97	5.29							
	400.6	7.93	7.02	5.97	5.29							
	434.3	7.93	7.02	5.97	5.29							
	474.3	7.93	7.02	5.97	5.29							
	523.5	7.93	7.02	5.97	5.29							
	571.7	7.93	7.02	5.97	5.29							
	632.7	7.24	6.41	5.45	4.83							
	661.8	7.24	6.41	5.45	4.83							
	747.3	6.36	5.63	4.79	4.24							
	768.6	7.24	6.41	5.45	4.83							
	832.3	7.24	6.41	5.45	4.83							
	869.9	6.36	5.63	4.79	4.24							
	976.4	6.36	5.63	4.79	4.24							
	1048.6	6.36	5.63	4.79	4.24							
	1177.0	6.36	5.63	4.79	4.24							
	1366.8	6.36	5.63	4.79	4.24							
	1651.4	6.36	5.63	4.79	4.24							
	2968.8	4.35	3.85	3.28	2.90							

PG 700

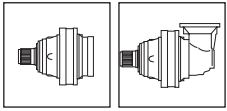


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 702	12.6	7.93	7.02	5.97	5.29	2800	18	—	104	120	86	107
	15.2	7.24	6.41	5.45	4.83							
	17.2	6.36	5.63	4.79	4.24							
	20.0	5.38	4.76	4.05	3.59							
	24.1	7.24	6.41	5.45	4.83							
	27.2	6.36	5.63	4.79	4.24							
	31.5	5.38	4.76	4.05	3.59							
	38.1	4.35	3.85	3.28	2.90							
PGA 703	53.8	7.24	6.41	5.45	4.83	2800	14	—	94	110	76	97
	55.5	7.24	6.41	5.45	4.83							
	60.4	6.36	5.63	4.79	4.24							
	67.1	7.24	6.41	5.45	4.83							
	77.9	7.24	6.41	5.45	4.83							
	87.9	6.36	5.63	4.79	4.24							
	94.1	7.24	6.41	5.45	4.83							
	106.3	6.36	5.63	4.79	4.24							
	123.3	5.38	4.76	4.05	3.59							
	148.8	4.35	3.85	3.28	2.90							
PGA 704	157.7	7.93	7.02	5.97	5.29	2800	8	—	100	116	82	103
	174.1	7.93	7.02	5.97	5.29							
	190.1	7.93	7.02	5.97	5.29							
	210.3	7.24	6.41	5.45	4.83							
	229.6	7.24	6.41	5.45	4.83							
	248.4	7.93	7.02	5.97	5.29							
	274.8	7.24	6.41	5.45	4.83							
	300.7	7.24	6.41	5.45	4.83							
	331.2	7.24	6.41	5.45	4.83							
	361.6	7.24	6.41	5.45	4.83							
	393.0	5.38	4.76	4.05	3.59							
	453.0	7.24	6.41	5.45	4.83							
	511.4	6.36	5.63	4.79	4.24							
	557.0	5.38	4.76	4.05	3.59							
	593.9	6.36	5.63	4.79	4.24							
	656.7	6.36	5.63	4.79	4.24							
	717.7	6.36	5.63	4.79	4.24							
	832.5	5.38	4.76	4.05	3.59							
	921.5	6.36	5.63	4.79	4.24							
	1068.9	5.38	4.76	4.05	3.59							



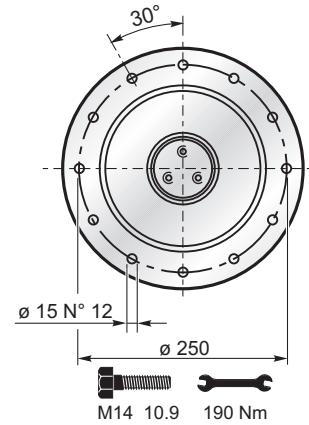
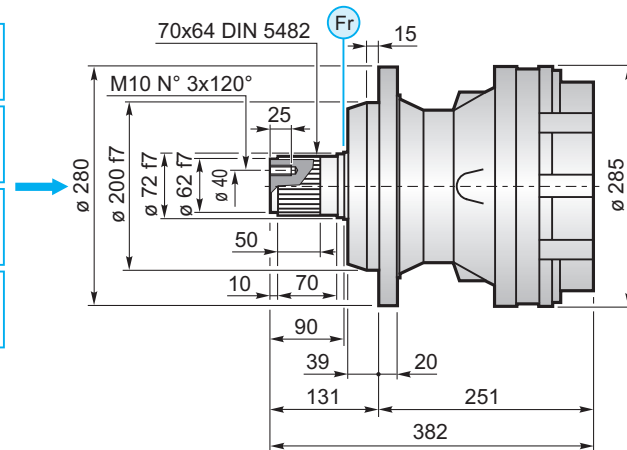
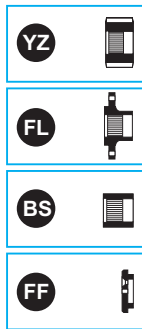
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

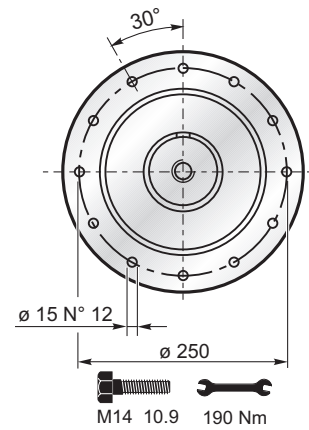
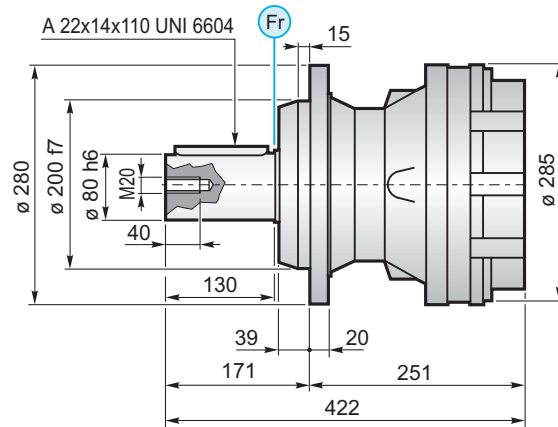


PG 700

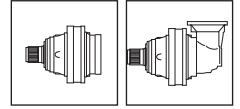
PS



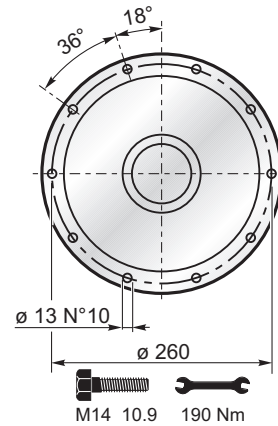
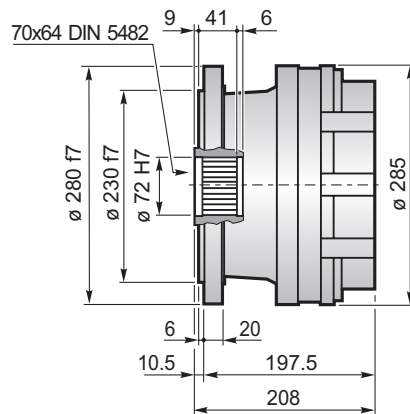
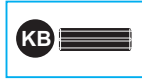
PC



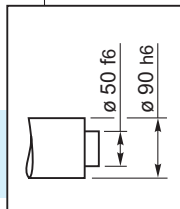
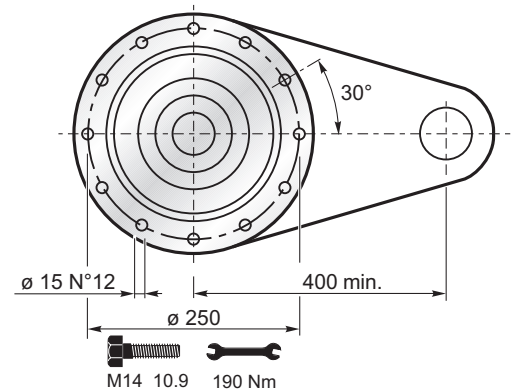
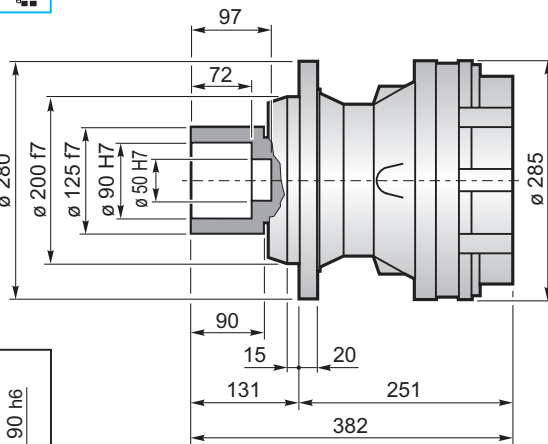
PG 700



F



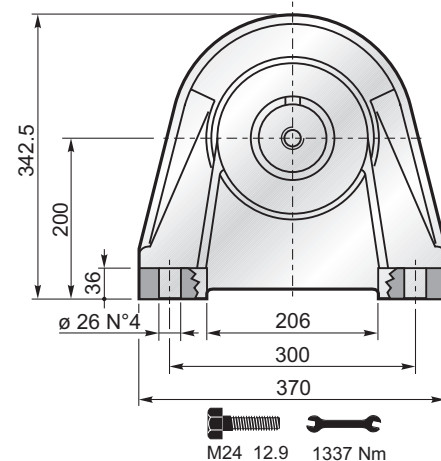
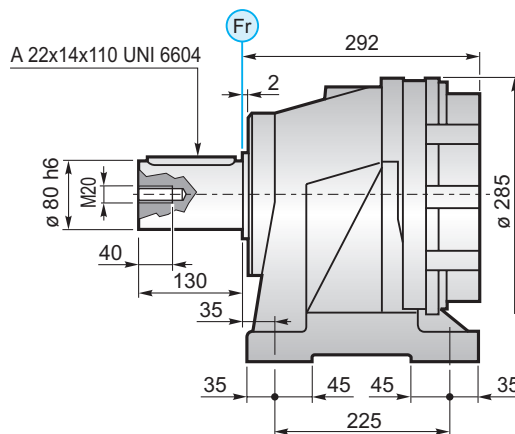
FS



$M_{max} = 13 \text{ kNm}$

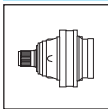
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

CPC



FL YZ BS FF KB GA → 80

SOM



PG 700

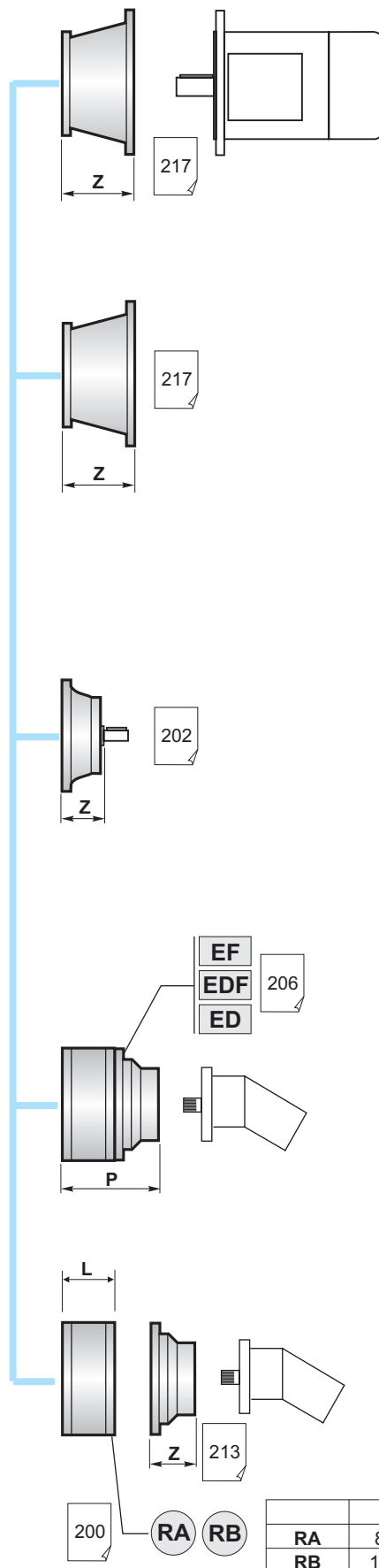
	PG		...PS			
	A	B	RA	RB	EF	EDF
PG 701	251	382		•		
PG 702	310.5	441.5	•	o	•	
PG 703	358.5	489.5	•			•
PG 704	406.5	537.5	•			•

	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	267.5	•	o	•	
PG 703	305	315.5	•			•
PG 704	353	363.5	•			•

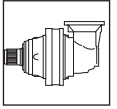
	PG		...FS			
	A	B	RA	RB	EF	EDF
PG 701	251	382		•		
PG 702	310.5	441.5	•	o	•	
PG 703	358.5	489.5	•			•
PG 704	406.5	537.5	•			•

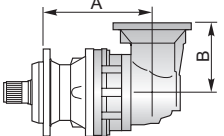
	PG		...CPC			
	A	B	RA	RB	EF	EDF
PG 701	292	422		•		
PG 702	351.5	481.5	•	o	•	
PG 703	399.5	529.5	•			•
PG 704	447.5	577.5	•			•

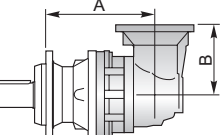


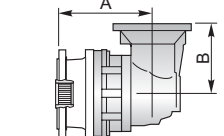
A+13.5	B+13.5	o
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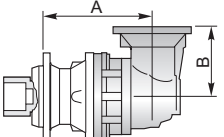
PG 700

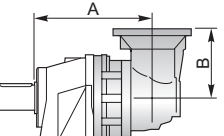


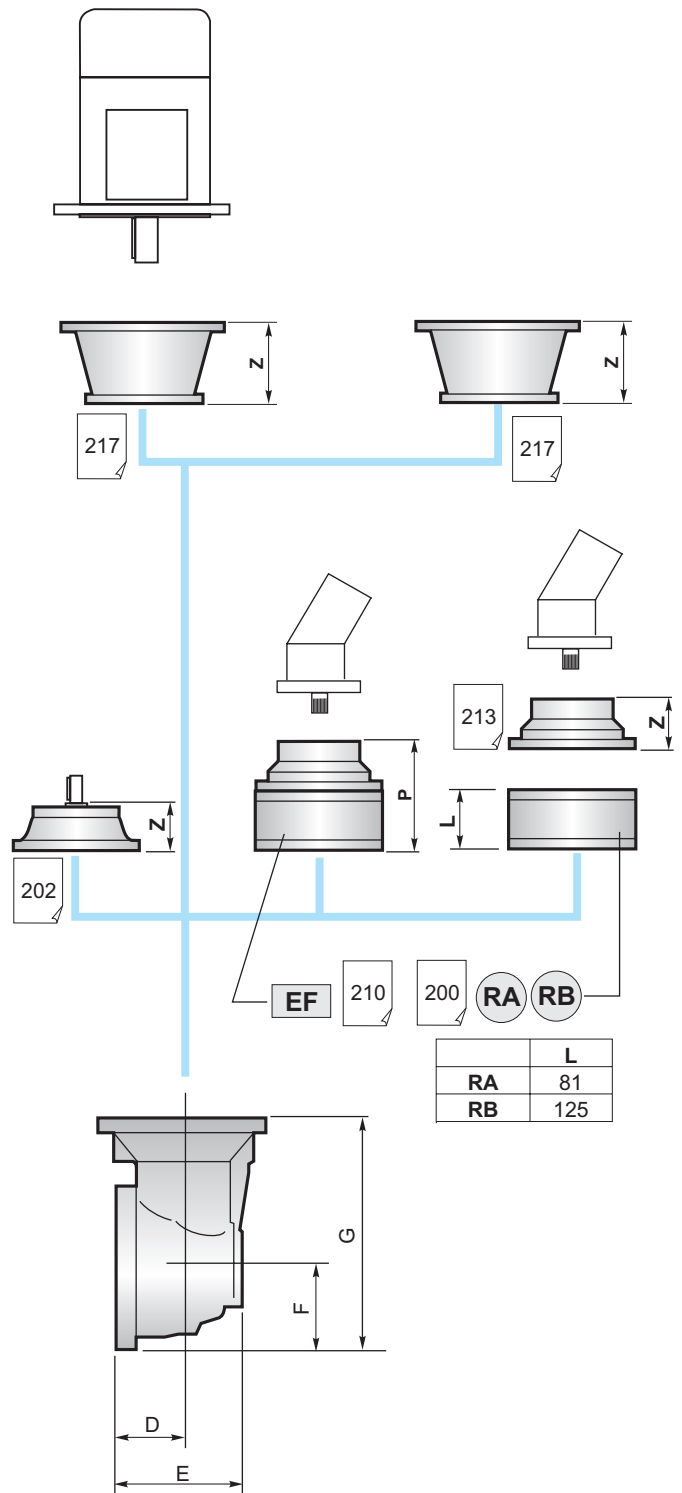
	PGA ...PS				
	A	B	RA	RB	EF
PGA 702	339	240	•	o	•
PGA 703	385.5	159	•	•	•
PGA 704	433.5	159	•	•	•

	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	•	•	•

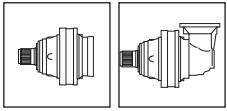
	PGA ...CPC				
	A	B	RA	RB	EF
PGA 702	380	240	•	o	•
PGA 703	426.5	159	•	•	•
PGA 704	474.5	159	•	•	•



	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



PG 700

YZ Pignoni / Pinion
Pignon / Ritzel



A

	Versione Output type Version Abtriebs- version	M	Z	XM	A	B	C	D	E	F	G	K	Materiale Material Matière Material	Codice Code Code Bestell - Nr.
A	P	10	11	8.06	90	—	10	31	142.1	72	72	—	18NiCrMo5	1701.267.042
B	P	10	11	8.06	90	99	18.5	31	142.1	72	72	84	18NiCrMo5	1701.285.042
A	P	10	12	0	90	—	10	31	140	72	72	—	38NiCrMo4	1701.166.042
A	P	10	13	0	90	—	10	30	155	72	72	—	38NiCrMo4	1701.201.042

B

FF Fondello di arresto / Stop bottom plate
Bouchon de fermeture / Endscheibe



Codice / Code
Code / Bestell - Nr.
5701.012.000

BS Boccola scanalata / Splined bushing
Moyeu cannelé / Innenverzahnte Buchse



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

Codice / Code
Code / Bestell - Nr.
1715.102.076

KB Barra scanalata / Splined rod
Arbre cannelé / Außenverzahnte Welle



Materiale / Material
Matière / Material
UNI 39NiCrMo3
bonificato
hardened and tempered
bonifié
vergütet

Codice / Code
Code / Bestell - Nr.
1703.405.042

FL Flangia / Flange
Bride / Flansch



Codice / Code
Code / Bestell - Nr.
1715.108.098

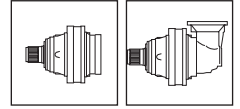
GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
13 kNm

Codice / Code
Code / Bestell - Nr.
9015.125.000

PG 700



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

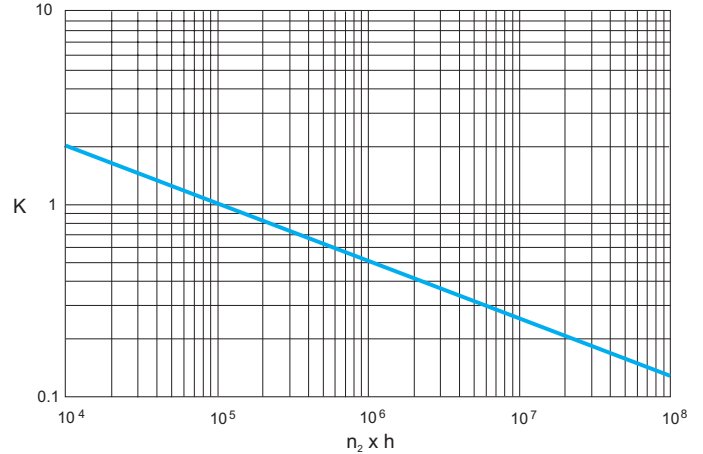
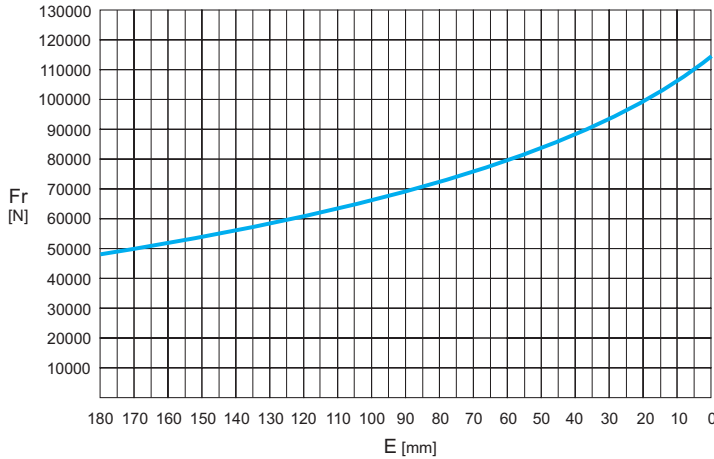
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

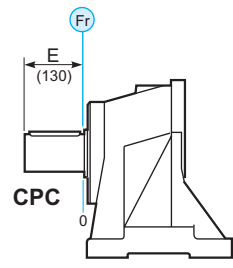
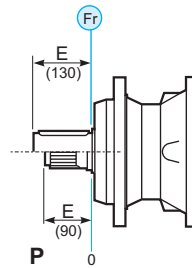
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

P - CPC*



	$n \times h$				
	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.

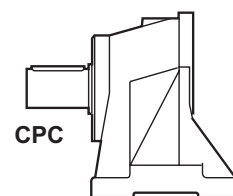
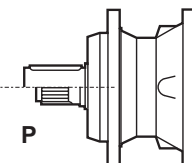
CHARGES AXIALES (Fa)

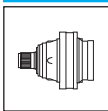
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

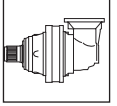




PG 1000

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 1001	3.55	13.80	12.21	10.39	9.20	2000	40	97	—	147	65	102
	4.28	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							
	8.66	4.98	4.41	3.75	3.32							
PG 1002	13.4	13.80	12.21	10.39	9.20	2800	23	113	—	163	81	118
	16.1	11.86	10.50	8.94	7.91							
	18.3	13.80	12.21	10.39	9.20							
	22.1	11.86	10.50	8.94	7.91							
	25.7	11.86	10.50	8.94	7.91							
	28.9	9.22	8.16	6.94	6.15							
	33.6	9.22	8.16	6.94	6.15							
	40.5	7.04	6.23	5.30	4.69							
	48.9	7.04	6.23	5.30	4.69							
PG 1003	57.5	13.80	12.21	10.39	9.20	2800	15	121	—	171	89	126
	62.8	13.80	12.21	10.39	9.20							
	75.2	13.80	12.21	10.39	9.20							
	82.1	13.80	12.21	10.39	9.20							
	94.8	11.86	10.50	8.94	7.91							
	109.2	11.86	10.50	8.94	7.91							
	118.4	9.22	8.16	6.94	6.15							
	123.9	11.86	10.50	8.94	7.91							
	129.3	9.22	8.16	6.94	6.15							
	143.9	11.86	10.50	8.94	7.91							
	155.9	9.22	8.16	6.94	6.15							
	173.5	11.86	10.50	8.94	7.91							
	188.1	9.22	8.16	6.94	6.15							
	195.2	9.22	8.16	6.94	6.15							
	209.7	7.04	6.23	5.30	4.69							
	226.8	9.22	8.16	6.94	6.15							
	235.4	7.04	6.23	5.30	4.69							
	274.0	9.22	8.16	6.94	6.15							
	330.3	7.04	6.23	5.30	4.69							
PG 1004	351.9	13.80	12.21	10.39	9.20	2800	11	127	—	177	95	132
	388.5	13.80	12.21	10.39	9.20							
	421.2	13.80	12.21	10.39	9.20							
	440.8	11.86	10.50	8.94	7.91							
	459.9	13.80	12.21	10.39	9.20							
	507.7	13.80	12.21	10.39	9.20							
	531.4	11.86	10.50	8.94	7.91							
	554.3	13.80	12.21	10.39	9.20							
	576.0	9.22	8.16	6.94	6.15							
	611.9	11.86	10.50	8.94	7.91							
	640.5	11.86	10.50	8.94	7.91							
	724.4	9.22	8.16	6.94	6.15							
	806.4	9.22	8.16	6.94	6.15							
	907.3	9.22	8.16	6.94	6.15							
	1008.8	11.86	10.50	8.94	7.91							
	1093.6	9.22	8.16	6.94	6.15							
	1270.0	9.22	8.16	6.94	6.15							
	1530.9	9.22	8.16	6.94	6.15							
	1849.8	9.22	8.16	6.94	6.15							
	2229.7	7.04	6.23	5.30	4.69							

PG 1000



	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 1002	12.2	13.80	12.21	10.39	9.20	2800	23	134	—	184	102	139
	14.8	11.86	10.50	8.94	7.91							
	19.3	9.22	8.16	6.94	6.15							
	23.3	7.04	6.23	5.30	4.69							
	30.4	9.22	8.16	6.94	6.15							
	36.7	7.04	6.23	5.30	4.69							
PGA 1003	46.4	13.80	12.21	10.39	9.20	2800	15	153	—	203	121	158
	50.6	13.80	12.21	10.39	9.20							
	61.0	11.86	10.50	8.94	7.91							
	73.1	13.80	12.21	10.39	9.20							
	88.8	11.86	10.50	8.94	7.91							
	96.2	11.86	10.50	8.94	7.91							
	116.0	9.22	8.16	6.94	6.15							
	120.5	11.86	10.50	8.94	7.91							
	125.7	9.22	8.16	6.94	6.15							
	139.9	11.86	10.50	8.94	7.91							
	157.5	9.22	8.16	6.94	6.15							
	182.9	9.22	8.16	6.94	6.15							
	221.0	9.22	8.16	6.94	6.15							
	266.4	7.04	6.23	5.30	4.69							
PGA 1004	140.0	13.80	12.21	10.39	9.20	2800	11	136	—	186	104	141
	168.8	13.80	12.21	10.39	9.20							
	184.3	11.86	10.50	8.94	7.91							
	203.5	11.86	10.50	8.94	7.91							
	230.9	13.80	12.21	10.39	9.20							
	265.9	11.86	10.50	8.94	7.91							
	278.3	11.86	10.50	8.94	7.91							
	301.7	13.80	12.21	10.39	9.20							
	320.5	11.86	10.50	8.94	7.91							
	350.0	11.86	10.50	8.94	7.91							
	379.4	9.22	8.16	6.94	6.15							
	418.8	9.22	8.16	6.94	6.15							
	457.3	9.22	8.16	6.94	6.15							
	510.3	9.22	8.16	6.94	6.15							
	551.9	9.22	8.16	6.94	6.15							
	665.2	9.22	8.16	6.94	6.15							
	803.8	9.22	8.16	6.94	6.15							
	968.9	7.04	6.23	5.30	4.69							

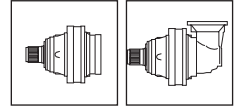


$$M_{\max} = M_c \times 2 \quad (n_2 \times h = 20.000)$$

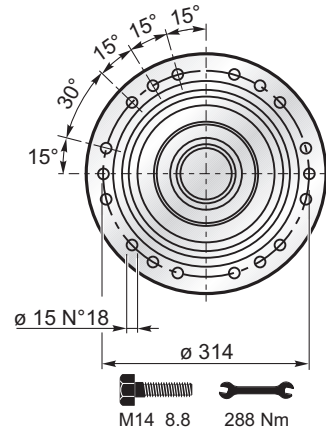
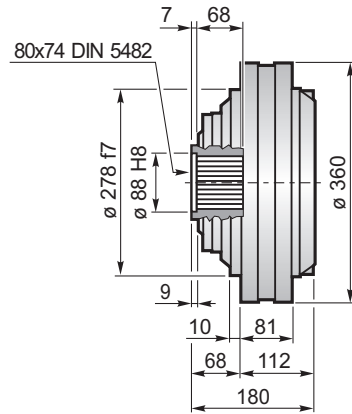


Technical drawing of a circular flange with 12 holes. The drawing shows a top view with a central hole of diameter 17 mm, 12 mounting holes arranged in a circle of diameter 295 mm, and a 36-degree angle between adjacent holes. Below the drawing, a bolt is shown with specifications M14 12.9 and a torque value of 346 Nm.

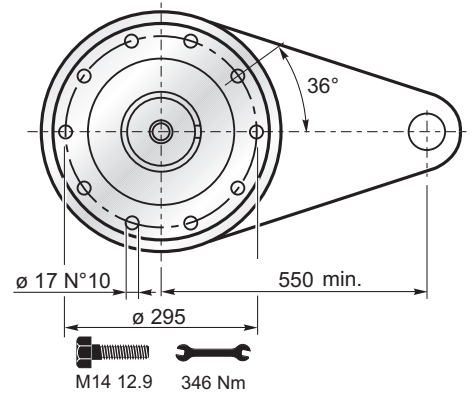
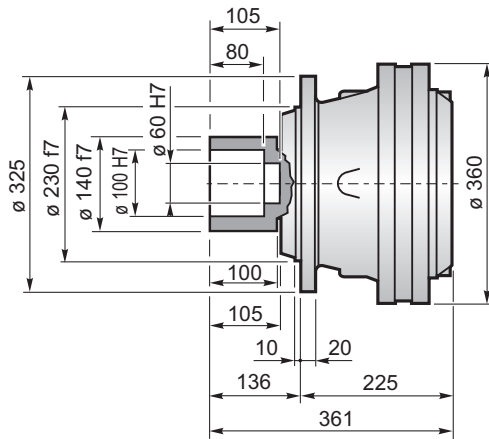
PG 1000



F



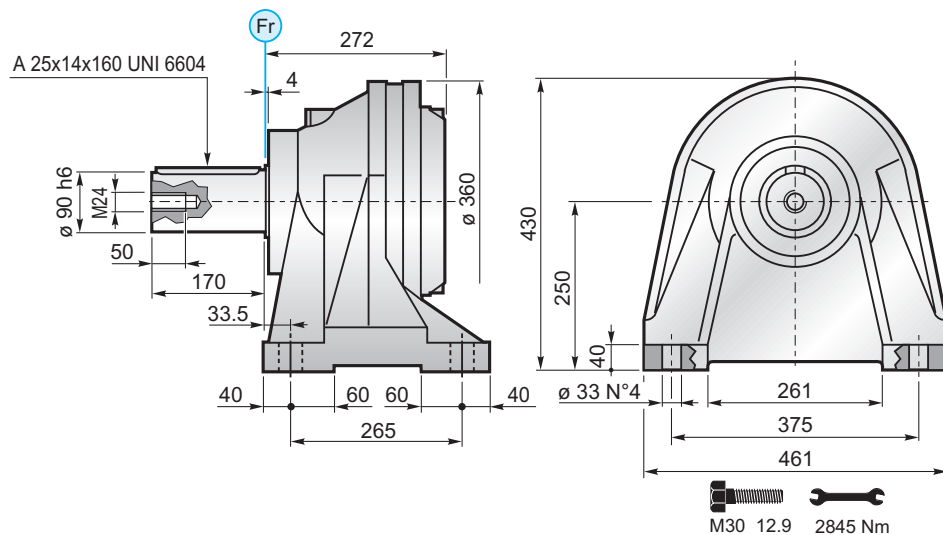
FS



$M_{max} = 17.6 \text{ kNm}$

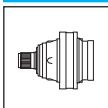
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

CPC

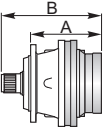


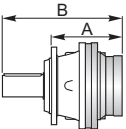
FL YZ BS FF KB GA → 88

SOM

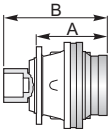


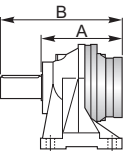
PG 1000

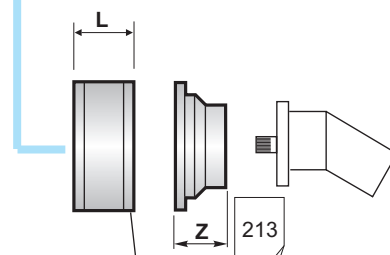
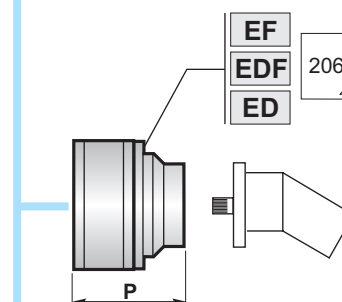
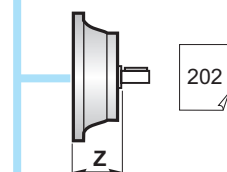
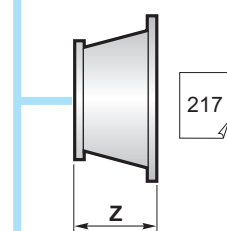
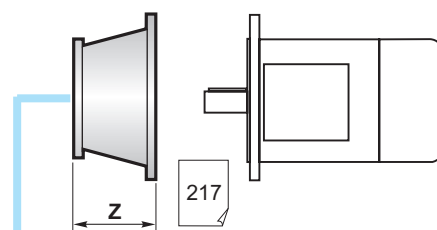
	PG		...MS			
	A	B	RA	RB	EF	EDF
	225	351		•		
PG 1001	225	351		•		
PG 1002	296.5	422.5	•	o	•	
PG 1003	357.5	483.5	•			•
PG 1004	405.5	531.5	•			•

	PG		...MC			
	A	B	RA	RB	EF	EDF
	225	431		•		
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
	112	180		•		
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
	225	361		•		
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
	272	442		•		
PG 1001	272	442		•		
PG 1002	343.5	513.5	•	o	•	
PG 1003	404.5	574.5	•			•
PG 1004	452.5	622.5	•			•

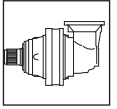


200	RA	RB	L
	RA	RB	81
	RA	RB	125



A+13.5	B+13.5	o
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PG 1000



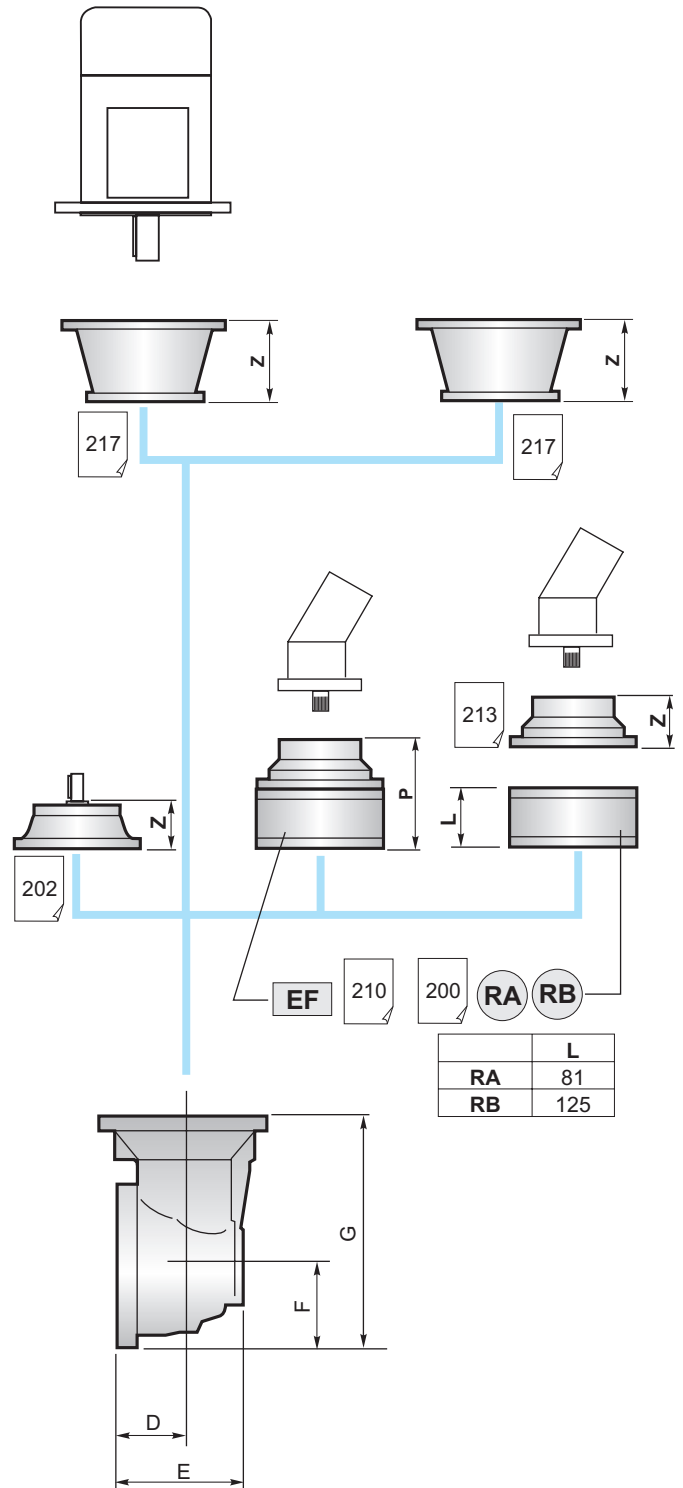
	PGA ...MS					
		A	B	RA	RB	EF
	PGA 1002	313	240	•	o	•
	PGA 1003	398	240	•	o	•
	PGA 1004	432.5	159	•		•

	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	•		•

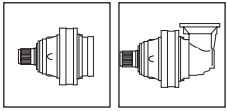
	PGA ...CPC					
		A	B	RA	RB	EF
	PGA 1002	360	240	•	o	•
	PGA 1003	445	240	•	o	•
	PGA 1004	479.5	159	•		•



	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
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PG 1000

YZ Pignoni / Pinion
Pignon / Ritzel



A

	Versione Output type Version Abtriebs- version	M	Z	XM	A	B	C	D	E	F	G	K	Materiale Material Matière Material	Codice Code Code Bestell - Nr.
A	M	10	12	0	90	—	10	31	140	85	80	—	38NiCrMo4	1701.236.042
	M	10	14	0	90	—	10	31	160	85	80	—	38NiCrMo4	1701.238.042
B	M	12	14	3	90	115	25	31	194.5	85	80	130	39NiCrMo3	1701.286.042

B

FF Fondello di arresto / Stop bottom plate
Bouchon de fermeture / Endscheibe



Codice / Code
Code / Bestell - Nr.
5701.030.000

BS Boccola scanalata / Splined bushing
Moyeu cannelé / Innenverzahnte Buchse



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

Codice / Code
Code / Bestell - Nr.
1716.103.076

KB Barra scanalata / Splined rod
Arbre cannelé / Außenverzahnte Welle



Materiale / Material
Matière / Material
UNI 39NiCrMo3
bonificato
hardened and tempered
bonifié
vergütet

Codice / Code
Code / Bestell - Nr.
1703.406.042

FL Flangia / Flange
Bride / Flansch



Codice / Code
Code / Bestell - Nr.
1716.105.098

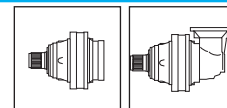
GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
17,6 kNm

Codice / Code
Code / Bestell - Nr.
9015.140.000

PG 1000



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

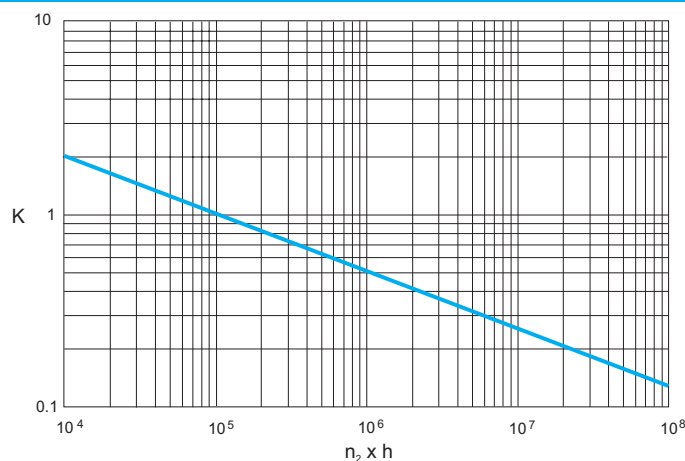
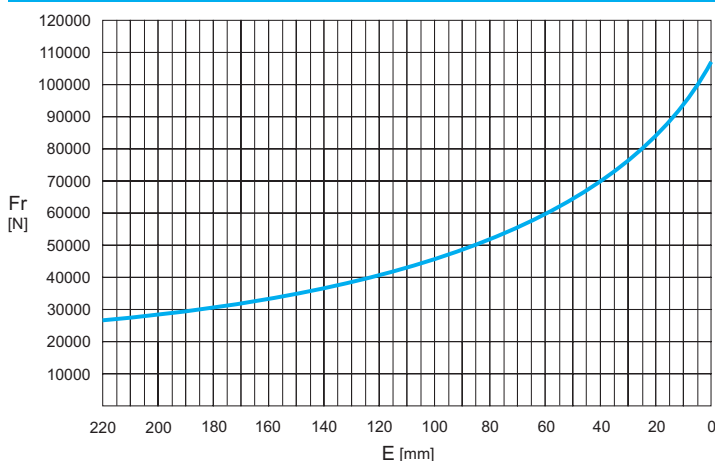
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

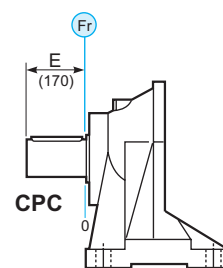
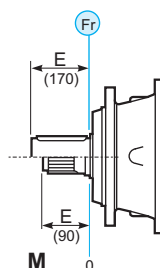
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

M - CPC



	$n \times h$				
	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.

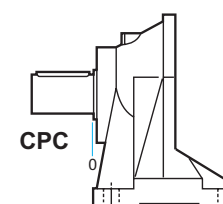
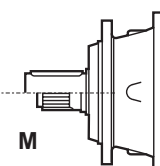
CHARGES AXIALES (Fa)

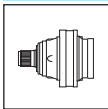
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

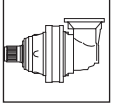




PG 1600

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h 10.000	n ₂ x h 20.000	n ₂ x h 50.000	n ₂ x h 100.000			M	P	CPC	F	FS
PG 1601	3.55	20.36	18.02	15.33	13.57	2000	40	105	132	155	74	110
	4.28	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	13.4	20.36	18.02	15.33	13.57	2800	23	121	148	171	90	126
	16.1	17.74	15.70	13.36	11.83							
	22.1	17.74	15.70	13.36	11.83							
	28.9	13.57	12.01	10.22	9.05							
	33.6	13.57	12.01	10.22	9.05							
	40.5	10.32	9.13	7.77	6.88							
	48.9	10.32	9.13	7.77	6.88							
PG 1603	57.5	20.36	18.02	15.33	13.57	2800	15	129	156	179	98	134
	62.8	20.36	18.02	15.33	13.57							
	75.2	20.36	18.02	15.33	13.57							
	82.1	20.36	18.02	15.33	13.57							
	94.8	17.74	15.70	13.36	11.83							
	109.2	17.74	15.70	13.36	11.83							
	118.4	13.57	12.01	10.22	9.05							
	123.9	17.74	15.70	13.36	11.83							
	129.3	13.57	12.01	10.22	9.05							
	143.9	13.57	12.01	10.22	9.05							
	155.9	13.57	12.01	10.22	9.05							
	188.1	13.57	12.01	10.22	9.05							
	195.2	13.57	12.01	10.22	9.05							
	209.7	10.32	9.13	7.77	6.88							
	226.8	13.57	12.01	10.22	9.05							
	235.4	10.32	9.13	7.77	6.88							
	274.0	13.57	12.01	10.22	9.05							
	330.3	10.32	9.13	7.77	6.88							
PG 1604	351.9	20.36	18.02	15.33	13.57	2800	11	135	162	185	104	140
	388.5	20.36	18.02	15.33	13.57							
	421.2	20.36	18.02	15.33	13.57							
	440.8	17.74	15.70	13.36	11.83							
	459.9	20.36	18.02	15.33	13.57							
	507.7	20.36	18.02	15.33	13.57							
	531.4	17.74	15.70	13.36	11.83							
	554.3	20.36	18.02	15.33	13.57							
	576.0	13.57	12.01	10.22	9.05							
	611.9	17.74	15.70	13.36	11.83							
	640.5	17.74	15.70	13.36	11.83							
	724.4	13.57	12.01	10.22	9.05							
	806.4	13.57	12.01	10.22	9.05							
	907.3	13.57	12.01	10.22	9.05							
	1008.8	17.74	15.70	13.36	11.83							
	1093.6	13.57	12.01	10.22	9.05							
	1270.0	13.57	12.01	10.22	9.05							
	1530.9	13.57	12.01	10.22	9.05							
	1849.8	13.57	12.01	10.22	9.05							
	2229.7	10.32	9.13	7.77	6.88							

PG 1600

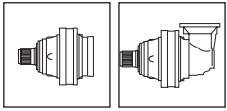


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 1602	12.2	20.36	18.02	15.33	13.57	2800	23	142	169	192	111	147
	14.8	17.74	15.70	13.36	11.83							
	19.3	13.57	12.01	10.22	9.05							
	23.3	10.32	9.13	7.77	6.88							
	30.4	13.57	12.01	10.22	9.05							
	36.7	10.32	9.13	7.77	6.88							
PGA 1603	46.4	20.36	18.02	15.33	13.57	2800	15	161	188	211	130	166
	50.6	20.36	18.02	15.33	13.57							
	61.0	17.74	15.70	13.36	11.83							
	76.5	17.74	15.70	13.36	11.83							
	88.8	17.74	15.70	13.36	11.83							
	96.2	17.74	15.70	13.36	11.83							
	116.0	13.57	12.01	10.22	9.05							
	120.5	17.74	15.70	13.36	11.83							
	125.7	13.57	12.01	10.22	9.05							
	139.9	17.74	15.70	13.36	11.83							
	157.5	13.57	12.01	10.22	9.05							
	182.9	13.57	12.01	10.22	9.05							
	221.0	13.57	12.01	10.22	9.05							
	226.4	10.32	9.13	7.77	6.88							
PGA 1604	140.0	20.36	18.02	15.33	13.57	2800	11	144	171	194	113	149
	168.8	20.36	18.02	15.33	13.57							
	184.3	17.74	15.70	13.36	11.83							
	203.5	17.74	15.70	13.36	11.83							
	230.9	17.74	15.70	13.36	11.83							
	240.9	13.57	12.01	10.22	9.05							
	290.4	17.74	15.70	13.36	11.83							
	301.7	13.57	12.01	10.22	9.05							
	320.6	17.74	15.70	13.36	11.83							
	347.5	13.57	12.01	10.22	9.05							
	379.4	13.57	12.01	10.22	9.05							
	418.8	13.57	12.01	10.22	9.05							
	457.3	13.57	12.01	10.22	9.05							
	510.3	13.57	12.01	10.22	9.05							
	551.9	13.57	12.01	10.22	9.05							
	665.2	13.57	12.01	10.22	9.05							
	803.8	13.57	12.01	10.22	9.05							
	968.9	10.32	9.13	7.77	6.88							



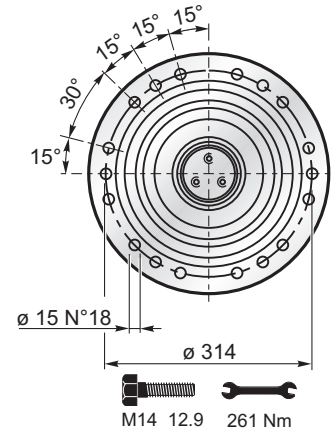
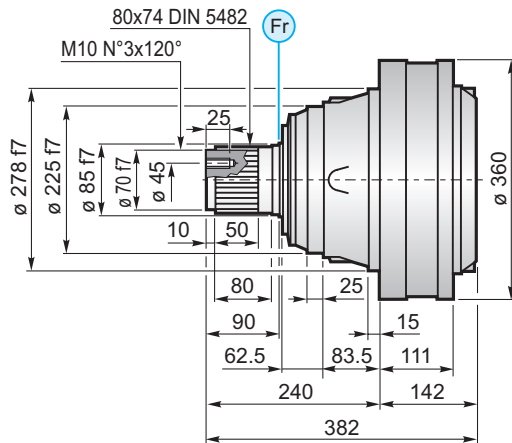
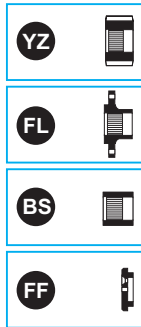
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

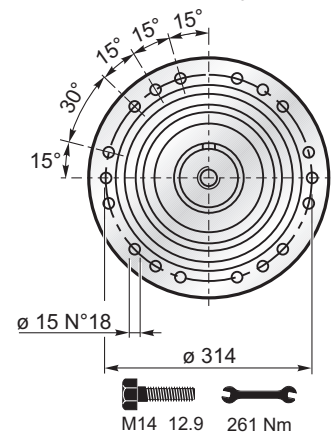
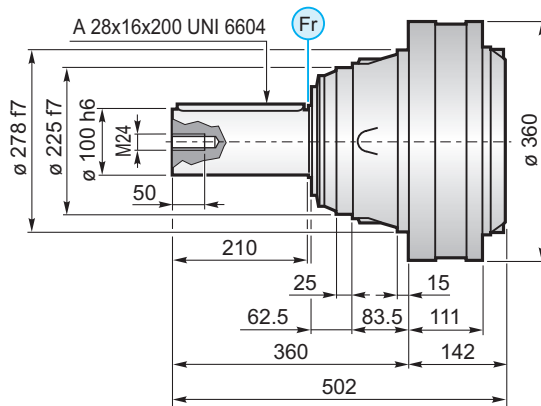


PG 1600

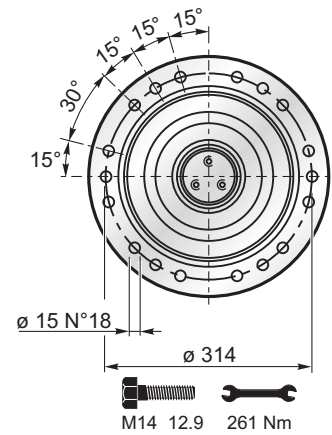
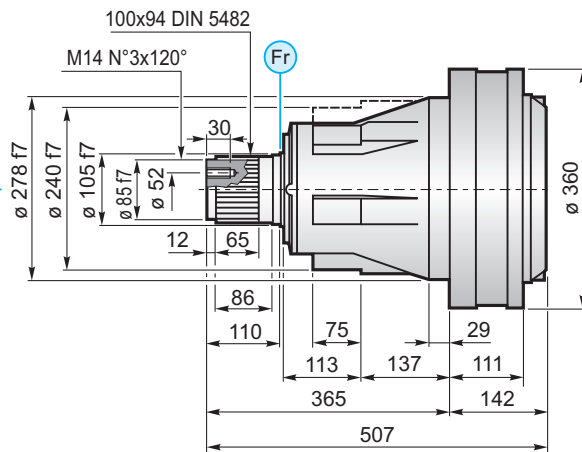
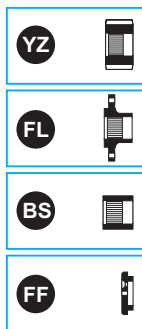
MS



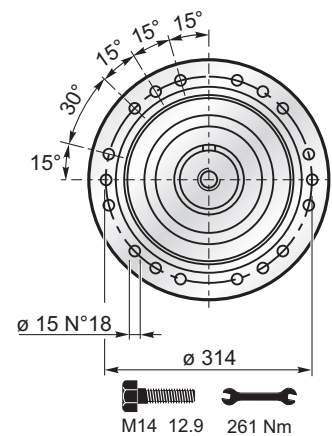
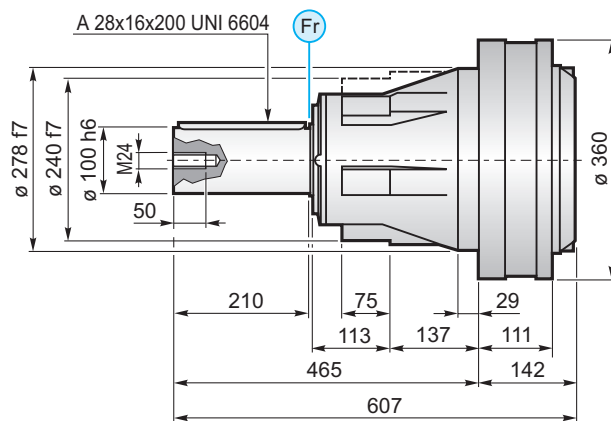
MC



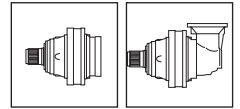
PS



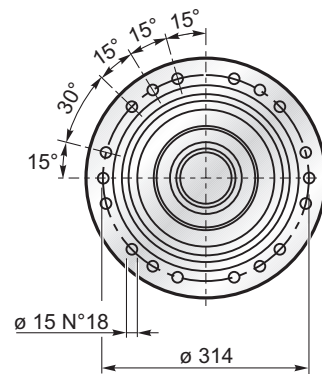
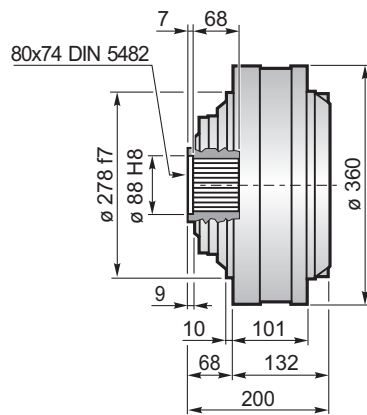
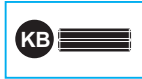
PC



PG 1600

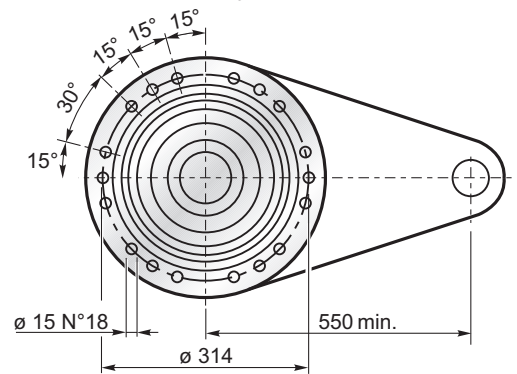
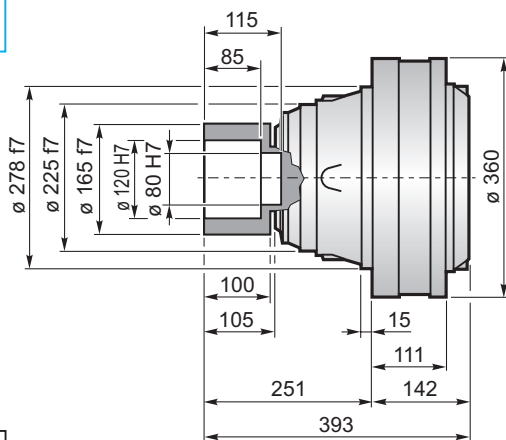


F

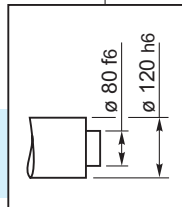


M14 12.9 261 Nm

FS



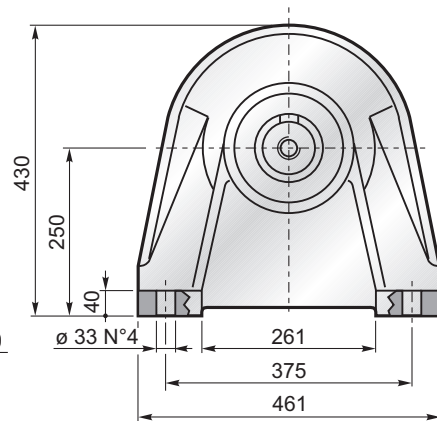
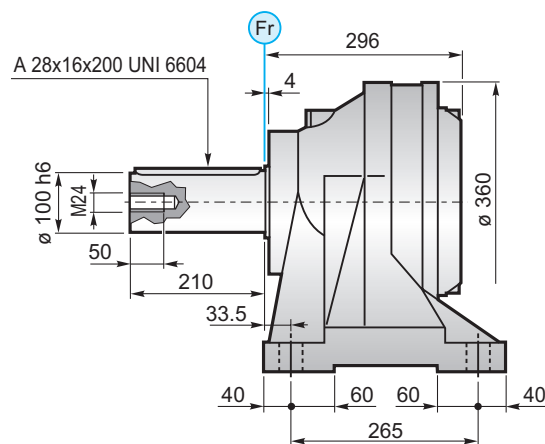
M14 12.9 261 Nm



$M_{max} = 35 \text{ kNm}$

La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

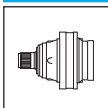
CPC



M30 12.9 2845 Nm

FL YZ BS FF KB GA → 96

SOM



PG 1600

	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	•			•

	PG		...PC			
	A	B	RA	RB	EF	EDF
PG 1601	142	607		•		
PG 1602	213.5	678.5	•	o	•	
PG 1603	274.5	739.5	•			•
PG 1604	322.5	787.5	•			•

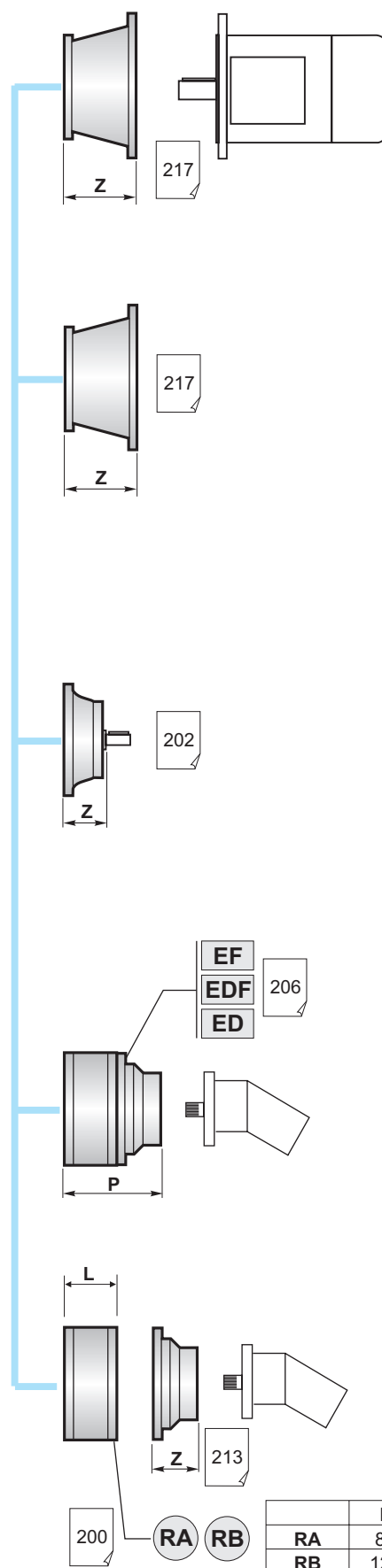
	PG		...F			
	A	B	RA	RB	EF	EDF
PG 1601	132	200		•		
PG 1602	203.5	271.5	•	o	•	
PG 1603	264.5	332.5	•			•
PG 1604	312.5	380.5	•			•

	PG		...FS			
	A	B	RA	RB	EF	EDF
PG 1601	142	393		•		
PG 1602	213.5	464.5	•	o	•	
PG 1603	274.5	525.5	•			•
PG 1604	322.5	573.5	•			•

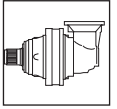
	PG		...CPC			
	A	B	RA	RB	EF	EDF
PG 1601	296	506		•		
PG 1602	317.5	577.5	•	o	•	
PG 1603	428.5	638.5	•			•
PG 1604	476.5	686.5	•			•



A+13.5	B+13.5	o
--------	--------	---



PG 1600



	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	•		•

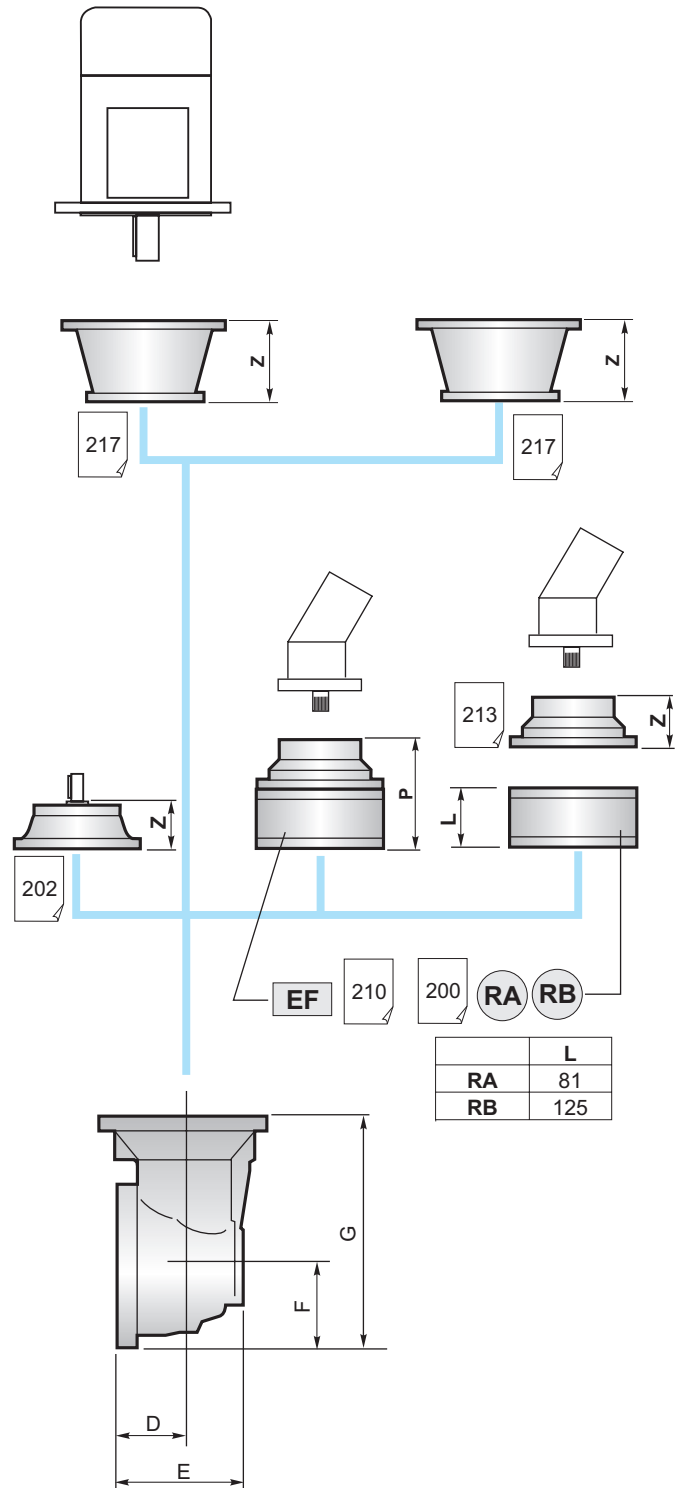
	PGA ...PS					
		A	B	RA	RB	EF
	PGA 1602	230	240	•	o	•
	PGA 1603	315	240	•	o	•
	PGA 1604	349.5	159	•		•

	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	•		•

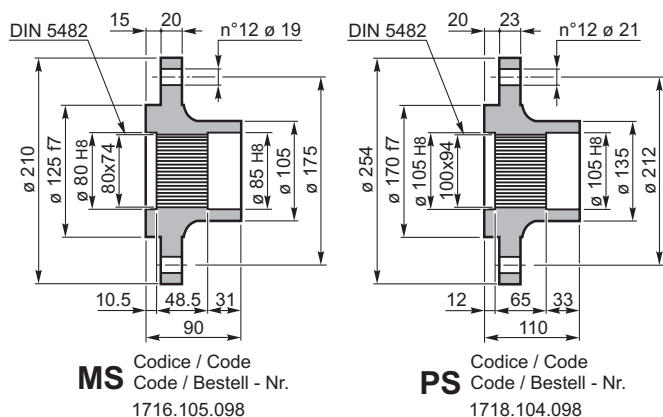
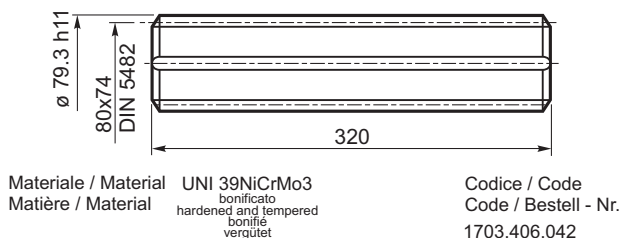
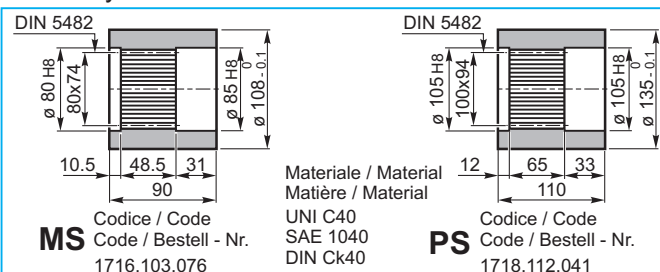
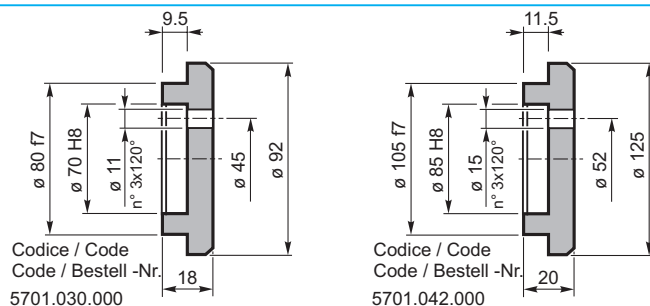
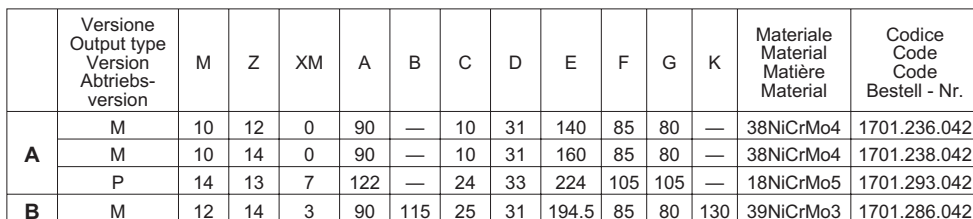
	PGA ...CPC					
		A	B	RA	RB	EF
	PGA 1602	384	240	•	o	•
	PGA 1603	469	240	•	o	•
	PGA 1604	503.5	159	•		•



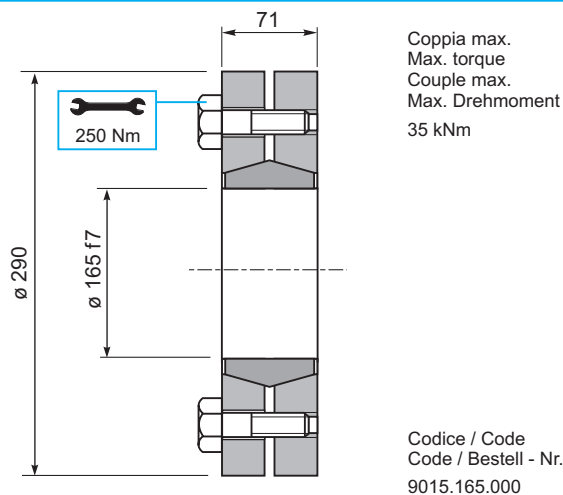
	D	E	F	G
PGA 1602	88	164	140	380
PGA 1603	88	164	140	380
PGA 1604	75	141.5	93	252



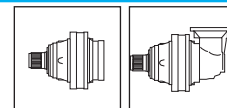
	B+16.5	o
--	--------	---



GA



PG 1600



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

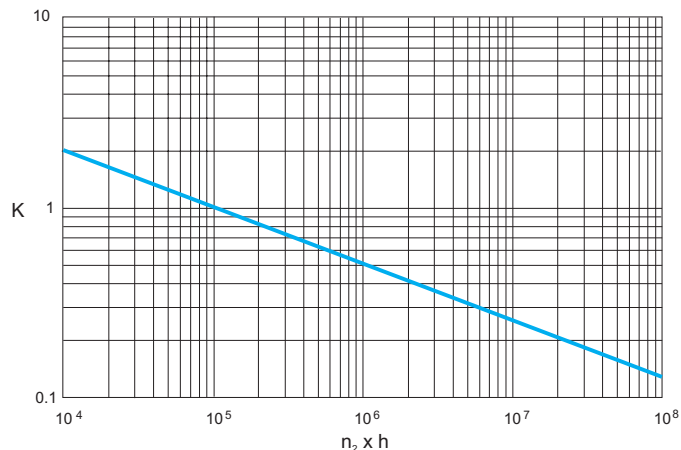
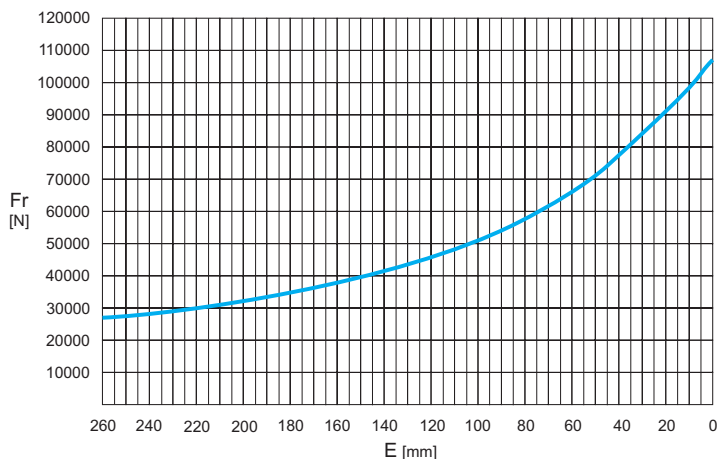
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

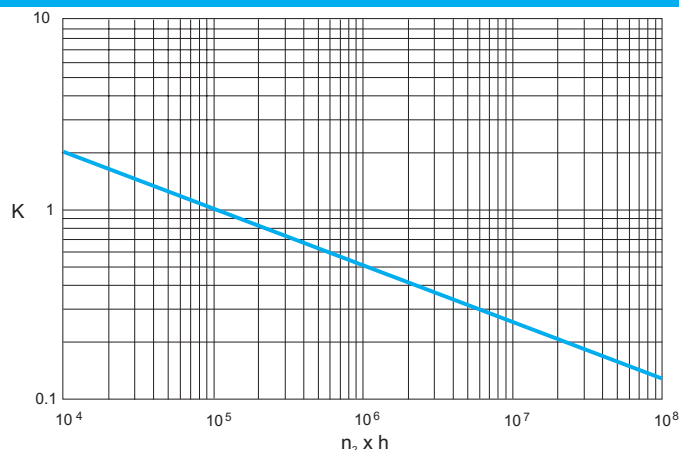
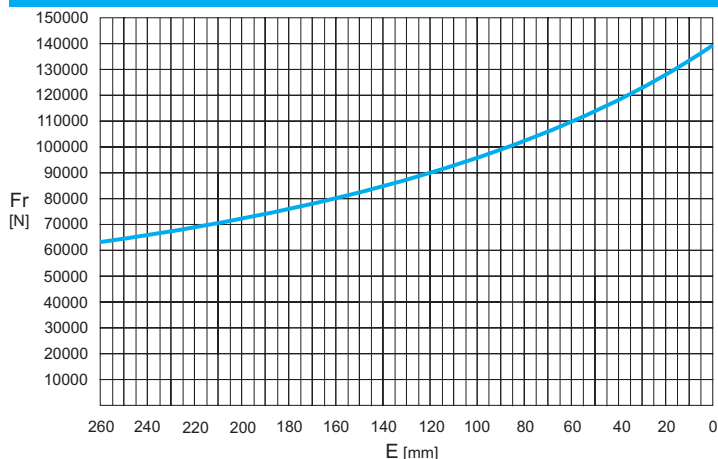
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

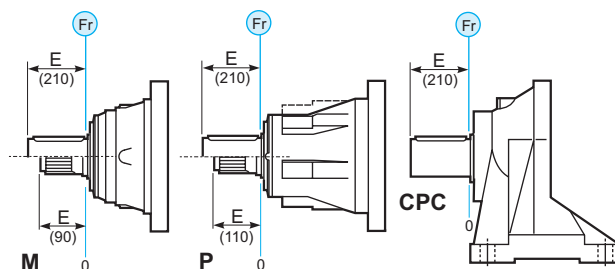
M - CPC*



P



	$n \times h$				
	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.

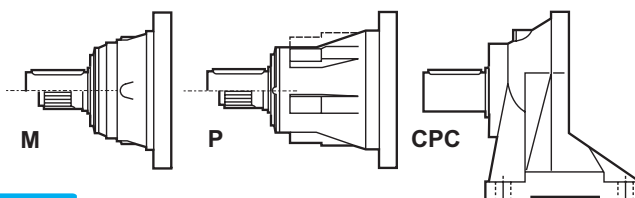
CHARGES AXIALES (Fa)

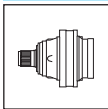
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

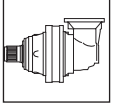




PG 1800

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 1802	13.0	20.36	18.02	15.33	13.57	2800	25	130	157	180	99	135
	15.7	20.36	18.02	15.33	13.57							
	19.0	17.74	15.70	13.36	11.83							
	21.4	17.74	15.70	13.36	11.83							
	24.9	17.74	15.70	13.36	11.83							
	30.0	17.74	15.70	13.36	11.83							
PG 1803	53.8	20.36	18.02	15.33	13.57	2800	17	142	169	192	111	147
	65.0	20.36	18.02	15.33	13.57							
	73.3	20.36	18.02	15.33	13.57							
	81.3	20.36	18.02	15.33	13.57							
	94.5	20.36	18.02	15.33	13.57							
	106.6	20.36	18.02	15.33	13.57							
	128.4	17.74	15.70	13.36	11.83							
	149.1	17.74	15.70	13.36	11.83							
	180.2	17.74	15.70	13.36	11.83							
PG 1804	348.6	20.36	18.02	15.33	13.57	2800	13	149	176	199	118	154
	377.2	20.36	18.02	15.33	13.57							
	438.4	20.36	18.02	15.33	13.57							
	489.2	20.36	18.02	15.33	13.57							
	549.1	20.36	18.02	15.33	13.57							
	620.0	20.36	18.02	15.33	13.57							
	677.9	20.36	18.02	15.33	13.57							
	720.0	20.36	18.02	15.33	13.57							
	770.5	20.36	18.02	15.33	13.57							
	818.8	20.36	18.02	15.33	13.57							
	849.8	17.74	15.70	13.36	11.83							
	928.8	17.74	15.70	13.36	11.83							
	987.4	17.74	15.70	13.36	11.83							
	1113.0	17.74	15.70	13.36	11.83							
	1216.4	17.74	15.70	13.36	11.83							

PG 1800

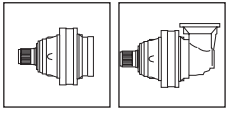


	i	Mc [kNm]				n1max [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 1802	10.9	20.36	18.02	15.33	13.57	2000	25	197	224	247	166	202
	13.2	17.74	15.70	13.36	11.83							
	16.6	20.36	18.02	15.33	13.57							
	20.0	17.74	15.70	13.36	11.83							
PGA 1803	54.4	20.36	18.02	15.33	13.57	2800	17	167	194	217	136	172
	71.2	20.36	18.02	15.33	13.57							
	85.7	20.36	18.02	15.33	13.57							
	103.3	17.74	15.70	13.36	11.83							
	116.7	17.74	15.70	13.36	11.83							
	135.5	20.36	18.02	15.33	13.57							
	163.3	17.74	15.70	13.36	11.83							
	185.8	20.36	18.02	15.33	13.57							
PGA 1804	224.4	20.36	18.02	15.33	13.57	2800	13	169	196	219	138	174
	281.0	20.36	18.02	15.33	13.57							
	323.8	20.36	18.02	15.33	13.57							
	353.6	20.36	18.02	15.33	13.57							
	394.3	20.36	18.02	15.33	13.57							
	442.9	20.36	18.02	15.33	13.57							
	500.0	20.36	18.02	15.33	13.57							
	558.2	17.74	15.70	13.36	11.83							
	580.7	20.36	18.02	15.33	13.57							
	622.5	17.74	15.70	13.36	11.83							
	699.2	17.74	15.70	13.36	11.83							
	749.1	17.74	15.70	13.36	11.83							
	812.0	17.74	15.70	13.36	11.83							
	981.1	17.74	15.70	13.36	11.83							



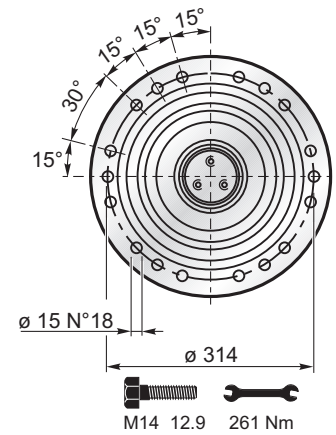
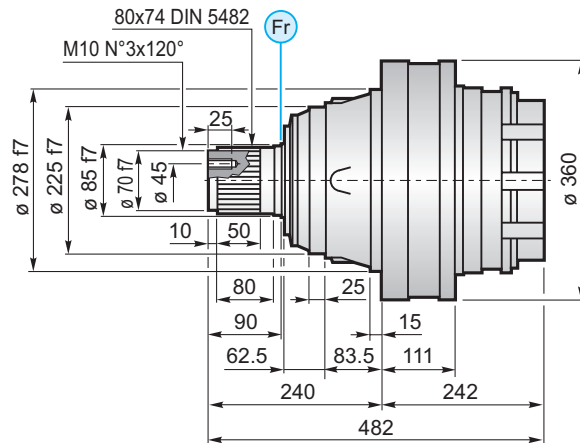
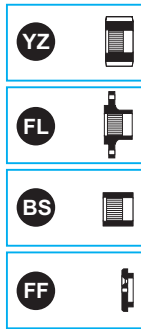
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

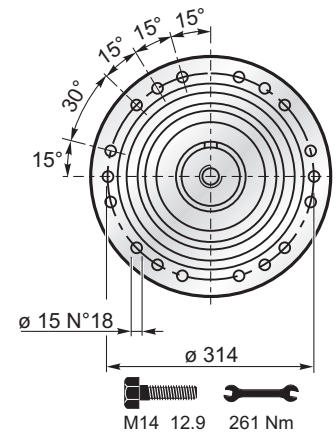
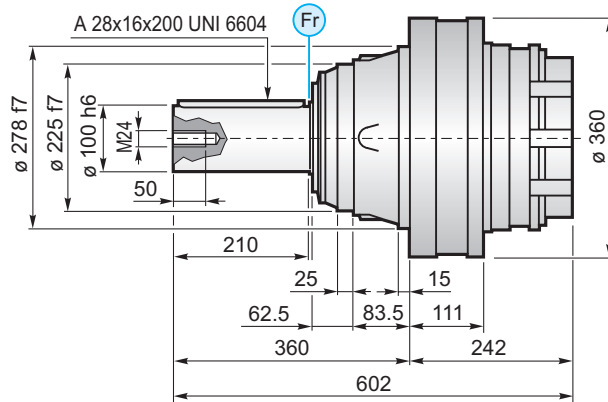


PG 1800

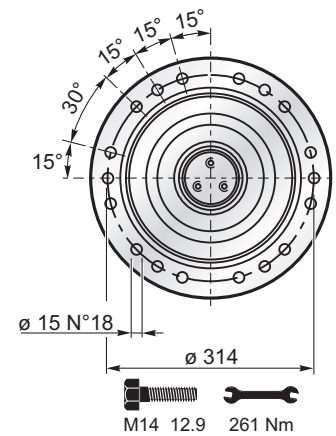
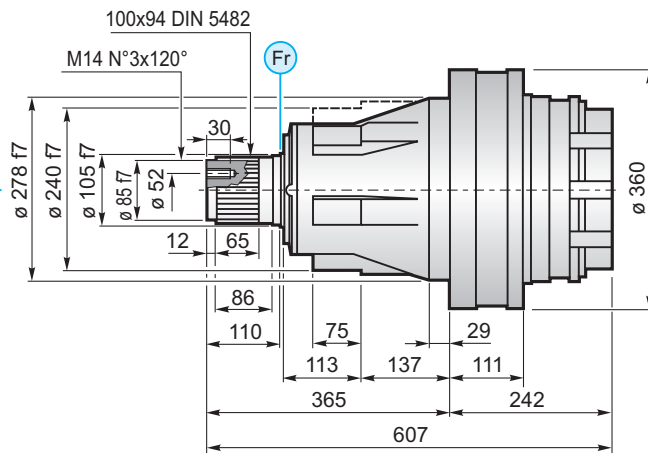
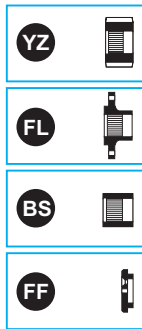
MS



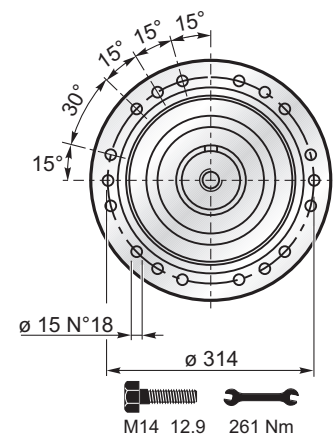
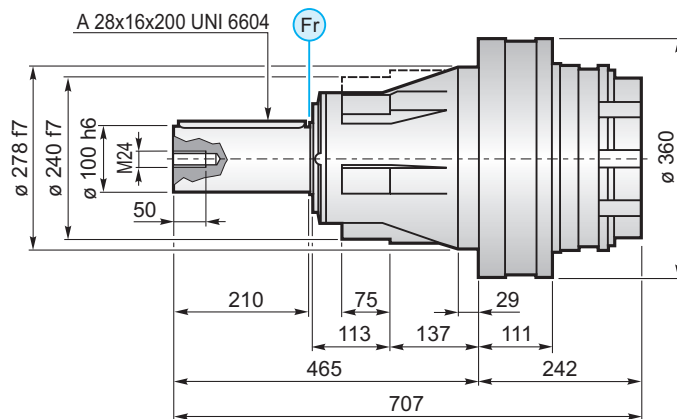
MC



PS

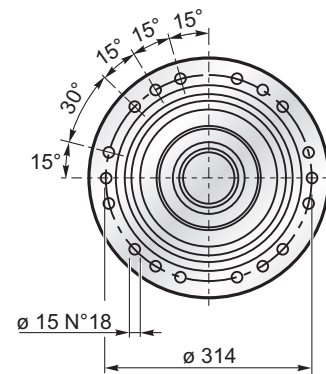


PC

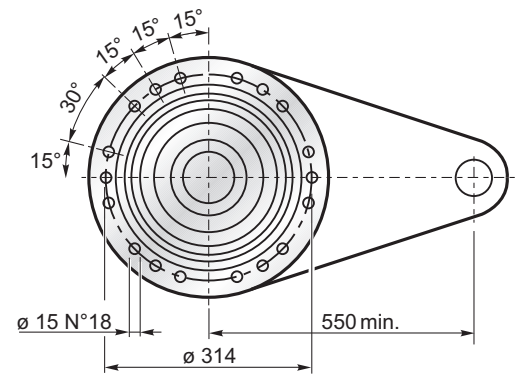




A blue square icon containing a black circle with the white letters 'KB' inside, followed by three horizontal black bars of varying lengths, and a blue arrow pointing to the right.



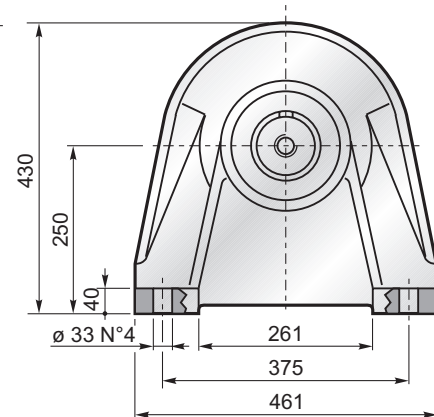
FS



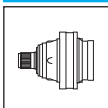
Technical drawing of a shaft with a step. The shaft has a total length of 120 mm with a tolerance of h6. A smaller section in the middle has a diameter of 80 mm with a tolerance of f6.

La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

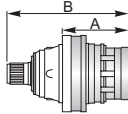
Technical drawing of a mechanical assembly showing a bolted connection. The drawing includes dimensions for the bolt (A 28x16x200 UNI 6604), the nut (M24), and the base plate. Key dimensions include a total width of 396, a base width of 265, and a height of 360. A force F_r is indicated acting on the bolt.

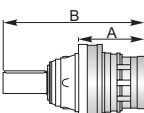


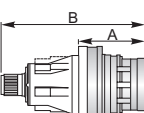
FL YZ BS FF KB GA → 104

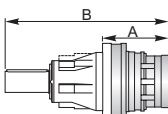


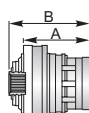
PG 1800

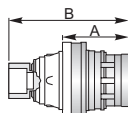
	PG ...MS					
	A	B	RA	RB	EF	EDF
	PG 1802	242	482		•	
	PG 1803	301.5	541.5	•	o	•
	PG 1804	345.5	585.5	•		•

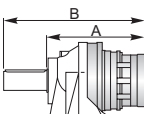
	PG ...MC					
	A	B	RA	RB	EF	EDF
	PG 1802	242	602		•	
	PG 1803	301.5	661.5	•	o	•
	PG 1804	345.5	705.5	•		•

	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	•		•

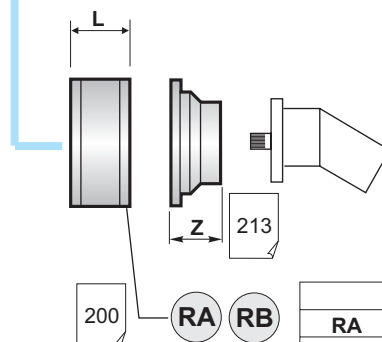
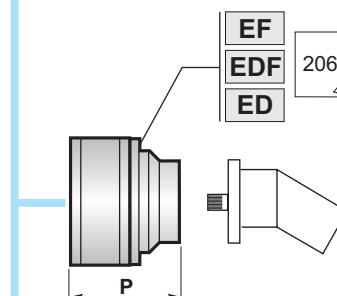
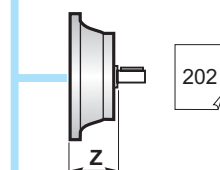
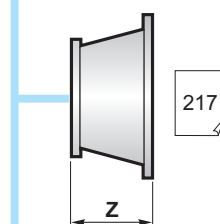
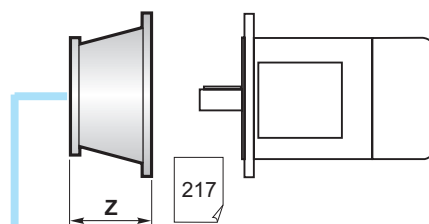
	PG ...F					
	A	B	RA	RB	EF	EDF
	PG 1802	232	300		•	
	PG 1803	291.5	359.5	•	o	•
	PG 1804	335.5	403.5	•		•

	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	•		•

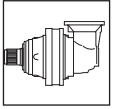


A+13.5	B+13.5	o
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	L
RA	81
RB	125

PG 1800



	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	•		•

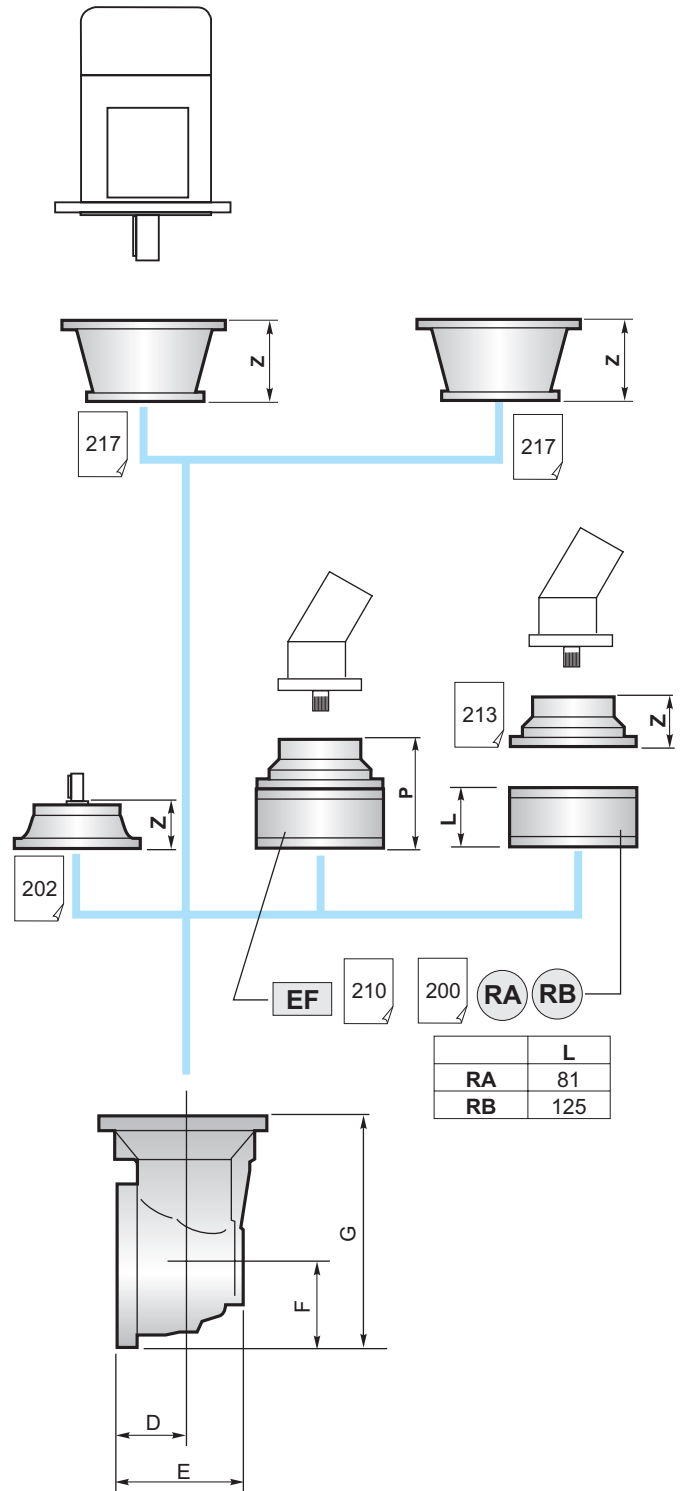
	PGA ...PS					
		A	B	RA	RB	EF
	PGA 1802	277	315		•	
	PGA 1803	334	240	•	o	•
	PGA 1804	407	240	•		•

	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	•		•

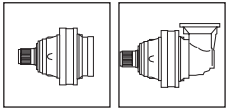
	PGA ...CPC					
		A	B	RA	RB	EF
	PGA 1802	431	315		•	
	PGA 1803	484	240	•	o	•
	PGA 1804	543.5	240	•		•



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



	B+16.5	o
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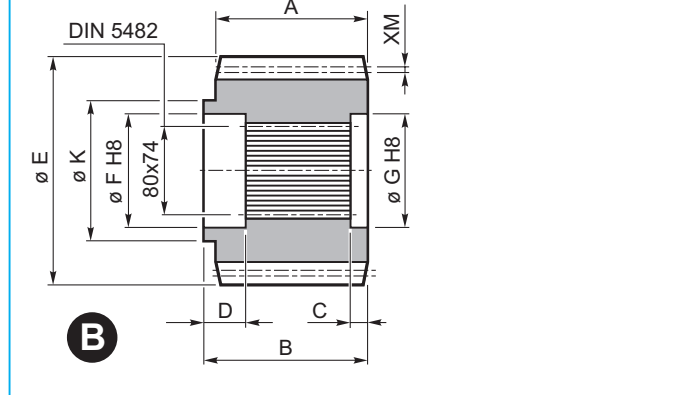


PG 1800

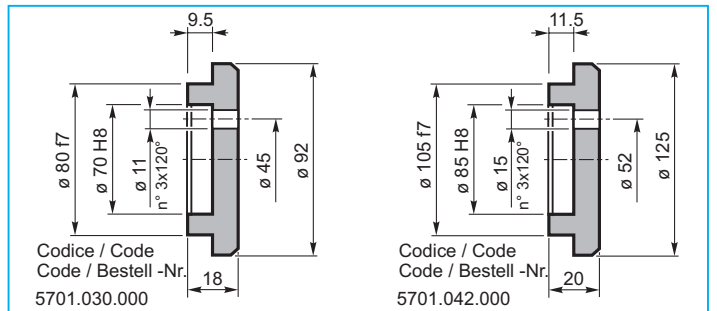
YZ Pignoni / Pinion
Pignon / Ritzel



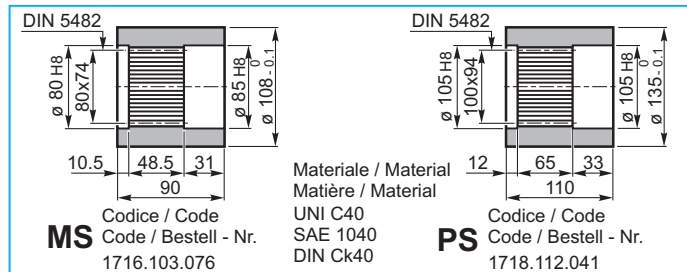
	Versione Output type Version Abtriebs- version	M	Z	XM	A	B	C	D	E	F	G	K	Materiale Matériau Matière Material	Codice Code Code Bestell - Nr.
A	M	10	12	0	90	—	10	31	140	85	80	—	38NiCrMo4	1701.236.042
	M	10	14	0	90	—	10	31	160	85	80	—	38NiCrMo4	1701.238.042
	M	10	15	5	90	—	10	31	180	85	80	—	38NiCrMo4	1701.138.042
B	M	10	18	5	85	114	31	24	209.3	85	95	160	42CrMo4	1701.261.042
	M	12	14	3	90	105	15	31	194.5	85	95	130	38NiCrMo4	1701.269.042



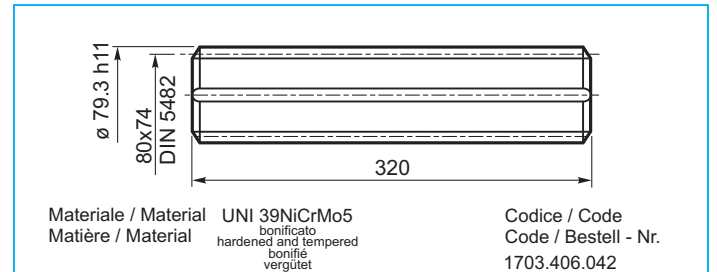
FF Fondello di arresto / Stop bottom plate
Bouchon de fermeture / Endscheibe



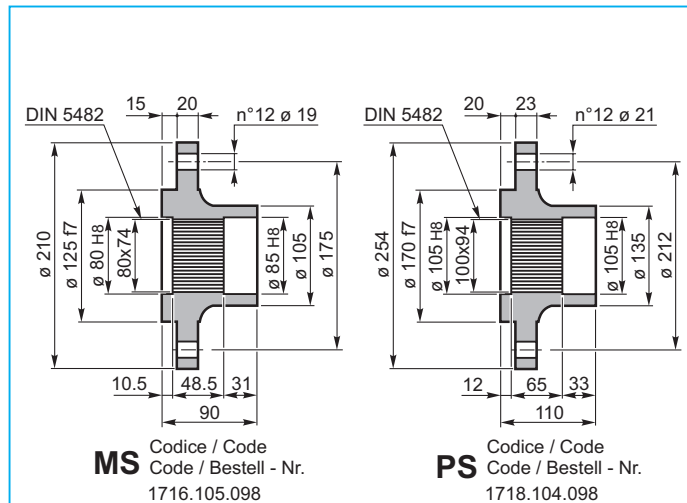
BS Boccola scanalata / Splined bushing
Moyeu cannelé / Innenverzahnte Buchse



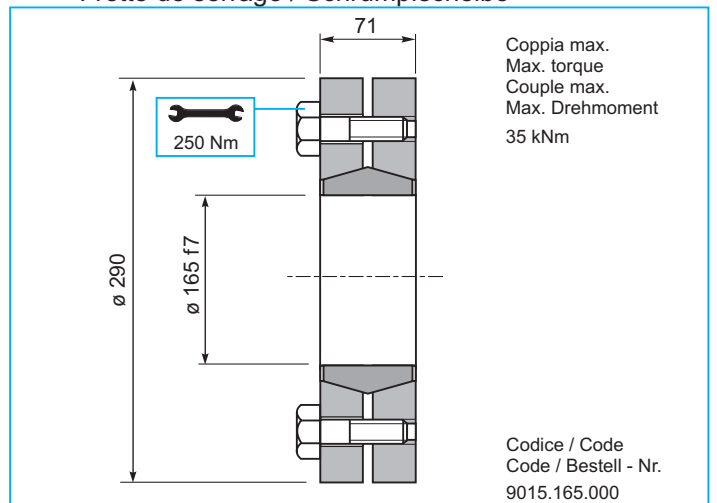
KB Barra scanalata / Splined rod
Arbre cannelé / Außenverzahnte Welle



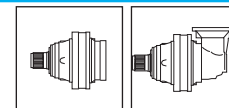
FL Flangia / Flange
Bride / Flansch



GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe



PG 1800



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

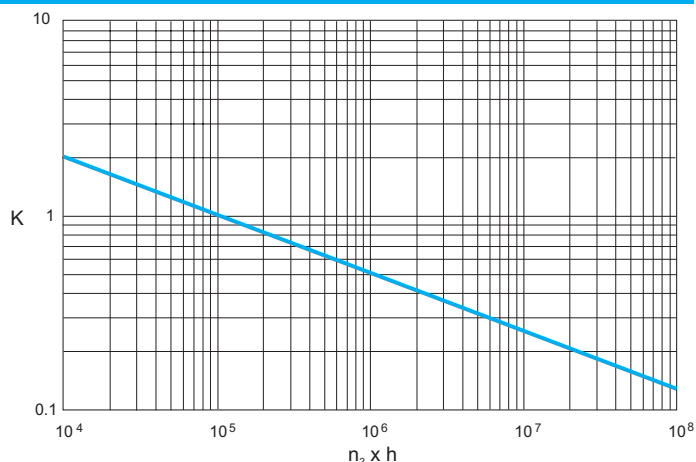
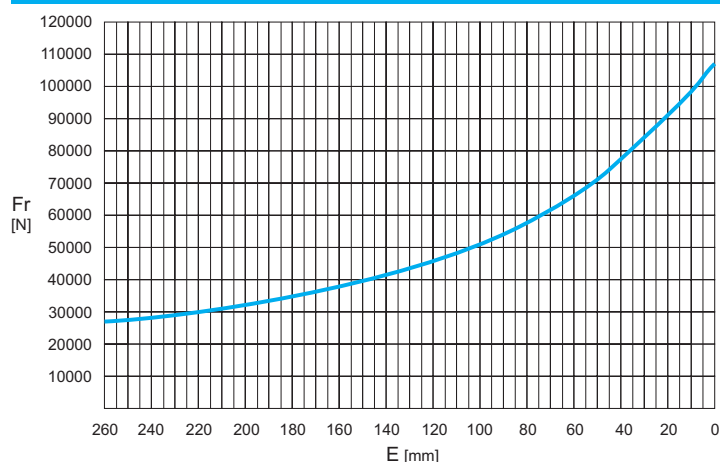
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

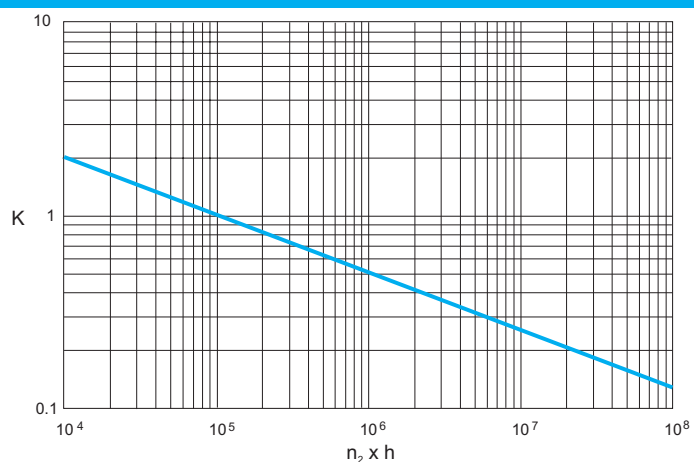
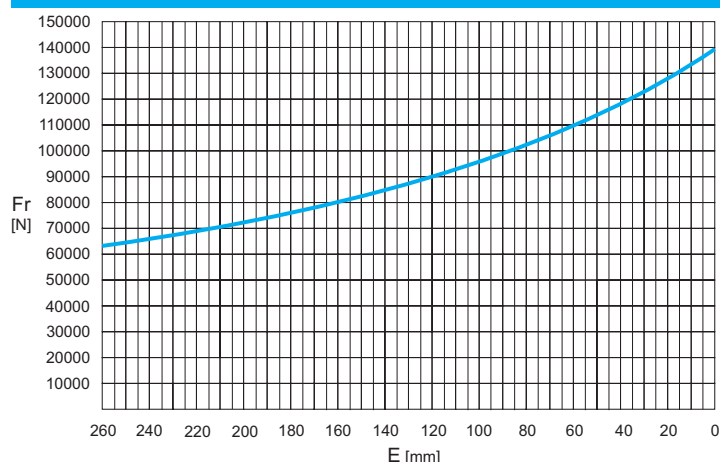
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

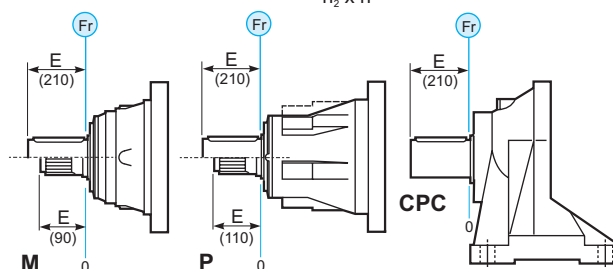
M - CPC*



P



	$n \times h$				
	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.

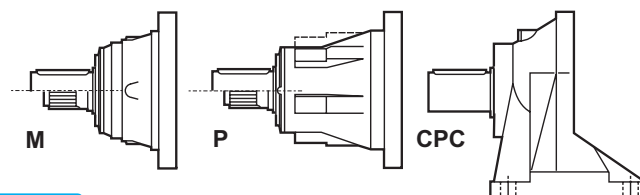
CHARGES AXIALES (Fa)

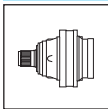
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

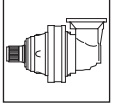




PG 2500

	i	Mc [kNm]				n1max [min ⁻¹]	Pt [kW]	Kg				
		n2 x h	n2 x h	n2 x h	n2 x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
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	14.6	34.75	30.76	26.18	23.17	2800	30	210	—	271	174	182
	17.7	34.75	30.76	26.18	23.17							
	20.0	34.75	30.76	26.18	23.17							
	23.0	26.87	23.78	20.24	17.91							
	26.0	26.87	23.78	20.24	17.91							
	30.1	26.87	23.78	20.24	17.91							
	36.2	20.73	18.35	15.62	13.82							
	43.7	20.73	18.35	15.62	13.82							
PG 2503	55.4	34.75	30.76	26.18	23.17	2800	20	222	—	283	186	194
	60.5	34.75	30.76	26.18	23.17							
	73.0	34.75	30.76	26.18	23.17							
	88.0	34.75	30.76	26.18	23.17							
	95.0	26.87	23.78	20.24	17.91							
	106.3	34.75	30.76	26.18	23.17							
	114.4	26.87	23.78	20.24	17.91							
	128.4	34.75	30.76	26.18	23.17							
	134.3	26.87	23.78	20.24	17.91							
	156.0	26.87	23.78	20.24	17.91							
	167.0	26.87	23.78	20.24	17.91							
	188.5	26.87	23.78	20.24	17.91							
	218.6	26.87	23.78	20.24	17.91							
	226.5	20.73	18.35	15.62	13.82							
	262.8	20.73	18.35	15.62	13.82							
	317.1	20.73	18.35	15.62	13.82							
PG 2504	338.7	34.75	30.76	26.18	23.17	2800	15	228	—	289	192	200
	373.9	34.75	30.76	26.18	23.17							
	408.3	34.75	30.76	26.18	23.17							
	424.3	34.75	30.76	26.18	23.17							
	455.5	34.75	30.76	26.18	23.17							
	493.2	34.75	30.76	26.18	23.17							
	556.8	34.75	30.76	26.18	23.17							
	617.7	34.75	30.76	26.18	23.17							
	697.4	34.75	30.76	26.18	23.17							
	752.2	26.84	23.76	20.22	17.90							
	803.0	26.84	23.76	20.22	17.90							
	873.6	26.84	23.76	20.22	17.90							
	934.9	26.84	23.76	20.22	17.90							
	1013.3	26.84	23.76	20.22	17.90							
	1126.9	26.84	23.76	20.22	17.90							
	1272.3	26.84	23.76	20.22	17.90							
	1354.4	20.73	18.35	15.62	13.82							
	1475.9	26.84	23.76	20.22	17.90							
	1529.3	20.73	18.35	15.62	13.82							
	1773.9	20.73	18.35	15.62	13.82							

PG 2500

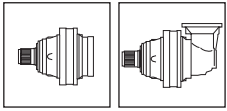


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 2502	12.2	34.75	30.76	26.18	23.17	2000	30	279	—	340	242	250
	15.9	26.87	23.78	20.24	17.91							
	19.1	20.73	18.35	15.62	13.82							
	24.2	26.87	23.78	20.24	17.91							
	29.1	20.73	18.35	15.62	13.82							
PGA 2503	50.6	34.75	30.76	26.18	23.17	2800	20	247	—	308	211	219
	61.2	34.75	30.76	26.18	23.17							
	69.0	34.75	30.76	26.18	23.17							
	79.5	26.87	23.78	20.24	17.91							
	89.8	26.87	23.78	20.24	17.91							
	96.4	34.75	30.76	26.18	23.17							
	104.1	26.87	23.78	20.24	17.91							
	125.3	26.87	23.78	20.24	17.91							
	141.5	26.87	23.78	20.24	17.91							
	164.2	26.87	23.78	20.24	17.91							
	197.3	20.73	18.35	15.62	13.82							
	238.1	20.73	18.35	15.62	13.82							
PGA 2504	252.4	34.75	30.76	26.18	23.17	2800	15	262	—	323	226	234
	284.9	34.75	30.76	26.18	23.17							
	303.9	34.75	30.76	26.18	23.17							
	364.3	34.75	30.76	26.18	23.17							
	397.8	34.75	30.76	26.18	23.17							
	449.1	34.75	30.76	26.18	23.17							
	498.2	34.75	30.76	26.18	23.17							
	562.5	34.75	30.76	26.18	23.17							
	651.1	26.87	23.78	20.24	17.91							
	731.3	26.87	23.78	20.24	17.91							
	789.4	34.75	30.76	26.18	23.17							
	985.2	26.87	23.78	20.24	17.91							
	1190.4	26.87	23.78	20.24	17.91							
	1430.8	20.73	18.35	15.62	13.82							
	1726.8	20.73	18.35	15.62	13.82							



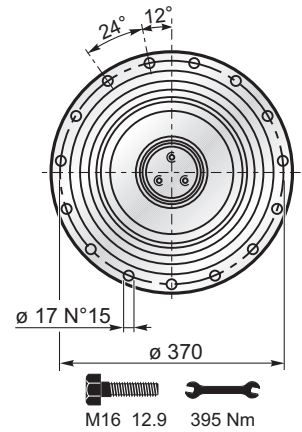
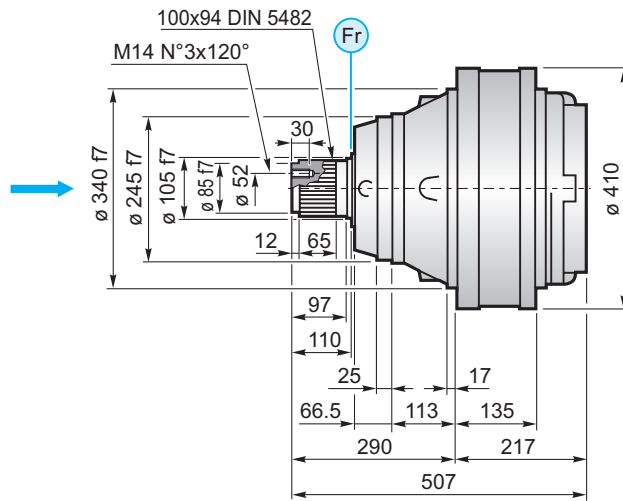
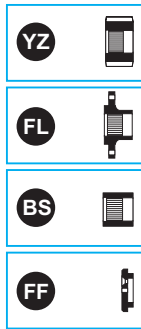
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

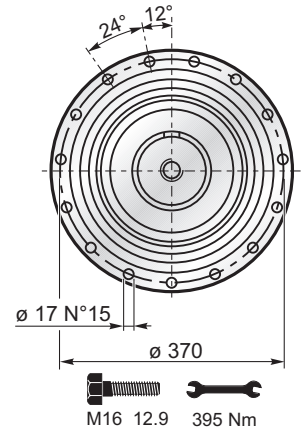
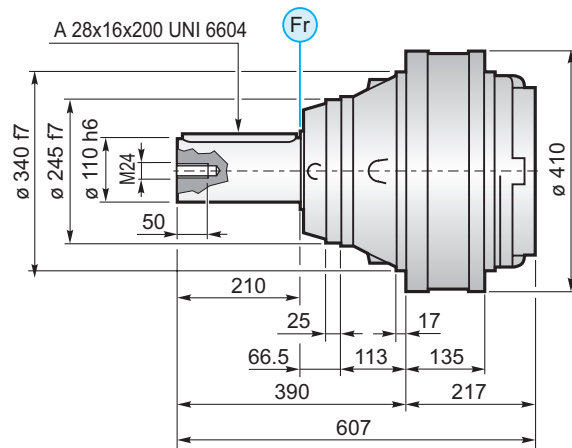


PG 2500

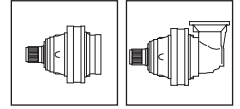
MS



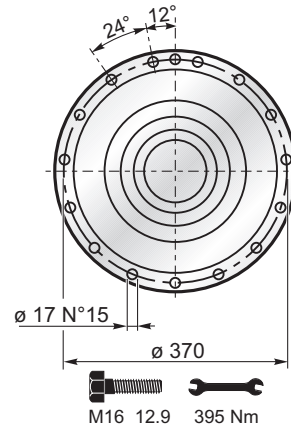
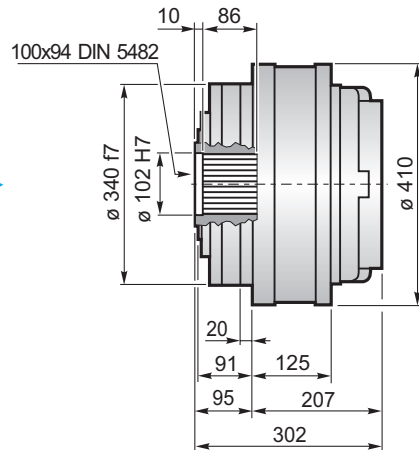
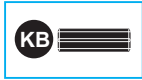
MC



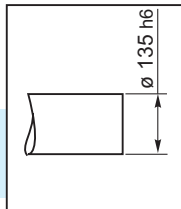
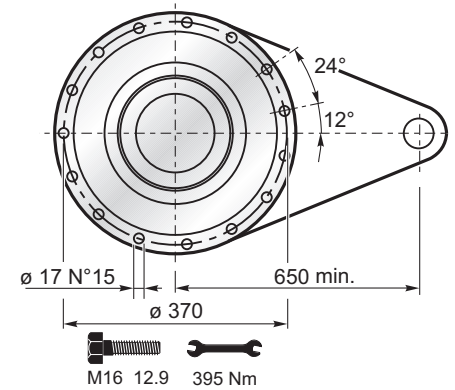
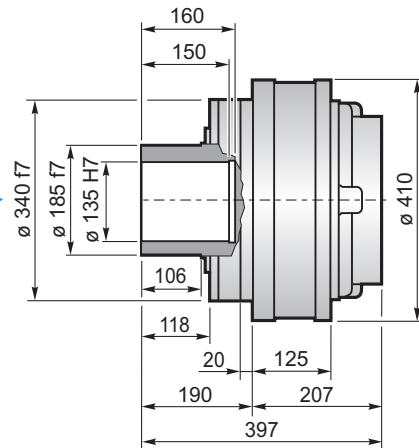
PG 2500



F



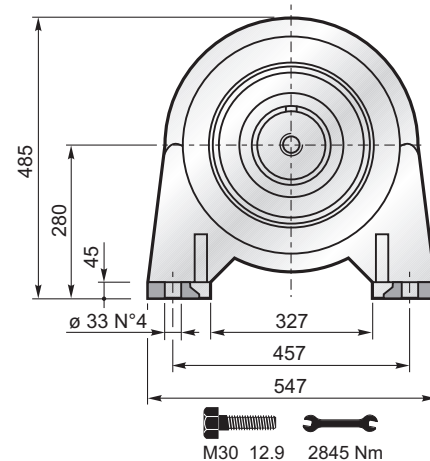
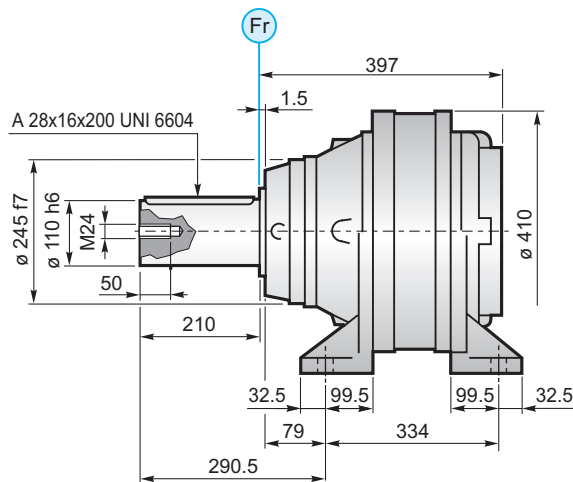
FS



$M_{max} = 52 \text{ kNm}$

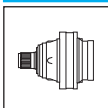
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

CPC



FL YZ BS FF KB GA → 112

SOM



PG 2500

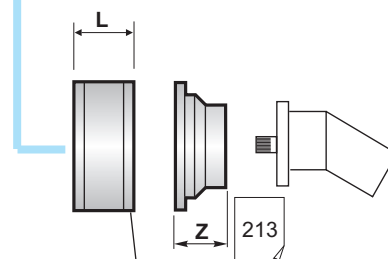
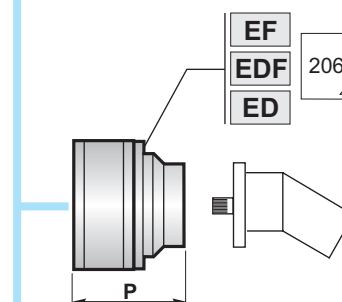
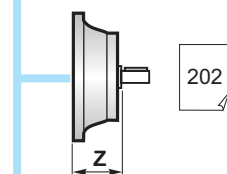
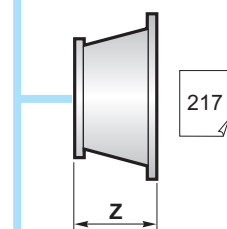
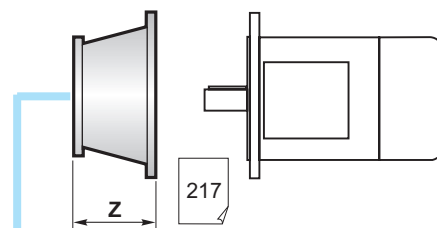
	PG		...MS			
	A	B	RA	RB	EF	EDF
PG 2501	217	507				
PG 2502	311	601		•		
PG 2503	370.5	660.5	•	o	•	
PG 2504	418.5	708.5	•			•

	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	•			•

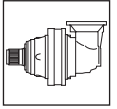


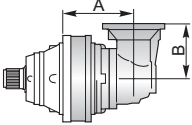
200	RA	RB	RA	L
			RB	81
				125

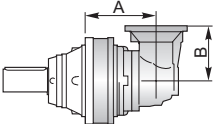


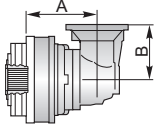
A+13.5	B+13.5	o
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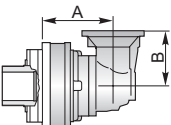
PG 2500

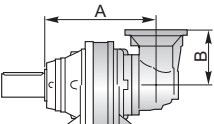


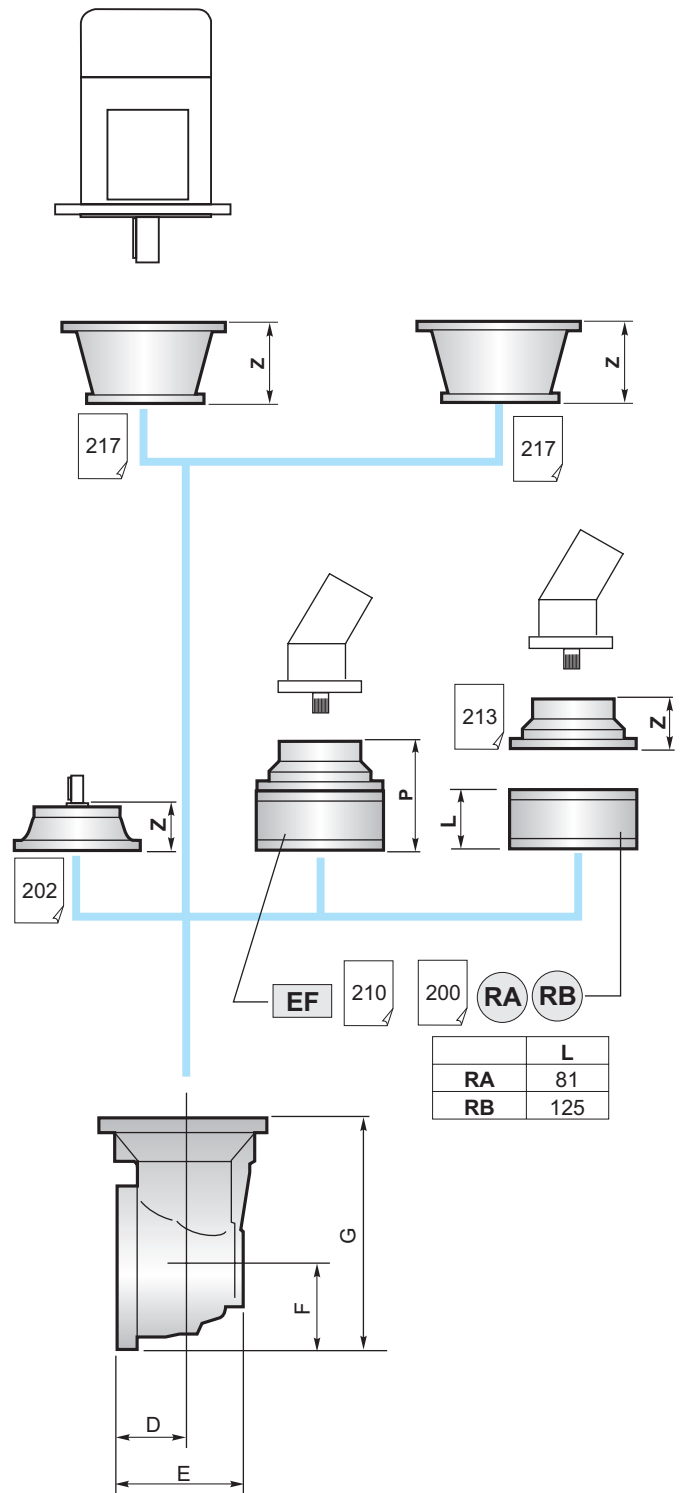
	PGA ...MS					
	A	B	RA	RB	EF	
	PGA 2502	297	315			
	PGA 2503	399	240			
	PGA 2504	472	240			

	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			

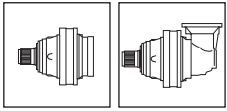
	PGA ...CPC					
	A	B	RA	RB	EF	
	PGA 2502	477	315			
	PGA 2503	579	240			
	PGA 2504	638.5	240			



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

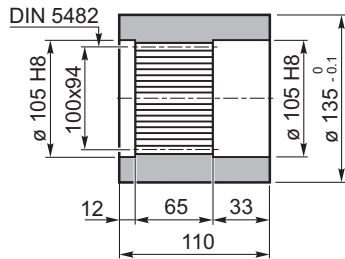


B+16.5 o



PG 2500

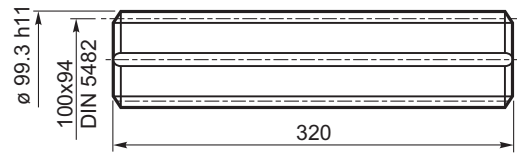
BS Boccola scanalata / Splined bushing Moyeu cannelé / Innenverzahnte Buchse



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

Codice / Code
Code / Bestell - Nr.
1718.112.041

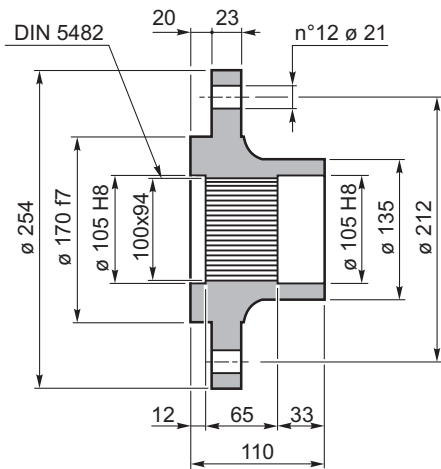
KB Barra scanalata / Splined rod Arbre cannelé / Außenverzahnte Welle



Materiale / Material
Matière / Material
UNI 39NiCrMo5
bonificato
hardened and tempered
bonifié
vergütet

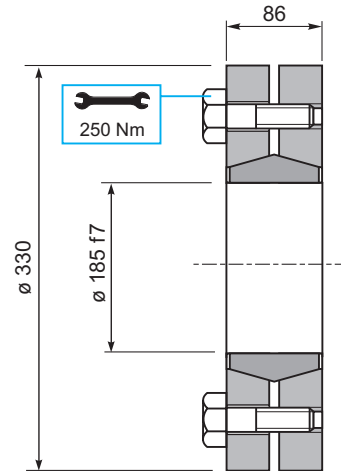
Codice / Code
Code / Bestell - Nr.
1703.407.042

FL Flangia / Flange Bride / Flansch



Codice / Code
Code / Bestell - N.
1718.104.098

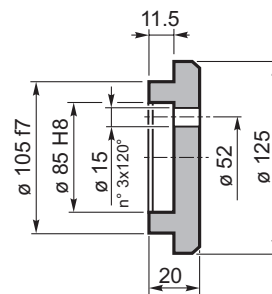
GA Giunto di attrito / Shrink disc Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
52 kNm

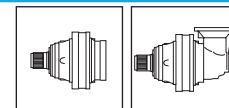
Codice / Code
Code / Bestell - Nr.
9015.185.000

FF Fondello di arresto / Stop bottom plate Bouchon de fermeture / Endscheibe



Codice / Code
Code / Bestell - Nr.
5701.042.000

PG 2500



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

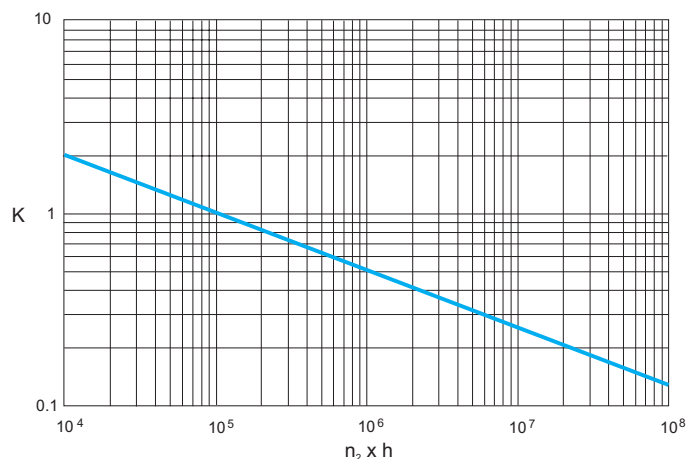
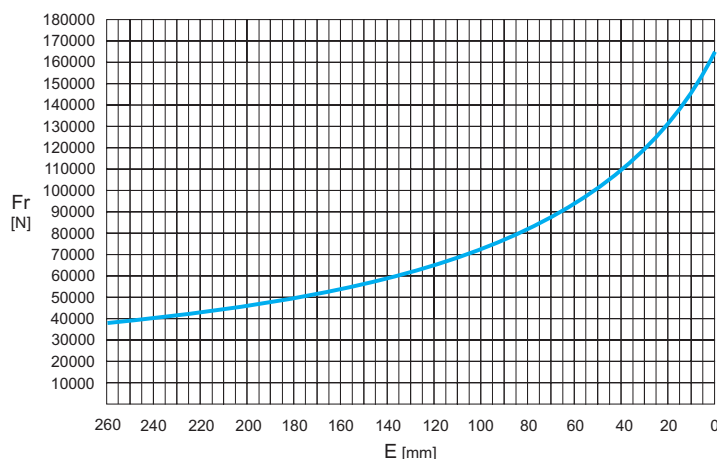
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

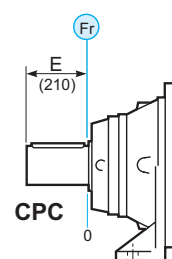
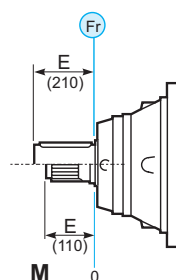
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

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.

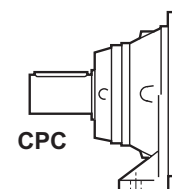
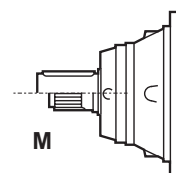
CHARGES AXIALES (Fa)

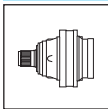
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

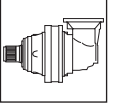




PG 3000

	i	Mc [kNm]				n1max [min ⁻¹]	Pt [kW]	Kg				
		n2 x h	n2 x h	n2 x h	n2 x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 3002	14.2	34.75	30.76	26.18	23.17	2000	34	237	—	298	196	204
	17.1	34.75	30.76	26.18	23.17							
	22.4	34.75	30.76	26.18	23.17							
	29.1	26.87	23.78	20.24	17.91							
	35.1	26.87	23.78	20.24	17.91							
PG 3003	64.6	34.75	30.76	26.18	23.17	2800	23	253	—	314	212	220
	73.5	34.75	30.76	26.18	23.17							
	88.6	34.75	30.76	26.18	23.17							
	102.9	34.75	30.76	26.18	23.17							
	124.3	34.75	30.76	26.18	23.17							
	134.4	34.75	30.76	26.18	23.17							
PG 3004	251.4	34.75	30.76	26.18	23.17	2800	17	261	—	322	220	228
	300.9	34.75	30.76	26.18	23.17							
	314.9	34.75	30.76	26.18	23.17							
	328.5	34.75	30.76	26.18	23.17							
	362.6	34.75	30.76	26.18	23.17							
	379.6	34.75	30.76	26.18	23.17							
	396.0	34.75	30.76	26.18	23.17							
	427.0	34.75	30.76	26.18	23.17							
	477.3	34.75	30.76	26.18	23.17							
	517.4	34.75	30.76	26.18	23.17							
	576.0	34.75	30.76	26.18	23.17							
	623.7	34.75	30.76	26.18	23.17							
	694.3	34.75	30.76	26.18	23.17							
	752.6	34.75	30.76	26.18	23.17							
	838.9	34.75	30.76	26.18	23.17							
	1015.5	26.87	23.78	20.24	17.91							
	1425.0	26.87	23.78	20.24	17.91							

PG 3000

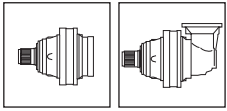


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 3003	59.2	34.75	30.76	26.18	23.17	2800	23	336	—	397	299	307
	77.4	34.75	30.76	26.18	23.17							
	93.3	34.75	30.76	26.18	23.17							
	121.0	34.75	30.76	26.18	23.17							
	158.6	26.87	23.78	20.24	17.91							
	191.1	26.87	23.78	20.24	17.91							
PGA 3004	306.0	34.75	30.76	26.18	23.17	2800	17	293	—	354	252	260
	352.6	34.75	30.76	26.18	23.17							
	385.0	34.75	30.76	26.18	23.17							
	460.7	34.75	30.76	26.18	23.17							
	519.8	26.87	23.78	20.24	17.91							
	598.9	26.87	23.78	20.24	17.91							
	676.7	34.75	30.76	26.18	23.17							
	729.3	26.87	23.78	20.24	17.91							
	819.1	26.87	23.78	20.24	17.91							
	951.2	26.87	23.78	20.24	17.91							
	1385.5	26.87	23.78	20.24	17.91							



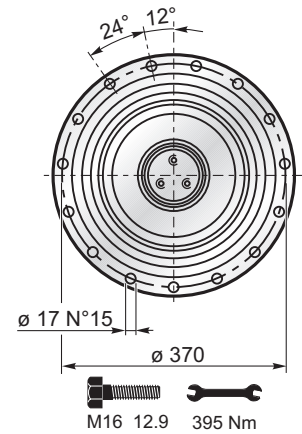
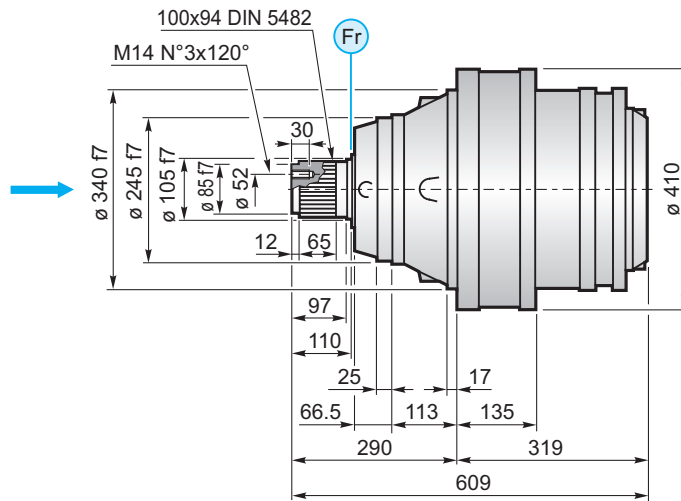
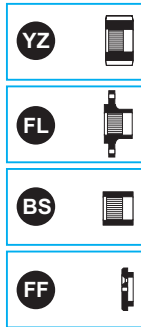
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

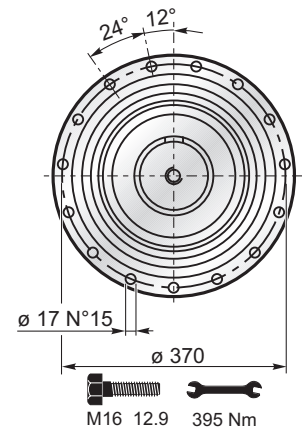
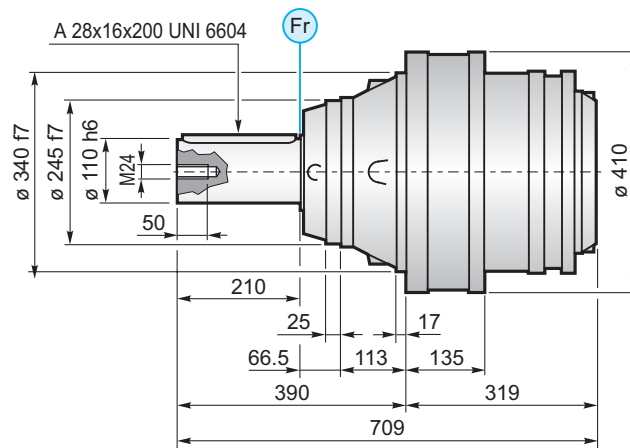


PG 3000

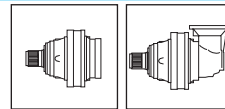
MS



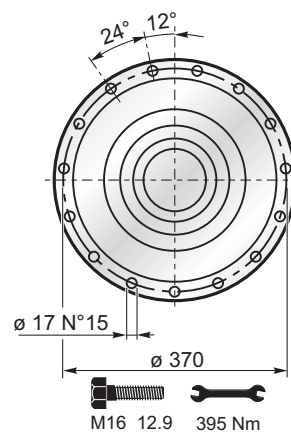
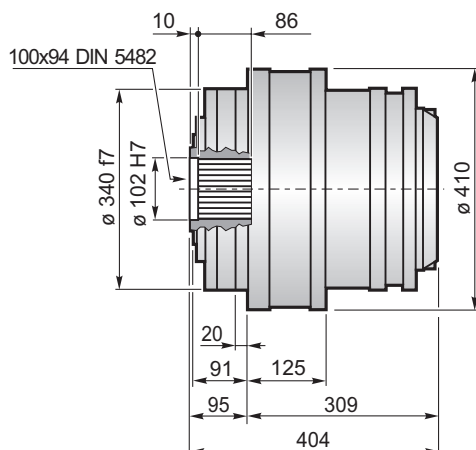
MC



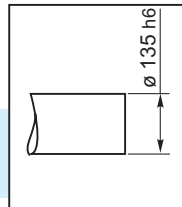
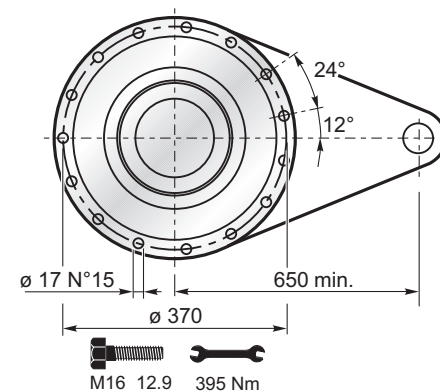
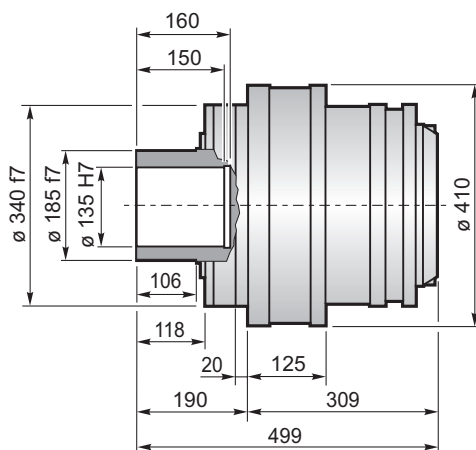
PG 3000



F



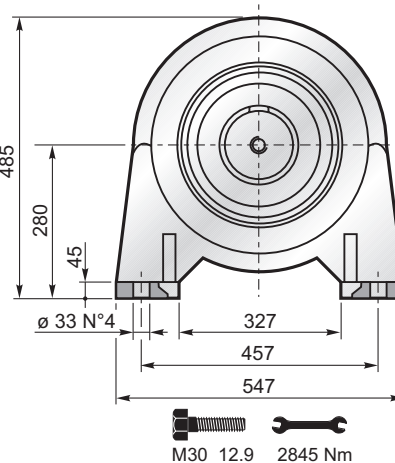
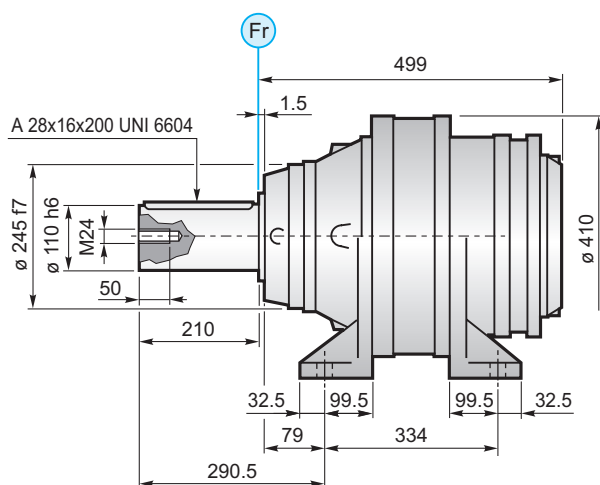
FS



$M_{max} = 52 \text{ kNm}$

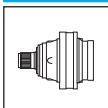
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

CPC



FL YZ BS FF KB GA → 120

SOM



PG 3000

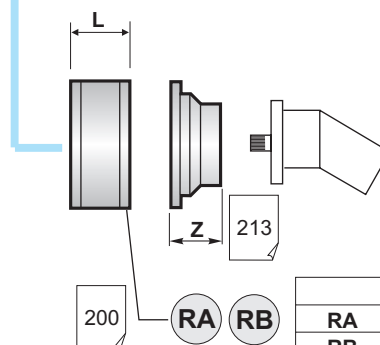
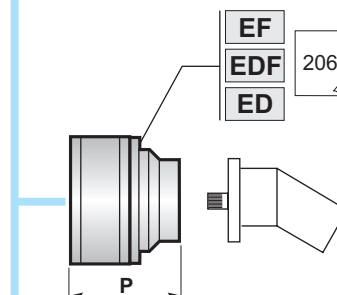
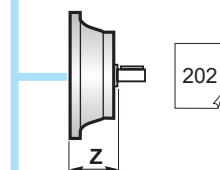
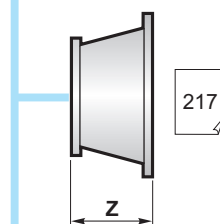
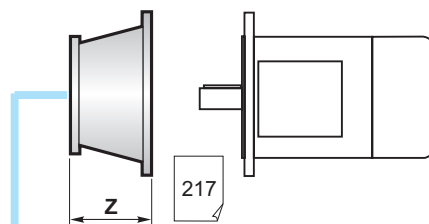
	PG ...MS					
	A	B	RA	RB	EF	EDF
PG 3002	319	609		•		
PG 3003	390.5	680.5	•	o	•	
PG 3004	451.5	741.5	•			•

	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
PG 3002	309	499		•		
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	•			•

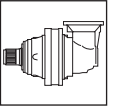


L	
RA	81
RB	125



A+13.5	B+13.5	o
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PG 3000



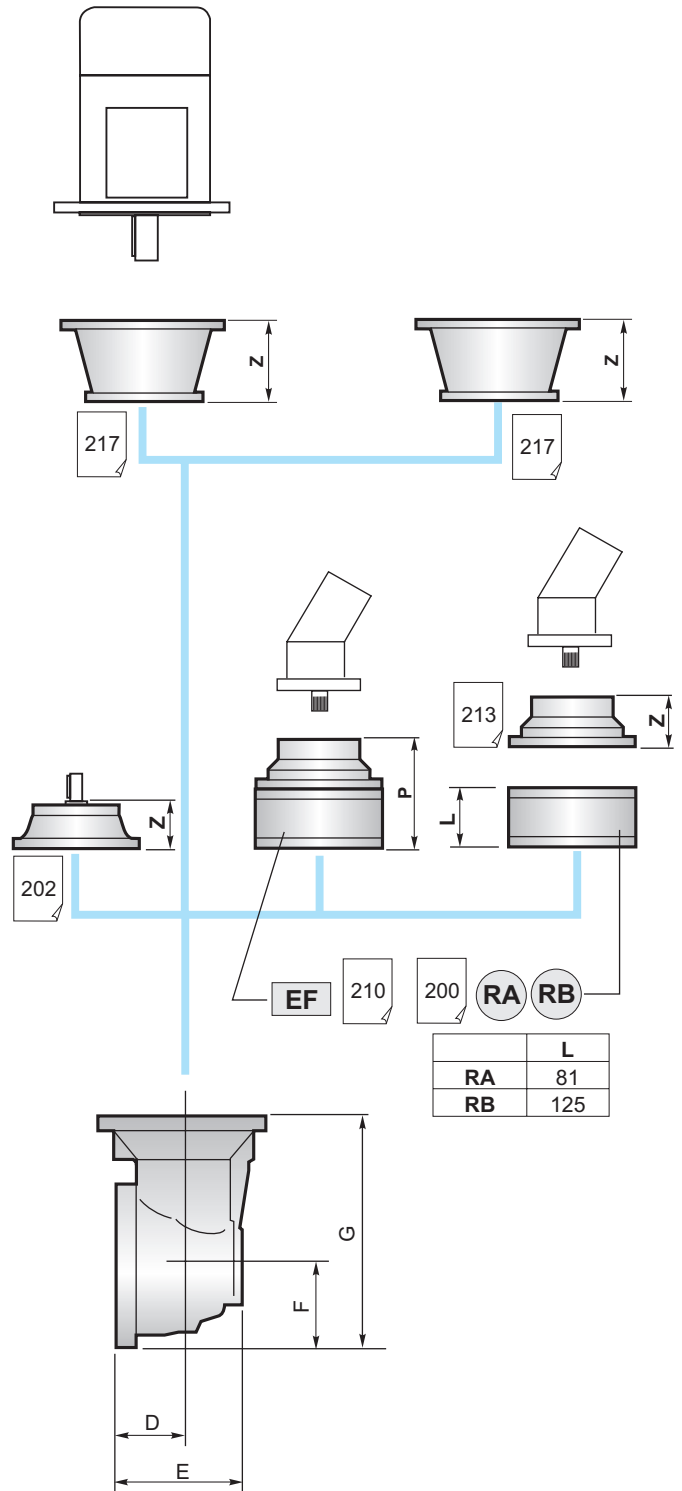
	PGA ...MS					
	A	B	RA	RB	EF	
	PGA 3003	407	240	•	o	•
PGA 3004	478.5	240	•	o	•	

	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	•	

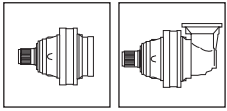
	PGA ...CPC					
	A	B	RA	RB	EF	
	PGA 3003	585.5	240	•	o	•
PGA 3004	657	240	•	o	•	



	D	E	F	G
PGA 3003	88	164	140	380
PGA 3004	88	164	140	380

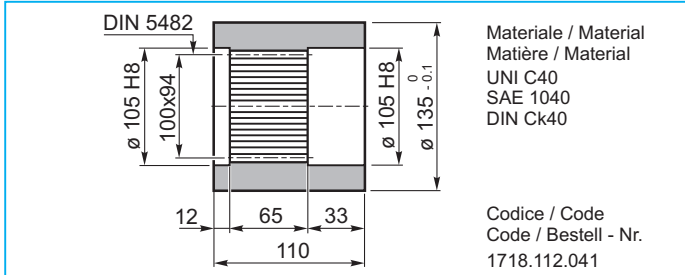


A+16.5	B	o
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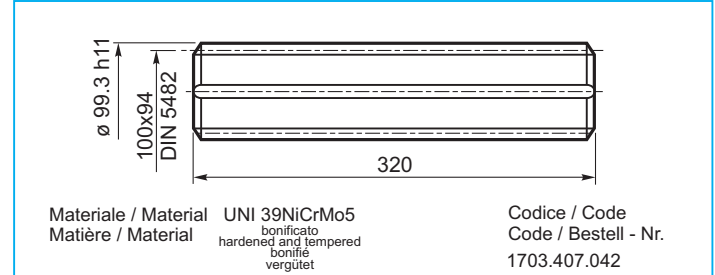


PG 3000

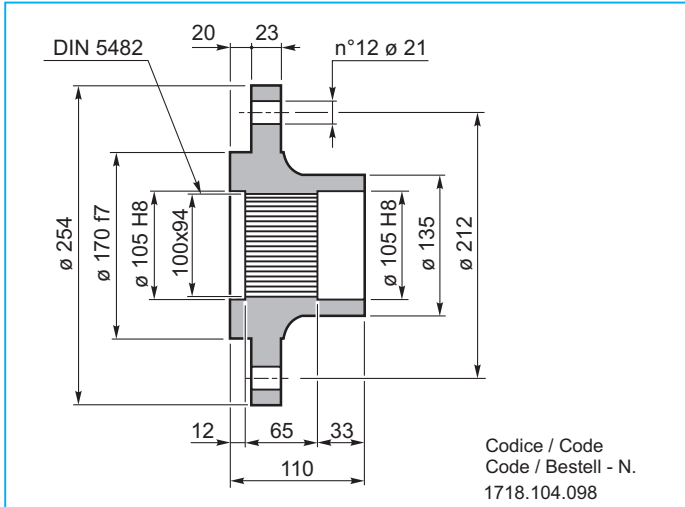
BS Boccola scanalata / Splined bushing Moyeu cannelé / Innenverzahnte Buchse



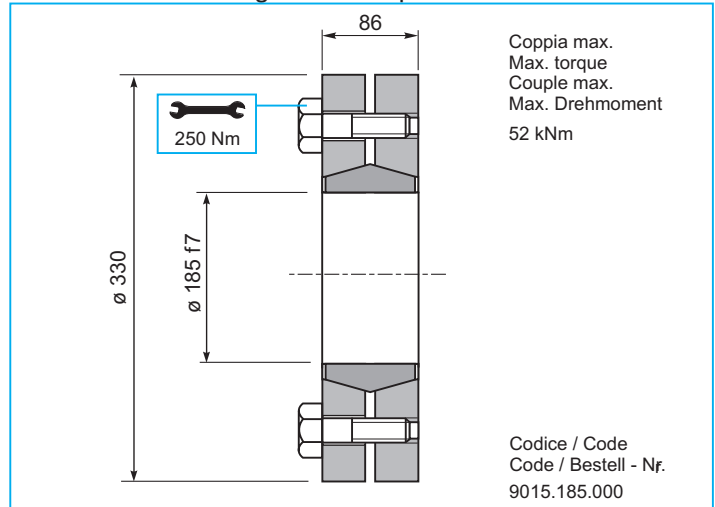
KB Barra scanalata / Splined rod Arbre cannelé / Außenverzahnte Welle



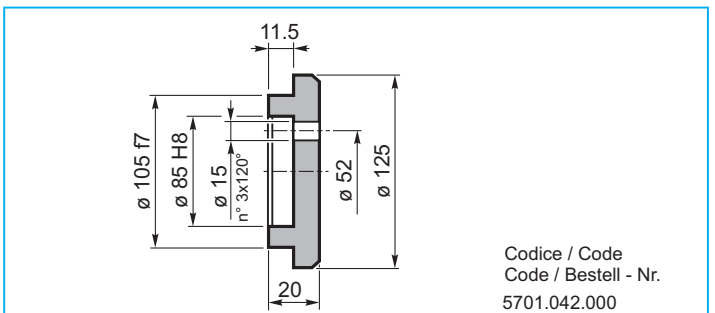
FL Flangia / Flange Bride / Flansch



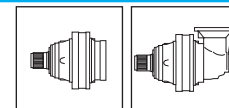
GA Giunto di attrito / Shrink disc Frette de serrage / Schrumpfscheibe



FF Fondello di arresto / Stop bottom plate Bouchon de fermeture / Endscheibe



PG 3000



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

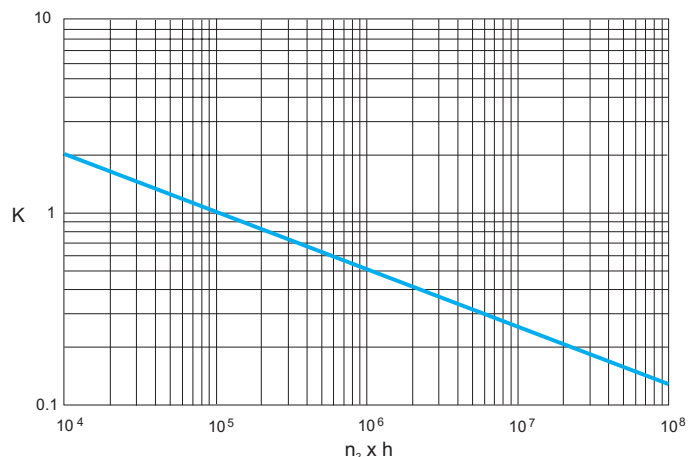
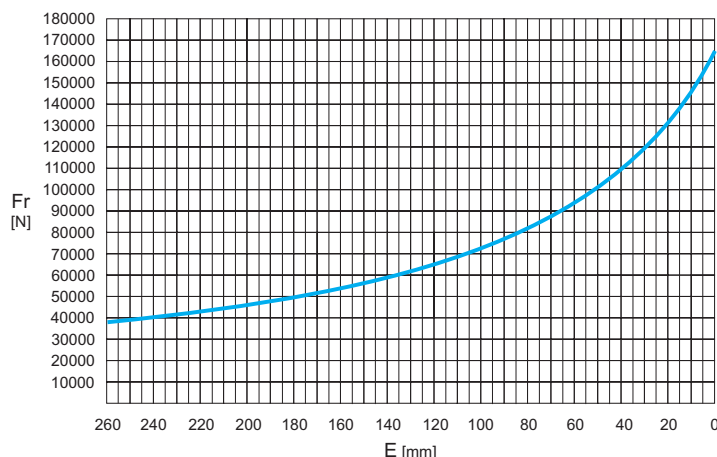
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

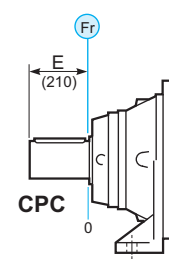
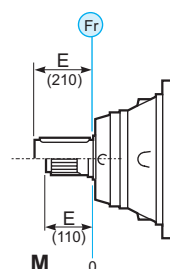
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

M - CPC*



	$n \times h$				
	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.

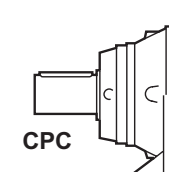
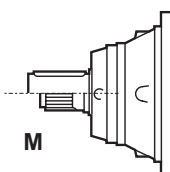
CHARGES AXIALES (Fa)

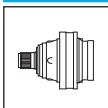
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

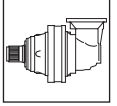




PG 3500

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
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	14.2	42.37	37.50	31.91	28.25	2000	34	243	—	304	207	215
	17.1	42.37	37.50	31.91	28.25							
	20.2	36.11	31.96	27.20	24.07							
	22.4	42.37	37.50	31.91	28.25							
	26.4	36.11	31.96	27.20	24.07							
	31.8	36.11	31.96	27.20	24.07							
	40.8	36.11	31.96	27.20	24.07							
PG 3503	53.7	42.37	37.50	31.91	28.25	2800	23	259	—	320	223	231
	58.7	42.37	37.50	31.91	28.25							
	64.8	42.37	37.50	31.91	28.25							
	70.7	42.37	37.50	31.91	28.25							
	83.2	36.11	31.96	27.20	24.07							
	88.6	42.37	37.50	31.91	28.25							
	99.6	36.11	31.96	27.20	24.07							
	108.7	36.11	31.96	27.20	24.07							
	121.0	36.11	31.96	27.20	24.07							
	136.2	36.11	31.96	27.20	24.07							
	158.1	36.11	31.96	27.20	24.07							
	164.1	36.11	31.96	27.20	24.07							
	191.1	36.11	31.96	27.20	24.07							
	230.3	36.11	31.96	27.20	24.07							
PG 3504	191.0	42.37	37.50	31.91	28.25	2800	17	267	—	328	231	239
	208.6	42.37	37.50	31.91	28.25							
	230.3	42.37	37.50	31.91	28.25							
	251.4	42.37	37.50	31.91	28.25							
	277.6	42.37	37.50	31.91	28.25							
	303.1	42.37	37.50	31.91	28.25							
	328.5	42.37	37.50	31.91	28.25							
	362.7	42.37	37.50	31.91	28.25							
	379.6	42.37	37.50	31.91	28.25							
	437.1	42.37	37.50	31.91	28.25							
	496.0	42.37	37.50	31.91	28.25							
	583.5	36.11	31.96	27.20	24.07							
	677.7	36.11	31.96	27.20	24.07							
	703.4	36.11	31.96	27.20	24.07							
	762.5	36.11	31.96	27.20	24.07							
	816.8	36.11	31.96	27.20	24.07							
	987.0	36.11	31.96	27.20	24.07							
	1067.3	36.11	31.96	27.20	24.07							
	1289.7	36.11	31.96	27.20	24.07							

PG 3500



	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 3502	12.3	42.37	37.50	31.91	28.25	2000	34	285	—	346	248	256
	14.5	36.11	31.96	27.20	24.07							
	18.7	42.37	37.50	31.91	28.25							
	22.0	36.11	31.96	27.20	24.07							
PGA 3503	43.7	42.37	37.50	31.91	28.25	2800	23	342	—	403	305	313
	52.7	42.37	37.50	31.91	28.25							
	66.4	42.37	37.50	31.91	28.25							
	80.0	42.37	37.50	31.91	28.25							
	94.1	36.11	31.96	27.20	24.07							
	123.0	36.11	31.96	27.20	24.07							
PGA 3504	185.6	42.37	37.50	31.91	28.25	2800	17	299	—	360	263	271
	202.7	42.37	37.50	31.91	28.25							
	223.7	42.37	37.50	31.91	28.25							
	244.3	42.37	37.50	31.91	28.25							
	292.5	42.37	37.50	31.91	28.25							
	319.4	42.37	37.50	31.91	28.25							
	352.6	42.37	37.50	31.91	28.25							
	385.0	42.37	37.50	31.91	28.25							
	414.8	36.11	31.96	27.20	24.07							
	452.9	36.11	31.96	27.20	24.07							
	542.0	36.11	31.96	27.20	24.07							
	591.8	36.11	31.96	27.20	24.07							
	658.8	36.11	31.96	27.20	24.07							
	741.3	36.11	31.96	27.20	24.07							
	860.9	36.11	31.96	27.20	24.07							
	1037.7	36.11	31.96	27.20	24.07							
	1253.8	36.11	31.96	27.20	24.07							

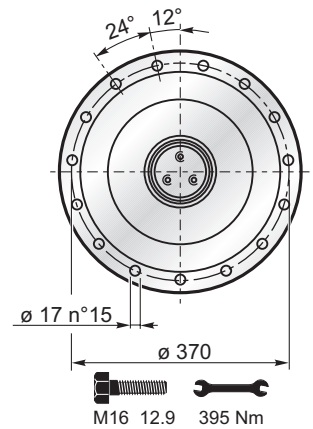
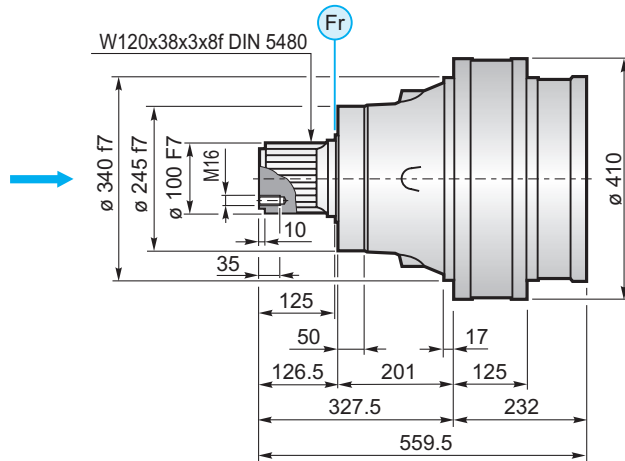


(n₂ x h = 20.000)

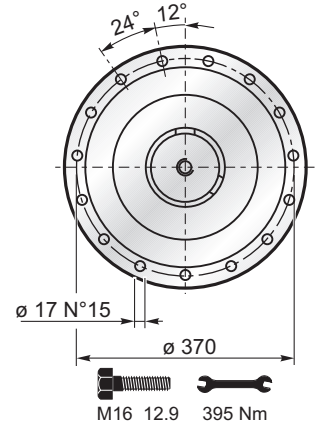
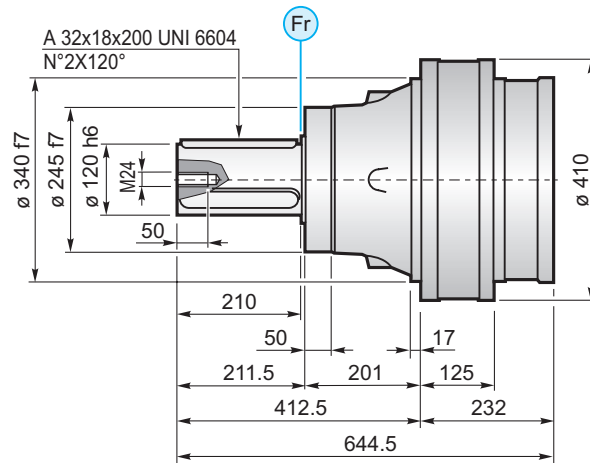
$$M_{\max} = M_c \times 1.65$$



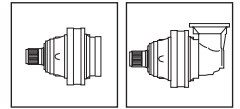
MS



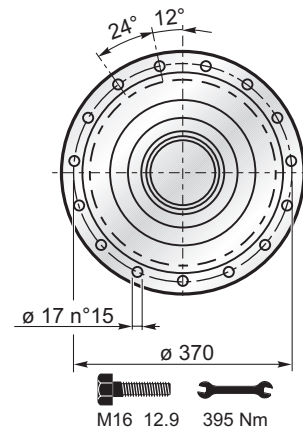
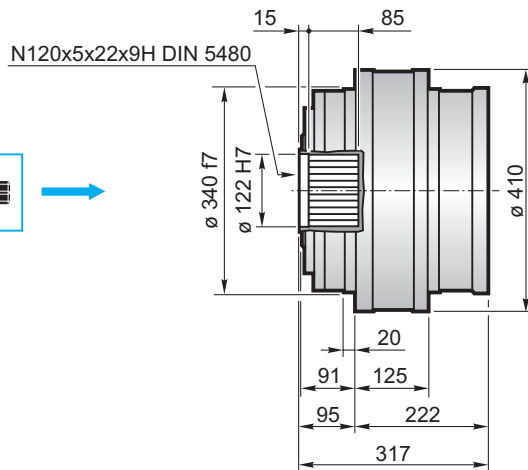
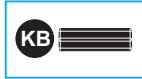
MC



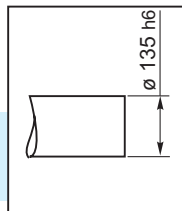
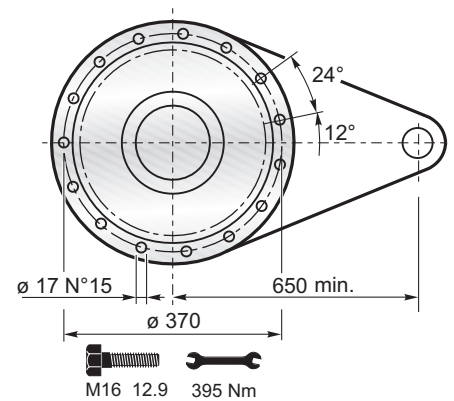
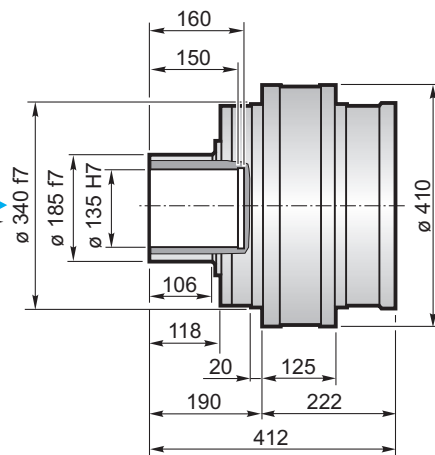
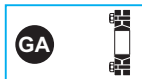
PG 3500



F



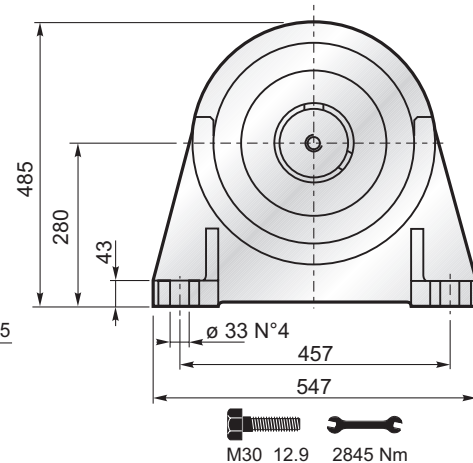
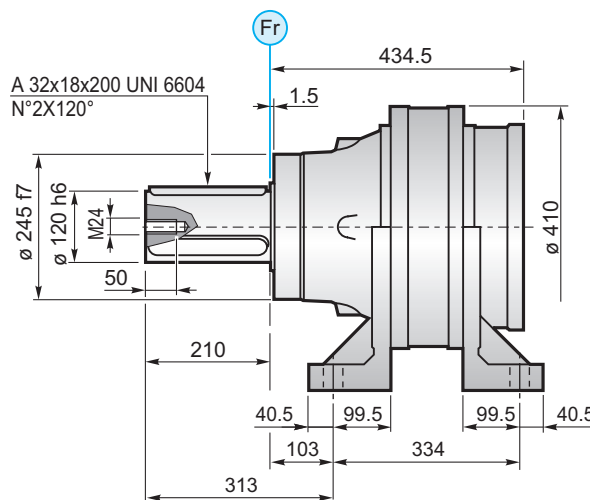
FS



$M_{max} = 52 \text{ kNm}$

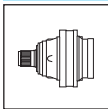
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

CPC



FL YZ BS FF KB GA → 128

SOM



PG 3500

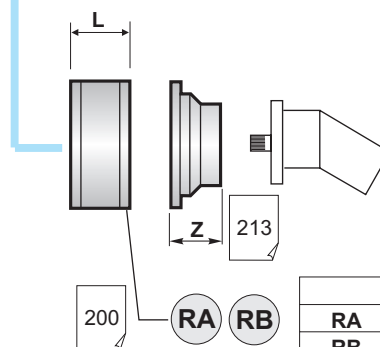
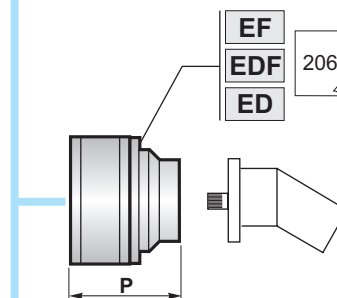
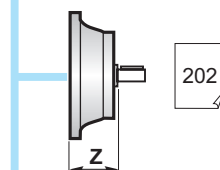
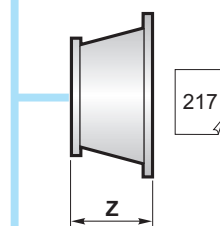
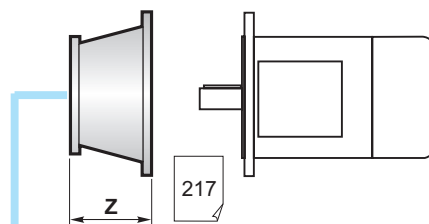
	PG		...MS			
	A	B	RA	RB	EF	EDF
PG 3501	232	559.5				
PG 3502	319	646.5		•		
PG 3503	390.5	718	•	o	•	
PG 3504	451.5	779	•			•

	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	222	317				
PG 3502	309	404		•		
PG 3503	380.5	475.5	•	o	•	
PG 3504	441.5	536.5	•			•

	PG		...FS			
	A	B	RA	RB	EF	EDF
PG 3501	222	412				
PG 3502	309	499		•		
PG 3503	380.5	570.5	•	o	•	
PG 3504	441.5	631.5	•			•

	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	•			•

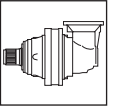


	L
RA	81
RB	125



A+13.5	B+13.5	o
--------	--------	---

PG 3500



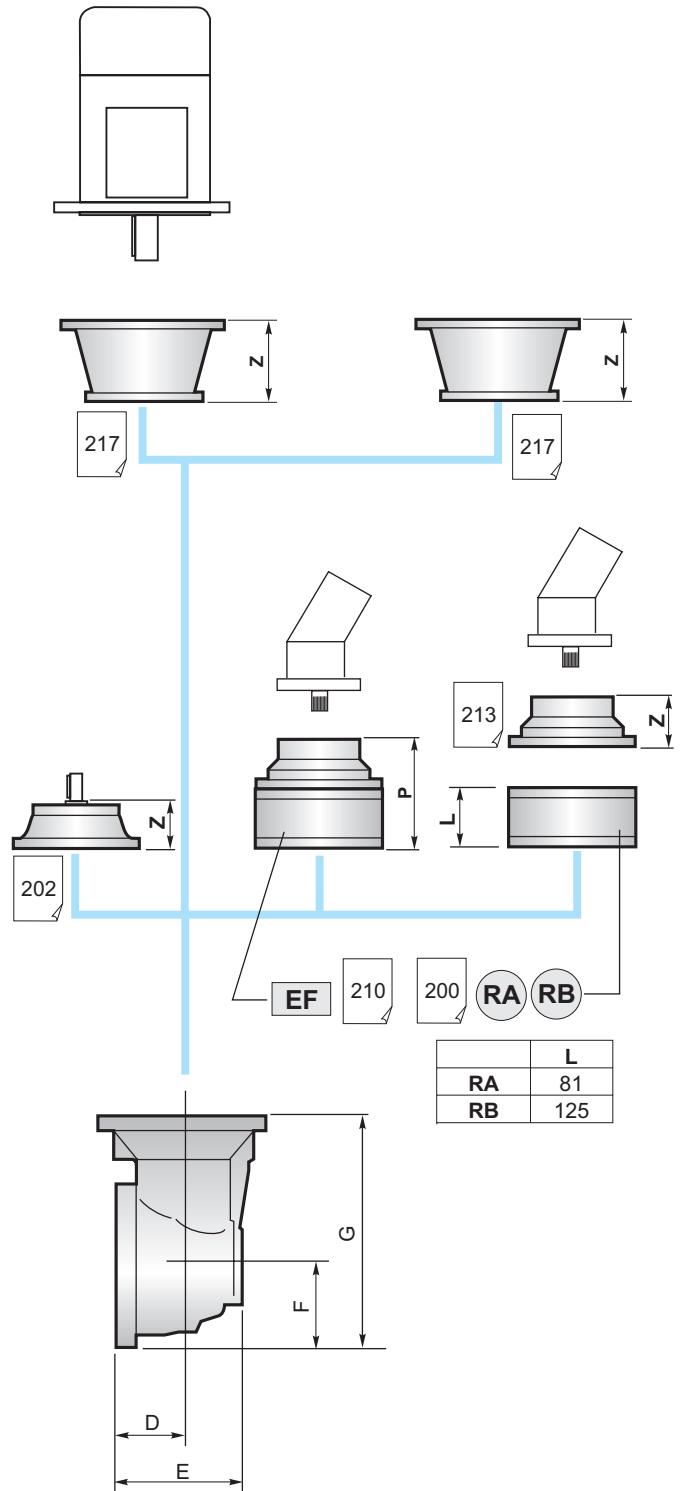
	PGA ...MS					
		A	B	RA	RB	EF
	PGA 3502	297	315		•	
	PGA 3503	454	240	•	o	•
	PGA 3504	492	240	•		•

	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	•		•

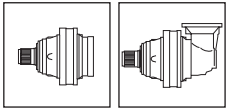
	PGA ...CPC					
		A	B	RA	RB	EF
	PGA 3502	499.5	315		•	
	PGA 3503	656.5	240	•	o	•
	PGA 3504	694.5	240	•		•



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

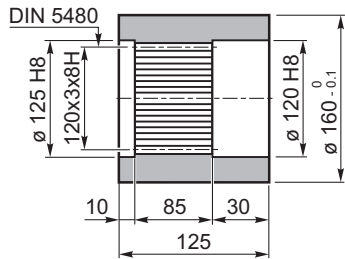


A	B+16.5	o
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PG 3500

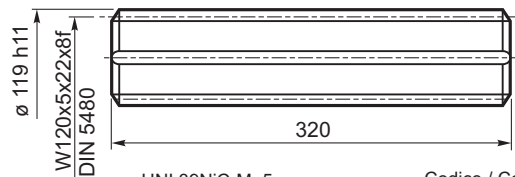
BS Boccola scanalata / Splined bushing Moyeu cannelé / Innenverzahnte Buchse



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

Codice / Code
Code / Bestell - Nr.
1719.104.076

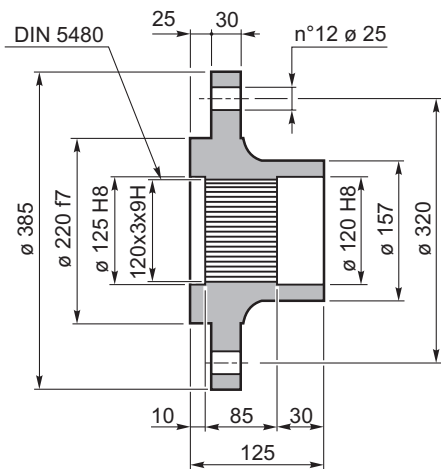
KB Barra scanalata / Splined rod Arbre cannelé / Außenverzahnte Welle



Materiale / Material
Matière / Material
UNI 39NiCrMo5
bonificato
hardened and tempered
bonifié
vergütet

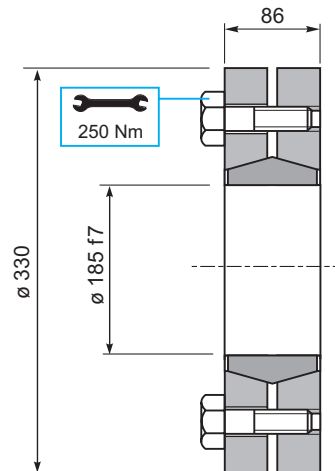
Codice / Code
Code / Bestell - Nr.
1703.588.042

FL Flangia / Flange Bride / Flansch



Codice / Code
Code / Bestell - Nr.
1719.103.098

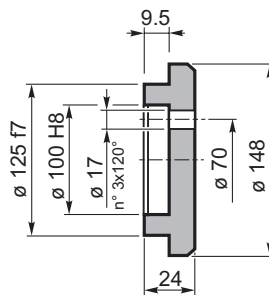
GA Giunto di attrito / Shrink disc Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
52 kNm

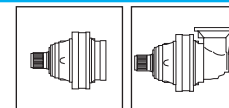
Codice / Code
Code / Bestell - Nr.
9015.185.000

FF Fondello di arresto / Stop bottom plate Bouchon de fermeture / Endscheibe



Codice / Code
Code / Bestell - Nr.
5701.005.000

PG 3500



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

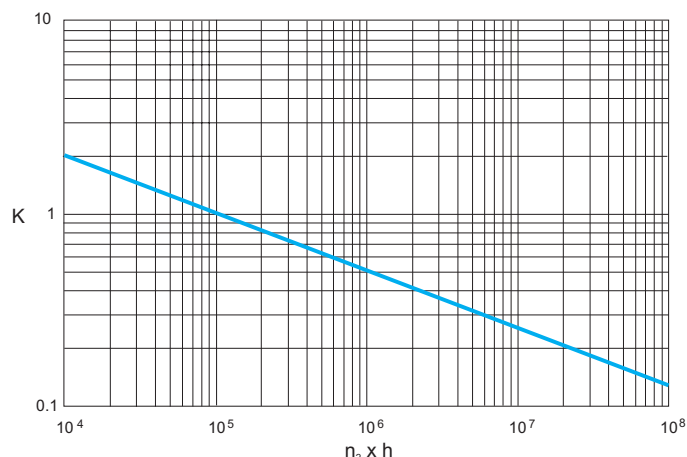
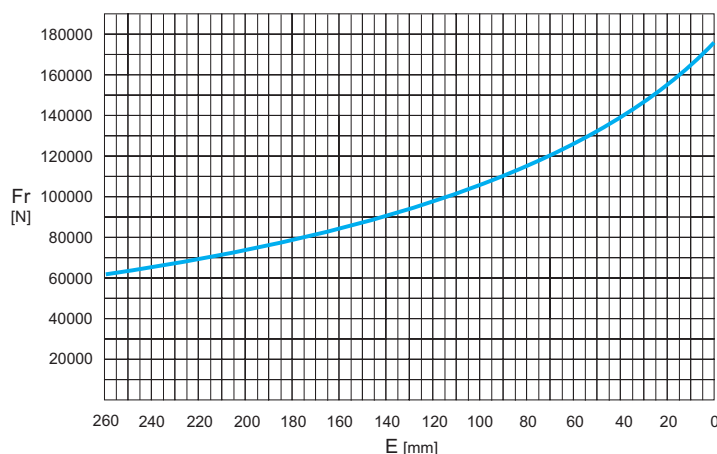
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

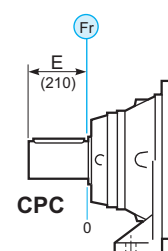
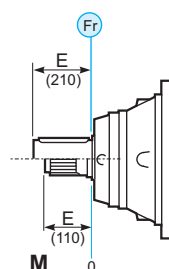
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

M - CPC*



	$n \times h$				
	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.

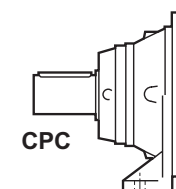
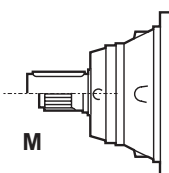
CHARGES AXIALES (Fa)

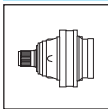
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

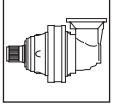




PG 5000

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 5001	4.00	68.69	60.80	51.74	45.80	1200	60	314	—	418	256	269
	5.10	50.28	44.50	37.87	33.52							
	6.00	40.11	35.50	30.21	26.74							
PG 5002	14.0	68.69	60.80	51.74	45.80	2000	38	373	—	477	315	328
	16.9	68.69	60.80	51.74	45.80							
	21.6	50.28	44.50	37.87	33.52							
	26.9	68.69	60.80	51.74	45.80							
	28.3	50.28	44.50	37.87	33.52							
	33.6	40.11	35.50	30.21	26.74							
	40.5	40.11	35.50	30.21	26.74							
PG 5003	53.1	68.69	60.80	51.74	45.80	2800	25	389	—	493	331	344
	64.0	68.69	60.80	51.74	45.80							
	74.2	50.28	44.50	37.87	33.52							
	84.3	68.69	60.80	51.74	45.80							
	92.9	50.28	44.50	37.87	33.52							
	107.9	50.28	44.50	37.87	33.52							
	116.9	50.28	44.50	37.87	33.52							
	130.1	50.28	44.50	37.87	33.52							
	138.6	40.11	35.50	30.21	26.74							
	157.2	50.28	44.50	37.87	33.52							
	170.1	50.28	44.50	37.87	33.52							
	205.5	50.28	44.50	37.87	33.52							
	247.7	50.28	44.50	37.87	33.52							
	293.6	40.11	35.50	30.21	26.74							
PG 5004	324.7	68.69	60.80	51.74	45.80	2800	20	397	—	501	339	352
	358.5	68.69	60.80	51.74	45.80							
	391.4	68.69	60.80	51.74	45.80							
	432.1	68.69	60.80	51.74	45.80							
	471.8	68.69	60.80	51.74	45.80							
	511.5	68.69	60.80	51.74	45.80							
	564.6	68.69	60.80	51.74	45.80							
	591.0	68.69	60.80	51.74	45.80							
	616.6	68.69	60.80	51.74	45.80							
	686.3	68.69	60.80	51.74	45.80							
	789.3	50.28	44.50	37.87	33.52							
	878.7	50.28	44.50	37.87	33.52							
	952.5	50.28	44.50	37.87	33.52							
	1061.7	50.28	44.50	37.87	33.52							
	1151.0	50.28	44.50	37.87	33.52							
	1258.3	40.11	35.50	30.21	26.74							
	1387.3	50.28	44.50	37.87	33.52							
	1672.2	50.28	44.50	37.87	33.52							
	1981.9	40.11	35.50	30.21	26.74							

PG 5000

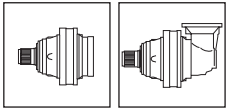


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 5002	12.1	68.69	60.80	51.74	45.80	2000	38	364	—	468	306	319
	15.5	50.28	44.50	37.87	33.52							
	18.4	40.11	35.50	30.21	26.74							
	23.6	50.28	44.50	37.87	33.52							
	27.9	40.11	35.50	30.21	26.74							
PGA 5003	58.5	68.69	60.80	51.74	45.80	2800	25	410	—	514	293	306
	76.5	68.69	60.80	51.74	45.80							
	97.9	50.28	44.50	37.87	33.52							
	118.1	50.28	44.50	37.87	33.52							
	139.9	40.11	35.50	30.21	26.74							
	154.3	50.28	44.50	37.87	33.52							
	220.4	40.11	35.50	30.21	26.74							
PGA 5004	241.5	68.69	60.80	51.74	45.80	2800	20	429	—	533	371	384
	288.9	68.69	60.80	51.74	45.80							
	315.7	68.69	60.80	51.74	45.80							
	351.2	68.69	60.80	51.74	45.80							
	395.2	68.69	60.80	51.74	45.80							
	455.4	68.69	60.80	51.74	45.80							
	506.3	50.28	44.50	37.87	33.52							
	543.3	50.28	44.50	37.87	33.52							
	587.6	50.28	44.50	37.87	33.52							
	668.9	50.28	44.50	37.87	33.52							
	708.7	50.28	44.50	37.87	33.52							
	797.4	50.28	44.50	37.87	33.52							
	856.3	50.28	44.50	37.87	33.52							
	926.0	50.28	44.50	37.87	33.52							
	961.2	50.28	44.50	37.87	33.52							
	1119.0	50.28	44.50	37.87	33.52							
	1348.8	50.28	44.50	37.87	33.52							
	1598.6	40.11	35.50	30.21	26.74							



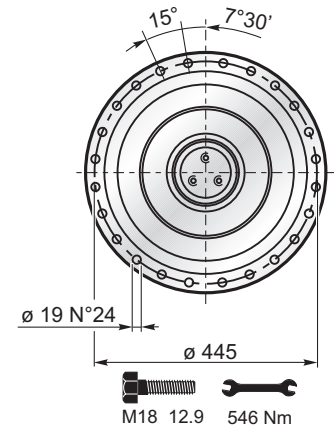
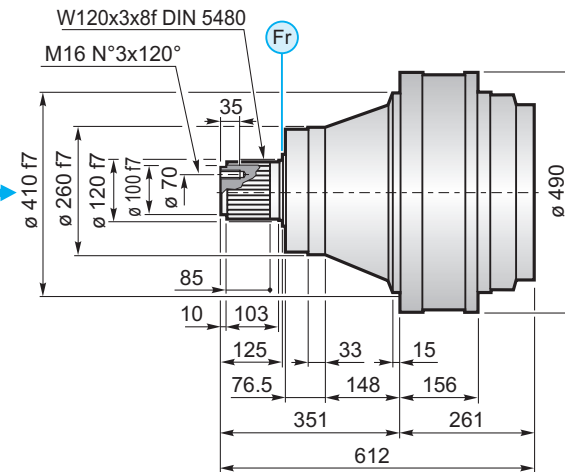
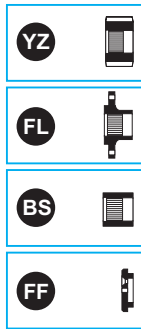
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

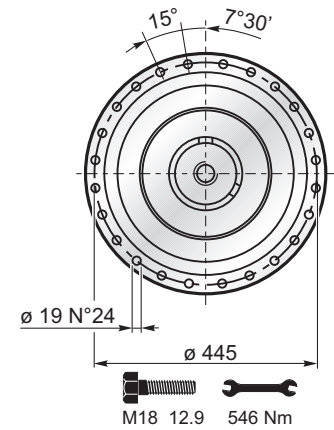
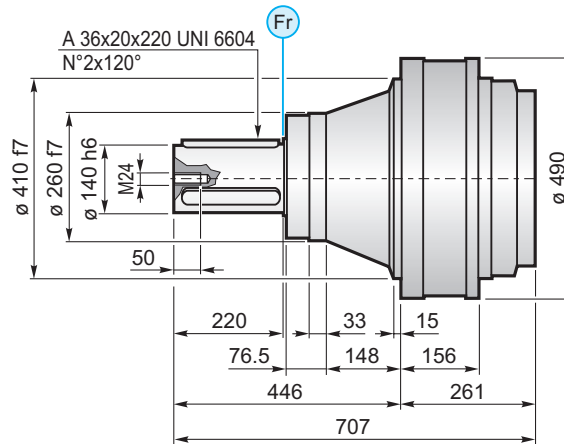


PG 5000

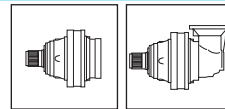
MS



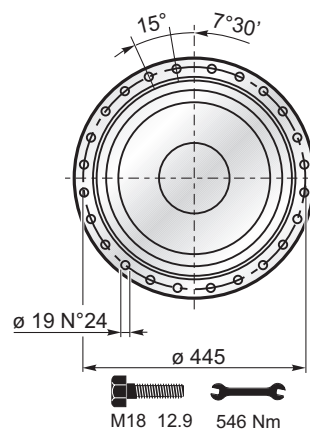
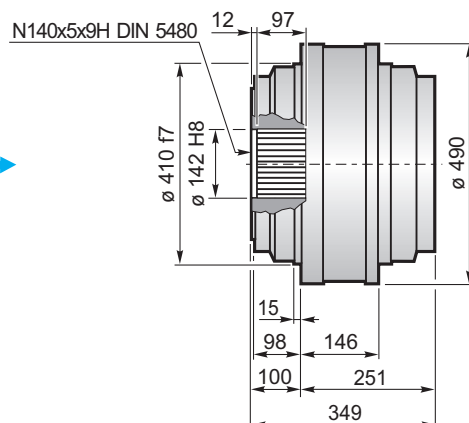
MC



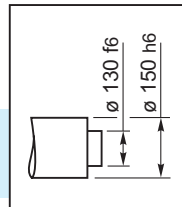
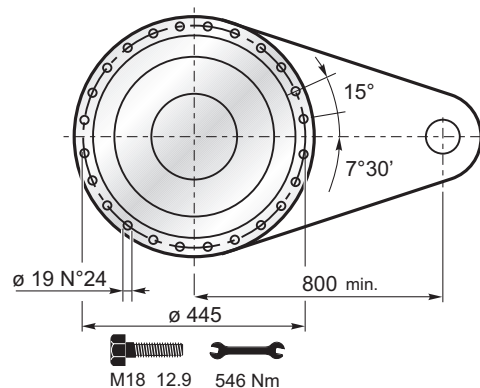
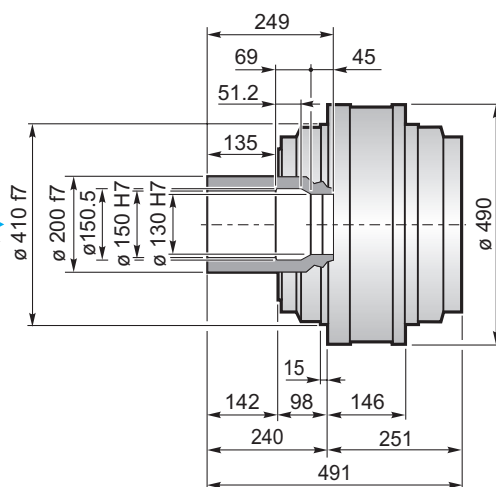
PG 5000



F



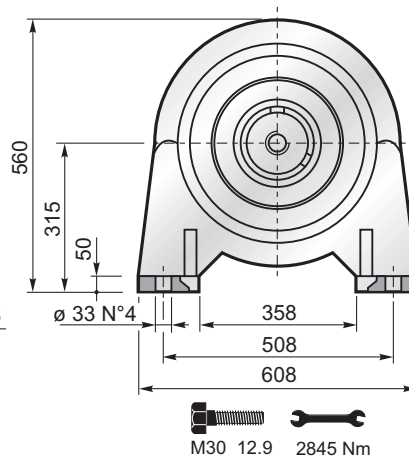
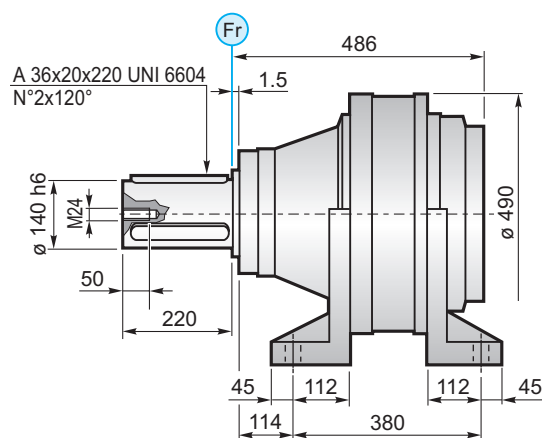
FS



$M_{max} = 92.5 \text{ kNm}$

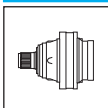
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

CPC



FL YZ BS FF KB GA → 136

SOM



PG 5000

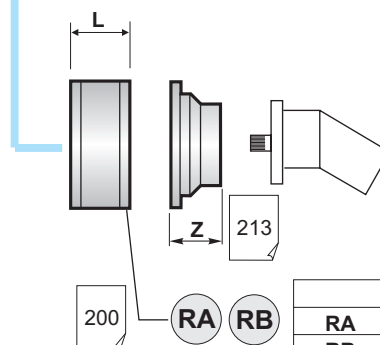
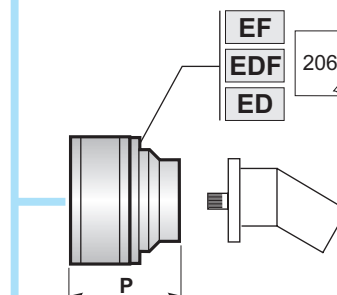
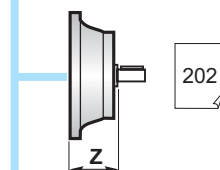
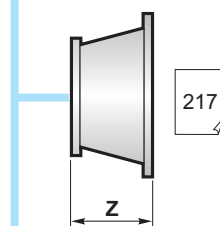
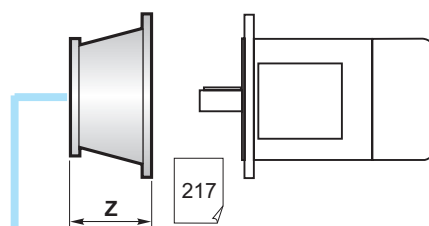
	PG		...MS			
	A	B	RA	RB	EF	EDF
PG 5001	261	612				
PG 5002	368	719		•		
PG 5003	439.5	790.5	•	o	•	
PG 5004	500.5	851.5	•			•

	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	•			•

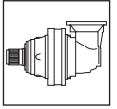


L	
RA	81
RB	125



A+13.5	B+13.5	o
--------	--------	---

PG 5000



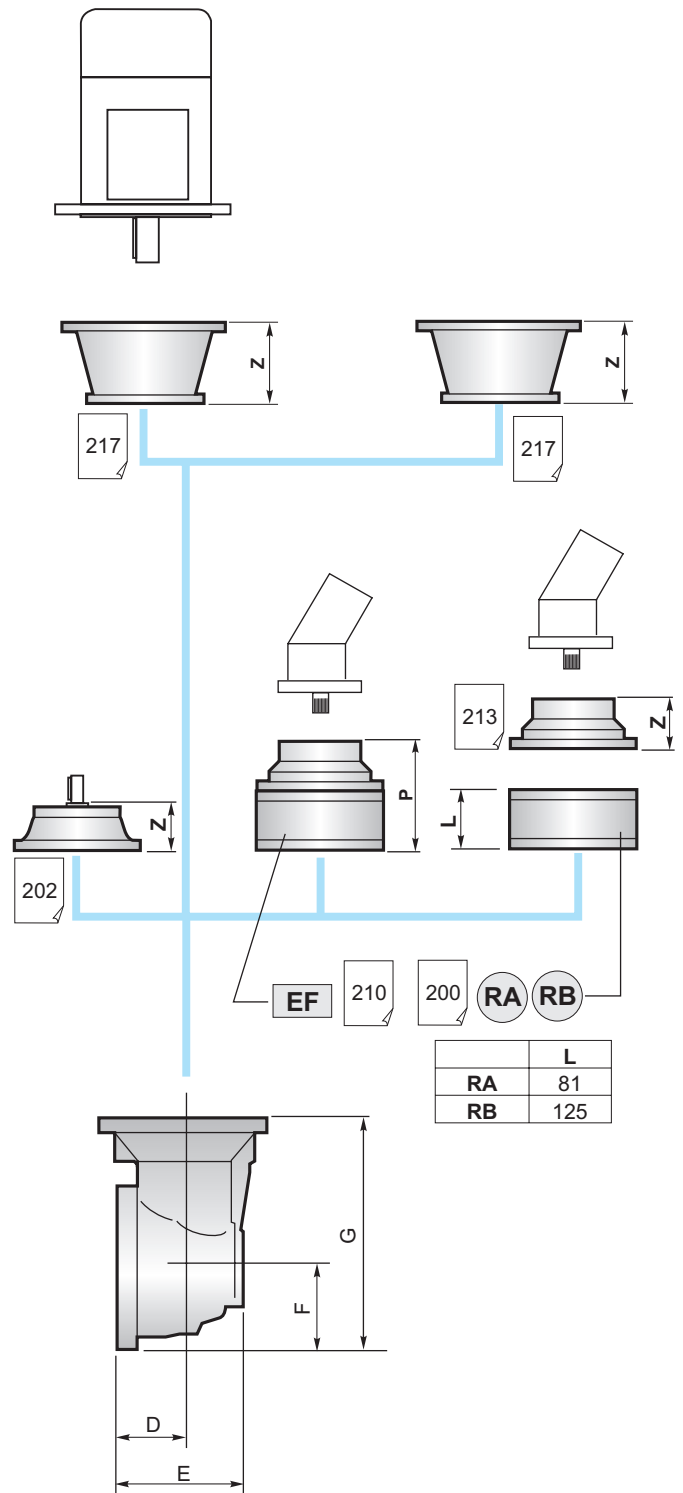
	PGA ...MS					
	A	B	RA	RB	EF	
	PGA 5002	442	315		•	
	PGA 5003	456	240	•	o	•
	PGA 5004	541	240	•		•

	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	•		•

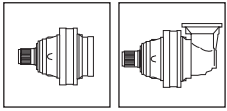
	PGA ...CPC					
	A	B	RA	RB	EF	
	PGA 5002	667	315		•	
	PGA 5003	681	240	•	o	•
	PGA 5004	766	240	•		•



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

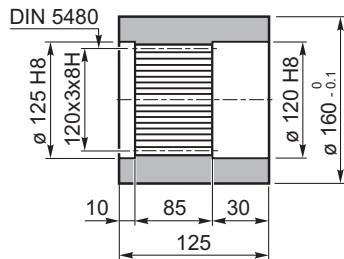


B+16.5 o



PG 5000

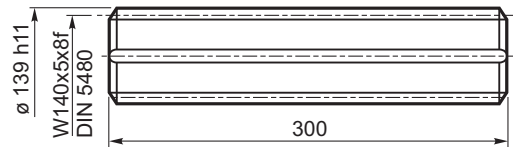
BS Boccola scanalata / Splined bushing Moyeu cannelé / Innenverzahnte Buchse



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

Codice / Code
Code / Bestell - Nr.
1719.104.076

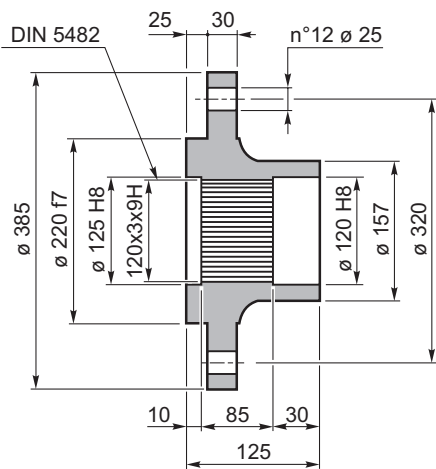
KB Barra scanalata / Splined rod Arbre cannelé / Außenverzahnte Welle



Materiale / Material
Matière / Material
UNI 39NiCrMo5
bonificato
hardened and tempered
bonifié
vergütet

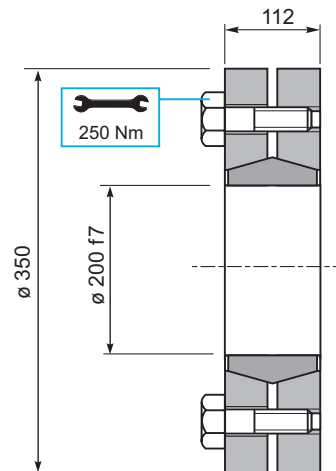
Codice / Code
Code / Bestell - Nr.
1703.564.042

FL Flangia / Flange Bride / Flansch



Codice / Code
Code / Bestell - Nr.
1719.103.098

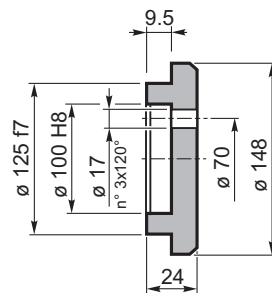
GA Giunto di attrito / Shrink disc Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
92,5 kNm

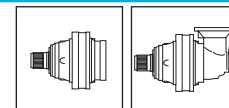
Codice / Code
Code / Bestell - Nr.
9015.200.000

FF Fondello di arresto / Stop bottom plate Bouchon de fermeture / Endscheibe



Codice / Code
Code / Bestell - Nr.
5701.005.000

PG 5000



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

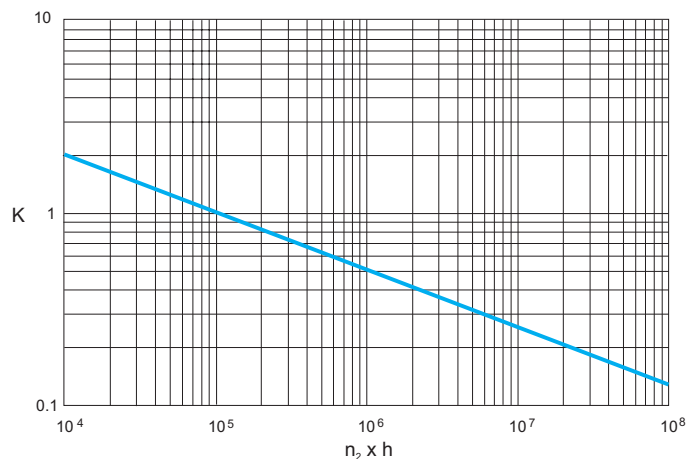
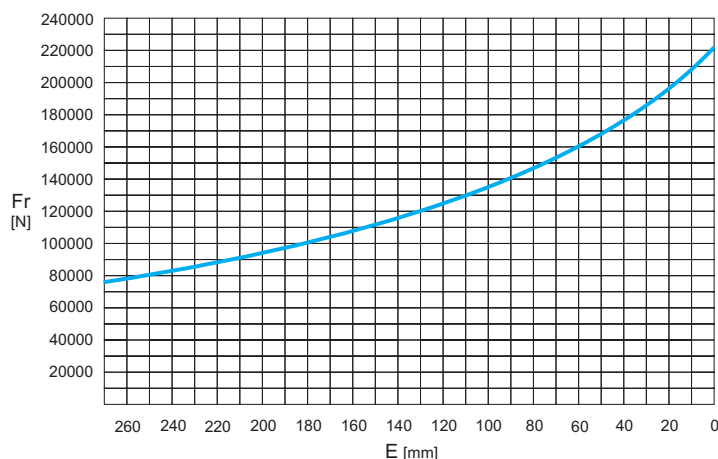
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

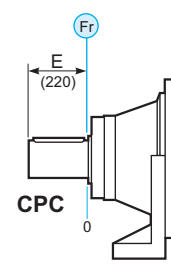
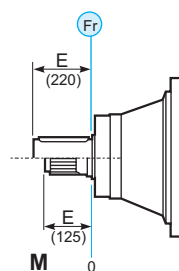
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

M - CPC*



	$n \times h$				
	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.

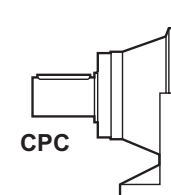
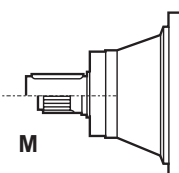
CHARGES AXIALES (Fa)

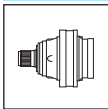
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

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

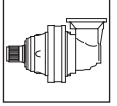




PG 6500

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 6501	3.83	78.31	69.31	58.98	52.21	1000	60	334	—	438	276	290
PG 6502	15.3	78.31	69.31	58.98	52.21	1500	50	450	—	554	392	406
	19.9	78.31	69.31	58.98	52.21							
	23.9	78.31	69.31	58.98	52.21							
PG 6503	56.2	78.31	69.31	58.98	52.21	2500	35	477	—	581	419	433
	67.9	78.31	69.31	58.98	52.21							
	73.1	78.31	69.31	58.98	52.21							
	88.3	78.31	69.31	58.98	52.21							
	99.7	78.31	69.31	58.98	52.21							
	115.6	78.31	69.31	58.98	52.21							
	139.0	78.31	69.31	58.98	52.21							
	167.8	78.31	69.31	58.98	52.21							
PG 6504	212.5	78.31	69.31	58.98	52.21	2800	25	489	—	593	431	445
	256.6	78.31	69.31	58.98	52.21							
	280.2	78.31	69.31	58.98	52.21							
	301.6	78.31	69.31	58.98	52.21							
	333.7	78.31	69.31	58.98	52.21							
	364.3	78.31	69.31	58.98	52.21							
	407.7	78.31	69.31	58.98	52.21							
	456.3	78.31	69.31	58.98	52.21							
	515.2	78.31	69.31	58.98	52.21							
	556.2	78.31	69.31	58.98	52.21							
	640.4	78.31	69.31	58.98	52.21							
	694.1	78.31	69.31	58.98	52.21							
	838.7	78.31	69.31	58.98	52.21							
	1008.1	78.31	69.31	58.98	52.21							

PG 6500

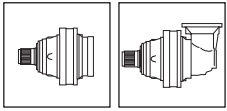


	i	Mc [kNm]				n1max [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 6503	47.1	78.31	69.31	58.98	52.21	2500	35	539	—	643	481	495
	61.2	78.31	69.31	58.98	52.21							
	71.6	78.31	69.31	58.98	52.21							
	93.0	78.31	69.31	58.98	52.21							
	111.8	78.31	69.31	58.98	52.21							
PGA 6504	194.3	78.31	69.31	58.98	52.21	2800	25	514	—	618	456	470
	234.7	78.31	69.31	58.98	52.21							
	252.6	78.31	69.31	58.98	52.21							
	265.0	78.31	69.31	58.98	52.21							
	305.1	78.31	69.31	58.98	52.21							
	344.5	78.31	69.31	58.98	52.21							
	399.6	78.31	69.31	58.98	52.21							
	417.6	78.31	69.31	58.98	52.21							
	484.5	78.31	69.31	58.98	52.21							
	578.0	78.31	69.31	58.98	52.21							
	629.8	78.31	69.31	58.98	52.21							
	757.0	78.31	69.31	58.98	52.21							
	913.7	78.31	69.31	58.98	52.21							



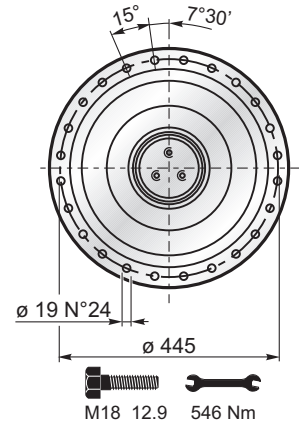
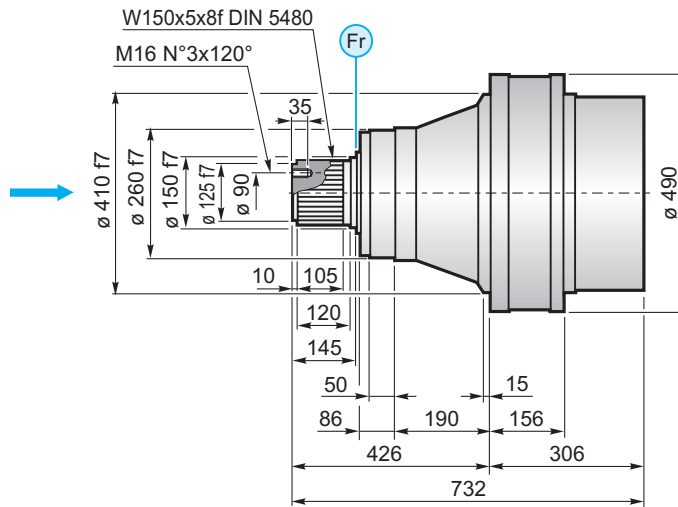
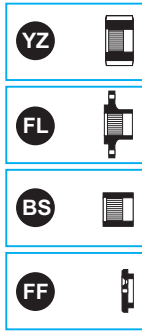
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

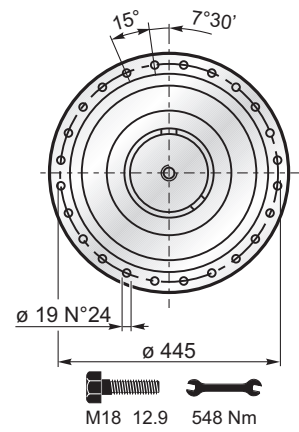
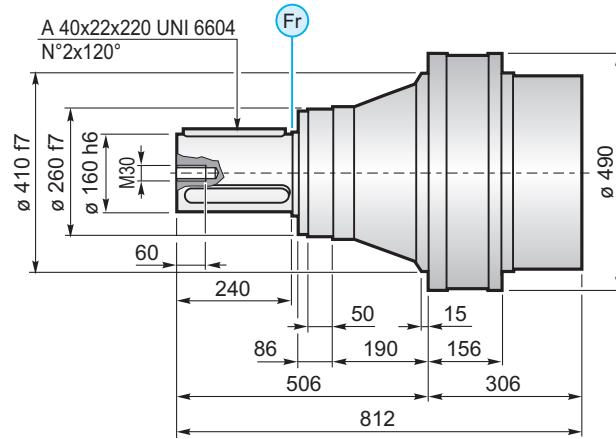


PG 6500

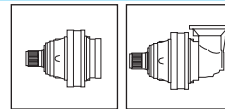
MS



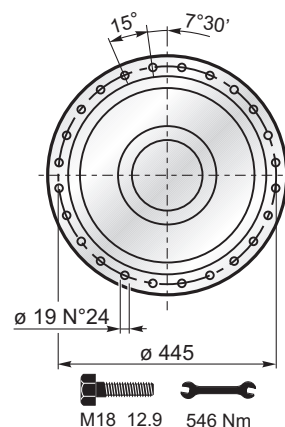
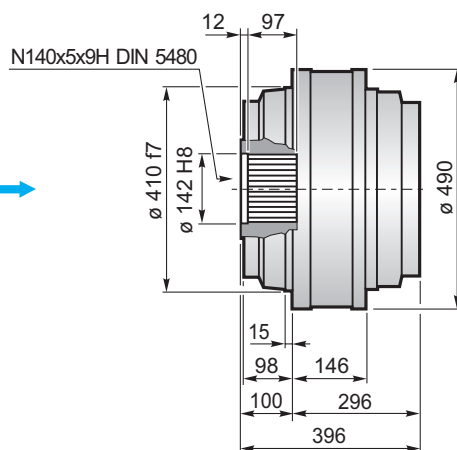
MC



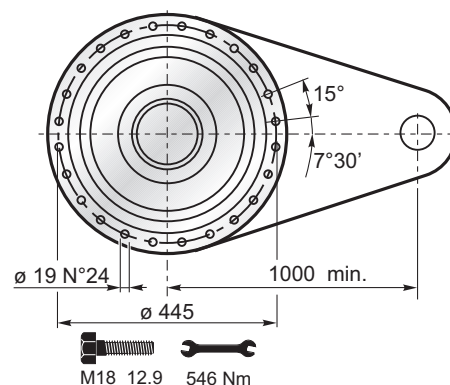
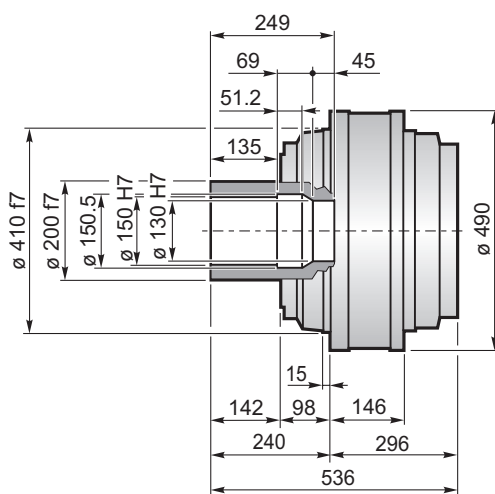
PG 6500



F



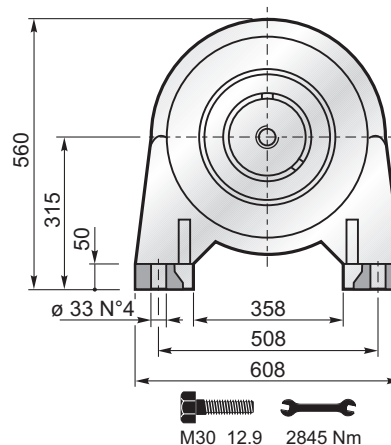
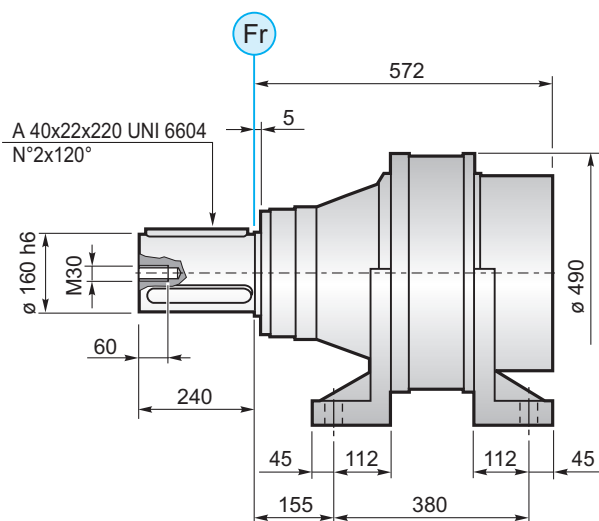
FS



$M_{max} = 92.5 \text{ kNm}$

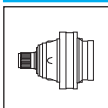
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

CPC



FL YZ BS FF KB GA → 144

SOM



PG 6500

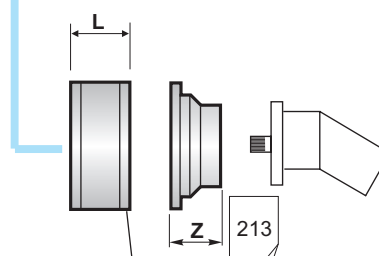
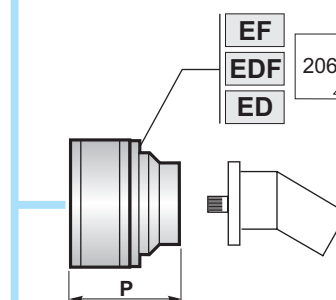
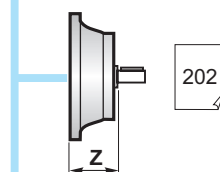
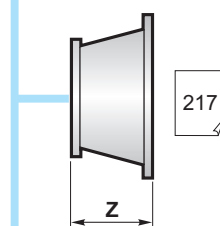
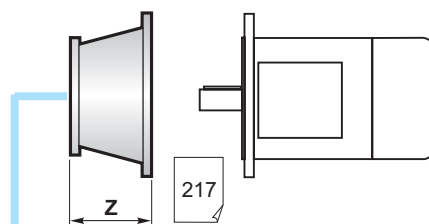
	PG		...MS			
	A	B	RA	RB	EF	EDF
PG 6501	306	732				
PG 6502	488	914				
PG 6503	582	1008		•		
PG 6504	641.5	1067.5	•	o	•	

	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
PG 6501	296	396				
PG 6502	478	578				
PG 6503	572	672		•		
PG 6504	631.5	631.5	•	o	•	

	PG		...FS			
	A	B	RA	RB	EF	EDF
PG 6501	296	536				
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	•	

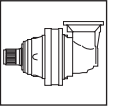


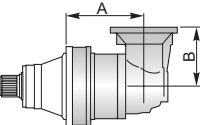
200	RA	RB	L
	RA	RB	81
	RA	RB	125

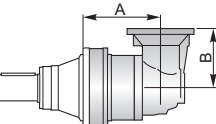


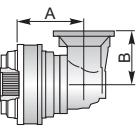
A+13.5	B+13.5	o
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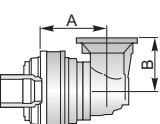
PG 6500

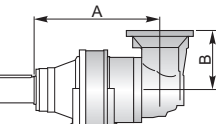


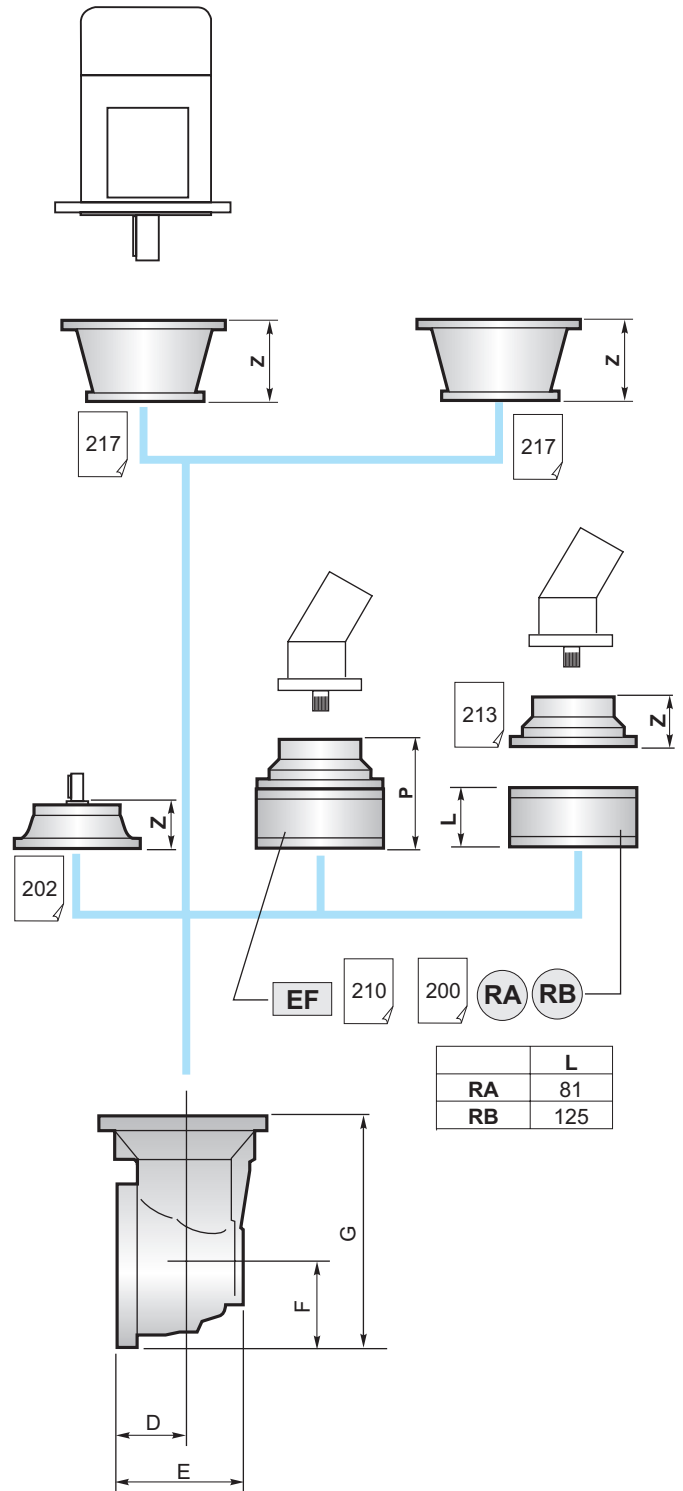
	PGA ...MS				
	A	B	RA	RB	EF
	PGA 6503	568	315	•	•
PGA 6504	670	240	•	o	•

	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	•

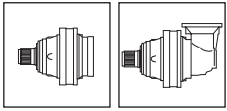
	PGA ...CPC				
	A	B	RA	RB	EF
	PGA 6503	834	315	•	•
PGA 6504	936	240	•	o	•



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

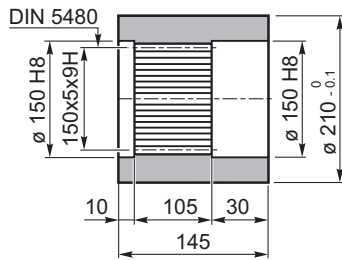


	B+16.5	o
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PG 6500

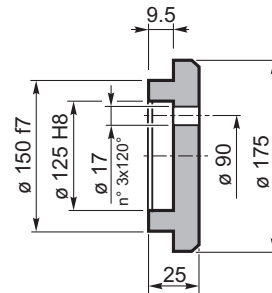
BS Boccola scanalata / Splined bushing Moyeu cannelé / Innenverzahnte Buchse



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

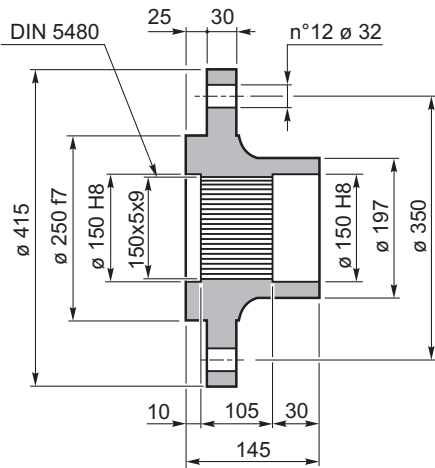
Codice / Code
Code / Bestell - Nr.
1720.102.076

FF Fondello di arresto / Stop bottom plate Bouchon de fermeture / Endscheibe



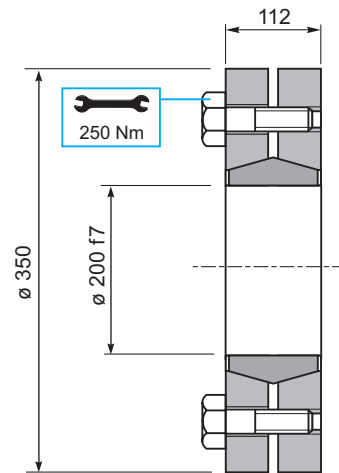
Codice / Code
Code / Bestell - Nr.
5701.043.000

FL Flangia / Flange Bride / Flansch



Codice / Code
Code / Bestell - Nr.
1720.106.098

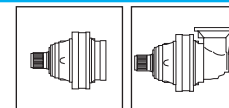
GA Giunto di attrito / Shrink disc Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
92,5 kNm

Codice / Code
Code / Bestell - Nr.
9015.200.000

PG 6500



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

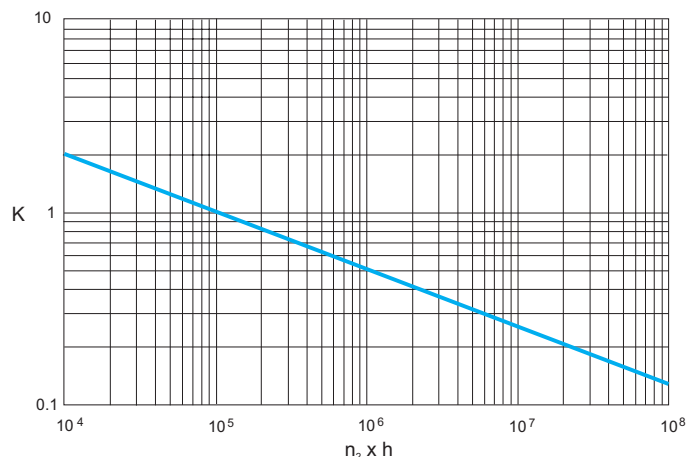
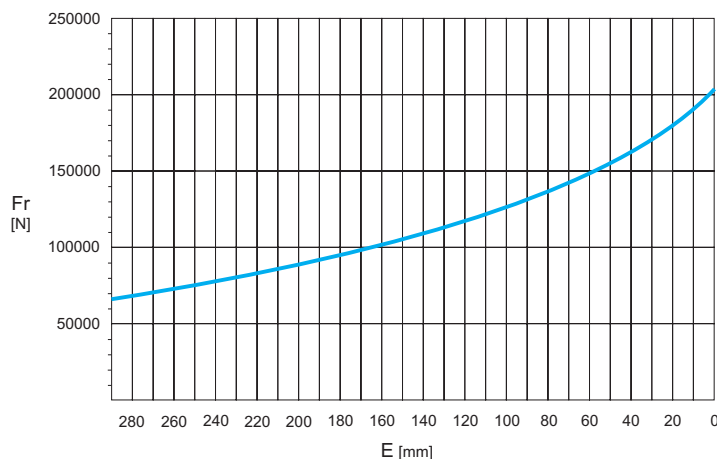
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

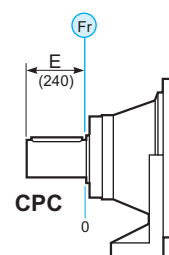
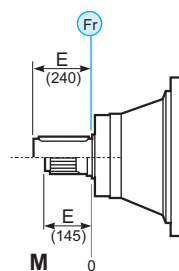
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

M - CPC*



	$n \times h$				
	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.

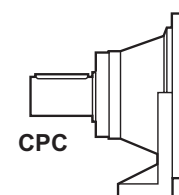
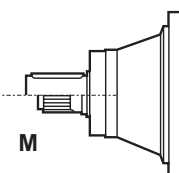
CHARGES AXIALES (Fa)

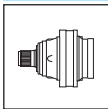
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

Fa [N]	M	CPC	
	50000	50000	←
	100000	100000	→

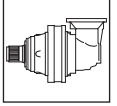




PG 9000

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n2 x h	n2 x h	n2 x h	n2 x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 9001	4.00	111.85	99.00	84.25	74.57	750	80	519	—	691	423	445
	5.10	89.26	79.00	67.23	59.50							
PG 9002	16.1	111.85	99.00	84.25	74.57	1500	65	635	—	807	539	561
	20.4	89.26	79.00	67.23	59.50							
	21.0	111.85	99.00	84.25	74.57							
	26.6	89.26	79.00	67.23	59.50							
	31.9	89.26	79.00	67.23	59.50							
PG 9003	59.3	111.85	99.00	84.25	74.57	2500	45	662	—	834	566	588
	71.6	111.85	99.00	84.25	74.57							
	80.8	111.85	99.00	84.25	74.57							
	93.1	111.85	99.00	84.25	74.57							
	105.1	111.85	99.00	84.25	74.57							
	117.8	89.26	79.00	67.23	59.50							
	121.9	111.85	99.00	84.25	74.57							
	133.0	89.26	79.00	67.23	59.50							
	154.3	89.26	79.00	67.23	59.50							
	185.5	89.26	79.00	67.23	59.50							
	224.0	111.85	99.00	84.25	74.57							
PG 9004	244.6	111.85	99.00	84.25	74.57	2800	30	673	—	845	577	599
	270.5	111.85	99.00	84.25	74.57							
	306.3	111.85	99.00	84.25	74.57							
	355.8	111.85	99.00	84.25	74.57							
	398.3	111.85	99.00	84.25	74.57							
	429.7	111.85	99.00	84.25	74.57							
	462.5	111.85	99.00	84.25	74.57							
	504.1	89.26	79.00	67.23	59.50							
	543.9	89.26	79.00	67.23	59.50							
	585.4	89.26	79.00	67.23	59.50							
	630.7	111.85	99.00	84.25	74.57							
	687.4	89.26	79.00	67.23	59.50							
	742.0	89.26	79.00	67.23	59.50							
	798.3	89.26	79.00	67.23	59.50							
	854.4	89.26	79.00	67.23	59.50							
	926.0	89.26	79.00	67.23	59.50							
	1119.0	89.26	79.00	67.23	59.50							
	1344.9	89.26	79.00	67.23	59.50							
	1623.2	89.26	79.00	67.23	59.50							

PG 9000

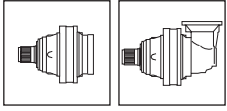


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 9003	49.6	111.85	99.00	84.25	74.57	2500	45	699	—	871	603	625
	64.5	111.85	99.00	84.25	74.57							
	81.7	89.26	79.00	67.23	59.50							
	95.5	89.26	79.00	67.23	59.50							
	124.1	89.26	79.00	67.23	59.50							
	149.2	89.26	79.00	67.23	59.50							
PGA 9004	247.4	111.85	99.00	84.25	74.57	2800	30	720	—	892	624	646
	266.3	111.85	99.00	84.25	74.57							
	322.8	111.85	99.00	84.25	74.57							
	389.9	111.85	99.00	84.25	74.57							
	419.7	111.85	99.00	84.25	74.57							
	459.6	89.26	79.00	67.23	59.50							
	506.9	111.85	99.00	84.25	74.57							
	572.3	111.85	99.00	84.25	74.57							
	638.4	89.26	79.00	67.23	59.50							
	663.9	111.85	99.00	84.25	74.57							
	724.4	89.26	79.00	67.23	59.50							
	771.1	89.26	79.00	67.23	59.50							
	840.3	89.26	79.00	67.23	59.50							
	1010.0	89.26	79.00	67.23	59.50							



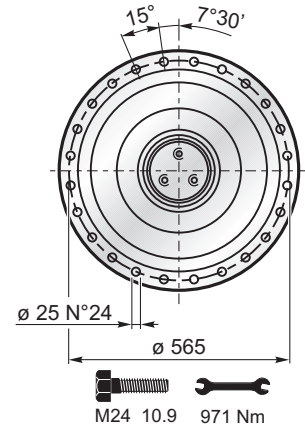
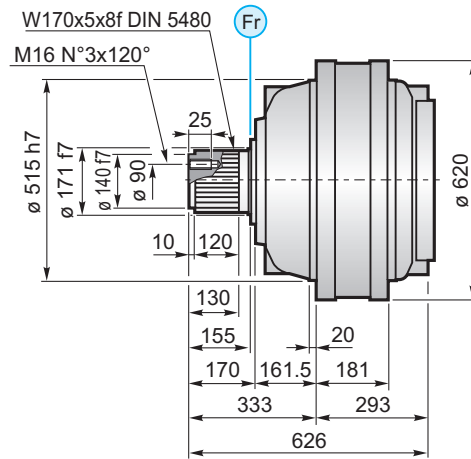
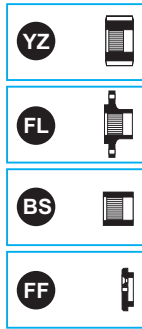
$$M_{\max} = M_c \times 2$$

(n₂ x h = 20.000)

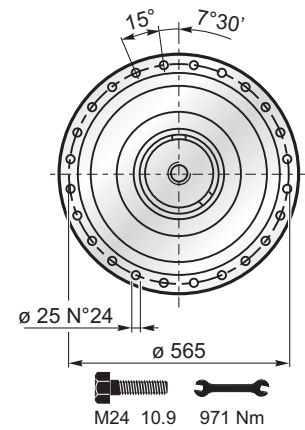
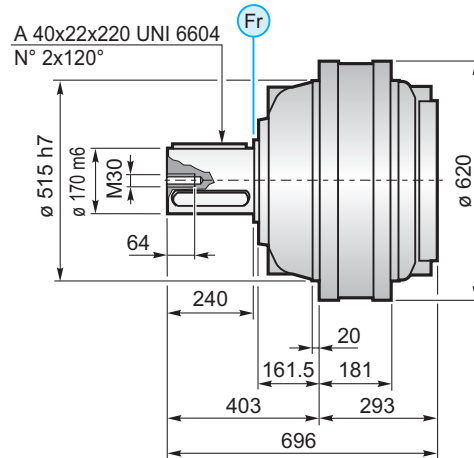


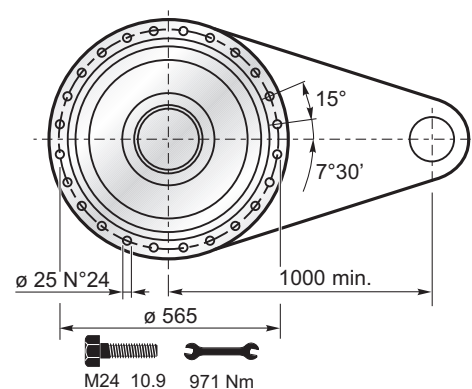
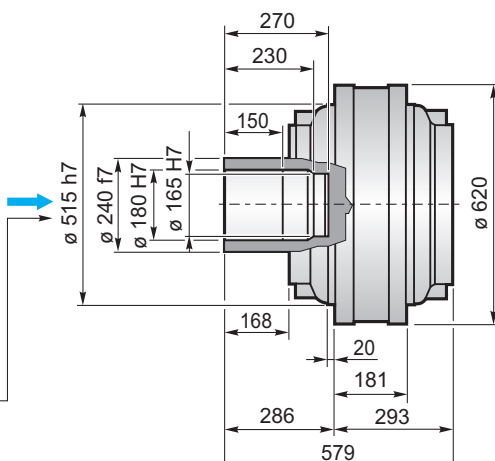
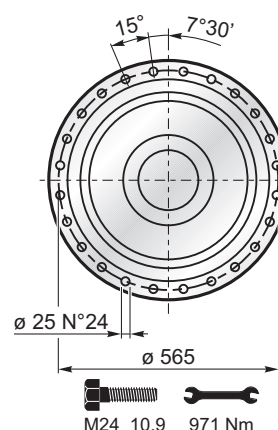
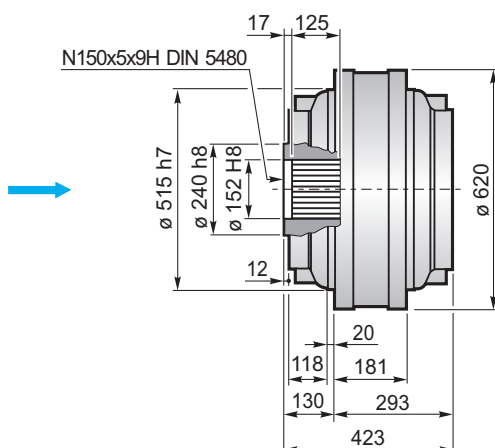
PG 9000

MS



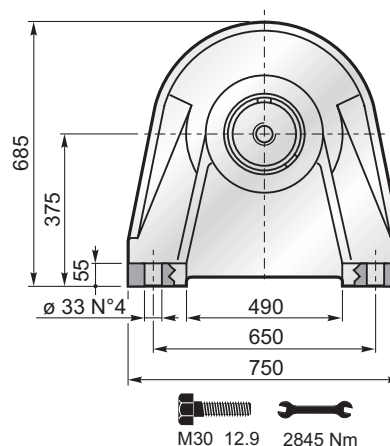
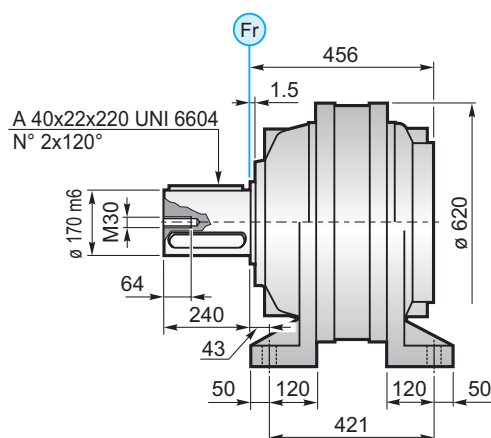
MC



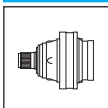


La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrupfscheibe

CPC



FL YZ BS FF KB GA → 152



PG 9000

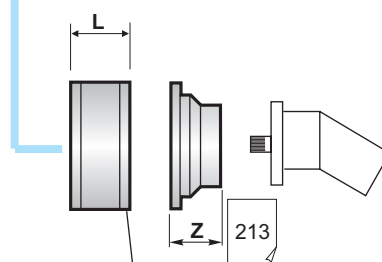
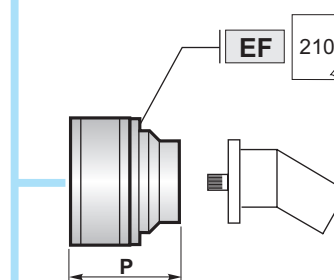
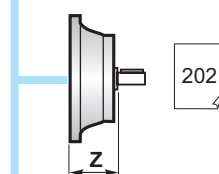
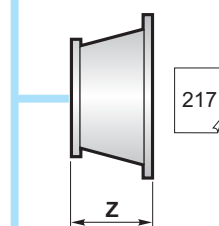
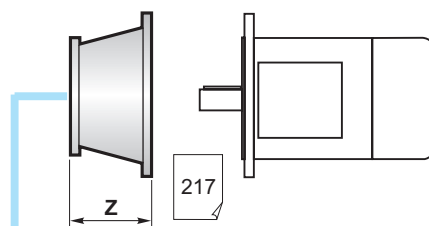
	PG		...MS			
	A	B	RA	RB	EF	EDF
PG 9001	293	626				
PG 9002	475	808				
PG 9003	569	902		•		
PG 9004	628.5	961.5	•	o	•	

	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	•	

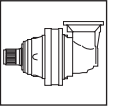
	PG		...CPC			
	A	B	RA	RB	EF	EDF
PG 9001	456	696				
PG 9002	638	878				
PG 9003	732	972		•		
PG 9004	791.5	1031.5	•	o	•	



200	RA	RB	L	
			RA	RB
			81	125

!	A+13.5	B+13.5	o
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PG 9000



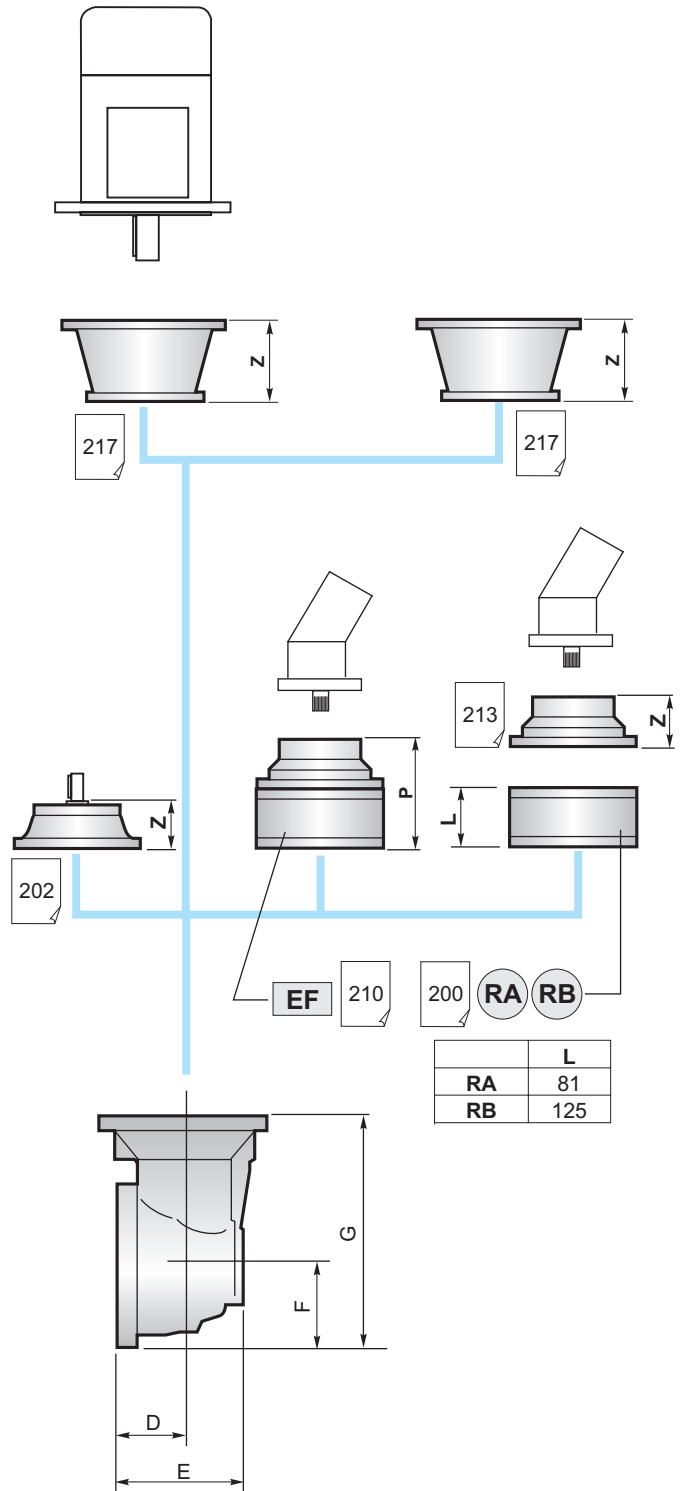
	PGA ...MS				
	A	B	RA	RB	EF
	PGA 9003	555	315	•	•
	PGA 9004	657	240	• o	•

	PGA ...MC				
	A	B	RA	RB	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	•

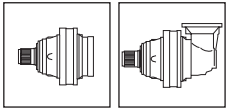
	PGA ...CPC				
	A	B	RA	RB	EF
	PGA 9003	718	315	•	•
	PGA 9004	820	240	• o	•



	D	E	F	G
PGA 9003	88	256	235	550
PGA 9004	88	164	140	380

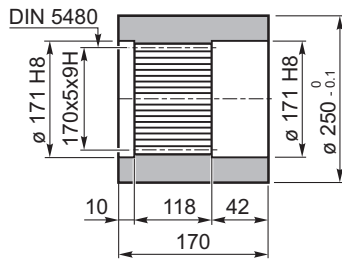


	B+16.5	o
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PG 9000

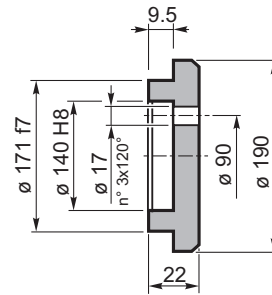
BS Boccola scanalata / Splined bushing Moyeu cannelé / Innenverzahnte Buchse



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

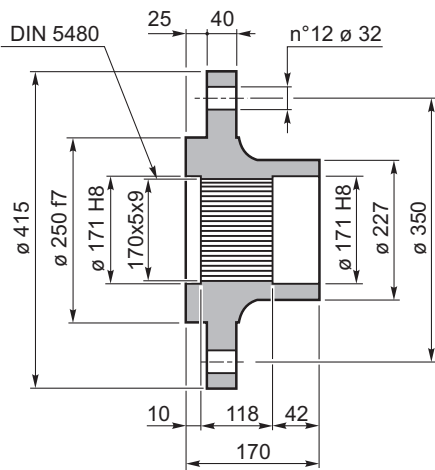
Codice / Code
Code / Bestell - Nr.
1721.115.076

FF Fondello di arresto / Stop bottom plate Bouchon de fermeture / Endscheibe



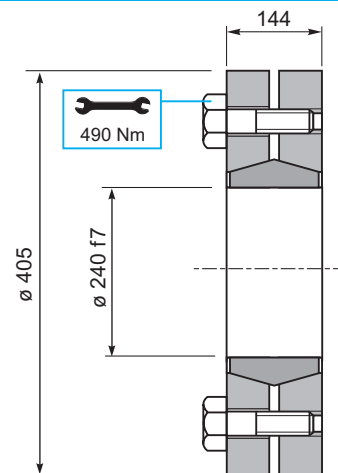
Codice / Code
Code / Bestell - Nr.
5701.044.000

FL Flangia / Flange Bride / Flansch



Codice / Code
Code / Bestell - Nr.
1721.133.098

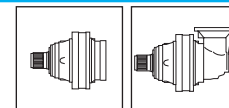
GA Giunto di attrito / Shrink disc Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
176 kNm

Codice / Code
Code / Bestell - Nr.
9015.240.000

PG 9000



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

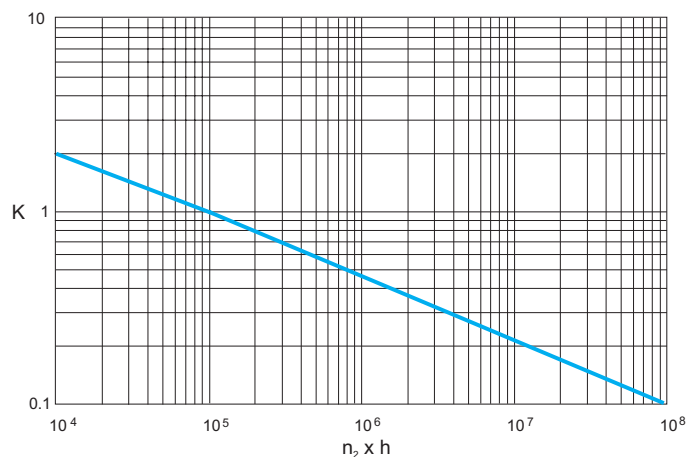
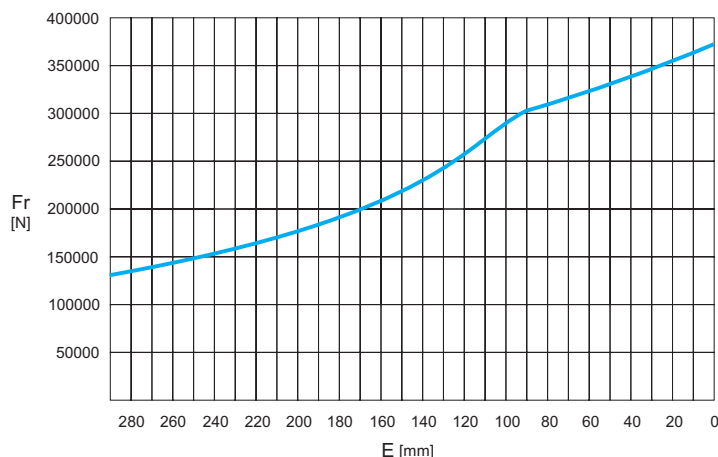
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

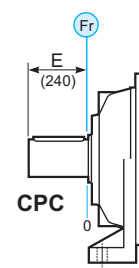
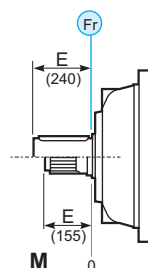
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

M - CPC*



	$n \times h$				
	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.

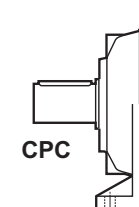
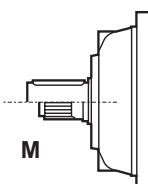
CHARGES AXIALES (Fa)

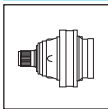
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastichtung.

Fa [N]	M	CPC	
	40000	40000	
	70000	70000	

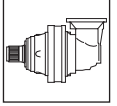




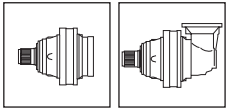
PG 14000

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 14001	3.83	156.6	140.9	122.7	115.0	200	75	685	—	—	615	628
	4.40	144.8	130.3	113.4	110.0							
PG 14002	15.33	156.6	140.9	122.7	115.0	1500	60	805	—	—	735	773
	18.04	156.6	140.9	122.7	115.0							
	20.71	144.8	130.3	113.4	110.0							
PG 14003	54.52	156.6	140.9	122.7	115.0	2000	40	855	—	—	785	823
	65.71	156.6	140.9	122.7	115.0							
	75.43	144.8	130.3	113.4	110.0							
	88.74	144.8	130.3	113.4	110.0							
	115.95	144.8	130.3	113.4	110.0							
	139.77	144.8	130.3	113.4	110.0							
PG 14004	205.96	156.6	140.9	122.7	115.0	2800	30	871	—	—	801	839
	248.25	156.6	140.9	122.7	115.0							
	271.07	156.6	140.9	122.7	115.0							
	281.68	156.6	140.9	122.7	115.0							
	311.14	144.8	130.3	113.4	110.0							
	335.24	144.8	130.3	113.4	110.0							
	380.38	144.8	130.3	113.4	110.0							
	395.26	156.6	140.9	122.7	115.0							
	443.64	156.6	140.9	122.7	115.0							
	476.43	156.6	140.9	122.7	115.0							
	546.86	144.8	130.3	113.4	110.0							
	599.09	144.8	130.3	113.4	110.0							
	643.36	144.8	130.3	113.4	110.0							
	695.72	144.8	130.3	113.4	110.0							
	840.66	144.8	130.3	113.4	110.0							
	1113.29	144.8	130.3	113.4	110.0							
PG 14005	732.30	156.6	140.9	122.7	115.0	2800	21	879	—	—	809	847
	799.61	156.6	140.9	122.7	115.0							
	882.68	156.6	140.9	122.7	115.0							
	963.81	156.6	140.9	122.7	115.0							
	1001.53	156.6	140.9	122.7	115.0							
	1063.95	156.6	140.9	122.7	115.0							
	1153.37	156.6	140.9	122.7	115.0							
	1207.20	156.6	140.9	122.7	115.0							
	1390.22	156.6	140.9	122.7	115.0							
	1577.40	156.6	140.9	122.7	115.0							
	1693.97	156.6	140.9	122.7	115.0							
	1829.73	156.6	140.9	122.7	115.0							
	2208.00	156.6	140.9	122.7	115.0							
	2661.43	156.6	140.9	122.7	115.0							
	2956.80	144.8	130.3	113.4	110.0							
	3228.56	144.8	130.3	113.4	110.0							
	3691.29	144.8	130.3	113.4	110.0							
	4043.86	144.8	130.3	113.4	110.0							
	5674.45	144.8	130.3	113.4	110.0							

PG 14000

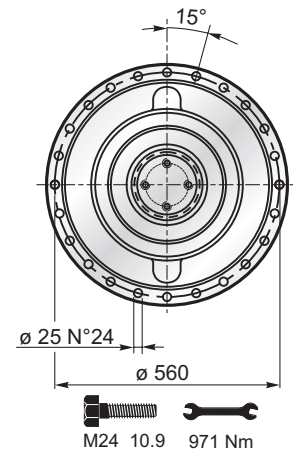
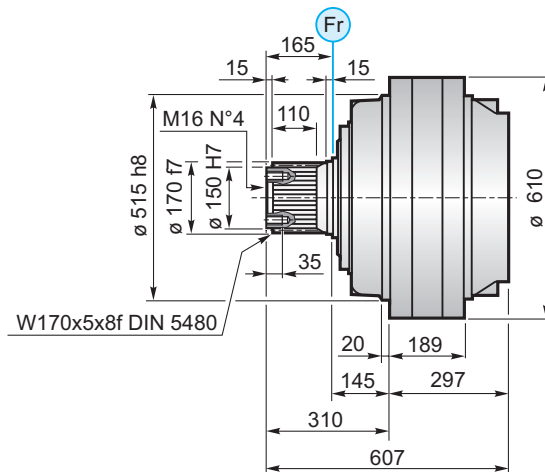
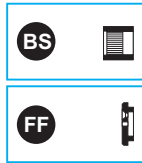


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 14004	167.45	156.6	140.9	122.7	115.0	2500	28	964	—	—	894	932
	201.84	156.6	140.9	122.7	115.0							
	272.56	144.8	130.3	113.4	110.0							
	306.67	156.6	140.9	122.7	115.0							
	356.14	144.8	130.3	113.4	110.0							
	414.12	144.8	130.3	113.4	110.0							
	459.95	144.8	130.3	113.4	110.0							
	541.11	144.8	130.3	113.4	110.0							
	652.24	144.8	130.3	113.4	110.0							
PGA 14005	711.49	156.6	140.9	122.7	115.0	2800	20	913	—	—	843	881
	857.60	156.6	140.9	122.7	115.0							
	973.07	156.6	140.9	122.7	115.0							
	1074.86	144.8	130.3	113.4	110.0							
	1224.40	156.6	140.9	122.7	115.0							
	1351.61	156.6	140.9	122.7	115.0							
	1514.23	144.8	130.3	113.4	110.0							
	1694.00	144.8	130.3	113.4	110.0							
	1992.94	144.8	130.3	113.4	110.0							
	2146.67	156.6	140.9	122.7	115.0							
	2496.21	144.8	130.3	113.4	110.0							
	2772.46	144.8	130.3	113.4	110.0							
	3138.88	144.8	130.3	113.4	110.0							
	3219.63	144.8	130.3	113.4	110.0							
	3502.74	144.8	130.3	113.4	110.0							
	3931.53	144.8	130.3	113.4	110.0							
	4576.92	144.8	130.3	113.4	110.0							
	5516.82	144.8	130.3	113.4	110.0							

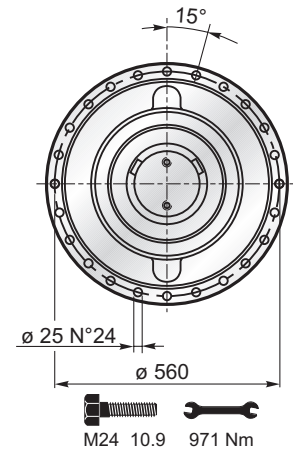
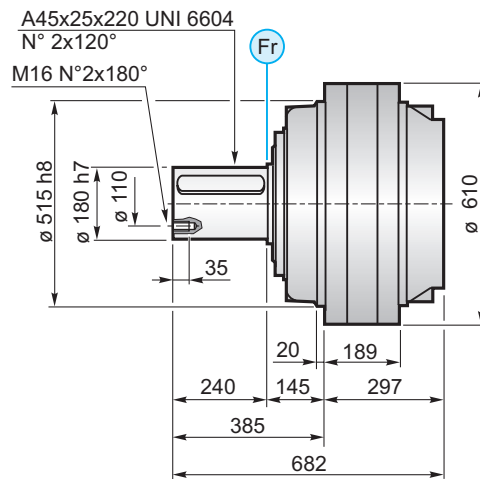


PG 14000

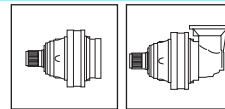
MS



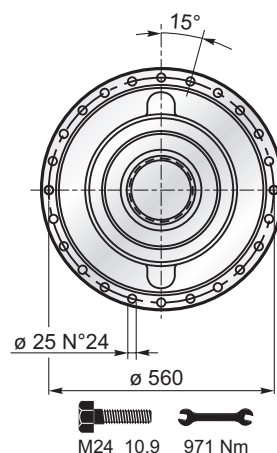
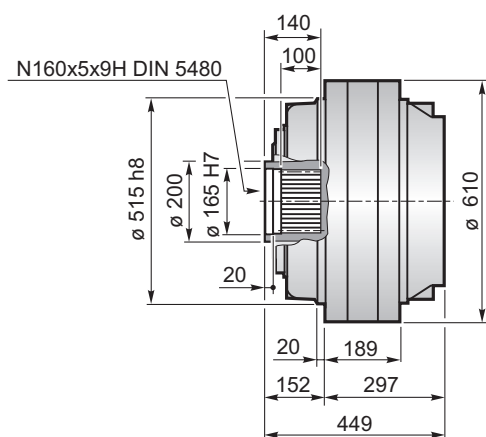
MC



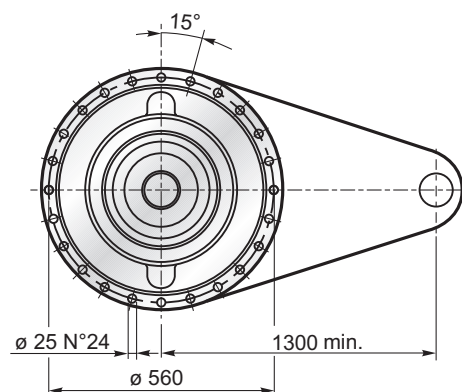
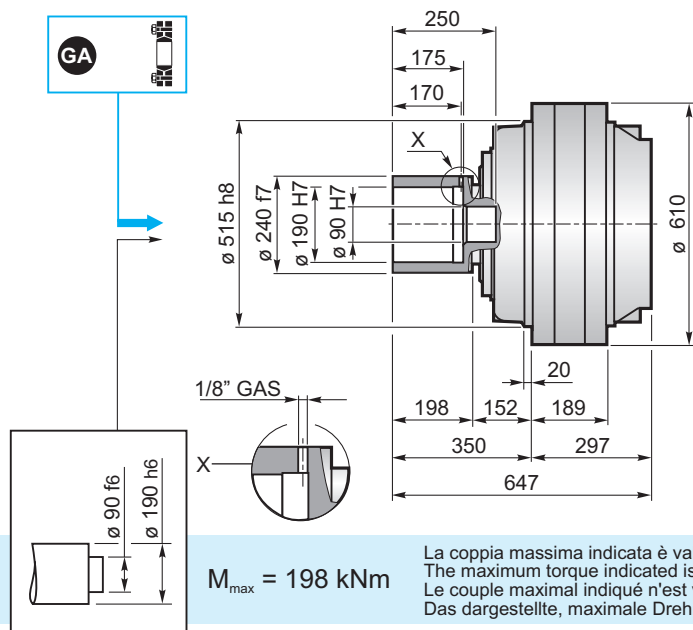
PG 14000



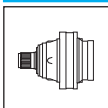
F



FS



La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe



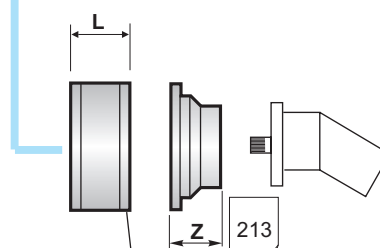
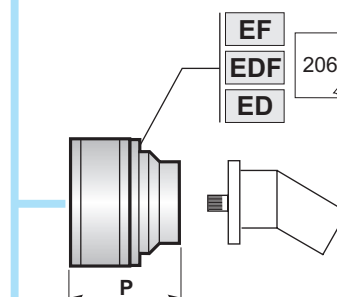
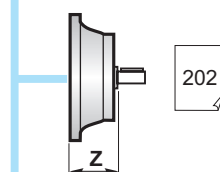
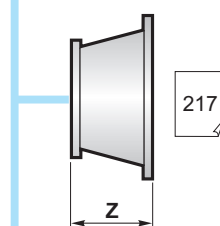
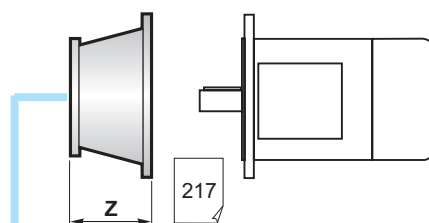
PG 14000

	PG		...MS			
	A	B	RA	RB	EF	EDF
PG 14002	494	804				
PG 14003	581	891		•		
PG 14004	652.5	962.5	•	o	•	
PG 14005	713.5	1023.5	•			•

	PG		...MC			
	A	B	RA	RB	EF	EDF
PG 14002	494	879				
PG 14003	581	966		•		
PG 14004	652.5	1037.5	•	o	•	
PG 14005	713.5	1098.5	•			•

	PG		...F			
	A	B	RA	RB	EF	EDF
PG 14002	494	646				
PG 14003	581	733		•		
PG 14004	652.5	804.5	•	o	•	
PG 14005	713.5	865.5	•			•

	PG		...FS			
	A	B	RA	RB	EF	EDF
PG 14002	494	844				
PG 14003	581	931		•		
PG 14004	652.5	1002.5	•	o	•	
PG 14005	713.5	1063.5	•			•

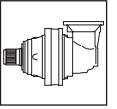


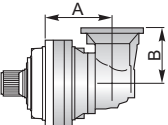
200	RA	RB	L
			81
			125

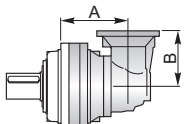


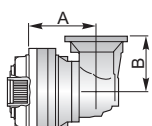
A	B	•
A+13.5	B+13.5	o

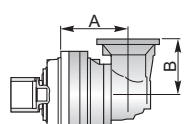
PG 14000

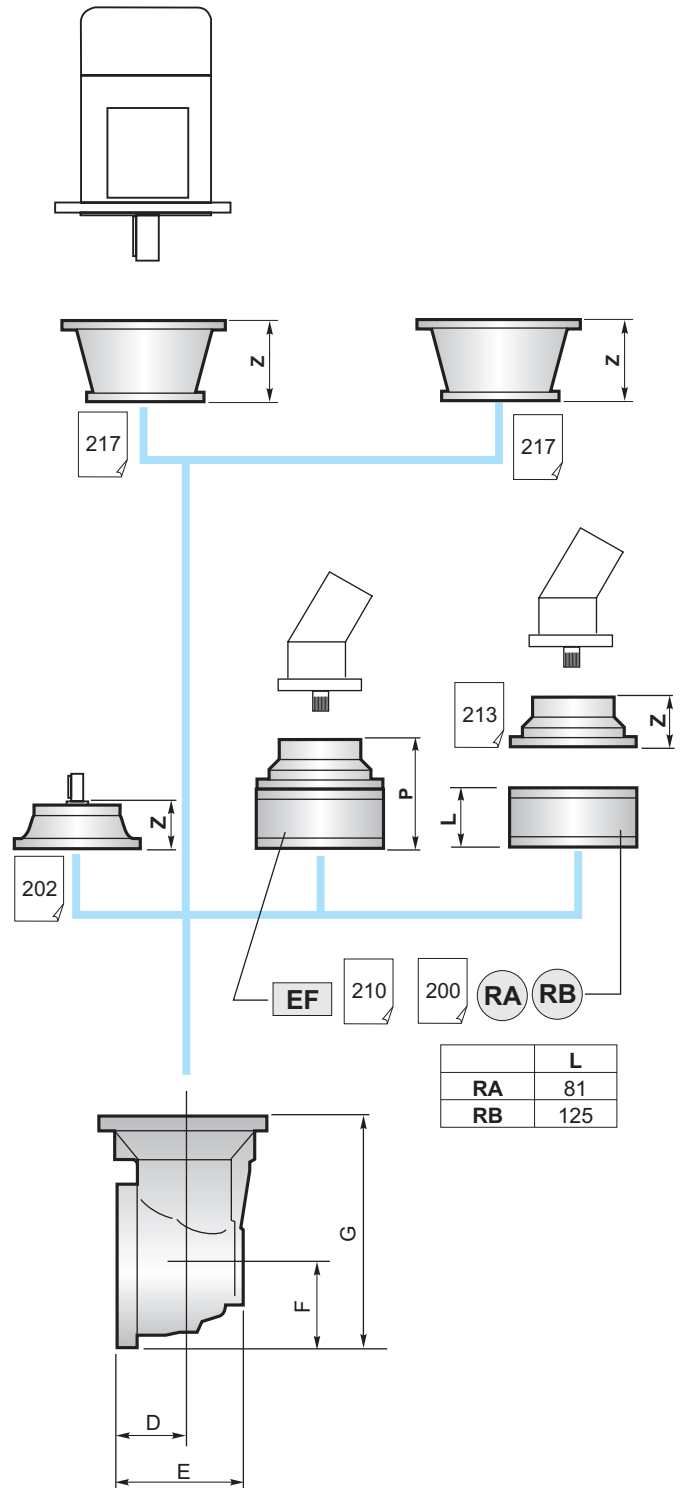


	PGA ...MS				
	A	B	RA	RB	EF
	PGA 14004	716	315	•	•
PGA 14005	754	240	•	o	•

	PGA ...MC				
	A	B	RA	RB	EF
	PGA 14004	716	315	•	•
PGA 14005	754	240	•	o	•

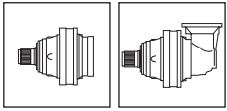
	PGA ...F				
	A	B	RA	RB	EF
	PGA 14004	716	315	•	•
PGA 14005	754	240	•	o	•

	PGA ...FS				
	A	B	RA	RB	EF
	PGA 14004	716	315	•	•
PGA 14005	754	240	•	o	•



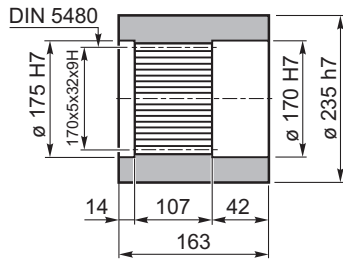
	D	E	F	G
PGA 14004	88	256	235	550
PGA 14005	88	164	140	380

	B	•
	B+16.5	o



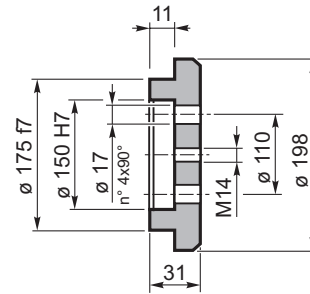
PG 14000

BS Boccola scanalata / Splined bushing Moyeu cannelé / Innenverzahnte Buchse

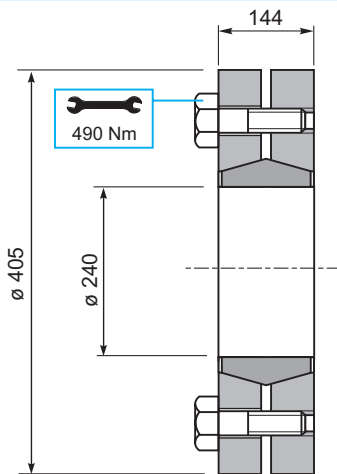


Materiale / Material
Matière / Material
UNI C40
SAE 1040
DIN Ck40

FF Fondello di arresto / Stop bottom plate Bouchon de fermeture / Endscheibe

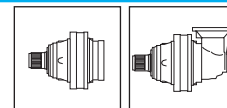


GA Giunto di attrito / Shrink disc Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
198 kNm

PG 14000



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

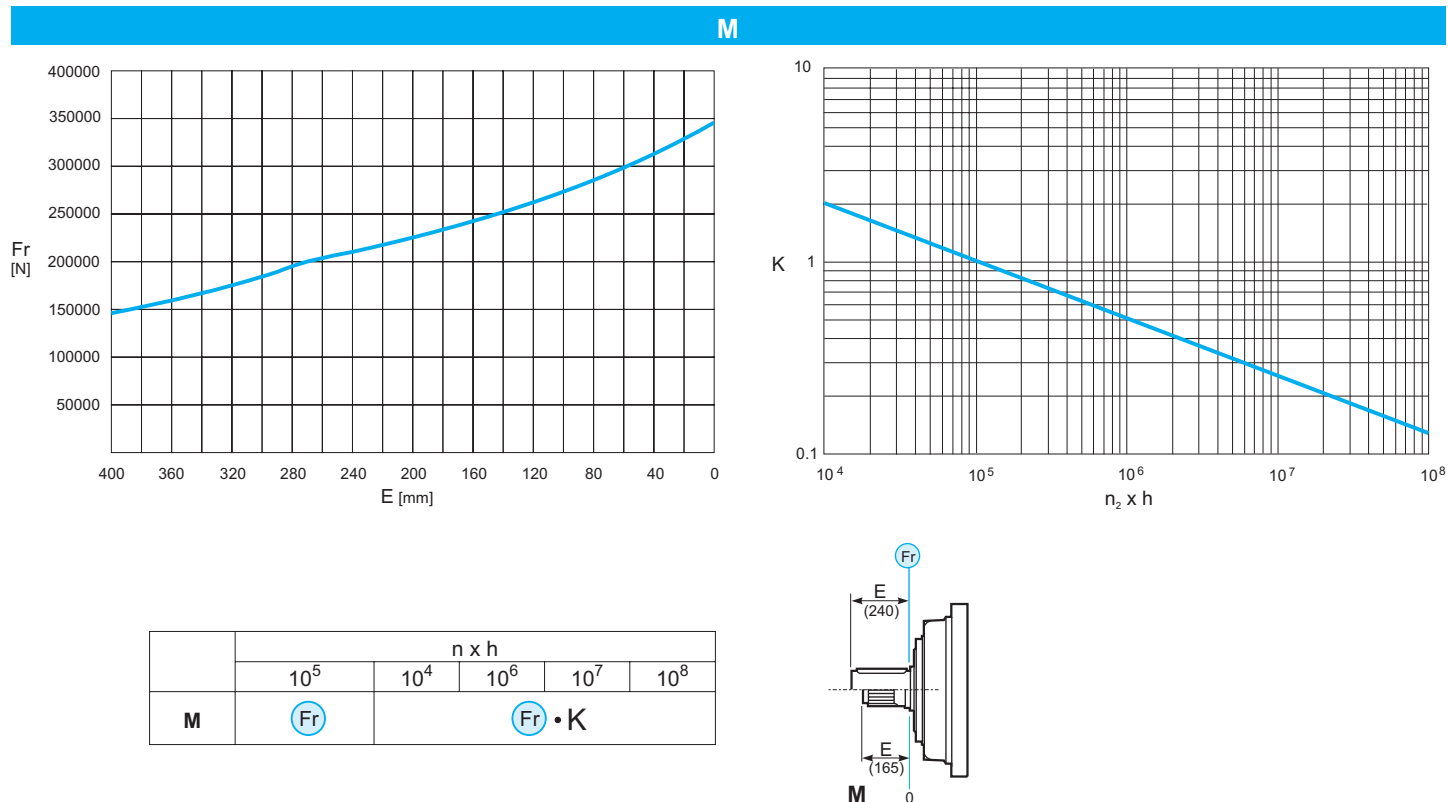
The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.



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.

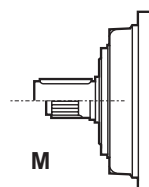
CHARGES AXIALES (Fa)

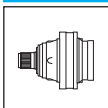
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

Fa [N]	M	
	45000	←
Fa [N]	45000	→

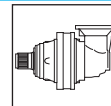




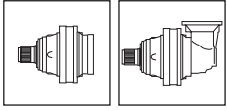
PG 18000

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 18001	3.91	204.0	184.0	160.0	153.0	200	83	1150	—	—	1050	1071
	4.94	159.0	143.0	125.0	125.0							
PG 18002	15.47	204.0	184.0	160.0	153.0	1200	67	1332	—	—	1233	1271
	19.81	204.0	184.0	160.0	153.0							
	25.01	159.0	143.0	125.0	125.0							
	29.65	159.0	143.0	125.0	125.0							
PG 18003	55.02	204.0	184.0	160.0	153.0	2000	47	1391	—	—	1292	1330
	66.32	204.0	184.0	160.0	153.0							
	74.79	204.0	184.0	160.0	153.0							
	86.66	204.0	184.0	160.0	153.0							
	95.75	204.0	184.0	160.0	153.0							
	107.21	159.0	143.0	125.0	125.0							
	120.91	159.0	143.0	125.0	125.0							
	133.71	204.0	184.0	160.0	153.0							
	166.02	159.0	143.0	125.0	125.0							
	200.12	159.0	143.0	125.0	125.0							
	250.53	204.0	184.0	160.0	153.0							
PG 18004	327.36	204.0	184.0	160.0	153.0	2800	37	1407	—	—	1308	1346
	386.42	204.0	184.0	160.0	153.0							
	438.64	204.0	184.0	160.0	153.0							
	487.96	159.0	143.0	125.0	125.0							
	519.93	204.0	184.0	160.0	153.0							
	574.48	204.0	184.0	160.0	153.0							
	624.68	159.0	143.0	125.0	125.0							
	684.72	159.0	143.0	125.0	125.0							
	725.43	159.0	143.0	125.0	125.0							
	793.33	159.0	143.0	125.0	125.0							
	840.50	159.0	143.0	125.0	125.0							
	969.43	204.0	184.0	160.0	153.0							
	1038.88	159.0	143.0	125.0	125.0							
	1203.68	159.0	143.0	125.0	125.0							
	1450.86	159.0	143.0	125.0	125.0							
	1531.94	204.0	184.0	160.0	153.0	2800	27	1415	—	—	1316	1354
PG 18005	1604.90	159.0	143.0	125.0	125.0							
	1727.69	204.0	184.0	160.0	153.0							
	1811.16	204.0	184.0	160.0	153.0							
	1907.19	204.0	184.0	160.0	153.0							
	2001.73	204.0	184.0	160.0	153.0							
	2091.27	159.0	143.0	125.0	125.0							
	2181.66	159.0	143.0	125.0	125.0							
	2363.88	204.0	184.0	160.0	153.0							
	2476.47	159.0	143.0	125.0	125.0							
	2608.36	204.0	184.0	160.0	153.0							
	2792.91	159.0	143.0	125.0	125.0							
	2960.82	204.0	184.0	160.0	153.0							
	3900.44	159.0	143.0	125.0	125.0							
	5145.91	159.0	143.0	125.0	125.0							
	5888.65	159.0	143.0	125.0	125.0							
	6979.14	159.0	143.0	125.0	125.0							
	8124.82	159.0	143.0	125.0	125.0							
	9793.30	159.0	143.0	125.0	125.0							

PG 18000

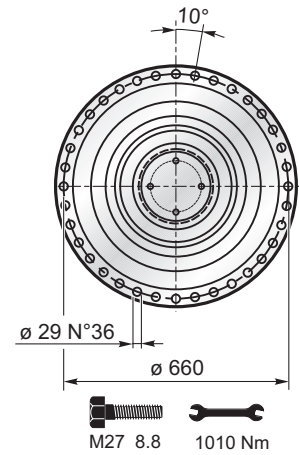
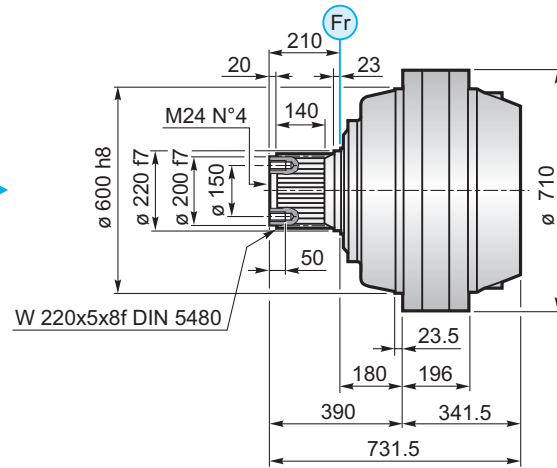
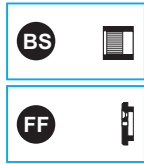


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 18003	60.02	159.0	143.0	125.0	125.0	2500	45	1473	—	—	1457	1495
	72.11	204.0	184.0	160.0	153.0							
	76.83	159.0	143.0	125.0	125.0							
	91.06	159.0	143.0	125.0	125.0							
	116.74	159.0	143.0	125.0	125.0							
	138.35	159.0	143.0	125.0	125.0							
PGA 18004	256.76	204.0	184.0	160.0	153.0	2500	35	1500	—	—	1401	1439
	328.69	204.0	184.0	160.0	153.0							
	390.80	159.0	143.0	125.0	125.0							
	440.74	159.0	143.0	125.0	125.0							
	500.30	159.0	143.0	125.0	125.0							
	564.22	159.0	143.0	125.0	125.0							
	653.72	159.0	143.0	125.0	125.0							
	787.97	159.0	143.0	125.0	125.0							
PGA 18005	933.89	159.0	143.0	125.0	125.0	2800	25	1453	—	—	1354	1392
	1183.67	204.0	184.0	160.0	153.0							
	1334.92	204.0	184.0	160.0	153.0							
	1440.05	159.0	143.0	125.0	125.0							
	1550.23	204.0	184.0	160.0	153.0							
	1685.69	159.0	143.0	125.0	125.0							
	1759.71	204.0	184.0	160.0	153.0							
	1880.74	159.0	143.0	125.0	125.0							
	1996.18	159.0	143.0	125.0	125.0							
	2205.01	159.0	143.0	125.0	125.0							
	2407.67	159.0	143.0	125.0	125.0							
	2656.68	159.0	143.0	125.0	125.0							
	3085.18	159.0	143.0	125.0	125.0							
	3949.56	159.0	143.0	125.0	125.0							
	4576.05	159.0	143.0	125.0	125.0							
	5423.46	159.0	143.0	125.0	125.0							
	6537.21	159.0	143.0	125.0	125.0							
	7899.13	159.0	143.0	125.0	125.0							

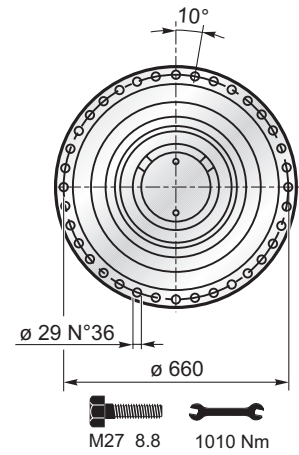
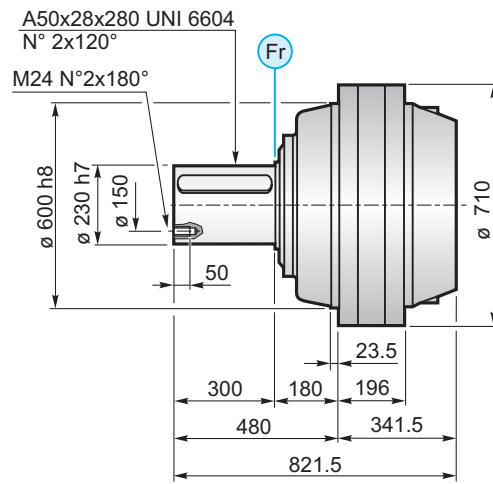


PG 18000

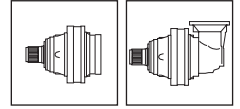
MS



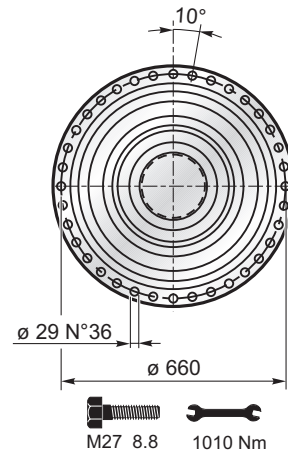
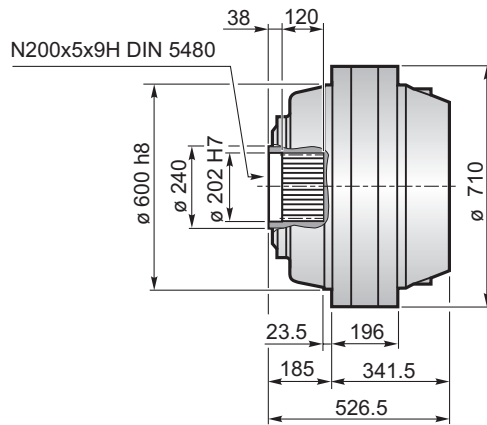
MC



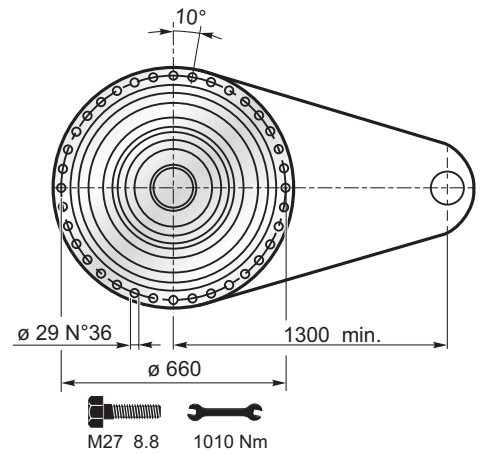
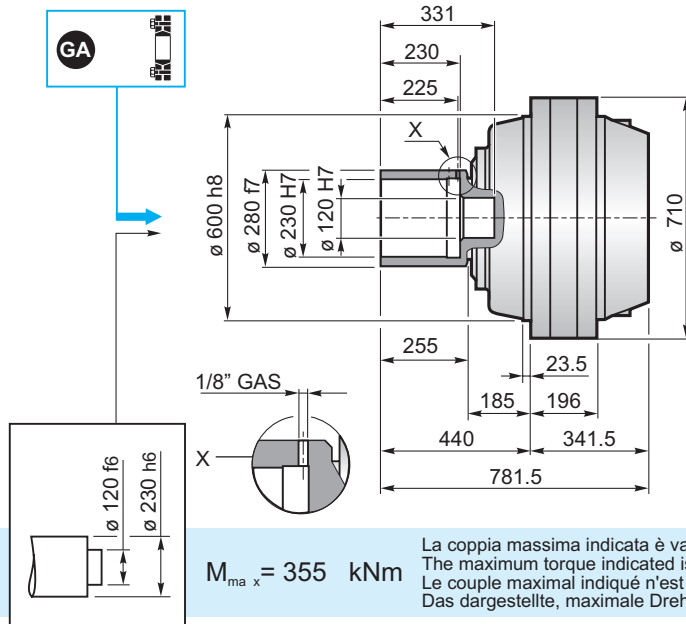
PG 18000



F

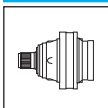


FS



$M_{max} = 355 \text{ kNm}$

La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe



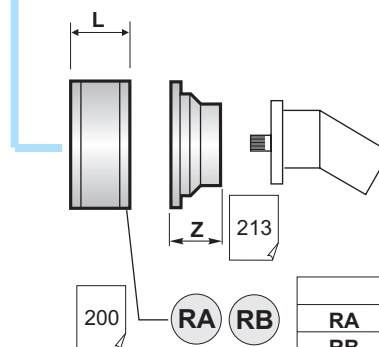
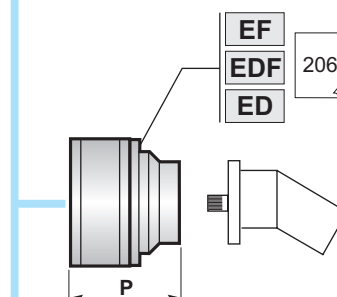
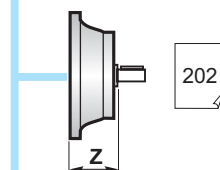
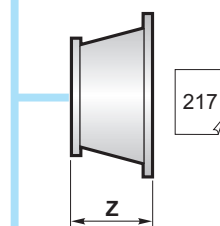
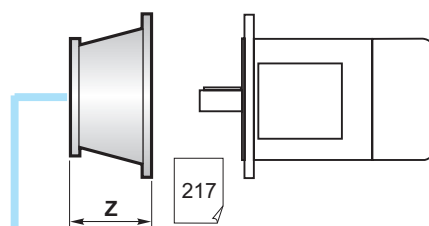
PG 18000

	PG		...MS			
	A	B	RA	RB	EF	EDF
PG 18002	562.5	952.5				
PG 18003	669.5	1059.5		•		
PG 18004	741	1131	•	o	•	
PG 18005	802	1192	•			•

	PG		...MC			
	A	B	RA	RB	EF	EDF
PG 18002	562.5	1042.5				
PG 18003	669.5	1149.5		•		
PG 18004	741	1221	•	o	•	
PG 18005	802	1282	•			•

	PG		...F			
	A	B	RA	RB	EF	EDF
PG 18002	562.5	747.5				
PG 18003	669.5	854.5		•		
PG 18004	741	926	•	o	•	
PG 18005	802	987	•			•

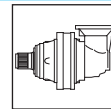
	PG		...FS			
	A	B	RA	RB	EF	EDF
PG 18002	562.5	1002.5				
PG 18003	669.5	1109.5		•		
PG 18004	741	1181	•	o	•	
PG 18005	802	1242	•			•

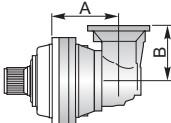


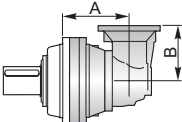
A	B	•
A+13.5	B+13.5	o

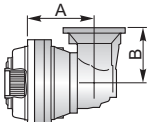
	L
RA	81
RB	125

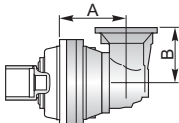
PG 18000

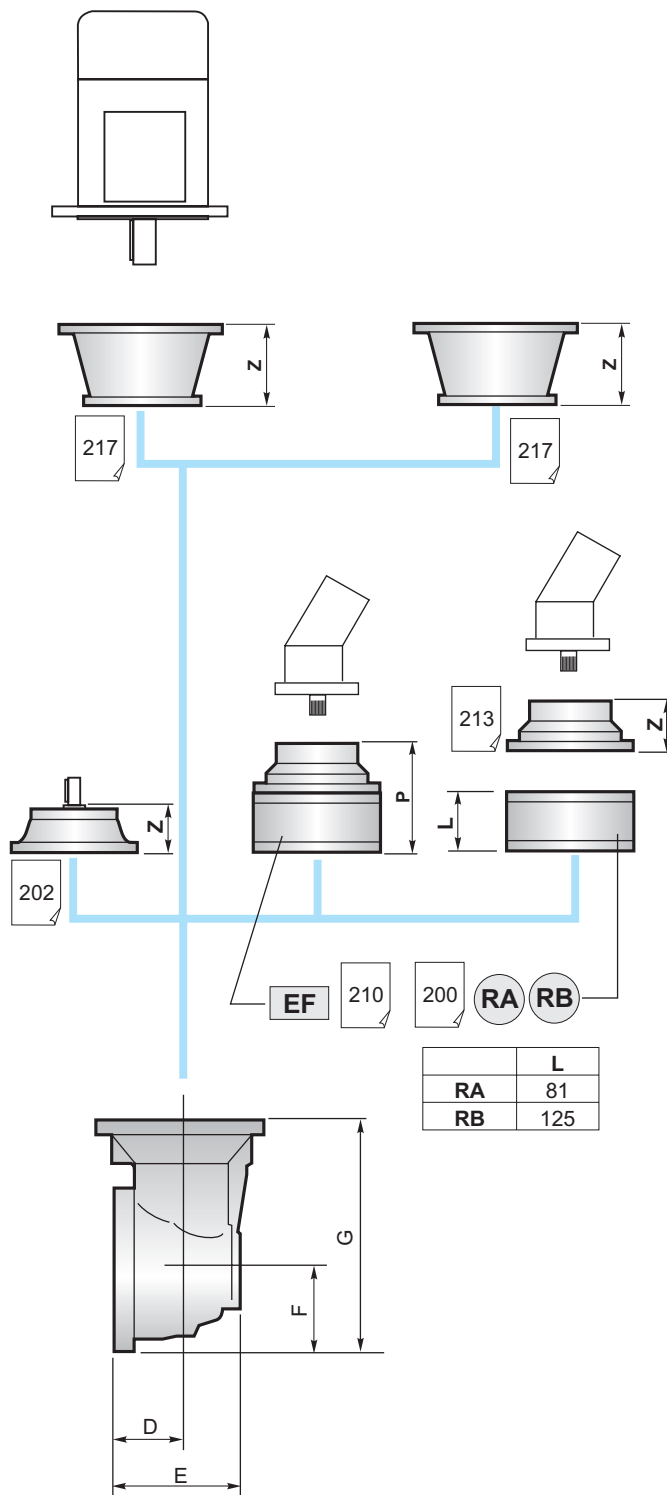


	PGA ...MS					
		A	B	RA	RB	EF
	PGA 18003	743.5	315		•	
	PGA 18004	804.5	315		•	
	PGA 18005	842.5	240	•	o	•

	PGA ...MC					
		A	B	RA	RB	EF
	PGA 18003	743.5	315		•	
	PGA 18004	804.5	315		•	
	PGA 18005	842.5	240	•	o	•

	PGA ...F					
		A	B	RA	RB	EF
	PGA 18003	743.5	315		•	
	PGA 18004	804.5	315		•	
	PGA 18005	842.5	240	•	o	•

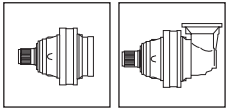
	PGA ...FS					
		A	B	RA	RB	EF
	PGA 18003	743.5	315		•	
	PGA 18004	804.5	315		•	
	PGA 18005	842.5	240	•	o	•



	D	E	F	G
PGA 18003	88	256	235	550
PGA 18004	88	256	235	550
PGA 18005	88	164	140	380

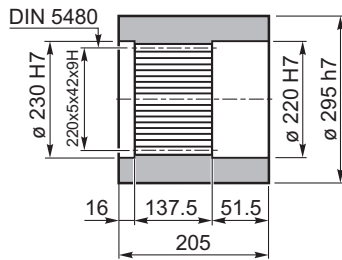


	B	•
	B+16.5	o



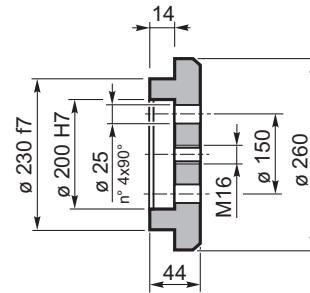
PG 18000

BS Boccola scanalata / Splined bushing Moyeu cannelé / Innenverzahnte Buchse

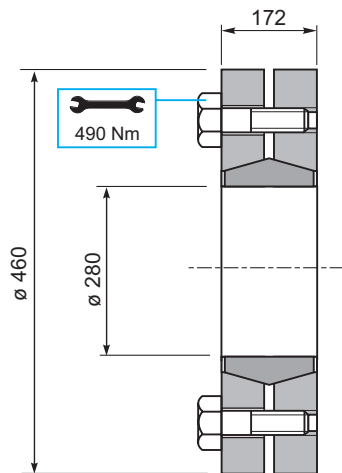


Materiale / Material
Matière / Material
UNI C40
SAE 1040
DIN Ck40

FF Fondello di arresto / Stop bottom plate Bouchon de fermeture / Endscheibe

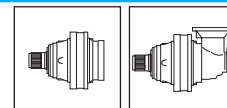


GA Giunto di attrito / Shrink disc Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
355 kNm

PG 18000



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

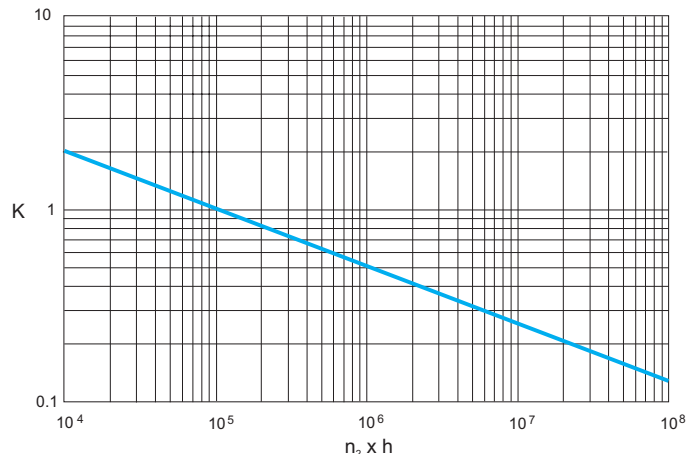
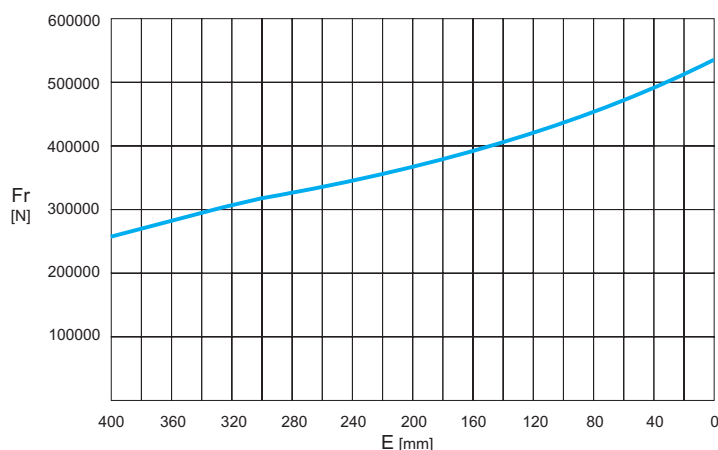
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

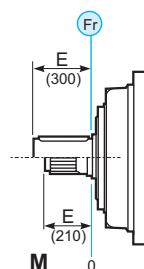
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

M



	$n \times h$				
	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.

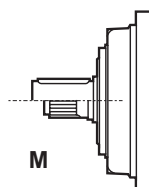
CHARGES AXIALES (Fa)

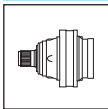
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastichtung.

Fa [N]	M	
	80000	←
	80000	→

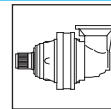




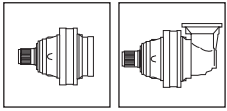
PG 22000

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 22001	3.68	238.0	215.0	190.0	190.0	200	83	1150	—	—	1050	1071
	4.94	188.0	169.0	154.0	154.0							
PG 22002	14.55	238.0	215.0	190.0	190.0	1200	67	1344	—	—	1244	1282
	19.54	188.0	169.0	154.0	154.0							
	25.01	188.0	169.0	154.0	154.0							
	29.65	188.0	169.0	154.0	154.0							
PG 22003	62.37	238.0	215.0	190.0	190.0	2000	47	1403	—	—	1303	1341
	70.34	238.0	215.0	190.0	190.0							
	83.74	188.0	169.0	154.0	154.0							
	94.44	188.0	169.0	154.0	154.0							
	107.21	188.0	169.0	154.0	154.0							
	120.91	188.0	169.0	154.0	154.0							
	140.08	188.0	169.0	154.0	154.0							
	168.85	188.0	169.0	154.0	154.0							
	200.12	188.0	169.0	154.0	154.0							
PG 22004	257.27	238.0	215.0	190.0	190.0	2800	37	1419	—	—	1319	1357
	336.00	188.0	169.0	154.0	154.0							
	389.58	188.0	169.0	154.0	154.0							
	432.68	188.0	169.0	154.0	154.0							
	487.96	188.0	169.0	154.0	154.0							
	533.65	188.0	169.0	154.0	154.0							
	577.84	188.0	169.0	154.0	154.0							
	624.68	188.0	169.0	154.0	154.0							
	681.46	188.0	169.0	154.0	154.0							
	725.43	188.0	169.0	154.0	154.0							
	793.33	188.0	169.0	154.0	154.0							
	840.50	188.0	169.0	154.0	154.0							
	921.18	188.0	169.0	154.0	154.0							
	1013.10	188.0	169.0	154.0	154.0							
	1200.71	188.0	169.0	154.0	154.0							
	1450.86	188.0	169.0	154.0	154.0							
PG 22005	1497.10	238.0	215.0	190.0	190.0	2800	27	1427	—	—	1327	1365
	1590.41	238.0	215.0	190.0	190.0							
	1669.64	188.0	169.0	154.0	154.0							
	1736.58	188.0	169.0	154.0	154.0							
	1804.54	238.0	215.0	190.0	190.0							
	1854.33	188.0	169.0	154.0	154.0							
	1934.48	188.0	169.0	154.0	154.0							
	1998.02	188.0	169.0	154.0	154.0							
	2091.27	188.0	169.0	154.0	154.0							
	2181.66	188.0	169.0	154.0	154.0							
	2268.01	188.0	169.0	154.0	154.0							
	2314.95	188.0	169.0	154.0	154.0							
	2422.99	188.0	169.0	154.0	154.0							
	2476.47	188.0	169.0	154.0	154.0							
	2677.18	188.0	169.0	154.0	154.0							
	3166.03	188.0	169.0	154.0	154.0							
	4216.56	188.0	169.0	154.0	154.0							
	6217.97	188.0	169.0	154.0	154.0							
	8263.10	188.0	169.0	154.0	154.0							

PG 22000

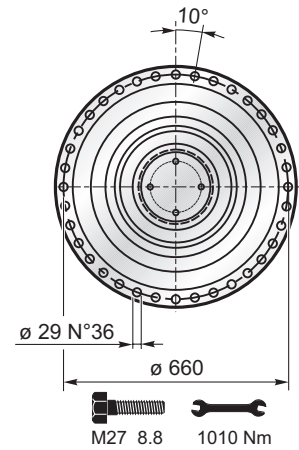
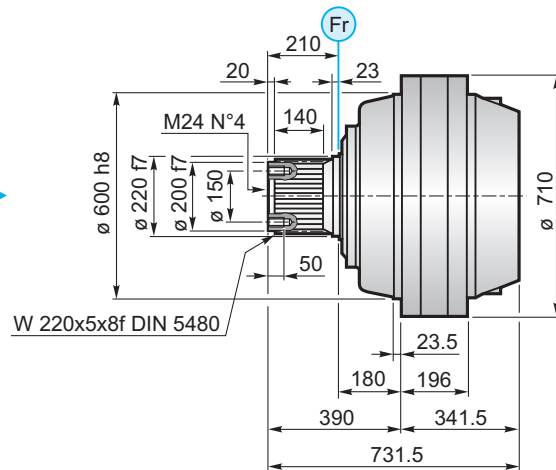
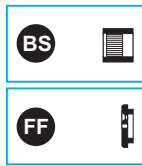


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 22003	60.02	188.0	169.0	154.0	154.0	2500	45	1485	—	—	1468	1506
	76.83	188.0	169.0	154.0	154.0							
	91.06	188.0	169.0	154.0	154.0							
	103.04	238.0	215.0	190.0	190.0							
	116.74	188.0	169.0	154.0	154.0							
	138.35	188.0	169.0	154.0	154.0							
PGA 22004	250.31	238.0	215.0	190.0	190.0	2500	35	1512	—	—	1412	1450
	336.09	188.0	169.0	154.0	154.0							
	390.80	188.0	169.0	154.0	154.0							
	440.74	188.0	169.0	154.0	154.0							
	500.30	188.0	169.0	154.0	154.0							
	564.22	188.0	169.0	154.0	154.0							
	592.94	188.0	169.0	154.0	154.0							
	653.72	188.0	169.0	154.0	154.0							
	787.97	188.0	169.0	154.0	154.0							
	933.89	188.0	169.0	154.0	154.0							
PGA 22005	1113.19	238.0	215.0	190.0	190.0	2800	25	1465	—	—	1365	1403
	1267.42	188.0	169.0	154.0	154.0							
	1399.10	188.0	169.0	154.0	154.0							
	1494.70	188.0	169.0	154.0	154.0							
	1587.47	188.0	169.0	154.0	154.0							
	1689.17	238.0	215.0	190.0	190.0							
	1735.78	188.0	169.0	154.0	154.0							
	1880.74	188.0	169.0	154.0	154.0							
	1997.48	188.0	169.0	154.0	154.0							
	2157.97	188.0	169.0	154.0	154.0							
	2269.56	188.0	169.0	154.0	154.0							
	2355.68	188.0	169.0	154.0	154.0							
	2486.76	188.0	169.0	154.0	154.0							
	2656.68	188.0	169.0	154.0	154.0							
	2903.54	188.0	169.0	154.0	154.0							
	3472.89	188.0	169.0	154.0	154.0							
	4231.67	188.0	169.0	154.0	154.0							
	6537.21	188.0	169.0	154.0	154.0							
	7899.13	188.0	169.0	154.0	154.0							

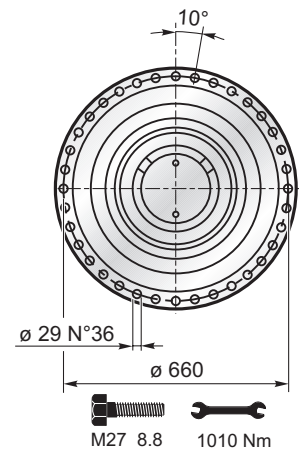
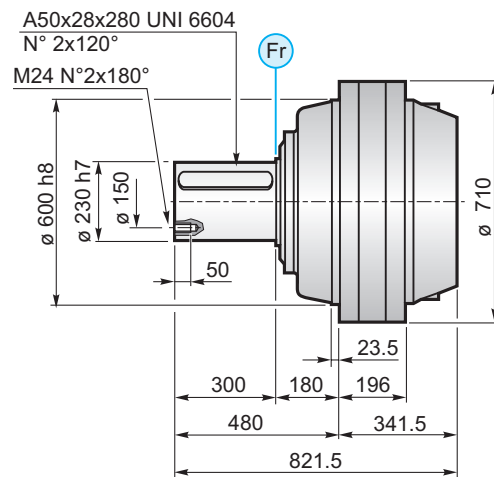


PG 22000

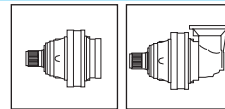
MS



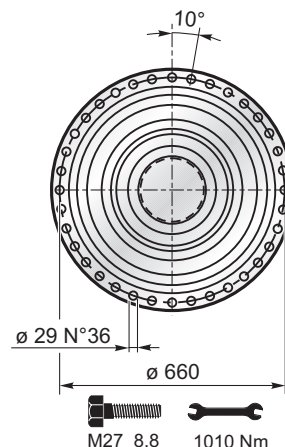
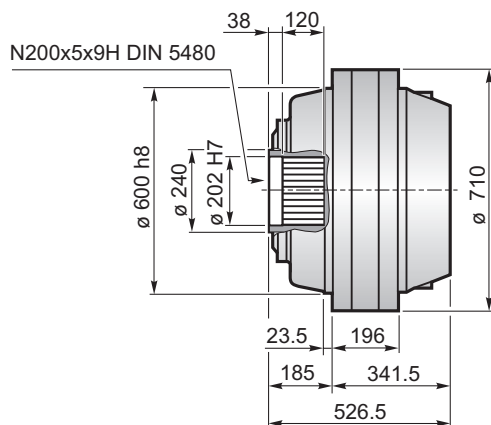
MC



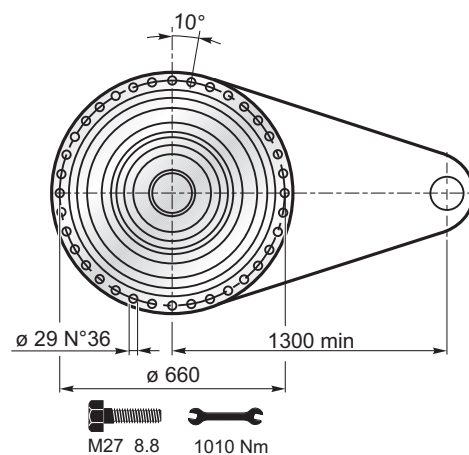
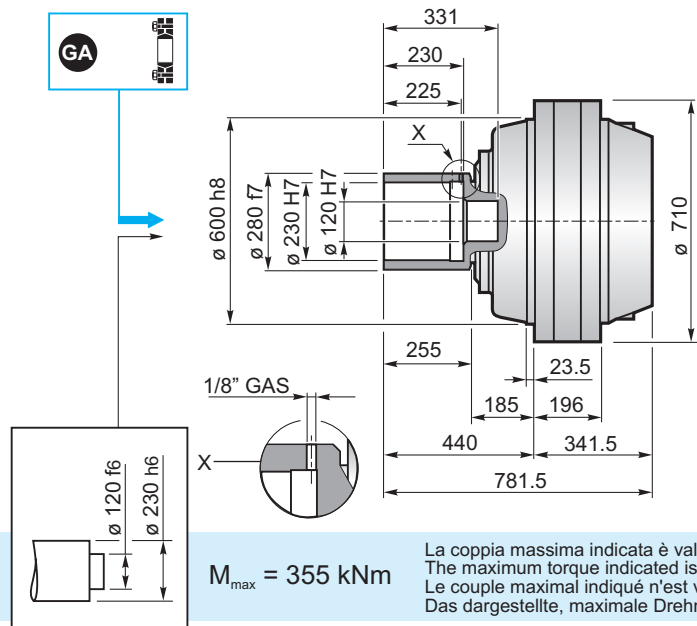
PG 22000



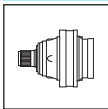
F



FS



La coppia massima indicata è valida solo con calettatori forniti da SOM
 The maximum torque indicated is valid only with shrink discs supplied by SOM
 Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
 Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe



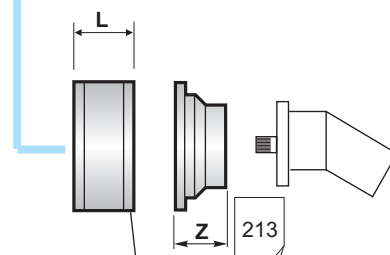
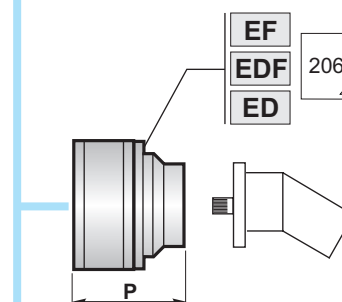
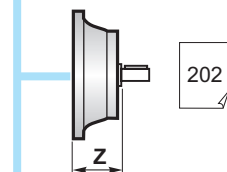
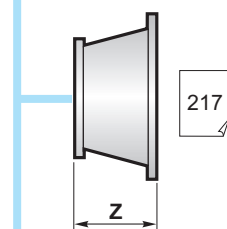
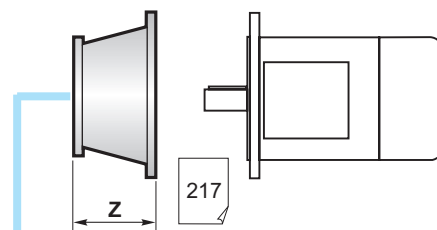
PG 22000

	PG		...MS			
	A	B	RA	RB	EF	EDF
PG 22002	562.5	952.5				
PG 22003	669.5	1059.5		•		
PG 22004	741	1131	•	o	•	
PG 22005	802	1192	•			•

	PG		...MC			
	A	B	RA	RB	EF	EDF
PG 22002	562.5	1042.5				
PG 22003	669.5	1149.5		•		
PG 22004	741	1221	•	o	•	
PG 22005	802	1282	•			•

	PG		...F			
	A	B	RA	RB	EF	EDF
PG 22002	562.5	747.5				
PG 22003	669.5	854.5		•		
PG 22004	741	926	•	o	•	
PG 22005	802	987	•			•

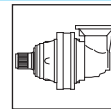
	PG		...FS			
	A	B	RA	RB	EF	EDF
PG 22002	562.5	1002.5				
PG 22003	669.5	1109.5		•		
PG 22004	741	1181	•	o	•	
PG 22005	802	1242	•			•

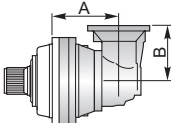


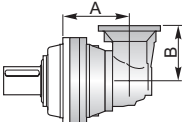
200	RA	RB	L
	RA	RB	81
	RA	RB	125

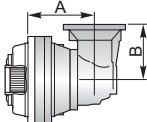
!	A	B	•
	A+13.5	B+13.5	o

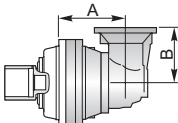
PG 22000

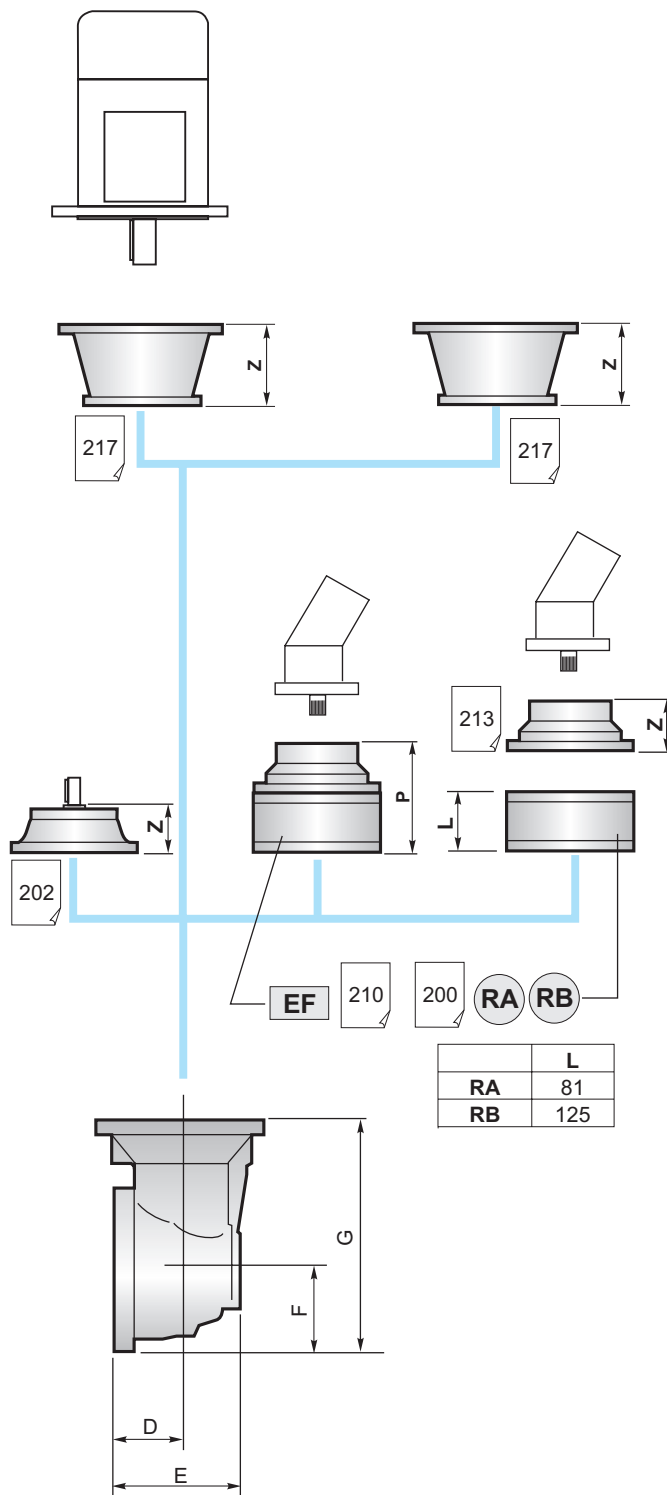


	PGA ...MS					
		A	B	RA	RB	EF
	PGA 22003	743.5	315		•	
	PGA 22004	804.5	315		•	
	PGA 22005	842.5	240	•	o	•

	PGA ...MC					
		A	B	RA	RB	EF
	PGA 22003	743.5	315		•	
	PGA 22004	804.5	315		•	
	PGA 22005	842.5	240	•	o	•

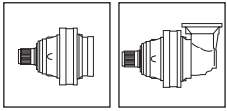
	PGA ...F					
		A	B	RA	RB	EF
	PGA 22003	743.5	315		•	
	PGA 22004	804.5	315		•	
	PGA 22005	842.5	240	•	o	•

	PGA ...FS					
		A	B	RA	RB	EF
	PGA 22003	743.5	315		•	
	PGA 22004	804.5	315		•	
	PGA 22005	842.5	240	•	o	•



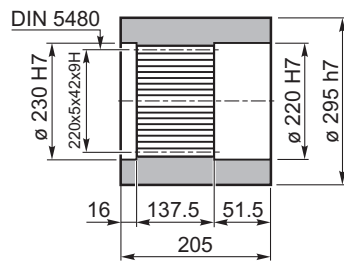
	D	E	F	G
PGA 22003	88	256	235	550
PGA 22004	88	256	235	550
PGA 22005	88	164	140	380

	B	•
	B+16.5	o



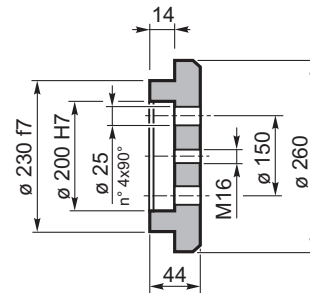
PG 22000

BS Boccola scanalata / Splined bushing Moyeu cannelé / Innenverzahnte Buchse

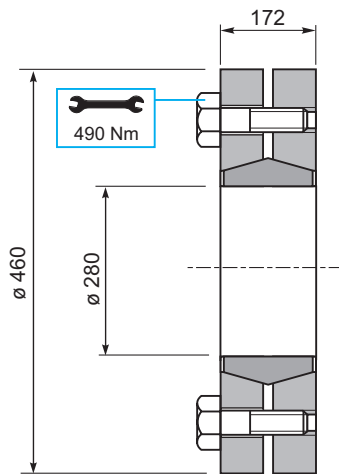


Materiale / Material
Matière / Material
UNI C40
SAE 1040
DIN Ck40

FF Fondello di arresto / Stop bottom plate Bouchon de fermeture / Endscheibe

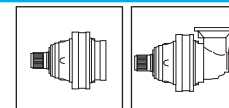


GA Giunto di attrito / Shrink disc Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
355 kNm

PG 22000



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

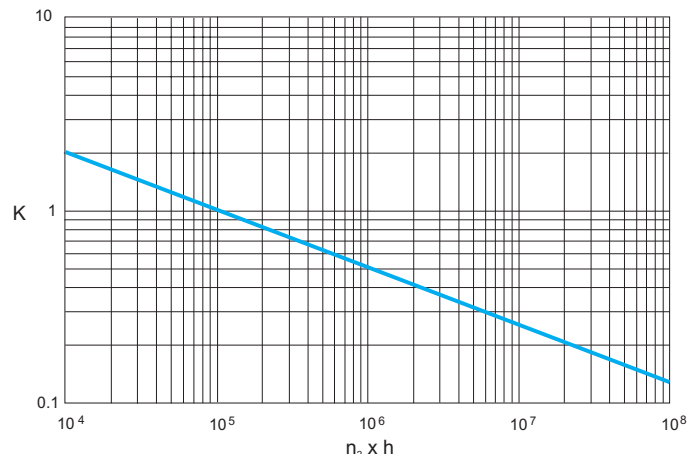
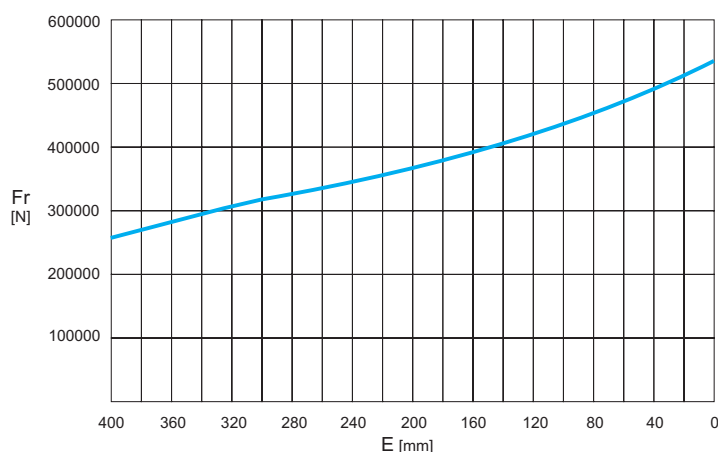
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

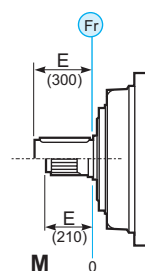
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

M



	$n \times h$				
	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.

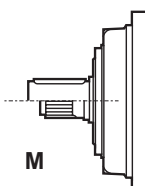
CHARGES AXIALES (Fa)

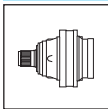
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

Fa [N]	M	
	80000	←
	80000	→

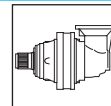




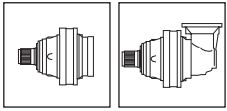
PG 33000

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 33001	4.09	369.6	332.8	289.6	265.0	200	110	1950	—	—	1870	1908
	5.25	275.1	247.7	215.6	207.0							
PG 33002	16.54	369.6	332.8	289.6	265.0	750	80	2263	—	—	2194	2232
	20.94	369.6	332.8	289.6	265.0							
	26.87	275.1	247.7	215.6	207.0							
PG 33003	86.02	369.6	332.8	289.6	265.0	1500	71	2379	—	—	2310	2348
	103.38	369.6	332.8	289.6	265.0							
	110.39	275.1	247.7	215.6	207.0							
	120.90	275.1	247.7	215.6	207.0							
	132.68	275.1	247.7	215.6	207.0							
	167.92	275.1	247.7	215.6	207.0							
PG 33004	242.61	369.6	332.8	289.6	265.0	2800	50	2406	—	—	2337	2375
	315.39	369.6	332.8	289.6	265.0							
	380.93	369.6	332.8	289.6	265.0							
	430.08	369.6	332.8	289.6	265.0							
	482.12	369.6	332.8	289.6	265.0							
	551.93	275.1	247.7	215.6	207.0							
	618.72	275.1	247.7	215.6	207.0							
	698.56	275.1	247.7	215.6	207.0							
	758.92	369.6	332.8	289.6	265.0							
	810.33	275.1	247.7	215.6	207.0							
	973.95	275.1	247.7	215.6	207.0							
PG 33005	1513.94	369.6	332.8	289.6	265.0	2800	37	2418	—	—	2349	2387
	1586.47	369.6	332.8	289.6	265.0							
	1629.52	369.6	332.8	289.6	265.0							
	1758.12	369.6	332.8	289.6	265.0							
	1846.79	275.1	247.7	215.6	207.0							
	1942.89	275.1	247.7	215.6	207.0							
	2006.73	275.1	247.7	215.6	207.0							
	2113.14	275.1	247.7	215.6	207.0							
	2256.26	275.1	247.7	215.6	207.0							
	2364.35	275.1	247.7	215.6	207.0							
	2506.11	275.1	247.7	215.6	207.0							
	2646.76	275.1	247.7	215.6	207.0							
	2726.32	275.1	247.7	215.6	207.0							
	2855.65	275.1	247.7	215.6	207.0							
	3570.59	275.1	247.7	215.6	207.0							
	4461.95	275.1	247.7	215.6	207.0							
	5064.55	275.1	247.7	215.6	207.0							
	6733.34	275.1	247.7	215.6	207.0							
	8522.08	275.1	247.7	215.6	207.0							

PG 33000

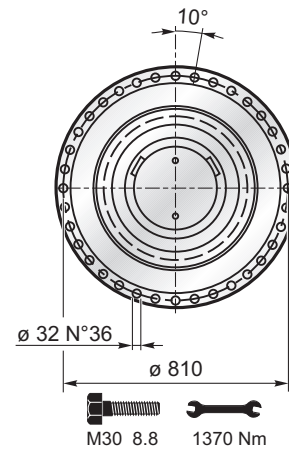
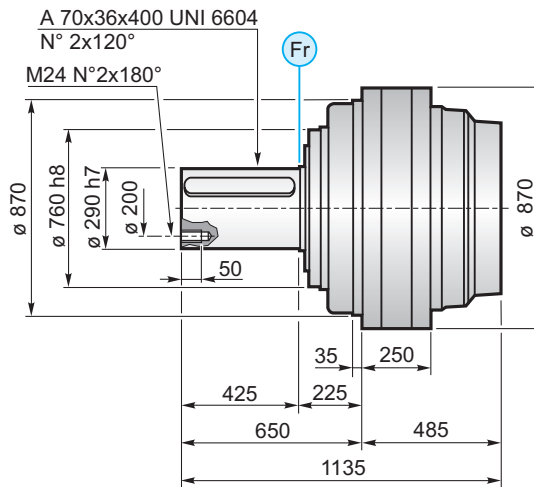


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 33004	264.19	369.6	332.8	289.6	265.0	2500	45	2501	—	—	2431	2469
	401.41	369.6	332.8	289.6	265.0							
	501.53	275.1	247.7	215.6	207.0							
	652.00	275.1	247.7	215.6	207.0							
	783.64	275.1	247.7	215.6	207.0							
PGA 33005	1142.87	369.6	332.8	289.6	265.0	2800	40	2443	—	—	2374	2412
	1315.93	369.6	332.8	289.6	265.0							
	1485.72	369.6	332.8	289.6	265.0							
	1644.16	275.1	247.7	215.6	207.0							
	1688.78	275.1	247.7	215.6	207.0							
	1769.68	275.1	247.7	215.6	207.0							
	1856.31	275.1	247.7	215.6	207.0							
	1906.68	275.1	247.7	215.6	207.0							
	2029.78	275.1	247.7	215.6	207.0							
	2127.02	275.1	247.7	215.6	207.0							
	2211.75	275.1	247.7	215.6	207.0							
	2413.20	275.1	247.7	215.6	207.0							
	2569.00	275.1	247.7	215.6	207.0							
	2925.59	275.1	247.7	215.6	207.0							
	3368.61	275.1	247.7	215.6	207.0							
	4411.79	275.1	247.7	215.6	207.0							
	5324.57	275.1	247.7	215.6	207.0							
	6399.72	275.1	247.7	215.6	207.0							

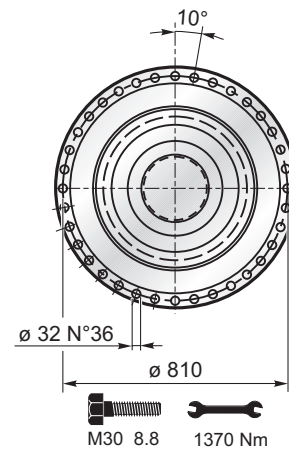
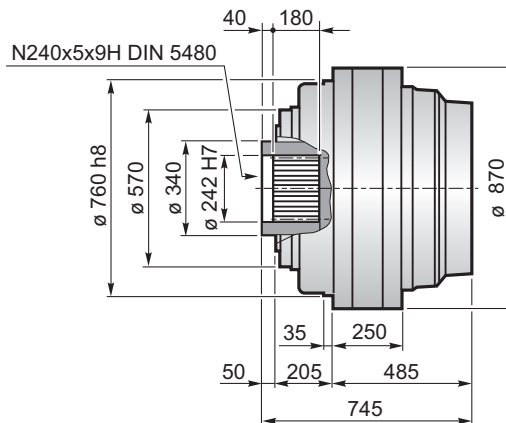


PG 33000

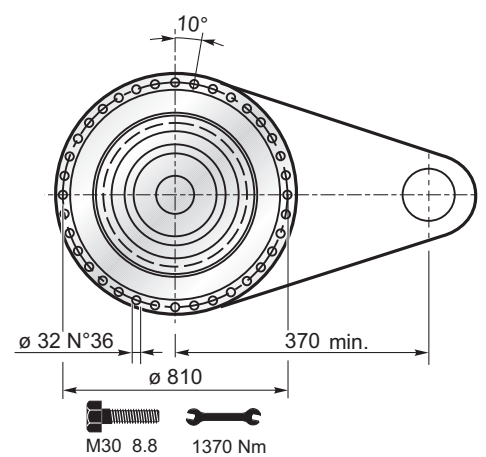
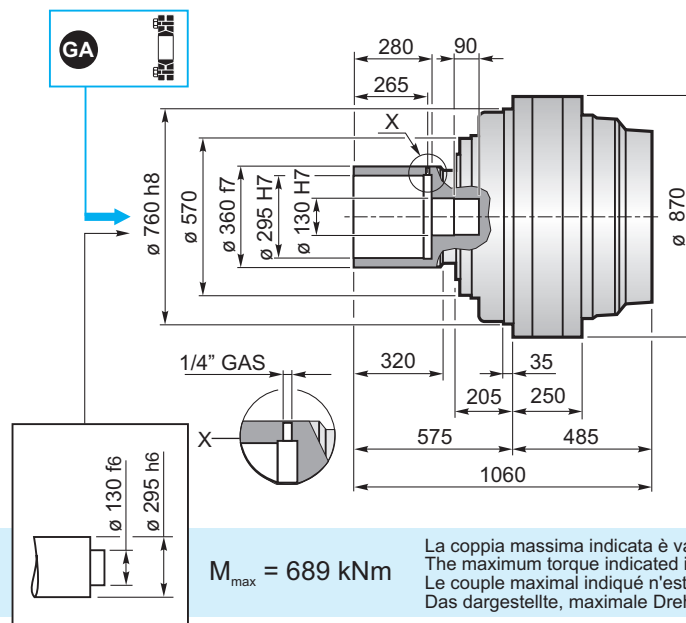
MC



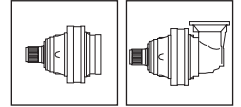
F



FS



PG 33000



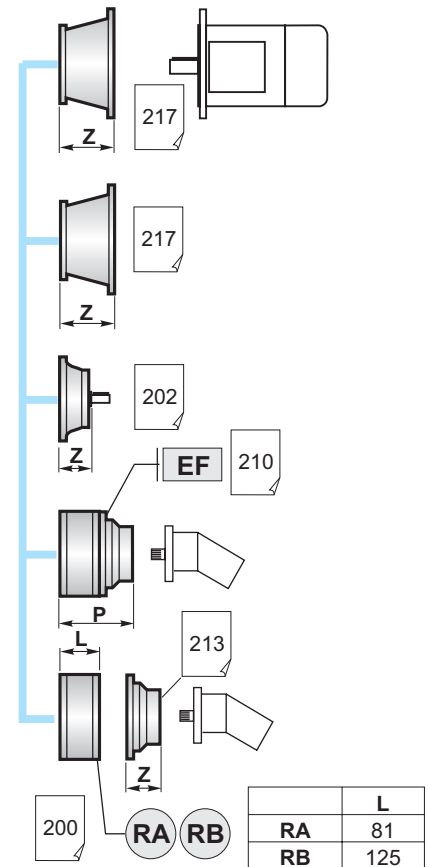
	PG		...MC			
	A	B	RA	RB	EF	EDF
PG 33002	740	1390				
PG 33003	922	1572				
PG 33004	1016	1666		•		
PG 33005	1075.5	1725.5	•	o	•	

	PG		...F			
	A	B	RA	RB	EF	EDF
PG 33002	740	995				
PG 33003	922	1177				
PG 33004	1016	1271		•		
PG 33005	1075.5	1330.5	•	o	•	

	PG		...FS			
	A	B	RA	RB	EF	EDF
PG 33002	740	1315				
PG 33003	922	1497				
PG 33004	1016	1591		•		
PG 33005	1075.5	1650.5	•	o	•	



A	B	
A+13.5	B+13.5	o



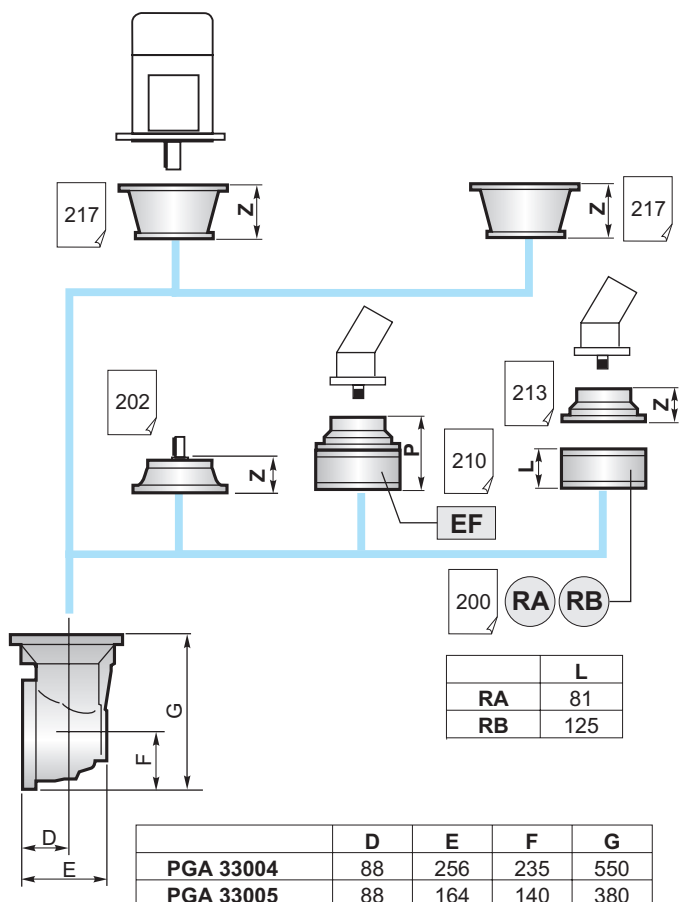
	PGA		...MC			
	A	B	RA	RB	EF	
PGA 33004	1002	315		•		
PGA 33005	1104	240	•	o	•	

	PGA		...F			
	A	B	RA	RB	EF	
PGA 33004	1002	315		•		
PGA 33005	1104	240	•	o	•	

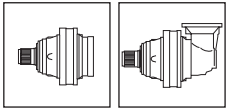
	PGA		...FS			
	A	B	RA	RB	EF	
PGA 33004	1002	315		•		
PGA 33005	1104	240	•	o	•	



B	
B+16.5	o

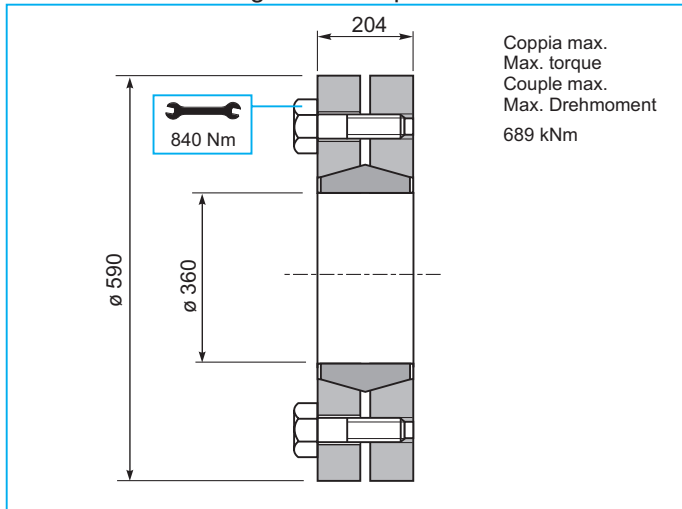


SOM

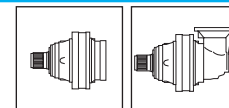


PG 33000

GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe



PG 33000



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

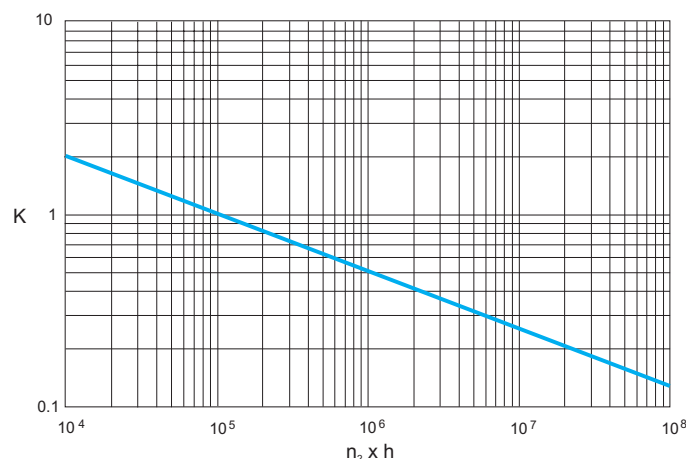
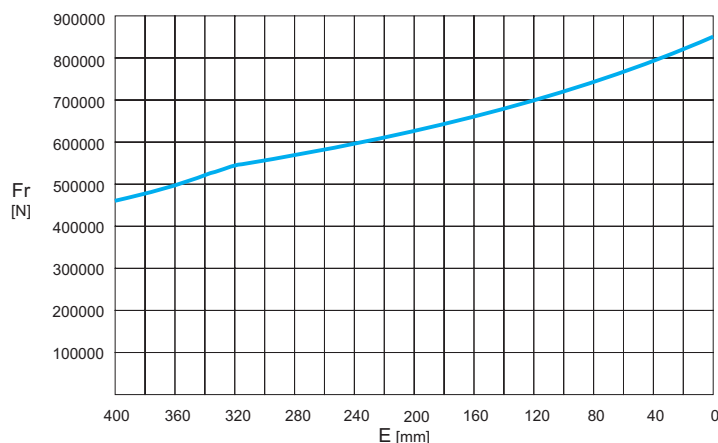
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

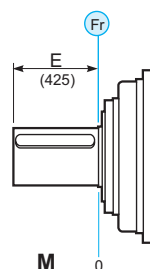
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

M



	$n \times h$				
	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.

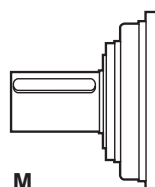
CHARGES AXIALES (Fa)

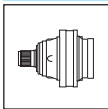
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

Fa [N]	M	
	110000	←
	110000	→

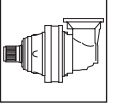




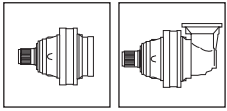
PG 40000

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 40001	3.83	434.0	390.0	340.0	330.0	200	110	1950	—	—	1870	1908
PG 40002	15.50	434.0	390.0	340.0	330.0	750	80	2283	—	—	2213	2251
	19.62	434.0	390.0	340.0	330.0							
PG 40003	62.00	434.0	390.0	340.0	330.0	1500	71	2399	—	—	2329	2367
	80.60	434.0	390.0	340.0	330.0							
	96.87	434.0	390.0	340.0	330.0							
	122.61	434.0	390.0	340.0	330.0							
PG 40004	227.33	434.0	390.0	340.0	330.0	2800	50	2426	—	—	2356	2394
	295.53	434.0	390.0	340.0	330.0							
	356.94	434.0	390.0	340.0	330.0							
	403.00	434.0	390.0	340.0	330.0							
	467.48	434.0	390.0	340.0	330.0							
	510.05	434.0	390.0	340.0	330.0							
	591.66	434.0	390.0	340.0	330.0							
	711.13	434.0	390.0	340.0	330.0							
PG 40005	858.81	434.0	390.0	340.0	330.0	2800	37	2438	—	—	2368	2406
	1037.26	434.0	390.0	340.0	330.0							
	1278.74	434.0	390.0	340.0	330.0							
	1418.61	434.0	390.0	340.0	330.0							
	1601.65	434.0	390.0	340.0	330.0							
	1844.19	434.0	390.0	340.0	330.0							
	2082.15	434.0	390.0	340.0	330.0							
	2157.58	434.0	390.0	340.0	330.0							
	2415.29	434.0	390.0	340.0	330.0							
	2635.28	434.0	390.0	340.0	330.0							
	3257.90	434.0	390.0	340.0	330.0							
	3550.00	434.0	390.0	340.0	330.0							
	4266.80	434.0	390.0	340.0	330.0							
	4444.59	434.0	390.0	340.0	330.0							
	5155.72	434.0	390.0	340.0	330.0							

PG 40000

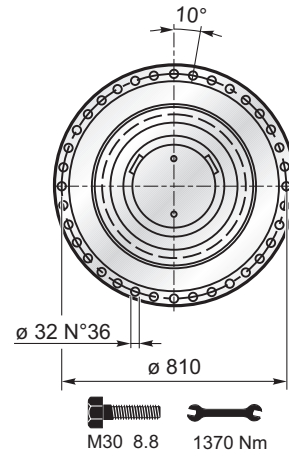
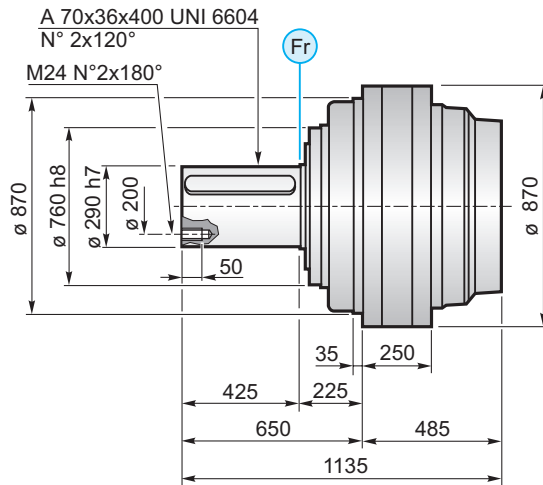


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 40004	190.43	434.0	390.0	340.0	330.0	2500	45	2521	—	—	2451	2489
	247.56	434.0	390.0	340.0	330.0							
	313.32	434.0	390.0	340.0	330.0							
	366.19	434.0	390.0	340.0	330.0							
	476.05	434.0	390.0	340.0	330.0							
	572.18	434.0	390.0	340.0	330.0							
PGA 40005	677.07	434.0	390.0	340.0	330.0	2500	45	2541	—	—	2471	2509
	816.12	434.0	390.0	340.0	330.0							
	1028.73	434.0	390.0	340.0	330.0							
	1240.00	434.0	390.0	340.0	330.0							
	1386.31	434.0	390.0	340.0	330.0							
	1620.25	434.0	390.0	340.0	330.0							
	1953.00	434.0	390.0	340.0	330.0							
	2106.33	434.0	390.0	340.0	330.0							
	2471.80	434.0	390.0	340.0	330.0							
	2665.89	434.0	390.0	340.0	330.0							
	3204.19	434.0	390.0	340.0	330.0							
	3862.19	434.0	390.0	340.0	330.0							
	4958.86	434.0	390.0	340.0	330.0							

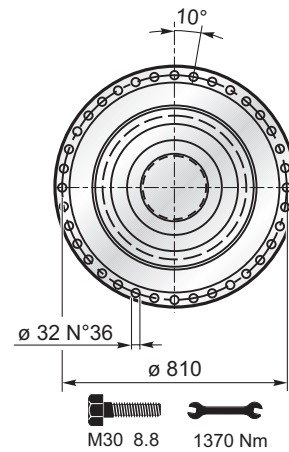
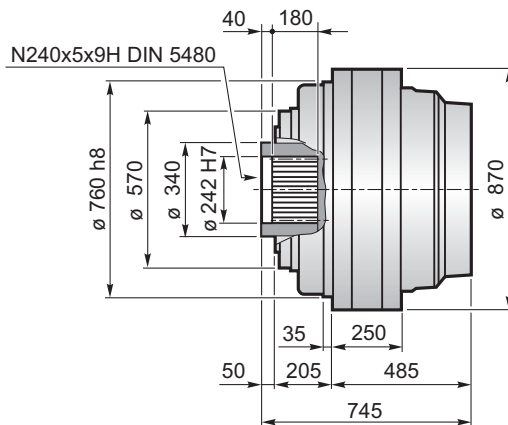


PG 40000

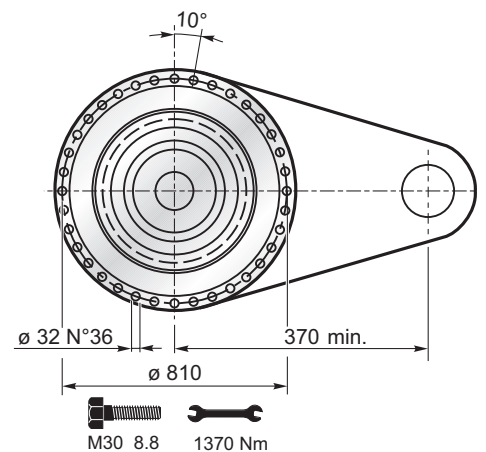
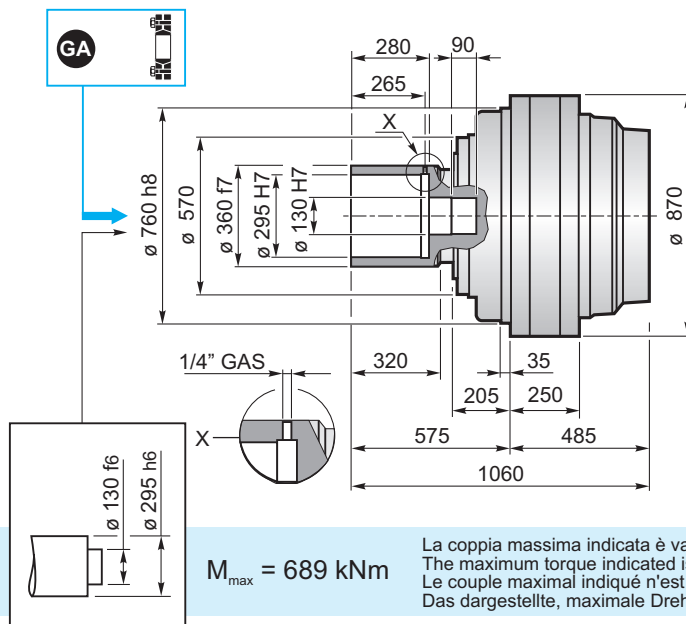
MC



F

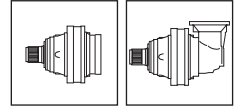


FS



La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

PG 40000

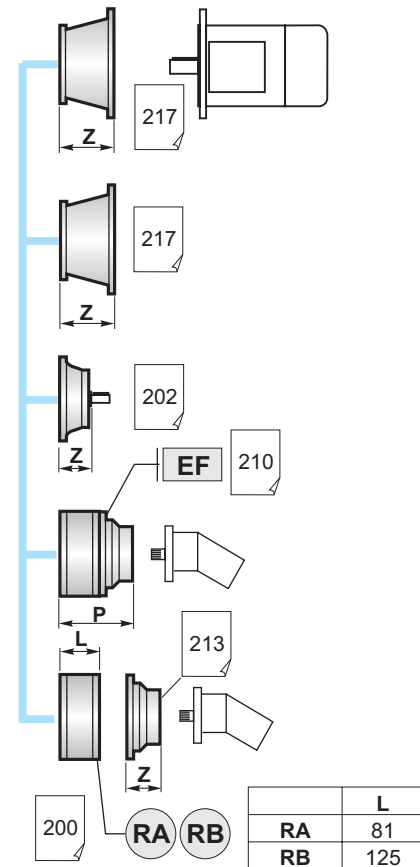


	PG		...MC			
	A	B	RA	RB	EF	EDF
PG 40002	818	1468				
PG 40003	1000	1650				
PG 40004	1055	1744		•		
PG 40005	1153.5	1803.5	•	o	•	

	PG		...F			
	A	B	RA	RB	EF	EDF
PG 40002	818	1073				
PG 40003	1000	1255				
PG 40004	1055	1349		•		
PG 40005	1153.5	1408.5	•	o	•	

	PG		...FS			
	A	B	RA	RB	EF	EDF
PG 40002	818	1393				
PG 40003	1000	1575				
PG 40004	1055	1669		•		
PG 40005	1153.5	1728.5	•	o	•	

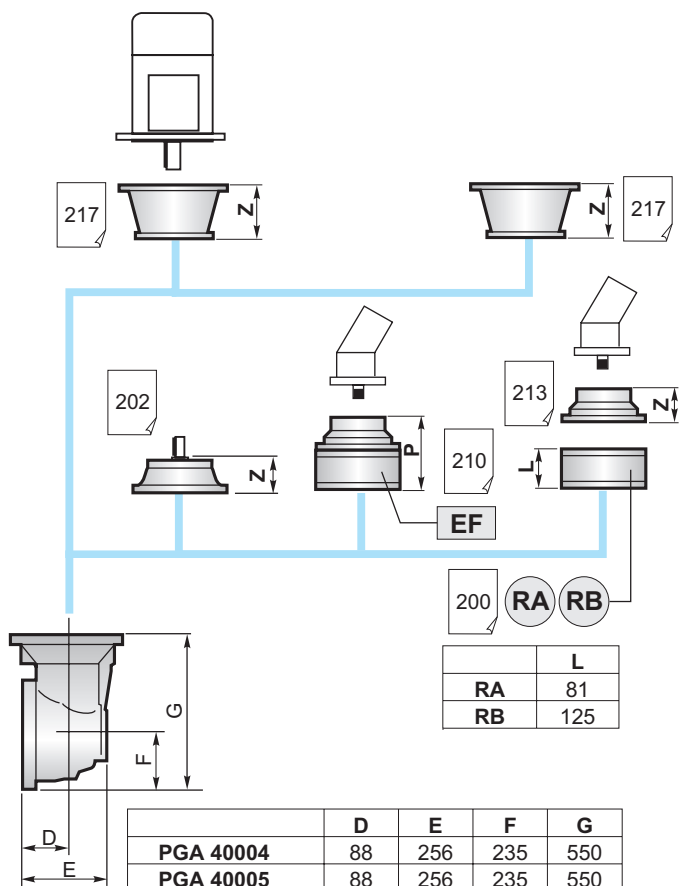
!	A	B	•
	A+13.5	B+13.5	o

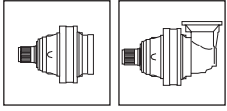


	PGA		...MC			
	A	B	RA	RB	EF	EDF
PGA 40004	1002	315		•		
PGA 40005	1159	240		•		

	PGA		...F			
	A	B	RA	RB	EF	EDF
PGA 40004	1002	315		•		
PGA 40005	1159	240		•		

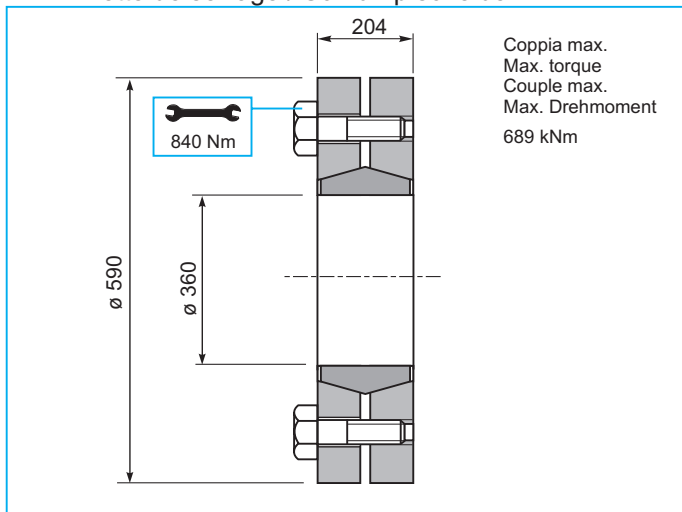
	PGA		...FS			
	A	B	RA	RB	EF	EDF
PGA 40004	1002	315		•		
PGA 40005	1159	240		•		



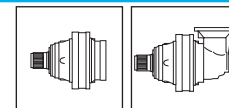


PG 40000

GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe



PG 40000



CARICHI RADIALI (Fr)

Nei diagrammi seguenti sono riportati i carichi radiali e i coefficienti K per rapportarli al valore $n_2 \times h$ desiderato.

RADIAL LOADS (Fr)

The following curves show the radial loads and the K factors to obtain the required $n_2 \times h$ value.

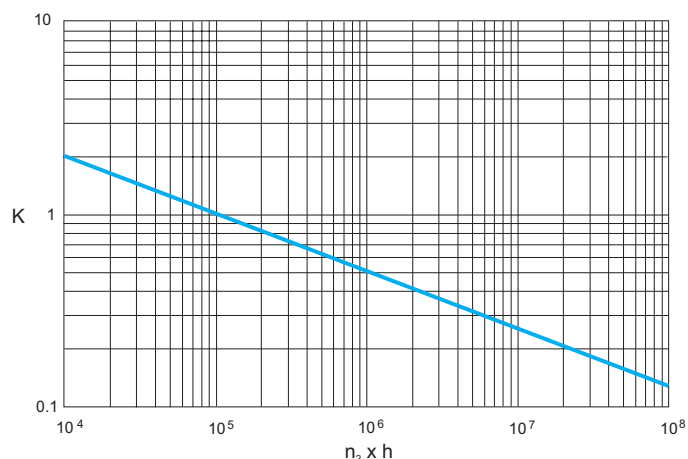
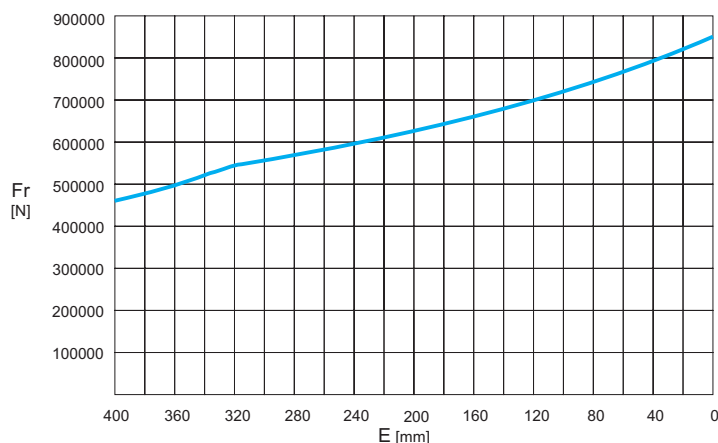
CHARGES RADIALES (Fr)

Dans les diagrammes suivants sont indiqués les charges radiales et les facteurs K de façon à obtenir la valeur $n_2 \times h$ désirée.

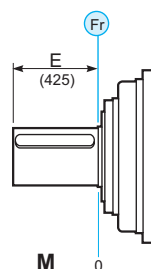
RADIALLAST (Fr)

In den nachstehenden Diagrammen ist die Radiallast und der Koeffizient K dargestellt und kann mit dem gewünschten Wert $n_2 \times h$ verglichen werden.

M



	$n \times h$				
	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.

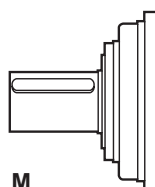
CHARGES AXIALES (Fa)

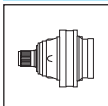
Les valeurs des charges axiales indiquées dans le tableau se réfèrent aux versions et à la direction d'application de la charge.

AXIALLAST (Fa)

Die dargestellten Werte der Axiallast basieren auf der Version und der applizierten Lastrichtung.

Fa [N]	M	
	110000	←
	110000	→

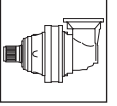




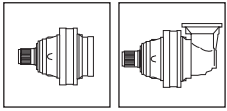
PG 55000

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 55001	3.84	635.7	572.3	498.2	450.0	100	160	3175	—	—	2850	2907
PG 55002	15.03	635.7	572.3	498.2	450.0	200	110	3972	—	—	3650	3707
	19.00	635.7	572.3	498.2	450.0							
PG 55003	59.42	635.7	572.3	498.2	450.0	1200	93	4166	—	—	3844	3901
	75.00	635.7	572.3	498.2	450.0							
	90.15	635.7	572.3	498.2	450.0							
	96.06	635.7	572.3	498.2	450.0							
	113.85	635.7	572.3	498.2	450.0							
PG 55004	211.27	635.7	572.3	498.2	450.0	2000	70	4225	—	—	3903	3960
	254.66	635.7	572.3	498.2	450.0							
	266.79	635.7	572.3	498.2	450.0							
	332.76	635.7	572.3	498.2	450.0							
	362.67	635.7	572.3	498.2	450.0							
	420.19	635.7	572.3	498.2	450.0							
	506.48	635.7	572.3	498.2	450.0							
	648.38	635.7	572.3	498.2	450.0							
PG 55005	798.14	635.7	572.3	498.2	450.0	2800	49	4241	—	—	3919	3976
	871.50	635.7	572.3	498.2	450.0							
	1050.47	635.7	572.3	498.2	450.0							
	1100.50	635.7	572.3	498.2	450.0							
	1214.84	635.7	572.3	498.2	450.0							
	1483.87	635.7	572.3	498.2	450.0							
	1600.73	635.7	572.3	498.2	450.0							
	1846.29	635.7	572.3	498.2	450.0							
	2082.20	635.7	572.3	498.2	450.0							
	2176.00	635.7	572.3	498.2	450.0							
	2398.76	635.7	572.3	498.2	450.0							
	2629.33	635.7	572.3	498.2	450.0							
	3046.40	635.7	572.3	498.2	450.0							
	3227.51	635.7	572.3	498.2	450.0							
	3722.61	635.7	572.3	498.2	450.0							
	3890.31	635.7	572.3	498.2	450.0							
	4700.79	635.7	572.3	498.2	450.0							
	5571.30	635.7	572.3	498.2	450.0							

PG 55000

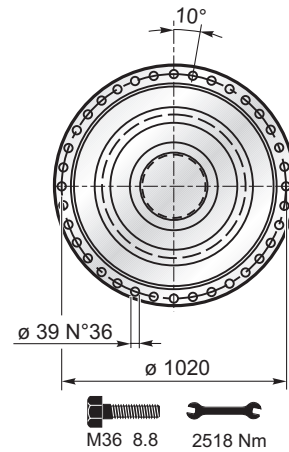
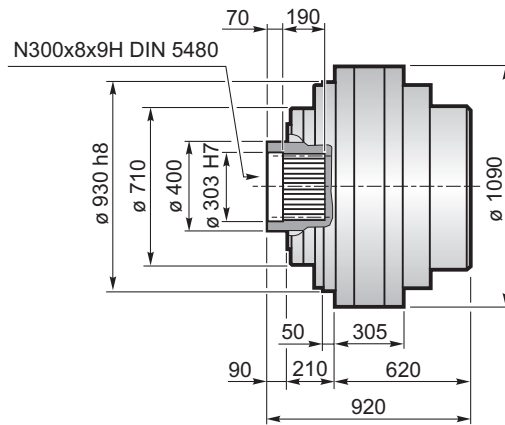


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 55004	276.91	635.7	572.3	498.2	450.0	2500	57	4307	—	—	3985	4042
	295.03	635.7	572.3	498.2	450.0							
	349.67	635.7	572.3	498.2	450.0							
	448.27	635.7	572.3	498.2	450.0							
	531.28	635.7	572.3	498.2	450.0							
PGA 55005	648.91	635.7	572.3	498.2	450.0	2500	50	4347	—	—	4025	4082
	782.17	635.7	572.3	498.2	450.0							
	830.72	635.7	572.3	498.2	450.0							
	985.94	635.7	572.3	498.2	450.0							
	1113.90	635.7	572.3	498.2	450.0							
	1245.00	635.7	572.3	498.2	450.0							
	1426.00	635.7	572.3	498.2	450.0							
	1593.83	635.7	572.3	498.2	450.0							
	1869.12	635.7	572.3	498.2	450.0							
	1960.90	635.7	572.3	498.2	450.0							
	2396.17	635.7	572.3	498.2	450.0							
	2839.90	635.7	572.3	498.2	450.0							
	3025.79	635.7	572.3	498.2	450.0							
	3586.13	635.7	572.3	498.2	450.0							

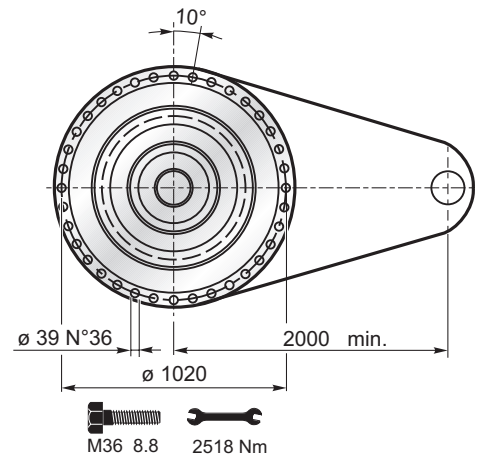
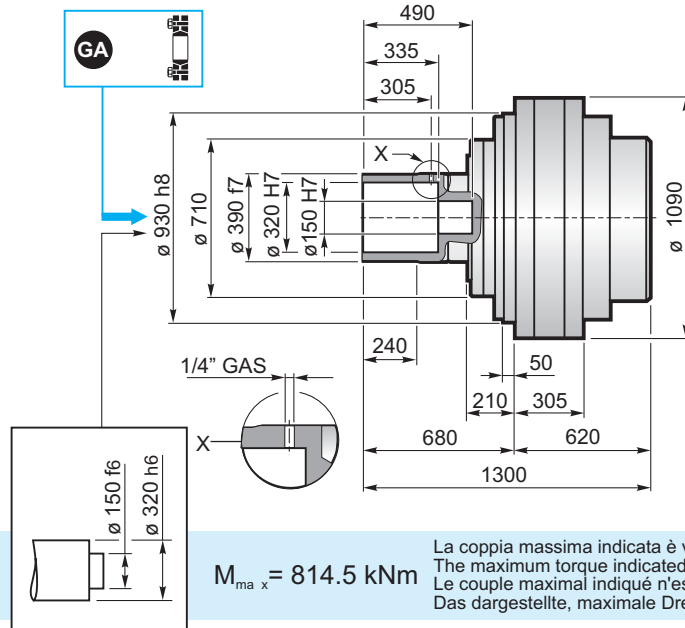


PG 55000

F



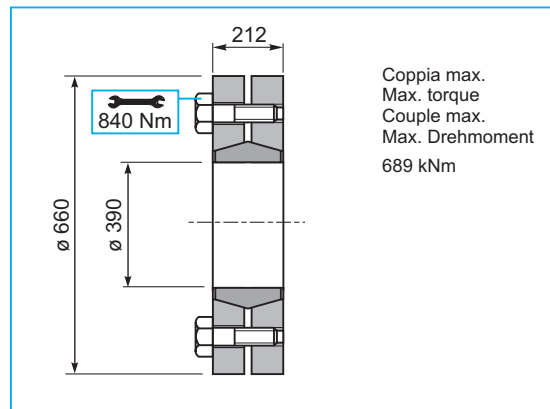
FS



$M_{max} = 814.5 \text{ kNm}$

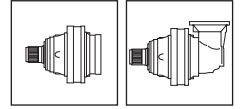
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
689 kNm

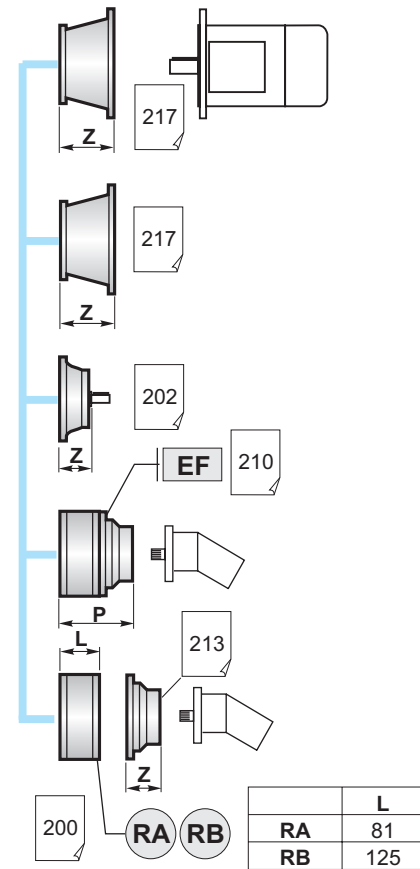
PG 55000



	PG ...F					
	A	B	RA	RB	EF	EDF
PG 55002	903.5	1203.5				
PG 55003	1124.5	1424.5				
PG 55004	1231.5	1531.5		•		
PG 55005	1303	1603	•	o	•	

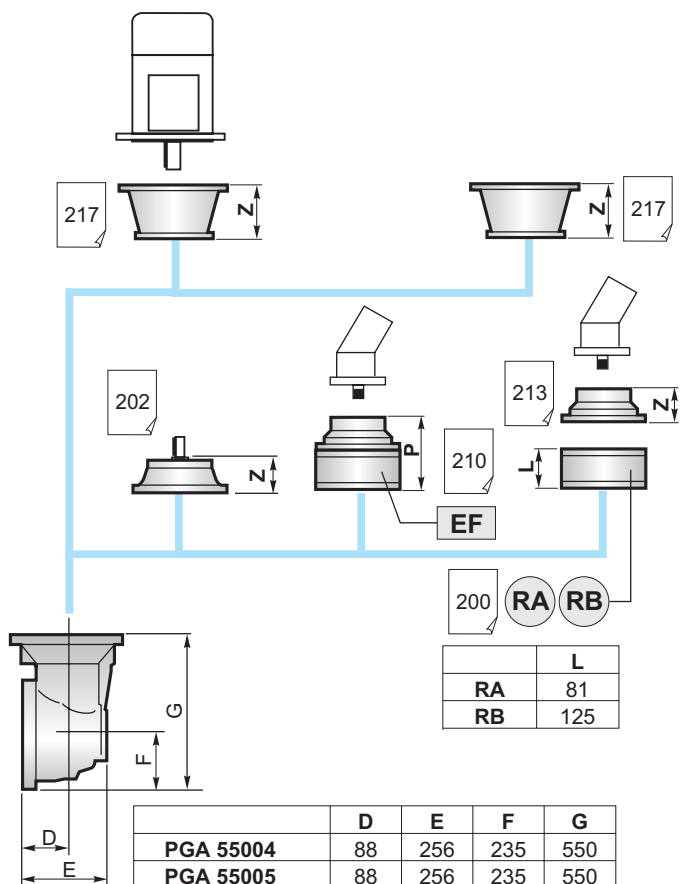
	PG ...FS					
	A	B	RA	RB	EF	EDF
PG 55002	903.5	1583.5				
PG 55003	1124.5	1804.5				
PG 55004	1231.5	1911.5		•		
PG 55005	1303	1983	•	o	•	

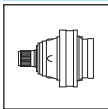
!	A	B	•
	A+13.5	B+13.5	o



	PGA ...F				
	A	B	RA	RB	EF
PGA 55004	1305.5	315		•	
PGA 55005	1366.5	315		•	

	PGA ...FS				
	A	B	RA	RB	EF
PGA 55004	1305.5	315		•	
PGA 55005	1366.5	315		•	

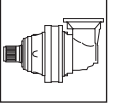




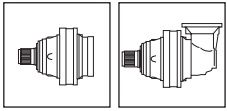
PG 65000

	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PG 65001	3.84	730.3	657.5	572.3	540.0	100	160	3175	—	—	2850	2907
PG 65002	14.13	730.3	657.5	572.3	540.0	200	110	4015	—	—	3690	3747
	19.00	730.3	657.5	572.3	540.0							
PG 65003	55.88	730.3	657.5	572.3	540.0	1200	93	4209	—	—	3884	3941
	75.00	730.3	657.5	572.3	540.0							
	96.06	730.3	657.5	572.3	540.0							
PG 65004	198.69	730.3	657.5	572.3	540.0	2000	70	4268	—	—	3943	4000
	266.79	730.3	657.5	572.3	540.0							
	306.60	730.3	657.5	572.3	540.0							
	362.67	730.3	657.5	572.3	540.0							
	411.67	730.3	657.5	572.3	540.0							
	482.89	730.3	657.5	572.3	540.0							
	537.92	730.3	657.5	572.3	540.0							
	648.38	730.3	657.5	572.3	540.0							
	768.46	730.3	657.5	572.3	540.0							
PG 65005	1026.58	730.3	657.5	572.3	540.0	2800	49	4284	—	—	3959	4016
	1214.84	730.3	657.5	572.3	540.0							
	1326.50	730.3	657.5	572.3	540.0							
	1496.00	730.3	657.5	572.3	540.0							
	1616.87	730.3	657.5	572.3	540.0							
	1736.35	730.3	657.5	572.3	540.0							
	1873.78	730.3	657.5	572.3	540.0							
	1958.22	730.3	657.5	572.3	540.0							
	2127.00	730.3	657.5	572.3	540.0							
	2218.92	730.3	657.5	572.3	540.0							
	2403.72	730.3	657.5	572.3	540.0							
	2779.25	730.3	657.5	572.3	540.0							
	3046.40	730.3	657.5	572.3	540.0							
	3500.95	730.3	657.5	572.3	540.0							
	3899.91	730.3	657.5	572.3	540.0							
	4610.73	730.3	657.5	572.3	540.0							
	5571.30	730.3	657.5	572.3	540.0							

PG 65000

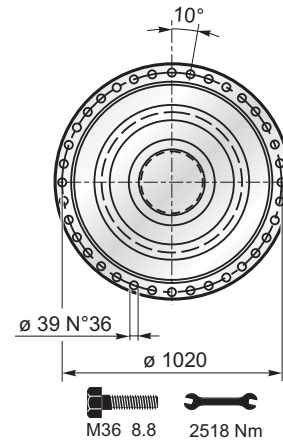
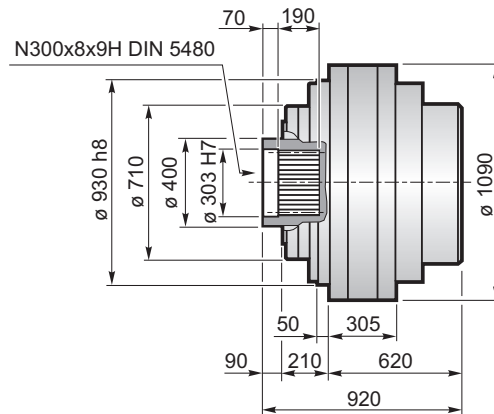


	i	Mc [kNm]				n _{1max} [min ⁻¹]	Pt [kW]	Kg				
		n ₂ x h	n ₂ x h	n ₂ x h	n ₂ x h			M	P	CPC	F	FS
		10.000	20.000	50.000	100.000							
PGA 65005	610.27	730.3	657.5	572.3	540.0	2500	50	4390	—	—	4065	4122
	735.60	730.3	657.5	572.3	540.0							
	819.42	730.3	657.5	572.3	540.0							
	927.24	730.3	657.5	572.3	540.0							
	987.70	730.3	657.5	572.3	540.0							
	1113.90	730.3	657.5	572.3	540.0							
	1246.00	730.3	657.5	572.3	540.0							
	1426.00	730.3	657.5	572.3	540.0							
	1500.69	730.3	657.5	572.3	540.0							
	1692.44	730.3	657.5	572.3	540.0							
	1960.90	730.3	657.5	572.3	540.0							
	2166.62	730.3	657.5	572.3	540.0							
	2510.29	730.3	657.5	572.3	540.0							
	3025.79	730.3	657.5	572.3	540.0							
	3586.13	730.3	657.5	572.3	540.0							

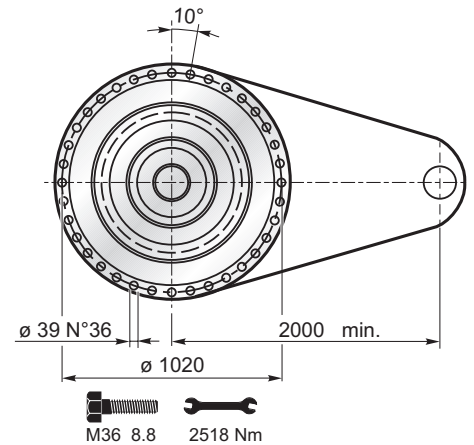
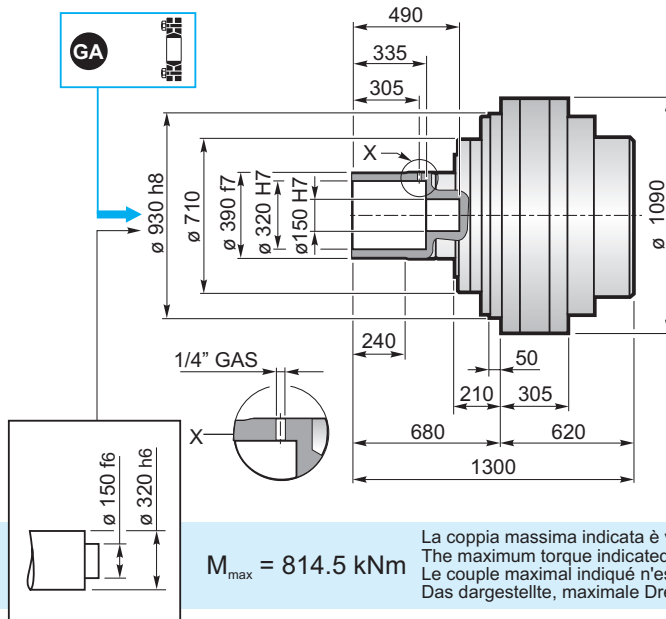


PG 65000

F



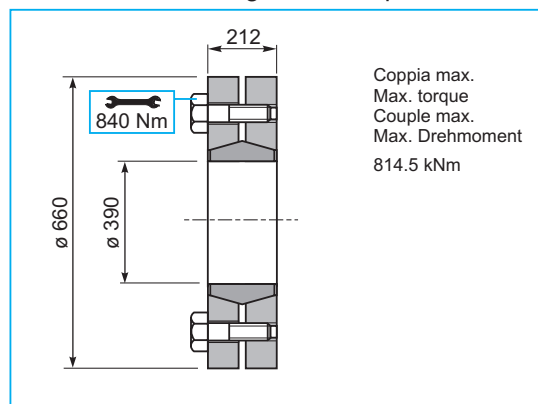
FS



$M_{max} = 814.5 \text{ kNm}$

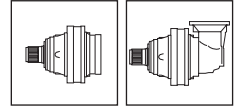
La coppia massima indicata è valida solo con calettatori forniti da SOM
The maximum torque indicated is valid only with shrink discs supplied by SOM
Le couple maximal indiqué n'est valable qu'avec les frettes de serrage fournis par SOM
Das dargestellte, maximale Drehmoment gilt nur mit von SOM gelieferter Schrumpfscheibe

GA Giunto di attrito / Shrink disc
Frette de serrage / Schrumpfscheibe



Coppia max.
Max. torque
Couple max.
Max. Drehmoment
814.5 kNm

PG 65000

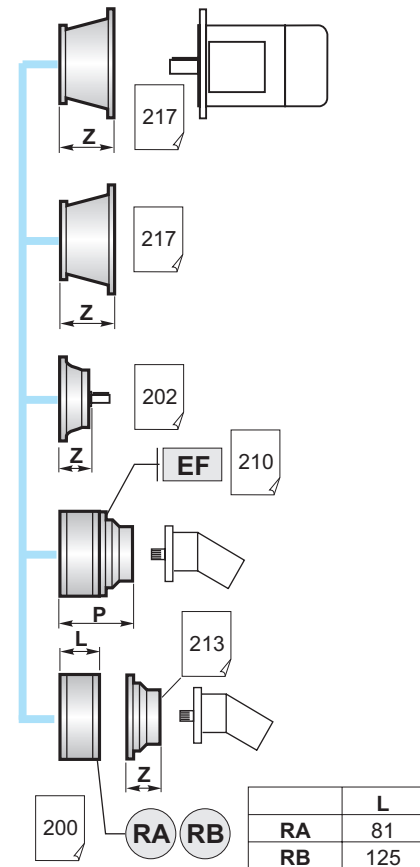


	PG ...F					
	A	B	RA	RB	EF	EDF
PG 65002	903.5	1203.5				
PG 65003	1124.5	1424.5				
PG 65004	1231.5	1531.5		•		
PG 65005	1303	1603	•	o	•	

	PG ...FS					
	A	B	RA	RB	EF	EDF
PG 65002	903.5	1583.5				
PG 65003	1124.5	1804.5				
PG 65004	1231.5	1911.5		•		
PG 65005	1303	1983.5	•	o	•	

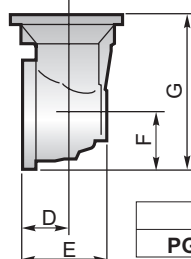
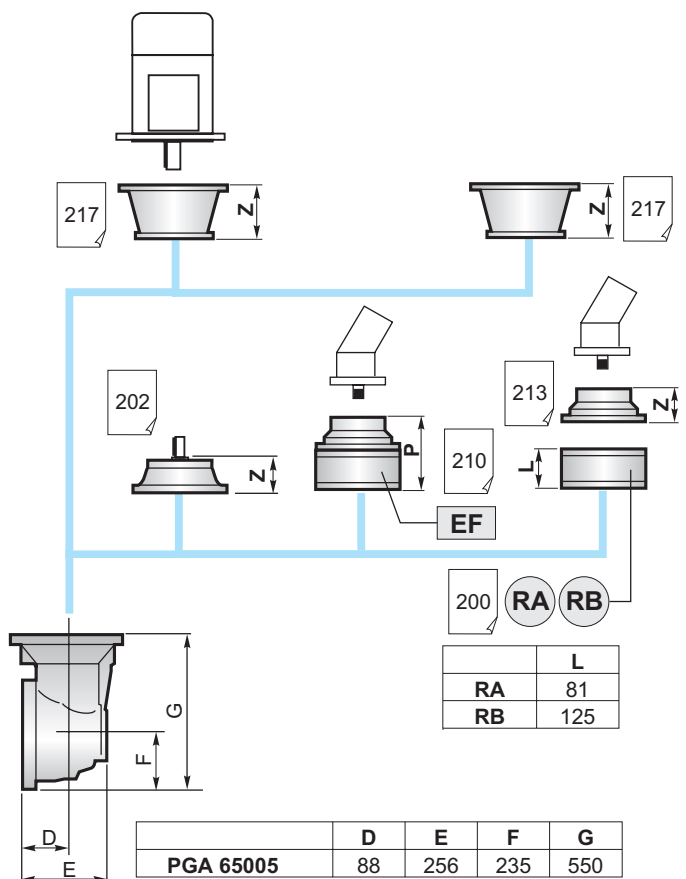


A	B	
A+13.5	B+13.5	o



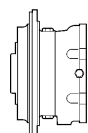
	PGA ...F				
	A	B	RA	RB	EF
PGA 65005	1366.5	315		•	

	PGA ...FS				
	A	B	RA	RB	EF
PGA 65005	1366.5	315		•	



	D	E	F	G
PGA 65005	88	256	235	550

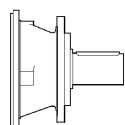
ACCESSORI ENTRATA
INPUT FITTINGS
ACCESSOIRES D'ENTREE
ANTRIEBSBAUTEILE



Freni Modulari
Modular Brakes
Freins Modulaires
Bremsmodule

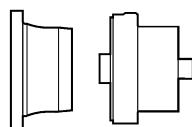


200



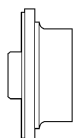
Alberi Entrata
Input Shafts
Arbres d'Entrée
Antriebswellen

202



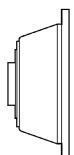
Entrate Dirette
Direct Inputs
Entrées Directes
Standardantrieb

206



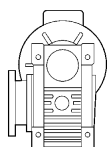
Predisposizioni Motori Idraulici
Hydraulic Motor Couplings
Adaptations Moteurs Hydrauliques
Motorflansch Hydraulikmotoren

213



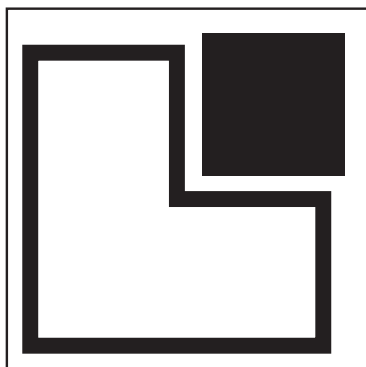
Predisposizioni Motori Elettrici
Electric Motor Couplings
Adaptations Moteurs Electriques
Motorflansch Elektromotoren

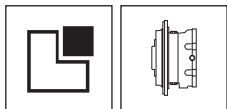
217



Predisposizioni riduttori
Gearbox adaptors
Adaptations réducteurs
Motorflansch Getriebe

218





FRENI MODULARI MODULAR BRAKES FREINS MODULAIRES BREMSMODULE

I freni in dotazione ai riduttori epicicloidali SOM sono di tipo idraulico, con dischi a bagno d'olio, adatti esclusivamente alla frenatura statica, ovvero di parcheggio.

I freni hanno la lubrificazione separata da quella del riduttore epicicloidale. In fase di immisione 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.

SOM 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).

Les freins dont sont équipés les réducteurs planétaires SOM sont du type hydraulique, avec disques en bain d'huile, appropriés exclusivement pour le freinage statique, c'est à dire de stationnement.

Les freins ont une lubrification séparée de celle du réducteur planétaire. Lors de l'introduction du lubrifiant, il est donc nécessaire d'introduire de l'huile par le trou pratiqué sur le corps du frein.

Il est conseillé d'utiliser du lubrifiant ISO VG 32 (on peut utiliser normalement des huiles hydrauliques).

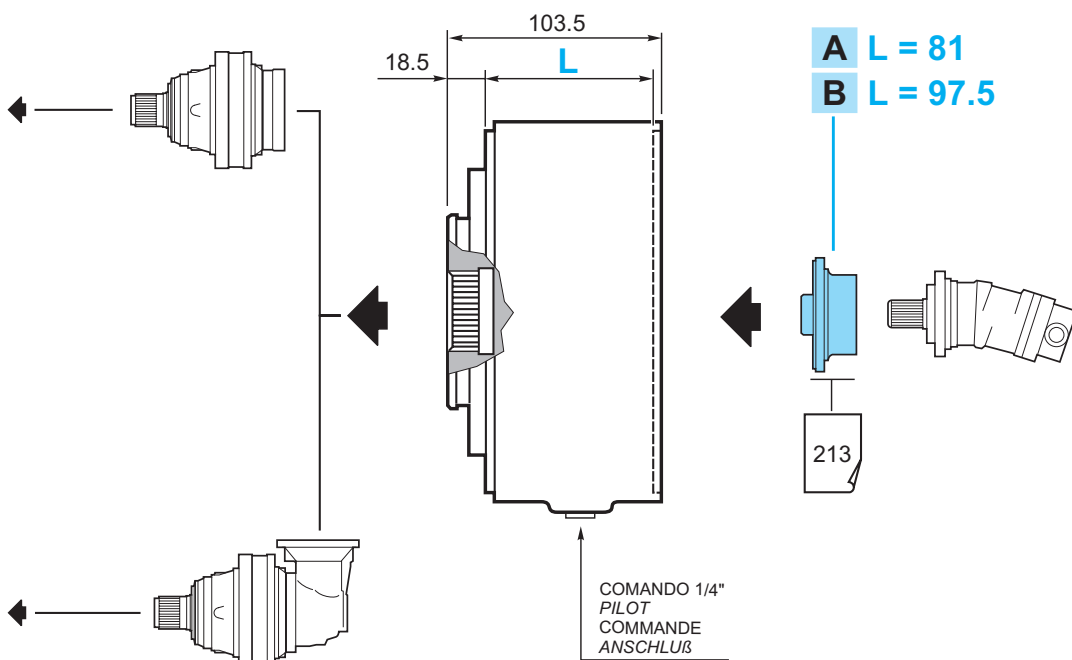
Fuer die SOM - Planetengetriebe stehen hydraulische Federdruck-Lamellenbremsen zur Verfügung. Diese sind ausschließlich als statische Haltebremsen ausgelegt.

Die Lamellen liegen im Oelbad, das vom Oelkreislauf des Getriebes getrennt ist. Deshalb ist beim Befüllen darauf zu achten, dass der Schmierstoff direkt in den Bremskörper gegeben wird.

In der Regel koennen Hydraulikoele verwendet werden. Empfohlener Schmierstoff: ISO VG 32.

	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 14000	4-5
PG 18000	5
PG 22000	5
PG 33000	5
PG 40000	5
PG 55000	—
PG 65000	—

	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	2-3-4
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 14000	5
PGA 18000	5
PGA 22000	5
PGA 33000	5
PGA 40000	—
PGA 55000	—
PGA 65000	—



RA							
	Cfs _{min} [Nm]	Pa _{min} [bar]	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
					V1	B5	
RA 10	90	15	4706.000.500	320	0.4	0.2	14
RA 16	140	21	4706.001.500				
RA 25	220	17	4706.002.500				
RA 35	330	21	4706.003.500				
RA 45	430	28	4706.004.500				
RA 55	550	34	4706.006.500				

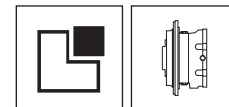
N.B.: i numeri 1-2-3-4-5 indicano il numero di stadi dei riduttori.

N.B.: Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.

N.B.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.

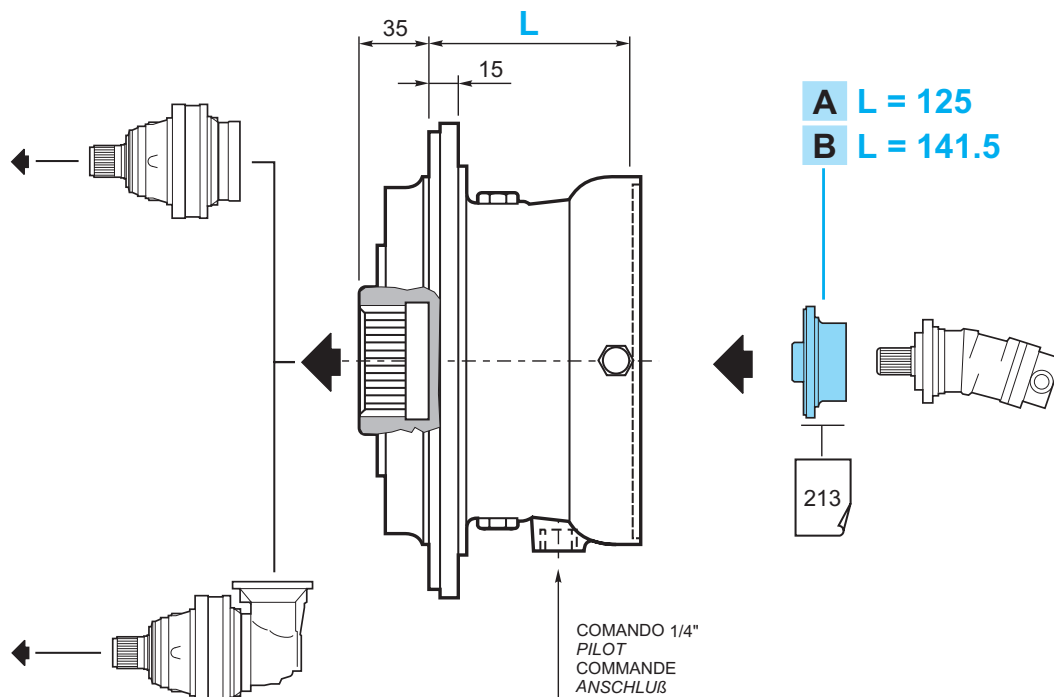
N.B. Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.

FRENI MODULARI MODULAR BRAKES FREINS MODULAIRES BREMSMODULE



	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 14000	3-4
PG 18000	3-4
PG 22000	3-4
PG 33000	4-5
PG 40000	4-5
PG 55000	4-5
PG 65000	4-5

	RB
PGA 100	—
PGA 160	—
PGA 250	—
PGA 500	—
PGA 700	—
PGA 1000	—
PGA 1600	—
PGA 1800	2
PGA 2500	2
PGA 3000	—
PGA 3500	2-3
PGA 5000	2
PGA 6500	3
PGA 9000	3
PGA 14000	4
PGA 18000	4
PGA 22000	4
PGA 33000	4
PGA 40000	4-5
PGA 55000	4-5
PGA 65000	5



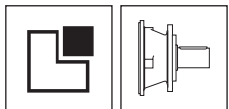
RB							
	Cfs _{min} [Nm]	Pa _{min} [bar]	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
					V1	B5	
RB 25	250	20	4705.300.500	320	0.6	0.3	21
RB 40	400	30	4705.301.500				
RB 63	650	45	4705.302.500				
RB 80	800	33	4705.303.500				
RB 100	1000	40	4705.304.500				
RB 125	1250	40	4705.305.500				
RB 160	1500	40	4705.306.500				
RB 180	1700	45	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.

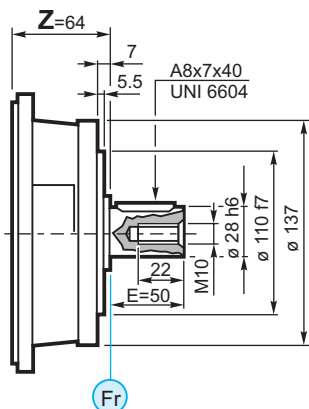
N.B.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.

N.B. Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.



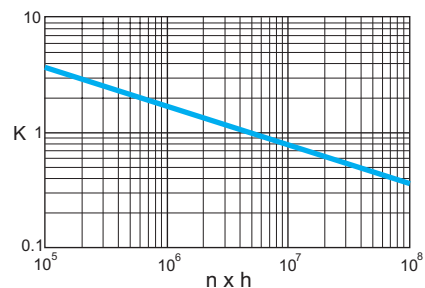
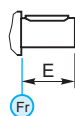
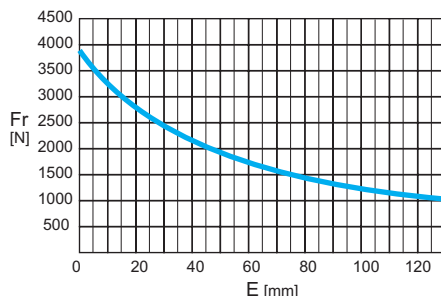
ALBERI ENTRATA INPUT SHAFTS ARBRES D'ENTREE ANTRIEBSWELLEN

EL28

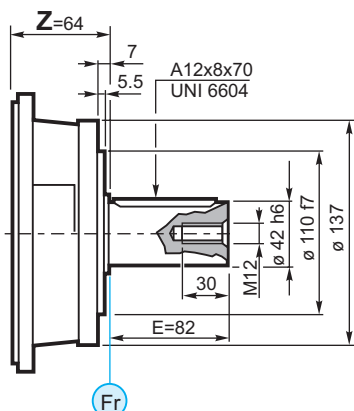


Peso
Weight
Poids
Gewicht

Kg 5.5

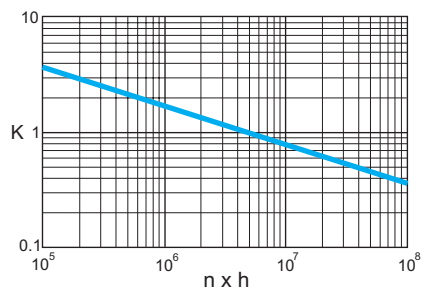
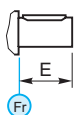
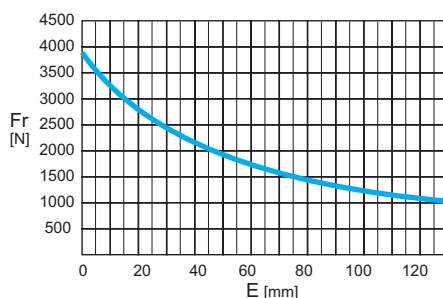


EL42

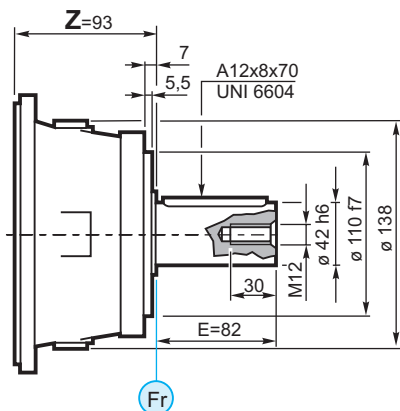


Peso
Weight
Poids
Gewicht

Kg 6.0

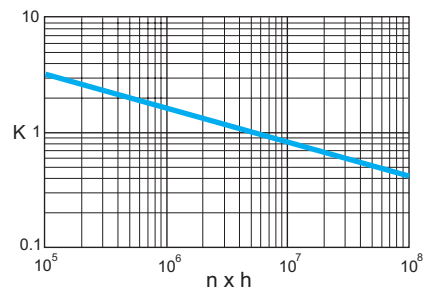
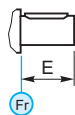
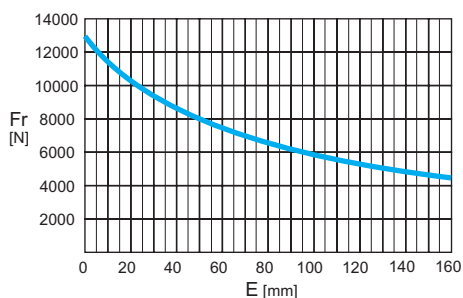


EML42

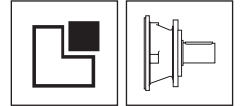


Peso
Weight
Poids
Gewicht

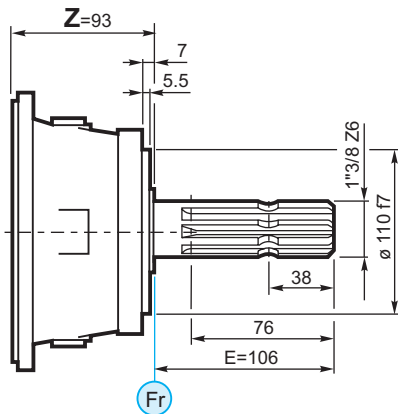
Kg 9.0



Le dimensioni Z riportate vanno verificate con la tabella a pag. 205.
Z dimensions have to be verified in the table on page 205.
Les dimensions de Z sont à vérifier dans le tableau à page 205.
Das Mass Z wird in der entsprechenden Tabelle auf der Seite 205 festgestellt.

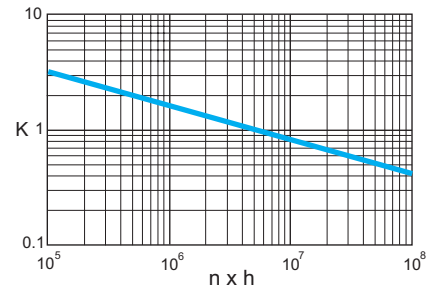
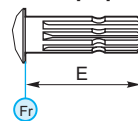
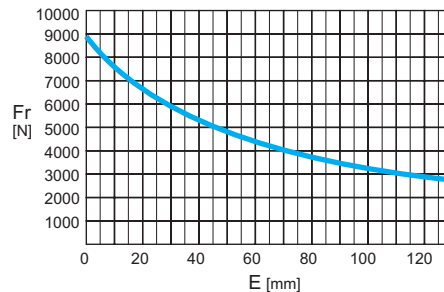


EML1"3/8 Z=6

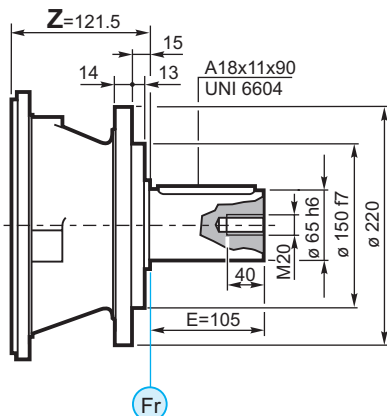


Peso
Weight
Poids
Gewicht

Kg 9.0

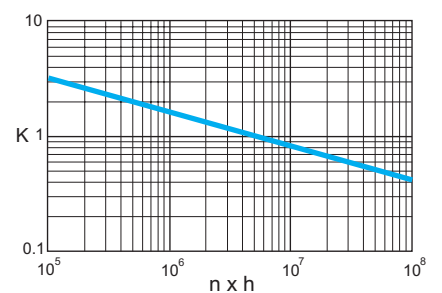
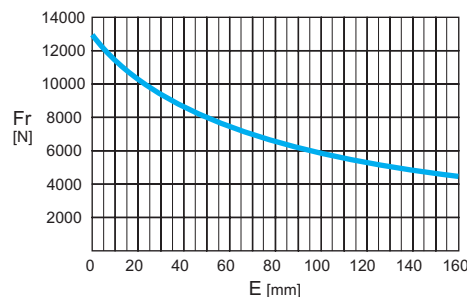


EM65

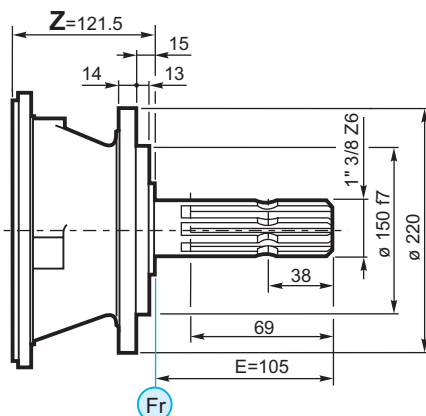


Peso
Weight
Poids
Gewicht

Kg 17

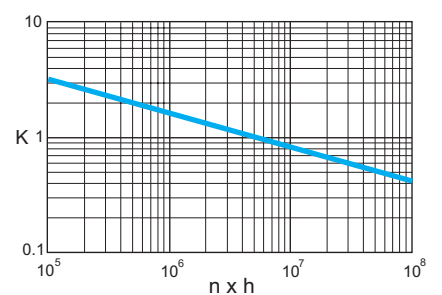
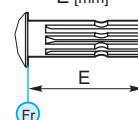
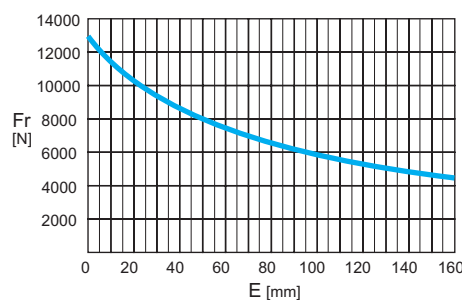


EM1"3/8 Z=6

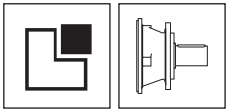


Peso
Weight
Poids
Gewicht

Kg 17

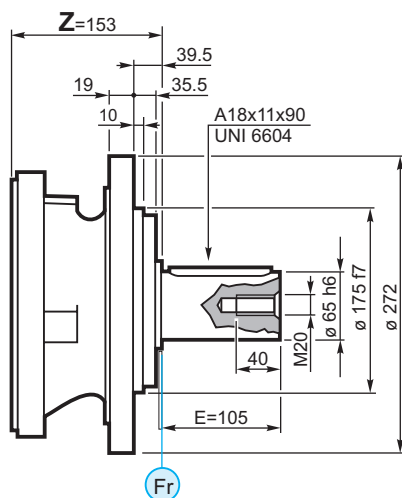


Le dimensioni Z riportate vanno verificate con la tabella a pag. 205.
Z dimensions have to be verified in the table on page 205.
Les dimensions de Z sont à vérifier dans le tableau à page 205.
Das Mass Z wird in der entsprechenden Tabelle auf der Seite 205 festgestellt.



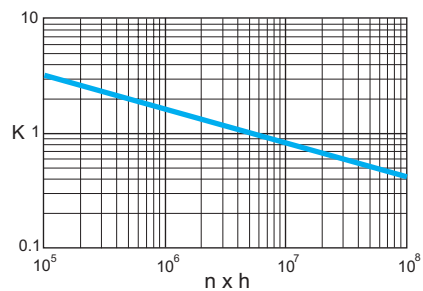
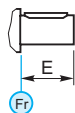
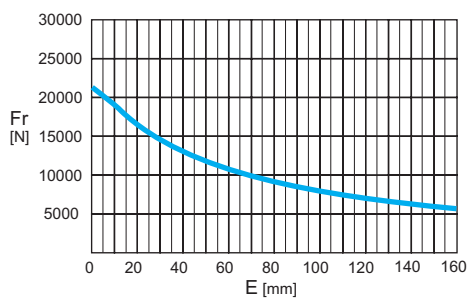
ALBERI ENTRATA INPUT SHAFTS ARBRES D'ENTREE ANTRIEBSWELLEN

EP65

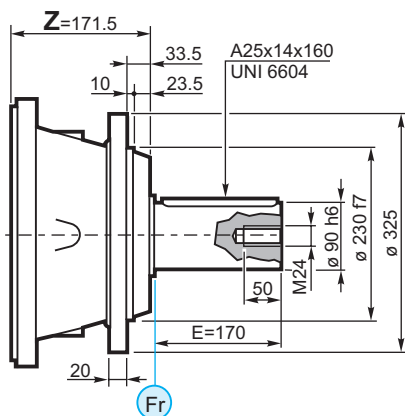


Peso
Weight
Poids
Gewicht

Kg 26

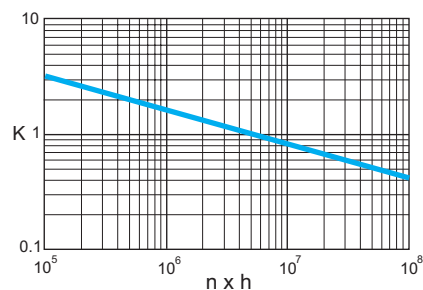
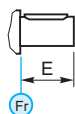
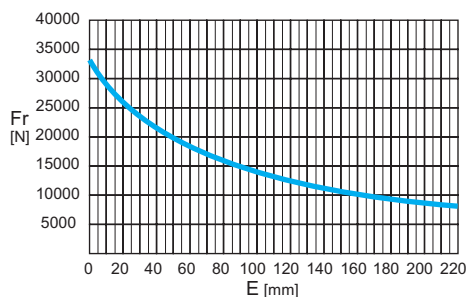


ET90



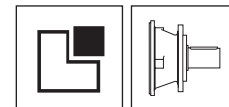
Peso
Weight
Poids
Gewicht

Kg 48



Le dimensioni Z riportate vanno verificate con la tabella a pag. 205.
Z dimensions have to be verified in the table on page 205.
Les dimensions de Z sont à vérifier dans le tableau à page 205.
Das Mass Z wird in der entsprechenden Tabelle auf der Seite 205 festgestellt.

**ALBERI ENTRATA
INPUT SHAFTS
ARBRES D'ENTREE
ANTRIEBSWELLEN**



						
	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 14000	4-5	3	4	—	2	3
PG 18000	4-5	3	4	—	2	3
PG 22000	4-5	3	4	2	—	3
PG 33000	5	4	5	—	3	—
PG 40000	5	4	5	—	3	—
PG 55000	5	4	5	3	—	4
PG 65000	5	4	5	3	—	4

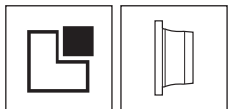
N.B.: i numeri 1-2-3-4-5 indicano il numero di stadi dei riduttori.

N.B.: Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.

				
	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	—
PG 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	2	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	—
PGA14000	5	4	5	—
PGA18000	5	4	5	—
PGA22000	5	4	5	—
PGA33000	5	4	5	—
PGA40000	—	4-5	—	—
PGA55000	—	4-5	—	—
PGA65000	—	5	—	—

N.B.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.

N.B. Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.



ENTRATE DIRETTE SENZA FRENO CON ATTACCO MOTORE DIRECT INPUT MOTOR ADAPTOR WITHOUT BRAKE ENTRÉE STANDARD SANS FREIN POUR ADAPTATION MOTEUR STANDARDANTRIEB OHNE BREMSE MIT MOTORFLANSCH

La tabella seguente indica l'applicabilità delle entrate dirette ED sui riduttori PG.

The following table shows how to apply direct inputs ED on PG planetary gear units.

Le tableau ci-dessous montre l'applicabilité des entrées standards ED aux réducteurs PG.

Die nachfolgende Tabelle zeigt die Anbaumöglichkeiten des ED-Antriebs an die Getriebe der Serie PG.

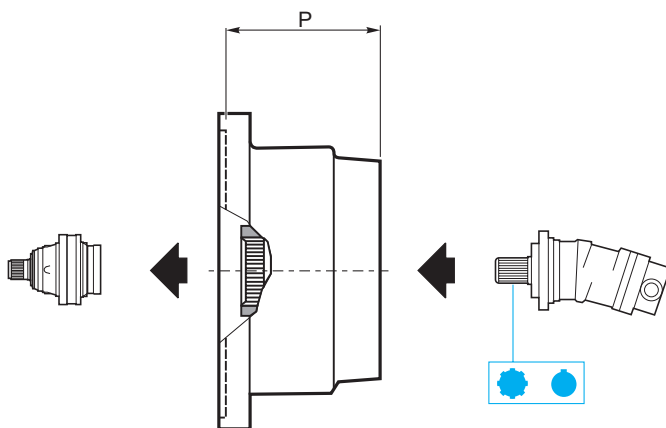
			
PG	ED	PG	ED
PG 100	1-2-3-4	PG 5000	4
PG 160	1-2-3-4	PG 6500	—
PG 250	2-3-4	PG 9000	—
PG 500	2-3-4	PG 14000	5
PG 700	3-4	PG 18000	5
PG 1000	3-4	PG 22000	5
PG 1600	3-4	PG 33000	—
PG 1800	4	PG 40000	—
PG 2500	4	PG 55000	—
PG 3000	4	PG 65000	—
PG 3500	4		

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.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.

N.B.: Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.

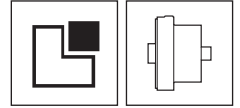


ED		
	P	Codice / Code Code / Bestell Nr.
ED SAE A 2-4 F 16/32 DP 9TH	62	4708.550.700
ED SAE A 2-4 F 16/32 DP 13TH	62	4708.551.700
ED SAE A 2-4 F 12/24 DP 14TH	78	4708.552.700
ED SAE A 2-4 F 12/24 DP 14TH	78	4708.553.700
ED SAE A 2-4 F 1" 6B	62	4708.554.700
ED SAE A 2-4 F 1" 6B	78	4708.555.700
ED SAE A 2-4 F 25x22 DIN 5482	62	4708.556.700



ED		
	P	Codice / Code Code / Bestell Nr.
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 ADAPTOR WITH BRAKE
ENTRÉE DIRECTE AVEC FREIN POUR ADAPTATION MOTEUR
MOTORFLANSCH MIT INTEGRIERTER BREMSE



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.

Les tableaux ci-dessous montrent l'applicabilité des entrées standards EDF, EF aux réducteurs PG, PGA.

Die nachfolgenden Tabellen zeigen die Anbaumöglichkeiten der EF- und EDF- Antriebe an die Getriebe der Serien PG und PGA.

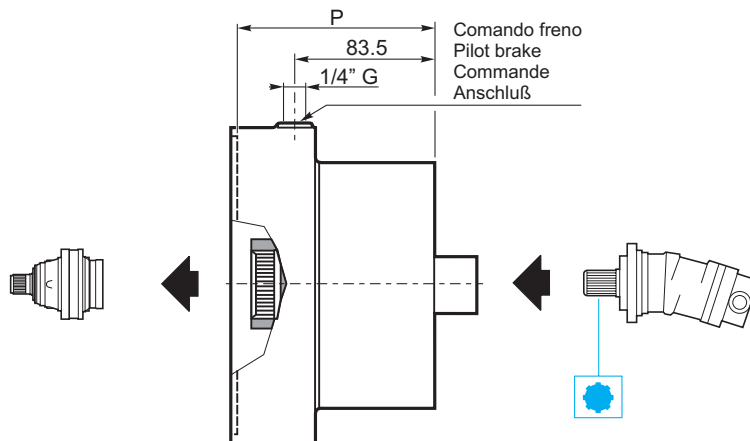
	EDF-EF		EDF-EF		EF		EF
PG 100	1-2-3-4	PG 5000	4	PGA 100	2-3-4	PGA 5000	4
PG 160	1-2-3-4	PG 6500	—	PGA 160	2-3-4	PGA 6500	4
PG 250	2-3-4	PG 9000	—	PGA 250	2-3-4	PGA 9000	4
PG 500	2-3-4	PG 14000	5	PGA 500	2-3-4	PGA14000	5
PG 700	3-4	PG 18000	5	PGA 700	2-3-4	PGA18000	5
PG 1000	3-4	PG 22000	5	PG 1000	2-3-4	PGA22000	5
PG 1600	3-4	PG 33000	—	PGA 1600	2-3-4	PGA33000	5
PG 1800	4	PG 40000	—	PGA 1800	3-4	PGA40000	—
PG 2500	4	PG 55000	—	PGA 2500	3-4	PGA55000	—
PG 3000	4	PG 65000	—	PGA 3000	3-4	PGA65000	—
PG 3500	4			PGA 3500	4		

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.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.

N.B.: Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.

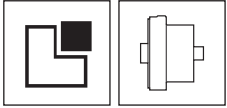


EDF

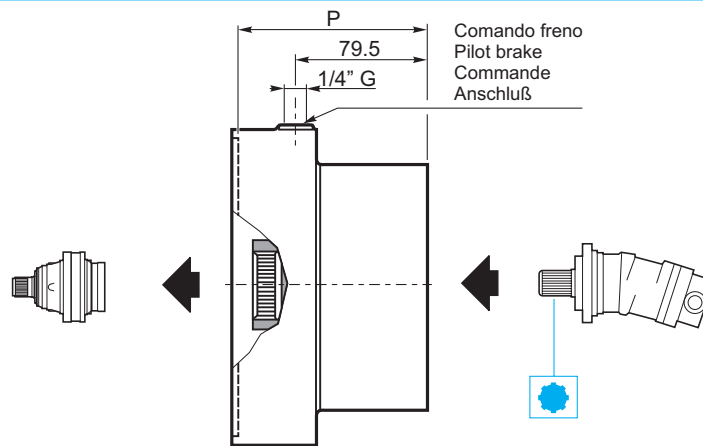
	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EDF 10 per/for GLC-OMSS-HPRC	110	11	118	4708.100.710	320	0.3	0.15	20
EDF 16 per/for GLC-OMSS-HPRC	160	15	118	4708.101.710				
EDF 20 per/for GLC-OMSS-HPRC	220	21	118	4708.102.710				
EDF 25 per/for GLC-OMSS-HPRC	260	15	118	4708.103.710				
EDF 35 per/for GLC-OMSS-HPRC	360	15	118	4708.104.710				
EDF 45 per/for GLC-OMSS-HPRC	470	21	118	4708.105.710				
EDF 55 per/for GLC-OMSS-HPRC	600	25	118	4708.106.710				

EDF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EDF 10 per/for EATON 2000 BEARINGLESS	110	11	118	4708.120.710	320	0.3	0.15	20
EDF 16 per/for EATON 2000 BEARINGLESS	160	15	118	4708.121.710				
EDF 20 per/for EATON 2000 BEARINGLESS	220	21	118	4708.122.710				
EDF 25 per/for EATON 2000 BEARINGLESS	260	15	118	4708.123.710				
EDF 35 per/for EATON 2000 BEARINGLESS	360	15	118	4708.124.710				
EDF 45 per/for EATON 2000 BEARINGLESS	470	21	118	4708.125.710				
EDF 55 per/for EATON 2000 BEARINGLESS	600	25	118	4708.126.710				



ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
DIRECT INPUT MOTOR ADAPTOR WITH BRAKE
ENTRÉE DIRECTE AVEC FREIN POUR ADAPTATION MOTEUR
MOTORFLANSCH MIT INTEGRIERTER BREMSE



EDF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EDF 10 SAE A 2-4 F 16/32 DP 9TH	110	11	114	4708.050.710	320	0.3	0.15	20
EDF 16 SAE A 2-4 F 16/32 DP 9TH	160	15	114	4708.051.710				
EDF 20 SAE A 2-4 F 16/32 DP 9TH	220	21	114	4708.052.710				
EDF 25 SAE A 2-4 F 16/32 DP 9TH	260	15	114	4708.053.710				
EDF 25 SAE A 2-4 F 16/32 DP 9TH	360	15	114	4708.054.710				
EDF 45 SAE A 2-4 F 16/32 DP 9TH	470	21	114	4708.055.710				
EDF 55 SAE A 2-4 F 16/32 DP 9TH	600	25	114	4708.056.710				

EDF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EDF 10 SAE A 2-4 F 16/32 DP 13TH	110	11	114	4708.060.710	320	0.3	0.15	20
EDF 16 SAE A 2-4 F 16/32 DP 13TH	160	15	114	4708.061.710				
EDF 20 SAE A 2-4 F 16/32 DP 13TH	220	21	114	4708.062.710				
EDF 25 SAE A 2-4 F 16/32 DP 13TH	260	15	114	4708.063.710				
EDF 35 SAE A 2-4 F 16/32 DP 13TH	360	15	114	4708.064.710				
EDF 45 SAE A 2-4 F 16/32 DP 13TH	470	21	114	4708.065.710				
EDF 55 SAE A 2-4 F 16/32 DP 13TH	600	25	114	4708.066.710				

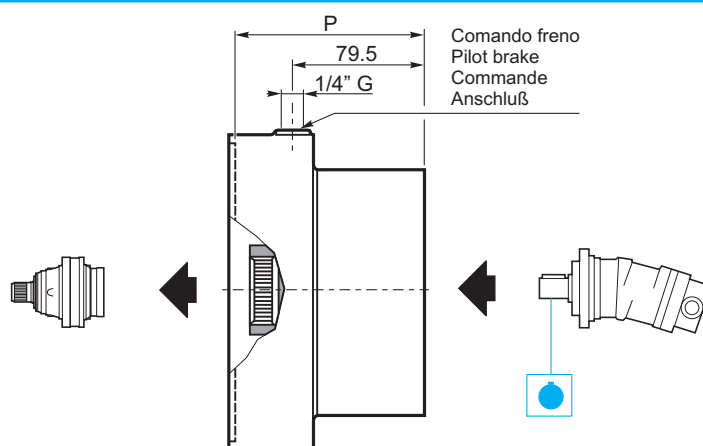
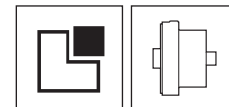
EDF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EDF 10 SAE A 2-4 F 12/24 DP 14TH	110	11	114	4708.070.710	320	0.3	0.15	20
EDF 16 SAE A 2-4 F 12/24 DP 14TH	160	15	114	4708.071.710				
EDF 20 SAE A 2-4 F 12/24 DP 14TH	220	21	114	4708.072.710				
EDF 25 SAE A 2-4 F 12/24 DP 14TH	260	15	114	4708.073.710				
EDF 35 SAE A 2-4 F 12/24 DP 14TH	360	15	114	4708.074.710				
EDF 45 SAE A 2-4 F 12/24 DP 14TH	470	21	114	4708.075.710				
EDF 55 SAE A 2-4 F 12/24 DP 14TH	600	25	114	4708.076.710				

EDF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EDF 10 SAE A 2-4 F 1" 6B	110	11	114	4708.080.710	320	0.3	0.15	20
EDF 16 SAE A 2-4 F 1" 6B	160	15	114	4708.081.710				
EDF 20 SAE A 2-4 F 1" 6B	220	21	114	4708.082.710				
EDF 25 SAE A 2-4 F 1" 6B	260	15	114	4708.083.710				
EDF 35 SAE A 2-4 F 1" 6B	360	15	114	4708.084.710				
EDF 45 SAE A 2-4 F 1" 6B	470	21	114	4708.085.710				
EDF 55 SAE A 2-4 F 1" 6B	600	25	114	4708.086.710				

ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
DIRECT INPUT MOTOR ADAPTOR WITH BRAKE
ENTRÉE DIRECTE AVEC FREIN POUR ADAPTATION MOTEUR
MOTORFLANSCH MIT INTEGRIERTER BREMSE



EDF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EDF 10 SAE A 2-4 F D. 25 CH 8	110	11	114	4708.010.710	320	0.3	0.15	20
EDF 16 SAE A 2-4 F D. 25 CH 8	160	15	114	4708.011.710				
EDF 20 SAE A 2-4 F D. 25 CH 8	220	21	114	4708.012.710				
EDF 25 SAE A 2-4 F D. 25 CH 8	260	15	114	4708.013.710				
EDF 35 SAE A 2-4 F D. 25 CH 8	360	15	114	4708.014.710				
EDF 45 SAE A 2-4 F D. 25 CH 8	470	21	114	4708.015.710				
EDF 55 SAE A 2-4 F D. 25 CH 8	600	25	114	4708.016.710				

EDF

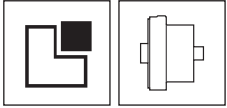
	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EDF 10 SAE A 2-4 F D. 25.4 CH 6.35	110	11	114	4708.020.710	320	0.3	0.15	20
EDF 16 SAE A 2-4 F D. 25.4 CH 6.35	160	15	114	4708.021.710				
EDF 20 SAE A 2-4 F D. 25.4 CH 6.35	220	21	114	4708.022.710				
EDF 25 SAE A 2-4 F D. 25.4 CH 6.35	260	15	114	4708.023.710				
EDF 35 SAE A 2-4 F D. 25.4 CH 6.35	360	15	114	4708.024.710				
EDF 45 SAE A 2-4 F D. 25.4 CH 6.35	470	21	114	4708.025.710				
EDF 55 SAE A 2-4 F D. 25.4 CH 6.35	600	25	114	4708.026.710				

EDF

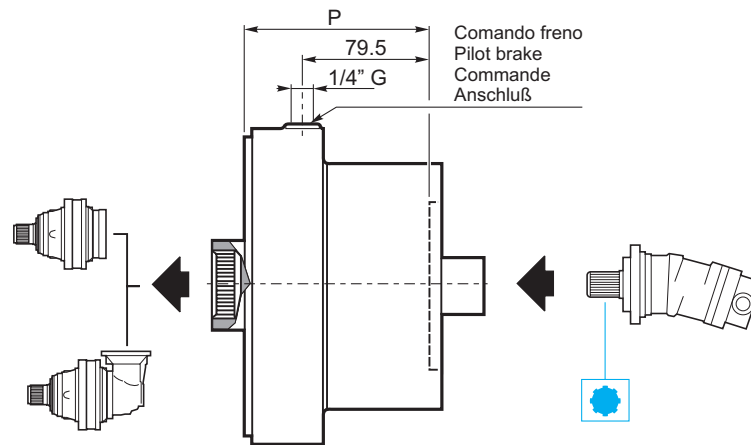
	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EDF 10 SAE A 2-4 F D. 31.75 CH 7.96	110	11	114	4708.030.710	320	0.3	0.15	20
EDF 16 SAE A 2-4 F D. 31.75 CH 7.96	160	15	114	4708.031.710				
EDF 20 SAE A 2-4 F D. 31.75 CH 7.96	220	21	114	4708.032.710				
EDF 25 SAE A 2-4 F D. 31.75 CH 7.96	260	28	114	4708.033.710				
EDF 35 SAE A 2-4 F D. 31.75 CH 7.96	360	15	114	4708.034.710				
EDF 45 SAE A 2-4 F D. 31.75 CH 7.96	470	21	114	4708.035.710				
EDF 55 SAE A 2-4 F D. 31.75 CH 7.96	600	25	114	4708.036.710				

EDF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EDF 10 SAE A 2-4 F D. 32 CH 10	110	11	114	4708.040.710	320	0.3	0.15	20
EDF 16 SAE A 2-4 F D. 32 CH 10	160	15	114	4708.041.710				
EDF 20 SAE A 2-4 F D. 32 CH 10	220	21	114	4708.042.710				
EDF 25 SAE A 2-4 F D. 32 CH 10	260	15	114	4708.043.710				
EDF 35 SAE A 2-4 F D. 32 CH 10	360	15	114	4708.044.710				
EDF 45 SAE A 2-4 F D. 32 CH 10	470	21	114	4708.045.710				
EDF 55 SAE A 2-4 F D. 32 CH 10	600	25	114	4708.046.710				



ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
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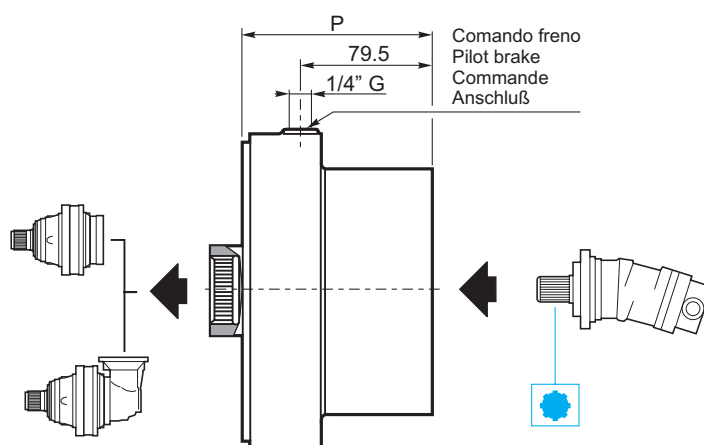
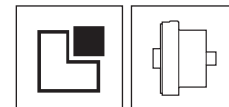
EF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	oil [lt]		Kg
						V1	B5	
EF 10 per/for GLC-OMSS-HPRC	110	11	118	4702.015.060	320	0.3	0.15	20
EF 16 per/for GLC-OMSS-HPRC	160	15	118	4702.015.061				
EF 20 per/for GLC-OMSS-HPRC	220	21	118	4702.015.062				
EF 25 per/for GLC-OMSS-HPRC	260	15	118	4702.015.063				
EF 35 per/for GLC-OMSS-HPRC	360	15	118	4702.015.064				
EF 45 per/for GLC-OMSS-HPRC	470	21	118	4702.015.065				
EF 55 per/for GLC-OMSS-HPRC	600	25	118	4702.015.066				

EF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	oil [lt]		Kg
						V1	B5	
EF 10 per/for EATON 2000 BEARINGLESS	110	11	118	4702.015.080	320	0.3	0.15	20
EF 16 per/for EATON 2000 BEARINGLESS	160	15	118	4702.015.081				
EF 20 per/for EATON 2000 BEARINGLESS	220	21	118	4702.015.082				
EF 25 per/for EATON 2000 BEARINGLESS	260	15	118	4702.015.083				
EF 35 per/for EATON 2000 BEARINGLESS	360	15	118	4702.015.084				
EF 45 per/for EATON 2000 BEARINGLESS	470	21	118	4702.015.085				
EF 55 per/for EATON 2000 BEARINGLESS	600	25	118	4702.015.086				

ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
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MOTORFLANSCH MIT INTEGRIERTER BREMSE



EF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EF 10 SAE A 2-4 F 16/32 DP 9TH	110	11	114	4702.015.001	320	0.3	0.15	20
EF 16 SAE A 2-4 F 16/32 DP 9TH	160	15	114	4702.015.002				
EF 20 SAE A 2-4 F 16/32 DP 9TH	220	21	114	4702.015.003				
EF 25 SAE A 2-4 F 16/32 DP 9TH	260	15	114	4702.015.004				
EF 35 SAE A 2-4 F 16/32 DP 9TH	360	15	114	4702.015.005				
EF 45 SAE A 2-4 F 16/32 DP 9TH	470	21	114	4702.015.006				
EF 55 SAE A 2-4 F 16/32 DP 9TH	600	25	114	4702.015.007				

EF

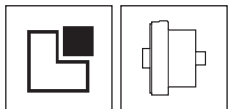
	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EF 10 SAE A 2-4 F 16/32 DP 13TH	110	11	114	4702.015.010	320	0.3	0.15	20
EF 16 SAE A 2-4 F 16/32 DP 13TH	160	15	114	4702.015.011				
EF 20 SAE A 2-4 F 16/32 DP 13TH	220	21	114	4702.015.012				
EF 25 SAE A 2-4 F 16/32 DP 13TH	260	15	114	4702.015.013				
EF 35 SAE A 2-4 F 16/32 DP 13TH	360	15	114	4702.015.014				
EF 45 SAE A 2-4 F 16/32 DP 13TH	470	21	114	4702.015.015				
EF 55 SAE A 2-4 F 16/32 DP 13TH	600	25	114	4702.015.016				

EF

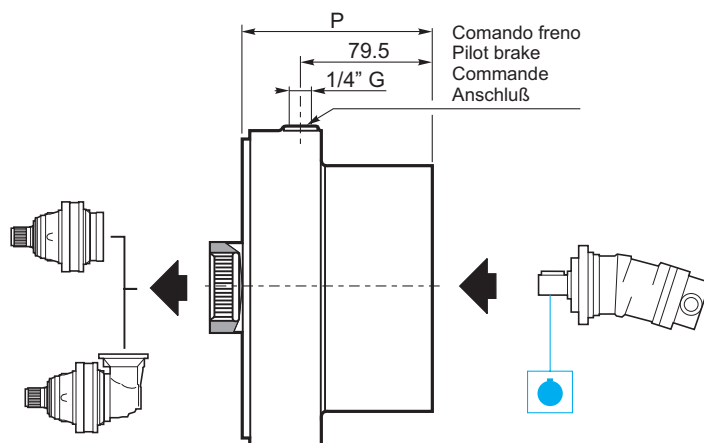
	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EF 10 SAE A 2-4 F 12/24 DP 14TH	110	11	114	4702.015.030	320	0.3	0.15	20
EF 16 SAE A 2-4 F 12/24 DP 14TH	160	15	114	4702.015.031				
EF 20 SAE A 2-4 F 12/24 DP 14TH	220	21	114	4702.015.032				
EF 25 SAE A 2-4 F 12/24 DP 14TH	260	15	114	4702.015.033				
EF 35 SAE A 2-4 F 12/24 DP 14TH	360	15	114	4702.015.034				
EF 45 SAE A 2-4 F 12/24 DP 14TH	470	21	114	4702.015.035				
EF 55 SAE A 2-4 F 12/24 DP 14TH	600	25	114	4702.015.036				

EF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EF 10 SAE A 2-4 F 1" 6B	110	11	114	4702.015.040	320	0.3	0.15	20
EF 16 SAE A 2-4 F 1" 6B	160	15	114	4702.015.041				
EF 20 SAE A 2-4 F 1" 6B	220	21	114	4702.015.042				
EF 25 SAE A 2-4 F 1" 6B	260	15	114	4702.015.043				
EF 35 SAE A 2-4 F 1" 6B	360	15	114	4702.015.044				
EF 45 SAE A 2-4 F 1" 6B	470	21	114	4702.015.045				
EF 55 SAE A 2-4 F 1" 6B	600	25	114	4702.015.046				



ENTRATE DIRETTE CON FRENO E ATTACCO MOTORE
DIRECT INPUT MOTOR ADAPTOR WITH BRAKE
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MOTORFLANSCH MIT INTEGRIERTER BREMSE



EF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EF 10 SAE A 2-4 F D. 25 CH 8	110	11	114	4702.014.010	320	0.3	0.15	20
EF 16 SAE A 2-4 F D. 25 CH 8	160	15	114	4702.014.011				
EF 20 SAE A 2-4 F D. 25 CH 8	220	21	114	4702.014.012				
EF 25 SAE A 2-4 F D. 25 CH 8	260	15	114	4702.014.013				
EF 35 SAE A 2-4 F D. 25 CH 8	360	15	114	4702.014.014				
EF 45 SAE A 2-4 F D. 25 CH 8	470	21	114	4702.014.015				
EF 55 SAE A 2-4 F D. 25 CH 8	600	25	114	4702.014.016				

EF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EF 10 SAE A 2-4 F D. 25.4 CH 6.35	110	11	114	4702.014.020	320	0.3	0.15	20
EF 16 SAE A 2-4 F D. 25.4 CH 6.35	160	15	114	4702.014.021				
EF 20 SAE A 2-4 F D. 25.4 CH 6.35	220	21	114	4702.014.022				
EF 25 SAE A 2-4 F D. 25.4 CH 6.35	260	15	114	4702.014.023				
EF 35 SAE A 2-4 F D. 25.4 CH 6.35	360	15	114	4702.014.024				
EF 45 SAE A 2-4 F D. 25.4 CH 6.35	470	21	114	4702.014.025				
EF 55 SAE A 2-4 F D. 25.4 CH 6.35	600	25	114	4702.014.026				

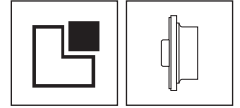
EF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EF 10 SAE A 2-4 F D. 31.75 CH 7.96	110	11	114	4702.014.030	320	0.3	0.15	20
EF 16 SAE A 2-4 F D. 31.75 CH 7.96	160	15	114	4702.014.031				
EF 20 SAE A 2-4 F D. 31.75 CH 7.96	220	21	114	4702.014.032				
EF 25 SAE A 2-4 F D. 31.75 CH 7.96	260	28	114	4702.014.033				
EF 35 SAE A 2-4 F D. 31.75 CH 7.96	360	15	114	4702.014.034				
EF 45 SAE A 2-4 F D. 31.75 CH 7.96	470	17	114	4702.014.035				
EF 55 SAE A 2-4 F D. 31.75 CH 7.96	600	21	114	4702.014.036				

EF

	Cfs _{min} [Nm]	Pa _{min} [bar]	P	Codice / Code Code / Bestell Nr.	P _{max} [bar]	OIL [lt]		Kg
						V1	B5	
EF 10 SAE A 2-4 F D. 32 CH 10	110	11	114	4702.014.040	320	0.3	0.15	20
EF 16 SAE A 2-4 F D. 32 CH 10	160	15	114	4702.014.041				
EF 20 SAE A 2-4 F D. 32 CH 10	220	21	114	4702.014.042				
EF 25 SAE A 2-4 F D. 32 CH 10	260	15	114	4702.014.043				
EF 35 SAE A 2-4 F D. 32 CH 10	360	15	114	4702.014.044				
EF 45 SAE A 2-4 F D. 32 CH 10	470	21	114	4702.014.045				
EF 55 SAE A 2-4 F D. 32 CH 10	600	25	114	4702.014.046				

**PREDISPOSIZIONI PER MOTORI IDRAULICI
HYDRAULIC MOTOR COUPLINGS
ADAPTATIONS POUR MOTEURS HYDRAULIQUES
ANBAUVORRICHTUNG FUER HYDRAULIKMOTORE**



		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 14000		4-5	3	4	2	—	3
PG 18000		4-5	3	4	2	—	3
PG 22000		4-5	3	4	—	2	3
PG 33000		5	4	5	3	—	—
PG 40000		5	4	5	3	—	—
PG 55000		5	4	5	—	3	4
PG 65000		5	4	5	—	3	4

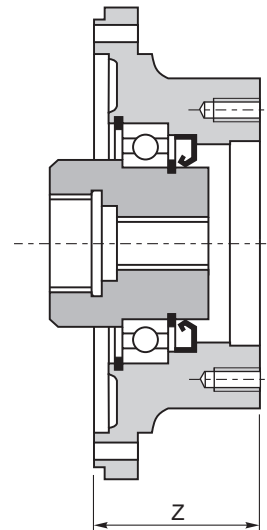
		A	B		C	D
		Z	Z	Z+16		
PGA 100		2-3-4	—	—	—	—
PGA 160		2-3-4	—	—	—	—
PGA 250		2-3-4	—	2-3-4	—	—
PGA 500		2-3-4	—	2-3-4	—	—
PGA 700		2-3-4	—	2-3-4	—	—
PG 1000		2-3-4	—	2-3-4	—	—
PGA 1600		2-3-4	—	2-3-4	—	—
PGA 1800		3-4	2	3-4	—	—
PGA 2500		3-4	2	3-4	—	—
PGA 3000		3-4	—	3-4	—	—
PGA 3500		4	2-3	4	—	—
PGA 5000		4	—	2-3-4	—	—
PGA 6500		4	—	3-4	—	—
PGA 9000		4	—	3-4	—	—
PGA14000		5	4	5	—	—
PGA18000		5	4	5	—	—
PGA22000		5	4	5	—	—
PGA33000		5	4	5	—	—
PGA40000		—	4-5	—	—	—
PGA55000		—	4-5	—	—	—
PGA65000		—	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.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.

Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.



AXIAL PUMP

Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	A
M2-AMVCS 34-40-50-55/32 DP TH13	52	4702.013.001	
M2-AMVCS 34-40-50-55/32 DP TH15	52	4702.013.003	
AMF 24-34	81	4702.013.004	
AMF 55	81	4702.013.005	

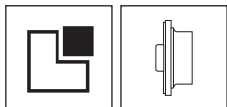
GEOLINK (AXIAL PUMP)

Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	A
GHL/GFS/GFS Ø 25 CH8	61.5	4702.012.012	
GHL/GFS/GFS Ø 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 Ø 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	

DANFOSS

Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	A
OMM Ø CH5	70.5	4702.012.035	
OMP - OMR Ø 25	61.5	4702.012.012	
OMP - OMR Ø 25.4	61.5	4702.012.014	
OMP - OMR SAE 1"6B	61.5	4702.013.013	
OMS Ø 32	77.5	4702.012.019	
OMS 12/24 DP TH14	77.5	4702.013.039	
OMSS	38	4702.013.006	
OMT Ø 40	134	4702.012.031	
OMTS	78	4702.013.032	

Le dimensioni Z riportate vanno verificate con le tabelle di questa pagina.
Z dimensions have to be verified in the tables of this page.
Les dimensions de Z sont à vérifier dans le tableaux de cette page.
Das Mass Z wird in den entsprechenden Tabellen auf dieser Seite festgestellt.



**PREDISPOSIZIONI PER MOTORI IDRAULICI
HYDRAULIC MOTOR COUPLINGS
ADAPTATIONS POUR MOTEURS HYDRAULIQUES
ANBAUVORRICHTUNG FUER HYDRAULIKMOTORE**

DINAMIC OIL

Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
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	C
PH800/PH1250/MH1000 46x50 UNI 8953	148	4702.073.001	
PH800/PH1250/MH1000 46x50 UNI 8953	148	4702.083.001	D

CHAR-LYNN (EATON)

Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
A-H-S Ø 25	61.5	4702.012.012	A
A-H-S Ø 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	
Ø 32 CH10	77	4702.012.019	
Ø 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	
Ø 40 CH12	78	4702.012.027	
Ø 31.75 CH7.96	78	4702.012.020	
12/24 DP TH17	78	4702.013.016	
SERIE 6000			
Ø 40 CH12	78	4702.012.027	
12/24 DP TH14	77.5	4702.013.038	

EATON

Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
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 Ø 22.22 CH6.25	52	4702.012.001	

HAGGLUNDS-ABEX DENISON

Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
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 Ø 22.22 CH4/75	67	4702.012.003	

HYDROMATIK-REXROTH

Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
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	
A2FM (107/125) W45x2 DIN 5480 TH21	112	4702.053.006	B
A2FM 160 W45x2 DIN 5480 TH21	112	4702.053.009	
A2FM (160/180) W50x2 DIN 5480 TH24	112	4702.053.008	A
A6VM55 W35x2 DIN 5480 TH16	78	4702.013.021	
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	

INTERMOT

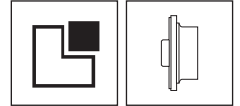
Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
NHM 100/150 26x32 UNI 8953	72.5	4702.013.052	A
NHM 200/250/300 32x38 UNI 8953	130	4702.053.016	B
NHM 400/450/500/600 36x42 UNI 8953	143	4702.053.017	
NHM 700/800/900/1000/1100 46x50 UNI 8953	118	4702.053.020	C
NHM 700/800/900/1000/1100 46x50 UNI 8953	148	4702.073.002	
NHM 700/800/900/1000/1100 46x50 UNI 8953	148	4702.083.002	D
NHM 1400/1600/1800/2000 62x72 UNI 8953	179	4702.053.021	B
NHM 1400/1600/1800/2000 62x72 UNI 8953	148	4702.073.003	C
NHM 1400/1600/1800/2000 62x72 UNI 8953	148	4702.083.003	D

LINDE

Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
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	4702.013.005	
BMF75 35x31 DIN 5482 TH18	98	4702.013.025	
BMF 105 40x36 DIN 5482 TH20	90.5	4702.013.026	

Le dimensioni Z riportate vanno verificate con le tabelle a pag. 213.
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**PREDISPOSIZIONI PER MOTORI IDRAULICI
HYDRAULIC MOTOR COUPLINGS
ADAPTATIONS POUR MOTEURS HYDRAULIQUES
ANBAUVORRICHTUNG FUER HYDRAULIKMOTORE**



SAUER-SUNSTRAND			
Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
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)			
MMF025 16/32 DP TH13	52	4702.013.001	A
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 Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
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 Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
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 Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
HMC 030	142	4702.052.001	B

SAMHYDRAULIC			
Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
AG/AR Ø 25 CH8	61.5	4702.012.012	A
AG/AR Ø 25.4 CH6.35	61.5	4702.012.014	
AG/AR Ø 25x22 DIN 5482 TH14	61.5	4702.013.011	
AG/AR SAE 1"6B	61.5	4702.013.013	
AGS/ARS Ø 25 CH8	61.5	4702.012.026	
AGS/ARS Ø 32 CH10	77.5	4702.012.019	
AGS/ARS SAE 1"6B	61.5	4702.013.012	
HPR Ø 32 CH10	77.5	4702.012.019	
HPRC	38	4702.013.006	

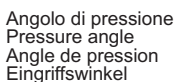
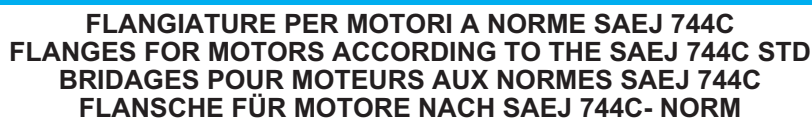
TRW TORQMOTOR			
Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
MF/MAC/MAF/MAB Ø 25 CH8	61.5	4702.012.012	A
MF/MAC/MAF/MAB Ø 25.4 CH6.35	61.5	4702.013.014	
MF/MAC/MAF/MAB SAE 1"6B	61.5	4702.013.013	
MAB/MAE Ø 31.75 CH7.96	77.5	4702.012.016	
ME 12/24 DP TH14	77.5	4702.013.047	

VICKERS			
Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
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 Ø 31.75	78	4702.012.020	

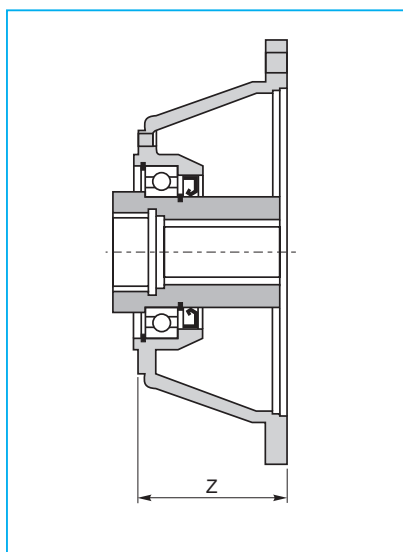
VOLVO			
Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
F11/10 (M-C-K) Ø 20 CH6	81	4702.012.006	A
F11/10 (C-T) W20x1.25 DIN 5480 TH14	49	4702.013.046	
F11/19 (M-C-D) W25x1.25 DIN 5480 TH18	77	4702.013.068	
F11/39/58 (M-C-D) W30x2 DIN 5480 TH14	81.5	4702.013.030	
F11/78 (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	B
F11/110 (M-C-D) W40x2 DIN 5480 TH18	112	4702.053.018	
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	B
V12-110 (U-S) S8/16 DP TH13	112	4702.053.005	
V12/110 (M-I-D) W45x2 DIN 5480 TH21	112	4702.053.006	

WHITE			
Motore tipo / Motor type Moteur type / Motortyp	Z	Codice / Code Code / Bestell Nr.	
HS-RS Ø 25	61.5	4702.012.012	A
HS-RS Ø 1"6B	61.5	4702.013.013	
RE Ø 32	77.5	4702.012.019	
RE Ø 31.75	77.5	4702.012.016	

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Das Mass Z wird in den entsprechenden Tabellen auf der Seite 213



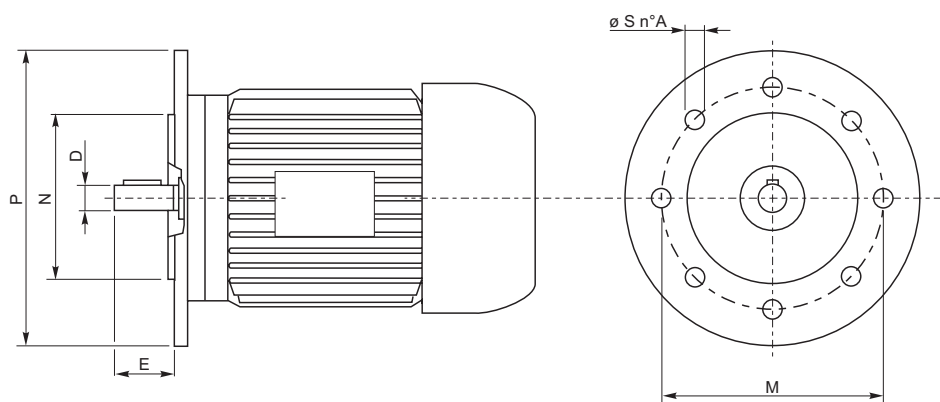
**PREDISPOSIZIONI PER MOTORI ELETTRICI
ELECTRIC MOTOR COUPLINGS
ADAPTATIONS POUR MOTEURS ELECTRIQUES
ANBAUVORRICHTUNG FÜR ELEKTROMOTORE**



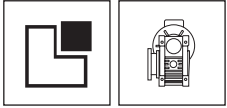
UNEL/IEC B5			
	Z	Codice / Code Code / Bestell. Nr.	
H63	36	4702.011.005	A
H71	36	4702.011.006	
H80	56	4702.011.001	
H90	56	4702.011.002	
H100/112	66	4702.011.003	
H132	100	4702.011.004	B
H160	118	4702.051.001	
H180	118	4702.051.002	
H200	148	4702.051.015	
H225	139	4702.051.016	
H160	150	4702.071.001	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	D
H160	150	4702.081.001	
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 Code / Bestell. Nr.	
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 Numero poles - Anzahl Pole									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



PREDISPOSIZIONI PER RIDUTTORI A VITE SENZA FINE WORM GEARBOX ADAPTORS ADAPTATION POUR REDUCTEURS A VIS SANS FIN ANSCHLUSS FÜR SCHNECKENGETRIEBE

SOM 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.

SOM 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.

Les réducteurs combinés peuvent être fournis de la manière suivante:

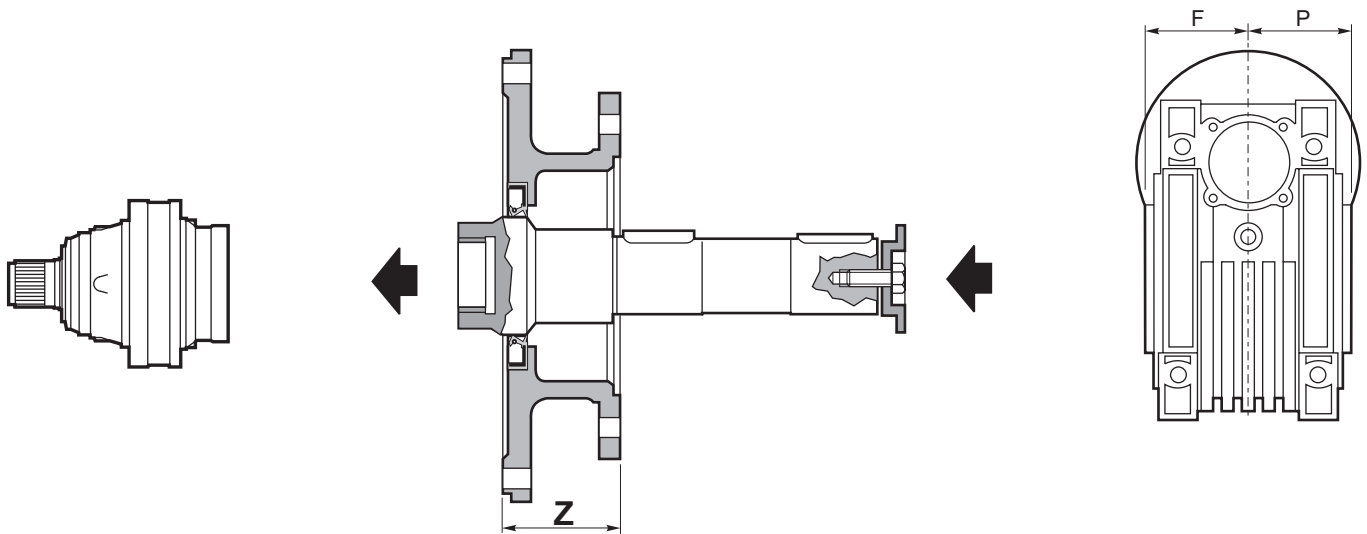
- 1) Equipés d'un réducteur à vis sans fin.
- 2) Equipés pour recevoir un réducteur à vis sans fin.

En outre, nous vous rappelons que les réducteurs planétaires ont une lubrification séparée de celle du réducteur à vis sans fin.

SOM kann kombinierte Getriebe wie folgt liefern:

- 1) komplett mit Schneckengetriebe.
- 2) Vorrichtung für Schneckengetriebe.

Weiterhin weisen wir darauf hin, dass die Schmierung der Planetengetriebe getrennt von der des Schneckengetriebes erfolgt.



PREDISPOSIZIONI PER RIDUTTORI VITE SENZA FINE WORM GEARBOX ADAPTORS ADAPTATIONS POUR REDUCTEURS A VIS SANS FIN ANSCHLUSS FÜR SCHNECKENGETRIEBE

Tipo - Type - Type - Typ	Z	Codice / Code Code / Bestell Nr.	
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	

RIDUTTORI VITE SENZA FINE WORM REDUCTION UNITS REDUCTEURS A VIS SANS FIN SCHNECKENGETRIEBE

Tipo - Type - Type - Typ	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

		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

		A	B	
		Z	Z	Z+13.5
PG 5000		3-4	2	3
PG 6500		4	3	4
PG 9000		4	3	4
PG 14000		4-5	3	4
PG 18000		4-5	3	4
PG 22000		4-5	3	4
PG 33000		5	4	5
PG 40000		5	4	5
PG 55000		5	4	5
PG 65000		5	4	5

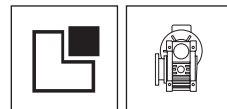
N.B.: i numeri 1-2-3-4-5 indicano il numero di stadi dei riduttori.

N.B.: Numbers 1-2-3-4-5 refer to the number of stages of the planetary gear unit.

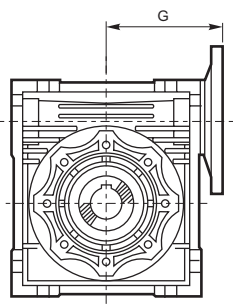
N.B.: Les numéros 1-2-3-4-5 indiquent le nombre d'étages des réducteurs.

N.B.: Die Ziffern 1-2-3-4-5 geben die Anzahl der Getriebestufen an.

**PREDISPOSIZIONI PER RIDUTTORI A VITE SENZA FINE
WORM GEARBOX ADAPTORS
ADAPTATION POUR REDUCTEURS A VIS SANS FIN
ANSCHLUSS FÜR SCHNECKENGETRIEBE**



NMRV



RIDUTTORI VITE SENZA FINE WORM REDUCTION UNITS REDUCTEURS A VIS SANS FIN SCHNECKENGETRIEBE	
Tipo - Type - Type - Typ	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 100 PAM 80 90 100 112 132	160
NMRV 130 PAM 90 100 112 132	180

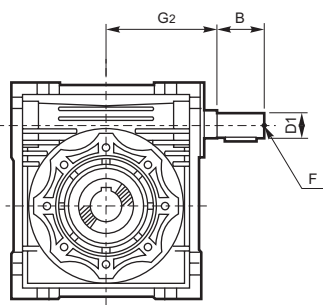
Riduttore vite senza fine con predisposizione per motore elettrico (PAM/IEC).

Worm gear reduction unit with input adaptor for electric motor (PAM/IEC).

Réducteur à vis sans fin avec prédisposition pour moteur électrique (PAM/IEC).

Schneckengetriebe vorgesehen für Elektromotoranbau (PAM/IEC).

NRV



SPORGENZA ALBERO DI ENTRATA INPUT SHAFT LENGTH ARBRE D'ENTREE MALE ANTRIEBSWELLENÄNGE				
Tipo - Type - Type - Typ	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 100	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.

Réducteur à vis sans fin avec arbre mâle en entrée.

Schneckengetriebe mit Zapfwelle am Eingang.

Per la selezione del riduttore vite senza fine contattare il Servizio Tecnico Commerciale SOM.

To select the worm reduction unit please contact the SOM Technical-Commercial Service Department.

Pour choisir le réducteur à vis sans fin, s'adresser au Service Technique-Commercial SOM.

Für die Auswahl des Schneckengetriebes kontaktieren sie bitte den Kundenservice von SOM.

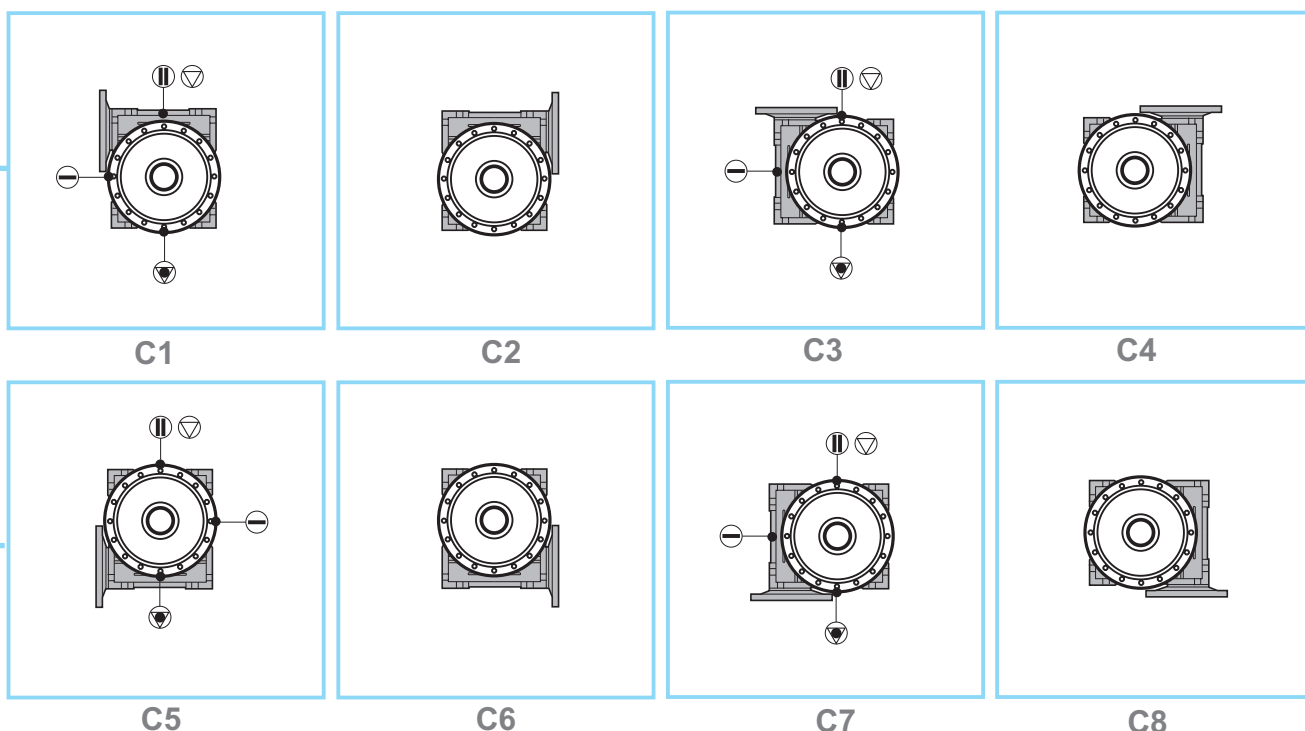
Posizioni di montaggio

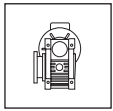
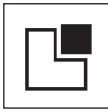
Mounting positions

Positions de montage

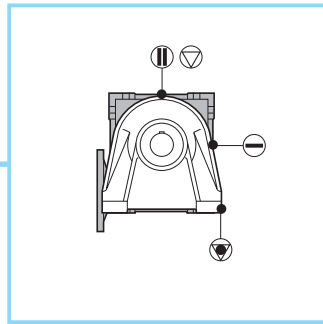
Einbauposition

**F
M
P
FS**

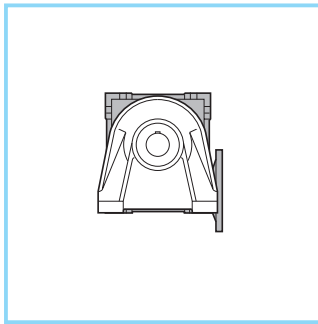




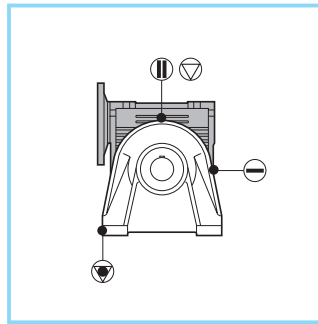
PREDISPOSIZIONI PER RIDUTTORI A VITE SENZA FINE
WORM GEARBOX ADAPTORS
ADAPTATION POUR REDUCTEURS A VIS SANS FIN
ANSCHLUSS FÜR SCHNECKENGETRIEBE



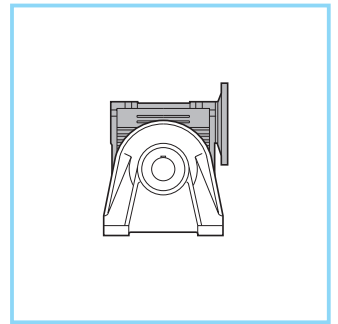
C9



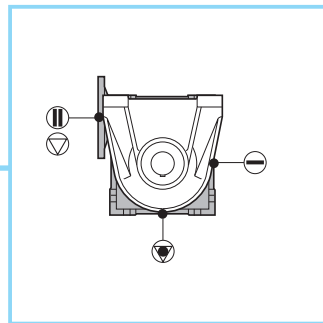
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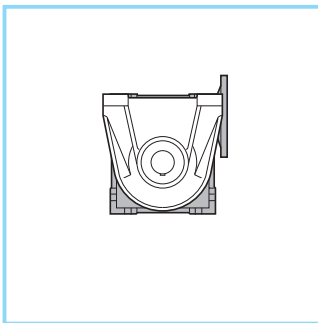
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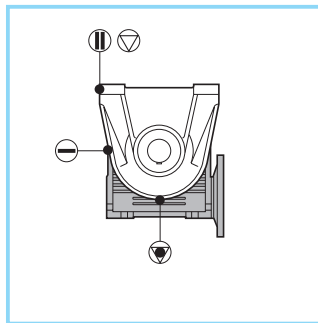
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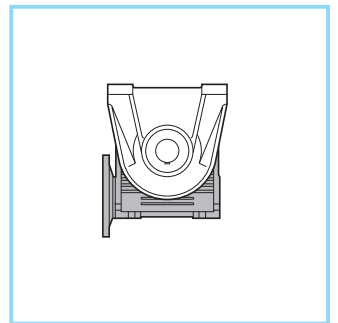
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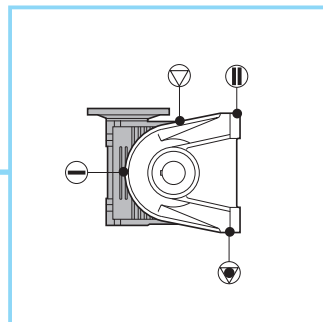
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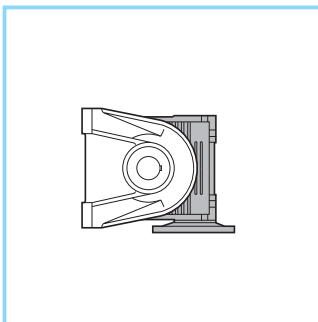
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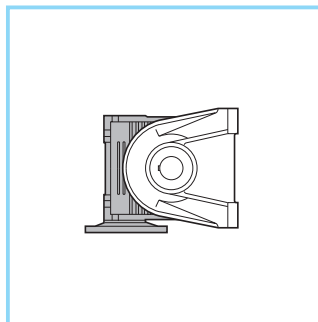
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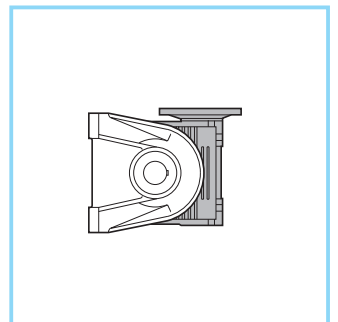
C17



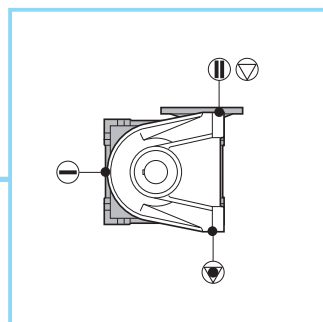
C18



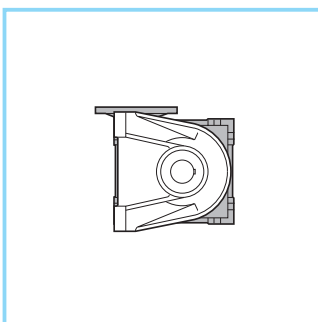
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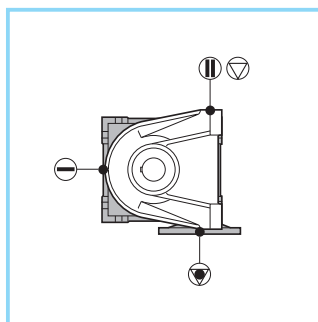
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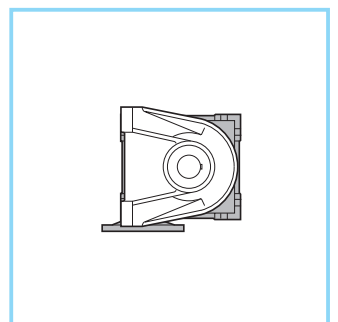
C21



C22



C23



C24

Tappi olio
Oil plugs
Bouchons huile
Ölstopfen

 **Tappo sfiato**
Vent plug
Bouchon a event
Entlüftungsstopfen

 **Tappo carico**
Filling plug
Bouchon remplissage
Einfüllstopfen

 **Tappo livello**
Level plug
Bouchon jauge
Ölstandsstopfen

 **Tappo scarico**
Drain plug
Bouchon vidange
Ablastsopfen

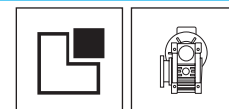
N.B.
L'orientamento della foratura della flangia di fissaggio è come illustrato nelle schede dei dati dimensionali dei riduttori (pag. 44-196).

N.B.
The mounting flange orientation is shown in each planetary gears technical sheets (page 44-196).

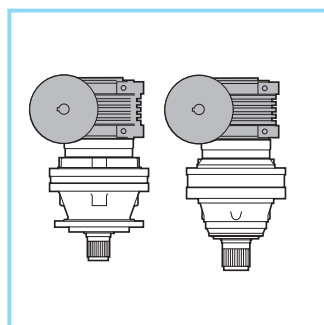
N.B.
L'orientation de la flasque de montage est indiquée dans chaque fiche technique réducteur (page 44-196).

N.B.
Die Ausführung der Befestigungsvorrichtung (Flansch, Bohrung) ist in den Datenblättern der Getriebe auf den Seiten 44-196 ersichtlich.

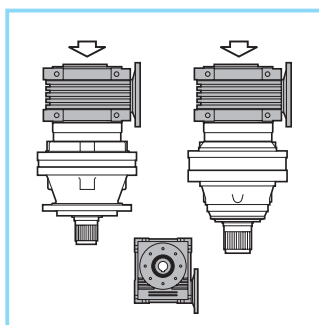
PREDISPOSIZIONI PER RIDUTTORI A VITE SENZA FINE
WORM GEARBOX ADAPTORS
ADAPTATION POUR REDUCTEURS A VIS SANS FIN
ANSCHLUSS FÜR SCHNECKENGETRIEBE



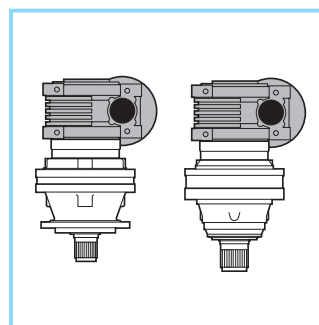
M-P



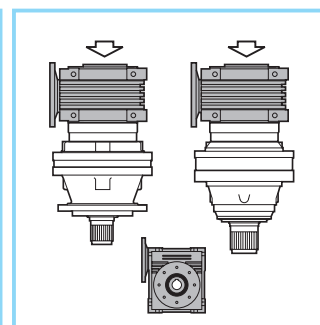
C25



C26

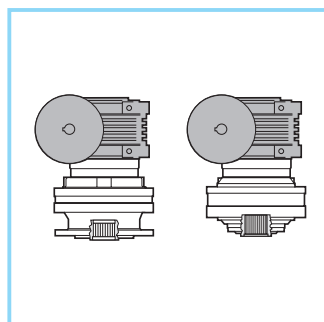


C27

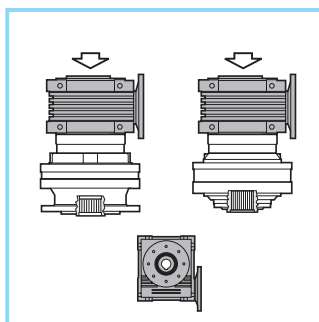


C28

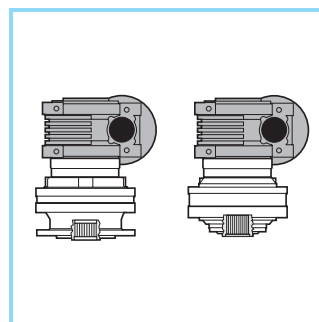
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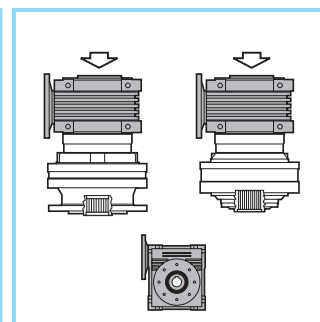
C25



C26

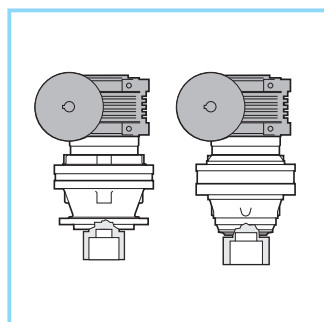


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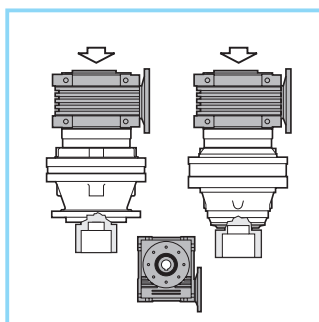


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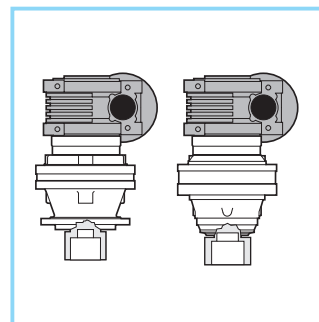
FS



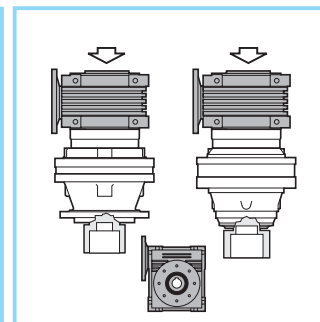
C25



C26

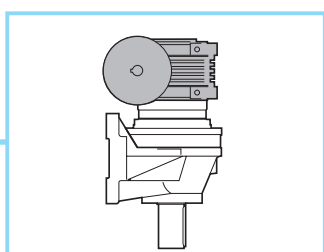


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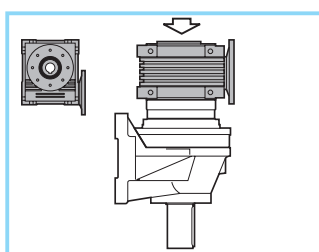


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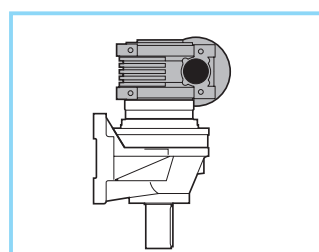
CPC



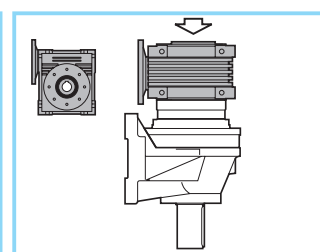
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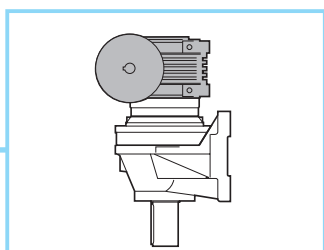
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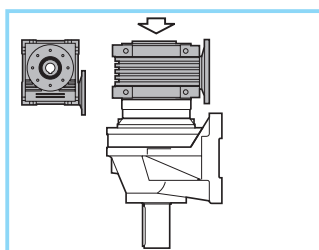
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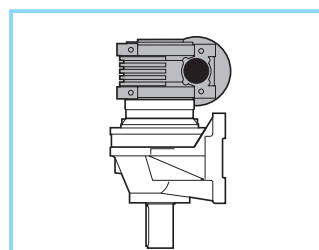
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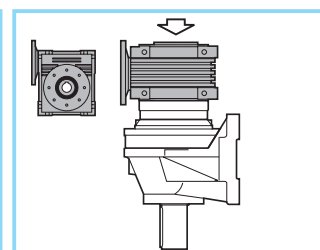
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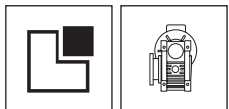
C46



C47

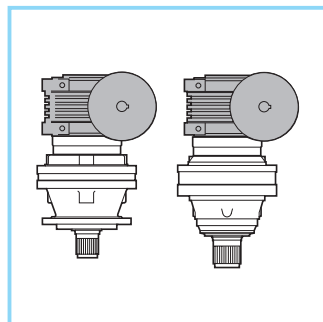


C48

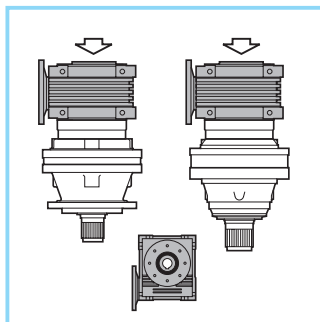


PREDISPOSIZIONI PER RIDUTTORI A VITE SENZA FINE
WORM GEARBOX ADAPTORS
ADAPTATION POUR REDUCTEURS A VIS SANS FIN
ANSCHLUSS FÜR SCHNECKENGETRIEBE

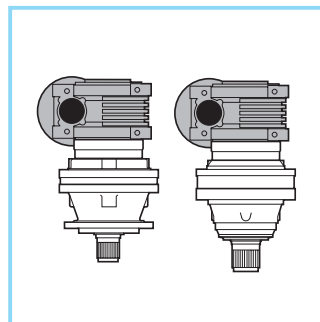
M-P



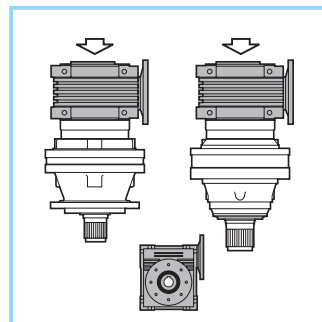
C29



C30

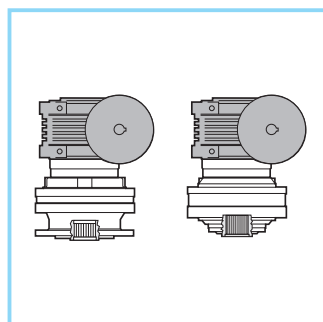


C31

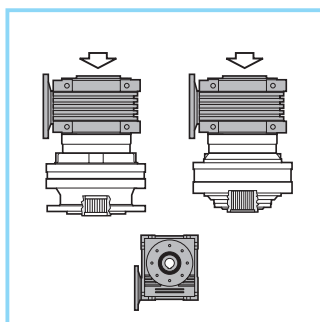


C32

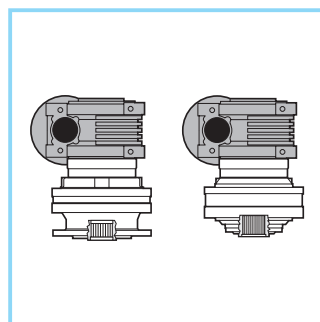
F



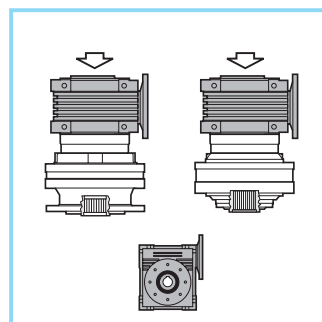
C29



C30

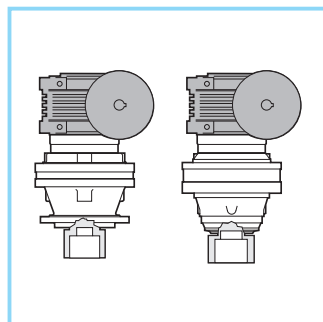


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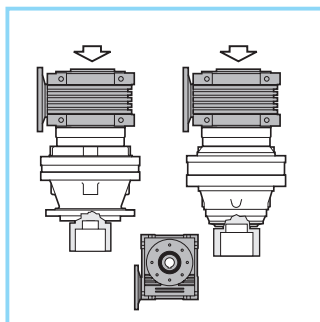


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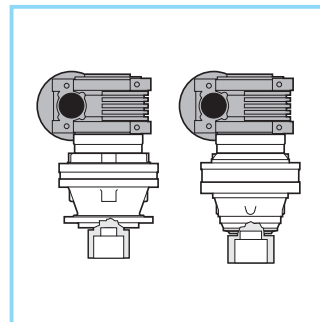
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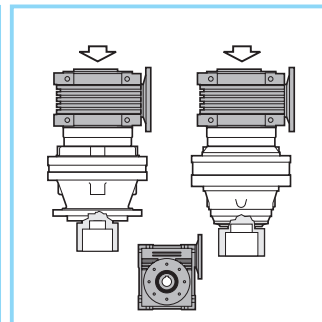
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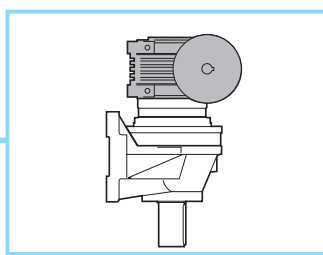


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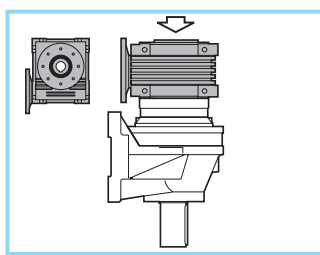


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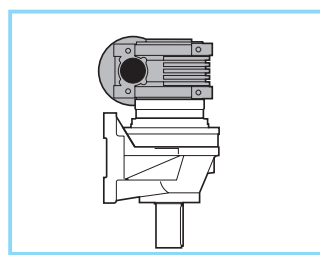
CPC



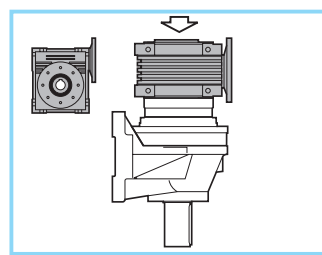
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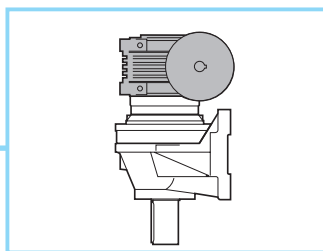
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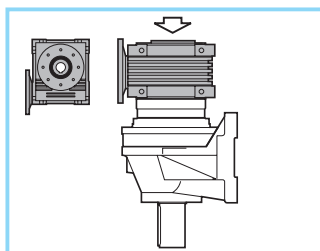
C51



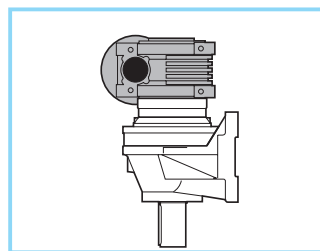
C52



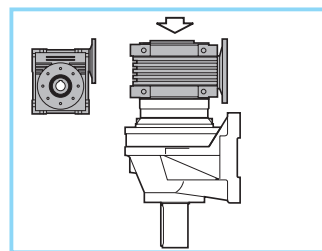
C53



C54

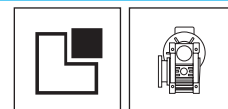


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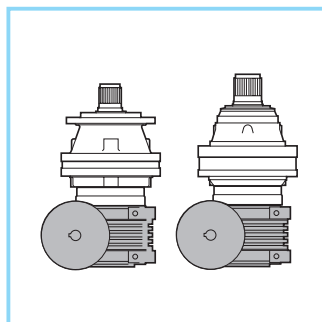


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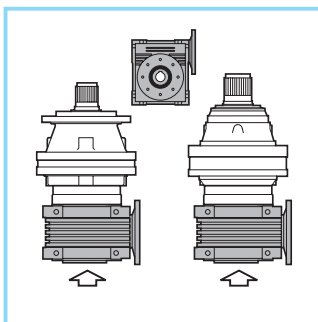
PREDISPOSIZIONI PER RIDUTTORI A VITE SENZA FINE
WORM GEARBOX ADAPTORS
ADAPTATION POUR REDUCTEURS A VIS SANS FIN
ANSCHLUSS FÜR SCHNECKENGETRIEBE



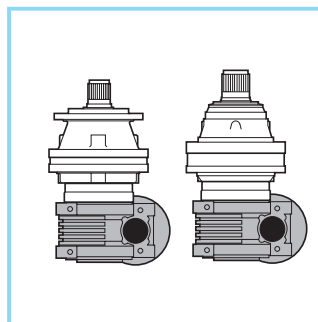
M-P



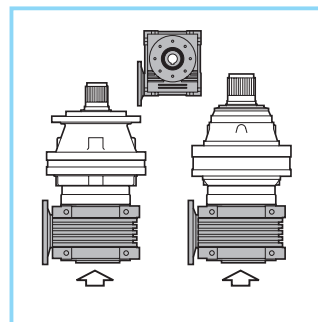
C33



C34

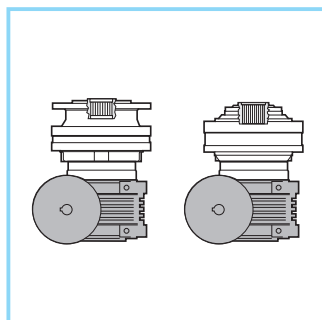


C35

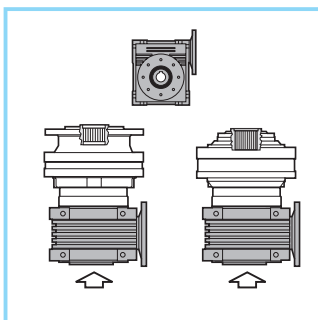


C36

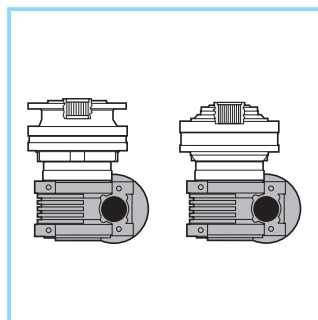
F



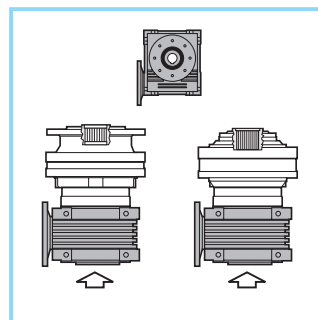
C33



C34

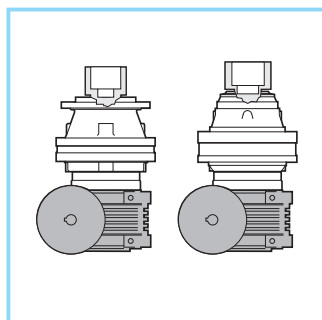


C35

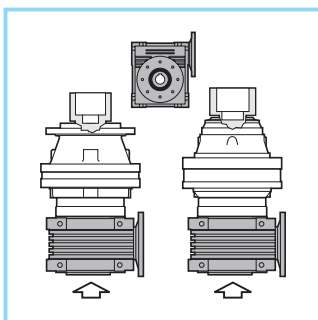


C36

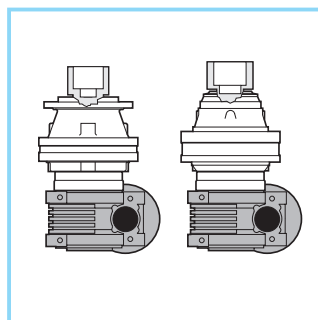
FS



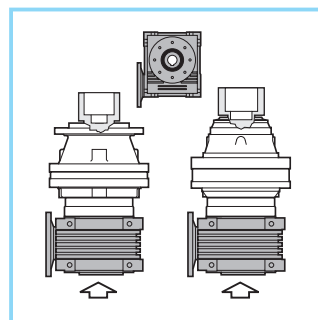
C33



C34

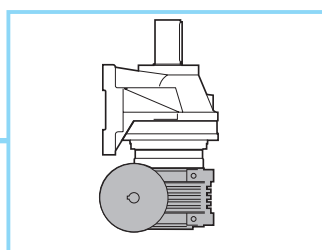


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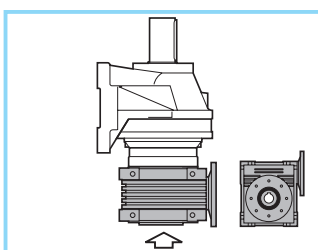


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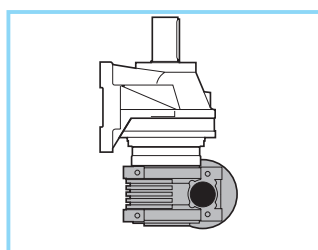
CPC



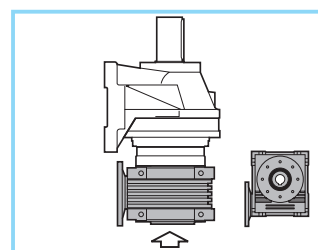
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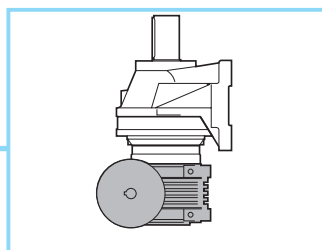
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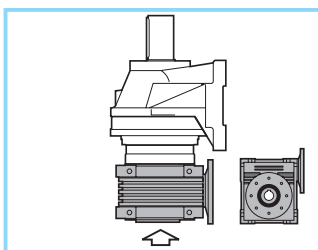
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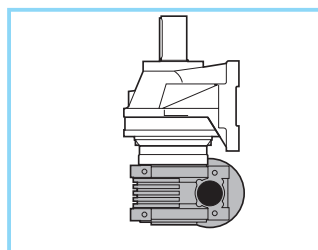
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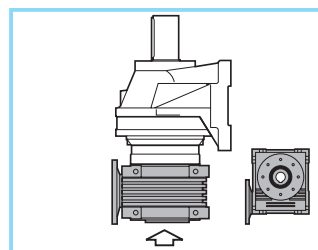
C61



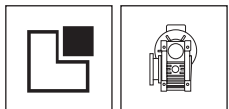
C62



C63

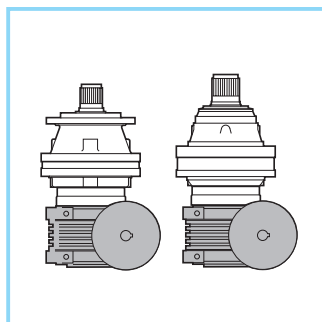


C64

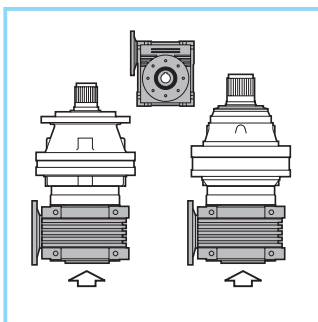


PREDISPOSIZIONI PER RIDUTTORI A VITE SENZA FINE
WORM GEARBOX ADAPTORS
ADAPTATION POUR REDUCTEURS A VIS SANS FIN
ANSCHLUSS FÜR SCHNECKENGETRIEBE

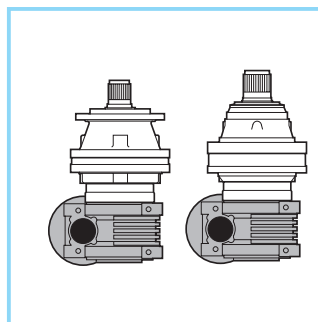
M-P



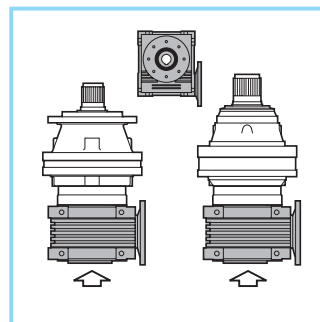
C37



C38

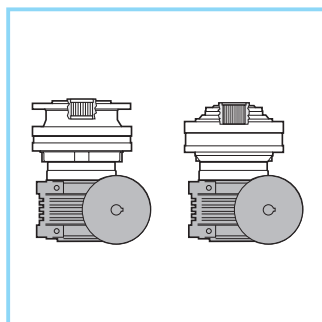


C39

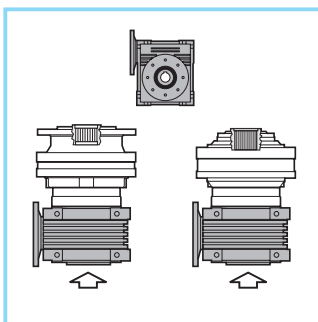


C40

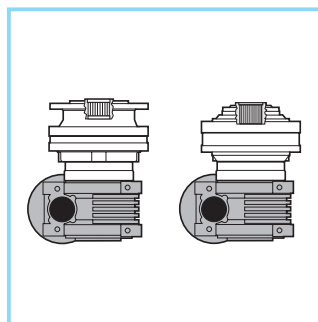
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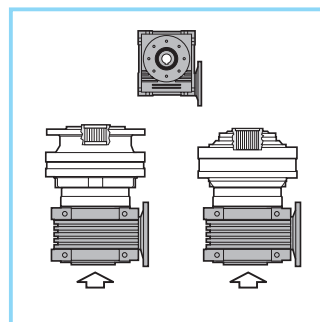
C37



C38

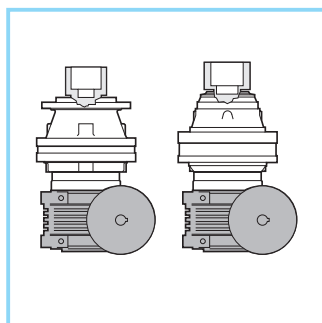


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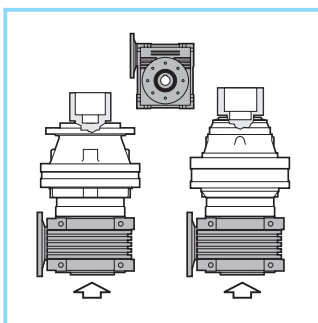


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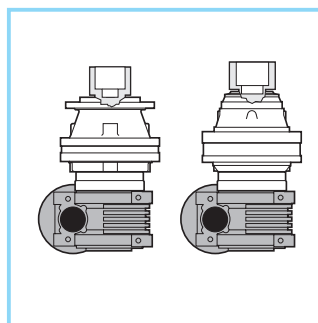
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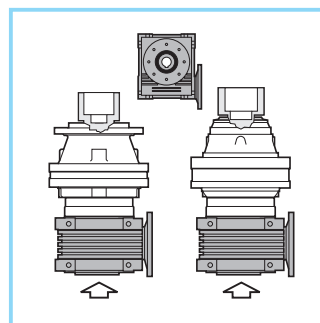
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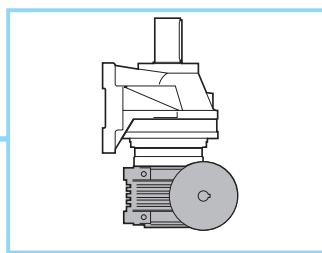


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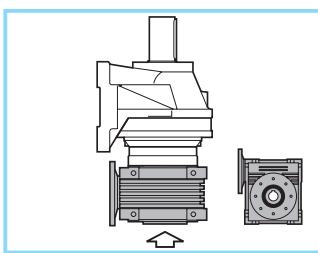


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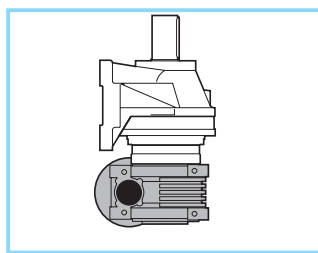
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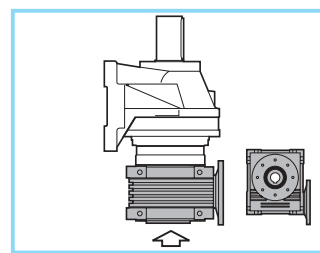
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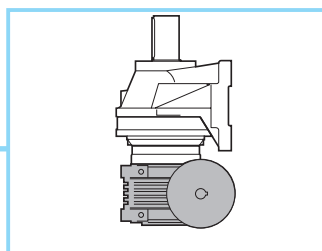
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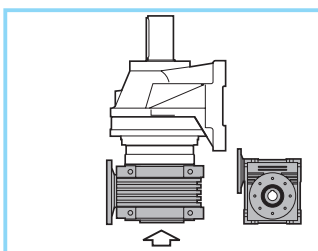
C67



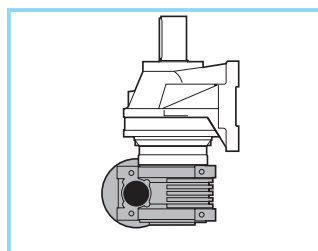
C68



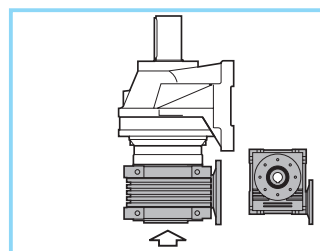
C69



C70



C71



C72



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