











| | | | | |
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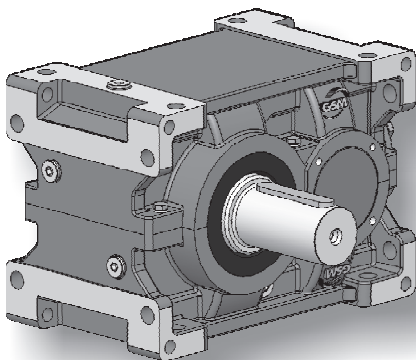
| SIMBOLO SYMBOL SYMBOL | DEFINIZIONE | DEFINITION | DEFINITION | UNITA' DI MISURA MEASUREMENT UNIT MAßEINHEIT |
|-----------------------------|--|---|---|--|
| | Dimensioni | <i>Dimensions</i> | Abmessungen | mm |
| fa | Fattore correttivo dell'altitudine | <i>Altitude factor</i> | Höhenkorrekturwert | |
| Fa₁₋₂ | Carico assiale | <i>Axial load</i> | Axialbelastung | N 1N=0.1daN ≅ 0.1kg |
| fc | Coefficiente relativo alla temperatura dell'aria | <i>Air temperature factor</i> | Koeffizient bezüglich der Lufttemperatur | |
| fd | Fattore correttivo del tempo di lavoro | <i>Operation time factor</i> | Korrekturfaktor der Arbeitszeit | |
| ff | Fattore correttivo di aerazione con ventola | <i>Fan cooling factor</i> | Korrekturfaktor der Belüftung durch Lüfter | |
| f_{Ga} | Fattore di affidabilità | <i>Safety factor</i> | Zuverlässigkeitsfaktor | |
| fm | Fattore correttivo per la posizione di montaggio | <i>Mounting position factor</i> | Korrekturfaktor für einbaulage | |
| f_n | Fattore correttivo delle prestazioni | <i>Input speed factor</i> | Korrekturfaktor der Leistungen | |
| fp | Fattore correttivo della temperatura | <i>Ambient temperature factor</i> | Korrekturfaktor der Umgebungstemperatur | |
| Fr₁₋₂ | Carico Radiale | <i>Radial load</i> | Radialbelastung | N 1N=0.1daN ≅ 0.1kg |
| Fs | Fattore di servizio | <i>Service factor</i> | Betriebsfaktor | |
| Fs' | Fattore di servizio riduttore | <i>Gearbox service factor</i> | Betriebsfaktor Getriebe | |
| fv | Fattore correttivo | <i>Duty cycle factor</i> | Korrekturfaktor | |
| fw | Coefficiente relativo alla temperatura dell'acqua | <i>Water temperature factor</i> | Koeffizient bezüglich der Wassertemperatur | |
| IEC | Motori accoppiabili | <i>Motor options</i> | Passende Motoren | |
| ir | Rapporto di trasmissione | <i>Ratio</i> | Übersetzungsverhältnis | |
| J | Momento d'inerzia della macchina e del riduttore ridotto all'asse motore | <i>Machine and gear unit inertial load reflected to motor shaft</i> | An der Motorachse reduziertes Trägheitsmoment der Maschine und des Getriebe | Kgxm² |
| J₀ | Momento d'inerzia delle masse rotanti sull'asse motore | <i>Inertial load of rotating parts at motor shaft</i> | Trägheitsmoment der an der Motorachse drehenden Massen | Kgxm² |
| kg | Massa | <i>Mass</i> | Masse | kg |
| n₁ | Velocità albero entrata | <i>Input speed</i> | Antriebsdrehzahl | min⁻¹ 1 min⁻¹ = 6.283 rad. |
| n₂ | Velocità albero in uscita | <i>Output speed</i> | Abtriebsdrehzahl | min⁻¹ 1 min⁻¹ = 6.283 rad. |
| P | Potenza motore | <i>Gear unit power</i> | Leistung Getriebe | kW |
| P' | Potenza richiesta in uscita | <i>Output power</i> | Erforderliche Abtriebsleistung | kW |
| P₁ | Potenza motoriduttore | <i>Gear motor power</i> | Leistung Getriebemotor | kW 1kW = 1.36 HP (PS) |
| Pc | Potenza corretta | <i>Correct power</i> | Tatsächliche Leistung | kW |
| P_N | Potenza nominale | <i>Nominal power</i> | Nennleistung | kW |
| P_{ta} | Potenza termica addizionale | <i>Additional thermal power</i> | Thermische Zusatzgrenzleistung | kW |
| P_{tN} | Potenza termica nominale | <i>Thermal power rating</i> | Thermische Nenngrenzleistung | kW |
| P_{t0} | Potenza limite termico | <i>Limit thermal capacity</i> | Thermische Leistungsgrenze | kW |
| RD (η) | Rendimento dinamico | <i>Dynamic efficiency</i> | Dynamischer Wirkungsgrad | |
| RS | Rendimento statico | <i>Static efficiency</i> | Statischer Wirkungsgrad | |
| T_{1f} | Coppia frenante dinamica | <i>Dynamic braking torque</i> | Dynamisches Bremsmoment | Nm |
| T_{1max} | Coppia motrice massima | <i>Max drive torque</i> | Max. Antriebsmoment | Nm |
| T_{1s} | Coppia motrice di spunto | <i>Starting torque</i> | Anlaufantriebsdrehmoment | Nm |
| Tc | Temperatura ambiente | <i>Ambient temperature</i> | Umgebungstemperatur | °C |
| T_N | Coppia nominale | <i>Nominal torque</i> | Nenn Drehmoment | Nm, kNm |

1.0 RIDUTTORI - MOTORIDUTTORI PARALLELI RXP PARALLEL SHAFT GEARBOXES AND GEARED MOTORS RXP FLACH-UND AUFSTECKGETRIEBE UND-GETRIEBEMOTOREN RXP

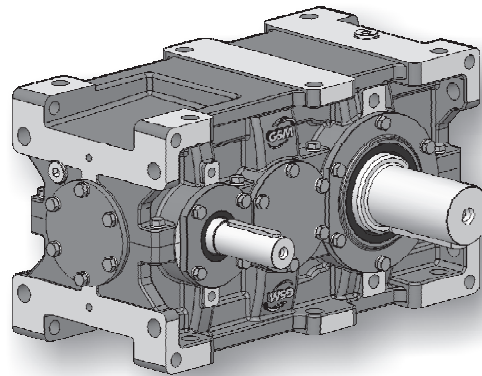
RXP

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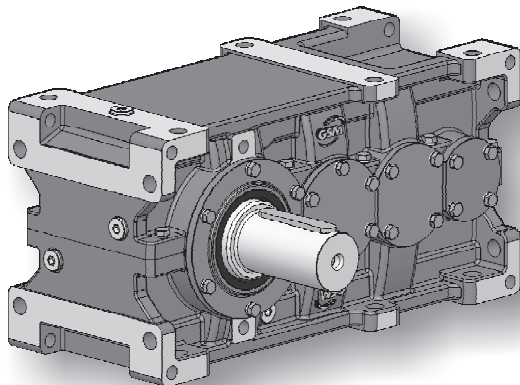
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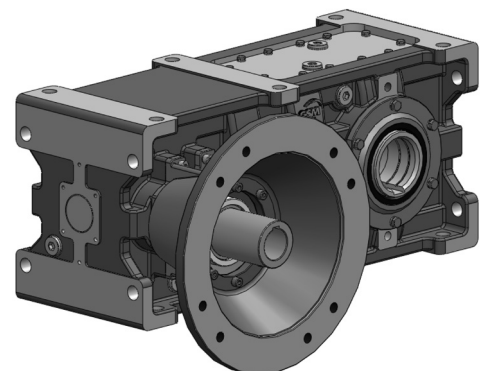
RXP1



RXP2



RXP3



RXP4

1.1 Caratteristiche costruttive

Generalità

Le dimensioni dei nostri riduttori e i rapporti di trasmissione seguono la serie dei numeri normali (serie di RENARD) Ra 20 UNI 2016.68.

I particolari accorgimenti adottati nella costruzione della carcassa esterna conferiscono ai nostri riduttori un'ampia versatilità di montaggio.

La grande scelta disponibile del tipo di esecuzione ci permette di soddisfare anche le esigenze più particolari. L'elevato numero di rapporti di trasmissione, $iN = (1.12 \div 1250)$, consente in alcuni casi di scegliere un riduttore di taglia inferiore. La suddivisione della carcassa in due parti e i coperchi fissati con viti consentono una facile manutenzione.

Ingranaggi

Gli ingranaggi cilindrici a dentatura elicoidale, sono rettificati sul profilo ad evolvente dopo cementazione, tempra e rinvenimento finale.

L'ottimizzazione geometrica dell'ingranaggio unitamente ad una accurata lavorazione, assicura bassi livelli di rumorosità e garantisce elevati rendimenti:

- 0.98 per un riduttore ad uno stadio di riduzione
- 0.96 per un riduttore a due stadi di riduzione
- 0.94 per un riduttore a tre stadi di riduzione
- 0.92 per un riduttore a quattro stadi di riduzione

Tutti gli ingranaggi sono costruiti in:

- 16CrNi4, 20CrNi4, 18NiCrMo5, 20MnCr5 UNI 7846-78

La capacità di carico è stata calcolata a pressione superficiale e a rottura secondo la normativa ISO 6336 (a richiesta sono possibili verifiche secondo le norme AGMA 2001-C95).

Alberi

Gli alberi lenti pieni sono realizzati in 39NiCrMo3 UNI 7845-78. Gli alberi veloci sono realizzati in 16 Cr Ni 4 UNI, 20MnCr5 UNI 7846-78 o in 39 Ni Cr Mo 3 UNI 7845-78. Sono verificati a flessione-torsione con elevato coefficiente di sicurezza. Le estremità d'albero cilindriche sono secondo UNI 6397-68, DIN 748, NF E 22.051, BS 4506-70, ISO/R 775-69, escluso corrispondenza R-S, con foro filettato in testa secondo DIN 1414. Linguetta secondo UNI 6604-69, DIN 6885 BI, 1-68, NF E 27.656 22.175, BS 4235.1-72, ISO/R 773-69 escluso corrispondenza I.

1.1 Construction features

General description

Gear unit dimensions and transmission ratios follow a geometric progression based on the R20 series of preferred (or Renard) numbers in accordance with UNI 2016.68.

The casing incorporates special design features to provide the utmost mounting versatility.

Our exhaustive range of designs is guaranteed to meet the requirements of every application, no matter how specific. Our broad range of transmission ratios - $iN = (1.12 \div 1250)$ and high ratio density frequently allows selection of a smaller size. Split casing design and bolted covers ensure great ease of maintenance.

Gearing

Helical spur gear sets are first case hardened, hardened and tempered and finally their involute profile is ground.

Optimal gear geometry and high machining accuracy ensure low noise levels and higher efficiency:

- *0.98 for single reduction gear units*
- *0.96 for double reduction gear units*
- *0.94 for triple reduction gear units*
- *0.92 for quadruple reduction gear units*

All gear sets are in:

- 16CrNi4, 20CrNi4, 18NiCrMo5, 20MnCr5 UNI 7846-78

The load capacity of gear sets is calculated at contact and root bending stress in accordance with standard ISO 6336 (gears can be rated to AGMA 2001-C95 on request).

Shafts

Solid output shafts are manufactured from 39NiCrMo3 UNI 7845-78. Input shafts are made from 16 Cr Ni 4 UNI, 20MnCr5 UNI 7846-78 or 39 Ni Cr Mo 3 UNI 7845-78. Shaft calculations incorporate a high safety factor and are validated by bending and torsional stress analyses. Cylindrical shaft ends are in accordance with UNI 6397-68, DIN 748, NF E 22.051, BS 4506-70, ISO/R 775-69, excluding section R-S, with centre tapped hole at shaft end to DIN 1414. Keys are in accordance with UNI 6604-69, DIN 6885 BI, 1-68, NF E27.656 22.175, BS 4235.1-72, ISO/R 773-69 excluding section I.

1.1 Construction features

Allgemeines

Die Baugrößen und Übersetzungen unserer Getriebe sind der normalen Nummernserie (RENARD Reihe) Ra 20 UNI 2016.68 gemäß ausgelegt.

Die besonderen Konstruktionsmerkmale der Gehäuse ermöglichen die Montage unserer Getriebe in den unterschiedlichsten Einbaulagen.

Das breite Angebot an Ausführungstypen versetzt uns in die Lage, auch den ausgefallenen Anforderungen unserer Kunden entsprechen zu können. Die zahlreichen Übersetzungsverhältnisse, $iN = (1.12 \div 1250)$ räumen in einigen Fällen die Möglichkeit ein, ein kleineres Getriebe wählen zu können. Die zweiteiligen Gehäuse und die mit Schrauben befestigten Deckel erlauben eine einfache Wartung.

Zahnräder

Das Evolventenprofil der Stirnrädergetriebe mit Schrägverzahnung wird nach dem Einsatzhärten, dem Abschrecken und dem Anlassen entsprechend geschliffen.

Die geometrische Optimierung des Zahnrads verbunden mit einer akkuraten Bearbeitung gewährleistet niedrige Geräuschentwicklung und einen hohen Wirkungsgrad:

- 0.98 bei Getrieben mit einer Getriebestufe
- 0.96 bei Getrieben mit zwei Getriebestufen
- 0.94 bei Getrieben mit drei Getriebestufen
- 0.92 bei Getrieben mit vier Getriebestufen

Alle Zahnräder werden aus folgenden Material gefertigt:

- 16CrNi4, 20CrNi4, 18NiCrMo5, 20MnCr5 UNI 7846-78

Die Belastbarkeit wurde auf Oberflächenbruch und Bruch der Richtlinie ISO 6336 gemäß berechnet (auf Anfrage können Überprüfungen den Normen AGMA 2001-C95 gemäß vorgenommen werden).

Wellen

Die vollen Abtriebswellen sind aus 39NiCrMo3 UNI 7845-78 realisiert. Die Antriebswellen dagegen aus 16 Cr Ni 4 UNI, 20MnCr5 UNI 7846-78 oder aus 39 Ni Cr Mo 3 UNI 7845-78. Sie werden unter Berücksichtigung eines hohen Sicherheitskoeffizienten auf Biegung-Windung getestet. Die Enden der zylindrischen Wellen entsprechen den Normen UNI 6397-68, DIN 748, NF E 22.051, BS 4506-70, ISO/R 775-69, ausgenommen Zuordnung R-S, mit Gewindebohrung in der Wellenspitze DIN 1414. Die Federkeile entsprechen UNI 6604-69, DIN 6885 BI, 1-68, NF E 27.656 22.175, BS 4235.1-72, ISO/R 773-69, ausgenommen Zuordnung I.

Cuscinetti

Tutti i cuscinetti sono del tipo a rulli conici o a rulli orientabili, di elevata qualità e dimensionati per garantire una lunga durata se lubrificati con il tipo di lubrificante previsto a catalogo.

Bearings

All bearings are high quality taper or self-aligning roller bearings suitably sized to ensure long service life provided the approved lubricants indicated in this catalogue are used.

Lager

Bei allen Lagern handelt es sich um hochqualitative Kegelrollenlager mit orientierungsfähigen Rollen und in Maßen, die so ausgelegt sind, dass sie bei Einsatz der gemäß Katalogangaben vorgesehenen Schmiermittel eine lange Lebensdauer garantieren.

Carcassa

La carcassa è ottenuta per fusione in GG 250 ISO 185 fino alla grandezza 820. Le altre grandezze sono in acciaio Fe430 EN UNI 10025 composto elettrosaldato e disteso. I particolari accorgimenti adottati nel disegno della struttura permettono di ottenere un' elevata rigidezza.

Casing

Casings up to size 820 are cast from GG 250 ISO 185 cast iron. All other sizes use casings fabricated from electrically welded casing relieved Fe430 steel EN UNI 10025. Casing design incorporates special arrangements to provide superior rigidity.

Gehäuse

Die Gehäuse der Getriebe bis Baugröße 820 werden im Gussverfahren aus GG 250 ISO 185 gewonnen; die anderen Baugrößen werden aus elektroverschweißtem und entspanntem Kombistahl Fe430 EN UNI 10025 realisiert. Die besonderen beim Entwurf der Struktur berücksichtigten Vorkehrungen verleihen ihr eine besondere Steifheit.

1.2 Livelli di pressione sonora SPL [dB(A)]

Valori normali di produzione del livello medio di pressione sonora SPL (dB(A)) a velocità in entrata di 1450 giri/min (tolleranza +3 db(A)). Valori misurati ad 1 m dalla superficie esterna del riduttore ed ottenuti su elaborazione di prove sperimentali. Per raffreddamento artificiale con ventola sommare ai valori di tabella: +2 db(A) per ogni ventola. Per entrata ad un numero di giri diverso sommare i valori come in tabella. Per particolari esigenze è possibile fornire riduttori con livello medio di pressione sonora ridotto.

1.2 Mean sound pressure levels SPL [dB(A)]

Noise levels are mean sound pressure levels SPL (dB(A)) and refer to normal operation at an input speed of 1450 rpm (tolerance +3 dB (A)). Measurements are taken at 1 m from the external surface of the gear unit and ratings are obtained by processing test data. For fan-cooled applications, add 2dB (A) to table values for each fan. For different input speeds, add the appropriate values indicated in the table below. Gear units with lower noise levels to suit particular needs are available on request.

1.2 Schalldruckpegel SPL [dB(A)]

Normale Werte des durchschnittlichen Schalldruckpegels SPL (dB(A)) bei einer Antriebsdrehzahl von 1450 U/min (Toleranz +3 dB(A)). Werte, die aus den Auswertungen der experimentellen Tests, bei denen die Messung in 1 m Entfernung von der Getriebeoberfläche erfolgte, resultieren. Bei Vorliegen einer Zusatzluftkühlung durch Lüfter muss ein Korrekturwert von +2 dB(A) pro Lüfterrad zum Tabellenwert addiert werden. Bei abweichender Antriebsdrehzahl sind die Werte gemäß Tabellenangaben zu addieren. Im Fall besonderer Anforderungen können Getriebe mit einem reduzierten durchschnittlichen Schalldruckpegel geliefert werden.

| | RXP1 | | RXP2 | | RXP3 | | |
|-----|---------|---------|--------|--------|--------|--------------|---------|
| | i ≤ 2.5 | i > 2.5 | i ≤ 14 | i > 14 | i < 40 | 40 ≤ i ≤ 100 | i > 100 |
| 802 | 80 | 76 | 75 | 72 | 72 | 70 | 67 |
| 804 | 81 | 77 | 76 | 73 | 73 | 71 | 68 |
| 806 | 83 | 79 | 77 | 74 | 74 | 72 | 69 |
| 808 | 84 | 80 | 78 | 75 | 75 | 73 | 70 |
| 810 | 86 | 82 | 80 | 77 | 77 | 75 | 72 |
| 812 | 87 | 83 | 81 | 78 | 78 | 76 | 73 |
| 814 | 89 | 85 | 83 | 80 | 80 | 78 | 75 |
| 816 | 91 | 87 | 85 | 82 | 82 | 80 | 77 |
| 818 | 93 | 89 | 87 | 84 | 84 | 82 | 79 |
| 820 | 95 | 91 | 89 | 86 | 86 | 84 | 81 |
| 822 | 97 | 93 | 91 | 88 | 88 | 86 | 83 |
| 824 | 99 | 95 | 93 | 90 | 90 | 88 | 85 |
| 826 | | | 95 | 92 | 92 | 90 | 87 |
| 828 | | | 96 | 93 | 93 | 91 | 89 |
| 830 | | | | | 96 | 94 | 91 |
| 832 | | | | | 97 | 95 | 92 |

| n ₁ [min ⁻¹] | 2750 | 2400 | 2000 | 1750 | 1000 | 750 | 500 | 350 |
|--|------|------|------|------|------|-----|-----|-----|
| Δ SPL [dB(A)] | 8 | 6 | 4 | 2 | -2 | -3 | -4 | -6 |

1.3 Criteri di selezione

Fattore di servizio - Fs

Il fattore di Servizio Fs dipende:

- a) dalle condizioni di applicazione
- b) dalla durata di funzionamento h/d
- c) avviamenti /ora
- d) dal grado di affidabilità o margine di sicurezza voluto .

Il fattore di servizio per casi specifici può essere assunto direttamente, altrimenti può essere calcolato in base ai singoli fattori: fattore di durata di funzionamento f_s , dal numero di avviamenti /ora f_v , e dal fattore di sicurezza o grado di affidabilità f_{Ga}

1.3 Gear unit selection

Service factor - Fs

Service factor Fs is determined on the basis of:

- a) *operating conditions of application*
- b) *operation per day (h/d)*
- c) *starts and stops per hour*
- d) *desired reliability or safety factor.*

Where service conditions allow it, the recommended service factor for a specific application may be used directly, otherwise the service factor must be calculated and the following factors must be considered: operation time factor f_s , duty cycle factor f_v and safety or reliability factor f_{Ga}

1.3 Auswahlkriterien

Betriebsfaktor - Fs

Der Betriebsfaktor Fs hängt von folgenden Kriterien ab:

- a) Einsatzbedingungen
- b) Betriebsdauer h/d
- c) Anläufe/Stunden
- d) Zuverlässigkeitsgrad oder gewünschter Sicherheitsbereich.

In spezifischen Fällen kann der Betriebsfaktor direkt übernommen werden, andernfalls kann er den einzelnen Faktoren gemäß berechnet werden: Betriebsdauerfaktor f_s , Anläufe/Stunde f_v und Sicherheitsfaktor oder Zuverlässigkeitsgrad f_{Ga} .

$F_s = f_s \cdot f_v \cdot f_{Ga}$

Le potenze e i momenti torcenti indicati a catalogo nominali sono validi per $F_s = 1$.

Power and torque ratings stated in the catalogue refer to service factor $F_s = 1$.

Die im Katalog angegebenen Nennleistungen und -drehmomente sind für $F_s = 1$ gültig.

f_s

| Macchina motrice / Prime mover / Kraftmaschine | h/d | Macchina utilizzatrice Driven Machine Arbeitsmaschine | | |
|---|-----|---|------|------|
| | | U | M | S |
| Motori elettrici, Turbine, Motori oleodinamici <i>Electric motors, Turbines, Hydraulic motors</i> Elektrische Motoren, Turbinen, hydraulische Motoren | 2 | 0.8 | 1.0 | 1.4 |
| | 4 | 0.9 | 1.12 | 1.6 |
| | 8 | 1.0 | 1.25 | 1.75 |
| | 16 | 1.25 | 1.5 | 2.0 |
| | 24 | 1.5 | 1.75 | 2.25 |
| Motori alternativi 4-6 cilindri <i>Combustion engines with 4-6 cylinders</i> Verbrennungsmotoren 4-6 Zylinder | 2 | 0.9 | 1.12 | 1.6 |
| | 4 | 1.0 | 1.25 | 1.75 |
| | 8 | 1.25 | 1.5 | 2.0 |
| | 16 | 1.5 | 1.75 | 2.25 |
| | 24 | 1.75 | 2.0 | 2.5 |
| Motori alternativi 1-3 cilindri <i>Combustion engines with 1-3 cylinders</i> Verbrennungsmotoren 1-3 Zylinder | 2 | 1.0 | 1.25 | 1.75 |
| | 4 | 1.25 | 1.5 | 2.0 |
| | 8 | 1.5 | 1.75 | 2.25 |
| | 16 | 1.75 | 2.0 | 2.5 |
| | 24 | 2.25 | 2.5 | 3.0 |

U = macchina a carico uniforme
M = macchina con urti moderati
S = macchina con urti severi

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

U = Maschine mit gleichmäßiger Last
M = Maschine mit mäßigen Stößen
S = Maschine mit harten Stößen

h/d = ore di funzionamento giornaliero

h/d = hours of operation per day

h/d = Betriebsstunden/Tag

Per i moltiplicatori di velocità, moltiplicare i valori di F_s per 1.1

For speed multipliers, multiply F_s by 1.1

Für Geschwindigkeits-Multiplikatoren die F_s -Werte mit 1.1 multiplizieren

Classificazione dell'applicazione

Application classification

Klassifikation der Anwendungsbereiche

| | SETTORE DI APPLICAZIONE | APPLICATION SECTOR | ANWENDUNGSBEREICHE |
|------------------|--|--|---|
| U M | AGITATORI | AGITATORS | MISCHER |
| | Con densità uniforme Con densità non uniforme | Uniform product density Variable product density | mit gleichmäßiger Dichte keine gleichmäßige Dichte |
| U M | ALIMENTARE | ALIMENTARY | LEBENSMITTELBEREICH |
| | Maceratori, bollitori, coclee Trituratrici, sbucciatrici, scatoratrici | Mashers, boilers, screw feeders, blenders, peelers, cartoners | Stampfmühlen, Kocher, Schnecken Zerkleinerer, Schälmaschinen, Einschachtelmaschinen |
| (1)U,M M S | ARGANI | WINCHES | SEILWINDEN |
| | Sollevamento Trascinamento Bobinatori | Lifting Dragging Reel winders | Heben Ziehen Aufrollen |
| | CARTARIO | PAPER MILLS | PAPIER |
| U M S | Avvolgitori, essiccatrici, pressatrici, Mescolatrici, estrusori, addensatrici Tagliatrici, lucidatrici | Winders, dryers, couch rolls Mixers, extruders, thickeners Cutters, glazing cylinders | Aufwickler, Trockner, Presse, Mischer, Extruder, Verdichter, Schneidevorrichtungen, Poliermaschinen |
| S M | CHIMICO | CHEMICAL | CHEMIE |
| | Estrusori, stampatrici Importatrici | Extruders, printing presses Mixers | Extruder, Drucker Vermischer |
| U M M | COMPRESSORI | COMPRESSORS | KOMPRESSOREN |
| | Centrifughi Rotativi Assiali | Centrifugal Rotating Axial piston | schleudernde rotierende axiale |
| | DRAGHE | DREDGES | BAGGER |
| M S | Trasportatori Estratrici, teste fresatrici | Conveyors Extractors, cutter head drives | Förderer Auszugsvorrichtungen, Fräsköpfe |
| M M S | EDILIZIA | BUILDING | BAUWESEN |
| | Betoniere, coclee Frantoi, dosatrici Frantumatrici | Cement mixers, screw feeders Crushers, batchers Stone breakers | Betonmischer, Schnecken Mühlen, Dosiervorrichtungen Brecher |
| | ELEVATORI | ELEVATORS | HEBER |
| U M M | A nastro, scale mobili A tazza, montacarichi, skip Ascensori, ponteggi mobili | Belt type, escalators Bucket conveyors, hoists, skip hoists Public lifts, mobile scaffolding | Mit Förderband, Rolltreppen Becherwerke, Lastenaufzüge, Skips Lifte, mobile Gerüste |
| M M (1)U,M | GRU | CRANES | KRÄNE |
| | Traslazione Rotazione Sollevamento | Translation Slew Lifting | Verfahren Drehen Heben |
| | LEGNO | WOOD | HOLZ |
| M M M | Accatastatori Trasportatori Seghe, piallatrici, fresatrici | Stackers Transporters Saws, thicknessers, routers | Stapler Förderer Sägen, Hobelmaschine, Fräsen |
| M M S | MACCHINE UTENSILI | MACHINE TOOLS | WERKZEUGMASCHINEN |
| | Alesatrici, brocciatrici, cesoiatrici Piegatrici, stampatrici Magli, laminatoi | Boring machines, broaching machines, shearing machines Bending machines, press forgers Power hammers, rolling mills | Bohrer, Räummaschine, Schneidemaschinen Biegemaschinen, Stanzmaschinen Gesenkhammer, Walzwerke |
| U M | MESCOLATORI-MISCELATORI | MIXERS | MISCHER |
| | Con densità uniforme Con densità non uniforme | Uniform density product Variable density product | Mit gleichmäßiger Dichte Keine gleichmäßige Dichte |
| S M | MOVIMENTO TERRA | EARTH MOVING MACHINERY | ERDBEWEGUNG |
| | Escavatrici rotative a pale Trasportatori | Rotating shovel excavators Transporters | Schaufelbagger Förderer |
| U M,S M,S | POMPE | PUMPS | PUMPEN |
| | Centrifughe Volumetriche a doppio effetto Volumetriche a semplice effetto | Centrifugal Double acting volumetric Single acting volumetric | Zentrifugalpumpen Doppelleffekt-Verdrängerpumpe Verdrängerpumpe |
| | TRASPORTATORI | CONVEYORS | FÖRDERER |
| U M | Su rotaie A nastro | On rails Belts | Auf Rädern Mit Band |
| M M U | TRATTAMENTO ACQUE | WATER TREATMENT | WASSERAUFBEREITUNG |
| | Coclee, trituratori Mescolatori, decantatori Ossigenatori | Screw feeders, disintegrators Mixers, settlers Oxygenators | Schnecken, Zerkleinerer Mischer, Dekanter Sauerstoffgeräte |
| | VENTILATORI | FAN UNITS | VENTILATOREN |
| U M | Di piccole dimensioni Di grandi dimensioni | Small Large | Kleine Große |

1) Per la scelta del fs secondo F.E.M. /1.001/1987 consultare il capitolo "sollevamento".

1) For fs selection in accordance with F.E.M. /1.001/1987, please read Chapter "Lifting".

1) Bei der Wahl des fs gemäß F.E.M. /1.001/1987 Bezug auf das Kapitel "Heben" nehmen.

Fattore correttivo - f_v

Fattore correttivo del fattore di servizio f_s per tenere conto degli avviamenti/ora. Il fattore di servizio f_s deve aumentare in caso di avviamenti frequenti con coppia di spunto notevolmente maggiore di quella di regime tenendo conto degli avviamenti per ora secondo la seguente tabella.

| |
|-------|
| f_v |
|-------|

| Avv/h - Starts/hour - Anl./Std. | U | M | S |
|---------------------------------|------|------|------|
| $Z \leq 5$ | 1 | 1 | 1 |
| $5 < Z \leq 30$ | 1.2 | 1.12 | 1.06 |
| $30 < Z \leq 63$ | 1.33 | 1.2 | 1.12 |
| $Z > 63$ | 1.5 | 1.33 | 1.2 |

Fattore affidabilità - f_{Ga}

Un margine di sicurezza o di affidabilità è già inserito nella prestazione di catalogo del riduttore. Se per particolari esigenze è necessaria un' affidabilità maggiore si aumenti il fattore di servizio ed in particolare si può dare i seguenti fattori:

Grado di affidabilità normale: $f_{Ga} = 1$;
 Grado di affidabilità elevato (difficoltà di manutenzione, grande importanza del riduttore nel ciclo produttivo, sicurezza per le persone, ecc...): $f_{Ga} = 1.25 - 1.4$;
 Non occorre introdurre coefficienti correttivi nel caso che si alternino cicli di funzionamento con carichi applicati nei due sensi, poichè se ne è già tenuto conto nel progetto degli ingranaggi.

Fattore correttivo delle prestazioni - f_N

Fattore correttivo delle prestazioni nominali per tenere conto delle velocità in entrata $n_1 > 1450 \text{ min}^{-1}$.

| |
|-------|
| f_N |
|-------|

| n_1 [min^{-1}] | $i_N \leq 8$ | | $8 < i_N < 80$ | | $i_N \geq 80$ | |
|--------------------------------|--------------|-------|----------------|-------|---------------|-------|
| | T_N | P_N | T_N | P_N | T_N | P_N |
| 2750 | 0.82 | 1.56 | 0.90 | 1.71 | 1.00 | 1.90 |
| 2400 | 0.85 | 1.41 | 0.92 | 1.52 | 1.00 | 1.66 |
| 2000 | 0.90 | 1.24 | 0.94 | 1.30 | 1.00 | 1.38 |
| 1750 | 0.94 | 1.13 | 0.97 | 1.17 | 1.00 | 1.21 |
| 1450 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |

Procedura di selezione

Conosciuti i dati dell'applicazione calcolare:

- $i = n_1/n_2$ rapporto richiesto
- potenza nominale:

$$f_N \times P_N \geq P_1 \times f_S \times f_v \times f_{Ga}$$

oppure

- coppia nominale:

$$f_N \times T_N \geq T_2 \times f_S \times f_v \times f_{Ga}$$

Scegliere gli stadi, il rapporto, la grandezza, l'esecuzione, la forma costruttiva e verificare le dimensioni del riduttore e di eventuali accessori o particolari estremità. Nel calcolo si consideri un rendimento per stadio di 0.98.

Duty cycle factor - f_v

This correction factor is used to adjust service f_s to reflect the number of starts per hour. Where an application involves frequent starts at a starting torque significantly greater than running torque, service factor f_s must be adjusted to account for the number of starts per hour using the factors indicated in following table.

Safety factor - f_{Ga}

Catalogue ratings incorporate a safety or reliability factor as standard. If greater reliability is required to meet specific requirements, service factor must be increased using the following factors:

*Standard safety factor: $f_{Ga} = 1$;
 High safety factor (recommended for difficult maintenance situations, where gear unit performs a critical task in the overall production process or a task such to affect the safety of people, etc...): $f_{Ga} = 1.25 - 1.4$;
 Applications with alternating duty cycles where load is applied in both directions have been considered in gear calculations and require no correction factors.*

Input speed factor - f_N

This correction factor is used to adjust performance ratings to account for input speeds $n_1 > 1450 \text{ min}^{-1}$.

Selection procedure

Locate application information and determine:

- required ratio $i = n_1/n_2$
- nominal power:

$$f_N \times P_N \geq P_1 \times f_S \times f_v \times f_{Ga}$$

or

- nominal torque:

$$f_N \times T_N \geq T_2 \times f_S \times f_v \times f_{Ga}$$

Select number of stages, ratio, size, shaft arrangement and design configuration and then check the dimensions of gear unit and any accessories or particular input/output configurations you have selected. Please consider 0.98 efficiency per stage in your calculations.

Korrekturfaktor - f_v

Korrekturfaktor des Betriebsfaktors f_s unter Berücksichtigung der Anläufe/Std.. Der Betriebsfaktor f_s muss bei häufigen Anläufen mit einem erheblich über dem Nenndrehmoment liegenden Anlaufmoment angehoben werden, wobei die Anläufe pro Stunde gemäß nachstehender Tabelle zu berücksichtigen sind.

Zuverlässigkeitsfaktor - f_{Ga}

Die Katalogangaben der Getriebeleistungen enthalten bereits einen Sicherheitsbereich oder Zuverlässigkeitsgrad. Falls aufgrund besonderer Anforderungen ein höherer Zuverlässigkeitsgrad verlangt wird, muss der Betriebsfaktor unter Bezugnahme insbesondere auf folgende Faktoren gesteigert werden. Normaler Zuverlässigkeitsgrad: $f_{Ga} = 1$;
 Hoher Zuverlässigkeitsgrad (schwierige Instandhaltung, für den Produktionszyklus besonders wichtiges Getriebe, Personenschutz, usw....): $f_{Ga} = 1.25 - 1.4$;
 Wechseln die Betriebszyklen mit in beide Richtungen applizierbaren Lasten, ist das Anwenden der Korrekturkoeffizienten nicht erforderlich, da diese Situation bereits beim Entwurf der Zahnräder berücksichtigt wurde.

Korrekturfaktor der Leistungen - f_N

Korrekturfaktor der Nennleistungen unter Berücksichtigung der Eingangsdrehzahlen $n_1 > 1450 \text{ min}^{-1}$.

Auswahlverfahren

Sind die Daten der Anwendung bekannt, ist wie folgt zu kalkulieren:

- $i = n_1/n_2$ gefordertes Übersetzungsverhältnis
- Nennleistung:

$$f_N \times P_N \geq P_1 \times f_S \times f_v \times f_{Ga}$$

oder

- Nenndrehmoment:

$$f_N \times T_N \geq T_2 \times f_S \times f_v \times f_{Ga}$$

Die Stufen, Übersetzung, Größe, Ausführung sowie die Bauform wählen und die Größe des Getriebes und des eventuellen Zubehörs oder besondere Wellenenden überprüfen. Bei der Berechnung ist pro Stufe einen Wirkungsgrad von 0.98 zu berücksichtigen.

1.4 Verifiche

1) Compatibilità dimensionale con ingombri disponibili (es diametro del tamburo) e delle estremità d'albero con giunti, dischi o pulegge.

2) Compatibilità del rapporto selezionato con l'esecuzione albero cavo.

3) Ammissibilità di carichi radiali e/o assiali esterni; i carichi radiali Fr_1 e Fr_2 ammissibili sono riportati nelle tabelle delle prestazioni e si intendono applicati in mezz'ora dell'estremità dell'albero. Per condizioni diverse consultare la pag. A19.

4) Massimo sovraccarico nel caso di:

- inversioni di moto per effetti inerziali,
- commutazioni da bassa ad alta polarità,
- avviamenti e frenature a pieno carico con grandi momenti d'inerzia (soprattutto nel caso di bassi rapporti),
- sovraccarichi, urti od altri effetti dinamici, deve essere verificata la condizione:

$$T_{max} \leq 2 \times T_N$$

5) Numero massimo di giri in entrata n_{1max} (vedere tabelle seguenti):

1.4 Verification

1) *Ensure that dimensions are compatible with space constraints (for instance, drum diameter) and shaft ends are compatible with any couplings, discs or pulleys to be used.*

2) *Ensure that selected ratio is available for the hollow shaft configuration.*

3) *Check that overhung and/or thrust loads do not exceed permissible loads; permissible overhung loads Fr_1 and Fr_2 at midpoint of shaft extension are listed in the rating tables. For any conditions other than those listed above, please read page A19.*

4) *Determine maximum overload in the event of:*

- *reversing due to inertia,*
- *switching from low to high polarity,*
- *starts and stops under full load with high moment of inertia (this is especially important for low ratios),*
- *overload, shock load or other dynamic load conditions, and determine whether this condition is verified:*

$$T_{max} \leq 2 \times T_N$$

5) *Check maximum input speed (rpm) n_{1max} (see the following tables):*

1.4 Überprüfungen

1) Kompatibilität der Abmessungen mit verfügbaren Maßen (z.B. Trommeldurchmesser) und der Wellenenden mit den Kupplungen, Scheiben oder Riemenscheiben.

2) Kompatibilität des gewählten Übersetzungsverhältnisses mit der Ausführung der Hohlwelle.

3) Zulässigkeit der externen Radial- und/oder Axialkräfte; die zulässigen Radialkräfte Fr_1 und Fr_2 werden in den Leistungstabellen angegeben und verstehen sich als auf die Wellenmitte wirkend. Im Fall anderer Bedingungen verweisen wir auf Seite A19.

4) Maximale Überlast im Fall von:

- Drehrichtungs-Umkehr aufgrund von Trägheitseffekten,
- Umschaltung von niedriger auf hohe Polarität,
- Anläufe und Bremsungen unter Vollast mit hohen Trägheitsmomenten (vor allem bei niedrigen Übersetzungsverhältnissen),
- Überlasten, Stöße oder andere dynamische Effekte.

Es muss die Bedingung:

$$T_{max} \leq 2 \times T_N$$

überprüft werden.

5) Max. Antriebsdrehzahl n_{1max} (siehe nachstehende Tabellen):



$n_1 \text{ max (min}^{-1}\text{)}$

| | in | 802 | | 804 | | 806 | | 808 | | 810 | | 812 | | 814 | | 816 | | 818 | |
|------|------------|------------|------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|
| | | splash oil | splash oil | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. |
| RXP1 | 1.11-1.48 | 2000 | 1750 | 1500 | 2900 | 1250 | 2500 | 1250 | 2500 | 1000 | 2000 | 900 | 2000 | 800 | 1750 | 700 | 1500 | | |
| | 1.5-2.16 | 2500 | 2000 | 1750 | | 1500 | 2900 | 1500 | 2900 | 1250 | 2500 | 1000 | 2500 | 900 | 2000 | 900 | 1750 | | |
| | 2.28-3.23 | 2900 | 2500 | 2000 | | 1750 | | 1750 | | 1500 | 2900 | 1500 | 2500 | 1000 | 2500 | 1000 | 2000 | 900 | 1750 |
| | 3.47-4.64 | 3500 | 2900 | 2500 | 3500 | 2000 | 3500 | 2000 | 3500 | 2000 | 3500 | 1750 | 2900 | 1750 | 2500 | 1500 | 2500 | 1500 | 2500 |
| | 4.85-6.2 | | 3500 | 2900 | | 2900 | 3500 | 2900 | 3500 | 2500 | 3500 | 2000 | 3500 | 2000 | 2900 | 2900 | 2000 | 2500 | |
| RXP2 | 4.44-5.72 | 2900 | 2500 | 2500 | 3500 | 2000 | 2900 | 2000 | 2900 | 1750 | 2500 | 1500 | 2500 | 1500 | 2500 | 1250 | 2000 | | |
| | 6-8.5 | | | | | 2500 | 3500 | 2500 | 3500 | 2000 | 2900 | 1750 | 2900 | 1750 | 2900 | 1500 | 2500 | 1500 | 2500 |
| | 9-11.8 | | | | | 2500 | 3500 | 2500 | 3500 | 2500 | 3500 | 2000 | 3500 | 2000 | 2900 | 1750 | 2900 | | |
| | 12-16.6 | 3500 | 2900 | 2900 | | 3500 | | 3500 | | 3500 | | 2900 | 3500 | 2500 | 3500 | 2500 | 2000 | 2500 | |
| | 17-26 | | | | | 3500 | 3500 | 3500 | 3500 | 2900 | 3500 | 2900 | 3500 | 2900 | 3500 | 2500 | 3500 | 2500 | 3500 |
| RXP3 | 7.3-23.4 | 2900 | 2700 | 2400 | 3500 | 2200 | 3500 | 1800 | 3500 | 1600 | 3000 | 1500 | 2500 | 1350 | 2500 | 1200 | 2000 | | |
| | $i > 23.5$ | 3500 | 3500 | 2900 | | 2900 | | 3500 | | 2900 | 3500 | 2500 | 3500 | 2500 | 3500 | 2100 | 2900 | 2000 | 2900 |
| RXP4 | $i > 110$ | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 2900 | 3500 | 2900 | 3500 | 2900 | 3500 | | |

| | in | 820 | | 822 | | 824 | | 826 | | 828 | | 830 | | 832 | |
|------|------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|------------|----------------|
| | | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. | splash oil | forced lubric. |
| RXP1 | 1.11-1.48 | 600 | 1250 | 500 | 1000 | * | | | | | | | | | |
| | 1.5-2.16 | 800 | 1500 | 600 | 1500 | | | | | | | | | | |
| | 2.28-3.23 | 1000 | 2000 | 800 | 1750 | | | | | | | | | | |
| | 3.47-4.64 | 1250 | 2500 | 1000 | 1500 | | | | | | | | | | |
| | 4.85-6.2 | 1750 | | 1500 | 1500 | | | | | | | | | | |
| RXP2 | 4.44-5.72 | 1000 | 1750 | 800 | 1500 | 800 | 1500 | * | | * | | | | | |
| | 6-8.5 | 1500 | 2000 | 1000 | 2000 | 1000 | 2000 | | | | | | | | |
| | 9-11.8 | | 2500 | 1000 | 2000 | 1000 | 2000 | | | | | | | | |
| | 12-16.6 | 2000 | 1500 | 2900 | 1500 | 2500 | | | | | | | | | |
| | 17-26 | | 2000 | 2900 | 1750 | 2500 | | | | | | | | | |
| RXP3 | 7.3-23.4 | 1050 | 2000 | 950 | 1750 | 850 | 1500 | 700 | 1200 | * | | * | | * | |
| | $i > 23.5$ | 1750 | 2900 | 1750 | 2500 | 1450 | 2200 | 1250 | 1750 | | | | | | |
| RXP4 | $i > 110$ | 2500 | 3500 | 2500 | 3500 | 2500 | 3500 | 2000 | 2900 | * | | * | | * | |

* Valori su richiesta / * Ratings supplied on request / * Wertangaben auf Anfrage

6) Verifica Posizione di montaggio

7) Adeguatezza della potenza termica del riduttore:

Nel caso di solo riduttore in servizio continuo o intermittente gravoso in ambienti a temperatura elevata e/o con difficoltà di scambio termico (es. acciaierie) è necessario verificare che la potenza termica nominale corretta dai fattori sia superiore alla potenza assorbita come evidenziato nella seguente equazione:

6) Check mounting position

7) Ensure gear unit thermal power is suitable for the application:

If a gear unit is to be used in continuous or intermittent duty in environments where high temperatures and/or poor heat exchange are encountered (such as steelworks), check to ensure the thermal power obtained after application of the relevant correction factors is greater than absorbed power, i.e. that the following condition is verified:

6) Prüfen der Einbaulage

7) Angemessene thermische Grenzleistung des Getriebes:

Wird ein einziges Getriebe im Dauerbetrieb oder harten Schaltbetrieb in einer Umgebung mit hohen Temperaturen und/oder einem schwierigem Wärmeaustausch (z.B. Stahlwerke) eingesetzt, muss geprüft werden, dass die thermische, von den jeweiligen Faktoren korrigierte Nenngrenzleistung über der Aufnahmeleistung liegt, wie es in der folgenden Gleichung dargestellt wird:

$$P_1 \leq P_{IN} \cdot fm \cdot fa \cdot fd \cdot fp \cdot ff \quad [kW]$$

Dove:

P_{IN} = potenza termica nominale
 fm = fattore correttivo per la posizione di montaggio
 fa = fattore correttivo dell'altitudine
 fd = fattore correttivo del tempo di lavoro
 fp = fattore correttivo della temperatura ambiente
 ff = fattore correttivo di aerazione con ventola

Qualora tale condizione non sia verificata occorre sostituire la ventola con un gruppo di raffreddamento con scambiatore di calore. Per selezionare il gruppo di raffreddamento adeguato occorre determinare la P_{ta} necessaria:

Where:

P_{ta} = thermal power rating
 fm = mounting position factor
 fa = altitude factor
 fd = operation time factor
 fp = ambient temperature factor
 ff = fan cooling factor

If this condition is not verified, opt for a heat exchanger instead of fan cooling. To select a suitable cooling unit, you need to determine required P_{ta} :

Hier ist:

P_{ta} = termische Nenngrenzleistung
 fm = Korrekturfaktor für Einbaulage
 fa = Höhenkorrekturwert
 fd = Korrekturfaktor der Arbeitszeit
 fp = Korrekturfaktor der Umgebungstemperatur
 ff = Korrekturfaktor der Belüftung durch Lüfter

Sollte diese Bedingung nicht gegeben sein, muss der Lüfter durch ein Kühlaggregat mit Wärmeaustauscher ersetzt werden. Vor der Wahl des angemessenen Kühlaggregats muss zunächst die erforderliche P_{ta} bestimmt werden:

$$P_{ta} \leq P_1 - (P_{IN} \cdot fm \cdot fa \cdot fd \cdot fp) \quad [kW]$$

dove:

P_{ta} = potenza termica addizionale

Dopo avere selezionato il gruppo di raffreddamento, ripetere la verifica aggiungendo alla precedente il valore massimo di $P_{ta\max}$ del range identificato espresso in tabella, adeguato con i coefficienti correttivi di temperatura acqua e aria:

Where:

P_{ta} = additional thermal power required

After selecting the cooling unit, check that the following condition is satisfied; as you can see, it considers the upper limit value $P_{ta\max}$ of the resulting tabulated range adjusted using the water and air temperature correction factors:

Hier ist:

P_{ta} = termische Zusatzgrenzleistung

Nach erfolgter Wahl der Kühlgruppe, die Kontrolle wiederholen und dabei dem vorausgehenden Wert den max. Wert des $P_{ta\max}$ des in der Tabelle angegebenen Bereichs zurechnen und durch die Korrekturkoeffizienten der Wasser- und Lufttemperatur anpassen:

$$P_1 \leq (P_{IN} \cdot fm \cdot fa \cdot fd \cdot fp) + (P_{ta\max} \cdot fw \cdot fc) \quad [kW]$$

dove:

$P_{ta\max}$ = potenza termica addizionale del range identificato espresso in tabella
 fw = coefficiente relativo alla temperatura dell'acqua (esclude fc)
 fc = coefficiente relativo alla temperatura dell'aria (esclude fw)

La P_{IN} è riferita ad un ambiente industriale aperto; nel caso di ambienti confinati scarsamente aerati consultarci.

Where:

$P_{ta\max}$ = additional thermal power required obtained from resulting tabulated range
 fw = water temperature factor (excludes fc)
 fc = air temperature factor (excludes fw)

P_{IN} refers to an open space industrial environment; in the event of a confined space environment with poor ventilation, please contact the factory.

Hier ist:

$P_{ta\max}$ = termische Zusatzgrenzleistung des identifizierten, in der Tabelle angegebenen Bereichs
 fw = Koeffizient bezüglich der Wassertemperatur (schließt fc aus)
 fc = Koeffizient bezüglich der Lufttemperatur (schließt fw aus)

Die P_{IN} bezieht sich immer auf einen Einsatz im industriellen offenen Umfeld; sollten Umgebungen mit geringer Belüftung daran angrenzen, bitten wir Sie, sich mit uns in Verbindung zu setzen.

P_{tN}

| | | | | | | | | | | | | | | | | |
|-------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 802 | 804 | 806 | 808 | 810 | 812 | 814 | 816 | 818 | 820 | 822 | 824 | 826 | 828 | 830 | 832 |
| RXP1 | 49 | 62 | 82 | 104 | 127 | 160 | 195 | 240 | 304 | 373 | 445 | 553 | — | — | — | — |
| RXP2 | 30 | 39 | 51 | 66 | 82 | 104 | 127 | 160 | 195 | 252 | 304 | 373 | 445 | 553 | — | — |
| RXP3 | 24 | 30 | 40 | 52 | 65 | 82 | 102 | 127 | 165 | 205 | 248 | 306 | 368 | 445 | 553 | 665 |
| RXP4 | 17 | 21 | 27 | 34 | 43 | 53 | 68 | 84 | 101 | 127 | 156 | 195 | 236 | 289 | 365 | 440 |

fm

fm.: fattore correttivo per la posizione di montaggio, velocità e rapporto.
(fm =1 nel caso in cui n₁ richiede la lubrificazione forzata)
(fm =1 nel caso in cui n₁= 0-749 min⁻¹)

fm.: correction factor accounting for mounting position, speed and ratio.
(fm =1 if n₁ requires forced lubrication)
(fm =1 if n₁= 0-749 rpm)

fm.: Korrekturfaktor für Einbaulage, Drehzahl und Übersetzungsverhältnis.
(fm =1 falls n₁ eine Zwangsschmierung erfordert)
(fm =1 bei n₁= 0-749 min⁻¹)

| size | | i | M1-M2-M6 | M3-M5 | | | M4 | | |
|-------------|----------------|-----------|---------------------|----------|-----------|------------------------|----------|-----------|------------------------|
| | | | n ₁ | | | | | | |
| | | | 0-n _{1max} | 750-1250 | 1251-1750 | 1751-n _{1max} | 750-1250 | 1251-1750 | 1751-n _{1max} |
| RXP1 | 802-806 | 1.11-6.18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 808-814 | 1.13-2.08 | | 0.9 | 0.8 | 0.65 | 1 | 0.9 | 0.7 |
| | | 2.30-6.18 | | 0.95 | 0.85 | 0.7 | 1 | 1 | 0.8 |
| | 816-824 | 1.11-2.08 | | 0.7 | 0.65 | 0.5 | 0.9 | 0.8 | 0.65 |
| | | 2.30-6.00 | | 0.9 | 0.75 | 0.65 | 0.95 | 0.85 | 0.75 |

| size | | i | M1- M2 | M3-M6 | | | M4-M5 | | |
|-------------|----------------|-----------|---------------------|----------|-----------|------------------------|----------|-----------|------------------------|
| | | | n ₁ | | | | | | |
| | | | 0-n _{1max} | 750-1250 | 1251-1750 | 1751-n _{1max} | 750-1250 | 1251-1750 | 1751-n _{1max} |
| RXP2 | 802-806 | 4.46-21.9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 808-814 | 4.44-11.8 | | 0.95 | 0.85 | 0.7 | 0.85 | 0.75 | 0.6 |
| | | 12.0-21.7 | | 1 | 0.9 | 0.75 | 0.9 | 0.8 | 0.65 |
| | 816-820 | 4.44-11.6 | | 0.85 | 0.75 | 0.6 | 0.7 | 0.65 | 0.5 |
| | | 12.4-21.9 | | 0.9 | 0.8 | 0.65 | 0.75 | 0.7 | 0.55 |
| | 822-828 | 4.52-11.8 | | 0.75 | 0.7 | 0.55 | 0.7 | 0.6 | 0.5 |
| | 12.2-23.2 | 0.85 | 0.75 | 0.6 | 0.7 | 0.65 | 0.5 | | |

| size | | i | M1- M2 | M3-M6 | | | M4-M5 | | |
|-------------|----------------|-----------|---------------------|----------|-----------|------------------------|----------|-----------|------------------------|
| | | | n ₁ | | | | | | |
| | | | 0-n _{1max} | 750-1250 | 1251-1750 | 1751-n _{1max} | 750-1250 | 1251-1750 | 1751-n _{1max} |
| RXP3 | 802-806 | 19.3-142 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| | 808-814 | 19.3-41.7 | | 0.95 | 0.85 | 0.7 | 0.9 | 0.8 | 0.65 |
| | | 44.0-140 | | 1 | 1 | 0.8 | 1 | 0.9 | 0.75 |
| | 816-820 | 19.5-43.0 | | 0.9 | 0.8 | 0.65 | 0.85 | 0.75 | 0.6 |
| | | 46.4-142 | | 1 | 0.9 | 0.75 | 0.95 | 0.85 | 0.7 |
| | 822-832 | 19.3-43.0 | | 0.85 | 0.75 | 0.6 | 0.75 | 0.7 | 0.55 |
| | | 44.0-144 | | 0.95 | 0.85 | 0.7 | 0.9 | 0.8 | 0.65 |

N.B. I valori di n_{1max} sono riportati al punto 5 (Verifiche).

NOTE n_{1max} values are listed at point 5 (Verification)

HINWEIS: Die Werte n_{1max} werden unter Punkt 5 "Überprüfungen" angegeben.

fa

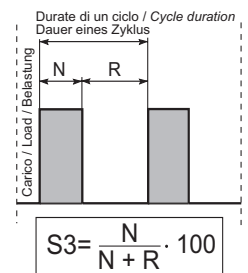
Fattore correttivo dell'altitudine
Altitude factor
Korrekturwert der Höhe

| | | | | | |
|-----------|---|------|------|------|------|
| m | 0 | 750 | 1500 | 2250 | 3000 |
| fa | 1 | 0.95 | 0.90 | 0.85 | 0.81 |

fd

Fattore correttivo del tempo di lavoro
Operation time factor
Korrekturwert der Betriebszeit

| | |
|-----|-----------|
| S3% | fd |
| 100 | 1 |
| 80 | 1.05 |
| 60 | 1.15 |
| 40 | 1.35 |
| 20 | 1.8 |



fp

Fattore correttivo della temperatura ambiente. *Ambient temperature factor.*

Korrekturfaktor der Umgebungstemperatur

| | | | | | | |
|---|-------|-------|-------|-------|-------|------|
| Temperatura ambiente <i>Ambient temperature</i> Umgebungstemperatur | 50 °C | 40 °C | 30 °C | 20 °C | 10 °C | 0 °C |
| fp | 0.63 | 0.75 | 0.87 | 1 | 1.12 | 1.25 |

ff

Il fattore correttivo ff della potenza termica che tiene conto dell'effetto refrigerante della ventola assume in accordo con le norme AGMA 6010.E88 i valori riportati nella tabella 8. L'impiego è limitato alle velocità maggiori o uguali a 700 min⁻¹.

Cooling fan factors ff reported in table 8 are in accordance with AGMA 6010.E88 and can be used directly to adjust thermal power to reflect the use of a cooling fan. These factors must only be used for speeds equal to 700 rpm and higher.

In Übereinstimmung mit den Normen AGMA 6010.E88 nimmt der Korrekturwert ff der thermischen Grenzleistung, der den Kühleffekt des Lüfters berücksichtigt, die in der Tabelle 8 angegebenen Werte an. Der Einsatz beschränkt sich auf die Drehzahlen die 700 min⁻¹ betragen oder darüber liegen.

| Tipo / Type / Typ | Tipo ventola / Fan type / Lüfertyp | Note / Notes / Hinweise | ff |
|--|------------------------------------|--|------|
| RXP1 | VE | — | 1.5 |
| | VS - VD | | |
| RXP2 RXP3 | VE | — | 1.25 |
| | V | — | 1.5 |
| | 2V | — | 1.75 |
| | VS - VD | Lato motore / <i>Motor side</i> / Motorseite | 1.25 |
| Lato opposto motore / <i>Opposite site</i> / Dem Motor gegenüberliegende Seite | | 1.5 | |

Pta [kW]

Potenza termica addizionale

Additional thermal power

Thermische Zusatzgrenzleistung

| Raffreddamento con scambiatore acqua-olio (Tacqua=15°C) <i>Cooling by water-oil exchanger (Twater=15°C)</i> Kühlung durch Wasser-/Öltaustauscher (TWasser=15°C) | | | |
|---|-------------|------------|-----------|
| Gruppo Size | RXP1 | RXP2 | RXP3 |
| 1 | ≤ 134 | ≤ 68 | ≤ 45 |
| 2 | 135 ÷ 233 | 69 ÷ 116 | 46 ÷ 78 |
| 3 | 234 ÷ 349 | 117 ÷ 175 | 79 ÷ 116 |
| 4 | 350 ÷ 1065 | 176 ÷ 532 | 117 ÷ 355 |
| 5 | 1066 ÷ 2041 | 533 ÷ 1021 | 366 ÷ 680 |

| Raffreddamento con scambiatore aria-olio (Taria=20°C) <i>Cooling by air-oil exchanger (Tair=20°C)</i> Kühlung durch Luft-/Öltaustauscher (TLuft=20°C) | | | |
|---|-------------|------------|-----------|
| Gruppo Size | RXP1 | RXP2 | RXP3 |
| 1 | ≤ 225 | ≤ 113 | ≤ 75 |
| 2 | 226 ÷ 423 | 114 ÷ 212 | 76 ÷ 140 |
| 3 | 424 ÷ 894 | 213 ÷ 445 | 141 ÷ 298 |
| 4 | 895 ÷ 1157 | 446 ÷ 578 | 299 ÷ 386 |
| 5 | 1158 ÷ 2041 | 579 ÷ 1021 | 387 ÷ 680 |

fw

Coefficiente relativo alla temperatura dell'acqua
Water temperature factor
Koeffizient bezüglich der Wassertemperatur

| | | | | |
|-----------|------|-------|-------|-------|
| Twater | 15°C | 20° C | 25° C | 30° C |
| fw | 1 | 0.85 | 0.7 | 0.6 |

fc

Coefficiente relativo alla temperatura dell'aria
Air temperature factor
Koeffizient bezüglich der Lufttemperatur

| | | | | | | |
|-----------|-------|-------|-------|-------|-------|-------|
| Tair | 15° C | 20° C | 25° C | 30° C | 35° C | 40° C |
| fc | 1.12 | 1 | 0.88 | 0.75 | 0.65 | 0.5 |

8) Compatibilità esecuzione grafica e forma costruttiva.

A seguito alcune tabelle che riassumono la compatibilità tra esecuzione grafica, estremità di entrata ed uscita, ventola e antiretro.

8) Ensure that shaft arrangement and design configuration are compatible.

The following table provides an overview of available options in terms of shaft arrangements, input and output configurations, fan and backstop, and their compatibility.

8) Kompatibilität der grafischen Ausführung und der Bauform.

In Folge werden die Kompatibilitäten zwischen grafischer Ausführung, Ende der Antriebs- und Abtriebswelle, Lüfter und Rücklaufsperr in einer Tabelle zusammengefasst.

| | | USCITA / OUTPUT / ABTRIEB | | | | | | | | | | ENTRATA / INPUT / ANTRIEB | | | |
|---|----------|--|--|---|---|--|---|--|--|--|---|---|--|---------|--|
| | | STANDARD | | | | | | BISPORGENTE DOUBLE EXTENDED BEIDSEITIG HERVORSTEHEND | | | | STANDARD | BISPORGENTE DOUBLE EXTENDED BEIDSEITIG HERVORSTEHEND | | |
| | | Albero pieno Solid shaft Vollwelle | Albero dentato Splined shaft Zahnwelle | Flangia brocciata Broached flange Geräumter Flansch | Flangia dentata Splined flange Verzahrter Flansch | Albero cavo Hollow shaft Hohlwelle | Albero calettatore Shrink disc shaft Aufschrumpfscheibenwelle | | Albero pieno Solid shaft Vollwelle | Albero dentato Splined shaft Zahnwelle | Flangia brocciata Broached flange Geräumter Flansch | Flangia dentata Splined flange Verzahrter Flansch | ECE/PAM | ECE/PAM | |
| | | N | D | FD | Fn | C | UB | B | N | D | FD | Fn | | | |
| ESECUZIONE GRAFICA SHAFT ARRANGEMENT GRAFISCHE AUSFÜHRUNGEN | A-AS | | | | | | | | | | | | | | |
| | B-BS | | | | | | | | | | | | | | |
| | ABE | | | | | | | | | | | | | | |
| | BBE | | | | | | | | | | | | | | |
| | AUD | | | | | | | | | | | | | | |
| | ABU-ABUS | | | | | | | | | | | | | | |
| | BBU | | | | | | | | | | | | | | |
| | BEU | | | | | | | | | | | | | | |
| | C1 | | | | | | | | | | | | | | |
| | C2 | | | | | | | | | | | | | | |
| | C3 | | | | | | | | | | | | | | |
| | C1D | | | | | | | | | | | | | | |
| | C1S | | | | | | | | | | | | | | |
| | C2D | | | | | | | | | | | | | | |
| | C2S | | | | | | | | | | | | | | |
| | C3D | | | | | | | | | | | | | | |
| C3S | | | | | | | | | | | | | | | |

RXP1

| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: A - B | | | | |
|--|----|----------------------------------|----|-----|
| A = N e/and/und D B = FD e/and/und Fn | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | A+B | A | ECE |
| | VE | A+B | A | |
| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: AUD-BUS-ABU-BBU | | | | |
| A = N e/and/und D B = FD e/and/und Fn | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | | A | ECE |
| | VE | | A | |
| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: C1-C2 | | | | |
| | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | | | ECE |
| | VE | | | |
| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: C1D - C2S | | | | |
| | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | | | ECE |
| | VE | | | |
| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: C1S - C2D | | | | |
| | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | | | ECE |
| | VE | | | |

| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: ABE | | | | |
|--|----|----------------------------------|----|-----|
| A = N e/and/und D B = FD e/and/und Fn | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | | | ECE |
| | VD | A+B | | |
| | VS | | | |
| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: BBE | | | | |
| A = N e/and/und D B = FD e/and/und Fn | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | | | ECE |
| | VD | | | |
| | VS | A+B | | |
| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: C3 | | | | |
| | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | | | ECE |
| | VD | | | |
| | VS | | | |
| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: BEU - C1D - C3S | | | | |
| | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | | | ECE |
| | VD | | | |
| | VE | | | |

RXP2

| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: A - B - AUD - BUS - ABU BBU - C1 - C2 - C1D - C1S - C2D - C2S | | | | |
|---|----|----------------------------------|----|-----|
| A = N e/and/und D B = FD e/and/und Fn | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | | | ECE |
| | VE | | | |
| | V | | | |
| | 2V | | | |
| | — | | | PAM |
| | V | | | |

| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: ABE - BBE - BEU - C3 - C3D - C3S | | | | |
|---|----|----------------------------------|---------|---------|
| A = N e/and/und D B = FD e/and/und Fn | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE | — | | | ECE |
| | VS | | | |
| | VD | | | |
| | 2V | | | |
| | — | | | ECE-PAM |
| | VS | | | |
| — | | | PAM-ECE | |
| VD | | | | |

RXP3

| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: A - B - AUD - BUS - ABU BBU - C1 - C2 - C1D - C1S - C2D - C2S | | | | |
|---|----|----------------------------------|----|-----|
| A = N e/and/und D B = FD e/and/und Fn | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE FANS LÜFTERRÄDER | — | | | ECE |
| | VE | | | |
| | V | | | |
| | 2V | | | |
| | — | | | PAM |
| | V | | | |

| ESECUZIONI GRAFICHE / SHAFT ARRANGEMENTS GRAFISCHE AUSFÜHRUNGEN: ABE - BBE - BEU C3D - C3S | | | | |
|---|----|----------------------------------|---------|---------|
| A = N e/and/und D B = FD e/and/und Fn | | Antiretro/Backstop/Rücklaufsperr | | |
| | | — | AR | |
| VENTOLE | — | | | ECE |
| | VS | | | |
| | VD | | | |
| | 2V | | | |
| | — | | | ECE-PAM |
| | VS | | | |
| — | | | PAM-ECE | |
| VD | | | | |

1.5 Designazione

1.5 Designation

1.5 Bezeichnung

| | [1*] | [2*] | [3*] | [4*] | [5*] | [6*] | [7*] | [8*] | [9*] | [10*] | [11*] | [12*] | [13*] |
|------------------------------|---|--|---------------------------------|--|-----------|--|--|---|--|--|--|--------------------------------|-----------|
| RX | P | 2 | 802 | ABU | 10 | ECE | V | AR | — | N | M1 | | ES |
| Macchina Range Version | Posizione assi Centreline orientation Achsenposition | N° stadi No. of Reductions Stufen | Grandezza Size Baugröße | Esecuzione grafica Shaft arrangement Grafische Ausführung | ir | Estremità entrata Input configuration Wellenende - Antrieb | Ventole raffreddamento Cooling fans Lüfterräder | Antiretro Backstop Rücklaufsperre | Materiale carcassa Casing material Gehäusematerial | Estremità uscita Output configuration Wellenende - Abtrieb | Posizione di montaggio Mounting position Einbaulage | Opzioni Options Optionen | |
| RX | P | 1 2 3 4 | 802 ... 832 | A-B-ABE-BB E-AUD-BUS ABU-BBU-BEU C1-C2-C3 C1D-C1S C2D-C2S C3D-C3S | | ECE PAM.. PAM..G PAM..D PAM../ECE ECE/PAM.. ECES PAM..S | V* VE 2V* VD VS | ARB ARN | — A GS | N C CD UB B FD Fn D | M1 M2 M3 M4 M5 M6 | | |

* Non disponibili per RXP1 / Not available on RXP1 / Für RXP1 nicht verfügbar

Designazione motore elettrico

Electric motor designation

Bezeichnung des Elektromotors

Se è richiesto un motoriduttore completo di motore è necessario riportare la designazione di quest'ultimo.
A tale proposito consultare il ns. catalogo dei motori elettrici Electronic Line.

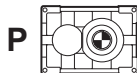
For applications requiring a gearmotor, motor designation must be specified.
To this end, please refer to our Electronic Line electric motor catalogue.

Wird ein Getriebemotor komplett mit Elektromotor angefordert, müssen dessen Daten angegeben werden.
Diesbezüglich verweisen wir auf unseren Katalog der Elektromotoren "Electronic Line".

[*1] Posizione assi

[*1] Centreline orientation

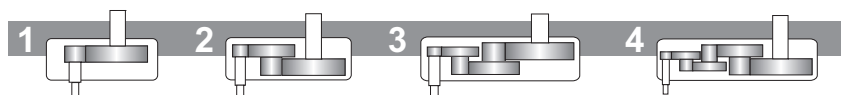
[*1] Achsenposition



[*2] N° stadi

[*2] No. of Reductions

[*2] Anzahl der Stufen



[*4] Esecuzione grafica

[*4] Shaft arrangement

[*4] Grafische Ausführung

(vedi pag. dimensionali)

(please refer to dimension pages)

(siehe Seite mit Maßangaben)

[*5] Rapporto di riduzione ir

[*5] Reduction ratio ir

[*5] Übersetzungsverhältnis ir

(Vedi prestazioni). Tutti i valori dei rapporti sono approssimati. Per applicazioni dove necessita il valore esatto consultare il ns. servizio tecnico.

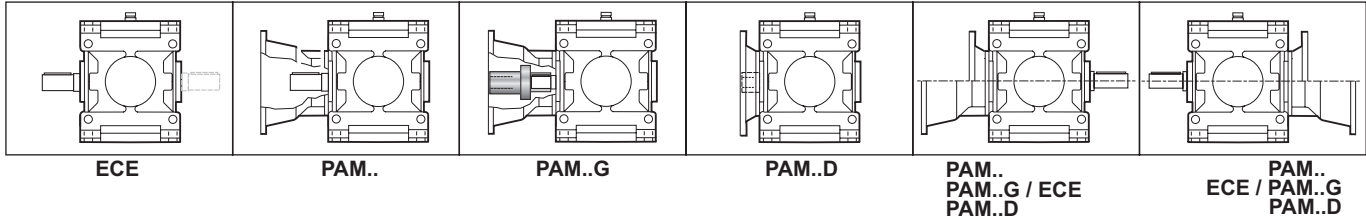
(See ratings). Ratios are approximate values. If you need exact values for a specific application, please contact our Engineering.

(Siehe "Leistungen"). Bei allen Werten der Übersetzungen handelt es sich um approximative Wertangaben. Bei Applikationen, bei denen die exakte Wertangabe erforderlich ist, muss unser Technischer Kundendienst konsultiert werden.

[*6] Estremità entrata

[*6] Input configuration

[*6] Wellenende - Antrieb



| | RXP1 | RXP2 RXP3 | | | |
|------------------|------|--------------|--|---|---|
| ECE | | | Entrata con albero pieno | <i>Solid input shaft</i> | Antrieb mit Vollwelle |
| ECES | | | Entrata con estremità speciale (disponibile a richiesta) | <i>Special input shaft end (available on request)</i> | Antrieb mit speziellem Wellenende (auf Anfrage erhältlich) |
| PAM.. | | | Con campana senza giunto | <i>Motor bell without coupling</i> | mit Glocke ohne Kupplung |
| PAM../ECE | | | Con campana senza giunto (o PAM..G o PAM..D) + albero pieno a dx | <i>Motor bell without coupling (PAM..G or PAM..D) + solid shaft on right side</i> | mit Glocke ohne Kupplung (oder PAM..G oder PAM..D) + Vollwelle re |
| ECE/PAM.. | | | Con campana senza giunto (o PAM..G o PAM..D) + albero pieno a sx | <i>Motor bell without coupling (PAM..G or PAM..D) + solid shaft on left side</i> | mit Glocke ohne Kupplung (oder PAM..G oder PAM..D) + Vollwelle li |
| PAM..G | | | Con campana e giunto | <i>Motor bell and coupling</i> | mit Glocke und Kupplung |
| PAM..D | | | Accoppiamento diretto | <i>Direct coupling</i> | direkte Passung |
| PAM..S | | | Accoppiamento speciale (disponibile a richiesta) | <i>Special coupling (available on request)</i> | Spezialpassung (auf Anfrage erhältlich) |

[*7] Ventole di raffreddamento

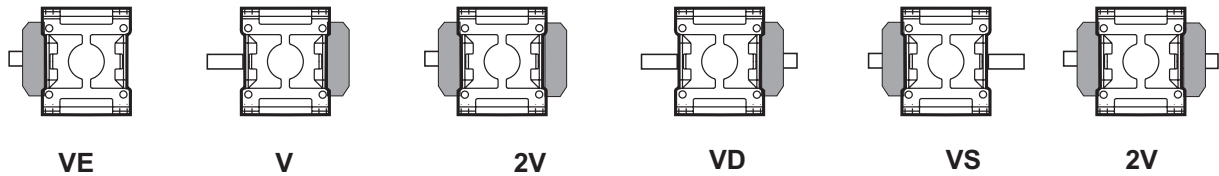
[*7] Cooling fans

[*7] Kühllüfterräder

(Fare riferimento al capitolo accessori G)

(Please refer to accessories chapter G)

(Siehe Kapitel "Zubehör" G)



[*8] Antiretro

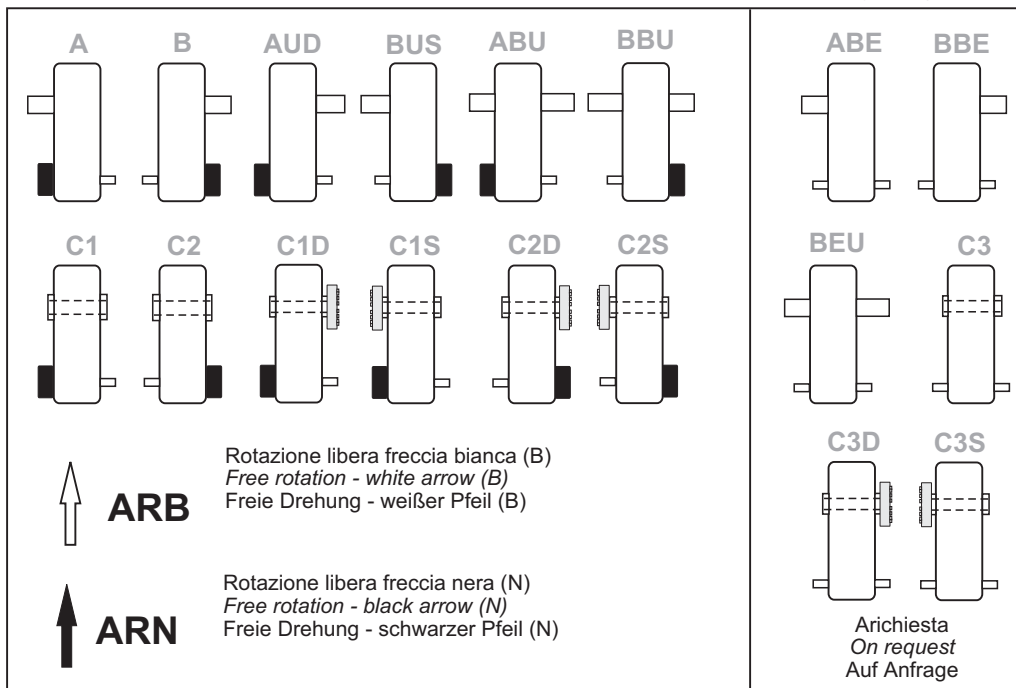
[*8] Backstop

[*8] Rücklaufperre

Indicare nella richiesta il senso di rotazione libero necessario riferendosi all'albero lento (freccia nera e bianca, vedere esecuzioni grafiche nelle pagine dimensionali).

Specify the required direction of free rotation as viewed from output shaft end (black and white arrow, see shaft arrangements in dimension pages).

In der Anfrage muss unter Bezugnahme auf die Antriebswelle die erforderliche Richtung der freien Drehung angegeben werden (schwarzer und weißer Pfeil, siehe grafische Ausführungen auf den Seiten mit Maßangaben).



[*9] Materiale carcassa

[*9] Housing material

[*9] Gehäusematerial

| Materiale carcassa Housing material Gehäusematerial | | 802 | 804 | 806 | 808 | 810 | 812 | 814 | 816 | 818 | 820 | 822 | 824 | 826 | 828 | 830 | 832 |
|---|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Acciaio Steel Stahl | A | | | | | | | | | | | | | * | * | ** | ** |
| Ghisa sferoidale Spheroidal cast iron Sphäroguss | GS | | | | | | | | | | | | | | | | |
| Ghisa meccanica Engineering cast iron Maschinenguss | — | | | | | | | | | | | | | | | | |

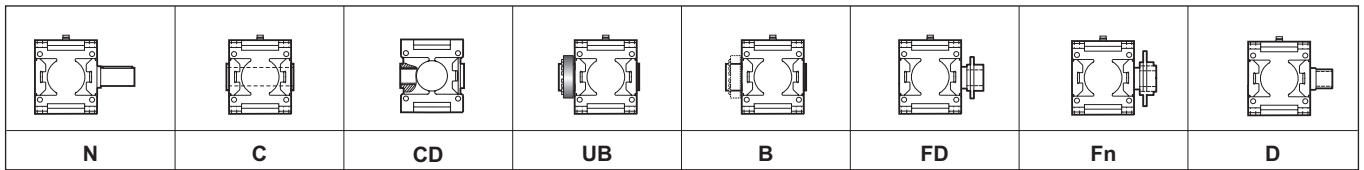
* Non disponibile per RXP1 / Not available on RXP1 / Für RXP1 nicht verfügbar

** Non disponibile per RXP1 ed RXP2 / Not available on RXP1 and RXP2 / Für RXP1 und RXP2 nicht verfügbar

[*10] Estremità uscita

[*10] Output Configuration

[*10] Wellenende - Abtrieb



Per ulteriori informazioni vedere la sezione "Estremità entrata, uscita" (F).

Please read Section "Input and Output Configurations" (F) for more details.

Weitere Informationen finden Sie im Abschnitt "Enden der Eingangs-Ausgangswellen" (F).

Altre opzioni uscita a richiesta / Other output options available on request / Weitere, auf Anfrage erhältliche Abtriebsoptionen

| US | uscita speciale | Special output | Spezialabtrieb |
|--|--|--|--|
| FNd FCd FBd FUd | flangia in uscita a dx | Output flange on right | Flansch am Abtrieb re |
| FNs FCs FBs FUs | flangia in uscita a sx | Output flange on left side | Flansch am Abtrieb li |
| 2FN 2FC | doppia flangia in uscita | Double output flange | doppelter Flansch am Abtrieb |
| MX | supportazione rinforzata in uscita per agitatori | Heavy duty output bearing for agitator applications | verstärkte Lagerung am Abtrieb für Mischwerke |
| TR | supportazione rinforzata in uscita x torri di raffreddamento | Heavy duty output bearing for cooling tower applications | verstärkte Lagerung am Abtrieb für Kühltürme |
| TS | supportazione rinforzata in uscita speciale | Special heavy duty output bearing | verstärkte Speziallagerung am Abtrieb |
| SND * | supportazione flangiata in uscita a dx con albero pieno | Flange bearing on the right at output end with solid shaft | geflanschte Lagerung am Abtrieb re mit Vollwelle |
| SNS * | supportazione flangiata in uscita a sx con albero pieno | Flange bearing on the left at output end with solid shaft | geflanschte Lagerung am Abtrieb li mit Vollwelle |
| SCD * | supportazione flangiata in uscita a dx con albero cavo | Flange bearing on the right at output end with hollow shaft | geflanschte Lagerung am Abtrieb re mit Hohlwelle |
| SCS * | supportazione flangiata in uscita a sx con albero cavo | Flange bearing on the left at output end with hollow shaft | geflanschte Lagerung am Abtrieb li mit Hohlwelle |
| SUD * | supportazione flangiata in uscita con calettatore | Flange bearing at output end with shrink disc | geflanschte Lagerung am Abtrieb mit Schrumpfscheibe |
| SUS * | supportazione flangiata in uscita con albero predisposto x calettatore | Flange bearing at output end with shaft incorporating provisions for shrink disc | geflanschte Lagerung am Abtrieb mit für Schrumpfscheibe ausgelegter Welle |
| SBD | supportazione flangiata in uscita a destra con albero cavo e predisposto per calettatore | Flange bearing on the right at output end with hollow shaft and provisions for shrink disc | geflanschte Lagerung am Abtrieb re mit Hohlwelle und Auslegung für Schrumpfscheibe |
| SBS | supportazione flangiata in uscita a sinistra con albero cavo e predisposto per calettatore | Flange bearing on the left at output end with hollow shaft and provisions for shrink disc | geflanschte Lagerung g am Abtrieb li mit Hohlwelle und Auslegung für Schrumpfscheibe |
| nU | riduttore con più alberi uscita | Gear unit with several output shafts | Getriebe mit mehreren Abtriebswellen |

* solo per RXP2 - RXP3 / Only available on RXP2 - RXP3 / nur für RXP2 - RXP3

Per ulteriori informazioni vedere la sezione "Accessori e opzioni"(G).

Please read Section "Accessories and Options" for more details. (G).

Weitere Informationen finden Sie im Abschnitt "Zubehör und Optionen" (G).

[*11] Posizioni di montaggio

[*11] Mounting positions

[*11] Einbaulagen

(vedi pag. A17)

(see page A17)

(siehe Seite A17)

[*12] Opzioni disponibili

[*12] Available options

[*12] Verfügbare Optionen

(vedi pag. G1)

(see page G1)

(siehe Seite G1)

[*13] Estremità supplementare

[*13] Additional Shaft Extension

[*13] Zusätzliches Wellenende

(vedi pag.

(see page G17)

(siehe Seite G17)

1.6 Lubrificazione

Gli oli disponibili appartengono generalmente a tre grandi famiglie:

- 1) Oli minerali
- 2) Oli sintetici Poli-Alfa-Olefine
- 3) Oli sintetici Poli-Glicole

La scelta più appropriata è generalmente legata alle condizioni di impiego. riduttori non particolarmente caricati e con un ciclo di impiego discontinuo, senza escursioni termiche importanti, possono certamente essere lubrificati con olio minerale.

Nei casi di impiego gravoso, quando i riduttori saranno prevedibilmente caricati molto ed in modo continuativo, con conseguente prevedibile innalzamento della temperatura, è bene utilizzare lubrificanti sintetici tipo polialfaolefine (PAO).

Gli oli di tipo poliglicole (PG) sono da utilizzare strettamente nel caso di applicazioni con forti strisciamenti fra i contatti, ad esempio nelle viti senza fine. Debbono essere impiegati con grande attenzione poiché non sono compatibili con gli altri oli e sono invece completamente miscibili con l'acqua. Questo fenomeno è particolarmente pericoloso poiché non si nota, ma deprime velocemente le caratteristiche lubrificanti dell'olio.

Oltre a questi già menzionati, ricordiamo che esistono gli oli per l'industria alimentare. Questi trovano specifico impiego nell'industria alimentare in quanto sono prodotti speciali non nocivi alla salute. Vari produttori forniscono oli appartenenti a tutte le famiglie con caratteristiche molto simili. Più avanti proponiamo una tabella comparativa.

1.6 Lubrication

Available oils are typically grouped into three major classes:

- 1) Mineral oils
- 2) Poly-Alpha-Olefin synthetic oils
- 3) Polyglycol synthetic oils

Oil is normally selected in accordance with environmental and operating conditions. Mineral oil is the appropriate choice for moderate load, non-continuous duty applications free from temperature extremes.

In severe applications, where gear units are to operate under heavy loads in continuous duty and high temperatures are expected, synthetic Poly-Alpha-Olefin oils (PAO) are the preferred choice.

Polyglycol oils (PG) should only be used in applications involving high sliding friction, as is the case with worm shafts. These particular oils should be used with great care, as they are not compatible with other oils, but are totally mixable with water. The oil mixed with water cannot be told from uncontaminated oil, but will degrade very rapidly.

In addition to the oils mentioned above, there are food-grade oils. These are special oils harmless to human health for use in the food industry. Oils with similar characteristics are available from a number of manufacturers. A comparative overview table is provided at the next pages.

1.6 Schmierung

Die verfügbaren Öle gehören im Allgemeinen drei großen Familien an:

- 1) Mineralöle
- 2) Polyalphaolefine-Synthetiköle
- 3) Polyglykol-Synthetiköle

Die angemessene Wahl ist im Allgemeinen an die Einsatzbedingungen gebunden. Getriebe, die keinen besonders schweren Belastungen ausgesetzt sind und einem unregelmäßigen Einsatzzyklus unterliegen, ohne starke thermische Ausschläge, können problemlos mit Mineralöl geschmiert werden.

Bei einem Einsatz unter harten Bedingungen, d.h. wenn die Getriebe stark und andauernd belastet werden, woraus sich ein sicherer Temperaturanstieg ergibt, sollten Synthetiköle, Typ Polyalphaolefine (PAO), verwendet werden.

Die Öle, Typ Polyglykole (PG), sind ausschließlich für einen Einsatz ausgelegt, bei denen es zu starken Reibungen zwischen den in Kontakt stehenden Elementen kommt, z.B. bei Schnecken. Bei ihrem Einsatz in besondere Aufmerksamkeit erforderlich, da sie nicht mit anderen Ölen kompatibel sind, sich jedoch vollständig mit Wasser vermischen lassen. Diese Tatsache erweist sich daher als besonders gefährlich, da sie sich nicht feststellen lässt, jedoch die Schmiereigenschaften des Öls bereits nach kurzer Zeit unterdrückt.

Über die bereits genannten Öle hinaus, gibt es auch Öle, die speziell für die Lebensmittelindustrie ausgelegt sind. Diese finden demzufolge dort ihren Einsatz, da es sich dabei um spezielle Produkte handelt, die für die Gesundheit unschädlich sind. Die den jeweiligen Familien angehörigen Ölarten werden von verschiedenen Herstellern angeboten; sie weisen jeweils sehr ähnliche Eigenschaften auf. Auf der folgenden Seite finden Sie eine entsprechende Vergleichstabelle.

| Input speed n_1 (min ⁻¹) | Absorbed power (kW) | Lubrication system | Viscosity ISO VG at 40° (cSt) | |
|---|------------------------|-------------------------|-------------------------------|----------|
| | | | $i \leq 10$ | $i > 10$ |
| $2000 < n_1 \leq 5000$ | $P < 7.5$ | Forced or Oil splash | 68 | 68 |
| | $7.5 \leq P \leq 22$ | | 68 | 150 |
| | $P > 22$ | | 150 | 220 |
| $1000 < n_1 \leq 2000$ | $P < 7.5$ | Forced or Oil splash | 68 | 150 |
| | $7.5 \leq P \leq 37$ | | 150 | 220 |
| | $P > 37$ | | 220 | 320 |
| $300 < n_1 \leq 1000$ | $P < 15$ | Forced Oil splash | 68 | 150 |
| | | | 150 | 220 |
| | $15 \leq P \leq 55$ | Forced Oil splash | 150 | 220 |
| | | | 220 | 320 |
| | $P > 55$ | Forced Oil splash | 220 | 320 |
| | | | 320 | 460 |
| $50 < n_1 \leq 300$ | $P < 22$ | Forced Oil splash | 150 | 220 |
| | | | 220 | 320 |
| | $22 \leq P \leq 75$ | Forced Oil splash | 220 | 320 |
| | | | 320 | 460 |
| | $P > 75$ | Forced Oil splash | 320 | 460 |
| | | | 460 | 680 |

Frequenza cambi olio [h]
Oil change intervals [h]
Frequenz - Ölwechsel [h]

| Tipo olio Oil type Öltyp | Temperatura olio Oil temperature Öltemperatur | | |
|---------------------------------------|---|-------|------|
| | 65°C | 80°C | 90°C |
| Minerale Mineral Mineralöl | 8000 | 3000 | 1000 |
| Sintetico Synthetic Synthetiköl | 20000 | 15000 | 9000 |

| Produttore Manufacturer Hersteller | Oli Minerali Mineral oils Mineralöle | | | Oli Sintetici Polialfaolefine (PAO) Poly-Alpha-Olefin synthetic oils (PAO) Polyalphaolefine- Synthetiköle (PAO) | | | Oli Sintetici Poliglicoli (PG) Polyglycol synthetic oils (PG) Polyglykol-Synthetiköle (PG) | | |
|--|--|---------------------|---------------------|---|--------------------------|--------------------------|--|----------------------|----------------------|
| | ISO VG | ISO VG | ISO VG | ISO VG | ISO VG | ISO VG | ISO VG | ISO VG | ISO VG |
| AGIP | Blasia 150 | Blasia 220 | Blasia 320 | - | Blasia SX 220 | Blasia SX 320 | Blasia S 150 | Blasia S 220 | Blasia S 320 |
| ARAL | Degol BG 150 Plus | Degol BG 220 Plus | Degol BG 320 Plus | Degol PAS 150 | Degol PAS 220 | Degol PAS 320 | Degol GS 150 | Degol GS 220 | Degol GS 320 |
| BP | Energol GR-XP 150 | Energol GR-XP 220 | Energol GR-XP 320 | Energol EPX 150 | Energol EPX 220 | Energol EPX 320 | Energol SG 150 | Energol SG-XP 220 | Energol SG-XP 320 |
| CASTROL | Alpha SP 150 | Alpha SP 220 | Alpha SP 320 | Alphasyn EP 150 | Alphasyn EP 220 | Alphasyn EP 320 | Alphasyn PG 150 | Alphasyn PG 220 | Alphasyn PG 320 |
| CHEVRON | Ultra Gear 150 | Ultra Gear 220 | Ultra Gear 320 | Tegra Synthetic Gear 150 | Tegra Synthetic Gear 220 | Tegra Synthetic Gear 320 | HiPerSYN 150 | HiPerSYN 220 | HiPerSYN 320 |
| ESSO | Spartan EP 150 | Spartan EP 220 | Spartan EP 320 | Spartan S EP 150 | Spartan S EP 220 | Spartan S EP 320 | Glycolube 150 | Glycolube 220 | Glycolube 320 |
| KLÜBER | Klüberoil GEM 1-150 | Klüberoil GEM 1-220 | Klüberoil GEM 1-320 | Klübersynth EG 4-150 | Klübersynth EG 4-220 | Klübersynth EG 4-320 | Klübersynth GH 6-150 | Klübersynth GH 6-220 | Klübersynth GH 6-320 |
| MOBIL | Mobilgear XMP 150 | Mobilgear XMP 220 | Mobilgear XMP 320 | Mobilgear SHC XMP 150 | Mobilgear SHC XMP 220 | Mobilgear SHC XMP 320 | Glygoyle 22 | Glygoyle 30 | Glygoyle HE320 |
| MOLIKOTE | L-0115 | L-0122 | L-0132 | L-1115 | L-1122 | L-1132 | - | - | - |
| OPTIMOL | Optigear BM 150 | Optigear BM 220 | Optigear BM 320 | Optigear Synthetic A 150 | Optigear Synthetic A 220 | Optigear Synthetic A 320 | Optiflex A 150 | Optiflex A 220 | Optiflex A 320 |
| Q8 | Goya 150 | Goya 220 | Goya 320 | El Greco 150 | El Greco 220 | El Greco 320 | Gade 150 | Gade 220 | Gade 320 |
| SHELL | OMALA S2 G 150 | OMALA S2 G 220 | OMALA S2 G 320 | Omala HD 150 | Omala HD 220 | Omala HD 320 | OMALA S4 WE 150 | OMALA S4 WE 220 | OMALA S4 WE 320 |
| TEXACO | Meropa 150 | Meropa 220 | Meropa 320 | Pinnacle EP 150 | Pinnacle EP 220 | Pinnacle EP 320 | - | Synlube CLP 220 | Synlube CLP 320 |
| TOTAL | Carter EP 150 | Carter EP 220 | Carter EP 320 | Carter SH 150 | Carter SH 220 | Carter SH 320 | Carter SY 150 | Carter SY 220 | Carter SY 320 |
| TRIBOL | 1100/150 | 1100/220 | 1100/320 | 1510/150 | 1510/220 | 1510/320 | 800\150 | 800\220 | 800\320 |

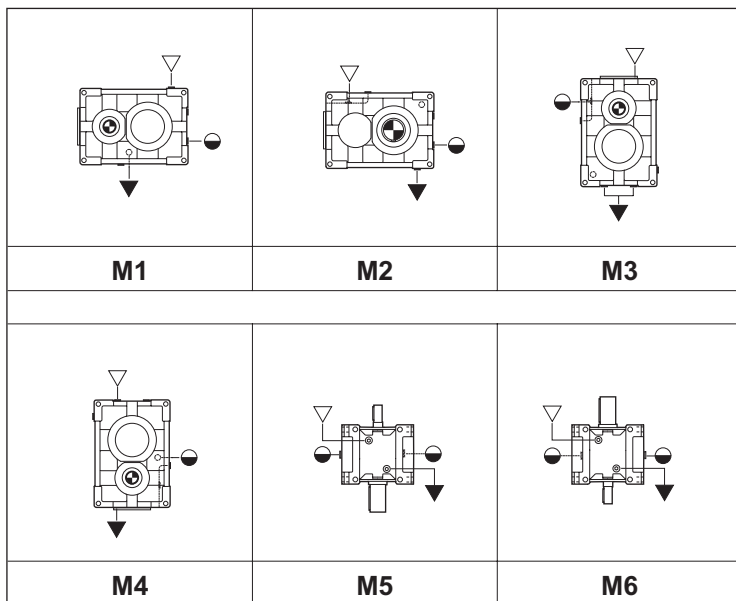
Lubrificanti sintetici per uso alimentare / Food-grade synthetic lubricants / Schmiermittel Synthetik für Lebensmittelbereich

| | | | | | | | | | |
|---------------|--|--|--|------------------------------|-----------------------|------------------------------|--|--|--|
| AGIP | | | | Rocol Foodlube Hi-Torque 150 | - | Rocol Foodlube Hi-Torque 320 | | | |
| ESSO | | | | - | Gear Oil FM 220 | - | | | |
| KLÜBER | | | | Klüberoil 4 UH1 N 150 | Klüberoil 4 UH1 N 220 | Klüberoil 4 UH1 N 320 | | | |
| MOBIL | | | | DTE FM 150 | DTE FM 220 | DTE FM 320 | | | |
| SHELL | | | | Cassida Fluid GL 150 | Cassida Fluid GL 220 | Cassida Fluid GL 320 | | | |

Posizioni di montaggio

Mounting positions

Einbaulagen



N.B. schema rappresentativo anche per 2 e 3 stadi
NOTE Diagram applies to double and triple reduction units as well
HINWEIS: Schema auch für 2 und 3 Stufen gültig

L'esecuzione grafica rappresentata è la A.
Per le altre esecuzioni grafiche vedere sezione POSIZIONI MONTAGGIO.
The noted version is A.
To see further alternatives please refer to section MOUNTING POSITIONS.
Die dargestellte Version ist A.
Für die anderen Versionen siehe MONTAGEPOSITIONEN.

- ▽ Carico / Filler plug / Einfüllschraube
- ▼ Livello / Level plug / Schauglas
- Scarico / Drain plug / Ablassschraube

| | | Quantità di lubrificante / Lubricant Quantity / Schmiermittelmenge (l) | | | | | | | | | | | | | | |
|--------------|---------|--|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | | 802 | 804 | 806 | 808 | 810 | 812 | 814 | 816 | 818 | 820 | 822 | 824 | 826 | 828 | 830 |
| RXP1 | M1 - M2 | 2.5 | 3.5 | 4.9 | 6.9 | 9.6 | 13 | 19 | 26 | 37 | 52 | 72 | — | — | — | — |
| | M3 | 3.8 | 5.3 | 7.5 | 11 | 15 | 21 | 30 | 42 | 61 | 85 | 115 | — | — | — | — |
| | M4 | 3.5 | 4.9 | 7 | 9.8 | 14 | 22 | 28 | 40 | 56 | 78 | 111 | — | — | — | — |
| | M5 - M6 | 3.6 | 5 | 7.1 | 10 | 14 | 20 | 29 | 40 | 57 | 79 | 110 | — | — | — | — |
| RXP2 | M1 - M2 | 3.3 | 4.7 | 6.5 | 9 | 13 | 18 | 25 | 35 | 49 | 69 | 96 | 135 | 189 | — | — |
| | M3 | 6.1 | 8.6 | 12 | 17 | 24 | 34 | 48 | 68 | 95 | 133 | 187 | 263 | 370 | — | — |
| | M4 | 5.1 | 7.2 | 10 | 15 | 20 | 29 | 40 | 56 | 80 | 114 | 164 | 228 | 320 | — | — |
| | M5 - M6 | 4.6 | 6.5 | 9.4 | 13 | 18 | 25 | 35 | 50 | 70 | 99 | 139 | 196 | 275 | — | — |
| RXP3 RXP4 | M1 - M2 | 3.9 | 5.5 | 7.6 | 11 | 15 | 21 | 29 | 41 | 58 | 81 | 113 | 158 | 221 | 310 | 433 |
| | M3 | 8.1 | 11 | 15 | 22 | 32 | 44 | 62 | 87 | 125 | 175 | 246 | 345 | 485 | 682 | 950 |
| | M4 | 6.6 | 9.2 | 13 | 18 | 26 | 36 | 50 | 71 | 102 | 144 | 201 | 285 | 400 | 561 | 789 |
| | M5 - M6 | 5.1 | 7.3 | 10 | 14 | 20 | 28 | 40 | 56 | 79 | 111 | 156 | 218 | 306 | 430 | 604 |

Le quantità di olio sono approssimative; per una corretta lubrificazione occorre fare riferimento al livello segnato sul riduttore.

Oil quantities listed in the table are approximate; to ensure correct lubrication, please refer to the level mark on the gear unit.

Bei den Ölmengenangaben handelt es sich um approximative Werte; für den Erhalt einer korrekten Schmierung muss Bezug auf den am Getriebe gekennzeichneten Füllstand genommen werden.

ATTENZIONE

Eventuali forniture con predisposizioni tappi diverse da quella indicata in tabella, dovranno essere concordate.

WARNING

Any plug arrangements other than that indicated in the table must be agreed upon.

ACHTUNG

Eventuelle Lieferungen mit einer von den Tabellenangaben abweichenden Anordnung der Stopfen müssen zuvor abgestimmt werden.

Lubrificazione cuscinetti superiori

Upper bearing lubrication

Schmierung der obenliegenden Lager

La lubrificazione forzata dei cuscinetti superiori viene associata alla lubrificazione forzata degli ingranaggi nel caso quest'ultima sia necessaria.

Forced lubrication for upper bearings is normally associated with forced lubrication for the gears, where necessary.

Die Zwangsschmierung der obenliegenden Lager wird mit der Zwangsschmierung der Zahnräder, für die erforderlich sind, assoziiert.

Pos. Mont. M5 - M6

Mntg. Pos. M5 - M6

Einbaulage M5 - M6

| | n ₁ [min ⁻¹] | Grandezza / Size / Baugröße | | | | | | | | | | | | | |
|------|--|-----------------------------|-----|------|-----|------|-----|------|------|------|------|-----|------|------|--|
| | | 802-810 | 812 | 814 | 816 | 818 | 820 | 822 | 824 | 826 | 828 | 830 | 832 | | |
| RXP3 | 1751 - n _{1max} | G | | LFM2 | | LFM2 | | | | LFM3 | | | LFM4 | | |
| | 1000 - 1750 | G | | | | | | LFM2 | | LFM3 | | | LFM4 | | |
| | 0 - 999 | G | | | | | | | LFM2 | | LFM3 | | | LFM4 | |
| RXP2 | 1751 - n _{1max} | G | | LFM2 | | LFM2 | | | | LFM3 | | | | | |
| | 1000 - 1750 | G | | | | | | LFM2 | | LFM3 | | | | | |
| | 0 - 999 | G | | | | | | | LFM2 | | LFM3 | | | | |
| RXP1 | 1751 - n _{1max} | G | | LFM2 | | LFM2 | | | | LFM3 | | | | | |
| | 1000 - 1750 | G | | | | | | LFM2 | | LFM3 | | | | | |
| | 0 - 999 | G | | | | | | | LFM2 | | LFM3 | | | | |

I valori di n₁ max sono riportati nel paragrafo Verifiche, punto 5).

n₁ max values are listed at paragraph Verification, point 5).

Die Werte von n₁ max werden im Paragraph "Kontrollen", Punkt 5, angegeben.

| | l/min | Motor | P (kW) | A |
|------|-------|-------|--------|------|
| LFM1 | 0.5 | 71A4 | 0.25 | 172 |
| LFM2 | 5 | | | |
| LFM2 | | 10 | 80A4 | 0.55 |
| LFM4 | 20 | 80B4 | 0.75 | |
| LFM5 | 30 | 90S4 | 1.1 | 214 |

LFM.: Motopompa (vedi sezione G accessori e opzioni).

LFM.: Motor pump (see Section G Accessories and Options).

LFM.: Motorpumpe (siehe Abschnitt G „Zubehör und Optionen“).

1.7 Verifica carichi radiali e assiali

Qualora il collegamento tra riduttore e macchina motrice o operatrice sia effettuato con mezzi che generano carichi radiali sull'estremità d'albero veloce o lento, occorre fare le seguenti verifiche.

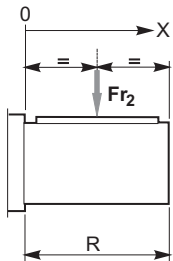
Calcolo Fr_2' e Fr_1'

I carichi massimi Fr_1 e Fr_2 sono calcolati con $F_s=1$ ed a una distanza dalla battuta dell'albero di 0.5 S se albero veloce o 0.5 R se albero lento.

Tali valori sono riportati nelle tabelle delle prestazioni.

Per distanze variabili tra 0 e una distanza "X" bisogna utilizzare le tabelle seguenti:

Fr_2 con coefficiente A.
 Fr_2 con coefficiente C nel caso di flange FD.
 Fr_1 con coefficiente B.



$$Fr_2' = Fr_2 \cdot \left(\frac{A}{A + X - \frac{R}{2}} \right)$$

$$Fr_2' = Fr_2 \cdot C$$

solo per esecuzione FD
 only for FD configuration
 Nur für Ausführung FD

1.7 Overhung and thrust load verification

When a gear unit is connected to prime mover or driven machine using overhung drive members that place a radial load on input or output shaft end, check the following loads.

Fr_2' e Fr_1' calculation

Load capacity ratings Fr_1 and Fr_2 consider a service factor $F_s=1$ and load location at a distance from shaft shoulder of 0.5 S for input shafts or 0.5 R for output shafts.

These values are reported in the rating tables.

Where load is applied at a distance from shoulder between 0 and an "X" distance, refer to the following tables:

Fr_2 with load location factor A.
 Fr_2 with load location factor C if an FD flange is used.
 Fr_1 with load location factor B.

1.7 Überprüfung der Radial- und Axialkräfte

Erfolgt die Verbindung zwischen Getriebe und Kraft- oder Arbeitsmaschine mit Vorrichtungen, die Radialkräfte auf das Ende der Antriebs- oder Abtriebswelle ausüben, sind folgende Überprüfungen erforderlich.

Berechnung von Fr_2' e Fr_1'

Die maximalen Belastungskräfte Fr_1 und Fr_2 werden mit $F_s=1$ und auf einem Abstand vom Wellenansatz von 0.5 S im Fall der Antriebswelle oder 0.5 R im Fall der Abtriebswelle berechnet.

Diese Werte werden in den Leistungstabellen angegeben.

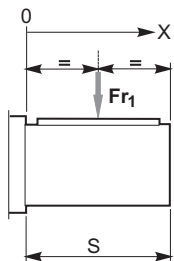
Bei zwischen 0 und einer Distanz "X" variierenden Abständen müssen folgende Tabellen verwendet werden:

Fr_2 mit Koeffizient A.
 Fr_2 mit Koeffizient C bei FD-Flanschen.
 Fr_1 mit Koeffizient B.

| | | | |
|-------------|---|---|---|
| Fr_2' [N] | Carico radiale ammissibile su albero uscita alla distanza X | Permissible output shaft OHL at distance X | An Abtriebswelle auf Distanz X zulässige Radialkraft |
| Fr_2 [N] | Carico radiale ammissibile su albero uscita indicato a catalogo | Output shaft OHL capacity as per catalogue rating | An Abtriebswelle gemäß Katalogangaben zulässige Radialkraft |
| X [mm] | Distanza dalla battuta dell'albero | Distance from shaft shoulder | Distanz vom Wellenansatz |
| R [mm] | Sporgenza dell'albero uscita | Output shaft projection | Überstand der Abtriebswelle |
| A | Coefficiente da tabella | Load location factor from table | Koeffizient aus Tabelle |
| C | Coefficiente da tabella | Load location factor from table | Koeffizient aus Tabelle |

Coefficienti correttivi del carico radiale di catalogo in uscita Fr_2 in funzione della distanza dalla battuta
 Load location factors to adjust output OHL capacity rating Fr_2 based on distance from shoulder
 Korrekturkoeffizient der Radialkraft am Abtrieb Fr_2 gemäß Katalog in Abhängigkeit des Ansatzabstands

| | RXP | | | | | | | | | | | | | | | |
|---|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|
| | 802 | 804 | 806 | 808 | 810 | 812 | 814 | 816 | 818 | 820 | 822 | 824 | 826 | 828 | 830 | 832 |
| A | 99 | 109 | 124 | 137 | 156 | 175 | 200 | 225 | 236 | 261 | 294 | 331 | 385 | 405 | 447 | 507 |
| C | 1.32 | 1.35 | 1.39 | 1.46 | 1.49 | 1.43 | 1.32 | 1.32 | 1.33 | 1.35 | 1.32 | | | | | |



$$Fr_1' = Fr_1 \cdot \left(\frac{B}{B + X - \frac{S}{2}} \right)$$

| | | | |
|-------------|--|--|---|
| Fr_1' [N] | Carico radiale ammissibile su albero entrata alla distanza X | Permissible input shaft OHL at distance X | An Abtriebswelle auf Distanz X zulässige Radialkraft |
| Fr_1 [N] | Carico radiale ammissibile su albero entrata indicato a catalogo | Input shaft OHL capacity as per catalogue rating | An Abtriebswelle gemäß Katalogangaben zulässige Radialkraft |
| X [mm] | Distanza dalla battuta dell'albero | Distance from shaft shoulder | Distanz vom Wellenansatz |
| S [mm] | Sporgenza dell'albero entrata | Input shaft projection | Überstand der Abtriebswelle |
| B | Coefficiente da tabella | Load location factor from table | Koeffizient aus Tabelle |

Coefficienti correttivi del carico radiale di catalogo in entrata Fr_1 in funzione della distanza dalla battuta
 Load location factors to adjust input OHL capacity rating Fr_1 based on distance from shoulder
 Korrekturkoeffizient der Radialkraft am Antrieb Fr_1 gemäß Katalog in Abhängigkeit des Ansatzabstands

| B | Size | 802 | 804 | 806 | 808 | 810 | 812 | 814 | 816 | 818 | 820 | 822 | 824 | 826 | 828 | 830 | 832 |
|------|------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | RXP2 | 68 | 75 | 85 | 95 | 105 | 120 | 136 | 152 | 172 | 190 | 210 | 240 | 260 | 300 | | |
| RXP3 | 87 | 98 | 110 | 121 | 142 | 155 | 173 | 195 | 212 | 240 | 271 | 305 | 344 | 387 | 435 | 484 | |

Calcolo Fr

Per calcolare il carico Fr agente sull'albero lento diamo formule approssimate per alcune trasmissioni più comuni, per la determinazione del carico radiale su albero veloce o lento.

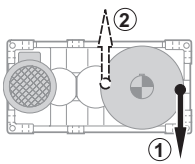
Fr calculation

Use the formula and the approximate factors for input or output overhung load determination referred to the most common drive members to calculate Fr load at output shaft.

Berechnung der Fr

Für die Berechnung der an der Abtriebswelle wirkenden Belastungen Fr geben wir approximative Formeln an, die für einige der allgemeinen Antriebsformen zum Bestimmen der auf die An- oder Abtriebswelle einwirkenden Radialkraft verwendet werden kann.

| | | | | | |
|--|---|--|---|---|----------------------------------|
| $Fr = k \cdot \frac{T}{d}$ | Fr [N] Carico radiale approssimato Approximate overhung load Approx. Wert - Radialkraft | d [mm] Diametro pulegge, ruote Pulley diameter, wheels Durchmesser Räder, Riemenscheiben | k Fattore di collegamento Connection factor Anschlusswert | T [Nm] Momento torcente Torque Drehmoment | |
| k = | 7000 | 5000 | 3000 | 2120 | 2000 |
| Trasmissioni Drive member Antriebe | Ruote di frizione (gomma su metallo) Friction wheel drive (rubber on metal) Kupplungsräder (Gummi auf Metall) | Cinghie trapezoidali V belt drives Keilriemen | Cinghie dentate Toothed belts Zahnriemen | Ingranaggi cilindrici Spur gears Zylinderzahnräder | Catene Chain drives Ketten |



Nel caso di sollevamento con tamburo con tiro verso il basso è preferibile che la fune si avvolga dalla parte opposta al motore (1).
Nel caso più gravoso del precedente, con tiro verso l'alto, viceversa è preferibile che la fune si avvolga dal lato motore (2).

In lifting applications using winch drums in a downward pull direction, it is best for the rope to wrap on the side opposite to the motor (1).
In the more severe case of upward pull direction, the rope should wrap on motor side (2).

Bei Hebeverfahren mit einer Trommel mit Zugkraft nach unten sollte das Seil auf der dem Motor (1) entgegen gesetzten Seite aufgerollt werden.
Im Fall eines härteren Einsatzes als den zuvor genannten, mit Zugkraft nach oben, sollte das Seil dagegen an der Motorseite (2) aufgewickelt werden.

Verifiche

Caso A)
Per carichi radiali minori di 0.25 Fr_{1'} o Fr_{2'} è necessario verificare soltanto che contemporaneamente al carico radiale sia presente un carico assiale non superiore a 0.2 volte Fr_{1'} o Fr_{2'};

Caso B)
Per carichi radiali maggiori di 0.25 Fr_{1'} o Fr_{2'};
1) Calcolo abbreviato: Fr(input) < Fr_{1'} e Fr(output) < Fr_{2'} e che contemporaneamente al carico radiale sia presente un carico assiale non superiore a 0.2 volte Fr_{1'} o Fr_{2'};

2) Calcolo completo per il quale occorre fornire i seguenti dati:

- momento torcente applicato o potenza applicata
- n₁ e n₂ (giri al minuto dell'albero veloce e dell'albero lento)
- carico radiale Fr (direzione, intensità, verso)

Verification

Case A)
For overhung loads lower than 0.25 Fr_{1'} or Fr_{2'}, ensure that the thrust load applied simultaneously with OHL is not greater than 0.2 times Fr_{1'} or Fr_{2'};

Case B)
For overhung loads greater than 0.25 Fr_{1'} or Fr_{2'};
1) Quick calculation method: Fr(input) < Fr_{1'} and Fr(output) < Fr_{2'} and thrust load applied simultaneously with OHL not greater than 0.2 times Fr_{1'} or Fr_{2'};

2) For the standard calculation method, the following information is required:

- applied torque or power
- n₁ and n₂ (input and output shaft min⁻¹)
- overhung load Fr (orientation, amount of loading, direction)

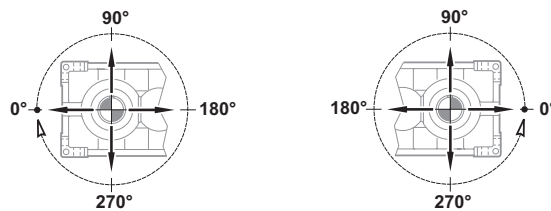
Überprüfungen

Fall A)
Bei Radialkräften unter 0.25 Fr_{1'} oder Fr_{2'} muss nur überprüft werden, dass gleichzeitig mit der Belastung durch die Radialkraft auch eine Axialkraft von nicht mehr als 0.2 Mal Fr_{1'} oder Fr_{2'} vorliegt.

Fall B)
Bei Radialkräften über 0.25 Fr_{1'} oder Fr_{2'};
1) Verkürzte Berechnungsgleichung: Fr(input) < Fr_{1'} und Fr(output) < Fr_{2'} und dass gleichzeitig mit der Belastung durch die Radialkraft auch eine Axialkraft von nicht mehr als 0.2 Mal Fr_{1'} oder Fr_{2'} vorliegt.

2) Vollständige Berechnungsgleichung für die folgende Daten erforderlich sind:

- appliziertes Drehmoment oder applizierte Leistung
- n₁ und n₂ (Drehungen/Minute der Antriebs- und Abtriebswelle)
- Radialkraft Fr (Richtung, Intensität, Seite)



- senso di rotazione dell'albero

- size and type of selected gear unit

- Drehrichtung der Welle



- grandezza e tipo del riduttore scelto
- tipo olio impiegato e sua viscosità
- esecuzione grafica assi:
- carico assiale presente Fa

- oil type and viscosity
- shaft arrangement:
- actual thrust load Fa

- Baugröße und Typ des gewählten Getriebes
 - verwendeter Öltyp und dessen Viskositätsgrad
 - grafische Achsenausführung
 - vorliegende Axialkraft Fa
- Für eine Überprüfung die Technischen Unterlagen konsultieren.

Consultare il supporto Tecnico per la verifica.

Please contact our Engineering for a verification.

1.8 Prestazioni riduttori RXP1

1.8 RXP1 gear unit ratings

1.8 Leistungen der RXP1-Getriebe

| n ₁ min ⁻¹ | 802 | | | | | 804 | | | | | 806 | | | | | | |
|--|------|-------------------------------------|----------------------|-----------------------|--|------|-------------------------------------|----------------------|-----------------------|--|------|-------------------------------------|----------------------|-----------------------|--|--|----|
| | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | | |
| 1450 | 1.14 | 1277 | 191 | 1.4 | 10.1 | 1.11 | 1305 | 279 | 2.0 | 13.3 | 1.11 | 1305 | 363 | 2.6 | 16.5 | | |
| 1000 | | 881 | 141 | 1.5 | | | 900 | 212 | 2.2 | | | 900 | 279 | 2.9 | | | |
| 500 | | 440 | 71 | 1.5 | | | 450 | 106 | 2.2 | | | 450 | 149 | 3.1 | | | |
| 1450 | 1.26 | 1153 | 185 | 1.5 | 9.6 | 1.24 | 1174 | 263 | 2.1 | 12.9 | 1.24 | 1174 | 351 | 2.8 | 16.1 | | |
| 1000 | | 795 | 136 | 1.6 | | | 810 | 199 | 2.3 | | | 810 | 268 | 3.1 | | | |
| 500 | | 398 | 68 | 1.6 | | | 405 | 99 | 2.3 | | | 405 | 143 | 3.3 | | | |
| 1450 | 1.39 | 1040 | 178 | 1.6 | 9.4 | 1.38 | 1055 | 248 | 2.2 | 12.6 | 1.38 | 1055 | 327 | 2.9 | 15.7 | | |
| 1000 | | 717 | 123 | 1.6 | | | 727 | 187 | 2.4 | | | 727 | 249 | 3.2 | | | |
| 500 | | 359 | 61 | 1.6 | | | 364 | 93 | 2.4 | | | 364 | 136 | 3.5 | | | |
| 1450 | 1.55 | 936 | 160 | 1.6 | 9.3 | 1.53 | 946 | 232 | 2.3 | 12.5 | 1.53 | 946 | 303 | 3.0 | 15.6 | | |
| 1000 | | 646 | 117 | 1.7 | | | 652 | 174 | 2.5 | | | 652 | 237 | 3.4 | | | |
| 500 | | 323 | 59 | 1.7 | | | 326 | 87 | 2.5 | | | 326 | 125 | 3.6 | | | |
| 1450 | 1.82 | 796 | 145 | 1.7 | 8.7 | 1.81 | 799 | 205 | 2.4 | 11.7 | 1.71 | 846 | 289 | 3.2 | 14.7 | | |
| 1000 | | 549 | 106 | 1.8 | | | 551 | 153 | 2.6 | | | 583 | 218 | 3.5 | | | |
| 500 | | 275 | 53 | 1.8 | | | 276 | 77 | 2.6 | | | 292 | 118 | 3.8 | | | |
| 1450 | 2.16 | 671 | 129 | 1.8 | 8.5 | 2.04 | 711 | 190 | 2.5 | 11.5 | 2.04 | 711 | 258 | 3.4 | 14.4 | | |
| 1000 | | 463 | 94 | 1.9 | | | 490 | 141 | 2.7 | | | 490 | 199 | 3.8 | | | |
| 500 | | 231 | 47 | 1.9 | | | 245 | 71 | 2.7 | | | 245 | 105 | 4.0 | | | |
| 1450 | 2.29 | 633 | 128 | 1.9 | 8 | 2.30 | 629 | 175 | 2.6 | 10.9 | 2.30 | 629 | 235 | 3.5 | 13.7 | | |
| 1000 | | 436 | 93 | 2.0 | | | 434 | 134 | 2.9 | | | 434 | 181 | 3.9 | | | |
| 500 | | 218 | 47 | 2.0 | | | 217 | 67 | 2.9 | | | 217 | 97 | 4.2 | | | |
| 1450 | 2.59 | 560 | 114 | 1.9 | 7 | 2.45 | 591 | 170 | 2.7 | 9.6 | 2.45 | 591 | 227 | 3.6 | 12.1 | | |
| 1000 | | 386 | 82 | 2.0 | | | 407 | 126 | 2.9 | | | 407 | 174 | 4.0 | | | |
| 500 | | 193 | 41 | 2.0 | | | 204 | 63 | 2.9 | | | 204 | 91 | 4.2 | | | |
| 1450 | 2.95 | 492 | 105 | 2.0 | 7 | 2.80 | 518 | 155 | 2.8 | 9.6 | 2.80 | 518 | 205 | 3.7 | 12.1 | | |
| 1000 | | 339 | 76 | 2.1 | | | 357 | 114 | 3.0 | | | 357 | 156 | 4.1 | | | |
| 500 | | 169 | 38 | 2.1 | | | 179 | 57 | 3.0 | | | 179 | 84 | 4.4 | | | |
| 1450 | 3.16 | 459 | 98 | 2.0 | 7 | 3.00 | 483 | 145 | 2.8 | 9.6 | 3.00 | 483 | 196 | 3.8 | 12.1 | | |
| 1000 | | 317 | 71 | 2.1 | | | 333 | 110 | 3.1 | | | 333 | 150 | 4.2 | | | |
| 500 | | 158 | 36 | 2.1 | | | 167 | 55 | 3.1 | | | 167 | 80 | 4.5 | | | |
| 1450 | 3.65 | 398 | 89 | 2.1 | 7 | 3.47 | 418 | 129 | 2.9 | 9.6 | 3.47 | 418 | 174 | 3.9 | 12.1 | | |
| 1000 | | 274 | 64 | 2.2 | | | 288 | 99 | 3.2 | | | 288 | 135 | 4.4 | | | |
| 500 | | 137 | 32 | 2.2 | | | 144 | 49 | 3.2 | | | 144 | 71 | 4.6 | | | |
| 1450 | 3.94 | 368 | 83 | 2.1 | 5.7 | 4.07 | 357 | 114 | 3.0 | 8.2 | 4.07 | 357 | 152 | 4.0 | 10.7 | | |
| 1000 | | 254 | 60 | 2.2 | | | 246 | 81 | 3.1 | | | 246 | 118 | 4.5 | | | |
| 500 | | 127 | 30 | 2.2 | | | 123 | 42 | 3.2 | | | 123 | 60 | 4.6 | | | |
| 1450 | 4.64 | 312 | 67 | 2.0 | 7 | 4.43 | 327 | 98 | 2.8 | 9.6 | 4.43 | 327 | 143 | 4.1 | 12.1 | | |
| 1000 | | 215 | 46 | 2.0 | | | 226 | 70 | 2.9 | | | 226 | 101 | 4.2 | | | |
| 500 | | 108 | 24 | 2.1 | | | 113 | 36 | 3.0 | | | 113 | 52 | 4.3 | | | |
| 1450 | 5.08 | 286 | 55 | 1.8 | 8 | 4.85 | 299 | 83 | 2.6 | 10.8 | 4.85 | 299 | 121 | 3.8 | 13.5 | | |
| 1000 | | 197 | 38 | 1.8 | | | 206 | 57 | 2.6 | | | 206 | 86 | 3.9 | | | |
| 500 | | 98 | 20 | 1.9 | | | 103 | 30 | 2.7 | | | 103 | 44 | 4.0 | | | |
| 1450 | 5.58 | 260 | 47 | 1.7 | 8.9 | 5.33 | 272 | 70 | 2.4 | 12 | 5.33 | 272 | 102 | 3.5 | 15 | | |
| 1000 | | 179 | 33 | 1.7 | | | 188 | 50 | 2.5 | | | 188 | 72 | 3.6 | | | |
| 500 | | 90 | 17 | 1.8 | | | 94 | 25 | 2.5 | | | 94 | 37 | 3.7 | | | |
| 1450 | 6.18 | 235 | 38 | 1.5 | 9.7 | 5.91 | 245 | 58 | 2.2 | 12.9 | 5.91 | 245 | 84 | 3.2 | 16.1 | | |
| 1000 | | 162 | 26 | 1.5 | | | 169 | 42 | 2.3 | | | 169 | 60 | 3.3 | | | |
| 500 | | 81 | 14 | 1.6 | | | 85 | 21 | 2.3 | | | 85 | 31 | 3.4 | | | |
| Potenze termiche / Thermal power / Thermische Grenzleistung PtN [kW] (senza raffreddamento / Without cooling / ohne Kühlung) | | | | | | | | | | | | | | | | | |
| | | | | | 49 | | | | | | 62 | | | | | | 82 |

1.8 Prestazioni riduttori RXP1

1.8 RXP1 gear unit ratings

1.8 Leistungen der RXP1-Getriebe

| n ₁ min ⁻¹ | 808 | | | | | 810 | | | | | 812 | | | | | | |
|---|-------------|-------------------------------------|----------------------|-----------------------|--|--------------|-------------------------------------|----------------------|-----------------------|--|-------------|-------------------------------------|----------------------|-----------------------|--|--|-----|
| | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ / Fr ₁ kN | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ / Fr ₁ kN | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ / Fr ₁ kN | | |
| 1450 | 1.17 | 1238 | 489 | 3.7 | 22.4 | 1.17 | 1238 | 595 | 4.5 | 28.4 | 1.20 | 1208 | 1007 | 7.8 | 35.0 | | |
| 1000 | | 854 | 374 | 4.1 | | | 854 | 456 | 5.0 | | | 833 | 775 | 8.7 | | | |
| 500 | | 427 | 210 | 4.6 | | | 427 | 283 | 6.2 | | | 417 | 401 | 9.0 | | | |
| 1450 | 1.30 | 1113 | 464 | 3.9 | 21.4 | 1.30 | 1113 | 559 | 4.7 | 27.7 | 1.33 | 1088 | 953 | 8.2 | 34.4 | | |
| 1000 | | 767 | 353 | 4.3 | | | 767 | 435 | 5.3 | | | 750 | 729 | 9.1 | | | |
| 500 | | 384 | 197 | 4.8 | | | 384 | 267 | 6.5 | | | 375 | 377 | 9.4 | | | |
| 1450 | 1.45 | 999 | 427 | 4.0 | 20.7 | 1.45 | 999 | 523 | 4.9 | 26.8 | 1.48 | 977 | 898 | 8.6 | 34 | | |
| 1000 | | 689 | 331 | 4.5 | | | 689 | 405 | 5.5 | | | 674 | 691 | 9.6 | | | |
| 500 | | 344 | 184 | 5.0 | | | 344 | 250 | 6.8 | | | 337 | 356 | 9.9 | | | |
| 1450 | 1.62 | 895 | 402 | 4.2 | 19.9 | 1.62 | 895 | 488 | 5.1 | 26.5 | 1.66 | 876 | 833 | 8.9 | 33.3 | | |
| 1000 | | 617 | 310 | 4.7 | | | 617 | 382 | 5.8 | | | 604 | 646 | 10.0 | | | |
| 500 | | 309 | 175 | 5.3 | | | 309 | 234 | 7.1 | | | 302 | 332 | 10.3 | | | |
| 1450 | 1.81 | 799 | 376 | 4.4 | 19.4 | 1.81 | 799 | 461 | 5.4 | 26.1 | 1.85 | 783 | 778 | 9.3 | 32.6 | | |
| 1000 | | 551 | 288 | 4.9 | | | 551 | 353 | 6.0 | | | 540 | 600 | 10.4 | | | |
| 500 | | 276 | 162 | 5.5 | | | 276 | 218 | 7.4 | | | 270 | 309 | 10.7 | | | |
| 1450 | 2.04 | 711 | 349 | 4.6 | 18.8 | 2.04 | 711 | 425 | 5.6 | 25.4 | 2.08 | 697 | 723 | 9.7 | 32.1 | | |
| 1000 | | 490 | 267 | 5.1 | | | 490 | 330 | 6.3 | | | 481 | 555 | 10.8 | | | |
| 500 | | 245 | 149 | 5.7 | | | 245 | 202 | 7.7 | | | 240 | 288 | 11.2 | | | |
| 1450 | 2.30 | 629 | 323 | 4.8 | 18.2 | 2.304 | 629 | 390 | 5.8 | 24.8 | 2.35 | 618 | 666 | 10.1 | 31.4 | | |
| 1000 | | 434 | 246 | 5.3 | | | 434 | 301 | 6.5 | | | 426 | 514 | 11.3 | | | |
| 500 | | 217 | 137 | 5.9 | | | 217 | 185 | 8.0 | | | 213 | 264 | 11.6 | | | |
| 1450 | 2.62 | 554 | 296 | 5.0 | 16.8 | 2.62 | 554 | 355 | 6.0 | 24.1 | 2.67 | 544 | 604 | 10.4 | 29.8 | | |
| 1000 | | 382 | 224 | 5.5 | | | 382 | 277 | 6.8 | | | 375 | 469 | 11.7 | | | |
| 500 | | 191 | 126 | 6.2 | | | 191 | 169 | 8.3 | | | 188 | 240 | 12.0 | | | |
| 1450 | 3.00 | 483 | 263 | 5.1 | 16.8 | 3.00 | 483 | 325 | 6.3 | 24.1 | 2.85 | 509 | 576 | 10.6 | 29.8 | | |
| 1000 | | 333 | 203 | 5.7 | | | 333 | 249 | 7.0 | | | 351 | 446 | 11.9 | | | |
| 500 | | 167 | 114 | 6.4 | | | 167 | 153 | 8.6 | | | 175 | 229 | 12.2 | | | |
| 1450 | 3.22 | 450 | 250 | 5.2 | 16.8 | 3.22 | 450 | 308 | 6.4 | 24.1 | 3.28 | 442 | 520 | 11.0 | 29.8 | | |
| 1000 | | 310 | 192 | 5.8 | | | 310 | 235 | 7.1 | | | 305 | 401 | 12.3 | | | |
| 500 | | 155 | 108 | 6.5 | | | 155 | 146 | 8.8 | | | 153 | 207 | 12.7 | | | |
| 1450 | 3.75 | 387 | 223 | 5.4 | 16.8 | 3.47 | 418 | 290 | 6.5 | 24.1 | 3.53 | 411 | 492 | 11.2 | 29.8 | | |
| 1000 | | 267 | 171 | 6.0 | | | 288 | 225 | 7.3 | | | 283 | 378 | 12.5 | | | |
| 500 | | 133 | 95 | 6.7 | | | 144 | 137 | 8.9 | | | 142 | 195 | 12.9 | | | |
| 1450 | 4.07 | 357 | 210 | 5.5 | 15.1 | 4.07 | 357 | 255 | 6.7 | 19.6 | 4.13 | 351 | 435 | 11.6 | 28.7 | | |
| 1000 | | 246 | 160 | 6.1 | | | 246 | 197 | 7.5 | | | 242 | 326 | 12.6 | | | |
| 500 | | 123 | 87 | 6.6 | | | 123 | 120 | 9.1 | | | 121 | 168 | 13.0 | | | |
| 1450 | 4.43 | 327 | 196 | 5.6 | 17 | 4.43 | 327 | 238 | 6.8 | 21.8 | 4.50 | 322 | 396 | 11.5 | 24.9 | | |
| 1000 | | 226 | 142 | 5.9 | | | 226 | 183 | 7.6 | | | 222 | 278 | 11.7 | | | |
| 500 | | 113 | 75 | 6.2 | | | 113 | 101 | 8.4 | | | 111 | 144 | 12.1 | | | |
| 1450 | 4.85 | 299 | 173 | 5.4 | 19.1 | 4.85 | 299 | 221 | 6.9 | 24 | 4.92 | 295 | 334 | 10.6 | 28.7 | | |
| 1000 | | 206 | 121 | 5.5 | | | 206 | 165 | 7.5 | | | 203 | 234 | 10.8 | | | |
| 500 | | 103 | 63 | 5.7 | | | 103 | 86 | 7.8 | | | 102 | 122 | 11.2 | | | |
| 1450 | 5.33 | 272 | 145 | 5.0 | 20.8 | 5.33 | 272 | 195 | 6.7 | 25.9 | 5.42 | 268 | 277 | 9.7 | 31.2 | | |
| 1000 | | 188 | 102 | 5.1 | | | 188 | 140 | 7.0 | | | 185 | 195 | 9.9 | | | |
| 500 | | 94 | 53 | 5.3 | | | 94 | 73 | 7.3 | | | 92 | 102 | 10.3 | | | |
| 1450 | 5.91 | 245 | 121 | 4.6 | 22 | 5.91 | 245 | 165 | 6.3 | 27.4 | 6.00 | 242 | 227 | 8.8 | 33.2 | | |
| 1000 | | 169 | 85 | 4.7 | | | 169 | 116 | 6.4 | | | 167 | 160 | 9.0 | | | |
| 500 | | 85 | 44 | 4.9 | | | 85 | 61 | 6.7 | | | 83 | 83 | 9.3 | | | |
| Potenze termiche / Thermal power / Thermische Grenzleistung PtN [kW] | | | | | | | | | | | | | | | | | |
| (senza raffreddamento / Without cooling / ohne Kühlung) | | | | | | | | | | | | | | | | | |
| | | | | | 104 | | | | | | 127 | | | | | | 160 |

1.8 Prestazioni riduttori RXP1

1.8 RXP1 gear unit ratings

1.8 Leistungen der RXP1-Getriebe

| n ₁ min ⁻¹ | 814 | | | | | 816 | | | | | 818 | | | | | | |
|---|------|-------------------------------------|----------------------|-----------------------|--|------|-------------------------------------|----------------------|-----------------------|--|------|-------------------------------------|----------------------|-----------------------|--|--|-----|
| | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | | |
| 1450 | 1.14 | 1277 | 1174 | 8.6 | 41.2 | 1.11 | 1305 | 2217 | 15.9 | 54.9 | 1.11 | 1305 | 3514 | 25.2 | 68.6 | | |
| 1000 | | 881 | 904 | 9.6 | | | 900 | 1654 | 17.2 | | | 900 | 2424 | 25.2 | | | |
| 500 | | 440 | 555 | 11.8 | | | 450 | 827 | 17.2 | | | 450 | 1212 | 25.2 | | | |
| 1450 | 1.26 | 1153 | 1109 | 9.0 | 39.9 | 1.24 | 1174 | 2095 | 16.7 | 54.2 | 1.24 | 1174 | 3311 | 26.4 | 66.6 | | |
| 1000 | | 795 | 858 | 10.1 | | | 810 | 1566 | 18.1 | | | 810 | 2284 | 26.4 | | | |
| 500 | | 398 | 527 | 12.4 | | | 405 | 783 | 18.1 | | | 405 | 1142 | 26.4 | | | |
| 1450 | 1.39 | 1040 | 1045 | 9.4 | 39.5 | 1.38 | 1055 | 1972 | 17.5 | 53.4 | 1.38 | 1055 | 3121 | 27.7 | 64.3 | | |
| 1000 | | 717 | 805 | 10.5 | | | 727 | 1469 | 18.9 | | | 727 | 2153 | 27.7 | | | |
| 500 | | 359 | 498 | 13.0 | | | 364 | 734 | 18.9 | | | 364 | 1076 | 27.7 | | | |
| 1450 | 1.63 | 888 | 949 | 10.0 | 38.4 | 1.53 | 946 | 1849 | 18.3 | 52.3 | 1.53 | 946 | 2920 | 28.9 | 61.7 | | |
| 1000 | | 612 | 733 | 11.2 | | | 652 | 1380 | 19.8 | | | 652 | 2014 | 28.9 | | | |
| 500 | | 306 | 451 | 13.8 | | | 326 | 690 | 19.8 | | | 326 | 1007 | 28.9 | | | |
| 1450 | 1.82 | 796 | 893 | 10.5 | 37.6 | 1.81 | 799 | 1665 | 19.5 | 51.5 | 1.71 | 846 | 2730 | 30.2 | 60.3 | | |
| 1000 | | 549 | 686 | 11.7 | | | 551 | 1242 | 21.1 | | | 583 | 1882 | 30.2 | | | |
| 500 | | 275 | 422 | 14.4 | | | 276 | 621 | 21.1 | | | 292 | 941 | 30.2 | | | |
| 1450 | 2.04 | 711 | 828 | 10.9 | 36.8 | 2.04 | 711 | 1542 | 20.3 | 50.6 | 2.04 | 711 | 2438 | 32.1 | 57.2 | | |
| 1000 | | 491 | 639 | 12.2 | | | 490 | 1147 | 21.9 | | | 490 | 1681 | 32.1 | | | |
| 500 | | 245 | 393 | 15.0 | | | 245 | 574 | 21.9 | | | 245 | 841 | 32.1 | | | |
| 1450 | 2.29 | 633 | 764 | 11.3 | 35.8 | 2.30 | 629 | 1419 | 21.1 | 49.6 | 2.30 | 629 | 2246 | 33.4 | 54.3 | | |
| 1000 | | 436 | 587 | 12.6 | | | 434 | 1057 | 22.8 | | | 434 | 1549 | 33.4 | | | |
| 500 | | 218 | 364 | 15.6 | | | 217 | 529 | 22.8 | | | 217 | 774 | 33.4 | | | |
| 1450 | 2.59 | 560 | 700 | 11.7 | 32.4 | 2.45 | 591 | 1357 | 21.5 | 44.6 | 2.62 | 554 | 2047 | 34.6 | 52.8 | | |
| 1000 | | 386 | 540 | 13.1 | | | 407 | 1010 | 23.2 | | | 382 | 1412 | 34.6 | | | |
| 500 | | 193 | 332 | 16.1 | | | 204 | 505 | 23.2 | | | 191 | 706 | 34.6 | | | |
| 1450 | 2.95 | 492 | 635 | 12.1 | 32.4 | 2.80 | 518 | 1239 | 22.4 | 44.6 | 2.80 | 518 | 1948 | 35.2 | 52.8 | | |
| 1000 | | 339 | 493 | 13.6 | | | 357 | 920 | 24.1 | | | 357 | 1343 | 35.2 | | | |
| 500 | | 169 | 302 | 16.7 | | | 179 | 460 | 24.1 | | | 179 | 672 | 35.2 | | | |
| 1450 | 3.16 | 459 | 603 | 12.3 | 32.4 | 3.22 | 450 | 1111 | 23.1 | 44.6 | 3.00 | 483 | 1854 | 35.9 | 52.8 | | |
| 1000 | | 317 | 467 | 13.8 | | | 310 | 829 | 25.0 | | | 333 | 1279 | 35.9 | | | |
| 500 | | 158 | 288 | 17.0 | | | 155 | 415 | 25.0 | | | 167 | 639 | 35.9 | | | |
| 1450 | 3.65 | 398 | 544 | 12.8 | 32.4 | 3.75 | 387 | 987 | 23.9 | 44.6 | 3.47 | 418 | 1656 | 37.1 | 52.8 | | |
| 1000 | | 274 | 419 | 14.3 | | | 267 | 721 | 25.3 | | | 288 | 1142 | 37.1 | | | |
| 500 | | 137 | 258 | 17.6 | | | 133 | 368 | 25.8 | | | 144 | 571 | 37.1 | | | |
| 1450 | 3.94 | 368 | 512 | 13.0 | 31.4 | 4.07 | 357 | 918 | 24.1 | 42 | 4.07 | 357 | 1341 | 35.2 | 42.7 | | |
| 1000 | | 254 | 393 | 14.5 | | | 246 | 644 | 24.5 | | | 246 | 943 | 35.9 | | | |
| 500 | | 127 | 242 | 17.8 | | | 123 | 334 | 25.4 | | | 123 | 487 | 37.1 | | | |
| 1450 | 4.64 | 312 | 447 | 13.4 | 27.9 | 4.43 | 327 | 784 | 22.4 | 37.8 | 4.43 | 327 | 1148 | 32.8 | 47.9 | | |
| 1000 | | 215 | 345 | 15.0 | | | 226 | 550 | 22.8 | | | 226 | 806 | 33.4 | | | |
| 500 | | 108 | 191 | 16.6 | | | 113 | 285 | 23.6 | | | 113 | 417 | 34.6 | | | |
| 1450 | 5.08 | 286 | 415 | 13.6 | 31.9 | 4.85 | 299 | 662 | 20.7 | 43.8 | 4.85 | 299 | 969 | 30.3 | 53.9 | | |
| 1000 | | 197 | 311 | 14.8 | | | 206 | 465 | 21.1 | | | 206 | 681 | 30.9 | | | |
| 500 | | 98 | 161 | 15.3 | | | 103 | 240 | 21.8 | | | 103 | 353 | 32.0 | | | |
| 1450 | 5.58 | 260 | 369 | 13.3 | 35.8 | 5.33 | 272 | 500 | 17.2 | 48.2 | 5.33 | 272 | 820 | 28.2 | 59.9 | | |
| 1000 | | 179 | 260 | 13.6 | | | 188 | 387 | 19.3 | | | 188 | 579 | 28.8 | | | |
| 500 | | 90 | 134 | 14.0 | | | 94 | 203 | 20.3 | | | 94 | 300 | 29.8 | | | |
| 1450 | 6.18 | 235 | 303 | 12.1 | 38.6 | 5.91 | 245 | 459 | 17.5 | 51.5 | 5.91 | 245 | 679 | 25.9 | 64.3 | | |
| 1000 | | 162 | 213 | 12.3 | | | 169 | 325 | 18.0 | | | 169 | 477 | 26.4 | | | |
| 500 | | 81 | 110 | 12.7 | | | 85 | 169 | 18.7 | | | 85 | 247 | 27.3 | | | |
| Potenze termiche / Thermal power / Thermische Grenzleistung PtN [kW] | | | | | | | | | | | | | | | | | |
| (senza raffreddamento / Without cooling / ohne Kühlung) | | | | | | | | | | | | | | | | | |
| | | | | | 195 | | | | | | 240 | | | | | | 304 |

1.8 Prestazioni riduttori RXP1

1.8 RXP1 gear unit ratings

1.8 Leistungen der RXP1-Getriebe

| n_1 min ⁻¹ | 820 | | | | | 822 | | | | | 824 | | | | |
|--|------|----------------------------|-------------|--------------|---------------------------|------|----------------------------|-------------|--------------|---------------------------|------|----------------------------|-------------|--------------|--|
| | ir | n_2 min ⁻¹ | P_N kW | T_N kNm | $\frac{Fr_2}{Fr_1}$ kN | ir | n_2 min ⁻¹ | P_N kW | T_N kNm | $\frac{Fr_2}{Fr_1}$ kN | ir | n_2 min ⁻¹ | P_N kW | T_N kNm | $\frac{Fr_2}{Fr_1}$ kN |
| 1450 | 1.17 | 1238 | 4828 | 36.5 | 93 | 1.17 | 1238 | 6653 | 50.3 | 119 | 1.20 | 1208 | 9297 | 72.0 | A richiesta / On request / Auf Anfrage |
| 1000 | | 854 | 3330 | 36.5 | | | 854 | 4588 | 50.3 | | | 833 | 6411 | 72.0 | |
| 500 | | 427 | 1665 | 36.5 | | | 427 | 2294 | 50.3 | | | 417 | 3206 | 72.0 | |
| 1450 | 1.30 | 1113 | 4542 | 38.2 | 89.8 | 1.30 | 1113 | 6278 | 52.8 | 117.4 | 1.33 | 1088 | 8762 | 75.4 | |
| 1000 | | 767 | 3133 | 38.2 | | | 767 | 4330 | 52.8 | | | 750 | 6043 | 75.4 | |
| 500 | | 384 | 1566 | 38.2 | | | 384 | 2165 | 52.8 | | | 375 | 3021 | 75.4 | |
| 1450 | 1.45 | 999 | 4270 | 40.0 | 87.4 | 1.45 | 999 | 5898 | 55.2 | 115.4 | 1.48 | 977 | 8228 | 78.8 | |
| 1000 | | 689 | 2944 | 40.0 | | | 689 | 4068 | 55.2 | | | 674 | 5675 | 78.8 | |
| 500 | | 344 | 1472 | 40.0 | | | 344 | 2031 | 55.2 | | | 337 | 2837 | 78.8 | |
| 1450 | 1.62 | 895 | 3996 | 41.8 | 86 | 1.62 | 895 | 5516 | 57.7 | 113.8 | 1.66 | 876 | 7704 | 82.3 | |
| 1000 | | 617 | 2756 | 41.8 | | | 617 | 3804 | 57.7 | | | 604 | 5313 | 82.3 | |
| 500 | | 309 | 1378 | 41.8 | | | 309 | 1902 | 57.7 | | | 302 | 2657 | 82.3 | |
| 1450 | 1.81 | 799 | 3722 | 43.6 | 84.2 | 1.81 | 799 | 5140 | 60.2 | 112.3 | 1.85 | 783 | 7170 | 85.7 | |
| 1000 | | 551 | 2567 | 43.6 | | | 551 | 3545 | 60.2 | | | 540 | 4945 | 85.7 | |
| 500 | | 276 | 1284 | 43.6 | | | 276 | 1772 | 60.2 | | | 270 | 2473 | 85.7 | |
| 1450 | 2.04 | 711 | 3441 | 45.3 | 82.4 | 2.04 | 711 | 4755 | 62.6 | 110.6 | 2.08 | 697 | 6637 | 89.1 | |
| 1000 | | 490 | 2373 | 45.3 | | | 490 | 3279 | 62.6 | | | 481 | 4577 | 89.1 | |
| 500 | | 245 | 1186 | 45.3 | | | 245 | 1640 | 62.6 | | | 240 | 2289 | 89.1 | |
| 1450 | 2.30 | 629 | 3167 | 47.1 | 80.8 | 2.30 | 629 | 4377 | 65.1 | 108.9 | 2.35 | 618 | 6104 | 92.5 | |
| 1000 | | 434 | 2184 | 47.1 | | | 434 | 3019 | 65.1 | | | 426 | 4210 | 92.5 | |
| 500 | | 217 | 1092 | 47.1 | | | 217 | 1509 | 65.1 | | | 213 | 2105 | 92.5 | |
| 1450 | 2.62 | 554 | 2893 | 48.9 | 72.1 | 2.62 | 554 | 3993 | 67.5 | 101 | 2.67 | 544 | 5578 | 96.0 | |
| 1000 | | 382 | 1995 | 48.9 | | | 382 | 2754 | 67.5 | | | 375 | 3847 | 96.0 | |
| 500 | | 191 | 998 | 48.9 | | | 191 | 1377 | 67.5 | | | 188 | 1923 | 96.0 | |
| 1450 | 3.00 | 483 | 2619 | 50.7 | 72.1 | 3.00 | 483 | 3615 | 70.0 | 101 | 2.85 | 509 | 5578 | 96.0 | |
| 1000 | | 333 | 1806 | 50.7 | | | 333 | 2493 | 70.0 | | | 351 | 3847 | 96.0 | |
| 500 | | 167 | 903 | 50.7 | | | 167 | 1247 | 70.0 | | | 175 | 1923 | 96.0 | |
| 1450 | 3.22 | 450 | 2481 | 51.6 | 72.1 | 3.22 | 450 | 3424 | 71.2 | 101 | 3.28 | 442 | 4779 | 101 | |
| 1000 | | 310 | 1711 | 51.6 | | | 310 | 2361 | 71.2 | | | 305 | 3296 | 101 | |
| 500 | | 155 | 856 | 51.6 | | | 155 | 1181 | 71.2 | | | 153 | 1648 | 101 | |
| 1450 | 3.75 | 387 | 2120 | 51.3 | 72.1 | 3.47 | 418 | 3232 | 72.4 | 101 | 3.53 | 411 | 4513 | 103 | |
| 1000 | | 267 | 1490 | 52.3 | | | 288 | 2229 | 72.4 | | | 283 | 3112 | 103 | |
| 500 | | 133 | 759 | 53.3 | | | 144 | 1115 | 72.4 | | | 142 | 1556 | 103 | |
| 1450 | 4.07 | 357 | 1894 | 49.7 | 65.4 | 4.07 | 357 | 2621 | 68.8 | 95.3 | 4.13 | 351 | 3704 | 98.8 | |
| 1000 | | 246 | 1332 | 50.7 | | | 246 | 1839 | 70.0 | | | 242 | 2585 | 100 | |
| 500 | | 123 | 688 | 52.4 | | | 123 | 953 | 72.5 | | | 121 | 1344 | 104 | |
| 1450 | 4.43 | 327 | 1620 | 46.3 | 68.2 | 4.43 | 327 | 2239 | 64.0 | 88.8 | 4.50 | 322 | 3140 | 91.2 | |
| 1000 | | 226 | 1139 | 47.2 | | | 226 | 1573 | 65.2 | | | 222 | 2223 | 93.6 | |
| 500 | | 113 | 589 | 48.8 | | | 113 | 814 | 67.5 | | | 111 | 1152 | 97.0 | |
| 1450 | 4.85 | 299 | 1368 | 42.8 | 76.6 | 4.85 | 299 | 1892 | 59.2 | 97.6 | 4.92 | 295 | 2672 | 84.9 | |
| 1000 | | 206 | 961 | 43.6 | | | 206 | 1328 | 60.3 | | | 203 | 1878 | 86.5 | |
| 500 | | 103 | 497 | 45.1 | | | 103 | 687 | 62.4 | | | 102 | 972 | 89.6 | |
| 1450 | 5.33 | 272 | 1159 | 39.9 | 83.3 | 5.33 | 272 | 1601 | 55.1 | 104.9 | 5.42 | 268 | 2263 | 79.1 | |
| 1000 | | 188 | 813 | 40.6 | | | 188 | 1126 | 56.2 | | | 185 | 1590 | 80.6 | |
| 500 | | 94 | 421 | 42.0 | | | 94 | 582 | 58.1 | | | 92 | 823 | 83.4 | |
| 1450 | 5.91 | 245 | 960 | 36.6 | 88.2 | 5.91 | 245 | 1322 | 50.5 | 111.2 | 6.00 | 242 | 1872 | 72.5 | |
| 1000 | | 169 | 673 | 37.2 | | | 169 | 930 | 51.5 | | | 167 | 1314 | 73.8 | |
| 500 | | 85 | 349 | 38.6 | | | 85 | 484 | 53.3 | | | 83 | 680 | 76.4 | |
| Potenze termiche / Thermal power / Thermische Grenzleistung PtN [kW] (senza raffreddamento / Without cooling / ohne Kühlung) | | | | | | | | | | | | | | | |
| 373 | | | | | 445 | | | | | 553 | | | | | |

1.9 Prestazioni riduttori RXP2

1.9 RXP2 gear unit ratings

1.9 Leistungen der RXP2-Getriebe

| n ₁ min ⁻¹ | 802 | | | | | 804 | | | | | 806 | | | | | | |
|---|-------|-------------------------------------|----------------------|-----------------------|--|-------|-------------------------------------|----------------------|-----------------------|--|-------|-------------------------------------|----------------------|-----------------------|--|--|----|
| | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | | |
| 1450 | 4.60 | 315 | 100 | 2.9 | 15 3 | 4.63 | 313 | 144 | 4.2 | 20 5.7 | 4.46 | 325 | 206 | 5.8 | 26.2 6.6 | | |
| 1000 | | 217 | 73 | 3.1 | | | 216 | 99 | 4.2 | | | 224 | 142 | 5.8 | | | |
| 500 | | 109 | 37 | 3.1 | | | 108 | 49 | 4.2 | | | 112 | 71 | 5.8 | | | |
| 1450 | 5.12 | 283 | 93 | 3.0 | 15 3 | 5.14 | 282 | 132 | 4.3 | 20 5.7 | 4.94 | 294 | 192 | 6.0 | 26.2 6.6 | | |
| 1000 | | 195 | 66 | 3.1 | | | 194 | 93 | 4.4 | | | 202 | 133 | 6.0 | | | |
| 500 | | 98 | 34 | 3.2 | | | 97 | 47 | 4.4 | | | 101 | 66 | 6.0 | | | |
| 1450 | 5.70 | 254 | 83 | 3.0 | 15 3.2 | 5.72 | 253 | 119 | 4.3 | 20 6 | 5.48 | 265 | 182 | 6.3 | 26.2 6.8 | | |
| 1000 | | 175 | 59 | 3.1 | | | 175 | 84 | 4.4 | | | 183 | 125 | 6.3 | | | |
| 500 | | 88 | 31 | 3.2 | | | 87 | 44 | 4.6 | | | 91 | 63 | 6.3 | | | |
| 1450 | 6.37 | 228 | 77 | 3.1 | 15 3.2 | 6.38 | 227 | 109 | 4.4 | 20 6 | 6.08 | 238 | 172 | 6.6 | 26.2 6.8 | | |
| 1000 | | 157 | 53 | 3.1 | | | 157 | 75 | 4.4 | | | 164 | 118 | 6.6 | | | |
| 500 | | 79 | 27 | 3.2 | | | 78 | 39 | 4.6 | | | 82 | 59 | 6.6 | | | |
| 1450 | 7.13 | 203 | 69 | 3.1 | 15 3.3 | 7.14 | 203 | 97 | 4.4 | 20 6.2 | 7.16 | 203 | 146 | 6.6 | 26.2 7.2 | | |
| 1000 | | 140 | 47 | 3.1 | | | 140 | 69 | 4.5 | | | 140 | 102 | 6.7 | | | |
| 500 | | 70 | 24 | 3.2 | | | 70 | 35 | 4.6 | | | 70 | 53 | 7.0 | | | |
| 1450 | 8.01 | 181 | 61 | 3.1 | 14 3.3 | 8.02 | 181 | 87 | 4.4 | 18.9 6.2 | 8.49 | 171 | 125 | 6.7 | 24.3 7.2 | | |
| 1000 | | 125 | 42 | 3.1 | | | 125 | 61 | 4.5 | | | 118 | 87 | 6.8 | | | |
| 500 | | 62 | 22 | 3.3 | | | 62 | 31 | 4.6 | | | 59 | 45 | 7.0 | | | |
| 1450 | 9.05 | 160 | 54 | 3.1 | 14 3.5 | 9.06 | 160 | 77 | 4.4 | 18.9 6.5 | 9.00 | 161 | 118 | 6.7 | 24.3 7.6 | | |
| 1000 | | 110 | 39 | 3.2 | | | 110 | 54 | 4.5 | | | 111 | 82 | 6.8 | | | |
| 500 | | 55 | 19.9 | 3.3 | | | 55 | 28 | 4.7 | | | 56 | 43 | 7.1 | | | |
| 1450 | 10.3 | 141 | 48 | 3.1 | 14 3.5 | 10.3 | 141 | 69 | 4.5 | 18.9 6.5 | 10.2 | 142 | 104 | 6.7 | 24.3 7.6 | | |
| 1000 | | 97 | 34 | 3.2 | | | 97 | 48 | 4.5 | | | 98 | 74 | 6.9 | | | |
| 500 | | 49 | 17.5 | 3.3 | | | 49 | 25 | 4.7 | | | 49 | 38 | 7.1 | | | |
| 1450 | 11.8 | 123 | 43 | 3.2 | 13 3.6 | 11.0 | 132 | 65 | 4.5 | 17.7 6.8 | 11.6 | 125 | 93 | 6.8 | 22.4 7.8 | | |
| 1000 | | 85 | 30 | 3.2 | | | 91 | 46 | 4.6 | | | 86 | 65 | 6.9 | | | |
| 500 | | 42 | 15.3 | 3.3 | | | 45 | 23 | 4.7 | | | 43 | 34 | 7.2 | | | |
| 1450 | 12.7 | 115 | 40 | 3.2 | 13 3.6 | 12.6 | 115 | 56 | 4.5 | 17.7 6.8 | 12.4 | 117 | 87 | 6.8 | 22.4 7.8 | | |
| 1000 | | 79 | 28 | 3.2 | | | 79 | 40 | 4.6 | | | 81 | 61 | 6.9 | | | |
| 500 | | 39 | 14.2 | 3.3 | | | 40 | 21 | 4.8 | | | 40 | 32 | 7.2 | | | |
| 1450 | 13.6 | 106 | 37 | 3.2 | 13 3.8 | 13.6 | 107 | 52 | 4.5 | 17.7 7 | 14.3 | 101 | 76 | 6.9 | 22.4 8 | | |
| 1000 | | 73 | 26 | 3.2 | | | 73 | 37 | 4.6 | | | 70 | 53 | 7.0 | | | |
| 500 | | 37 | 13.2 | 3.3 | | | 37 | 19.2 | 4.8 | | | 35 | 27 | 7.2 | | | |
| 1450 | 16.00 | 91 | 32 | 3.2 | 13 3.8 | 15.9 | 91 | 46 | 4.6 | 17.7 7 | 15.5 | 94 | 71 | 6.9 | 22.4 8 | | |
| 1000 | | 63 | 23 | 3.3 | | | 63 | 31 | 4.6 | | | 65 | 49 | 7.0 | | | |
| 500 | | 31 | 11.6 | 3.4 | | | 31 | 16.4 | 4.8 | | | 32 | 26 | 7.3 | | | |
| 1450 | 17.4 | 83 | 29 | 3.2 | 12 4 | 17.3 | 84 | 42 | 4.6 | 16 7.3 | 18.2 | 79 | 60 | 6.9 | 21 8.3 | | |
| 1000 | | 57 | 21 | 3.3 | | | 58 | 30 | 4.7 | | | 55 | 42 | 7.1 | | | |
| 500 | | 29 | 10.7 | 3.4 | | | 29 | 15.1 | 4.8 | | | 27 | 22 | 7.3 | | | |
| 1450 | 19.0 | 76 | 27 | 3.2 | 12 4 | 19.0 | 76 | 38 | 4.6 | 16 7.3 | 19.9 | 73 | 56 | 7.0 | 21 8.3 | | |
| 1000 | | 53 | 18.9 | 3.3 | | | 53 | 27 | 4.7 | | | 50 | 39 | 7.1 | | | |
| 500 | | 26 | 9.7 | 3.4 | | | 26 | 14.1 | 4.9 | | | 25 | 20 | 7.3 | | | |
| 1450 | 21.0* | 69 | 24 | 3.2 | 12 4 | 20.9* | 69 | 35 | 4.6 | 16 7.3 | 21.9 | 66 | 50 | 7.0 | 21 8.3 | | |
| 1000 | | 48 | 17.2 | 3.3 | | | 48 | 25 | 4.7 | | | 46 | 35 | 7.1 | | | |
| 500 | | 24 | 8.9 | 3.4 | | | 24 | 12.8 | 4.9 | | | 23 | 18.4 | 7.4 | | | |
| 1450 | 23.2* | 62 | 22 | 3.3 | 4 | 23.1* | 63 | 31 | 4.6 | 16 7.3 | 24.3* | 60 | 46 | 7.0 | 21 8.3 | | |
| 1000 | | 43 | 15.5 | 3.3 | | | 43 | 22 | 4.7 | | | 41 | 32 | 7.2 | | | |
| 500 | | 22 | 8.0 | 3.4 | | | 22 | 11.5 | 4.9 | | | 21 | 16.6 | 7.4 | | | |
| Potenze termiche / Thermal power / Thermische Grenzleistung P_{TN} [kW] (senza raffreddamento / Without cooling / ohne Kühlung) | | | | | | | | | | | | | | | | | |
| | | | | | 30 | | | | | | 39 | | | | | | 51 |

* Nei rapporti contrassegnati non è disponibile la versione uscita con albero cavo.

* Hollow output shaft not available for ratios marked with this symbol.

* Bei den gekennzeichneten Übersetzungsverhältnissen ist die Version „Abtrieb mit Hohlwelle“ nicht verfügbar.

1.9 Prestazioni riduttori RXP2

1.9 RXP2 gear unit ratings

1.9 Leistungen der RXP2-Getriebe

| n ₁ min ⁻¹ | 808 | | | | | 810 | | | | | 812 | | | | | | |
|---|------|-------------------------------------|----------------------|-----------------------|--|-------|-------------------------------------|----------------------|-----------------------|--|-------|-------------------------------------|----------------------|-----------------------|--|--|-----|
| | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | ir | n ₂ min ⁻¹ | P _N kW | T _N kNm | Fr ₂ Fr ₁ kN | | |
| 1450 | 4.44 | 326 | 285 | 8.0 | 47.5 9.1 | 4.52 | 321 | 385 | 11.0 | 60 11.4 | 4.53 | 320 | 471 | 13.5 | 66.2 14.9 | | |
| 1000 | | 225 | 206 | 8.4 | | | 221 | 297 | 12.3 | | | 221 | 364 | 15.1 | | | |
| 500 | | 113 | 103 | 8.4 | | | 111 | 152 | 12.6 | | | 110 | 210 | 17.4 | | | |
| 1450 | 4.94 | 293 | 285 | 8.9 | 47.5 9.1 | 5.03 | 288 | 374 | 11.9 | 60 11.4 | 5.04 | 288 | 474 | 15.1 | 66.2 14.9 | | |
| 1000 | | 202 | 196 | 8.9 | | | 199 | 280 | 12.9 | | | 198 | 366 | 16.9 | | | |
| 500 | | 101 | 98 | 8.9 | | | 99 | 143 | 13.2 | | | 99 | 198 | 18.3 | | | |
| 1450 | 5.50 | 264 | 267 | 9.3 | 47.5 9.5 | 5.60 | 259 | 356 | 12.6 | 60 11.7 | 5.61 | 258 | 468 | 16.6 | 66.2 15.2 | | |
| 1000 | | 182 | 184 | 9.3 | | | 179 | 253 | 13.0 | | | 178 | 363 | 18.7 | | | |
| 500 | | 91 | 92 | 9.3 | | | 89 | 132 | 13.5 | | | 89 | 186 | 19.1 | | | |
| 1450 | 6.13 | 236 | 242 | 9.4 | 47.5 9.5 | 6.24 | 232 | 324 | 12.8 | 60 11.7 | 6.27 | 231 | 439 | 17.4 | 66.2 15.2 | | |
| 1000 | | 163 | 169 | 9.5 | | | 160 | 229 | 13.1 | | | 160 | 338 | 19.4 | | | |
| 500 | | 82 | 86 | 9.7 | | | 80 | 118 | 13.5 | | | 80 | 174 | 20.0 | | | |
| 1450 | 7.26 | 200 | 207 | 9.5 | 47.5 9.8 | 6.98 | 208 | 292 | 12.9 | 60 12 | 7.02 | 207 | 412 | 18.3 | 66.2 15.6 | | |
| 1000 | | 138 | 144 | 9.6 | | | 143 | 206 | 13.2 | | | 143 | 303 | 19.5 | | | |
| 500 | | 69 | 75 | 10.0 | | | 72 | 106 | 13.6 | | | 71 | 157 | 20.2 | | | |
| 1450 | 8.16 | 178 | 184 | 9.5 | 43.8 9.8 | 8.31 | 175 | 248 | 13.0 | 55.9 12 | 7.89 | 184 | 381 | 19.0 | 62 15.6 | | |
| 1000 | | 123 | 130 | 9.7 | | | 120 | 175 | 13.3 | | | 127 | 271 | 19.6 | | | |
| 500 | | 61 | 67 | 10.0 | | | 60 | 90 | 13.7 | | | 63 | 140 | 20.3 | | | |
| 1450 | 9.22 | 157 | 165 | 9.6 | 43.8 10.3 | 9.38 | 155 | 221 | 13.1 | 55.9 12.8 | 8.91 | 163 | 344 | 19.4 | 62 16.3 | | |
| 1000 | | 108 | 115 | 9.7 | | | 107 | 156 | 13.4 | | | 112 | 242 | 19.8 | | | |
| 500 | | 54 | 60 | 10.1 | | | 53 | 80 | 13.8 | | | 56 | 125 | 20.5 | | | |
| 1450 | 9.82 | 148 | 155 | 9.6 | 43.8 10.3 | 9.99 | 145 | 209 | 13.2 | 55.9 12.8 | 10.1 | 143 | 305 | 19.5 | 62 16.3 | | |
| 1000 | | 102 | 109 | 9.8 | | | 100 | 146 | 13.4 | | | 99 | 214 | 19.9 | | | |
| 500 | | 51 | 56 | 10.1 | | | 50 | 76 | 13.9 | | | 49 | 111 | 20.6 | | | |
| 1450 | 11.2 | 129 | 137 | 9.7 | 40.1 10.5 | 11.4 | 127 | 183 | 13.2 | 52 13 | 11.6 | 125 | 269 | 19.7 | 57.9 18.5 | | |
| 1000 | | 89 | 95 | 9.8 | | | 88 | 129 | 13.5 | | | 86 | 188 | 20.0 | | | |
| 500 | | 45 | 50 | 10.2 | | | 44 | 67 | 14.0 | | | 43 | 97 | 20.7 | | | |
| 1450 | 12.0 | 121 | 128 | 9.7 | 40.1 10.5 | 12.2 | 119 | 172 | 13.3 | 52 13 | 12.5 | 116 | 250 | 19.7 | 57.9 18.5 | | |
| 1000 | | 83 | 90 | 9.9 | | | 82 | 121 | 13.5 | | | 80 | 176 | 20.1 | | | |
| 500 | | 42 | 46 | 10.2 | | | 41 | 63 | 14.0 | | | 40 | 91 | 20.8 | | | |
| 1450 | 13.9 | 104 | 112 | 9.8 | 40.1 10.8 | 14.1 | 103 | 150 | 13.4 | 52 13.3 | 14.5 | 100 | 217 | 19.9 | 57.9 18.8 | | |
| 1000 | | 72 | 78 | 9.9 | | | 71 | 105 | 13.6 | | | 69 | 152 | 20.2 | | | |
| 500 | | 36 | 40 | 10.3 | | | 35 | 54 | 14.1 | | | 34 | 79 | 21.0 | | | |
| 1450 | 16.3 | 89 | 95 | 9.8 | 40.1 10.8 | 16.6 | 88 | 129 | 13.5 | 52 13.3 | 15.7 | 92 | 201 | 20.0 | 57.9 16.8 | | |
| 1000 | | 61 | 67 | 10.0 | | | 60 | 90 | 13.7 | | | 64 | 141 | 20.3 | | | |
| 500 | | 31 | 35 | 10.4 | | | 30 | 47 | 14.2 | | | 32 | 73 | 21.0 | | | |
| 1450 | 17.7 | 82 | 88 | 9.9 | 38 11.2 | 18.0 | 80 | 118 | 13.5 | 48 13.5 | 17.1 | 85 | 185 | 20.0 | 53 16.8 | | |
| 1000 | | 56 | 62 | 10.1 | | | 55 | 83 | 13.8 | | | 58 | 130 | 20.4 | | | |
| 500 | | 28 | 32 | 10.4 | | | 28 | 43 | 14.3 | | | 29 | 67 | 21.1 | | | |
| 1450 | 19.4 | 75 | 81 | 9.9 | 38 11.2 | 19.7 | 73 | 109 | 13.6 | 48 13.5 | 18.7 | 77 | 170 | 20.1 | 53 17.2 | | |
| 1000 | | 52 | 57 | 10.1 | | | 51 | 77 | 13.9 | | | 53 | 119 | 20.5 | | | |
| 500 | | 26 | 30 | 10.5 | | | 25 | 40 | 14.3 | | | 27 | 62 | 21.2 | | | |
| 1450 | 21.3 | 68 | 74 | 10.0 | 38 11.2 | 21.7* | 67 | 100 | 13.7 | 48 13.5 | 20.6* | 70 | 155 | 20.2 | 53 17.2 | | |
| 1000 | | 47 | 52 | 10.2 | | | 46 | 70 | 13.9 | | | 48 | 109 | 20.6 | | | |
| 500 | | 23 | 27 | 10.5 | | | 23 | 36 | 14.4 | | | 24 | 56 | 21.3 | | | |
| 1450 | 23.6 | 61 | 67 | 10.0 | 38 11.2 | 24.1* | 60 | 90 | 13.7 | 48 13.5 | 22.8* | 63 | 141 | 20.3 | 53 17.2 | | |
| 1000 | | 42 | 47 | 10.2 | | | 42 | 63 | 14.0 | | | 44 | 99 | 20.7 | | | |
| 500 | | 21 | 24 | 10.6 | | | 21 | 33 | 14.5 | | | 22 | 51 | 21.4 | | | |
| Potenze termiche / Thermal power / Thermische Grenzleistung P_{TN} [kW] (senza raffreddamento / Without cooling / ohne Kühlung) | | | | | | | | | | | | | | | | | |
| | | | | | 66 | | | | | | 82 | | | | | | 104 |

* Nei rapporti contrassegnati non è disponibile la versione uscita con albero cavo.

* Hollow output shaft not available for ratios marked with this symbol.

* Bei den gekennzeichneten Übersetzungsverhältnissen ist die Version „Abtrieb mit Hohlwelle“ nicht verfügbar.

1.12 Motori applicabili

1.12 Compatible motors

1.12 Applizierbare Motoren

| | | IEC | | | | | | | | | | | | | | | |
|------|-----|-----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---|
| | | 63 | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315 | 355 | |
| RXP2 | 802 | | | | | | | o | | | * | | | | | | |
| | 804 | | | | | | | | o | | * | * | | | | | |
| | 806 | | | | | | | | o | o | | * | | | | | |
| | 808 | | | | | | | | | o | o | | * | * | | | |
| | 810 | | | | | | | | | | o | o | | * | | | |
| | 812 | | | | | | | | | | | o | o | * | * | | |
| | 814 | | | | | | | | | | | | o | o | * | * | |
| | 816 | | | | | | | | | | | | | o | | * | |
| | 818 | | | | | | | | | | | | | o | o | * | |
| | 820 | | | | | | | | | | | | | | o | * | |
| RXP3 | 802 | | o | o | o | o | o | o | * | * | * | | | | | | |
| | 804 | | | o | o | o | o | o | o* | * | * | * | | | | | |
| | 806 | | | | o | o | o | o | o | * | * | * | | | | | |
| | 808 | | | | o | o | o | o | o | o | * | * | * | * | | | |
| | 810 | | | | o | o | o | o | o | o | | * | * | * | * | | |
| | 812 | | | | o | o | o | o | o | o | o | o | * | * | * | | |
| | 814 | | | | | | o | o | o | o | o | o | * | * | * | | |
| | 816 | | | | | | o | o | o | o | o | o | o | * | * | * | |
| | 818 | | | | | | | o | o | o | o | o | o | o | o | * | * |
| | 820 | | | | | | | | o | o | o | o | o | o | o | * | * |
| RXP4 | 802 | | | | | | | | | | | | | | | | |
| | 804 | | | | | | | | | | | | | | | | |
| | 806 | | | | | | | | | | | | | | | | |
| | 808 | | | | | | | | | | | | | | | | |
| | 810 | | | | | | | | | | | | | | | | |
| | 812 | | | | | | | | | | | | | | | | |
| | 814 | | | | | | | | | | | | | | | | |
| | 816 | | | | | | | | | | | | | | | | |
| | 818 | | | | | | | | | | | | | | | | |
| | 820 | | | | | | | | | | | | | | | | |

o PAM...D (opzionale per RXP2 e RXP3 / optional for RXP2 e RXP3 / Optional für RXP2 e RXP3)

■ PAM...G

* Accoppiamenti consentiti solamente in posizioni di montaggio M5 ed M6.

* Given motor/gearbox connections are possible only in presence of mounting positions M5 and M6.

* Die obengenannten motor/getriebe verbindungen sind nur bei einbau M5 und M6 moeglich.

N.B: Per ulteriori accoppiamenti non previsti a catalogo consultare il ns. servizio tecnico commerciale.

NOTE: For coupling with motors not listed in this catalogue, please contact our Sales Engineers.

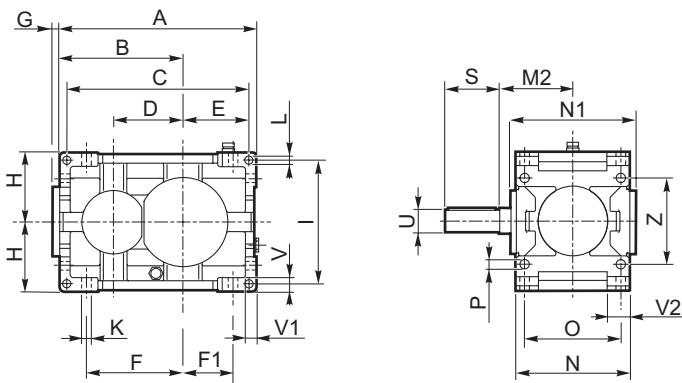
HINWEIS: Für weitere, nicht im Katalog enthaltene Passungen, bitten wir Sie sich mit unseren Technischen Kundendienst in Verbindung zu setzen.

I motori autofrenanti di taglia maggiore o uguale a 160 accoppiati agli RXP3-RXP4 devono essere supportati anche con l' ausilio dei propri piedi (B3-B5).

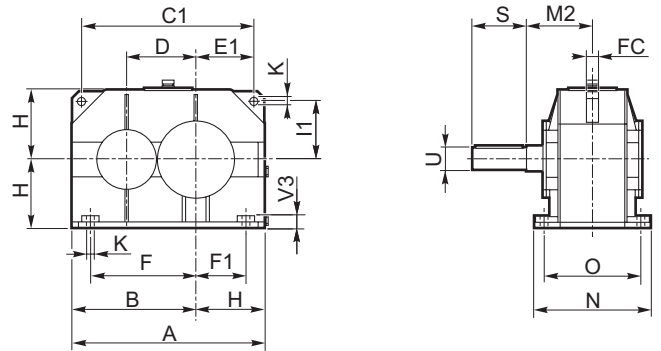
The brake motors above size 160 (included) coupled with RXP3-RXP4 must be supported by their own mounting feet as well (B3-B5).

Bremsmotoren ab Groesse 160 (inbegriffen) die am getriebe RXP3-RXP4 angebaut werden, muessen eigene Fuesse haben (B3-B5).

802-820



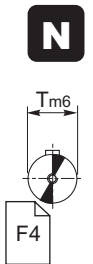
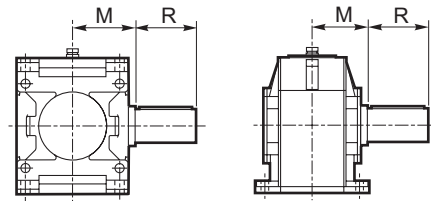
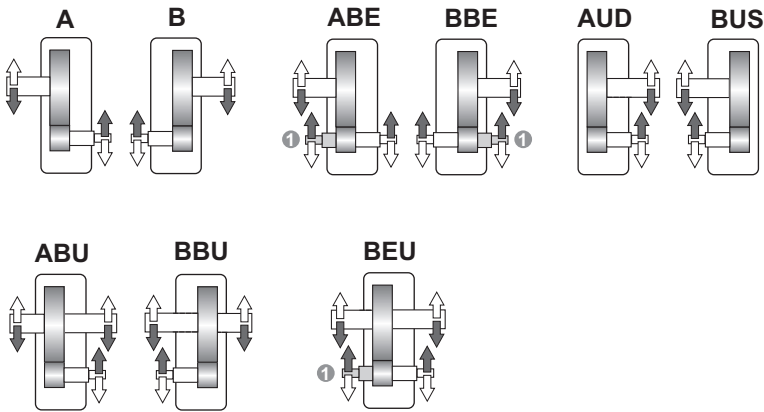
822-824



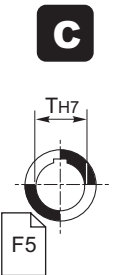
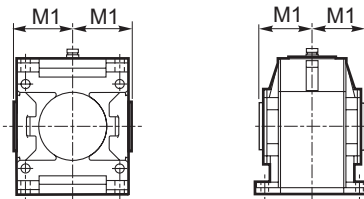
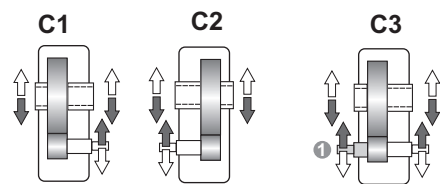
Esecuzione grafica / Shaft arrangement / Grafische Ausführung

Albero uscita / Output shaft / Abtriebswelle

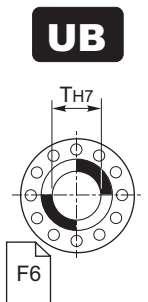
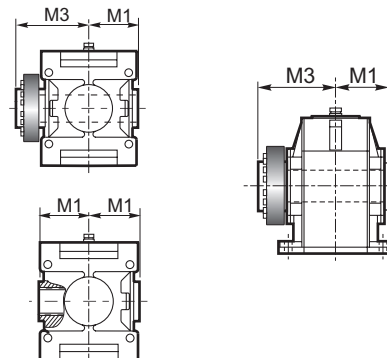
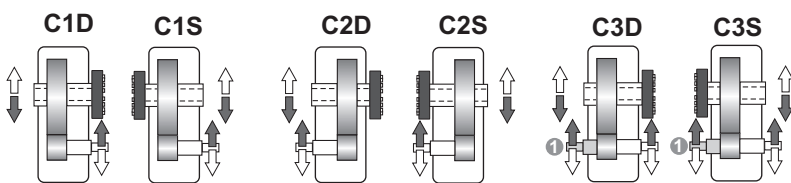
⇒ **N D FD Fn**



⇒ **C**



⇒ **UB B CD**



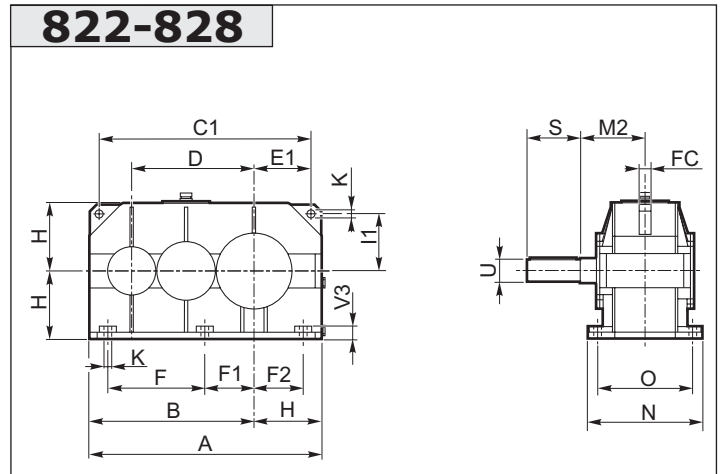
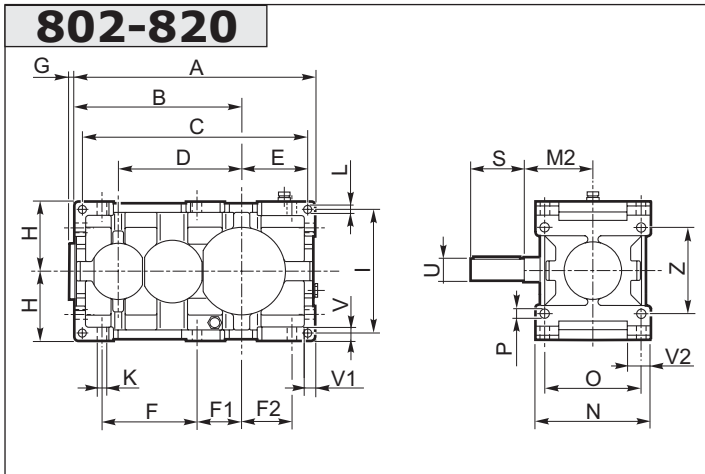
① ⇨ F2 Estremità bisorgente / Double-extended shaft / Doppelseitig herausragendes Wellenende

| | Dimensioni generali / Dimensions / Allgemeine Abmessungen | | | | | | | | | | | | | | | | | | | | | | | | Kg | |
|------------|---|-----|-----|------|-----|-------|-----|-----|-----|----|----|------------------|-----|-----|----|----|------------------|-----|-----|----|----|------|-------|----|-----|------|
| | A | B | C | C1 | D | E | E1 | F | F1 | FC | G | H _{h11} | I | I1 | K | L | N _{h11} | N1 | O | P | V | V1 | V2 | V3 | | Z |
| 802 | 355 | 225 | 327 | — | 125 | 116 | — | 175 | 90 | — | 19 | 125 | 224 | — | 18 | 14 | 213 | 219 | 180 | 18 | 25 | 20 | 44.5 | — | 160 | 71 |
| 804 | 402 | 252 | 370 | — | 140 | 134 | — | 196 | 104 | — | 20 | 140 | 250 | — | 20 | 16 | 237 | 241 | 200 | 20 | 28 | 22.5 | 49 | — | 180 | 103 |
| 806 | 455 | 285 | 421 | — | 160 | 153 | — | 222 | 117 | — | 23 | 160 | 280 | — | 22 | 18 | 269 | 271 | 225 | 22 | 32 | 25 | 56.5 | — | 200 | 115 |
| 808 | 510 | 320 | 472 | — | 180 | 171 | — | 250 | 130 | — | 25 | 180 | 320 | — | 25 | 20 | 297 | 299 | 250 | 25 | 36 | 28 | 59.5 | — | 224 | 200 |
| 810 | 570 | 360 | 530 | — | 200 | 190 | — | 280 | 145 | — | 28 | 200 | 360 | — | 27 | 22 | 335 | 327 | 280 | 27 | 40 | 32 | 67.5 | — | 250 | 281 |
| 812 | 645 | 405 | 600 | — | 225 | 217.5 | — | 315 | 160 | — | 30 | 225 | 400 | — | 30 | 24 | 379 | 380 | 315 | 30 | 45 | 36 | 78.5 | — | 280 | 376 |
| 814 | 715 | 450 | 665 | — | 250 | 240 | — | 350 | 180 | — | 34 | 250 | 450 | — | 33 | 27 | 427 | 424 | 355 | 33 | 50 | 40 | 89 | — | 320 | 550 |
| 816 | 805 | 505 | 749 | — | 280 | 272 | — | 393 | 203 | — | 36 | 280 | 500 | — | 36 | 30 | 479 | 473 | 400 | 36 | 56 | 45 | 96.5 | — | 360 | 771 |
| 818 | 910 | 570 | 846 | — | 320 | 308 | — | 445 | 230 | — | 41 | 315 | 560 | — | 39 | 35 | 541 | 497 | 450 | 39 | 63 | 50 | 114.5 | — | 400 | 1079 |
| 820 | 1020 | 640 | 948 | — | 360 | 344 | — | 500 | 260 | — | 44 | 355 | 638 | — | 42 | 39 | 599 | 550 | 500 | 42 | 70 | 56 | 124 | — | 450 | 1511 |
| 822 | 1115 | 715 | — | 985 | 400 | — | 335 | 615 | 300 | 60 | — | 400 | — | 335 | 45 | — | 675 | — | 560 | — | — | — | — | 55 | — | 2115 |
| 824 | 1255 | 805 | — | 1125 | 450 | — | 385 | 675 | 320 | 60 | — | 450 | — | 385 | 48 | — | 761 | — | 630 | — | — | — | — | 60 | — | 2960 |

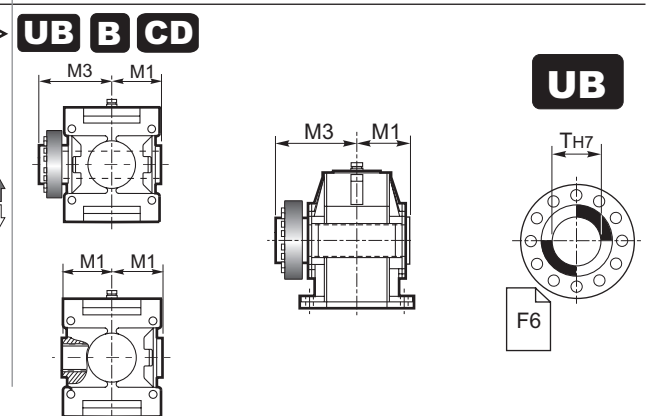
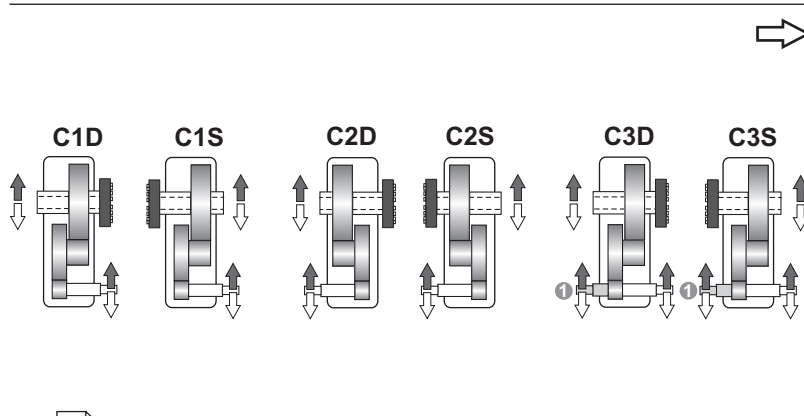
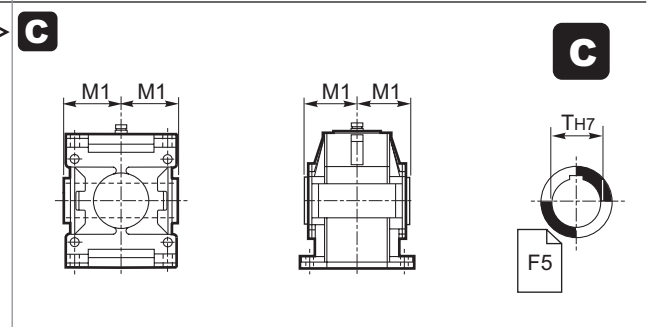
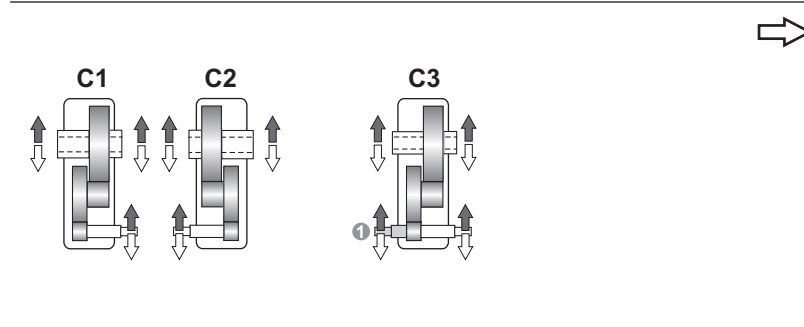
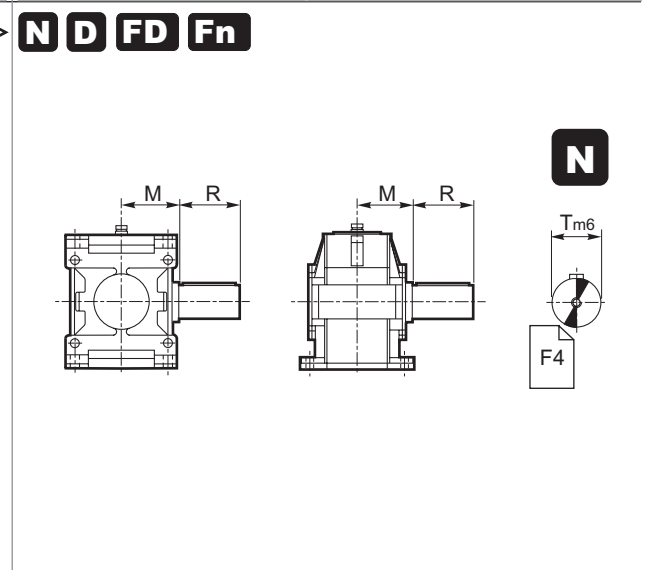
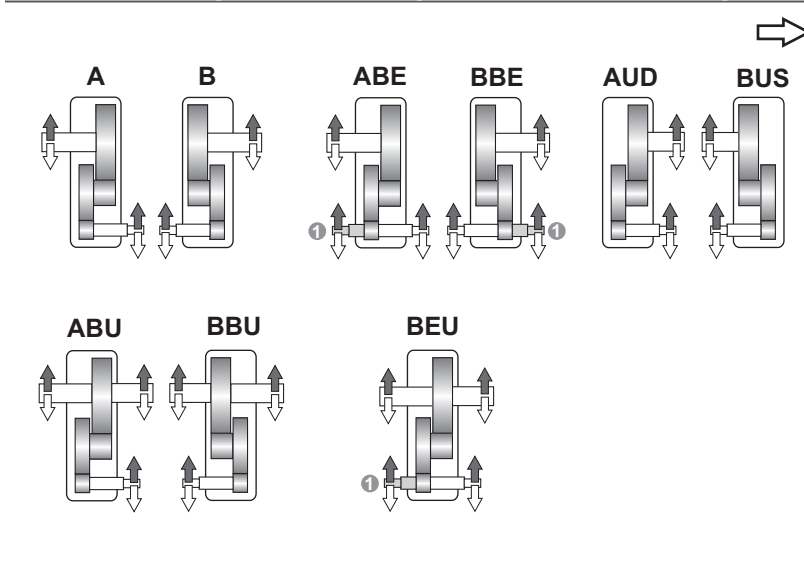


| | Albero entrata / Input shaft / Antriebswelle | | | Albero uscita / Output shaft / Abtriebswelle | | | | | | | | |
|------------|--|-----|-----|--|-----|-----|------|-----|------|-----|-----|--|
| | U | S | M2 | | | | | | | | | |
| | | | | T m6 | R | M | T H7 | M1 | T H7 | M1 | M3 | |
| 802 | 45 kJ6 | 112 | 137 | 60 | 112 | 109 | 60 | 109 | 60 | 109 | 170 | |
| 804 | 50 k6 | 112 | 151 | 70 | 125 | 121 | 70 | 121 | 70 | 121 | 192 | |
| 806 | 55 m6 | 125 | 170 | 80 | 140 | 137 | 80 | 137 | 80 | 137 | 215 | |
| 808 | 60 m6 | 140 | 192 | 90 | 160 | 151 | 90 | 151 | 90 | 151 | 246 | |
| 810 | 65 m6 | 140 | 216 | 100 | 180 | 170 | 100 | 170 | 100 | 170 | 266 | |
| 812 | 70 m6 | 160 | 242 | 110 | 200 | 192 | 110 | 192 | 110 | 192 | 302 | |
| 814 | 80 m6 | 180 | 273 | 125 | 225 | 216 | 125 | 216 | 125 | 216 | 335 | |
| 816 | 90 m6 | 180 | 302 | 140 | 250 | 242 | 140 | 242 | 140 | 242 | 370 | |
| 818 | 100 m6 | 200 | 273 | 160 | 280 | 273 | 160 | 273 | 160 | 273 | 422 | |
| 820 | 110 m6 | 200 | 302 | 180 | 315 | 302 | 180 | 302 | 180 | 302 | 477 | |
| 822 | 125 m6 | 225 | 340 | 200 | 355 | 340 | 200 | 340 | 200 | 340 | * | |
| 824 | 140 m6 | 250 | 383 | 220 | 400 | 383 | 220 | 383 | 220 | 383 | * | |

* A richiesta / On request / Auf Anfrage



Esecuzione grafica / Shaft arrangement / Grafische Ausführung Albero uscita / Output shaft / Abtriebswelle

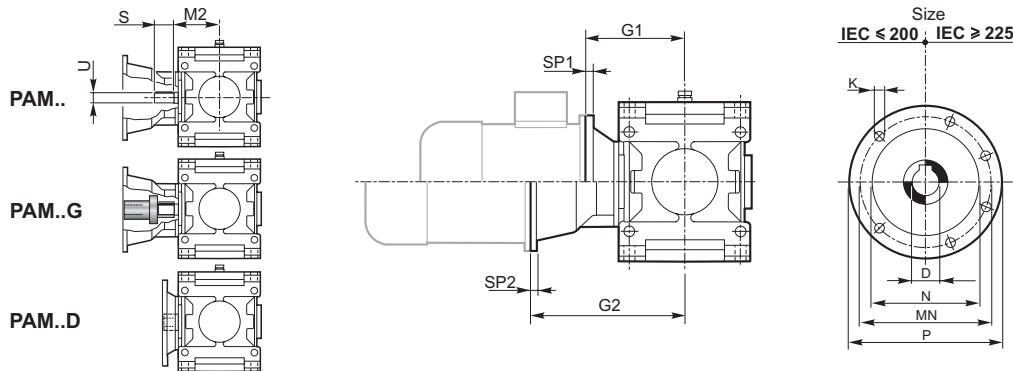


① → F2 Estremità bisorgente / Double-extended shaft / Doppelseitig herausragendes Wellenende

| | Dimensioni generali / Dimensions / Allgemeine Abmessungen | | | | | | | | | | | | | | | | | | | | | | | Kg | | |
|-----|---|------|------|------|------|-------|-----|-------|-------|-----|------|----|------------------|-----|-----|----|----|------------------|-----|----|----|------|-------|----|-----|------|
| | A | B | C | C1 | D | E | E1 | F | F1 | F2 | FC | G | H _{h11} | I | I1 | K | L | N _{h11} | O | P | V | V1 | V2 | | V3 | Z |
| 802 | 435 | 305 | 407 | — | 225 | 116 | — | 172.5 | 82.5 | 90 | — | 16 | 125 | 224 | — | 18 | 14 | 213 | 180 | 18 | 25 | 20 | 44.5 | — | 160 | 87 |
| 804 | 492 | 342 | 460 | — | 252 | 134 | — | 195 | 91 | 104 | — | 17 | 140 | 250 | — | 20 | 16 | 237 | 200 | 20 | 28 | 22.5 | 49 | — | 180 | 120 |
| 806 | 555 | 385 | 521 | — | 285 | 153 | — | 219.5 | 102.5 | 117 | — | 19 | 160 | 280 | — | 22 | 18 | 269 | 225 | 22 | 32 | 25 | 56.5 | — | 200 | 172 |
| 808 | 622 | 432 | 584 | — | 320 | 171 | — | 246 | 116 | 130 | — | 20 | 180 | 320 | — | 25 | 20 | 297 | 250 | 25 | 36 | 28 | 59.5 | — | 224 | 236 |
| 810 | 695 | 485 | 655 | — | 360 | 190 | — | 275 | 130 | 145 | — | 23 | 200 | 360 | — | 27 | 22 | 335 | 280 | 27 | 40 | 32 | 67.5 | — | 250 | 341 |
| 812 | 785 | 545 | 740 | — | 405 | 217.5 | — | 307.5 | 147.5 | 160 | — | 25 | 225 | 400 | — | 30 | 24 | 379 | 315 | 30 | 45 | 36 | 78.5 | — | 280 | 466 |
| 814 | 875 | 610 | 825 | — | 450 | 240 | — | 345 | 165 | 180 | — | 28 | 250 | 450 | — | 33 | 27 | 427 | 355 | 33 | 50 | 40 | 89 | — | 320 | 648 |
| 816 | 985 | 685 | 929 | — | 505 | 272 | — | 388 | 185 | 203 | — | 30 | 280 | 500 | — | 36 | 30 | 479 | 400 | 36 | 56 | 45 | 96.5 | — | 360 | 906 |
| 818 | 1110 | 770 | 1046 | — | 570 | 308 | — | 437.5 | 207.5 | 230 | — | 34 | 315 | 560 | — | 39 | 35 | 541 | 450 | 39 | 63 | 50 | 114.5 | — | 400 | 1270 |
| 820 | 1245 | 865 | 1173 | — | 640 | 344 | — | 492.5 | 232.5 | 260 | — | 36 | 355 | 638 | — | 42 | 39 | 599 | 500 | 42 | 70 | 56 | 124 | — | 450 | 1778 |
| 822 | 1370 | 970 | — | 1240 | 720 | — | 335 | 570 | 300 | 300 | 60 | — | 400 | — | 335 | 45 | — | 675 | 560 | — | — | — | — | 55 | — | 2488 |
| 824 | 1540 | 1090 | — | 1410 | 810 | — | 385 | 640 | 320 | 320 | 60 | — | 450 | — | 385 | 48 | — | 761 | 630 | — | — | — | — | 60 | — | 2961 |
| 826 | 1715 | 1215 | — | 1565 | 900 | — | 425 | 715 | 365 | 365 | 70 | — | 500 | — | 425 | 52 | — | 855 | 710 | — | — | — | — | 65 | — | 4145 |
| 828 | 1925 | 1365 | — | 1755 | 1010 | — | 475 | 805 | 415 | 415 | 2x50 | — | 560 | — | 475 | 56 | — | 965 | 800 | — | — | — | — | 80 | — | 5766 |

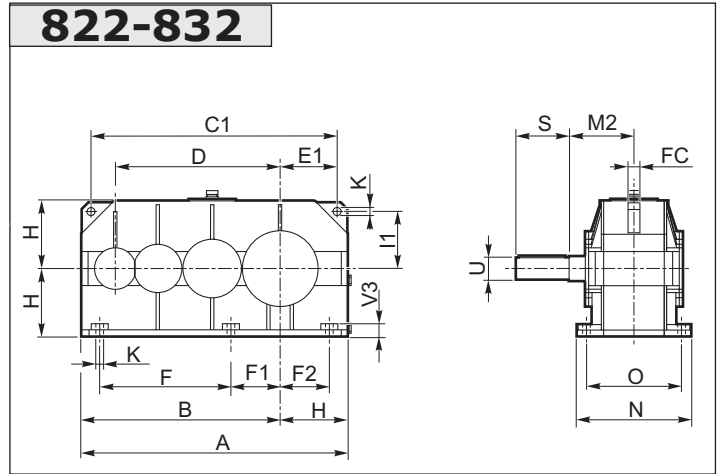
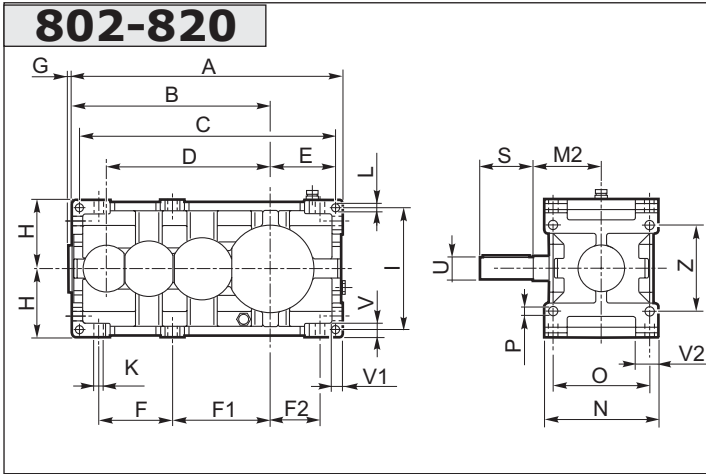
| | Albero entrata / Input shaft / Antriebswelle | | | Albero uscita / Output shaft / Abtriebswelle | | | | | | | |
|-----|--|-----|-----|--|-----|-----|------|-----|------|-----|-----|
| | U | S | M2 | | | | | | | | |
| | | | | T m6 | R | M | T H7 | M1 | T H7 | M1 | M3 |
| 802 | 32 kJ6 | 80 | 109 | 60 | 112 | 109 | 60 | 109 | 60 | 109 | 170 |
| 804 | 35 k6 | 80 | 121 | 70 | 125 | 121 | 70 | 121 | 70 | 121 | 192 |
| 806 | 45 k6 | 112 | 137 | 80 | 140 | 137 | 80 | 137 | 80 | 137 | 215 |
| 808 | 50 k6 | 112 | 151 | 90 | 160 | 151 | 90 | 151 | 90 | 151 | 246 |
| 810 | 55 m6 | 125 | 170 | 100 | 180 | 170 | 100 | 170 | 100 | 170 | 266 |
| 812 | 60 m6 | 140 | 192 | 110 | 200 | 192 | 110 | 192 | 110 | 192 | 302 |
| 814 | 65 m6 | 140 | 216 | 125 | 225 | 216 | 125 | 216 | 125 | 216 | 335 |
| 816 | 70 m6 | 160 | 242 | 140 | 250 | 242 | 140 | 242 | 140 | 242 | 370 |
| 818 | 80 m6 | 180 | 273 | 160 | 280 | 273 | 160 | 273 | 160 | 273 | 422 |
| 820 | 90 m6 | 180 | 302 | 180 | 315 | 302 | 180 | 302 | 180 | 302 | 477 |
| 822 | 100 m6 | 200 | 340 | 200 | 355 | 340 | 200 | 355 | 200 | 355 | * |
| 824 | 110 m6 | 200 | 383 | 220 | 400 | 383 | 220 | 400 | 220 | 400 | * |
| 826 | 125 m6 | 225 | 430 | 250 | 450 | 430 | 250 | 450 | 250 | 450 | * |
| 828 | 140 m6 | 250 | 485 | 280 | 500 | 485 | 280 | 500 | 280 | 500 | * |

* A richiesta / On request / Auf Anfrage

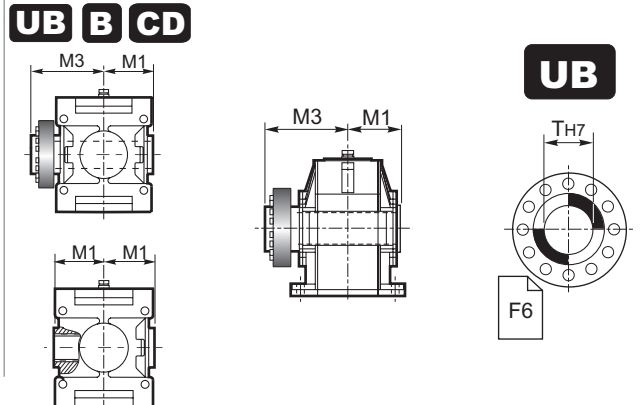
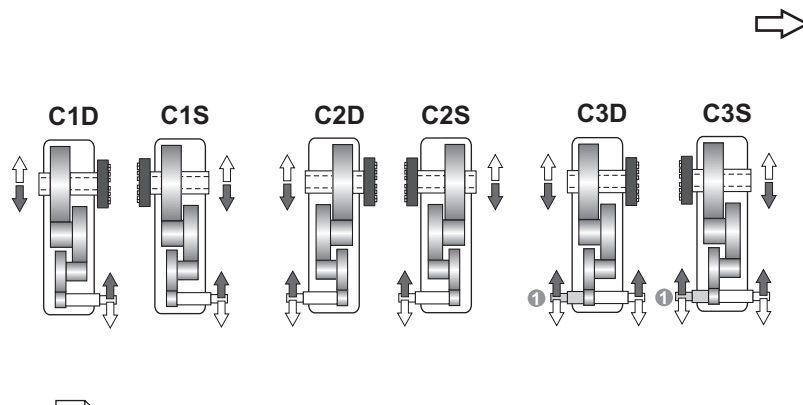
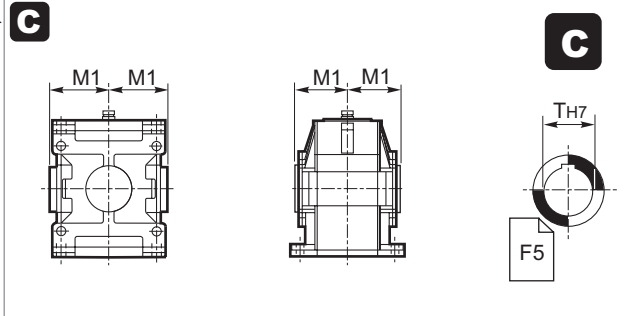
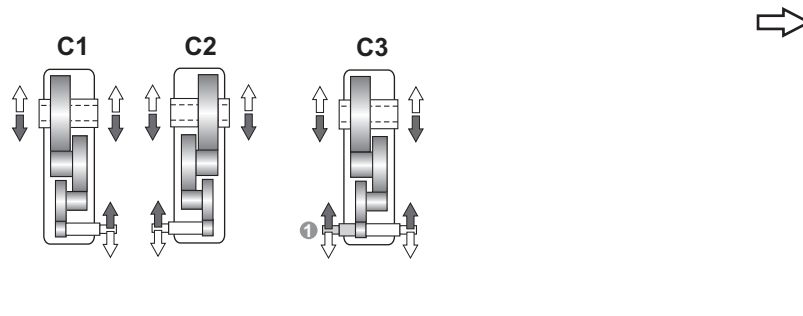
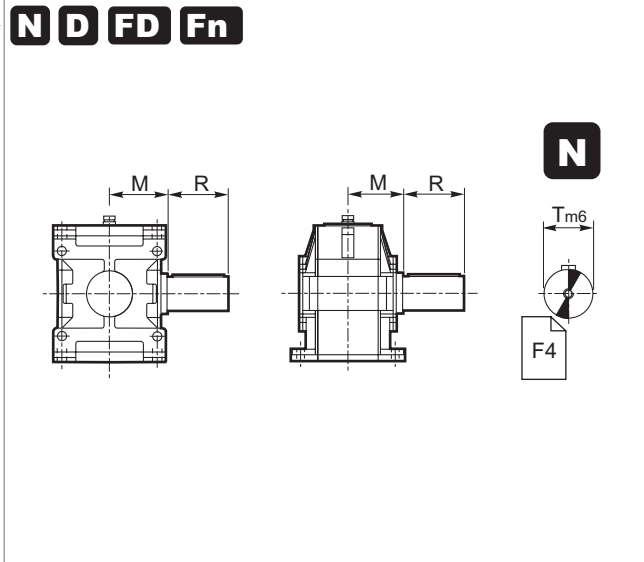
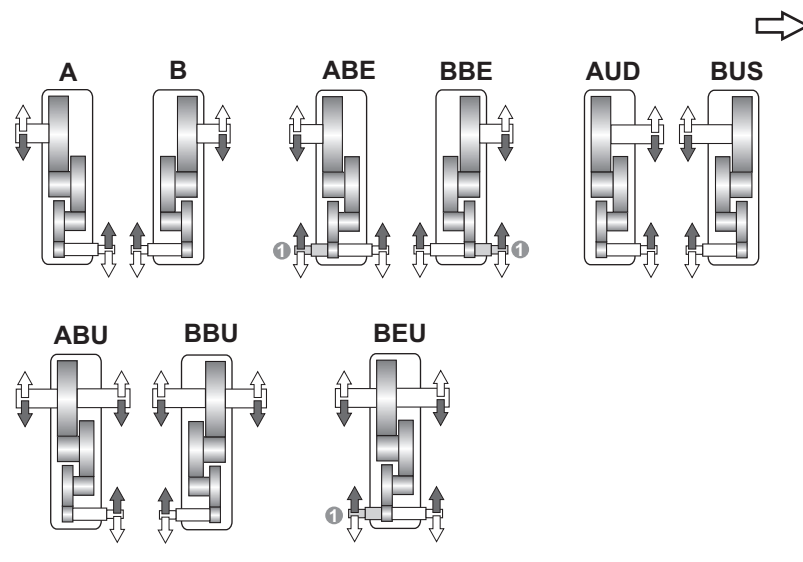


NB: Applicabilità motori al punto 1.12 / Possible assembly to IEC motors (see paragraph 1.12) / Moeglicher einbau auf IEC elektromotoren (siehe 1.12)

| | IEC | | | | | | | | | | | | | |
|--------|-------|-------|-------|-------|-------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315 | 355 |
| D H7 | 14 | 19 | 24 | 28 | 28 | 38 | 42 | 48 | 55 | 60 | 65 | 75 | 80 | 100 |
| P | 160 | 200 | 200 | 250 | 250 | 300 | 350 | 350 | 400 | 450 | 550 | 550 | 660 | 800 |
| MN | 130 | 165 | 165 | 215 | 215 | 265 | 300 | 300 | 350 | 400 | 500 | 500 | 600 | 740 |
| N G6 | 110 | 130 | 130 | 180 | 180 | 230 | 250 | 250 | 300 | 350 | 450 | 450 | 550 | 680 |
| K | M8 | M10 | M10 | M12 | M12 | M12 | M16 | M16 | M16 | M16 | M16 | M16 | M16 | M20 |
| SP/SP2 | 12/12 | 12/12 | 12/12 | 14/14 | 14/14 | 16/16 | 18/18 | 18/18 | 20/20 | 20/20 | 20/20 | 20/20 | 24/24 | 30 |
| G1/G2 | 802 | | | | | 170/273 | —/303 | —/303 | —/303 | | | | | |
| | 804 | | | | | | 205/315 | —/315 | —/315 | —/345 | | | | |
| | 806 | | | | | | 195/363 | 205/363 | —/363 | —/393 | | | | |
| | 808 | | | | | | | 205/377 | —/407 | —/407 | | | | |
| | 810 | | | | | | | | 205/409 | 245/439 | —/439 | —/439 | | |
| | 812 | | | | | | | | | 240/476 | 250/476 | —/476 | —/506 | |
| | 814 | | | | | | | | | | 235/500 | 250/500 | —/530 | —/570 |
| | 816 | | | | | | | | | | | 260/546 | —/576 | —/616 |
| | 818 | | | | | | | | | | | 260/597 | 290/627 | —/667 |
| | 820 | | | | | | | | | | | | 320/656 | —/696 |
| 822 | | | | | | | | | | | | | | |
| 828 | | | | | | | | | | | | | | |



Esecuzione grafica / Shaft arrangement / Grafische Ausführung Albero uscita / Output shaft / Abtriebswelle

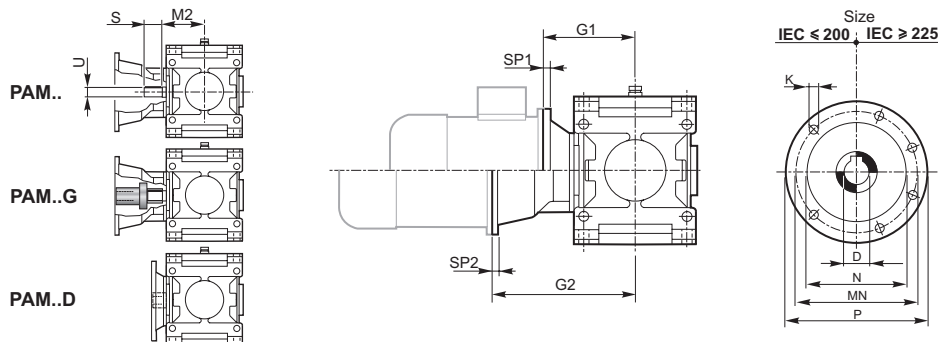


① F2 Estremità bisporgente / Double-extended shaft / Doppelseitig herausragendes Wellenende

| | Dimensioni generali / Dimensions / Allgemeine Abmessungen | | | | | | | | | | | | | | | | | | | | | | | | | |
|-----|---|------|------|------|------|-------|-----|------|-------|-------|------|----|------------------|-----|-----|----|----|------------------|------|----|----|------|-------|-----|-----|-------|
| | A | B | C | C1 | D | E | E1 | F | F1 | F2 | FC | G | H _{h11} | I | I1 | K | L | N _{h11} | O | P | V | V1 | V2 | V3 | Z | Kg |
| 802 | 498 | 368 | 470 | — | 305 | 116 | — | 136 | 182 | 90 | — | 12 | 125 | 224 | — | 18 | 14 | 213 | 180 | 18 | 25 | 20 | 44.5 | — | 160 | 99 |
| 804 | 562 | 412 | 530 | — | 342 | 134 | — | 153 | 202.5 | 103.5 | — | 13 | 140 | 250 | — | 20 | 16 | 237 | 200 | 20 | 28 | 22.5 | 49 | — | 180 | 138 |
| 806 | 635 | 465 | 601 | — | 385 | 153 | — | 173 | 229 | 117 | — | 16 | 160 | 280 | — | 22 | 18 | 269 | 225 | 22 | 32 | 25 | 56.5 | — | 200 | 243 |
| 808 | 712 | 522 | 674 | — | 432 | 171 | — | 194 | 258 | 130 | — | 17 | 180 | 320 | — | 25 | 20 | 297 | 250 | 25 | 36 | 28 | 59.5 | — | 224 | 273 |
| 810 | 795 | 585 | 755 | — | 485 | 190 | — | 216 | 288 | 144 | — | 19 | 200 | 360 | — | 27 | 22 | 335 | 280 | 27 | 40 | 32 | 67.5 | — | 250 | 382 |
| 812 | 897 | 657 | 852 | — | 545 | 217.5 | — | 242 | 324.5 | 159.5 | — | 20 | 225 | 400 | — | 30 | 24 | 379 | 315 | 30 | 45 | 36 | 78.5 | — | 280 | 534 |
| 814 | 1000 | 735 | 950 | — | 610 | 240 | — | 271 | 363 | 179 | — | 23 | 250 | 450 | — | 33 | 27 | 427 | 355 | 33 | 50 | 40 | 89 | — | 320 | 758 |
| 816 | 1125 | 825 | 1069 | — | 685 | 272 | — | 305 | 407.5 | 202.5 | — | 25 | 280 | 500 | — | 36 | 30 | 479 | 400 | 36 | 56 | 45 | 96.5 | — | 360 | 1045 |
| 818 | 1270 | 930 | 1206 | — | 770 | 308 | — | 345 | 460 | 230 | — | 28 | 315 | 560 | — | 39 | 35 | 541 | 450 | 39 | 63 | 50 | 114.5 | — | 400 | 1464 |
| 820 | 1425 | 1045 | 1353 | — | 865 | 344 | — | 388 | 516.5 | 259.5 | — | 30 | 355 | 638 | — | 42 | 39 | 599 | 500 | 42 | 70 | 56 | 124 | — | 450 | 2049 |
| 822 | 1570 | 1170 | — | 1440 | 970 | — | 335 | 770 | 300 | 300 | 60 | — | 400 | — | 335 | 45 | — | 675 | 560 | — | — | — | — | 56 | — | 2346 |
| 824 | 1765 | 1315 | — | 1635 | 1090 | — | 385 | 865 | 320 | 320 | 60 | — | 450 | — | 385 | 48 | — | 761 | 630 | — | — | — | — | 60 | — | 3414 |
| 826 | 1970 | 1470 | — | 1820 | 1220 | — | 425 | 970 | 365 | 365 | 70 | — | 500 | — | 425 | 52 | — | 855 | 710 | — | — | — | — | 65 | — | 4780 |
| 828 | 2210 | 1650 | — | 2040 | 1370 | — | 475 | 1090 | 415 | 415 | 2x50 | — | 560 | — | 475 | 56 | — | 965 | 800 | — | — | — | — | 80 | — | 6691 |
| 830 | 2485 | 1855 | — | 2305 | 1540 | — | 540 | 1225 | 470 | 470 | 2x50 | — | 630 | — | 540 | 60 | — | 1085 | 900 | — | — | — | — | 80 | — | 9368 |
| 832 | 2795 | 2085 | — | 2615 | 1730 | — | 620 | 1375 | 540 | 540 | 2x50 | — | 710 | — | 620 | 60 | — | 1185 | 1000 | — | — | — | — | 100 | — | 13064 |

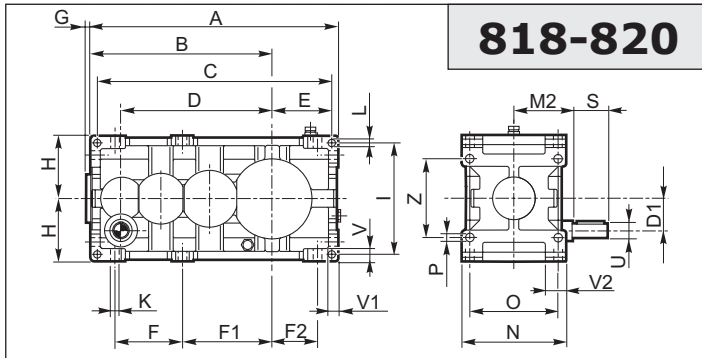
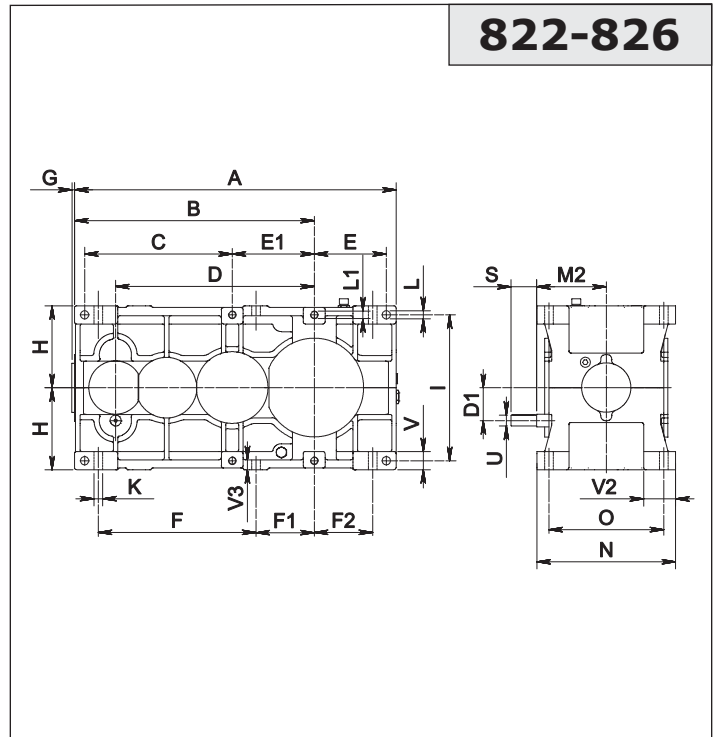
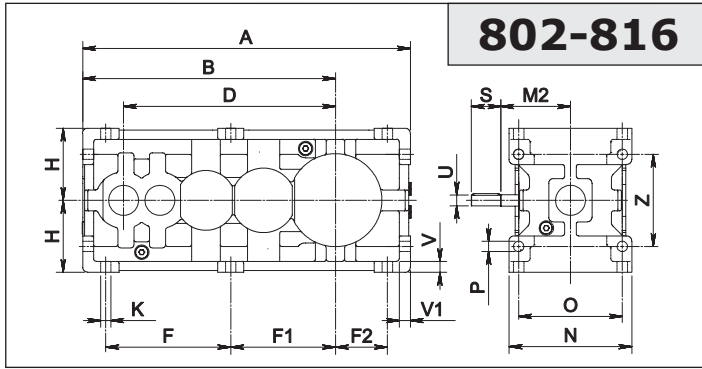
| | Albero entrata / Input shaft / Antriebswelle | | | Albero uscita / Output shaft / Abtriebswelle | | | | | | | | |
|-----|--|-----|-----|--|-----|-----|------|-----|------|-----|-----|--|
| | U | S | M2 | | | | | | | | | |
| | | | | T m6 | R | M | T H7 | M1 | T H7 | M1 | M3 | |
| 802 | 24 j6 | 63 | 109 | 60 | 112 | 109 | 60 | 109 | 60 | 109 | 170 | |
| 804 | 28 j6 | 63 | 121 | 70 | 125 | 121 | 70 | 121 | 70 | 121 | 192 | |
| 806 | 32 k6 | 80 | 137 | 80 | 140 | 137 | 80 | 137 | 80 | 137 | 215 | |
| 808 | 35 k6 | 80 | 151 | 90 | 160 | 151 | 90 | 151 | 90 | 151 | 246 | |
| 810 | 45 k6 | 112 | 170 | 100 | 180 | 170 | 100 | 170 | 100 | 170 | 266 | |
| 812 | 50 k6 | 112 | 192 | 110 | 200 | 192 | 110 | 192 | 110 | 192 | 302 | |
| 814 | 55 m6 | 125 | 216 | 125 | 225 | 216 | 125 | 216 | 125 | 216 | 335 | |
| 816 | 60 m6 | 140 | 242 | 140 | 250 | 242 | 140 | 242 | 140 | 242 | 370 | |
| 818 | 65 m6 | 140 | 273 | 160 | 280 | 273 | 160 | 273 | 160 | 273 | 422 | |
| 820 | 70 m6 | 160 | 302 | 180 | 315 | 302 | 180 | 302 | 180 | 302 | 477 | |
| 822 | 80 m6 | 180 | 340 | 200 | 355 | 340 | 200 | 340 | 200 | 340 | * | |
| 824 | 90 m6 | 180 | 383 | 220 | 400 | 383 | 220 | 383 | 220 | 383 | * | |
| 826 | 100 m6 | 200 | 430 | 250 | 450 | 430 | 250 | 430 | 250 | 430 | * | |
| 828 | 110 m6 | 200 | 485 | 280 | 500 | 485 | 280 | 485 | 280 | 485 | * | |
| 830 | 125 m6 | 225 | 545 | 320 | 500 | 545 | 320 | 545 | 320 | 545 | * | |
| 832 | 140 m6 | 250 | 595 | 350 | 560 | 595 | 350 | 595 | 350 | 595 | * | |

* A richiesta / On request / Auf Anfrage



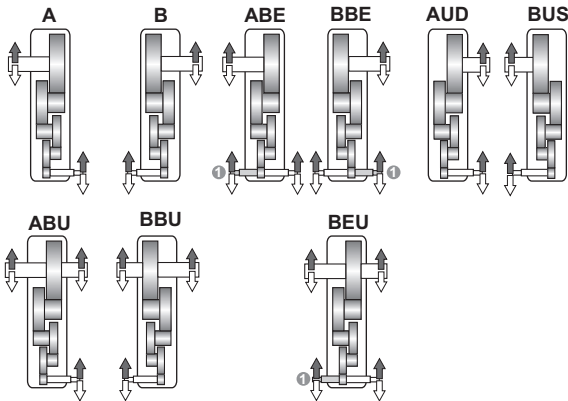
NB: Applicabilità motori al punto 1.12 / Possible assembly to IEC motors (see paragraph 1.12) / Moeglicher einbau auf IEC elektromotoren (siehe 1.12)

| | IEC | | | | | | | | | | | | | |
|---------|-------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|-------|-------|
| | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | 315 | 355 | |
| D H7 | 19 | 24 | 28 | 28 | 38 | 42 | 48 | 55 | 60 | 65 | 75 | 80 | 100 | |
| P | 200 | 200 | 250 | 250 | 300 | 350 | 350 | 400 | 450 | 550 | 550 | 660 | 800 | |
| MN | 165 | 165 | 215 | 215 | 265 | 300 | 300 | 350 | 400 | 500 | 500 | 600 | 740 | |
| N G6 | 130 | 130 | 180 | 180 | 230 | 250 | 250 | 300 | 350 | 450 | 450 | 550 | 680 | |
| K | M10 | M10 | M12 | M12 | M12 | M16 | M16 | M16 | M16 | M16 | M16 | M16 | M20 | |
| SP1/SP2 | 12/12 | 12/12 | 14/14 | 14/14 | 16/16 | 18/18 | 18/18 | 20/20 | 20/20 | 20/20 | 20/20 | 24/24 | | |
| G1/G2 | 802 | 125/ — | 125/226 | 125/236 | 125/236 | 195/256 | — 286 | — 286 | — 286 | | | | | |
| | 804 | | 135/ — | 135/248 | 135/248 | 160/268 | 160/298 | — 298 | — 298 | — 328 | | | | |
| | 806 | | | 155/281 | 155/281 | 160/301 | 200/331 | — 331 | — 331 | — 361 | | | | |
| | 808 | | | 160/ — | 160/ — | 160/315 | 190/345 | 190/345 | — 345 | — 375 | — 375 | — 375 | | |
| | 810 | | | 175/ — | 175/ — | 175/366 | 190/396 | 190/396 | — 396 | — 426 | — 426 | — 426 | — 456 | |
| | 812 | | | 205/ — | 205/ — | 210/388 | 220/418 | 220/418 | 220/418 | 250/448 | — 448 | — 448 | — 478 | |
| | 814 | | | | | 225/ — | 225/455 | 225/455 | 230/455 | 250/485 | — 485 | — 485 | — 515 | |
| | 816 | | | | | 245/ — | 245/496 | 245/496 | 250/496 | 260/526 | — 526 | — 526 | — 556 | — 596 |
| | 818 | | | | | | 280/ — | 280/ — | 280/527 | 280/557 | 290/557 | 290/557 | — 587 | — 627 |
| | 820 | | | | | | 320/ — | 320/ — | 320/ — | 320/606 | 320/606 | 320/606 | — 636 | — 676 |
| 822 | | | | | | | | | | | | | | |
| 832 | | | | | | | | | | | | | | |

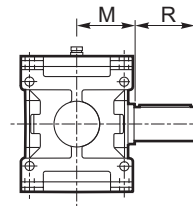


Esecuzione grafica / Shaft arrangement / Grafische Ausführung

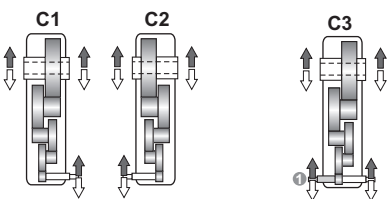
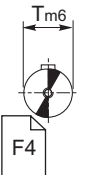
Albero uscita / Output shaft / Abtriebswelle



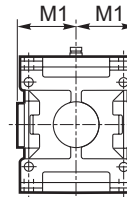
➔ **N D FD Fn**



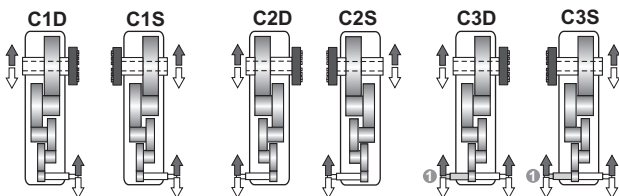
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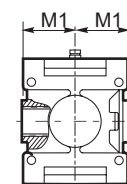
➔ **C**



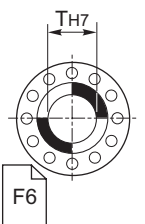
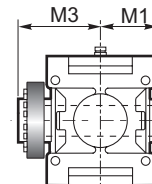
C



➔ **UB B CD**






UB

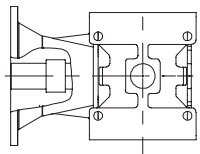


➔ **F2** Estremità bisorgente / Double extended shaft / Doppelseitig herausragendes Wellenende

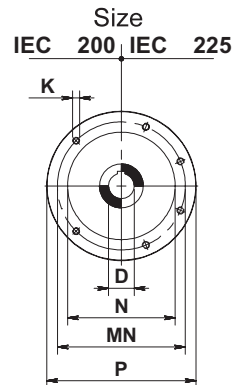
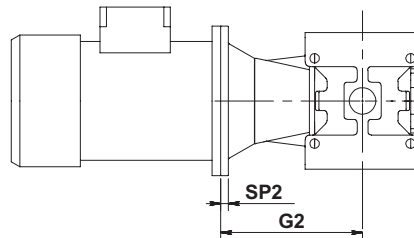
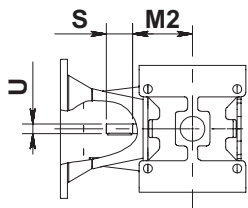
| Dimensioni generali / Dimensions / Allgemeine Abmessungen | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|------|------|------|------|-----|-----|-----|-----|-------|-------|----|----------|-----|----|----|-----|----------|-----|----|-----|----|-------|----|-----|------|
| | A | B | C | D | D1 | E | E1 | F | F1 | F2 | G | H h11 | I | K | L | L1 | N h11 | O | P | V | V1 | V2 | V3 | Z | Kg |
| 802 | 569 | 439 | - | 368 | - | - | - | 217 | 182 | 90 | - | 125 | - | 18 | - | - | 213 | 180 | 18 | 19 | 19 | - | - | 160 | 110 |
| 804 | 626 | 476 | - | 405 | - | - | - | 229 | 202.5 | 103.5 | - | 140 | - | 20 | - | - | 237 | 200 | 20 | 21 | 21 | - | - | 180 | 135 |
| 806 | 718 | 548 | - | 458 | - | - | - | 266 | 229 | 117 | - | 160 | - | 22 | - | - | 269 | 225 | 22 | 25 | 25 | - | - | 200 | 200 |
| 808 | 785 | 595 | - | 505 | - | - | - | 280 | 258 | 130 | - | 180 | - | 25 | - | - | 297 | 250 | 25 | 28 | 28 | - | - | 224 | 280 |
| 810 | 901 | 691 | - | 579 | - | - | - | 337 | 288 | 144 | - | 200 | - | 27 | - | - | 335 | 280 | 27 | 32 | 32 | - | - | 250 | 390 |
| 812 | 991 | 751 | - | 639 | - | - | - | 355 | 324.5 | 159.5 | - | 225 | - | 30 | - | - | 379 | 315 | 30 | 36 | 36 | - | - | 280 | 550 |
| 814 | 1136 | 871 | - | 731 | - | - | - | 422 | 363 | 179 | - | 250 | - | 33 | - | - | 427 | 355 | 33 | 40 | 40 | - | - | 320 | 770 |
| 816 | 1246 | 946 | - | 806 | - | - | - | 441 | 407.5 | 202.5 | - | 280 | - | 36 | - | - | 479 | 400 | 36 | 45 | 45 | - | - | 360 | 1060 |
| 818 | 1270 | 930 | 1206 | 770 | 125 | 308 | - | 345 | 460 | 230 | 28 | 315 | 560 | 39 | 35 | - | 541 | 450 | 39 | 63 | 50 | 114.5 | - | 400 | 1460 |
| 820 | 1425 | 1045 | 1353 | 865 | 140 | 344 | - | 388 | 516.5 | 259.5 | 30 | 355 | 638 | 42 | 39 | - | 599 | 500 | 42 | 70 | 56 | 124 | - | 450 | 2030 |
| 822 | 1570 | 1170 | 720 | 970 | 160 | 350 | 400 | 770 | 300 | 300 | 29 | 400 | 710 | 45 | 42 | M39 | 675 | 560 | - | 90 | - | 162 | 50 | - | 2880 |
| 824 | 1765 | 1315 | 810 | 1090 | 180 | 395 | 450 | 865 | 320 | 320 | 30 | 450 | 800 | 48 | 45 | M42 | 761 | 630 | - | 100 | - | 175 | 55 | - | 3965 |
| 826 | 1970 | 1470 | 910 | 1220 | 200 | 440 | 500 | 970 | 365 | 365 | 34 | 500 | 900 | 52 | 52 | M45 | 855 | 710 | - | 100 | - | 197 | 55 | - | 5210 |

| | Albero entrata / Input shaft / Antriebswelle | | | Albero uscita / Output shaft / Abtriebswelle | | | | | | | | |
|-----|--|-----|-----|---|-----|-----|---|-----|---|-----|--|--|
| | U | S | M2 |  | | |  | |  | | | |
| | | | | T m6 | R | M | T H7 | M1 | T H7 | M1 | M3 | |
| 802 | 19 j6 | 51 | 121 | 60 | 112 | 109 | 60 | 109 | 60 | 109 | 170 | |
| 804 | 19 j6 | 51 | 121 | 70 | 125 | 121 | 70 | 121 | 70 | 121 | 192 | |
| 806 | 24 j6 | 66 | 151 | 80 | 140 | 137 | 80 | 137 | 80 | 137 | 215 | |
| 808 | 24 j6 | 66 | 151 | 90 | 160 | 151 | 90 | 151 | 90 | 151 | 246 | |
| 810 | 28 j6 | 90 | 192 | 100 | 180 | 170 | 100 | 170 | 100 | 170 | 266 | |
| 812 | 28 j6 | 90 | 192 | 110 | 200 | 192 | 110 | 192 | 110 | 192 | 302 | |
| 814 | 32 k6 | 100 | 242 | 125 | 225 | 216 | 125 | 216 | 125 | 216 | 335 | |
| 816 | 32 k6 | 100 | 242 | 140 | 250 | 242 | 140 | 242 | 140 | 242 | 370 | |
| 818 | 45 k6 | 112 | 273 | 160 | 280 | 273 | 160 | 273 | 160 | 273 | 422 | |
| 820 | 50 k6 | 112 | 302 | 180 | 315 | 302 | 180 | 302 | 180 | 302 | 477 | |
| 822 | 55 m6 | 125 | 340 | 200 | 355 | 340 | 200 | 340 | 200 | 340 | | |
| 824 | 60 m6 | 140 | 383 | 220 | 400 | 383 | 220 | 383 | 220 | 383 | | |
| 826 | 65 m6 | 140 | 430 | 250 | 450 | 430 | 250 | 430 | 250 | 430 | A richiesta On request Auf Anfrage | |

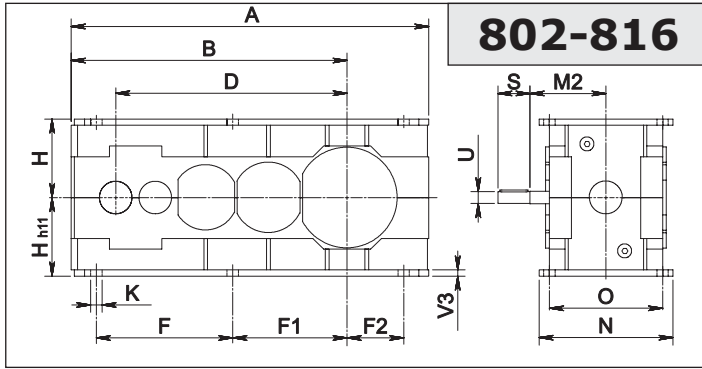
PAM..G



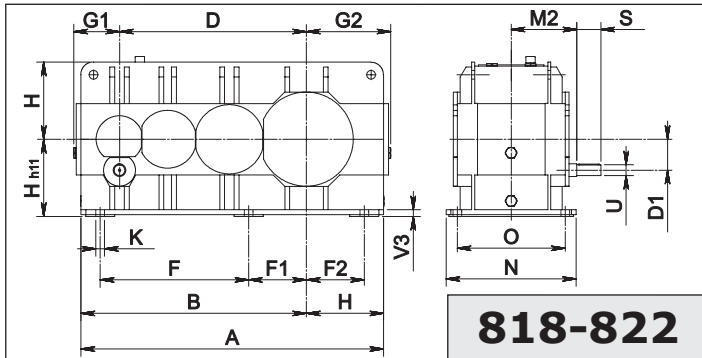
PAM..



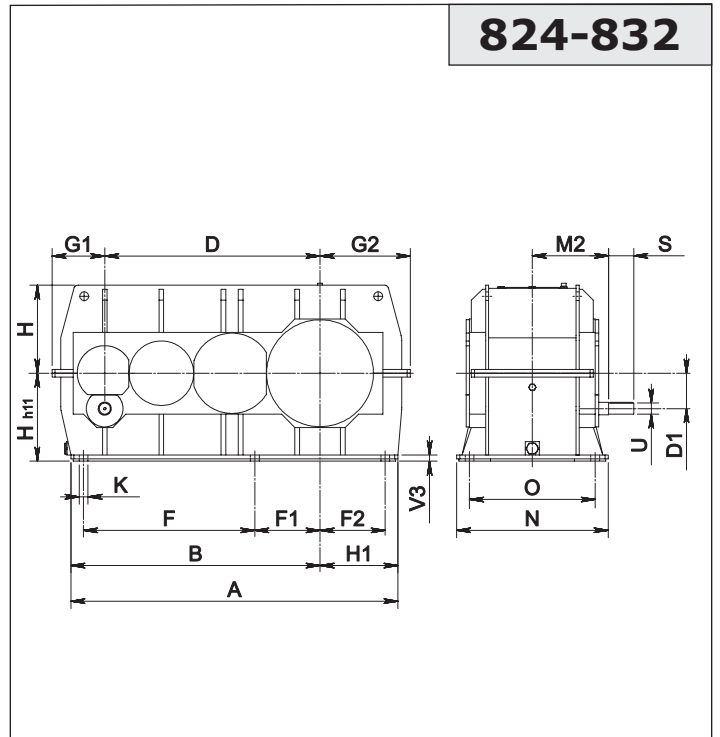
| | IEC | | | | | | | | | | | | |
|------|-----|-----|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| | 71 | 80 | 90 | 100 | 112 | 132 | 160 | 180 | 200 | 225 | 250 | 280 | |
| D H7 | 14 | 19 | 24 | 28 | 28 | 38 | 42 | 48 | 55 | 60 | 65 | 75 | |
| P | 160 | 200 | 200 | 250 | 250 | 300 | 350 | 350 | 400 | 450 | 550 | 550 | |
| MN | 130 | 165 | 165 | 215 | 215 | 265 | 300 | 300 | 350 | 400 | 500 | 500 | |
| N G6 | 110 | 130 | 130 | 180 | 180 | 230 | 250 | 250 | 300 | 350 | 450 | 450 | |
| K | M8 | M10 | M10 | M12 | M12 | M12 | M16 | M16 | M16 | M16 | M16 | M 16 | |
| SP2 | 12 | 12 | 12 | 14 | 14 | 16 | 16 | 16 | 20 | 20 | 20 | 20 | |
| G2 | 802 | 208 | 218 | 228 | 238 | 238 | 258 | 288 | 288 | 288 | | | |
| | 804 | 218 | 228 | 238 | 248 | 248 | 268 | 298 | 298 | 298 | | | |
| | 806 | | 272.5 | 272.5 | 282.5 | 282.5 | 302.5 | 332.5 | 332.5 | 332.5 | 362.5 | | |
| | 808 | | 285 | 285 | 295 | 295 | 315 | 345 | 345 | 345 | 375 | | |
| | 810 | | | | 361.5 | 361.5 | 370.5 | 400.5 | 400.5 | 400.5 | 430.5 | 430.5 | |
| | 812 | | | | 379 | 379 | 388 | 418 | 418 | 418 | 448 | 448 | |
| | 814 | | | | 435 | 435 | 444 | 474 | 474 | 474 | 504 | 504 | 504 |
| | 816 | | | | 457.5 | 457.5 | 466.5 | 496.5 | 496.5 | 496.5 | 526.5 | 526.5 | 526.5 |
| | 818 | | | | | | 469 | 499 | 499 | 499 | 529 | 529 | 529 |
| | 820 | | | | | | | 528 | 528 | 528 | 558 | 558 | 558 |
| 822 | | | | | | | | | | | | | |
| 824 | | | | | | | | | | | | | |
| 826 | | | | | | | | | | | | | |



802-816



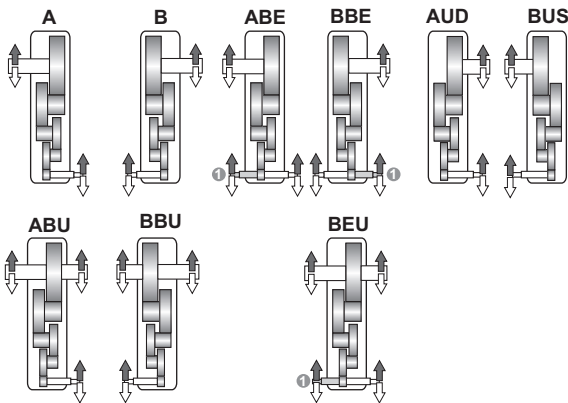
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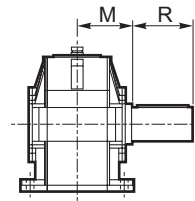
824-832

Esecuzione grafica / Shaft arrangement / Grafische Ausführung

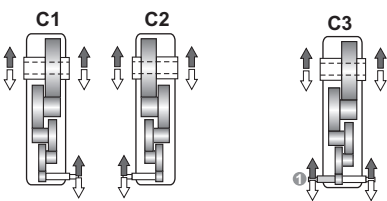
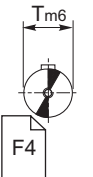
Albero uscita / Output shaft / Abtriebswelle



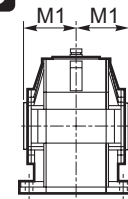
➔ **N D FD Fn**



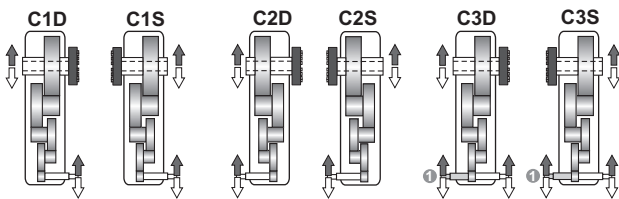
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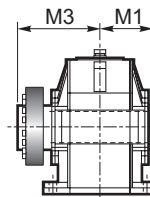
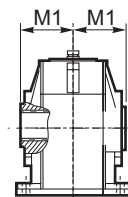
➔ **C**



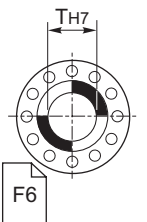
C



➔ **UB B CD**






UB



➔ F2 Estremità bisporgente / Double extended shaft / Doppelseitig herausragendes Wellenende

| | Dimensioni generali / Dimensions / Allgemeine Abmessungen | | | | | | | | | | | | | | | |
|------------|---|------|------|-----|------|-------|-------|-----|-----|------------------|-----|----|------------------|------|----|-------|
| | A | B | D | D1 | F | F1 | F2 | G1 | G2 | H _{h11} | H1 | K | N _{h11} | O | V3 | Kg |
| 802 | 569 | 439 | 368 | - | 217 | 182 | 90 | - | - | 125 | - | 18 | 213 | 180 | 10 | 110 |
| 804 | 626 | 476 | 405 | - | 229 | 202.5 | 103.5 | - | - | 140 | - | 20 | 237 | 200 | 12 | 135 |
| 806 | 718 | 548 | 458 | - | 266 | 229 | 117 | - | - | 160 | - | 22 | 269 | 225 | 15 | 200 |
| 808 | 785 | 595 | 505 | - | 280 | 258 | 130 | - | - | 180 | - | 25 | 297 | 250 | 15 | 280 |
| 810 | 901 | 691 | 579 | - | 337 | 288 | 144 | - | - | 200 | - | 27 | 335 | 280 | 20 | 390 |
| 812 | 991 | 751 | 639 | - | 355 | 324.5 | 159.5 | - | - | 225 | - | 30 | 379 | 315 | 20 | 550 |
| 814 | 1136 | 871 | 731 | - | 422 | 363 | 179 | - | - | 250 | - | 33 | 427 | 355 | 20 | 770 |
| 816 | 1246 | 946 | 806 | - | 441 | 407.5 | 202.5 | - | - | 280 | - | 36 | 479 | 400 | 20 | 1060 |
| 818 | 1245 | 930 | 770 | 125 | 345 | 460 | 230 | 202 | 357 | 315 | - | 39 | 541 | 450 | 30 | 1524 |
| 820 | 1400 | 1045 | 865 | 140 | 388 | 516.5 | 259.5 | 232 | 407 | 355 | - | 42 | 599 | 500 | 30 | 2204 |
| 822 | 1570 | 1170 | 970 | 160 | 770 | 300 | 300 | 237 | 437 | 400 | - | 45 | 675 | 560 | 35 | 3030 |
| 824 | 1635 | 1255 | 1090 | 180 | 865 | 320 | 320 | 265 | 480 | 450 | 380 | 48 | 761 | 630 | 37 | 4100 |
| 826 | 1830 | 1400 | 1220 | 200 | 970 | 365 | 365 | 295 | 545 | 500 | 430 | 52 | 850 | 710 | 40 | 5200 |
| 828 | 2082 | 1586 | 1370 | 225 | 1090 | 415 | 415 | 336 | 575 | 560 | 496 | 56 | 965 | 800 | 40 | 7300 |
| 830 | 2355 | 1805 | 1540 | 250 | 1225 | 470 | 470 | 380 | 665 | 630 | 550 | 60 | 1080 | 900 | 45 | 10800 |
| 832 | 2895 | 2265 | 1730 | 280 | 1375 | 540 | 540 | 430 | 735 | 710 | 630 | 60 | 1180 | 1000 | 50 | 14300 |

| | Albero entrata / Input shaft / Antriebswelle | | | Albero uscita / Output shaft / Abtriebswelle | | | | | | | | |
|------------|--|-----|-----|---|-----|-----|---|-----|---|-----|--|--|
| | U | S | M2 |  | | |  | |  | | | |
| | | | | T m6 | R | M | T H7 | M1 | T H7 | M1 | M3 | |
| 802 | 19 j6 | 51 | 121 | 60 | 112 | 109 | 60 | 109 | 60 | 109 | 170 | |
| 804 | 19 j6 | 51 | 121 | 70 | 125 | 121 | 70 | 121 | 70 | 121 | 192 | |
| 806 | 24 j6 | 66 | 151 | 80 | 140 | 137 | 80 | 137 | 80 | 137 | 215 | |
| 808 | 24 j6 | 66 | 151 | 90 | 160 | 151 | 90 | 151 | 90 | 151 | 246 | |
| 810 | 28 j6 | 90 | 192 | 100 | 180 | 170 | 100 | 170 | 100 | 170 | 266 | |
| 812 | 28 j6 | 90 | 192 | 110 | 200 | 192 | 110 | 192 | 110 | 192 | 302 | |
| 814 | 32 k6 | 100 | 242 | 125 | 225 | 216 | 125 | 216 | 125 | 216 | 335 | |
| 816 | 32 k6 | 100 | 242 | 140 | 250 | 242 | 140 | 242 | 140 | 242 | 370 | |
| 818 | 45 k6 | 112 | 273 | 160 | 280 | 273 | 160 | 273 | 160 | 273 | 422 | |
| 820 | 50 k6 | 112 | 302 | 180 | 315 | 302 | 180 | 302 | 180 | 302 | 477 | |
| 822 | 55 m6 | 125 | 340 | 200 | 355 | 340 | 200 | 340 | 200 | 340 | A richiesta On request Auf Anfrage | |
| 824 | 60 m6 | 140 | 383 | 220 | 400 | 383 | 220 | 383 | 220 | 383 | | |
| 826 | 65 m6 | 140 | 430 | 250 | 450 | 430 | 250 | 430 | 250 | 430 | | |
| 828 | 70 m6 | 160 | 485 | 280 | 500 | 485 | 280 | 485 | 280 | 485 | | |
| 830 | 80 m6 | 180 | 545 | 320 | 500 | 545 | 320 | 545 | 320 | 545 | | |
| 832 | 90 m6 | 180 | 595 | 350 | 560 | 595 | 350 | 595 | 350 | 595 | | |

Predisposizioni per attacco motore IEC a richiesta
 Provisions for IEC motor coupling available on request
 Auslegung für Anschluss eines IEC-Motor auf Anfrage

