

CATALOGO RO•RV
RO•RV CATALOGUE /
RO•RV-KATALOG /





L'esperienza al servizio dell'innovazione

IT

Dal 1955 il Gruppo Varvel progetta e realizza sistemi di trasmissione di potenza impiegati in numerosi settori dell'industria. "Know-how to do it": Varvel ha le competenze per soddisfare al meglio le richieste dei clienti. Grazie alla grande esperienza maturata in oltre sessant'anni, Varvel offre alla clientela un'ampia gamma di soluzioni standard e prodotti personalizzati per esigenze specifiche. L'intera gamma di prodotti Varvel è progettata e realizzata in Italia, ma il Gruppo è presente in tutto il mondo con due filiali (una in USA e l'altra in India) e una rete globale con oltre 100 partner commerciali.

Experience at the service of innovation

EN

The Varvel Group has been designing and producing power transmission systems for numerous areas of industry since 1955. "Know-how to do it": Varvel has the know-how needed to satisfy customers' requests in the best way possible. Thanks to over sixty years of accumulated experience, Varvel can offer customers a vast range of standard solutions and customise products for specific needs. The entire product range is designed and made in Italy and sold worldwide through two subsidiaries (in the USA and India) and a global network of over 100 commercial partners.

Erfahrung im Dienste der Innovation

DE

Die Varvel-Gruppe entwickelt und produziert seit 1955 Kraftübertragungssysteme für viele Industriezweige. "Know-how to do it": Varvel verfügt über das Know-how, um die Anforderungen der Kunden bestmöglich zu erfüllen. Dank der in über sechzig Jahren Firmenaktivität gesammelten Erfahrung kann Varvel seinen Kunden eine breite Palette von Standardlösungen und maßgeschneiderten Produkten für alle spezifischen Anforderungen bieten. Die gesamte Varvel-Produktpalette wird in Italien entwickelt und hergestellt; darüber hinaus ist die Gruppe aber auch weltweit mit zwei Tochtergesellschaften (die eine in den USA und die andere in Indien) und einem globalen Netzwerk mit über 100 Geschäftspartnern präsent.

ISO 9001:2015
ISO 14001:2015
ISO 45001:2018



EC DIRECTIVE 2014/34/EC (ATEX)



RO - RV



RIDUTTORI AD ASSI ORTOGONALI




- tre coppie di ingranaggi
- versioni in linea e a squadra
- motori IEC e NEMA

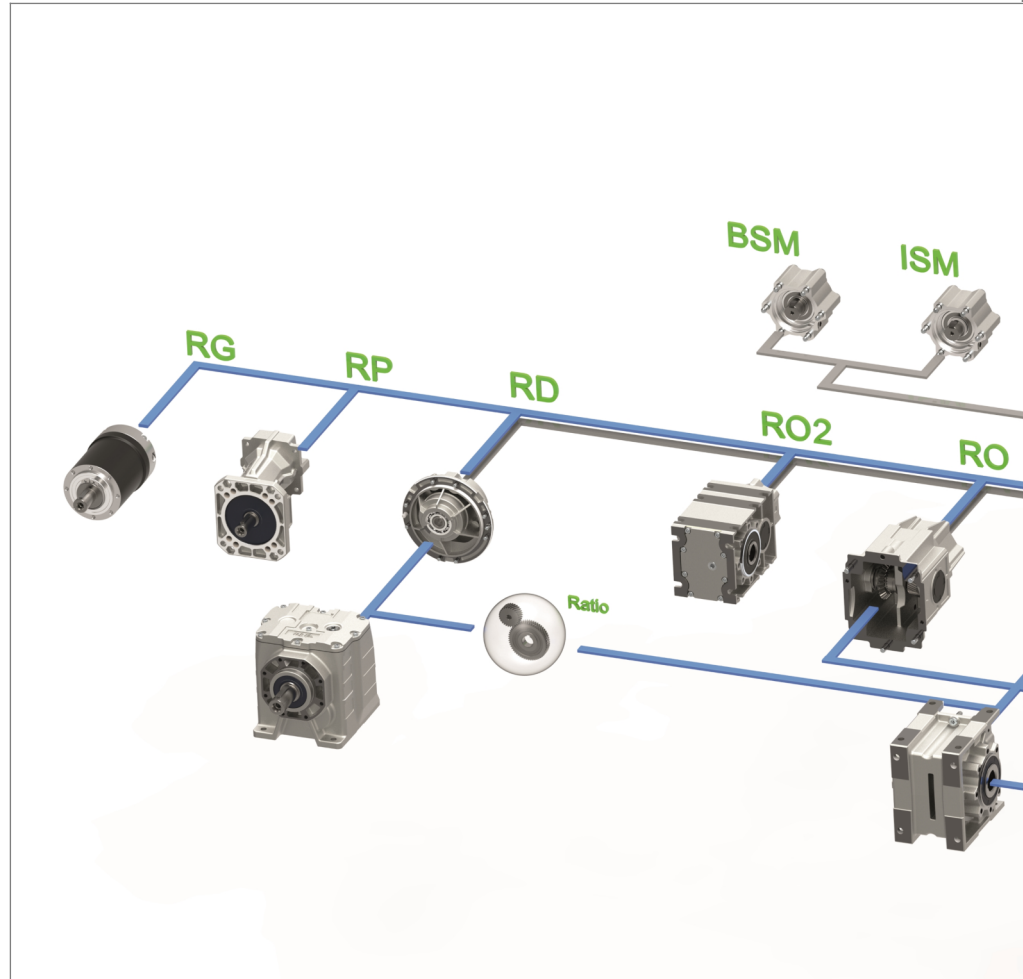
BEVEL HELICAL GEARBOXES

- three gear trains
- in-line and right angle versions
- IEC and NEMA motors

KEGELRADGETRIEBE

- Dreistufig
- In-Linie- u. Winkelausführungen
- IEC- u. NEMA-Motoren

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Modularità - Modularity - Modularität

Modularità e flessibilità hanno guidato il progetto dei prodotti VARVEL fino dagli anni 2000 permettendo così alla rete di vendita, il montaggio di riduttori da kit in pochi minuti e con normale attrezzatura.

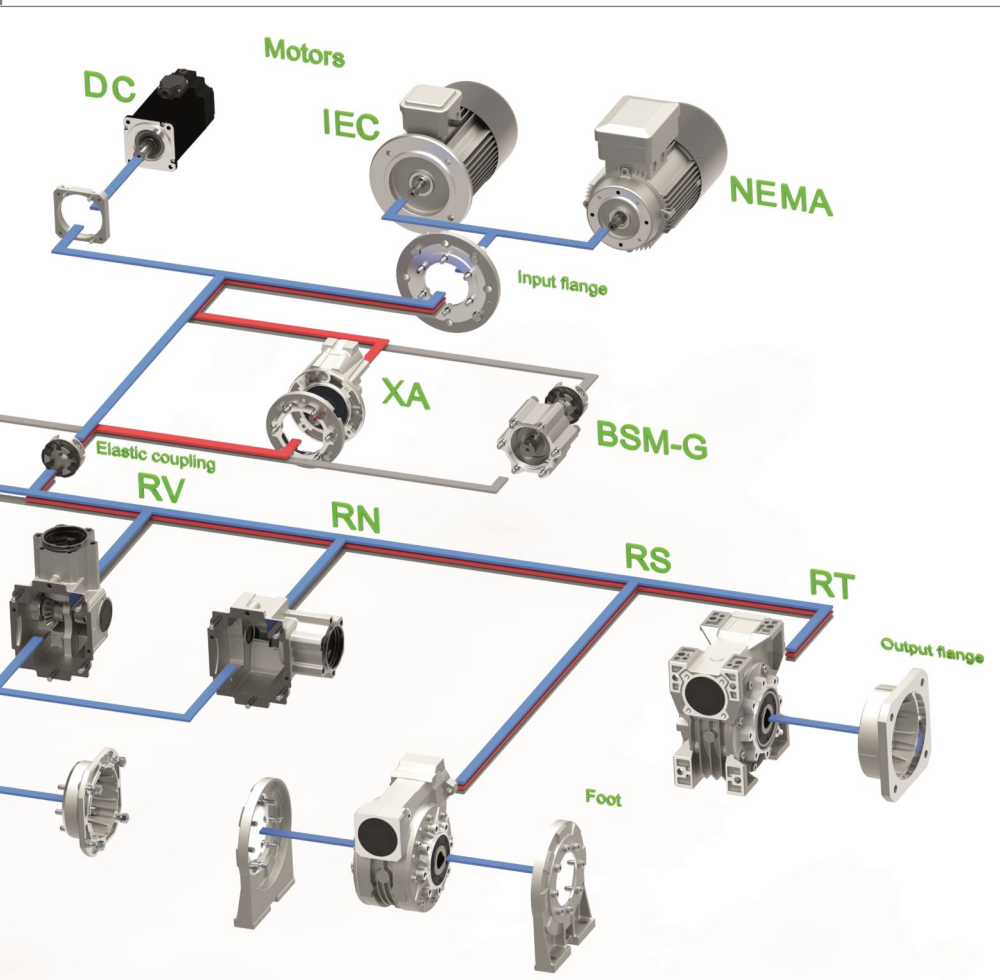
Il montaggio da kit permette la massima flessibilità ai distributori e rivenditori VARVEL che, grazie alla disponibilità di un numero limitato di kit in magazzino, possono configurare all'istante il prodotto richiesto.

Modularity and flexibility have been leading the VARVEL product design since the 2000s, allowing our sales net the assembly of gearboxes in kit form in a few minutes and with a normal equipment.

The kit-form mounting allows maximum flexibility to VARVEL distributors and resellers who, thanks to the availability of a limited kit number in stock, can instantly configure the product requested.

Modularität und Flexibilität sind seit den Jahren 2000 führend bei der Entwicklung von VARVEL-Produkten, indem sie unserem Vertriebsnetz die Montage von Getrieben in Bausatzform in wenigen Minuten und mit normaler Ausrüstung ermöglichen.

Die Kit-Zusammenstellung bietet VARVEL-Händlern und Wiederverkäufern maximale Flexibilität, die dank einer begrenzten Verfügbarkeit von Bausätzen sofort das erforderliche Produkt konfigurieren können.



Selezione guidata - Selection wizard - Geführte Auswahl

Il programma di selezione **VARsize**® disponibile nel sito www.varvel.com permette un facile dimensionamento dei prodotti VARVEL.

Disegni 2D/3D

Tramite configurazione assistita si generano modelli 3D e disegni 2D nei formati CAD più diffusi.

Configurazione assistita

VARsize identifica

- i riduttori che soddisfano i parametri di funzionamento richiesti (potenza, coppia, velocità, fattore di servizio, ecc.),
- un documento dei dati caratteristici del riduttore selezionato,
- il disegno dimensionale 2D,
- il modello 3D.

VARsize® selection program, available from our site www.varvel.com allows a friendly sizing of VARVEL product range.

2D/3D Drawings

A guided selection lets 2D/3D models downloaded for the most popular CAD systems.

Guided selection

VARsize returns

- the gearboxes matching the required operation parameters (power, output torque, rpm, service factor etc.),
- a data sheet featuring performance data of the selected gearbox;
- the 2D dimensional drawings,
- the 3D model.

Das **VARsize**®-Auswahlprogramm finden Sie auf der Website www.varvel.com ermöglicht die einfache Dimensionierung von VARVEL-Produkten .

2D/3D-Zeichnungen

Die unterstützte Auswahl bietet die Möglichkeit 2D/3D Modelle für die gängigen CAD Systeme zu laden.

Unterstützte Auswahl

VARsize erzeugt

- die Getriebe der erforderlichen Betriebsparameter für: Leistung, Moment, Drehzahl, Betriebsfaktor usw.,
- ein Datenblatt mit die charakteristischen Daten des gewählten Getriebe,
- die 2D-Maßzeichnung,
- das 3D-Modell.

**Descrizione
Description
Beschreibung**

La serie dei riduttori RO-RV è concepita secondo le norme di progettazione ISO con l'ausilio di analisi strutturale per verifica della deformata e dello stress.

La robusta struttura non subisce deformazioni significative sotto effetto della coppia di funzionamento e dei carichi esterni con positivi risultati sulle superfici di tenuta.

I riduttori delle serie RO-RV sono costruiti in alluminio pressofuso per le prime 3 grandezze ed in ghisa per le rimanenti.

La versione pendolare permette la conversione in forma flangiata B5 applicando semplicemente una delle diverse flange di uscita disponibili.

Diverse dimensioni e tipi di alberi di uscita (cavo con chiavetta, cavo senza chiavetta e con calettatore, cavo scanalato e pieno con una o due sporgenze) sono disponibili per la più ampia possibilità di applicazioni.

La serie RO e RV sono previste in 6 grandezze, 30 rapporti di riduzione e momenti torcenti fra 180 e 3400 Nm.

La serie dei riduttori RO-RV è costituita da riduttori ad assi ortogonali, con una coppia conica e due cilindriche, e con albero di uscita cavo in esecuzione standard.

Fattore di servizio

I dati di selezione sono intesi per un fattore di servizio SF1.0, cioè per

- 8 ore di funzionamento al giorno
- carico uniforme
- 6 avviamenti all'ora
- temperatura ambiente fra 15 a 35 °C

Potenza termica

La **potenza nominale** è la potenza che può essere applicata all'entrata del riduttore, in servizio continuo, temperatura max. ambiente di 40 °C, altitudine max. 1000 m e velocità dell'aria 1,25 m/s, senza superare una temperatura dell'olio di circa 85 °C.

La **potenza termica** può limitare la nominale P_1 (v. pag.18 area in grigio) in funzione del sistema di raffreddamento, della velocità di entrata, della temperatura ambiente e del coefficiente di servizio.

Direttiva ATEX

I riduttori VARVEL-ATEX fornibili su richiesta, sono progettati e costruiti in accordo alla Direttiva 2014/34/CE "ATEX" e sono pertanto idonei alla installazione in atmosfere potenzialmente esplosive.

Informazioni dettagliate alle pagine 86-87.

The gearboxes Series RO-RV are designed according to latest ISO engineering specifications with the help of computer aided structural analysis for displacement and stress field.

The monolithic framework does not deflect under the effect of torque and external loads with effective results on sealing surfaces.

The gearboxes of Series RO-RV are manufactured of aluminium pressure die cast for the first 3 sizes and of cast iron for the others. The shaft mount version allows the flange mount B5 conversion by simply fitting one of the many output flanges available.

Various dimensions and types of output shafts (hollow with through keyway, hollow without keyway and with shrink disk, hollow splined and solid with single or double end) are available for the majority of applications.

The series RO and RV are made of 6 sizes, 30 reduction ratios and output torques between 180 and 3400 Nm.

The gearboxes series RO-RV consist of bevel/helical gearboxes with one bevel and two helical trains, and hollow output shaft as standard.

Service factor

Selection data are meant for service factor SF1.0, i.e. for

- 8 running hours per day,
- uniform load,
- 6 start/stops per hour and
- room temperature from 15 to 35 °C

Thermal power

Rated power is the power that can be applied at the gearbox input, on continuous operation, max. temperature of 40 °C, max. altitude of 1000 m and air speed of 1.25 m/s, without exceeding the oil temperature of about 85 °C.

Thermal power can limit the rated P_1 (shaded area on page 18) depending on the cooling system, input speed, ambient temperature and service factor.

Directive ATEX

The gearboxes VARVEL-ATEX, supplied on demand, are designed and manufactured according to Directive 2014/34/CE "ATEX" and therefore, they are qualified for installation in potentially explosive atmospheres.

Detailed information at pages 86-87.

Die Getriebe der Baureihe RO-RV nach den ISO Normen konstruiert und anhand von Analysen auf Deformation und Kräfteeinwirkung nachgerechnet sind mit einem gemeinsamen Gehäuse hergestellt und haben somit die gleichen Befestigungsanschlüsse.

Die Gehäusestruktur wird von den Betriebsdrehmomenten und durch außen am Getriebe wirkende Kräfte nahezu nicht beeinflusst, was sich positiv auf die Lebensdauer der Wellendichtungen auswirkt.

Die ersten drei Größen der Getriebe der Baureihe RO-RV sind aus Aluminiumdruckguss die restlichen aus Grauguss.

Die Aufsteckausführung kann in Flanschausführung B5 nachgerüstet werden mittels eines der vielen zur Auswahl stehenden Ausgangsflansche.

Eine breite Auswahl an Wellenabmessungen am Ausgang (Hohlwelle mit Nut, Hohlwelle ohne Nut u. mit Schrumpfscheibe, Hohlkeilwelle oder Vollwelle ein- oder beidseitig) ist verfügbar.

Die Serien RO-RV sind für 6 Baugrößen lieferbar mit 30 Untersetzungen und Ausgangsdrehmomenten zwischen 180 u. 3400 Nm.

Die Serie der RO-RV besteht aus Kegelradgetrieben mit einem konischen und zwei zylindrischen Radpaar und mit einer Ausgangshohlwelle in Standardausführung.

Betriebsfaktor

Die Auswahldaten sind für einen SF1.0-Leistungsfaktor bestimmt, d.h. für:

- 8-Betriebsstunden pro Tag
- gleichmäßige Belastung
- 6 Schaltungen pro Stunde
- Raumtemperatur zwischen 15 und 35 °C

Thermische Leistung

Die **Nennleistung** ist die Leistung, die am Getriebe angewendet werden kann, Dauerbetriebstemperatur von 40 °C max., max. Höhe 1000 m und Luftgeschwindigkeit von 1,25 m/s, ohne mehr als eine Temperatur von Öl von etwa 85 °C.

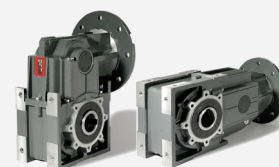
Die **thermische Leistung** kann der Nennleistung P_1 (Schattiert Zone - Seite 18) als Funktion des Kühlsystems der Antriebsdrehzahl, Umgebungstemperatur und der Koeffizient der Service begrenzen.

ATEX Richtlinien

Die Getriebe Varvel-ATEX, ausschließlich auf Anfrage geliefert, sind entsprechend den ATEX-Richtlinien 94/9/ EG "ATEX" konstruiert und hergestellt und somit zugelassen für die Installation in potentiell zündfähigen Atmosphäre.

Detaillierte Informationen auf den Seiten 86 und 87.

Descrizione
Description
Beschreibung



Paraoli

- NBR - montati su alberi entrata e uscita, come standard,
- FKM - (Viton) per funzionamento con motori 2-poli AC, DC e servo, a richiesta.
- Silicone - per funzionamento a basse temperature, a richiesta.

Lubrificante

I riduttori sono forniti riempiti di olio sintetico a lunga durata (ISO VG 320) per temperature -15/+35 °C.

Le quantità d'olio variano secondo le diverse posizioni di montaggio (v. pag. 12-13). Tappi olio e di sfiato sono forniti su richiesta (v. pag. 11).

Dimensioni

Le dimensioni e le unità di misura sono riferite al sistema metrico o imperiale quando specificato.

Oil seals

- NBR - fitted on input and output shafts as standard.
- FKM - (Viton) for operation with 2-pole AC, DC and servo motors, on demand.
- Silicone - for low temperature operation, on demand.

Lubricant

Gearboxes are delivered filled with synthetic long-life oil (ISO VG 320 Grade) for temperature -15/+35 °C as standard.

Oil quantities vary according to working positions (see page 12-13). Oil, drain or vent plugs on demand (see page 11).

Dimensions

Dimensions and units of measurement are referred to the metric system or imperial when stated.

Dichtringe

- NBR - werden als Standard an den Ein- und Ausgangswellen montiert.
- FKM - (Viton) für Betrieb mit 2-Pole Wechselstrom-, Gleichstrom- und Servomotoren, auf Anfrage.
- Silikon - für niedrige Temperaturen, auf Anfrage.

Schmierung

Die Getriebe werden mit langlebigem synthetischem Öl (ISO VG 320) für Temperaturen bei -15/+35 °C beliefert.

Die Ölmenge variiert je nach verschiedene Montagepositionen (siehe Seite 12-13). Öl- und Entlüftungsventile sind auf Anfrage erhältlich (siehe Seite 11).

Dimensionen

Die Abmessungen und Maßeinheiten beziehen sich auf das metrische System oder imperiale wenn angegeben.

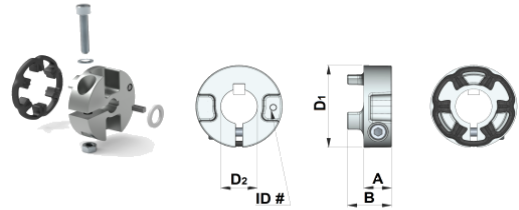
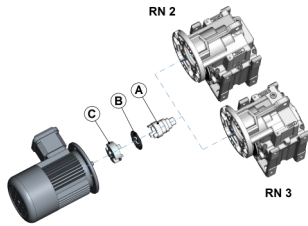
Formule utili - Useful formulae - Nützliche Formeln

Potenza entrata Input power Eingangsleistung [kW]	Coppia uscita Output torque Ausgangsrehmoment [Nm]	Fattore di utilizzo Duty factor Nutzungsfaktor [FU]	
$P_1 = \frac{M_2 * n_2}{9550 * \eta}$	$M_2 = \frac{9550 * P_1 * \eta}{n_2}$	$FU = \frac{M_2}{M_{(app)}}$	

Descrizione Description Beschreibung			
	Specifiche generali	General specifications	Allgemeine Eigenschaften
Gamma Range Bereich	6 grandezze 30 rapporti in 3 coppie 3400 Nm coppia uscita max.	6 sizes 40 ratios in 2 and 3 stages 3300 Nm max. output torque	6 Baugrößen 40 Übersetzungen 2- u. 3- stufig 3300 Nm max. Abtriebsmoment
Dimensionamento Sizing Auslegung	Secondo ISO6336 / DIN3990.	According to ISO6336/DIN3990.	Laut ISO6336/DIN3990.
Carcassa, Coperchi Housing, Covers Gehäuse, Flansche	Pressofusione in alluminio fino taglia 3 e ghisa dalla taglia 4	Pressure die cast aluminium up to size 3 and cast iron from size 4	Aluminium-Druckguss bis Größe 3 und Grauguss ab Größe 4
Entrata con giunto G Coupling G input Kupplungseingang G	Pressofusione in alluminio per G3, G5, G6 e acciaio per G8	Pressure die cast aluminium for sizes G3, G5, G6 and alloyed steel from size G8	Aluminium-Druckguss für Größen G3, G5, G6 und Stahl ab Größe G8
Parti dentate Toothed parts Verzahnung	Acciaio cmt / tmp Evolvente rettificato o sbarbato Coppie coniche rodate	Steel case hardened Tooth profile ground or shaved Run-in bevel gears	Stahl einsatzgehärtet Zahnprofil geschliffen / rasiert Kegelräder eingelaufen
Albero di uscita Output shafts Abtriebswelle	Cavo, in ghisa sferoidale	Hollow, of ductile cast iron	Hohl, duktilen Gusseisen
Alberi & Linguetta Shafts & Keys Wellen	Acciaio Tolleranze: Alberi h6, Fori E8 Linguetta secondo DIN6885 B1	Steel Tolerances: Shafts h6, Bores E8 Keys according to DIN6885 B1	Stahl Toleranzen: Wellen h6, Bohrungen E8 Passfedern nach DIN6885 B1
Cuscinetti Bearings Lagerung	Sfere o rulli secondo grandezza e specifiche tecniche	Ball- or roller-types according to sizes and technical requirements	Kugel- oder Rollenlager entsprechend den technischen Vor- schriften
Paraolio Oil seals Dichtungen	NBR - Nitril-Butadiene Rubber con secondo labbro parapolvere secondo DIN 3760 FKM - Polimero fluorurato (Viton) a richiesta SIL - Silicone a richiesta	NBR - Nitril-Butadiene Rubber with additional anti-dust lip according to DIN 3760 FKM - (Viton) Fluorinated rubber on demand SIL - Silicone rubber on demand	NBR - Nitril-Butadien Rubber mit zusätzlicher Staublippe entsprechend DIN 3760 FKM - Fluorelaste (Viton) auf Anfrage SIL - Silikon auf Anfrage
Lubrificante Lubricant Schmierung	Olio sintetico a lunga durata Gradazione ISO VG 320	Synthetic long-life oil Grade ISO VG 320	Synthetisches Getriebeöl ISO VG 320 als Langzeit-Füllung
Verniciatura Painting Gehäuselackierung	Alluminio naturale fino taglia 3 e dalla taglia 4 con vernice a polveri epossidiche colore standard RAL 7012	Aluminium until size 3 and from size 4 Epoxy powder paint Standard colour RAL 7012	Aluminium bis Größe 3 und Epoxydpulverfarbe Standard Farbton RAL 7012 ab Größe 4
Grado di protezione Protection grade Schutzgrad	IP66 - Corpo del riduttore IP20 - Riduttore con flange e colle- gamenti: protezioni aumentate su richiesta	IP66 - Gearbox body IP20 - Gearbox with flanges and adapters: Increased grades on de- mand	IP66 - Getriebeskörper IP20 - Getriebe mit Verbindungs- flansche: Schutzart erhöht nach Anfrage
ATEX	A richiesta.	On demand.	Auf Anfrage.

Simboli Symbols Symbole				
Simboli		Symbols	Symbole	
D	[mm]	Diametro primitivo dell'elemento di trasmissione k_T	PCD of transmission element k_T	Wirkkreisdurchmesser des Übertragungselementes k_T
F_{r1} , F_{r2} , F_r	[N]	Carico radiale di catalogo (entrata, uscita, applicazione)	Catalogue radial load (input, output, application)	Radialbelastung aus dem Katalog (Eingang, Ausgang, Anwendung)
SF		Fattore di servizio	Service factor	Betriebsfaktor
i_i , i_r		Rapporto di riduzione (nominale, reale)	Reduction ratio (nominal, real)	Übersetzung (nominale, reelle)
J_1 , J_2 , J_m	[kgm ²]	Momento d'inerzia del riduttore (entrata, uscita) e del motore	Moment of inertia of the gearbox (input, output) and of motor	Trägheitsmoment des Getriebes (Eingang, Ausgang) u. des Motor
k_a , k_L , k_T , k_{S3}		Fattore (accelerazione, lunghezza, tipo, intermittenza S3)	Factor (acceleration, length, type, S3 intermittenza)	Faktor (Beschleunigung, Länge, Typ, S3-Intermittenz)
Lub H, V	[l]	Lubrificante (litri) Montaggio (orizzontale, verticale)	Lubricant (litres) Mounting (horizontal, vertical)	Schmierstoff (Liter) Einbaulage (waagrechte, senkrechte)
M_2 , $M_{(app)}$	[Nm]	Coppia massima di uscita (riduttore, applicazione)	Maximum output torque (gearbox, application)	Abtriebsdrehmoment (Getriebe, Anwendung)
n_1 , n_2	[rpm]	Velocità (entrata, uscita)	Speed (input, output)	Drehzahl (Eingang, Ausgang)
P_1	[kW]	Potenza (entrata)	Power (input)	Leistung (Eingang)
Peso Weight Gewicht	[kg]	Pesi di catalogo: calcolati per montaggio B3H e rapporto di riduzione medio	Catalogue weights: worked out for B3H mounting and average reduction ratio	Katalogsgewichte: berechnet für B3H-Bauform und durchschnittliche Getriebeübersetzung
η		Rendimento - 0.94 (3 coppie)	Efficiency - 0.94 (3-gear trains)	Wirkungsgrad - 0.94 (3-Stufen)

**Giunto
Coupling
Kupplung**



Giunto con serraggio a morsetto per attrito sull'albero motore

- Flange e giunti per motori IEC/NEMA montabili sul riduttore finito
- Eliminazione sfregamento fra foro e chiavetta (tribocorrosione)
- Gioco zero nel collegamento riduttore/ motore
- Elevata rigidità torsionale

Friction clamped coupling on motor shaft

- IEC/NEMA adapters and couplings fitted on already assembled gearbox
- Elimination of fretting corrosion between bore and key
- Zero backlash in gearbox/motor connection
- High torsional rigidity

Kupplung mit Reibungsklemmung auf dem Motorwelle

- IEC/NEMA Flanschen und Kupplungen auf dem fertigen Getriebe montierbar
- Vermeidung von Passungsost zwischen Bohrung u. Keil
- Spielfrei an der Getriebe/Motor Verbindung
- Hohe Verdrehsteifigkeit

Tipo Type Typ	Codice Kit Kit Part No. Kit Teil Nr.	RO - RV	Mt [Nm]	Mt ₁ [Nm]	Mt ₂ [Nm]	A [mm]	B [mm]	D ₁ [mm]	D ₂ [mm]	ID#
G5	KG5.009	13	8.9 - 10	14	8 - 10	14.5	23	45	9	509
	KG5.011			15	8 - 10			45	11	511
	KG5.014			30	12 - 17			45	14	514
	KG5.019			40	20 - 25			45	19	519
	KG5.024			70	30 - 40			52	24	524
G6	KG6.014	23 - 33 - 43	15.3 - 18	60	30 - 40	19.5	31.5	58	14	614
	KG6.019			90	50 - 65			19	619	
	KG6.024			130	85 - 100			24	624	
	KG6.028			180	100 - 120			28	628	
	KGS6.038			500	---			38	---	
* GS8	KGS8.019	53 - 63	15	150	---	35	51	79	19	---
	KGS8.024			250	---			24	---	
	KGS8.028			350	---			28	---	
	KGS8.038			500	---			38	---	
	KGS8.042			500	---			42	---	
	KGS8.048			500	---			48	---	



Tipo Type Typ	Codice Kit Kit Part No. Kit Teil Nr.	RO - RV	Mt [in-lb]	Mt ₁ [in-lb]	Mt ₂ [in-lb]	A [in]	B [in]	D ₁ [in]	D ₂ [in]	ID#
G5	KG5.N56	13	80 - 90	400	265 - 310	0.57	0.91	1.77	1/2"	5N48
	KG5.N140			530	355 - 400			2.05	5/8"	5N56
G6	KG6.N56	23 - 33 - 43	135 - 160	440	---	0.77	1.24	2.28	5/8"	6N56
	KG6.N140	23 - 33 - 43		750	---			7/8"	6N140	
	KG6.N180	43		1770	---			1-1/8"	6N180	
* GS8	KGS8.N056	53 - 63	135	1240	---	1.38	2.01	3.11	5/8"	---
	KGS8.N140	53 - 63		1770	---			7/8"	---	
	KGS8.N180	53 - 63		2665	---			1-1/8"	---	
	KGS8.N210	53 - 63		4425	---			1-3/8"	---	
	KGS8N250	63		4425	---			1-5/8"	---	



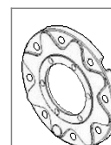
Mt - Coppia di serraggio vite
 Mt₁ - Coppia trasmissibile con chiavetta
 Mt₂ - Coppia trasmissibile senza chiavetta
 (*) - Giunto GS8: acciaio, chiavetta e grano di bloccaggio
Nota: Nessun ID# marcato sul Giunto GS8

Mt - Screw locking torque
 Mt₁ - Transmissible torque with key
 Mt₂ - Transmissible torque without key
 (*) - Coupling GS8: steel, key and locking grub screw
Note: No ID# marked on Coupling GS8

Mt - Klemmendrehmoment der Schraube
 Mt₁ - übertragbar Drehmoment mit Keil
 Mt₂ - übertragbar Drehmoment ohne Keil
 (*) - Kupplung GS8: Stahl, Keil u. Gewinde Stift
Anmerkung: - Kein ID# auf dem Kupplung GS8 markiert ist

Informazioni tecniche - Technical information - Technische Informationen
RO - RV
**Flange e Giunto
Flanges & Coupling
Flansche u. Kupplung**

Tipo Type Typ		Flangia - Flange - Flansch			Giunto - Coupling - Kupplung	
		IEC	Codice - Part No. - Teil Nr. Kit B5	Kit B14	Tipo - Type - Typ	Kit Part No.
RO13 RV13	FM 50	56	K532.206.120	---	G5 ø9	KG5.009
		63	K532.206.140	K532.206.090	G5 ø11	KG5.011
		71	K532.206.160	K532.206.105	G5 ø14	KG5.014
		80	K532.206.200	K532.206.120	G5 ø19	KG5.019
		90	K532.206.200	K532.206.140	G5 ø24	KG5.024
RO23 RV23	FM 70	71	K533.206.160	K533.206.105	G6 ø14	KG6.014
		80	K533.206.200	K533.206.120	G6 ø19	KG6.019
		90	K533.206.200	K533.206.140	G6 ø24	KG6.024
		100/112	K533.206.250	K533.206.160	G6 ø28	KG6.028
RO33 RV33	FM 85	71	K534.206.160	---	G6 ø14	KG6.014
		80	K534.206.200	K534.206.120	G6 ø19	KG6.019
		90	K534.206.200	K534.206.140	G6 ø24	KG6.024
		100/112	K534.206.250	K534.206.160	G6 ø28	KG6.028
RO43 RV43	FM 110	71	K535.206.160	---	G6 ø14	KG6.014
		80	K535.206.200	---	G6 ø19	KG6.019
		90	K535.206.200	---	G6 ø24	KG6.024
		100/112	K535.206.250	K535.206.160	G6 ø28	KG6.028
		132	K535.206.300	K535.206.200	* GS6 ø38	KGS6.038
RO53 RV53	FM 130 & FM 150	80	K536.206.200	---	* GS8 ø19	KGS8.019
		90	K536.206.200	---	* GS8 ø24	KGS8.024
		100/112	K536.206.250	---	* GS8 ø28	KGS8.028
		132	K537.206.300	K536.206.200	* GS8 ø38	KGS8.038
		160	K565.206.350	---	* GS8 ø42	KGS8.042
		180	K565.206.350	---	* GS8 ø48	KGS8.048
RO63 RV63	FM 130 & FM 150	80	K536.206.200	---	* GS8 ø19	KGS8.019
		90	K536.206.200	---	* GS8 ø24	KGS8.024
		100/112	K536.206.250	---	* GS8 ø28	KGS8.028
		132	K537.206.300	K536.206.200	* GS8 ø38	KGS8.038
		160	K565.206.350	---	* GS8 ø42	KGS8.042
		180	K565.206.350	---	* GS8 ø48	KGS8.048



Tipo Type Typ		Flangia - Flange - Flansch		Giunto - Coupling - Kupplung	
		NEMA	Kit Part No.	Tipo - Type - Typ	Kit Part No.
RO13 RV13	FM 50	56 C	K532.227.N56	G5 ø 5/8"	KG5.N56
		140 TC	K532.227.N56	G5 ø 7/8"	KG5.N140
RO23 RV23	FM 70	56 C	K533.227.N56	G6 ø 5/8"	KG6.N56
		140 C	K533.227.N56	G6 ø 7/8"	KG6.N140
RO33 RV33	FM 85	56 C	K534.227.N56	G6 ø 5/8"	KG6.N56
		140 TC	K534.227.N56	G6 ø 7/8"	KG6.N140
RO43 RV43	FM 110	56 C	K535.227.N56	G6 ø 5/8"	KG6.N56
		140 TC	K535.227.N56	G6 ø 7/8"	KG6.N140
		180 TC	K535.227.N180	G6 ø 1-1/8"	KG6.N180
RO53 RV53	FM 150	56 C	K537.227.N56	* GS8 ø 5/8"	KGS8.N56
		140 TC	K537.227.N56	* GS8 ø 7/8"	KGS8.N140
		180 TC	K537.227.N180	* GS8 ø 1-1/8"	KGS8.N180
RO63 RV63	FM 150	56 C	K537.227.N56	* GS8 ø 5/8"	KGS8.N56
		140 TC	K537.227.N56	* GS8 ø 7/8"	KGS8.N140
		180 TC	K537.227.N180	* GS8 ø 1-1/8"	KGS8.N180
		210 TC	K537.227.N180	* GS8 ø 1-3/8"	KGS8.N210



(*) - Giunto: acciaio, chiave e grano di bloccaggio

(*) - Coupling: steel, key and locking screw

(*) - Kupplung: Stahl, Keil u. Gewinde Stift

**Designazione
Designation
Bezeichnungen**

Riduttore - Gearbox - Getriebe

F RO -G 33 /B3 H 31.5 IEC80 -B5 AU30 DFU200

Flangia uscita ø - Output flange - Ausgangsflansch

Albero uscita ø - Output shaft ø - Ausgangswelle ø

B5. B14 = Forma del motore - Motor form - Motorbauform

Grandezza del motore elettrico - Electric motor frame - Motorbaugröße

Rapporto di riduzione - Reduction ratio - Getriebeübersetzung

H. V = Posizione di montaggio del riduttore - Gearbox mounting position - Einbaulage des Getriebes

B3. B5. B3/B5 = Forma costruttiva del riduttore - Gearbox form - Bauform des Getriebes

Grandezza e coppie del riduttore - Gearbox size and stages - Baugröße u. Stufen des Getriebes

-G = Entrata con giunto G - Input with G-type coupling - Eingang mit G-Kupplung

- - - = Entrata con foro e chiavetta - Input with bore and keyway - Eingang mit Bohrung u. Keil

RO, RV = Tipo del riduttore - Gearbox type - Getriebetyp

M = Motoriduttore

- Geared motor

- Getriebemotor

F = Riduttore con flangia entrata

- Gearbox with input flange

- Getriebe mit Eingangsflansch

S = Riduttore senza flangia entrata

- Gearbox without input flange

- Getriebe ohne Eingangsflansch

... = (nulla) Riduttore con albero entrata sporgente

- (nothing) Gearbox with input free shaft

- (kein) Freie Eingangswelle

Motore elettrico - Electric motor - Elektromotor

MT 0.75 kW 80 A 4 B14 230/400/50 IP55 F X4

Posizione della morsettiera - Terminal box position
Klemmkastenposition

Classe isolamento - Insulation class - Isolationsklasse

Grado di protezione - Protection class - Schutzart

Tensione / Frequenza - Voltage/frequency - Spannung/Frequenz

Forma costruttiva - Mounting form - Bauform

Numero poli - Number of poles - Polzahl

Grandezza IEC del motore - IEC motor frame - IEC-Motorbaugröße

Potenza del motore - Motor power - Motorleistung

MT = Motore trifase

- Three-phase motor

- Dreiphasenmotor

MM = Motore monofase

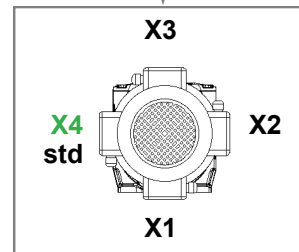
- Single-phase motor

- Einphasenmotor











MA = Motore autofrenante

- Brake motor

- Bremsmotor



**Lubrificazione
Lubrication
Schmierung**

									
VG320*	Degol GS 320	Enersyn SG-XP320	Alphasyn PG 320	Glycolube 320	Klübersynth GH-6-320	Glygoyle HE 320	Synlube CLP 320	Carter SY 320	Omala S4 WE 320
VG320**	Eural Gear 320	---	Vitalube GS 320	Gear Oil FM 320	Klübersynth UH1-6-320	Mobil DTE FM 320	---	Nevastane EP 320	---
* - Olio sintetico ** - Olio sintetico per Industria Alimentare			* - Synthetic base oil ** - Food Industry Approved Synthetic Oil			* - Synthetisches Öl ** - Lebensmittel-verträgliche, synthetisches Öl			

Apparenti perdite di olio - Apparent oil leakages - Scheinbare Öllecks

Il labbro del paraolio è protetto al montaggio con un apposito grasso per evitare che all'avviamento l'albero inizi a ruotare senza alcun lubrificante interposto e che non avvenga ossidazione della pista di scorrimento del labbro.

La temperatura del labbro del paraolio aumenta durante il funzionamento; il grasso posto all'esterno fluidifica e la sua parte oleosa può essere riconosciuta erroneamente come olio proveniente dall'interno.

Questa untuosità, come la pellicola lubrificante che è sempre presente fra paraolio e albero, possono essere giudicate a torto come perdite di lubrificante.

Oil seal lips are safeguarded with an adequate grease amount against oil seal dry running-in and shaft oxidation at gearbox assembly.

Oil seal lip-temperature increases during operation; the grease laid on the outer side of the oil seal becomes then more and more fluid and the grease oily component may be misread as oil coming from inside the gearbox.

Apparently, this oiliness and also the lubricant film, that must always exist between oil seal lip and shaft seat to avoid the oil seal lip is quickly damaged, might be wrongly considered as lubricant leakages.

Die Lippe der Öldichtung wird während der Montage mit einem speziellen Fett geschützt, um zu verhindern, dass sich die Welle beim Start ohne dazwischenliegenden Schmiermittel zu drehen beginnt und keine Oxidation der Lippengleitbahn auftritt.

Die Temperatur der Öldichtungslippe steigt während des Betriebs an. Das außen angebrachte Fett wird dünner und sein öliger Teil kann fälschlicherweise als von innen kommendes Öl erkannt werden.

Diese Fettigkeit kann wie der Schmierfilm, der immer zwischen der Öldichtung und der Welle vorhanden ist, fälschlicherweise als Schmiermittelverlust beurteilt werden.

Tappi di sfiato - Breather plugs - Entlüftungsventile

L'installazione del tappo di sfiato è raccomandata quando la pressione interna supera i valori di 0.25-0.3 bar per evitare possibili fuoriuscite di lubrificante dai paraolio.

L'aumento della pressione interna è originata dalla variazione del volume del lubrificante causato dall'aumento della temperatura a fronte di condizioni

- esterne (posizione di lavoro inclinata, ambiente maggiore di 35 °C), o
- interne (velocità di ingresso maggiore di 2000 rpm, frequenti avviamenti, servizio continuo oltre a 8 ore al giorno).

La taratura standard dello sfiato è 0.25-0.3 bar.

Altre tarature su richiesta.

Richiedere la fattibilità dell'installazione del tappo di sfiato in quanto non tutte le taglie dei riduttori lo permettono.

Breather plug installation is recommended when internal pressure exceeds 0.25-0.3 bar to avoid possible lubricant leakages from the oil seal.

Internal pressure increase is due to lubricant volume variation caused by temperature increase because of

- external conditions (sloped working position, environment over 35°C), or
- internal conditions (input speed over 2000 rpm; frequent start/stops, continuous service over 8 hours a day).

Breather plug standard calibration is 0.25-0.3 bar.

Other calibrations on demand.

Ask for breather plug installation feasibility as not all the sizes allow it.

Die Installation des Entlüftungsventil wird empfohlen, wenn der Innendruck 0.25-0.3 bar übersteigt, um ein Auslaufen von Schmiermitteln aus den Dichtungen zu vermeiden.

Die Erhöhung des Innendrucks ergibt sich aus der Veränderung des Schmier volumens verursacht unter bestimmten Temperatur Bedingungen, rein indikativ, wie

- äußerer Bedingungen (gekippte Arbeitsposition, Umgebung mehr als 35 °C), oder
- inneren Bedingungen (Eingangsgeschwindigkeit mehr als 2000 UpM, häufige Start ups, durchgehender Dienst mehr als 8 Stunden pro Tag).

Die Standardkalibrierung der Entlüftung beträgt 0.25-0,3 bar.

Andere Kalibrierungen auf Anfrage.

Bitte fragen Sie nach der Durchführbarkeit des Entlüftungsventil, da dies nicht alle Getrieben erlauben.

Pesi - Lubrificanti - Posizioni di montaggio
Weights - Lubricants - Mounting positions
Gewichte - Schmiermittel - Bauformen

FRO	Peso Weight Gewicht kg	ISO VG320 Olio [litri] - Oil [litres] - Öl [Liter]					
		H1	H2	H3	H4	V1	V2
13	6.4	0.5	0.45	0.4	0.45	0.35	0.45
23	10.6	0.8	0.7	0.75	0.7	0.85	0.85
33	12.5	1.5	1.2	1.4	1.2	1.5	1.7
42	39	2.8	2.0	1.6	2.0	2.0	2.5
53	73	5.1	3.6	2.9	3.5	5.0	5.0
63	121	9.2	6.5	5.2	6.5	9.0	9.0

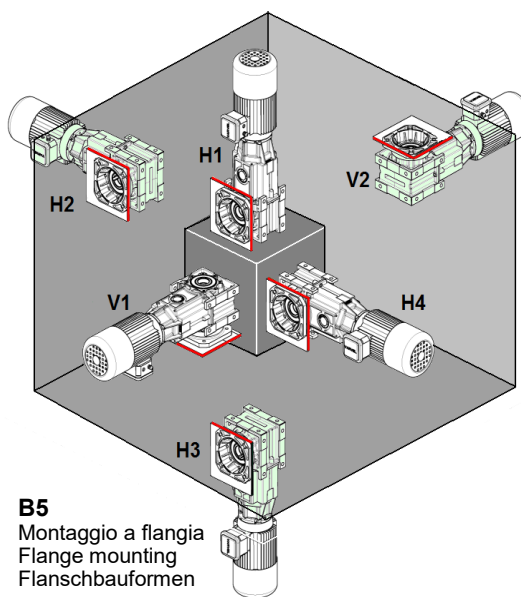
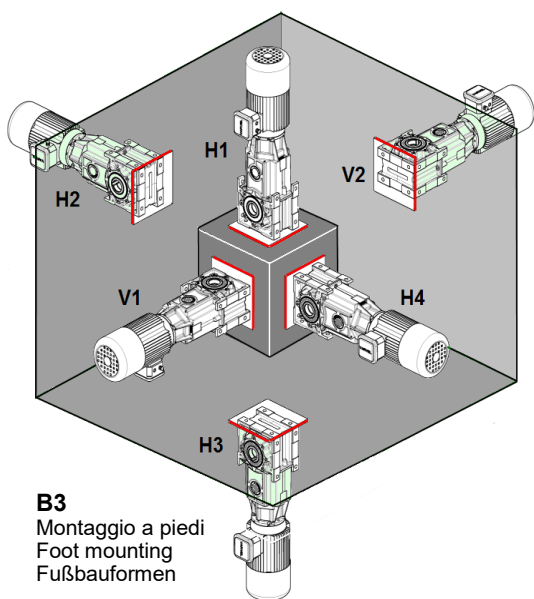
RO



Tutti i gruppi sono spediti già riempiti con olio a base sintetica a lunga durata.

All units are delivered pre-filled with long-life synthetic base oil.

Die Getriebeeinheiten werden bereits mit Synthetik Ölfüllung ausgeliefert.



La posizione di montaggio (H o V) è riferita alla posizione dell'albero di uscita e non alla posizione di fissaggio con piedi o con flangia.

Mounting position (H or V) is referred to the output shaft position and not to foot or flange fixing position.

Die Montageposition (H oder V) bezieht sich auf die Ausgangs Welleposition und nicht der Fuß- oder Flanschbefestigungen.

Informazioni tecniche - Technical information - Technische Informationen

RO - RV

Pesi - Lubrificanti - Posizioni di montaggio
Weights - Lubricants - Mounting positions
Gewichte - Schmiermittel - Bauformen

FRV	Peso Weight Gewicht kg	ISO VG320 Olio [litri] - Oil [litres] - Öl [Liter]					
		H1	H2	H3	H4	V1	V2
13	6.1	0.5	0.35	0.25	0.35	0.4	0.3
23	10.1	0.65	0.6	0.5	0.6	0.7	0.56
33	13.0	1.5	1.0	0.8	1.0	1.2	0.8
42	36.5	2.9	1.9	1.2	1.8	2.6	1.7
53	68	5.2	3.4	2.1	3.2	4.7	4.7
63	117	9.4	6.1	3.8	5.8	8.5	8.5

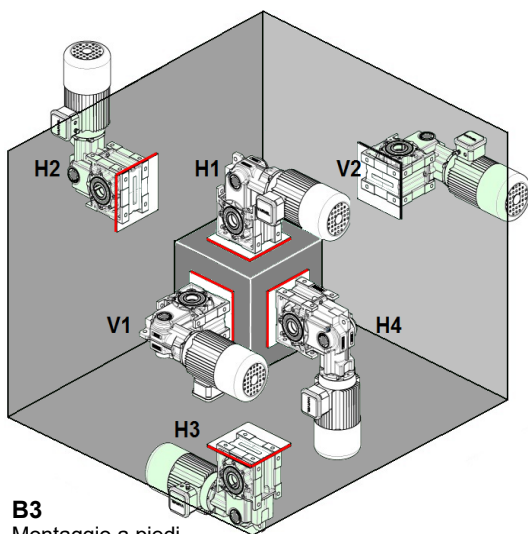
RV



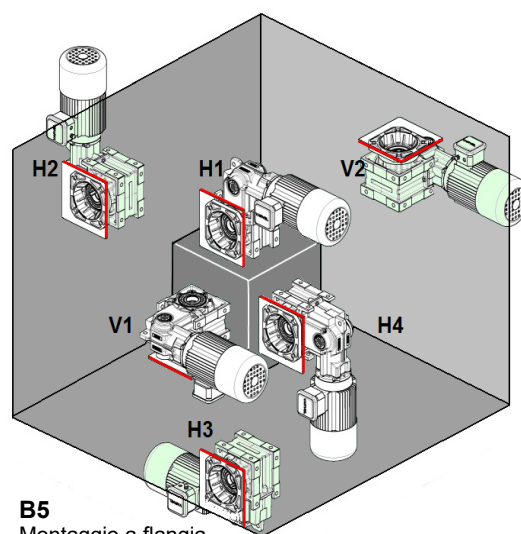
Tutti i gruppi sono spediti già riempiti con olio a base sintetica a lunga durata.

All units are delivered pre-filled with long-life synthetic base oil.

Die Getriebeeinheiten werden bereits mit Synthetik Ölfüllung ausgeliefert.



B3
 Montaggio a piedi
 Foot mounting
 Fußbauformen



B5
 Montaggio a flangia
 Flange mounting
 Flanschbauformen

La posizione di montaggio (H o V) è riferita alla posizione dell'albero di uscita e non alla posizione di fissaggio con piedi o con flangia.

Mounting position (H or V) is referred to the output shaft position and not to foot or flange fixing position.

Die Montageposition (H oder V) bezieht sich auf die Ausgangs Welleposition und nicht der Fuß- oder Flanschbefestigungen.

Fattore di utilizzo - **Fattore di servizio** - **Fattore di accelerazione**
Duty factor - **Service factor** - **Acceleration factor**
Ausnutzungsfaktor - **Betriebsfaktor** - **Beschleunigungsfaktor**

Il **Fattore di utilizzo [FU]** è determinato dal rapporto fra la coppia massima di uscita M_2 del riduttore e la coppia richiesta dalla applicazione M_{app} .
 Il rapporto deve essere superiore o uguale ai fattori SF o $k_{(a)}$ qui definiti.

Duty Factor [FU] is defined as the ratio between gearbox maximum output torque M_2 and application torque M_{app} .
 The ratio must be bigger than or equal to SF or $k_{(a)}$ factors here defined.

Der **Nutzungsfaktor [FU]** wird durch das Verhältnis zwischen dem maximalen M_2 -Ausgangsdrehmoment des Getriebes und dem von der Anwendung geforderten M_{app} -Drehmoment bestimmt.
 Das Verhältnis muss größer oder gleich als der hier definierte SF- oder $k_{(a)}$ -Faktoren sein.

$$FU = \frac{M_2}{M_{app}}$$

$$FU \geq SF$$

$$FU \geq k_{(a)}$$

Il **Fattore di servizio [SF1.0]** è inteso come rappresentativo di un funzionamento di 8 ore al giorno, con carico uniforme, avviamenti inferiori a 6 all'ora e temperatura ambiente fra 15 e 35 °C.
 Per altre condizioni di servizio, selezionare SF secondo le tabelle SF₁ e SF₂.

Service factor [SF1.0] is meant as typical operation of 8 hours/day, with uniform load, starts/ stops lower than 6 per hour and ambient temperature between 15 and 35 Celsius.
 For other operation conditions, select SF according to tables SF₁ and SF₂.

Der **Belastungsfaktor [SF1.0]** ist als repräsentativ für einen Betrieb von 8 Stunden pro Tag mit gleichmäßiger Belastung, Starts von weniger als 6 pro Stunde und Umgebungstemperatur zwischen 15 und 35 °C gedacht. Wählen Sie für andere Betriebsbedingungen den SF-Faktor gemäß den Tabellen SF₁ und SF₂ aus.

$$SF = SF_1 \times SF_2$$

SF ₁				SF ₂			
Tipo di carico Load type Belastung-Typ				Avviamenti / ora Start-Stops / hour Schaltungen/Stunde			
ore hours Stunden	uniforme uniform gleichmäßig	variabile variable variabel	a urti with shocks mit Stöße	numero number Anzahl	RD-RN RO RV	numero number Anzahl	RS-RT
8	1.0	1.2	1.4	6	1.0	6	1.0
16	1.2	1.4	1.6	240	1.25	60	1.1
24	1.4	1.6	1.8	1200	.35	120	1.2

Il **Fattore di accelerazione delle masse** [$k_{(a)} \leq 0.2$] è inteso come rappresentativo di un funzionamento di 8 ore al giorno per Classe di carico A.
 Per altre condizioni di lavoro, selezionare $k_{(a)}$ secondo i grafici alle pagine 3 e 4 del 'Catalogo FS'.

Mass acceleration factor [$k_{(a)} \leq 0.2$] is meant as typical operation of 8 hours/day for Load class A.
 For other working conditions, select $k_{(a)}$ from the graphs at pages 3 and 4 of 'FS Catalogue'.

Der **Massenbeschleunigungs Faktor** [$k_{(a)} \leq 0.2$] gilt als repräsentativ für eine 8-stündiger Betrieb für A-Belastungsklasse.
 Für andere Arbeitsbedingungen, bitte $k_{(a)}$ gemäß den Grafiken auf Seite 3 und 4 im 'FS-Katalog' wählen.

$$k_{(a)} = \frac{\frac{J_2}{i_r^2} + J_1}{J_m}$$

	$k_{(a)}$	Tipo di carico	Load type	Last-Typ
A	$k_{(a)} \leq 0.2$	uniforme	uniform	gleichförmige
B	$0.2 < k_{(a)} \leq 3$	urti moderati	moderate shocks	ungleichförmige
C	$3 < k_{(a)} \leq 10$	forti urti	severe shocks	stark ungleichförmige

A, B, C - Classe di carico
 J_1, J_2 - Momento d'inerzia del riduttore (entrata, uscita)
 J_m - Momento d'inerzia del motore
 i_r - Rapporto di riduzione reale

A, B, C - Load class
 J_1, J_2 - Moment of inertia of the gearbox (input, output)
 J_m - Moment of inertia of the motor
 i_r - Real reduction ratio

A, B, C - Belastungsklassen
 J_1, J_2 - Trägheitsmoment des Getriebes (Eingang, Ausgang)
 J_m - Trägheitsmoment des Motors
 i_r - Reales Übersetzungsverhältnis

Tipo di servizio
Duty type
Betriebsarten

Le specifiche dei tipi di servizi sono definiti dalle norme CEI EN 60034-1 / IEC34-1.

Duty types are defined by CEI EN 60034-1 / IEC34-1 Standard.

Die Betriebsarten sind definiert in den Normen CEI EN 60034-1 / IEC34-1.

S1 - Servizio continuo - Continuous duty - Dauerbetrieb

Funzionamento

- carico costante (c)
- periodo di tempo indefinito (N)
- periodo sufficiente a raggiungere l'equilibrio termico (t)

In servizio continuo, selezionare il riduttore con fattore di servizio SF1.0 o maggiore.

Operation

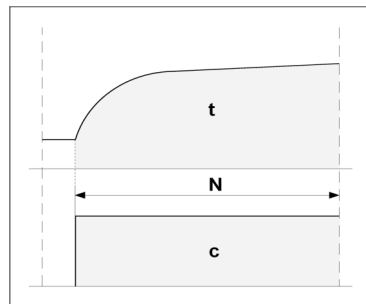
- steady load (c)
- indefinite period of time (N)
- period long enough to achieve thermal balancing (t)

On continuous duty, select the gearbox with service factor SF1.0 or higher

Betrieb

- konstanter Belastung (c)
- unbestimmte Zeit (N)
- genügend Zeit bis zum Erreichen des Temperaturgleichgewichts (t)

Bei Dauerbetrieb wählen Sie das Getriebe mit dem Betriebsfaktor SF1.0 oder höher.



- c = Carico
Load
Belastung
- N = Tempo di lavoro
Operation time
Betriebszeit
- t = Temperatura
Temperature
Temperatur

S3 - Servizio intermittente periodico - Periodic intermittent duty - Periodischer Aussetzbetriebe

Funzionamento

- carico costante (c)
- secondo un ciclo (C)
- comprendente un periodo di tempo a carico costante (N)
- e un periodo di tempo di riposo (R).

Gli avviamenti non influiscono sulle temperature (t). Il ciclo (C) di riferimento è di 10 minuti complessivi.

In servizio intermittente periodico, selezionare il riduttore con l'adeguato moltiplicatore k_{S3} o maggiore.

Il rapporto di intermittenza viene determinato secondo la formula seguente.

Operation

- steady load (c)
- according to a cycle (C)
- including a steady load time (N)
- and a rest time (R)

Starts/stops do not affect temperature (t). Reference cycle (C) is 10 minutes overall.

On periodic intermittent duty, select the gearbox with the appropriate multiplier k_{S3} or higher.

Intermittence ratio is calculated according the following formula.

Betrieb

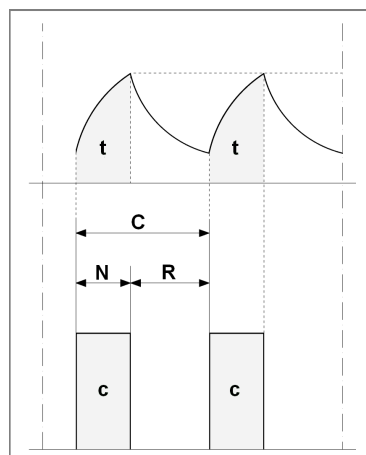
- konstanter Belastung (c)
- nach einem Zyklus (C)
- mit einer konstanten Zulaufzeit (N)
- und einer Ruhelage (R)

Für die Zyklusdauer (C) gilt eine Zeit von 10 Minuten.

Bei periodischem Aussetzbetrieb, wählen Sie das Getriebe mit dem entsprechenden Multiplikator k_{S3} oder höher.

Die Intermittenzübersetzung wird nach die folgende Formel bestimmt.

$$\frac{N}{(N+R)} * 100 = \begin{cases} 60\% & k_{S3} \mathbf{0.9} \\ 40\% & k_{S3} \mathbf{0.85} \\ 25\% & k_{S3} \mathbf{0.75} \\ 15\% & k_{S3} \mathbf{0.7} \end{cases}$$



- c = Carico
Load
Belastung
- C = Ciclo di lavoro
Duty cycle
Zyklusdauer
- N = Tempo di lavoro
Operation time
Betriebszeit
- R = Tempo di riposo
Rest time
Pause
- t = Temperatura
Temperature
Temperatur

**Carichi esterni
External Loads
Ausgangsbelastungen**

Il carico radiale riportato nelle tabelle, deve essere verificato in base alla velocità di uscita, al punto di applicazione e all'elemento di trasmissione montato sull'albero di uscita del riduttore e quindi rettificato tramite i relativi fattori k_L e k_T .
Il carico radiale del riduttore F_{r2} deve essere uguale o maggiore al carico radiale dell'applicazione F_r .

Il carico assiale è incluso nel carico radiale di catalogo come il 20% del valore F_{r2} ed è valido per carichi assiali sia a trazione che a compressione

Catalogue radial (overhung) load should be checked according to output speed, mounting position, the transmission element fitted on the gearbox output shaft and then rectified by the appropriate k_L and k_T rating factors.

Gearbox radial load F_{r2} must be greater than or equal to application radial load F_r .

The axial load is included in the catalogue radial load as 20% of F_{r2} value and is valid for both tensile and compressive axial stress.

Die Radialbelastung in den Tabellen müssen mit entsprechender Abtriebsdrehzahl, der Montageposition und dem Übertragungselement montiert auf der Getriebeausgangswelle durch entsprechendem Faktoren k_L und k_T verglichen werden.

Die Radialbelastung des Getriebes F_{r2} muss gleich oder größer als die Radialbelastung der Anwendung F_r sein.

Die axiale Belastung ist als 20% des Wertes F_{r2} in der radialen Katalogbelastung enthalten und gilt sowohl für Zug- als auch für Druckbelastungen.

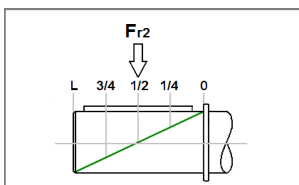
Punto di applicazione - Application point - Anwendung Punkt

Il carico radiale è considerato applicato alla mezzzeria dell'albero di uscita.
Altre posizioni originano carichi da correggere con l'appropriato fattore k_r .
Esempi della distanza da spallamento dell'albero:

The radial load is considered as applied at the output shaft mid-point.
Other positions origin loads to be adjusted by the appropriate factor k_L .
Examples of the distance from the shaft shoulder:

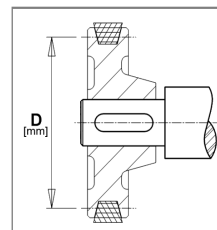
Die Radialbelastung wird auf der Mitte der Ausgangswelle angelegt.
Andere Positionen erzeugen Lasten, die mit dem entsprechendem Faktor k_L zu korrigieren sind.
Beispiele für den Abstand der Stufenwelle:

k_L	L [mm]
1.1	1/4 * L
1.0	1/2 * L
0.9	3/4 * L
0.8	L



Elemento della trasmissione - Transmission element - Übertragungselement

k_T	Tipo dell'elemento	Element type	Elementtyp
1,15	Ingranaggio n. denti < 17	Gear tooth No. < 17	Zahnrad Zähnezahl < 17
1,40	Pignone catena n. denti < 13	Chain sprocket tooth No. < 13	Kettenrad Zähnezahl < 13
1,25	n. denti < 20	tooth No. < 20	Zähnezahl < 20
1,00	n. denti > 20	tooth No. > 20	Zähnezahl > 20
1,75	Puleggia per cinghie trapezoidali	Pulley for V-belt	Riemen für Keilriemen
2,50	cinghie piane	flat belts	Flachriemen
2,25	cinghie dentate	toothed-belt	Zahnriemen



Carico radiale - Radial load - Radialbelastung

$$F_{r2} = (2000 \times M_2) : D \times k_L \times k_T$$

$$F_{r2} \geq F_r$$

Carico assiale - Axial load - Axialbelastung

$$F_{a2} = F_{r2} \times 0.2$$

dove

F_{a2} = Carico assiale ammesso
 F_r = Carico radiale dell'applicazione
 F_{r2} = Carico radiale del riduttore
 M_2 = Coppia di uscita del riduttore

where

F_{a2} = Permissible axial load
 F_r = Radial load of application
 F_{r2} = Radial load of gearbox
 M_2 = Output torque of gearbox

wo

F_{a2} = Zulässige axial Belastung
 F_r = Radial Belastung der Anwendung-
 F_{r2} = Radial Belastung des Getriebes
 M_2 = Ausgangsdrehmoment des Getriebes

Versioni
Versions
Ausführungen

MRO - MRV

Motoriduttori

- tre coppie di ingranaggi
- fissaggio a piedi, flangia uscita e pendolare

Geared motors

- three gear sets
- foot-, flange-, and shaft-mounting

Getriebemotoren

- Dreistufig
- Fuß-,Flansch- u. Aufsteckausführung

FRO - FRV

Riduttori con flangia motore di entrata

- albero cavo e giunto in entrata
- tre coppie di ingranaggi ,
- fissaggio a piedi, flangia uscita e pendolare

Gearboxes with input motor flange

- quill input and coupling
- three gear sets
- foot-, flange-, and shaft-mounting

Getriebe mit Motorflansch,

- Eingangshohlwelle und Kupplung
- Dreistufig
- Fuß-,Flansch- u. Aufsteckausführung

SRO - SRV

Riduttori senza flangia motore di entrata

- albero cavo e giunto in entrata
- tre coppie di ingranaggi ,
- fissaggio a piedi, flangia uscita e pendolare

Gearboxes without input motor flange

- quill input and coupling
- three gear sets
- foot-, flange-, and shaft-mounting

Getriebe ohne Motorflansch

- Eingangshohlwelle und Kupplung
- Dreistufig
- Fuß-,Flansch- u. Aufsteckausführung

RO - RV

Riduttori con albero entrata sporgente

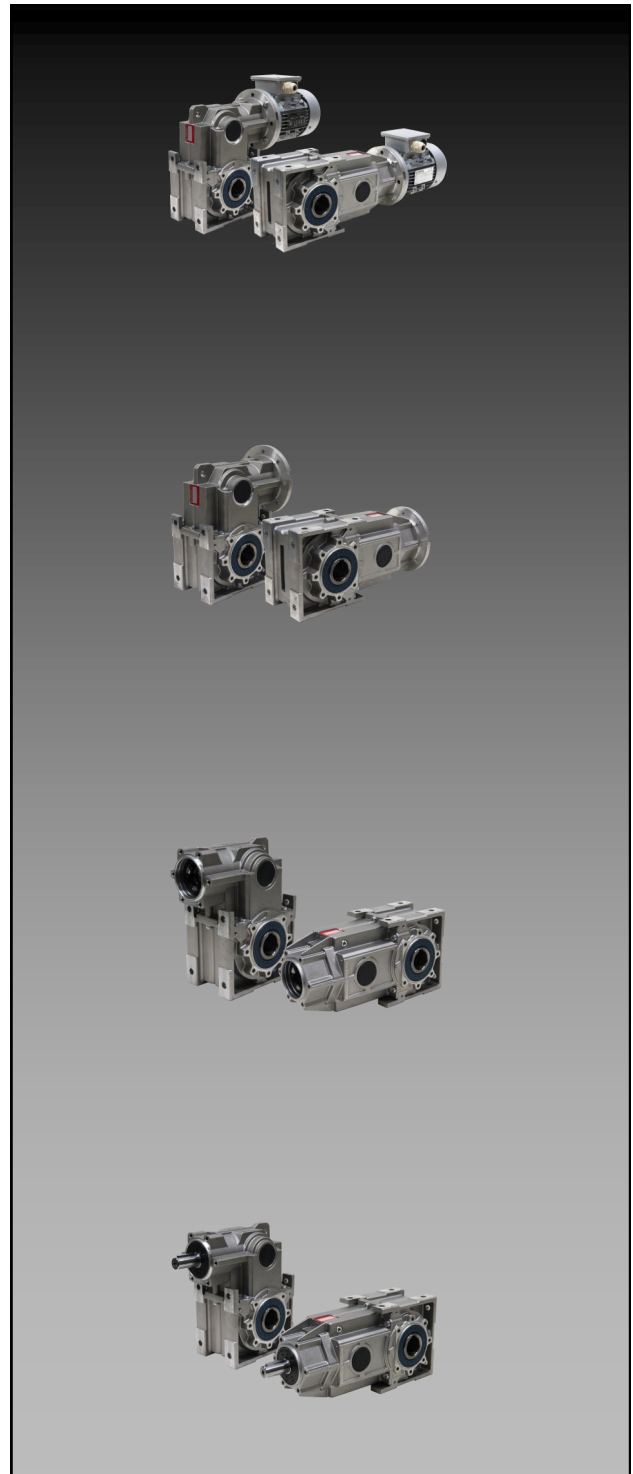
- tre coppie di ingranaggi ,
- fissaggio a piedi, flangia uscita e pendolare

Gearboxes with input solid shaft

- three gear sets
- foot-, flange-, and shaft-mounting

Getriebe mit Eingang Vollwelle

- Dreistufig
- Fuß-,Flansch- u. Aufsteckausführung



Serie RO - Versione in linea
Serie RV - Versione a squadra

RO Series - In-line version
RV Series - Right angle version

Reihe RO - Inlineausführung
Reihe RV - Winkelausführung

Potenza termica
Thermal power
Thermische Nennleistung

i _n [kW]	RO-RV 13		RO-RV 23		RO-RV 33		RO-RV 43		RO-RV 53		RO-RV 63	
	P ₁	P _{t1}	P ₁	P _{t1}	P ₁	P _{t1}	P ₁	P _{t1}	P ₁	P _{t1}	P ₁	P _{t1}
6,3	---	---	4,70	5,40	10,20	7,04	11,10	9,49	22,40	16,43	40,30	22,32
7,1	2,70	3,08	---	---	---	---	---	---	---	---	---	---
8	---	---	4,10	5,11	8,50	6,68	9,90	9,01	20,00	15,40	31,90	21,56
9,0	2,20	3,11	3,90	4,28	6,50	6,22	11,60	7,07	---	---	---	---
10,0	2,30	3,01	3,70	4,85	7,70	6,33	9,10	8,51	17,60	14,37	28,50	20,46
11,2	2,00	2,90	3,10	4,12	5,10	5,98	9,20	6,68	---	---	---	---
12,5	---	---	3,30	4,56	6,60	5,98	7,90	7,98	16,60	13,45	25,70	19,19
14,0	1,50	2,92	2,50	3,93	5,30	5,26	5,80	7,99	12,00	12,43	18,90	17,80
16,0	1,70	2,68	2,90	4,20	5,20	5,53	7,00	7,53	14,10	12,65	22,60	17,91
18,0	1,20	2,70	2,20	3,89	4,60	5,07	5,40	7,64	10,80	11,87	17,00	17,01
20,0	1,40	2,47	2,40	3,95	3,20	4,84	6,00	6,97	12,20	11,48	19,40	16,44
22,4	1,10	2,27	1,90	3,72	4,00	4,93	4,90	7,30	9,70	11,30	15,40	16,36
25,0	0,96	2,27	1,90	3,41	3,30	4,63	5,00	6,21	9,70	10,20	14,10	15,21
28,0	0,91	2,06	1,80	3,54	2,20	4,15	4,30	6,83	8,80	10,76	13,90	15,57
31,5	0,81	2,13	1,20	3,22	2,60	4,23	4,30	5,81	8,30	10,13	14,00	14,11
35,5	0,66	1,75	1,40	3,32	2,50	4,35	3,90	6,45	7,70	10,14	12,40	14,77
40	0,68	2,00	1,20	3,08	2,20	4,01	---	---	6,40	9,41	10,80	13,62
45	0,55	1,87	1,10	3,18	2,00	3,97	3,10	6,00	6,20	9,26	9,20	11,88
50	0,56	1,84	0,92	2,89	1,80	3,79	3,00	6,12	5,20	8,95	10,30	12,88
56	0,37	1,85	0,88	2,80	1,70	3,72	2,80	5,40	4,80	8,38	9,30	12,13
63	0,43	1,69	0,74	2,77	1,00	3,70	2,40	5,67	4,20	8,27	8,10	12,01
71	0,36	1,64	0,60	2,57	1,30	3,48	2,10	5,10	3,60	8,05	6,90	11,36
80	0,30	1,59	0,59	2,48	1,10	3,29	1,90	5,10	2,50	8,25	6,20	10,88
90	0,30	1,51	0,53	2,48	0,70	3,08	1,60	5,39	3,00	6,83	5,80	10,67
100	0,27	1,48	0,39	2,36	0,86	3,11	1,40	4,83	2,80	7,54	5,20	10,66
112	0,21	1,51	0,42	2,23	0,80	2,92	1,40	4,85	2,40	7,25	4,40	9,73
125	0,22	1,38	0,33	2,16	0,60	2,88	1,00	3,68	2,30	6,73	3,00	9,84
140	0,18	1,26	0,28	2,13	0,61	2,77	1,00	4,58	2,00	6,74	3,70	9,55
160	0,16	1,21	0,26	1,97	0,41	2,59	0,71	3,65	1,80	6,49	3,40	9,19
180	0,13	1,15	0,24	1,90	0,43	2,58	0,67	3,49	1,20	6,03	2,20	8,40
200	0,12	1,21	0,20	1,88	0,32	2,63	0,61	3,75	1,00	6,07	---	---
224	0,10	1,15	0,17	1,74	---	---	0,51	3,48	0,92	5,62	1,80	8,54
250	0,09	1,10	0,16	1,65	0,27	2,45	0,46	3,32	0,82	5,66	---	---
280	---	---	---	---	0,25	2,36	0,41	3,14	---	---	1,50	7,85
315	0,06	0,99	0,13	1,55	0,20	2,14	---	---	0,66	5,12	1,30	7,36

La potenza termica P_{t1} limita la potenza nominale P₁ nelle aree ombreggiate.

Tuttavia, può essere accettato un funzionamento max. di 3 ore se seguito da un periodo di riposo abbastanza lungo (ca. 2-4 ore) per ripristinare il riduttore a temperatura ambiente.

The thermal power P_{t1} limits the rated power P₁ in shaded areas.

However, a maximum operation of 3 hours may be accepted if followed by a sufficiently long rest period (approx. 2-4 hours) to restore the reducer to room temperature.

Die P_{t1} thermische Leistung begrenzt die P₁-Nennleistung in den schattigen Bereichen.

Ein Betrieb von höchstens 3 Stunden kann jedoch akzeptiert werden, wenn eine ausreichend lange Ruhezeit (ca. 2-4 Stunden) folgt, um das Getriebe wieder auf Zimmertemperatur zu bringen.

Tabelle di selezione - Selection tables - Auswahltabelle

RO - RV

RO1 / RV1 - 180 Nm - 1400 rpm
 Riduttore - Speed reducer - Getriebe



	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	$J_1 (x 10^{-4})$ [kgm ²]	56 B5	63 B*	71 B*	80 B*	90 B*
FRO13 FRV13 3c	7.1	7.58	185	130	2.7	1550	3310	1.1700	⊙	⊙	⊙	⊙	⊙
	9.0	9.14	153	130	2.2	1580	3740	1.0754	⊙	⊙	⊙	⊙	⊙
	10.0	9.57	146	140	2.3	1580	3600	1.0469	⊙	⊙	⊙	⊙	⊙
	11.2	11.63	120	150	2.0	1590	3570	0.9761	⊙	⊙	⊙	⊙	⊙
	14.0	14.02	100	130	1.5	1600	4040	0.9358	⊙	⊙	⊙	⊙	⊙
	16.0	15.14	92.5	165	1.7	1600	3550	0.9105	⊙	⊙	⊙	⊙	⊙
	18.0	18.25	76.7	135	1.2	1610	4240	0.8868	⊙	⊙	⊙	⊙	⊙
	20.0	19.15	73.1	170	1.4	1610	3670	0.8712	⊙	⊙	⊙	⊙	⊙
	22.4	23.33	60.0	170	1.1	1610	3820	0.8476	⊙	⊙	⊙	⊙	⊙
	25.0	24.44	57.3	150	0.96	1600	4150	0.3567	⊙	⊙	⊙	⊙	⊙
	28.0	29.18	48.0	170	0.91	1610	3960	0.8281	⊙	⊙	⊙	⊙	⊙
	31.5	31.82	44.0	165	0.81	1600	4120	0.3418	⊙	⊙	⊙	⊙	
	35.5	37.95	36.9	160	0.66	1610	4430	0.8125	⊙	⊙	⊙	⊙	
	40	40.24	34.8	175	0.68	1610	4100	0.3329	⊙	⊙	⊙	⊙	
	45	47.88	29.2	170	0.55	1600	4300	0.2717	⊙	⊙	⊙	⊙	
	50	49.02	28.6	175	0.56	1610	4100	0.3276	⊙	⊙	⊙	⊙	
	56	59.10	23.7	140	0.37	1610	4820	0.3253	⊙	⊙	⊙	⊙	
	63	61.31	22.8	170	0.43	1610	4000	0.3231	⊙	⊙	⊙		
	71	73.77	19.0	170	0.36	1610	4000	0.2654	⊙	⊙	⊙		
	80	84.93	16.5	165	0.30	1610	4400	0.2441	⊙	⊙	⊙		
	90	92.26	15.2	180	0.30	1610	4000	0.2634	⊙	⊙	⊙		
	100	103.46	13.5	180	0.27	1610	4000	0.2429	⊙	⊙	⊙		
	112	111.22	12.6	150	0.21	1610	4800	0.2628	⊙	⊙	⊙		
	125	129.39	10.8	180	0.22	1610	4000	0.2419	⊙	⊙	⊙		
	140	132.61	10.6	150	0.18	1610	4700	0.2614	⊙	⊙			
	160	168.30	8.3	175	0.16	1610	4100	0.2411	⊙	⊙			
	180	185.98	7.5	150	0.13	1610	4700	0.2409	⊙	⊙			
	200	202.90	6.9	150	0.12	1610	4800	0.2408	⊙	⊙			
	224	224.22	6.2	150	0.10	1610	4800	0.2407	⊙	⊙			
	250	249.80	5.6	150	0.09	1610	4800	0.2405	⊙				
	315	320.51	4.4	130	0.06	1360	4800	0.2320	⊙				

B* = B5 & B14

3c = Numero delle coppie di riduzione - Number of reduction stages - Anzahl der Getriebestufen

Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

RO2 / RV2 - 310 Nm - 1400 rpm
 Riduttore - Speed reducer - Getriebe



	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	J_1 ($\times 10^{-4}$) [kgm ²]	71 B5	80 B*	90 B*	100 B*	112 B*
FRO23 FRV23 3c	6.3	6.62	211.4	200	4.7	2900	3350	3.7230	⊙	⊙	⊙	⊙	⊙
	8.0	8.47	165.3	220	4.1	2900	3620	3.4225	⊙	⊙	⊙	⊙	⊙
	9.0	8.97	156.0	225	3.9	2900	3710	3.4623	⊙	⊙	⊙	⊙	⊙
	10.0	10.43	134.3	245	3.7	2900	3870	3.2499	⊙	⊙	⊙	⊙	⊙
	11.2	11.48	122.0	230	3.1	3000	4040	3.2632	⊙	⊙	⊙	⊙	⊙
	12.5	13.03	107.4	275	3.3	3000	3920	3.1175	⊙	⊙	⊙	⊙	⊙
	14.0	14.13	99.1	230	2.5	3000	4340	3.1448	⊙	⊙	⊙	⊙	
	16.0	16.68	83.9	305	2.9	3000	3620	3.0140	⊙	⊙	⊙	⊙	
	18.0	17.80	78.6	250	2.2	3000	4480	1.3623	⊙	⊙	⊙	⊙	
	20.0	20.55	68.1	310	2.4	3000	3720	2.9511	⊙	⊙	⊙	⊙	
	22.4	21.91	63.9	270	1.9	3000	4420	1.3232	⊙	⊙	⊙	⊙	
	25.0	26.07	53.7	310	1.9	3000	3930	2.8990	⊙	⊙	⊙	⊙	
	28.0	27.39	51.1	310	1.8	3000	4180	1.2932	⊙	⊙	⊙	⊙	
	31.5	32.97	42.5	260	1.2	3000	4960	1.0795	⊙	⊙	⊙		
	35.5	35.06	39.9	310	1.4	3000	4220	1.2698	⊙	⊙	⊙		
	40	41.21	34.0	310	1.2	3000	4600	1.0662	⊙	⊙	⊙		
	45	43.18	32.4	310	1.1	3000	4450	1.2555	⊙	⊙	⊙		
	50	52.75	26.5	310	0.92	3000	4680	1.0559	⊙	⊙	⊙		
	56	54.78	25.6	310	0.88	3000	4720	1.2437	⊙	⊙	⊙		
	63	64.97	21.5	310	0.74	3000	4930	1.0496	⊙	⊙			
	71	73.98	18.9	285	0.60	3000	5510	0.9764	⊙	⊙			
	80	82.42	17.0	310	0.59	3000	5100	1.0444	⊙	⊙			
	90	91.12	15.4	310	0.53	3000	5100	0.9732	⊙	⊙			
	100	106.60	13.1	270	0.39	3000	6000	1.0405	⊙	⊙			
	112	115.60	12.1	310	0.42	3000	5100	0.9706	⊙	⊙			
	125	123.47	11.34	260	0.33	3000	6200	0.9721	⊙				
	140	149.51	9.36	270	0.28	3000	6000	0.9686	⊙				
	160	156.64	8.94	260	0.26	3000	6200	0.9699	⊙				
	180	170.11	8.23	260	0.24	3000	6200	1.0381	⊙				
	200	202.59	6.91	260	0.20	3000	6200	0.9682	⊙				
	224	238.58	5.87	260	0.17	3000	6200	0.9674	(⊙)				
	250	261.07	5.363	260	0.16	3000	6200	0.9670	(⊙)				
	315	319.55	4.381	260	0.13	3000	6200	0.9664	(⊙)				

B* = B5 & B14

3c = Numero delle coppie di riduzione - Number of reduction stages - Anzahl der Getriebestufen

(⊙) = Potenza max utilizzabile $\leq P_1$ - Max. available power $\leq P_1$ - Max. Leistung $\leq P_1$

Tabelle di selezione - Selection tables - Auswahltabelle

RO - RV

RO3 / RV3- 580 Nm - 1400 rpm

Riduttore - Speed reducer - Getriebe



	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	$J_1 (x 10^{-4})$ [kgm ²]	71 B*	80 B*	90 B*	100 B*	112 B*
FRO33 FRV33 3c	6.3	6.43	217.6	420	10.2	4550	4990	7.8449	⊙	⊙	⊙	⊙	⊙
	8.0	8.25	169.7	450	8.5	5540	5430	7.0546	⊙	⊙	⊙	⊙	⊙
	9.0	9.09	154.0	380	6.5	5710	5680	7.1141	⊙	⊙	⊙	⊙	⊙
	10.0	10.17	137.7	500	7.7	5630	4980	6.5966	⊙	⊙	⊙	⊙	⊙
	11.2	11.65	120.2	380	5.1	5730	6180	6.6099	⊙	⊙	⊙	⊙	⊙
	12.5	12.72	110.0	540	6.6	5710	4640	6.2405	⊙	⊙	⊙	⊙	⊙
	14.0	13.52	103.5	460	5.3	5520	5970	2.2602	⊙	⊙	⊙	⊙	⊙
	16.0	16.30	85.9	540	5.2	5730	4800	5.9573	⊙	⊙	⊙	⊙	⊙
	18.0	17.33	80.8	510	4.6	5680	5460	2.0812	⊙	⊙	⊙	⊙	⊙
	20.0	19.10	73.3	390	3.2	5730	7310	2.0993	⊙	⊙	⊙	⊙	⊙
	22.4	21.67	64.6	550	4.0	5740	4970	5.7302	⊙	⊙	⊙	⊙	⊙
	25.0	26.73	52.4	560	3.3	5730	5130	1.8969	⊙	⊙	⊙	⊙	⊙
	28.0	28.74	48.7	400	2.2	5740	7800	1.4638	⊙	⊙	⊙	⊙	
	31.5	33.27	42.1	550	2.6	5740	4800	5.5211	⊙	⊙	⊙	⊙	
	35.5	34.26	40.9	560	2.5	5740	5370	1.8327	⊙	⊙	⊙	⊙	
	40	40.23	34.8	570	2.2	5740	5500	1.3744	⊙	⊙	⊙	⊙	
	45	45.54	30.7	570	2.0	5740	5580	1.7813	⊙	⊙	⊙	⊙	
	50	51.55	27.2	580	1.8	5740	5600	1.3460	⊙	⊙	⊙	⊙	
	56	53.60	26.1	580	1.7	5740	5600	1.7597	⊙	⊙	⊙	⊙	
	63	64.33	21.8	410	1.0	5740	8950	1.7667	⊙	⊙	⊙		
	71	68.52	20.4	580	1.3	5740	5500	1.3233	⊙	⊙	⊙		
	80	80.65	17.4	580	1.1	5740	5500	1.3138	⊙	⊙	⊙		
	90	91.94	15.2	410	0.70	5740	9580	1.7158	⊙	⊙	⊙		
	100	105.20	13.3	580	0.86	5750	5500	1.3024	⊙	⊙	⊙		
	112	113.11	12.4	580	0.80	5740	5500	1.1546	⊙	⊙			
	125	125.46	11.2	480	0.60	5740	8500	1.2969	⊙	⊙			
	140	147.54	9.5	580	0.61	5740	5500	1.1488	⊙	⊙			
	160	162.17	8.6	430	0.41	5740	9400	1.7036	⊙	⊙			
	180	175.95	8.0	490	0.43	5740	8200	1.1460	⊙				
	200	208.42	6.7	430	0.32	5740	9400	1.1474	⊙				
	250	248.56	5.6	430	0.27	5740	9400	1.1450	⊙				
	280	274.11	5.1	430	0.25	5740	9400	1.1439	⊙				
	315	342.23	4.1	430	0.20	5740	9400	1.1420	(⊙)				

B* = B5 & B14

3c = Numero delle coppie di riduzione - Number of reduction stages - Anzahl der Getriebestufen

(⊙) = Potenza max utilizzabile ≤ P₁ - Max. available power ≤ P₁ - Max. Leistung ≤ P₁

RO4 / RV4 - 1000 Nm - 1400 rpm
 Riduttore - Speed reducer - Getriebe



	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	$J_1 (x 10^{-4})$ [kgm ²]	71 B5	80 B5	90 B5	100 B*	112 B*	132 B*
FRO43 FRV43 3c	6.3	6.60	212.1	470	11.1	5670	5570	18.0401	⊙	⊙	⊙	⊙	⊙	⊙
	8.0	8.35	167.6	530	9.9	5740	6000	16.3029	⊙	⊙	⊙	⊙	⊙	⊙
	9.0	8.72	160.6	650	11.6	5560	5980	16.5334	⊙	⊙	⊙	⊙	⊙	⊙
	10.0	10.43	134.2	610	9.1	5770	6430	15.1392	⊙	⊙	⊙	⊙	⊙	⊙
	11.2	11.04	126.8	650	9.2	5740	6520	15.3615	⊙	⊙	⊙	⊙	⊙	⊙
	12.5	13.29	105.4	670	7.9	5780	6950	14.2633	⊙	⊙	⊙	⊙	⊙	⊙
	14.0	13.87	100.9	515	5.8	5630	7190	6.3637	⊙	⊙	⊙	⊙	⊙	⊙
	16.0	16.21	86.4	730	7.0	5780	7420	13.7425	⊙	⊙	⊙	⊙	⊙	⊙
	18.0	17.55	79.8	610	5.4	5700	7740	5.9704	⊙	⊙	⊙	⊙	⊙	⊙
	20.0	20.22	69.2	780	6.0	5780	7980	13.3129	⊙	⊙	⊙	⊙	⊙	⊙
	22.4	21.94	63.8	690	4.9	5740	8310	5.7069	⊙	⊙	⊙	⊙	⊙	⊙
	25.0	26.10	53.6	840	5.0	5780	8690	12.9609	⊙	⊙	⊙	⊙	⊙	⊙
	28.0	27.92	50.1	770	4.3	5780	8990	5.5085	⊙	⊙	⊙	⊙	⊙	
	31.5	32.52	43.1	890	4.3	5790	9390	12.7520	⊙	⊙	⊙	⊙	⊙	
	35.5	34.06	41.1	840	3.9	5780	9580	5.3906	⊙	⊙	⊙	⊙		
	45	42.50	32.9	840	3.1	5780	10020	5.2933	⊙	⊙	⊙	⊙		
	50	51.25	27.3	980	3.0	5780	9720	4.3723	⊙	⊙	⊙	⊙		
	56	54.84	25.5	980	2.8	5790	9800	5.2136	⊙	⊙	⊙	⊙		
	63	63.95	21.9	990	2.4	5780	10090	4.3293	⊙	⊙	⊙	⊙		
	71	68.34	20.5	920	2.1	5790	10970	5.1663	⊙	⊙	⊙	⊙		
	80	82.52	17.0	1000	1.9	5790	10510	4.2941	⊙	⊙	⊙	⊙		
	90	89.69	15.6	890	1.6	5790	11880	3.9791	⊙	⊙	⊙			
	100	102.83	13.6	940	1.4	5790	11740	4.2732	⊙	⊙	⊙			
	112	115.73	12.1	1020	1.4	5790	11130	3.9612	⊙	⊙	⊙			
	125	121.80	11.5	780	1.0	5790	13730	5.1136	⊙	⊙	⊙			
	140	144.22	9.7	950	1.0	5790	12410	3.9506	⊙	⊙	⊙			
	160	164.63	8.5	750	0.71	5790	14400	4.2552	⊙	⊙				
	180	183.27	7.6	790	0.67	5790	14710	4.2500	⊙	⊙				
200	190.66	7.3	750	0.61	5790	14830	3.9474	⊙	⊙					
224	230.89	6.1	750	0.51	5790	15400	3.9414	⊙	⊙					
250	257.04	5.5	750	0.46	5790	16500	3.9388	⊙	⊙					
280	289.00	4.8	750	0.41	5790	16470	3.9363	⊙						

B* = B5 & B14

3c = Numero delle coppie di riduzione - Number of reduction stages - Anzahl der Getriebestufen

Tabelle di selezione - Selection tables - Auswahltabelle

RO - RV

RO5 / RV5 - 1800 Nm - 1400 rpm
 Riduttore - Speed reducer - Getriebe



	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	$J_1 (x 10^{-4})$ [kgm ²]	80-90 B5	100 B5	112 B5	132 B*	160 B5	180 B5
FRO53 FRV53 3c	6.3	6.48	215.9	930	22.4	8200	8020	57.2158	⊙	⊙	⊙	⊙	⊙	⊙
	8.0	8.57	163.3	1100	20.0	8290	8770	52.4172	⊙	⊙	⊙	⊙	⊙	⊙
	10.0	10.87	128.8	1230	17.6	8350	9470	49.6847	⊙	⊙	⊙	⊙	⊙	⊙
	12.5	13.17	106.3	1400	16.6	8350	10050	48.0516	⊙	⊙	⊙	⊙	⊙	⊙
	14.0	13.63	102.7	1050	12.0	8110	10340	20.5375	⊙	⊙	⊙	⊙	⊙	
	16.0	16.24	86.2	1470	14.1	8360	10150	46.6813	⊙	⊙	⊙	⊙	⊙	⊙
	18.0	18.02	77.7	1250	10.8	8260	11300	19.4509	⊙	⊙	⊙	⊙	⊙	
	20.0	20.53	68.2	1600	12.2	8360	8650	45.5253	⊙	⊙	⊙	⊙	⊙	
	22.4	22.85	61.3	1420	9.7	8310	11180	18.8321	⊙	⊙	⊙	⊙	⊙	
	25.0	26.97	51.9	1670	9.7	8360	8140	44.5592	⊙	⊙	⊙	⊙	⊙	
	28.0	27.68	50.6	1560	8.8	8350	9800	18.4623	⊙	⊙	⊙	⊙	⊙	
	31.5	31.69	44.2	1680	8.3	8360	8230	44.1495	⊙	⊙	⊙	⊙	⊙	
	35.5	34.12	41.0	1690	7.7	8360	8340	18.1520	⊙	⊙	⊙	⊙		
	40	41.65	33.6	1700	6.4	8330	8510	14.8941	⊙	⊙	⊙	⊙		
	45	43.14	32.5	1700	6.2	8360	8540	17.8902	⊙	⊙	⊙	⊙		
	50	51.34	27.3	1720	5.2	8360	8720	14.7570	⊙	⊙	⊙	⊙		
	56	56.67	24.7	1730	4.8	8360	8820	17.6715	⊙	⊙	⊙	⊙		
	63	64.91	21.6	1740	4.2	8360	8950	14.6414	⊙	⊙	⊙	⊙		
	71	72.56	19.3	1660	3.6	8360	10800	17.5356	⊙	⊙	⊙			
	80	79.37	17.6	1280	2.5	8360	16160	13.5189	⊙	⊙	⊙			
	90	91.04	15.4	1770	3.0	8360	8400	13.4434	⊙	⊙	⊙			
	100	100.20	14.0	1780	2.8	8360	8000	14.5038	⊙	⊙				
	112	109.18	12.8	1700	2.4	8360	11200	14.4848	⊙	⊙				
	125	119.59	11.7	1790	2.3	8360	7200	13.3942	⊙	⊙				
	140	140.53	10.0	1790	2.0	8360	7200	13.3734	⊙	⊙				
	160	153.12	9.1	1720	1.8	8360	10100	13.3637	⊙	⊙				
	180	185.17	7.7	1420	1.2	8360	17640	13.3462	⊙					
	200	208.05	6.7	1330	1.0	8360	19060	13.3560	⊙					
	224	224.24	6.2	1330	0.92	8360	19100	14.4140	⊙					
	250	251.60	5.6	1330	0.82	8360	19100	13.3409	⊙					
315	314.50	4.5	1330	0.66	8360	19100	13.3277	(⊙)						

B* = B5 & B14

3c = Numero delle coppie di riduzione - Number of reduction stages - Anzahl der Getriebestufen

(⊙) = Potenza max utilizzabile ≤ P₁ - Max. available power ≤ P₁ - Max. Leistung ≤ P₁

RO6 / RV6 - 3400 Nm - 1400 rpm
 Riduttore - Speed reducer - Getriebe



	i_n	i_r	n_2 [rpm]	M_2 [Nm]	P_1 [kW]	F_{r1} [N]	F_{r2} [N]	$J_1 (x 10^{-4})$ [kgm ²]	80-90 B5	100 B5	112 B5	132 B*	160 B5	180 B5
FRO63 FRV63 3c	6.3	6.43	217.7	1660	40.3	6670	10740	102.1187	⊙	⊙	⊙	⊙	⊙	⊙
	8.0	8.50	164.7	1740	31.9	7570	11850	89.9906	⊙	⊙	⊙	⊙	⊙	⊙
	10.0	10.78	129.9	1970	28.5	7820	12750	81.543	⊙	⊙	⊙	⊙	⊙	⊙
	12.5	13.06	107.2	2150	25.7	8010	13550	76.4873	⊙	⊙	⊙	⊙	⊙	⊙
	14.0	13.51	103.6	1640	18.9	7530	14110	40.9607	⊙	⊙	⊙	⊙	⊙	⊙
	16.0	16.10	87.0	2330	22.6	8190	14450	72.2401	⊙	⊙	⊙	⊙	⊙	⊙
	18.0	17.87	78.4	1950	17.0	7880	15380	38.2144	⊙	⊙	⊙	⊙	⊙	⊙
	20.0	20.36	68.8	2530	19.4	8310	14100	68.6529	⊙	⊙	⊙	⊙	⊙	⊙
	22.4	22.66	61.8	2230	15.4	8090	16460	36.3014	⊙	⊙	⊙	⊙	⊙	⊙
	25.0	25.48	55.0	2300	14.1	8230	16820	36.6126	⊙	⊙	⊙	⊙	⊙	⊙
	28.0	27.45	51.0	2450	13.9	8240	15700	35.1566	⊙	⊙	⊙	⊙	⊙	⊙
	31.5	31.85	44.0	2860	14.0	8360	11540	64.3060	⊙	⊙	⊙	⊙	⊙	⊙
	35.5	33.83	41.4	2690	12.4	8310	13920	34.1949	⊙	⊙	⊙	⊙	⊙	⊙
	40	42.78	32.7	2950	10.8	8360	11390	33.3825	⊙	⊙	⊙	⊙	⊙	⊙
	45	42.95	32.6	2540	9.2	8360	16450	62.5533	⊙	⊙	⊙	⊙	⊙	⊙
	50	50.91	27.5	3360	10.3	8120	9810	25.1536	⊙	⊙	⊙	⊙	⊙	⊙
	56	56.19	24.9	3360	9.3	8360	9970	32.7029	⊙	⊙	⊙	⊙	⊙	⊙
	63	64.36	21.8	3360	8.1	8330	10200	24.7949	⊙	⊙	⊙	⊙	⊙	⊙
	71	73.41	19.1	3250	6.9	8360	11430	32.2564	⊙	⊙	⊙	⊙	⊙	⊙
	80	84.55	16.6	3360	6.2	8360	11400	24.4947	⊙	⊙	⊙	⊙	⊙	⊙
	90	90.27	15.5	3360	5.8	8340	11400	21.7196	⊙	⊙	⊙	⊙	⊙	⊙
	100	100.70	13.9	3360	5.2	8360	9800	24.3601	⊙	⊙	⊙	⊙	⊙	⊙
	112	118.58	11.8	3360	4.4	8360	9800	21.5670	⊙	⊙	⊙	⊙	⊙	⊙
	125	128.72	10.9	2490	3.0	8360	22060	21.6569	⊙	⊙	⊙	⊙	⊙	⊙
	140	141.23	9.9	3360	3.7	8360	9800	21.4986	⊙	⊙	⊙	⊙	⊙	⊙
	160	154.91	9.0	3360	3.4	8360	9800	21.4668	⊙	⊙	⊙	⊙	⊙	⊙
	180	190.49	7.5	2730	2.2	8360	19400	21.4095	⊙	⊙	⊙	⊙	⊙	⊙
	224	220.89	6.3	2550	1.8	8360	22500	21.4455	⊙	⊙	⊙	⊙	⊙	⊙
	280	271.62	5.2	2550	1.5	8360	22500	21.3954	⊙	⊙	⊙	⊙	⊙	⊙
	315	305.43	4.6	2550	1.3	8360	22500	21.3730	⊙	⊙	⊙	⊙	⊙	⊙

B* = B5 & B14

3c = Numero delle coppie di riduzione - Number of reduction stages - Anzahl der Getriebestufen

Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

MRO / MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,06	7,1	7,58	185,0	2,9	44,6	MRO 13 - 56A4	9,3	6,4	3310	1,50	0,9150
	9,0	9,14	153,0	3,5	37,0	MRO 13 - 56A4	9,3	6,4	3740	1,50	0,8480
	10,0	9,57	146,0	3,7	38,0	MRO 13 - 56A4	9,3	6,4	3600	1,50	0,7740
	11,2	11,60	120,0	4,5	33,5	MRO 13 - 56A4	9,3	6,4	3570	1,50	0,6940
	14,0	14,00	99,9	5,4	24,1	MRO 13 - 56A4	9,3	6,4	4040	1,50	0,6660
	16,0	15,10	92,5	5,8	28,3	MRO 13 - 56A4	9,3	6,4	3550	1,50	0,6210
	18,0	18,30	76,7	7,0	19,2	MRO 13 - 56A4	9,3	6,4	4240	1,50	0,6040
	20,0	19,20	73,1	7,4	23,1	MRO 13 - 56A4	9,3	6,4	3670	1,50	0,5770
	22,4	23,30	60,0	9,0	18,9	MRO 13 - 56A4	9,3	6,4	3820	1,50	0,5510
	25,0	24,40	57,3	9,4	16,0	MRO 13 - 56A4	9,3	6,4	4150	1,50	0,4940
	28,0	29,20	48,0	11,2	15,1	MRO 13 - 56A4	9,3	6,4	3960	1,50	0,5290
	31,5	31,80	44,0	12,2	13,5	MRO 13 - 56A4	9,3	6,4	4120	1,50	0,4770
	35,5	38,00	36,9	14,6	11,0	MRO 13 - 56A4	9,3	6,4	4430	1,50	0,5120
	40,0	40,30	34,8	15,5	11,3	MRO 13 - 56A4	9,3	6,4	4100	1,50	0,4670
	45,0	47,90	29,2	18,4	9,2	MRO 13 - 56A4	9,3	6,4	4300	1,50	0,4540
	50,0	49,00	28,6	18,9	9,3	MRO 13 - 56A4	9,3	6,4	4100	1,50	0,4610
	56,0	59,10	23,7	22,7	6,2	MRO 13 - 56A4	9,3	6,4	4820	1,50	0,4600
	63,0	61,30	22,8	23,6	7,2	MRO 13 - 56A4	9,3	6,4	4000	1,50	0,4560
	71,0	73,80	19,0	28,4	6,0	MRO 13 - 56A4	9,3	6,4	4000	1,50	0,4470
	80,0	84,90	16,5	32,7	5,1	MRO 13 - 56A4	9,3	6,4	4400	1,50	0,4420
	90,0	92,30	15,2	35,5	5,1	MRO 13 - 56A4	9,3	6,4	4000	1,50	0,4450
	100,0	103,00	13,5	39,8	4,5	MRO 13 - 56A4	9,3	6,4	4000	1,50	0,4410
	112,0	111,00	12,6	42,8	3,5	MRO 13 - 56A4	9,3	6,4	4800	1,50	0,4440
	125,0	129,00	10,8	49,8	3,6	MRO 13 - 56A4	9,3	6,4	4000	1,50	0,4400
	140,0	133,00	10,6	51,0	2,9	MRO 13 - 56A4	9,3	6,4	4700	1,50	0,4420
	160,0	168,00	8,3	64,7	2,7	MRO 13 - 56A4	9,3	6,4	4100	1,50	0,4390
	180,0	186,00	7,5	71,5	2,1	MRO 13 - 56A4	9,3	6,4	4700	1,50	0,4390
	200,0	203,00	6,9	78,1	1,9	MRO 13 - 56A4	9,3	6,4	4800	1,50	0,4390
224,0	224,00	6,2	86,3	1,7	MRO 13 - 56A4	9,3	6,4	4800	1,50	0,4390	
250,0	250,00	5,6	96,1	1,6	MRO 13 - 56A4	9,3	6,4	4800	1,50	0,4380	
315,0	321,00	4,4	123,0	1,1	MRO 13 - 56A4	9,3	6,4	4800	1,50	0,4380	
0,09	7,1	7,58	185,0	4,4	29,7	MRO 13 - 56B4	9,6	6,4	3310	2,00	0,9150
	9,0	9,14	153,0	5,3	24,6	MRO 13 - 56B4	9,6	6,4	3740	2,00	0,8480
	10,0	9,57	146,0	5,5	25,4	MRO 13 - 56B4	9,6	6,4	3600	2,00	0,7740
	11,2	11,60	120,0	6,7	22,4	MRO 13 - 56B4	9,6	6,4	3570	2,00	0,6940
	14,0	14,00	99,9	8,1	16,1	MRO 13 - 56B4	9,6	6,4	4040	2,00	0,6660
	16,0	15,10	92,5	8,7	18,9	MRO 13 - 56B4	9,6	6,4	3550	2,00	0,6210
	18,0	18,30	76,7	10,5	12,8	MRO 13 - 56B4	9,6	6,4	4240	2,00	0,6040
	20,0	19,20	73,1	11,1	15,4	MRO 13 - 56B4	9,6	6,4	3670	2,00	0,5770
	22,4	23,30	60,0	13,5	12,6	MRO 13 - 56B4	9,6	6,4	3820	2,00	0,5510
	25,0	24,40	57,3	14,1	10,6	MRO 13 - 56B4	9,6	6,4	4150	2,00	0,4940
	28,0	29,20	48,0	16,8	10,1	MRO 13 - 56B4	9,6	6,4	3960	2,00	0,5290
	31,5	31,80	44,0	18,4	9,0	MRO 13 - 56B4	9,6	6,4	4120	2,00	0,4770
	35,5	38,00	36,9	21,9	7,3	MRO 13 - 56B4	9,6	6,4	4430	2,00	0,5120
	40,0	40,30	34,8	23,2	7,5	MRO 13 - 56B4	9,6	6,4	4100	2,00	0,4670
	45,0	47,90	29,2	27,6	6,2	MRO 13 - 56B4	9,6	6,4	4300	2,00	0,4540
	50,0	49,00	28,6	28,3	6,2	MRO 13 - 56B4	9,6	6,4	4100	2,00	0,4610
	56,0	59,10	23,7	34,1	4,1	MRO 13 - 56B4	9,6	6,4	4820	2,00	0,4600
63,0	61,30	22,8	35,4	4,8	MRO 13 - 56B4	9,6	6,4	4000	2,00	0,4560	
71,0	73,80	19,0	42,6	4,0	MRO 13 - 56B4	9,6	6,4	4000	2,00	0,4470	

MRO / MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,09	80,0	84,90	16,5	49,0	3,4	MRO 13 - 56B4	9,6	6,4	4400	2,00	0,4420
	90,0	92,30	15,2	53,2	3,4	MRO 13 - 56B4	9,6	6,4	4000	2,00	0,4450
	100,0	103,00	13,5	59,7	3,0	MRO 13 - 56B4	9,6	6,4	4000	2,00	0,4410
	112,0	111,00	12,6	64,2	2,3	MRO 13 - 56B4	9,6	6,4	4800	2,00	0,4440
	125,0	129,00	10,8	74,7	2,4	MRO 13 - 56B4	9,6	6,4	4000	2,00	0,4400
	140,0	133,00	10,6	76,5	2,0	MRO 13 - 56B4	9,6	6,4	4700	2,00	0,4420
	160,0	168,00	8,3	97,1	1,8	MRO 13 - 56B4	9,6	6,4	4100	2,00	0,4390
	180,0	186,00	7,5	107,0	1,4	MRO 13 - 56B4	9,6	6,4	4700	2,00	0,4390
	200,0	203,00	6,9	117,0	1,3	MRO 13 - 56B4	9,6	6,4	4800	2,00	0,4390
	224,0	224,00	6,2	129,0	1,2	MRO 13 - 56B4	9,6	6,4	4800	2,00	0,4390
250,0	250,00	5,6	144,0	1,0	MRO 13 - 56B4	9,6	6,4	4800	2,00	0,4380	
0,12	7,1	7,58	185,0	5,8	22,3	MRO 13 - 63A4	10,1	6,4	3310	2,80	0,9150
	9,0	9,14	153,0	7,0	18,5	MRO 13 - 63A4	10,1	6,4	3740	2,80	0,8480
	10,0	9,57	146,0	7,4	19,0	MRO 13 - 63A4	10,1	6,4	3600	2,80	0,7740
	11,2	11,60	120,0	8,9	16,8	MRO 13 - 63A4	10,1	6,4	3570	2,80	0,6940
	14,0	14,00	99,9	10,8	12,1	MRO 13 - 63A4	10,1	6,4	4040	2,80	0,6660
	16,0	15,10	92,5	11,6	14,2	MRO 13 - 63A4	10,1	6,4	3550	2,80	0,6210
	18,0	18,30	76,7	14,0	9,6	MRO 13 - 63A4	10,1	6,4	4240	2,80	0,6040
	20,0	19,20	73,1	14,7	11,5	MRO 13 - 63A4	10,1	6,4	3670	2,80	0,5770
	22,4	23,30	60,0	18,0	9,5	MRO 13 - 63A4	10,1	6,4	3820	2,80	0,5510
	25,0	24,40	57,3	18,8	8,0	MRO 13 - 63A4	10,1	6,4	4150	2,80	0,4940
	28,0	29,20	48,0	22,5	7,6	MRO 13 - 63A4	10,1	6,4	3960	2,80	0,5290
	31,5	31,80	44,0	24,5	6,7	MRO 13 - 63A4	10,1	6,4	4120	2,80	0,4770
	35,5	38,00	36,9	29,2	5,5	MRO 13 - 63A4	10,1	6,4	4430	2,80	0,5120
	40,0	40,30	34,8	31,0	5,7	MRO 13 - 63A4	10,1	6,4	4100	2,80	0,4670
	45,0	47,90	29,2	36,8	4,6	MRO 13 - 63A4	10,1	6,4	4300	2,80	0,4540
	50,0	49,00	28,6	37,7	4,6	MRO 13 - 63A4	10,1	6,4	4100	2,80	0,4610
	56,0	59,10	23,7	45,5	3,1	MRO 13 - 63A4	10,1	6,4	4820	2,80	0,4600
	63,0	61,30	22,8	47,2	3,6	MRO 13 - 63A4	10,1	6,4	4000	2,80	0,4560
	71,0	73,80	19,0	56,8	3,0	MRO 13 - 63A4	10,1	6,4	4000	2,80	0,4470
	80,0	84,90	16,5	65,3	2,5	MRO 13 - 63A4	10,1	6,4	4400	2,80	0,4420
	90,0	92,30	15,2	71,0	2,5	MRO 13 - 63A4	10,1	6,4	4000	2,80	0,4450
	100,0	103,00	13,5	79,6	2,3	MRO 13 - 63A4	10,1	6,4	4000	2,80	0,4410
	112,0	111,00	12,6	85,6	1,8	MRO 13 - 63A4	10,1	6,4	4800	2,80	0,4440
	125,0	129,00	10,8	99,6	1,8	MRO 13 - 63A4	10,1	6,4	4000	2,80	0,4400
140,0	133,00	10,6	102,0	1,5	MRO 13 - 63A4	10,1	6,4	4700	2,80	0,4420	
160,0	168,00	8,3	129,0	1,4	MRO 13 - 63A4	10,1	6,4	4100	2,80	0,4390	
180,0	186,00	7,5	143,0	1,0	MRO 13 - 63A4	10,1	6,4	4700	2,80	0,4390	
200,0	203,00	6,9	156,0	1,0	MRO 13 - 63A4	10,1	6,4	4800	2,80	0,4390	
224,0	224,00	6,2	173,0	0,9	MRO 13 - 63A4	10,1	6,4	4800	2,80	0,4390	
250,0	250,00	5,6	192,0	0,8	MRO 13 - 63A4	10,1	6,4	4800	2,80	0,4380	
0,18	7,1	7,58	185,0	8,7	14,9	MRO 13 - 63B4	10,6	6,4	3310	4,00	0,9150
	9,0	9,14	153,0	10,5	12,3	MRO 13 - 63B4	10,6	6,4	3740	4,00	0,8480
	10,0	9,57	146,0	11,0	12,7	MRO 13 - 63B4	10,6	6,4	3600	4,00	0,7740
	11,2	11,60	120,0	13,4	11,2	MRO 13 - 63B4	10,6	6,4	3570	4,00	0,6940
	14,0	14,00	99,9	16,2	8,0	MRO 13 - 63B4	10,6	6,4	4040	4,00	0,6660
	16,0	15,10	92,5	17,5	9,4	MRO 13 - 63B4	10,6	6,4	3550	4,00	0,6210
	18,0	18,30	76,7	21,1	6,4	MRO 13 - 63B4	10,6	6,4	4240	4,00	0,6040
	20,0	19,20	73,1	22,1	7,7	MRO 13 - 63B4	10,6	6,4	3670	4,00	0,5770
	22,4	23,30	60,0	26,9	6,3	MRO 13 - 63B4	10,6	6,4	3820	4,00	0,5510

Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,18	25,0	24,40	57,3	28,2	5,3	MRO 13 - 63B4	10,6	6,4	4150	4,00	0,4940
	28,0	29,20	48,0	33,7	5,0	MRO 13 - 63B4	10,6	6,4	3960	4,00	0,5290
	31,5	31,80	44,0	36,7	4,5	MRO 13 - 63B4	10,6	6,4	4120	4,00	0,4770
	35,5	38,00	36,9	43,8	3,7	MRO 13 - 63B4	10,6	6,4	4430	4,00	0,5120
	40,0	40,30	34,8	46,5	3,8	MRO 13 - 63B4	10,6	6,4	4100	4,00	0,4670
	45,0	47,90	29,2	55,3	3,1	MRO 13 - 63B4	10,6	6,4	4300	4,00	0,4540
	50,0	49,00	28,6	56,6	3,1	MRO 13 - 63B4	10,6	6,4	4100	4,00	0,4610
	56,0	59,10	23,7	68,2	2,1	MRO 13 - 63B4	10,6	6,4	4820	4,00	0,4600
	63,0	61,30	22,8	70,8	2,4	MRO 13 - 63B4	10,6	6,4	4000	4,00	0,4560
	71,0	73,80	19,0	85,1	2,0	MRO 13 - 63B4	10,6	6,4	4000	4,00	0,4470
	80,0	84,90	16,5	98,0	1,7	MRO 13 - 63B4	10,6	6,4	4400	4,00	0,4420
	90,0	92,30	15,2	106,0	1,7	MRO 13 - 63B4	10,6	6,4	4000	4,00	0,4450
	100,0	103,00	13,5	119,0	1,5	MRO 13 - 63B4	10,6	6,4	4000	4,00	0,4410
	112,0	111,00	12,6	128,0	1,2	MRO 13 - 63B4	10,6	6,4	4800	4,00	0,4440
	125,0	129,00	10,8	149,0	1,2	MRO 13 - 63B4	10,6	6,4	4000	4,00	0,4400
	140,0	133,00	10,6	153,0	1,0	MRO 13 - 63B4	10,6	6,4	4700	4,00	0,4420
160,0	168,00	8,3	194,0	0,9	MRO 13 - 63B4	10,6	6,4	4100	4,00	0,4390	
0,25	6,3	6,62	211,0	10,6	18,8	MRO 23 - 71A4	15,6	10,6	3350	5,00	1,7940
	7,1	7,58	185,0	12,2	10,7	MRO 13 - 71A4	11,4	6,4	3310	5,00	0,9150
	7,1	7,58	185,0	12,2	10,7	MRO 13 - 63C4	11,4	6,4	3310	4,00	0,9150
	8,0	8,47	165,0	13,6	16,2	MRO 23 - 71A4	15,6	10,6	3620	5,00	1,3930
	9,0	9,14	153,0	14,7	8,9	MRO 13 - 71A4	11,4	6,4	3740	5,00	0,8480
	9,0	9,14	153,0	14,7	8,9	MRO 13 - 63C4	11,4	6,4	3740	4,00	0,8480
	10,0	9,57	146,0	15,3	9,1	MRO 13 - 71A4	11,4	6,4	3600	5,00	0,7740
	10,0	9,57	146,0	15,3	9,1	MRO 13 - 63C4	11,4	6,4	3600	4,00	0,7740
	11,2	11,60	120,0	18,6	8,0	MRO 13 - 71A4	11,4	6,4	3570	5,00	0,6940
	11,2	11,60	120,0	18,6	8,0	MRO 13 - 63C4	11,4	6,4	3570	4,00	0,6940
	12,5	13,00	107,0	20,9	13,2	MRO 23 - 71A4	15,6	10,6	3920	5,00	0,9900
	14,0	14,00	99,9	22,5	5,8	MRO 13 - 71A4	11,4	6,4	4040	5,00	0,6660
	14,0	14,00	99,9	22,5	5,8	MRO 13 - 63C4	11,4	6,4	4040	4,00	0,6660
	16,0	15,10	92,5	24,3	6,8	MRO 13 - 71A4	11,4	6,4	3550	5,00	0,6210
	16,0	15,10	92,5	24,3	6,8	MRO 13 - 63C4	11,4	6,4	3550	4,00	0,6210
	18,0	18,30	76,7	29,3	4,6	MRO 13 - 71A4	11,4	6,4	4240	5,00	0,6040
	18,0	18,30	76,7	29,3	4,6	MRO 13 - 63C4	11,4	6,4	4240	4,00	0,6040
	20,0	19,20	73,1	30,7	5,5	MRO 13 - 71A4	11,4	6,4	3670	5,00	0,5770
	20,0	19,20	73,1	30,7	5,5	MRO 13 - 63C4	11,4	6,4	3670	4,00	0,5770
	22,4	23,30	60,0	37,4	4,5	MRO 13 - 71A4	11,4	6,4	3820	5,00	0,5510
	22,4	23,30	60,0	37,4	4,5	MRO 13 - 63C4	11,4	6,4	3820	4,00	0,5510
	25,0	24,40	57,3	39,2	3,8	MRO 13 - 71A4	11,4	6,4	4150	5,00	0,4940
	25,0	24,40	57,3	39,2	3,8	MRO 13 - 63C4	11,4	6,4	4150	4,00	0,4940
	28,0	29,20	48,0	46,8	3,6	MRO 13 - 71A4	11,4	6,4	3960	5,00	0,5290
	28,0	29,20	48,0	46,8	3,6	MRO 13 - 63C4	11,4	6,4	3960	4,00	0,5290
	31,5	33,00	42,5	52,8	4,9	MRO 23 - 71A4	15,6	10,6	4960	5,00	0,5440
	31,5	31,80	44,0	51,0	3,2	MRO 13 - 71A4	11,4	6,4	4120	5,00	0,4770
	31,5	31,80	44,0	51,0	3,2	MRO 13 - 63C4	11,4	6,4	4120	4,00	0,4770
	35,5	38,00	36,9	60,8	2,6	MRO 13 - 71A4	11,4	6,4	4430	5,00	0,5120
	35,5	38,00	36,9	60,8	2,6	MRO 13 - 63C4	11,4	6,4	4430	4,00	0,5120
40,0	41,20	34,0	66,1	4,7	MRO 23 - 71A4	15,6	10,6	4600	5,00	0,5270	
40,0	40,30	34,8	64,5	2,7	MRO 13 - 71A4	11,4	6,4	4100	5,00	0,4670	
40,0	40,30	34,8	64,5	2,7	MRO 13 - 63C4	11,4	6,4	4100	4,00	0,4670	

MRO-MRV - 1400 rpm

Motorriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,25	45,0	43,20	32,4	69,2	4,5	MRO 23 - 71A4	15,6	10,6	4450	5,00	0,5440
	45,0	47,90	29,2	76,7	2,2	MRO 13 - 71A4	11,4	6,4	4300	5,00	0,4540
	45,0	47,90	29,2	76,7	2,2	MRO 13 - 63C4	11,4	6,4	4300	4,00	0,4540
	50,0	52,80	26,5	84,6	3,7	MRO 23 - 71A4	15,6	10,6	4680	5,00	0,5130
	50,0	49,00	28,6	78,6	2,2	MRO 13 - 71A4	11,4	6,4	4100	5,00	0,4610
	50,0	49,00	28,6	78,6	2,2	MRO 13 - 63C4	11,4	6,4	4100	4,00	0,4610
	56,0	54,80	25,6	87,8	3,5	MRO 23 - 71A4	15,6	10,6	4720	5,00	0,5290
	56,0	59,10	23,7	94,7	1,5	MRO 13 - 71A4	11,4	6,4	4820	5,00	0,4600
	56,0	59,10	23,7	94,7	1,5	MRO 13 - 63C4	11,4	6,4	4820	4,00	0,4600
	63,0	64,30	21,8	103,0	4,0	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,8750
	63,0	65,00	21,5	104,0	3,0	MRO 23 - 71A4	15,6	10,6	4930	5,00	0,5050
	63,0	61,30	22,8	98,3	1,7	MRO 13 - 71A4	11,4	6,4	4000	5,00	0,4560
	63,0	61,30	22,8	98,3	1,7	MRO 13 - 63C4	11,4	6,4	4000	4,00	0,4560
	71,0	74,00	18,9	119,0	2,4	MRO 23 - 71A4	15,6	10,6	5510	5,00	0,4950
	71,0	73,80	19,0	118,0	1,4	MRO 13 - 71A4	11,4	6,4	4000	5,00	0,4470
	71,0	73,80	19,0	118,0	1,4	MRO 13 - 63C4	11,4	6,4	4000	4,00	0,4470
	80,0	80,70	17,4	129,0	4,5	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7720
	80,0	82,40	17,0	132,0	2,3	MRO 23 - 71A4	15,6	10,6	5100	5,00	0,4990
	80,0	84,90	16,5	136,0	1,2	MRO 13 - 71A4	11,4	6,4	4400	5,00	0,4420
	80,0	84,90	16,5	136,0	1,2	MRO 13 - 63C4	11,4	6,4	4400	4,00	0,4420
	90,0	91,90	15,2	147,0	2,8	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,8090
	90,0	91,10	15,4	146,0	2,1	MRO 23 - 71A4	15,6	10,6	5100	5,00	0,4900
	90,0	92,30	15,2	148,0	1,2	MRO 13 - 71A4	11,4	6,4	4000	5,00	0,4450
	90,0	92,30	15,2	148,0	1,2	MRO 13 - 63C4	11,4	6,4	4000	4,00	0,4450
	100,0	105,00	13,3	169,0	3,4	MRO 33 - 71A4	17,5	12,5	5750	5,00	1,7580
	100,0	107,00	13,1	171,0	1,6	MRO 23 - 71A4	15,6	10,6	6000	5,00	0,4940
	100,0	103,00	13,5	166,0	1,1	MRO 13 - 71A4	11,4	6,4	4000	5,00	0,4410
	100,0	103,00	13,5	166,0	1,1	MRO 13 - 63C4	11,4	6,4	4000	4,00	0,4410
	112,0	113,00	12,4	181,0	3,2	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7370
	112,0	116,00	12,1	185,0	1,7	MRO 23 - 71A4	15,6	10,6	5100	5,00	0,4870
	112,0	111,00	12,6	178,0	0,8	MRO 13 - 63C4	11,4	6,4	4800	4,00	0,4440
	112,0	111,00	12,6	178,0	0,8	MRO 13 - 71A4	11,4	6,4	4800	5,00	0,4440
	125,0	122,00	11,5	195,0	4,0	MRO 43 - 71A4	44	39	13730	5,00	3,9785
	125,0	125,00	11,2	201,0	2,4	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7510
	125,0	123,00	11,3	198,0	1,3	MRO 23 - 71A4	15,6	10,6	6200	5,00	0,4890
	125,0	129,00	10,8	207,0	0,9	MRO 13 - 63C4	11,4	6,4	4000	4,00	0,4400
	125,0	129,00	10,8	207,0	0,9	MRO 13 - 71A4	11,4	6,4	4000	5,00	0,4400
	140,0	144,00	9,7	231,0	4,1	MRO 43 - 71A4	44	39	12410	5,00	3,8506
	140,0	148,00	9,5	236,0	2,5	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7300
	140,0	150,00	9,4	240,0	1,1	MRO 23 - 71A4	15,6	10,6	6000	5,00	0,4850
160,0	165,00	8,5	264,0	2,8	MRO 43 - 71A4	44	39	14400	5,00	3,8831	
160,0	162,00	8,6	260,0	1,7	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7940	
160,0	157,00	8,9	251,0	1,0	MRO 23 - 71A4	15,6	10,6	6200	5,00	0,4860	
180,0	183,00	7,6	294,0	2,7	MRO 43 - 71A4	44	39	14710	5,00	3,8768	
180,0	176,00	8,0	282,0	1,7	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7260	
180,0	170,00	8,2	273,0	1,0	MRO 23 - 71A4	15,6	10,6	6200	5,00	0,4910	
200,0	191,00	7,3	306,0	2,5	MRO 43 - 71A4	44	39	14830	5,00	3,8477	
200,0	208,00	6,7	334,0	1,3	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7280	
200,0	203,00	6,9	325,0	0,8	MRO 23 - 71A4	15,6	10,6	6200	5,00	0,4840	
224,0	231,00	6,1	370,0	2,0	MRO 43 - 71A4	44	39	15400	5,00	3,8405	

Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

MRO-MRV - 1400 rpm

Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,25	250,0	257,00	5,5	412,0	1,8	MRO 43 - 71A4	44	39	16500	5,00	3,8372
	250,0	249,00	5,6	398,0	1,1	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7250
	280,0	289,00	4,8	463,0	1,6	MRO 43 - 71A4	44	39	16470	5,00	3,8343
	280,0	274,00	5,1	439,0	1,0	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7240
	315,0	342,00	4,1	549,0	0,8	MRO 33 - 71A4	17,5	12,5	5740	5,00	1,7210
0,37	6,3	6,62	211,0	15,7	12,7	MRO 23 - 71B4	16,4	10,6	3350	8,00	1,7940
	7,1	7,58	185,0	18,0	7,2	MRO 13 - 71B4	12,2	6,4	3310	8,00	0,9150
	8,0	8,47	165,0	20,1	10,9	MRO 23 - 71B4	16,4	10,6	3620	8,00	1,3930
	9,0	9,14	153,0	21,7	6,0	MRO 13 - 71B4	12,2	6,4	3740	8,00	0,8480
	10,0	9,57	146,0	22,7	6,2	MRO 13 - 71B4	12,2	6,4	3600	8,00	0,7740
	11,2	11,60	120,0	27,6	5,4	MRO 13 - 71B4	12,2	6,4	3570	8,00	0,6940
	12,5	13,00	107,0	30,9	8,9	MRO 23 - 71B4	16,4	10,6	3920	8,00	0,9900
	14,0	14,00	99,9	33,3	3,9	MRO 13 - 71B4	12,2	6,4	4040	8,00	0,6660
	16,0	15,10	92,5	35,9	4,6	MRO 13 - 71B4	12,2	6,4	3550	8,00	0,6210
	18,0	18,30	76,7	43,3	3,1	MRO 13 - 71B4	12,2	6,4	4240	8,00	0,6040
	20,0	19,20	73,1	45,4	3,7	MRO 13 - 71B4	12,2	6,4	3670	8,00	0,5770
	22,4	23,30	60,0	55,3	3,1	MRO 13 - 71B4	12,2	6,4	3820	8,00	0,5510
	25,0	24,40	57,3	58,0	2,6	MRO 13 - 71B4	12,2	6,4	4150	8,00	0,4940
	28,0	27,40	51,1	65,0	4,8	MRO 23 - 71B4	16,4	10,6	4180	8,00	0,5920
	28,0	29,20	48,0	69,2	2,5	MRO 13 - 71B4	12,2	6,4	3960	8,00	0,5290
	31,5	33,00	42,5	78,2	3,3	MRO 23 - 71B4	16,4	10,6	4960	8,00	0,5440
	31,5	31,80	44,0	75,5	2,2	MRO 13 - 71B4	12,2	6,4	4120	8,00	0,4770
	35,5	35,10	39,9	83,2	3,7	MRO 23 - 71B4	16,4	10,6	4220	8,00	0,5620
	35,5	38,00	36,9	90,0	1,8	MRO 13 - 71B4	12,2	6,4	4430	8,00	0,5120
	40,0	41,20	34,0	97,8	3,2	MRO 23 - 71B4	16,4	10,6	4600	8,00	0,5270
	40,0	40,30	34,8	95,5	1,8	MRO 13 - 71B4	12,2	6,4	4100	8,00	0,4670
	45,0	43,20	32,4	102,0	3,0	MRO 23 - 71B4	16,4	10,6	4450	8,00	0,5440
	45,0	47,90	29,2	114,0	1,5	MRO 13 - 71B4	12,2	6,4	4300	8,00	0,4540
	50,0	51,60	27,2	122,0	4,7	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,8120
	50,0	52,80	26,5	125,0	2,5	MRO 23 - 71B4	16,4	10,6	4680	8,00	0,5130
	50,0	49,00	28,6	116,0	1,5	MRO 13 - 71B4	12,2	6,4	4100	8,00	0,4610
	56,0	53,60	26,1	127,0	4,6	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,8620
	56,0	54,80	25,6	130,0	2,4	MRO 23 - 71B4	16,4	10,6	4720	8,00	0,5290
	56,0	59,10	23,7	140,0	1,0	MRO 13 - 71B4	12,2	6,4	4820	8,00	0,4600
	63,0	64,30	21,8	153,0	2,7	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,8750
	63,0	65,00	21,5	154,0	2,0	MRO 23 - 71B4	16,4	10,6	4930	8,00	0,5050
	63,0	61,30	22,8	145,0	1,2	MRO 13 - 71B4	12,2	6,4	4000	8,00	0,4560
	71,0	68,50	20,4	163,0	3,6	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7840
71,0	74,00	18,9	176,0	1,6	MRO 23 - 71B4	16,4	10,6	5510	8,00	0,4950	
71,0	73,80	19,0	175,0	1,0	MRO 13 - 71B4	12,2	6,4	4000	8,00	0,4470	
80,0	80,70	17,4	191,0	3,0	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7720	
80,0	82,40	17,0	196,0	1,6	MRO 23 - 71B4	16,4	10,6	5100	8,00	0,4990	
80,0	84,90	16,5	201,0	0,8	MRO 13 - 71B4	12,2	6,4	4400	8,00	0,4420	
90,0	89,70	15,6	213,0	4,2	MRO 43 - 71B4	44,8	39	11880	8,00	3,8846	
90,0	91,90	15,2	218,0	1,9	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,8090	
90,0	91,10	15,4	216,0	1,4	MRO 23 - 71B4	16,4	10,6	5100	8,00	0,4900	
90,0	92,30	15,2	219,0	0,8	MRO 13 - 71B4	12,2	6,4	4000	8,00	0,4450	
100,0	103,00	13,6	244,0	3,9	MRO 43 - 71B4	44,8	39	11740	8,00	3,9031	
100,0	105,00	13,3	250,0	2,3	MRO 33 - 71B4	18,3	12,5	5750	8,00	1,7580	
100,0	107,00	13,1	253,0	1,1	MRO 23 - 71B4	16,4	10,6	6000	8,00	0,4940	

MRO-MRV - 1400 rpm

Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,37	112,0	116,00	12,1	275,0	3,7	MRO 43 - 71B4	44,8	39	11130	8,00	3,8632
	112,0	113,00	12,4	268,0	2,2	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7370
	112,0	116,00	12,1	274,0	1,1	MRO 23 - 71B4	16,4	10,6	5100	8,00	0,4870
	125,0	122,00	11,5	289,0	2,7	MRO 43 - 71B4	44,8	39	13730	8,00	3,9785
	125,0	125,00	11,2	298,0	1,6	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7510
	125,0	123,00	11,3	293,0	0,9	MRO 23 - 71B4	16,4	10,6	6200	8,00	0,4890
	140,0	144,00	9,7	342,0	2,8	MRO 43 - 71B4	44,8	39	12410	8,00	3,8506
	140,0	148,00	9,5	350,0	1,7	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7300
	140,0	150,00	9,4	355,0	0,8	MRO 23 - 71B4	16,4	10,6	6000	8,00	0,4850
	160,0	165,00	8,5	391,0	1,9	MRO 43 - 71B4	44,8	39	14400	8,00	3,8831
	160,0	162,00	8,6	385,0	1,1	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7940
	180,0	183,00	7,6	435,0	1,8	MRO 43 - 71B4	44,8	39	14710	8,00	3,8768
	180,0	176,00	8,0	417,0	1,2	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7260
	200,0	191,00	7,3	452,0	1,7	MRO 43 - 71B4	44,8	39	14830	8,00	3,8477
	200,0	208,00	6,7	494,0	0,9	MRO 33 - 71B4	18,3	12,5	5740	8,00	1,7280
	224,0	231,00	6,1	548,0	1,4	MRO 43 - 71B4	44,8	39	15400	8,00	3,8405
	250,0	257,00	5,5	610,0	1,2	MRO 43 - 71B4	44,8	39	16500	8,00	3,8372
280,0	289,00	4,8	686,0	1,1	MRO 43 - 71B4	44,8	39	16470	8,00	3,8343	
0,55	6,3	6,62	211,0	23,3	8,6	MRO 23 - 80A4	18,7	10,6	3350	14,00	1,7940
	6,3	6,62	211,0	23,3	8,6	MRO 23 - 71C4	17,1	10,6	3350	9,00	1,7940
	7,1	7,58	185,0	26,7	4,9	MRO 13 - 80A4	14,5	6,4	3310	14,00	0,9150
	7,1	7,58	185,0	26,7	4,9	MRO 13 - 71C4	12,9	6,4	3310	9,00	0,9150
	8,0	8,47	165,0	29,9	7,4	MRO 23 - 80A4	18,7	10,6	3620	14,00	1,3930
	8,0	8,47	165,0	29,9	7,4	MRO 23 - 71C4	17,1	10,6	3620	9,00	1,3930
	9,0	9,14	153,0	32,2	4,0	MRO 13 - 80A4	14,5	6,4	3740	14,00	0,8480
	9,0	9,14	153,0	32,2	4,0	MRO 13 - 71C4	12,9	6,4	3740	9,00	0,8480
	10,0	9,57	146,0	33,7	4,1	MRO 13 - 80A4	14,5	6,4	3600	14,00	0,7740
	10,0	9,57	146,0	33,7	4,1	MRO 13 - 71C4	12,9	6,4	3600	9,00	0,7740
	11,2	11,60	120,0	41,0	3,7	MRO 13 - 80A4	14,5	6,4	3570	14,00	0,6940
	11,2	11,60	120,0	41,0	3,7	MRO 13 - 71C4	12,9	6,4	3570	9,00	0,6940
	12,5	13,00	107,0	45,9	6,0	MRO 23 - 80A4	18,7	10,6	3920	14,00	0,9900
	12,5	13,00	107,0	45,9	6,0	MRO 23 - 71C4	17,1	10,6	3920	9,00	0,9900
	14,0	14,10	99,1	49,8	4,6	MRO 23 - 80A4	18,7	10,6	4340	14,00	1,0580
	14,0	14,10	99,1	49,8	4,6	MRO 23 - 71C4	17,1	10,6	4340	9,00	1,0580
	14,0	14,00	99,9	49,4	2,6	MRO 13 - 80A4	14,5	6,4	4040	14,00	0,6660
	14,0	14,00	99,9	49,4	2,6	MRO 13 - 71C4	12,9	6,4	4040	9,00	0,6660
	16,0	15,10	92,5	53,4	3,1	MRO 13 - 80A4	14,5	6,4	3550	14,00	0,6210
	16,0	15,10	92,5	53,4	3,1	MRO 13 - 71C4	12,9	6,4	3550	9,00	0,6210
	18,0	17,80	78,7	62,8	4,0	MRO 23 - 80A4	18,7	10,6	4480	14,00	0,6830
	18,0	17,80	78,7	62,8	4,0	MRO 23 - 71C4	17,1	10,6	4480	9,00	0,6830
	18,0	18,30	76,7	64,4	2,1	MRO 13 - 80A4	14,5	6,4	4240	14,00	0,6040
	18,0	18,30	76,7	64,4	2,1	MRO 13 - 71C4	12,9	6,4	4240	9,00	0,6040
	20,0	20,60	68,1	72,5	4,3	MRO 23 - 80A4	18,7	10,6	3720	14,00	0,7790
	20,0	20,60	68,1	72,5	4,3	MRO 23 - 71C4	17,1	10,6	3720	9,00	0,7790
	20,0	19,20	73,1	67,5	2,5	MRO 13 - 80A4	14,5	6,4	3670	14,00	0,5770
	20,0	19,20	73,1	67,5	2,5	MRO 13 - 71C4	12,9	6,4	3670	9,00	0,5770
22,4	21,90	63,9	77,3	3,5	MRO 23 - 80A4	18,7	10,6	4420	14,00	0,6310	
22,4	21,90	63,9	77,3	3,5	MRO 23 - 71C4	17,1	10,6	4420	9,00	0,6310	
22,4	23,30	60,0	82,3	2,1	MRO 13 - 80A4	14,5	6,4	3820	14,00	0,5510	
22,4	23,30	60,0	82,3	2,1	MRO 13 - 71C4	12,9	6,4	3820	9,00	0,5510	

Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,55	25,0	26,10	53,7	91,9	3,4	MRO 23 - 80A4	18,7	10,6	3930	14,00	0,7150
	25,0	26,10	53,7	91,9	3,4	MRO 23 - 71C4	17,1	10,6	3930	9,00	0,7150
	25,0	24,40	57,3	86,2	1,7	MRO 13 - 80A4	14,5	6,4	4150	14,00	0,4940
	25,0	24,40	57,3	86,2	1,7	MRO 13 - 71C4	12,9	6,4	4150	9,00	0,4940
	28,0	28,70	48,7	101,0	3,9	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,9940
	28,0	28,70	48,7	101,0	3,9	MRO 33 - 71C4	19	12,5	5740	9,00	1,9940
	28,0	27,40	51,1	96,6	3,2	MRO 23 - 80A4	18,7	10,6	4180	14,00	0,5920
	28,0	27,40	51,1	96,6	3,2	MRO 23 - 71C4	17,1	10,6	4180	9,00	0,5920
	28,0	29,20	48,0	103,0	1,7	MRO 13 - 80A4	14,5	6,4	3960	14,00	0,5290
	28,0	29,20	48,0	103,0	1,7	MRO 13 - 71C4	12,9	6,4	3960	9,00	0,5290
	31,5	33,30	42,1	117,0	4,7	MRO 33 - 80A4	20,6	12,5	5740	14,00	2,2750
	31,5	33,30	42,1	117,0	4,7	MRO 33 - 71C4	19	12,5	5740	9,00	2,2750
	31,5	33,00	42,5	116,0	2,2	MRO 23 - 80A4	18,7	10,6	4960	14,00	0,5440
	31,5	33,00	42,5	116,0	2,2	MRO 23 - 71C4	17,1	10,6	4960	9,00	0,5440
	31,5	31,80	44,0	112,0	1,5	MRO 13 - 80A4	14,5	6,4	4120	14,00	0,4770
	31,5	31,80	44,0	112,0	1,5	MRO 13 - 71C4	12,9	6,4	4120	9,00	0,4770
	35,5	34,30	40,9	121,0	4,6	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,9540
	35,5	34,30	40,9	121,0	4,6	MRO 33 - 71C4	19	12,5	5740	9,00	1,9540
	35,5	35,10	39,9	124,0	2,5	MRO 23 - 80A4	18,7	10,6	4220	14,00	0,5620
	35,5	35,10	39,9	124,0	2,5	MRO 23 - 71C4	17,1	10,6	4220	9,00	0,5620
	35,5	38,00	36,9	134,0	1,2	MRO 13 - 80A4	14,5	6,4	4430	14,00	0,5120
	35,5	38,00	36,9	134,0	1,2	MRO 13 - 71C4	12,9	6,4	4430	9,00	0,5120
	40,0	40,20	34,8	142,0	4,0	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8490
	40,0	40,20	34,8	142,0	4,0	MRO 33 - 71C4	19	12,5	5740	9,00	1,8490
	40,0	41,20	34,0	145,0	2,1	MRO 23 - 80A4	18,7	10,6	4600	14,00	0,5270
	40,0	41,20	34,0	145,0	2,1	MRO 23 - 71C4	17,1	10,6	4600	9,00	0,5270
	40,0	40,30	34,8	142,0	1,2	MRO 13 - 80A4	14,5	6,4	4100	14,00	0,4670
	40,0	40,30	34,8	142,0	1,2	MRO 13 - 71C4	12,9	6,4	4100	9,00	0,4670
	45,0	45,50	30,7	161,0	3,5	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8890
	45,0	45,50	30,7	161,0	3,5	MRO 33 - 71C4	19	12,5	5740	9,00	1,8890
	45,0	43,20	32,4	152,0	2,0	MRO 23 - 80A4	18,7	10,6	4450	14,00	0,5440
	45,0	43,20	32,4	152,0	2,0	MRO 23 - 71C4	17,1	10,6	4450	9,00	0,5440
	45,0	47,90	29,2	169,0	1,0	MRO 13 - 80A4	14,5	6,4	4300	14,00	0,4540
	45,0	47,90	29,2	169,0	1,0	MRO 13 - 71C4	12,9	6,4	4300	9,00	0,4540
	50,0	51,60	27,2	182,0	3,2	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8120
	50,0	51,60	27,2	182,0	3,2	MRO 33 - 71C4	19	12,5	5740	9,00	1,8120
	50,0	52,80	26,5	186,0	1,7	MRO 23 - 80A4	18,7	10,6	4680	14,00	0,5130
	50,0	52,80	26,5	186,0	1,7	MRO 23 - 71C4	17,1	10,6	4680	9,00	0,5130
	50,0	49,00	28,6	173,0	1,0	MRO 13 - 80A4	14,5	6,4	4100	14,00	0,4610
	50,0	49,00	28,6	173,0	1,0	MRO 13 - 71C4	12,9	6,4	4100	9,00	0,4610
	56,0	53,60	26,1	189,0	3,1	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8620
	56,0	53,60	26,1	189,0	3,1	MRO 33 - 71C4	19	12,5	5740	9,00	1,8620
56,0	54,80	25,6	193,0	1,6	MRO 23 - 80A4	18,7	10,6	4720	14,00	0,5290	
56,0	54,80	25,6	193,0	1,6	MRO 23 - 71C4	17,1	10,6	4720	9,00	0,5290	
63,0	64,00	21,9	226,0	4,4	MRO 43 - 80A4	47,1	39	10090	14,00	3,9699	
63,0	64,00	21,9	226,0	4,4	MRO 43 - 71C4	45,5	39	10090	9,00	3,9699	
63,0	64,30	21,8	227,0	1,8	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8750	
63,0	64,30	21,8	227,0	1,8	MRO 33 - 71C4	19	12,5	5740	9,00	1,8750	
63,0	65,00	21,5	229,0	1,4	MRO 23 - 80A4	18,7	10,6	4930	14,00	0,5050	
63,0	65,00	21,5	229,0	1,4	MRO 23 - 71C4	17,1	10,6	4930	9,00	0,5050	



Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,55	63,0	61,30	22,8	216,0	0,8	MRO 13 - 71C4	12,9	6,4	4000	9,00	0,4560
	63,0	61,30	22,8	216,0	0,8	MRO 13 - 80A4	14,5	6,4	4000	14,00	0,4560
	71,0	68,30	20,5	241,0	3,8	MRO 43 - 80A4	47,1	39	10970	14,00	4,0382
	71,0	68,30	20,5	241,0	3,8	MRO 43 - 71C4	45,5	39	10970	9,00	4,0382
	71,0	68,50	20,4	242,0	2,4	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7840
	71,0	68,50	20,4	242,0	2,4	MRO 33 - 71C4	19	12,5	5740	9,00	1,7840
	71,0	74,00	18,9	261,0	1,1	MRO 23 - 80A4	18,7	10,6	5510	14,00	0,4950
	71,0	74,00	18,9	261,0	1,1	MRO 23 - 71C4	17,1	10,6	5510	9,00	0,4950
	80,0	79,40	17,6	280,0	4,6	MRO 53 - 80A4	81,1	73	16160	14,00	2,5012
	80,0	82,50	17,0	291,0	3,4	MRO 43 - 80A4	47,1	39	10510	14,00	3,9279
	80,0	82,50	17,0	291,0	3,4	MRO 43 - 71C4	45,5	39	10510	9,00	3,9279
	80,0	80,70	17,4	284,0	2,0	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7720
	80,0	80,70	17,4	284,0	2,0	MRO 33 - 71C4	19	12,5	5740	9,00	1,7720
	80,0	82,40	17,0	291,0	1,1	MRO 23 - 80A4	18,7	10,6	5100	14,00	0,4990
	80,0	82,40	17,0	291,0	1,1	MRO 23 - 71C4	17,1	10,6	5100	9,00	0,4990
	90,0	89,70	15,6	316,0	2,8	MRO 43 - 80A4	47,1	39	11880	14,00	3,8846
	90,0	89,70	15,6	316,0	2,8	MRO 43 - 71C4	45,5	39	11880	9,00	3,8846
	90,0	91,90	15,2	324,0	1,3	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,8090
	90,0	91,90	15,2	324,0	1,3	MRO 33 - 71C4	19	12,5	5740	9,00	1,8090
	90,0	91,10	15,4	321,0	1,0	MRO 23 - 71C4	17,1	10,6	5100	9,00	0,4900
	90,0	91,10	15,4	321,0	1,0	MRO 23 - 80A4	18,7	10,6	5100	14,00	0,4900
	100,0	103,00	13,6	363,0	2,6	MRO 43 - 80A4	47,1	39	11740	14,00	3,9031
	100,0	103,00	13,6	363,0	2,6	MRO 43 - 71C4	45,5	39	11740	9,00	3,9031
	100,0	105,00	13,3	371,0	1,6	MRO 33 - 80A4	20,6	12,5	5750	14,00	1,7580
	100,0	105,00	13,3	371,0	1,6	MRO 33 - 71C4	19	12,5	5750	9,00	1,7580
	112,0	109,00	12,8	385,0	4,4	MRO 53 - 80A4	81,1	73	11200	14,00	24,8595
	112,0	116,00	12,1	408,0	2,5	MRO 43 - 80A4	47,1	39	11130	14,00	3,8632
	112,0	116,00	12,1	408,0	2,5	MRO 43 - 71C4	45,5	39	11130	9,00	3,8632
	112,0	113,00	12,4	399,0	1,5	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7370
	112,0	113,00	12,4	399,0	1,5	MRO 33 - 71C4	19	12,5	5740	9,00	1,7370
	112,0	116,00	12,1	408,0	0,8	MRO 23 - 71C4	17,1	10,6	5100	9,00	0,4870
	112,0	116,00	12,1	408,0	0,8	MRO 23 - 80A4	18,7	10,6	5100	14,00	0,4870
	125,0	120,00	11,7	422,0	4,2	MRO 53 - 80A4	81,1	73	7200	14,00	24,7730
	125,0	122,00	11,5	430,0	1,8	MRO 43 - 80A4	47,1	39	13730	14,00	3,9785
	125,0	122,00	11,5	430,0	1,8	MRO 43 - 71C4	45,5	39	13730	9,00	3,9785
	125,0	125,00	11,2	442,0	1,1	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7510
	125,0	125,00	11,2	442,0	1,1	MRO 33 - 71C4	19	12,5	5740	9,00	1,7510
	140,0	141,00	10,0	496,0	3,6	MRO 53 - 80A4	81,1	73	7200	14,00	24,7467
	140,0	144,00	9,7	509,0	1,9	MRO 43 - 80A4	47,1	39	12410	14,00	3,8506
	140,0	144,00	9,7	509,0	1,9	MRO 43 - 71C4	45,5	39	12410	9,00	3,8506
	140,0	148,00	9,5	520,0	1,1	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7300
	140,0	148,00	9,5	520,0	1,1	MRO 33 - 71C4	19	12,5	5740	9,00	1,7300
	160,0	153,00	9,1	540,0	3,2	MRO 53 - 80A4	81,1	73	10100	14,00	24,7344
	160,0	165,00	8,5	581,0	1,3	MRO 43 - 80A4	47,1	39	14400	14,00	3,8831
	160,0	165,00	8,5	581,0	1,3	MRO 43 - 71C4	45,5	39	14400	9,00	3,8831
	160,0	162,00	8,6	572,0	0,8	MRO 33 - 71C4	19	12,5	5740	9,00	1,7940
	160,0	162,00	8,6	572,0	0,8	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7940
	180,0	190,00	7,4	672,0	4,1	MRO 63 - 80A4	129,1	121	19400	14,00	1,7431
	180,0	185,00	7,6	653,0	2,2	MRO 53 - 80A4	81,1	73	17640	14,00	24,7124
	180,0	183,00	7,6	646,0	1,2	MRO 43 - 80A4	47,1	39	14710	14,00	3,8768

Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,55	180,0	183,00	7,6	646,0	1,2	MRO 43 - 71C4	45,5	39	14710	9,00	3,8768
	180,0	176,00	8,0	620,0	0,8	MRO 33 - 71C4	19	12,5	5740	9,00	1,7260
	180,0	176,00	8,0	620,0	0,8	MRO 33 - 80A4	20,6	12,5	5740	14,00	1,7260
	200,0	208,00	6,7	734,0	1,8	MRO 53 - 80A4	81,1	73	19060	14,00	24,7277
	200,0	191,00	7,3	672,0	1,1	MRO 43 - 80A4	47,1	39	14830	14,00	3,8477
	200,0	191,00	7,3	672,0	1,1	MRO 43 - 71C4	45,5	39	14830	9,00	3,8477
	224,0	221,00	6,3	779,0	3,3	MRO 63 - 80A4	129,1	121	22500	14,00	17,4800
	224,0	224,00	6,2	791,0	1,7	MRO 53 - 80A4	81,1	73	19100	14,00	24,7733
	224,0	231,00	6,1	814,0	0,9	MRO 43 - 71C4	45,5	39	15400	9,00	3,8405
	224,0	231,00	6,1	814,0	0,9	MRO 43 - 80A4	47,1	39	15400	14,00	3,8405
	250,0	252,00	5,6	887,0	1,5	MRO 53 - 80A4	81,1	73	19100	14,00	24,7078
	250,0	257,00	5,5	906,0	0,8	MRO 43 - 71C4	45,5	39	16500	9,00	3,8372
	250,0	257,00	5,5	906,0	0,8	MRO 43 - 80A4	47,1	39	16500	14,00	3,8372
	280,0	272,00	5,2	958,0	2,7	MRO 63 - 80A4	129,1	121	22500	14,00	17,4170
	315,0	305,00	4,6	1077,0	2,4	MRO 63 - 80A4	129,1	121	22500	14,00	17,3880
315,0	315,00	4,5	1109,0	1,2	MRO 53 - 80A4	81,1	73	19100	14,00	24,6906	
0,75	6,3	6,62	211,0	31,8	6,3	MRO 23 - 80B4	19,7	10,6	3350	17,00	1,7940
	7,1	7,58	185,0	36,5	3,6	MRO 13 - 80B4	15,5	6,4	3310	17,00	0,9150
	9,0	9,14	153,0	44,0	3,0	MRO 13 - 80B4	15,5	6,4	3740	17,00	0,8480
	10,0	10,40	134,0	50,2	4,9	MRO 23 - 80B4	19,7	10,6	3870	17,00	1,1640
	10,0	9,57	146,0	46,0	3,0	MRO 13 - 80B4	15,5	6,4	3600	17,00	0,7740
	11,2	11,50	122,0	55,2	4,2	MRO 23 - 80B4	19,7	10,6	4040	17,00	1,2320
	11,2	11,60	120,0	55,9	2,7	MRO 13 - 80B4	15,5	6,4	3570	17,00	0,6940
	12,5	13,00	107,0	62,7	4,4	MRO 23 - 80B4	19,7	10,6	3920	17,00	0,9900
	14,0	14,10	99,1	67,9	3,4	MRO 23 - 80B4	19,7	10,6	4340	17,00	1,0580
	14,0	14,00	99,9	67,4	1,9	MRO 13 - 80B4	15,5	6,4	4040	17,00	0,6660
	16,0	16,70	83,9	80,2	3,8	MRO 23 - 80B4	19,7	10,6	3620	17,00	0,8580
	16,0	15,10	92,5	72,8	2,3	MRO 13 - 80B4	15,5	6,4	3550	17,00	0,6210
	18,0	17,80	78,7	85,6	2,9	MRO 23 - 80B4	19,7	10,6	4480	17,00	0,6830
	18,0	18,30	76,7	87,8	1,5	MRO 13 - 80B4	15,5	6,4	4240	17,00	0,6040
	20,0	19,10	73,3	91,8	4,2	MRO 33 - 80B4	21,6	12,5	5730	17,00	2,3640
	20,0	20,60	68,1	98,8	3,1	MRO 23 - 80B4	19,7	10,6	3720	17,00	0,7790
	20,0	19,20	73,1	92,1	1,8	MRO 13 - 80B4	15,5	6,4	3670	17,00	0,5770
	22,4	21,90	63,9	105,0	2,6	MRO 23 - 80B4	19,7	10,6	4420	17,00	0,6310
	22,4	23,30	60,0	112,0	1,5	MRO 13 - 80B4	15,5	6,4	3820	17,00	0,5510
	25,0	26,70	52,4	129,0	4,4	MRO 33 - 80B4	21,6	12,5	5730	17,00	2,0370
	25,0	26,10	53,7	125,0	2,5	MRO 23 - 80B4	19,7	10,6	3930	17,00	0,7150
	25,0	24,40	57,3	118,0	1,3	MRO 13 - 80B4	15,5	6,4	4150	17,00	0,4940
	28,0	28,70	48,7	138,0	2,9	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,9940
	28,0	27,40	51,1	132,0	2,4	MRO 23 - 80B4	19,7	10,6	4180	17,00	0,5920
	28,0	29,20	48,0	140,0	1,2	MRO 13 - 80B4	15,5	6,4	3960	17,00	0,5290
	31,5	33,30	42,1	160,0	3,4	MRO 33 - 80B4	21,6	12,5	5740	17,00	2,2750
	31,5	33,00	42,5	159,0	1,6	MRO 23 - 80B4	19,7	10,6	4960	17,00	0,5440
	31,5	31,80	44,0	153,0	1,1	MRO 13 - 80B4	15,5	6,4	4120	17,00	0,4770
	35,5	34,30	40,9	165,0	3,4	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,9540
	35,5	35,10	39,9	169,0	1,8	MRO 23 - 80B4	19,7	10,6	4220	17,00	0,5620
	35,5	38,00	36,9	182,0	0,9	MRO 13 - 80B4	15,5	6,4	4430	17,00	0,5120
	40,0	40,20	34,8	193,0	2,9	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8490
	40,0	41,20	34,0	198,0	1,6	MRO 23 - 80B4	19,7	10,6	4600	17,00	0,5270
40,0	40,30	34,8	194,0	0,9	MRO 13 - 80B4	15,5	6,4	4100	17,00	0,4670	

MRO-MRV - 1400 rpm

Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,75	45,0	42,50	32,9	204,0	4,1	MRO 43 - 80B4	48,1	39	10020	17,00	4,1893
	45,0	45,50	30,7	219,0	2,6	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8890
	45,0	43,20	32,4	208,0	1,5	MRO 23 - 80B4	19,7	10,6	4450	17,00	0,5440
	50,0	51,30	27,3	246,0	4,0	MRO 43 - 80B4	48,1	39	9720	17,00	4,0217
	50,0	51,60	27,2	248,0	2,3	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8120
	50,0	52,80	26,5	254,0	1,2	MRO 23 - 80B4	19,7	10,6	4680	17,00	0,5130
	56,0	54,80	25,5	264,0	3,7	MRO 43 - 80B4	48,1	39	9800	17,00	4,0943
	56,0	53,60	26,1	258,0	2,3	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8620
	56,0	54,80	25,6	263,0	1,2	MRO 23 - 80B4	19,7	10,6	4720	17,00	0,5290
	63,0	64,00	21,9	308,0	3,2	MRO 43 - 80B4	48,1	39	10090	17,00	3,9699
	63,0	64,30	21,8	309,0	1,3	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8750
	63,0	65,00	21,5	312,0	1,0	MRO 23 - 80B4	19,7	10,6	4930	17,00	0,5050
	71,0	72,60	19,3	349,0	4,8	MRO 53 - 80B4	82,1	73	10800	17,00	25,1812
	71,0	68,30	20,5	329,0	2,8	MRO 43 - 80B4	48,1	39	10970	17,00	4,0382
	71,0	68,50	20,4	329,0	1,8	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,7840
	71,0	74,00	18,9	356,0	0,8	MRO 23 - 80B4	19,7	10,6	5510	17,00	0,4950
	80,0	79,40	17,6	382,0	3,4	MRO 53 - 80B4	82,1	73	16160	17,00	25,0122
	80,0	82,50	17,0	397,0	2,5	MRO 43 - 80B4	48,1	39	10510	17,00	3,9279
	80,0	80,70	17,4	388,0	1,5	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,7720
	80,0	82,40	17,0	396,0	0,8	MRO 23 - 80B4	19,7	10,6	5100	17,00	0,4990
	90,0	91,00	15,4	438,0	4,0	MRO 53 - 80B4	82,1	73	8400	17,00	24,8176
	90,0	89,70	15,6	431,0	2,1	MRO 43 - 80B4	48,1	39	11880	17,00	3,8846
	90,0	91,90	15,2	442,0	0,9	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,8090
	100,0	100,00	14,0	482,0	3,7	MRO 53 - 80B4	82,1	73	8000	17,00	24,8837
	100,0	103,00	13,6	494,0	1,9	MRO 43 - 80B4	48,1	39	11740	17,00	3,9031
	100,0	105,00	13,3	506,0	1,1	MRO 33 - 80B4	21,6	12,5	5750	17,00	1,7580
	112,0	109,00	12,8	525,0	3,2	MRO 53 - 80B4	82,1	73	11200	17,00	24,8595
	112,0	116,00	12,1	557,0	1,8	MRO 43 - 80B4	48,1	39	11130	17,00	3,8632
	112,0	113,00	12,4	544,0	1,1	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,7370
	125,0	129,00	10,9	619,0	4,0	MRO 63 - 80B4	130,1	121	22060	17,00	17,7600
	125,0	120,00	11,7	575,0	3,1	MRO 53 - 80B4	82,1	73	7200	17,00	24,7730
	125,0	122,00	11,5	586,0	1,3	MRO 43 - 80B4	48,1	39	13730	17,00	3,9785
	125,0	125,00	11,2	603,0	0,8	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,7510
	140,0	141,00	9,9	679,0	4,9	MRO 63 - 80B4	130,1	121	9800	17,00	17,5400
	140,0	141,00	10,0	676,0	2,6	MRO 53 - 80B4	82,1	73	7200	17,00	24,7467
	140,0	144,00	9,7	694,0	1,4	MRO 43 - 80B4	48,1	39	12410	17,00	3,8506
	140,0	148,00	9,5	709,0	0,8	MRO 33 - 80B4	21,6	12,5	5740	17,00	1,7300
	160,0	155,00	9,0	745,0	4,5	MRO 63 - 80B4	130,1	121	9800	17,00	17,5010
	160,0	153,00	9,1	736,0	2,3	MRO 53 - 80B4	82,1	73	10100	17,00	24,7344
	160,0	165,00	8,5	792,0	0,9	MRO 43 - 80B4	48,1	39	14400	17,00	3,8831
180,0	190,00	7,4	916,0	3,0	MRO 63 - 80B4	130,1	121	19400	17,00	17,4310	
180,0	185,00	7,6	890,0	1,6	MRO 53 - 80B4	82,1	73	17640	17,00	24,7124	
180,0	183,00	7,6	881,0	0,9	MRO 43 - 80B4	48,1	39	14710	17,00	3,8768	
200,0	208,00	6,7	1000,0	1,3	MRO 53 - 80B4	82,1	73	19060	17,00	24,7277	
200,0	191,00	7,3	917,0	0,8	MRO 43 - 80B4	48,1	39	14830	17,00	3,8477	
224,0	221,00	6,3	1062,0	2,4	MRO 63 - 80B4	130,1	121	22500	17,00	17,4800	
224,0	224,00	6,2	1078,0	1,2	MRO 53 - 80B4	82,1	73	19100	17,00	24,7733	
250,0	252,00	5,6	1210,0	1,1	MRO 53 - 80B4	82,1	73	19100	17,00	24,7078	
280,0	272,00	5,2	1306,0	2,0	MRO 63 - 80B4	130,1	121	22500	17,00	17,4170	
315,0	305,00	4,6	1469,0	1,7	MRO 63 - 80B4	130,1	121	22500	17,00	17,3880	

Tabelle di selezione - Selection tables - Auswahltablelle
RO - RV
MRO-MRV - 1400 rpm

Motorriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
0,75	315,0	315,00	4,5	1512,0	0,9	MRO 53 - 80B4	82,1	73	19100	17,00	24,6906
1,1	6,3	6,62	211,0	46,7	4,3	MRO 23 - 90S4	22,3	10,6	3350	33,00	1,7940
	6,3	6,62	211,0	46,7	4,3	MRO 23 - 80C4	21,6	10,6	3350	23,00	1,7940
	7,1	7,58	185,0	53,5	2,4	MRO 13 - 90S4	18,1	6,4	3310	33,00	0,9150
	7,1	7,58	185,0	53,5	2,4	MRO 13 - 80C4	17,4	6,4	3310	23,00	0,9150
	8,0	8,47	165,0	59,7	3,7	MRO 23 - 90S4	22,3	10,6	3620	33,00	1,3930
	8,0	8,47	165,0	59,7	3,7	MRO 23 - 80C4	21,6	10,6	3620	23,00	1,3930
	9,0	8,97	156,0	63,3	3,6	MRO 23 - 90S4	22,3	10,6	3710	33,00	1,5320
	9,0	8,97	156,0	63,3	3,6	MRO 23 - 80C4	21,6	10,6	3710	23,00	1,5320
	9,0	9,14	153,0	64,5	2,0	MRO 13 - 90S4	18,1	6,4	3740	33,00	0,8480
	9,0	9,14	153,0	64,5	2,0	MRO 13 - 80C4	17,4	6,4	3740	23,00	0,8480
	10,0	10,40	134,0	73,6	3,3	MRO 23 - 90S4	22,3	10,6	3870	33,00	1,1640
	10,0	10,40	134,0	73,6	3,3	MRO 23 - 80C4	21,6	10,6	6430	23,00	7,7706
	10,0	9,57	146,0	67,5	2,1	MRO 13 - 90S4	18,1	6,4	3600	33,00	0,7740
	10,0	9,57	146,0	67,5	2,1	MRO 13 - 80C4	17,4	6,4	3600	23,00	0,7740
	11,2	11,70	120,0	82,2	4,6	MRO 33 - 90S4	24,2	12,5	5730	33,00	3,8410
	11,2	11,70	120,0	82,2	4,6	MRO 33 - 80C4	23,5	12,5	5730	23,00	3,8410
	11,2	11,50	122,0	81,0	2,8	MRO 23 - 90S4	22,3	10,6	4040	33,00	1,2320
	11,2	11,50	122,0	81,0	2,8	MRO 23 - 80C4	21,6	10,6	4040	23,00	1,2320
	11,2	11,60	120,0	82,0	1,8	MRO 13 - 90S4	18,1	6,4	3570	33,00	0,6940
	11,2	11,60	120,0	82,0	1,8	MRO 13 - 80C4	17,4	6,4	3570	23,00	0,6940
	12,5	13,00	107,0	91,9	3,0	MRO 23 - 90S4	22,3	10,6	3920	33,00	0,9900
	12,5	13,00	107,0	91,9	3,0	MRO 23 - 80C4	21,6	10,6	3920	23,00	0,9900
	14,0	13,50	104,0	95,4	4,8	MRO 33 - 90S4	24,2	12,5	5520	33,00	2,5250
	14,0	13,50	104,0	95,4	4,8	MRO 33 - 80C4	23,5	12,5	5520	23,00	2,5250
	14,0	14,10	99,1	99,7	2,3	MRO 23 - 90S4	22,3	10,6	4340	33,00	1,0580
	14,0	14,10	99,1	99,7	2,3	MRO 23 - 80C4	21,6	10,6	4340	23,00	1,0580
	14,0	14,00	99,9	98,9	1,3	MRO 13 - 90S4	18,1	6,4	4040	33,00	0,6660
	14,0	14,00	99,9	98,9	1,3	MRO 13 - 80C4	17,4	6,4	4040	23,00	0,6660
	16,0	16,30	85,9	115,0	4,7	MRO 33 - 90S4	24,2	12,5	5730	33,00	2,8190
	16,0	16,30	85,9	115,0	4,7	MRO 33 - 80C4	23,5	12,5	5730	23,00	2,8190
	16,0	16,70	83,9	118,0	2,6	MRO 23 - 90S4	22,3	10,6	3620	33,00	0,8580
	16,0	16,70	83,9	118,0	2,6	MRO 23 - 80C4	21,6	10,6	3620	23,00	0,8580
	16,0	15,10	92,5	107,0	1,5	MRO 13 - 90S4	18,1	6,4	3550	33,00	0,6210
16,0	15,10	92,5	107,0	1,5	MRO 13 - 80C4	17,4	6,4	3550	23,00	0,6210	
18,0	17,60	79,8	124,0	4,9	MRO 43 - 90S4	50,7	39	7740	33,00	5,0261	
18,0	17,60	79,8	124,0	4,9	MRO 43 - 80C4	50	39	7740	23,00	5,0261	
18,0	17,30	80,8	122,0	4,2	MRO 33 - 90S4	24,2	12,5	5680	33,00	2,2830	
18,0	17,30	80,8	122,0	4,2	MRO 33 - 80C4	23,5	12,5	5680	23,00	2,2830	
18,0	17,80	78,7	126,0	2,0	MRO 23 - 90S4	22,3	10,6	4480	33,00	0,6830	
18,0	17,80	78,7	126,0	2,0	MRO 23 - 80C4	21,6	10,6	4480	23,00	0,6830	
18,0	18,30	76,7	129,0	1,0	MRO 13 - 90S4	18,1	6,4	4240	33,00	0,6040	
18,0	18,30	76,7	129,0	1,0	MRO 13 - 80C4	17,4	6,4	4240	23,00	0,6040	
20,0	19,10	73,3	135,0	2,9	MRO 33 - 90S4	24,2	12,5	5730	33,00	2,3640	
20,0	19,10	73,3	135,0	2,9	MRO 33 - 80C4	23,5	12,5	5730	23,00	2,3640	
20,0	20,60	68,1	145,0	2,1	MRO 23 - 90S4	22,3	10,6	3720	33,00	0,7790	
20,0	20,60	68,1	145,0	2,1	MRO 23 - 80C4	21,6	10,6	3720	23,00	0,7790	
20,0	19,20	73,1	135,0	1,3	MRO 13 - 90S4	18,1	6,4	3670	33,00	0,5770	
20,0	19,20	73,1	135,0	1,3	MRO 13 - 80C4	17,4	6,4	3670	23,00	0,5770	
22,4	21,90	63,8	155,0	4,5	MRO 43 - 90S4	50,7	39	8310	33,00	4,6963	

MRO-MRV - 1400 rpm

Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
1,1	22,4	21,90	63,8	155,0	4,5	MRO 43 - 80C4	50	39	8310	23,00	4,6963
	22,4	21,70	64,6	153,0	3,6	MRO 33 - 90S4	24,2	12,5	5740	33,00	2,5320
	22,4	21,70	64,6	153,0	3,6	MRO 33 - 80C4	23,5	12,5	5740	23,00	2,3200
	22,4	21,90	63,9	155,0	1,7	MRO 23 - 90S4	22,3	10,6	4420	33,00	0,6310
	22,4	21,90	63,9	155,0	1,7	MRO 23 - 80C4	21,6	10,6	4420	23,00	0,6310
	22,4	23,30	60,0	165,0	1,0	MRO 13 - 90S4	18,1	6,4	3820	33,00	0,5510
	22,4	23,30	60,0	165,0	1,0	MRO 13 - 80C4	17,4	6,4	3820	23,00	0,5510
	25,0	26,10	53,6	184,0	4,6	MRO 43 - 90S4	50,7	39	8690	33,00	5,1123
	25,0	26,10	53,6	184,0	4,6	MRO 43 - 80C4	50	39	8690	23,00	5,1123
	25,0	26,70	52,4	189,0	3,0	MRO 33 - 90S4	24,2	12,5	5730	33,00	2,0370
	25,0	26,70	52,4	189,0	3,0	MRO 33 - 80C4	23,5	12,5	5730	23,00	2,0370
	25,0	26,10	53,7	184,0	1,7	MRO 23 - 90S4	22,3	10,6	3930	33,00	0,7150
	25,0	26,10	53,7	184,0	1,7	MRO 23 - 80C4	21,6	10,6	3930	23,00	0,7150
	25,0	24,40	57,3	172,0	0,9	MRO 13 - 80C4	17,4	6,4	4150	23,00	0,4940
	25,0	24,40	57,3	172,0	0,9	MRO 13 - 90S4	18,1	6,4	4150	33,00	0,4940
	28,0	27,90	50,1	197,0	3,9	MRO 43 - 90S4	50,7	39	8990	33,00	4,4508
	28,0	27,90	50,1	197,0	3,9	MRO 43 - 80C4	50	39	8990	23,00	4,4508
	28,0	28,70	48,7	203,0	2,0	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,9940
	28,0	28,70	48,7	203,0	2,0	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,9940
	28,0	27,40	51,1	193,0	1,6	MRO 23 - 90S4	22,3	10,6	4180	33,00	0,5920
	28,0	27,40	51,1	193,0	1,6	MRO 23 - 80C4	21,6	10,6	4180	23,00	0,5920
	28,0	29,20	48,0	206,0	0,8	MRO 13 - 80C4	17,4	6,4	3960	23,00	0,5290
	28,0	29,20	48,0	206,0	0,8	MRO 13 - 90S4	18,1	6,4	3960	33,00	0,5290
	31,5	32,50	43,1	229,0	3,9	MRO 43 - 90S4	50,7	39	9390	33,00	4,8644
	31,5	32,50	43,1	229,0	3,9	MRO 43 - 80C4	50	39	9390	23,00	4,8644
	31,5	33,30	42,1	235,0	2,3	MRO 33 - 90S4	24,2	12,5	5740	33,00	2,2750
	31,5	33,30	42,1	235,0	2,3	MRO 33 - 80C4	23,5	12,5	5740	23,00	2,2750
	31,5	33,00	42,5	233,0	1,1	MRO 23 - 90S4	22,3	10,6	4960	33,00	0,5440
	31,5	33,00	42,5	233,0	1,1	MRO 23 - 80C4	21,6	10,6	4960	23,00	0,5440
	35,5	34,10	41,1	240,0	3,5	MRO 43 - 90S4	50,7	39	9580	33,00	4,3066
	35,5	34,10	41,1	240,0	3,5	MRO 43 - 80C4	50	39	9580	23,00	4,3066
	35,5	34,30	40,9	242,0	2,3	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,9540
	35,5	34,30	40,9	242,0	2,3	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,9540
	35,5	35,10	39,9	247,0	1,3	MRO 23 - 90S4	22,3	10,6	4220	33,00	0,5620
	35,5	35,10	39,9	247,0	1,3	MRO 23 - 80C4	21,6	10,6	4220	23,00	0,5620
	40,0	40,20	34,8	284,0	2,0	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,8490
	40,0	40,20	34,8	284,0	2,0	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,8490
	40,0	41,20	34,0	291,0	1,1	MRO 23 - 90S4	22,3	10,6	4600	33,00	0,5270
	40,0	41,20	34,0	291,0	1,1	MRO 23 - 80C4	21,6	10,6	4600	23,00	0,5270
	45,0	42,50	32,9	300,0	2,8	MRO 43 - 90S4	50,7	39	10020	33,00	4,1893
	45,0	42,50	32,9	300,0	2,8	MRO 43 - 80C4	50	39	10020	23,00	4,1893
	45,0	45,50	30,7	321,0	1,8	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,8890
45,0	45,50	30,7	321,0	1,8	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,8890	
45,0	43,20	32,4	305,0	1,0	MRO 23 - 90S4	22,3	10,6	4450	33,00	0,5440	
45,0	43,20	32,4	305,0	1,0	MRO 23 - 80C4	21,6	10,6	4450	23,00	0,5440	
50,0	51,30	27,3	362,0	4,8	MRO 53 - 90S4	84,7	73	8720	33,00	25,2163	
50,0	51,30	27,3	362,0	4,8	MRO 53 - 80C4	84	73	8720	23,00	25,2163	
50,0	51,30	27,3	361,0	2,7	MRO 43 - 90S4	50,7	39	9720	33,00	4,0217	
50,0	51,30	27,3	361,0	2,7	MRO 43 - 80C4	50	39	9720	23,00	4,0217	
50,0	51,60	27,2	364,0	1,6	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,8120	

Tabelle di selezione - Selection tables - Auswahltable

RO - RV

MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
1,1	50,0	51,60	27,2	364,0	1,6	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,8120
	50,0	52,80	26,5	372,0	0,8	MRO 23 - 80C4	21,6	10,6	4680	23,00	0,5130
	50,0	52,80	26,5	372,0	0,8	MRO 23 - 90S4	22,3	10,6	4680	33,00	0,5130
	56,0	56,70	24,7	400,0	4,3	MRO 53 - 90S4	84,7	73	8820	33,00	25,3529
	56,0	56,70	24,7	400,0	4,3	MRO 53 - 80C4	84	73	8820	23,00	25,3529
	56,0	54,80	25,5	387,0	2,5	MRO 43 - 90S4	50,7	39	9800	33,00	4,0943
	56,0	54,80	25,5	387,0	2,5	MRO 43 - 80C4	50	39	9800	23,00	4,0943
	56,0	53,60	26,1	378,0	1,5	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,8620
	56,0	53,60	26,1	378,0	1,5	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,8620
	56,0	54,80	25,6	386,0	0,8	MRO 23 - 80C4	21,6	10,6	4720	23,00	0,5290
	56,0	54,80	25,6	386,0	0,8	MRO 23 - 90S4	22,3	10,6	4720	33,00	0,5290
	63,0	64,90	21,6	458,0	3,8	MRO 53 - 90S4	84,7	73	8950	33,00	25,0608
	63,0	64,90	21,6	458,0	3,8	MRO 53 - 80C4	84	73	8950	23,00	25,0608
	63,0	64,00	21,9	451,0	2,2	MRO 43 - 90S4	50,7	39	10090	33,00	3,9699
	63,0	64,00	21,9	451,0	2,2	MRO 43 - 80C4	50	39	10090	23,00	3,9699
	63,0	64,30	21,8	454,0	0,9	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,8750
	63,0	64,30	21,8	454,0	0,9	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,8750
	71,0	72,60	19,3	512,0	3,2	MRO 53 - 90S4	84,7	73	10800	33,00	25,1812
	71,0	72,60	19,3	512,0	3,2	MRO 53 - 80C4	84	73	10800	23,00	25,1812
	71,0	68,30	20,5	482,0	1,9	MRO 43 - 90S4	50,7	39	10970	33,00	4,0382
	71,0	68,30	20,5	482,0	1,9	MRO 43 - 80C4	50	39	10970	23,00	4,0382
	71,0	68,50	20,4	483,0	1,2	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,7840
	71,0	68,50	20,4	483,0	1,2	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,7840
	80,0	79,40	17,6	560,0	2,3	MRO 53 - 90S4	84,7	73	16160	33,00	25,0122
	80,0	79,40	17,6	560,0	2,3	MRO 53 - 80C4	84	73	16160	23,00	2,5012
	80,0	82,50	17,0	582,0	1,7	MRO 43 - 90S4	50,7	39	10510	33,00	3,9279
	80,0	82,50	17,0	582,0	1,7	MRO 43 - 80C4	50	39	10510	23,00	3,9279
	80,0	80,70	17,4	569,0	1,0	MRO 33 - 90S4	24,2	12,5	5740	33,00	1,7720
	80,0	80,70	17,4	569,0	1,0	MRO 33 - 80C4	23,5	12,5	5740	23,00	1,7720
	90,0	91,00	15,4	642,0	2,8	MRO 53 - 90S4	84,7	73	8400	33,00	24,8176
	90,0	91,00	15,4	642,0	2,8	MRO 53 - 80C4	84	73	8400	23,00	24,8176
	90,0	89,70	15,6	633,0	1,4	MRO 43 - 90S4	50,7	39	11880	33,00	3,8846
	90,0	89,70	15,6	633,0	1,4	MRO 43 - 80C4	50	39	11880	23,00	3,8846
	100,0	101,00	13,9	710,0	4,7	MRO 63 - 90S4	132,7	121	9800	33,00	17,9540
	100,0	101,00	13,9	710,0	4,7	MRO 63 - 80C4	132	121	9800	23,00	17,9540
	100,0	100,00	14,0	707,0	2,5	MRO 53 - 90S4	84,7	73	8000	33,00	24,8837
	100,0	100,00	14,0	707,0	2,5	MRO 53 - 80C4	84	73	8000	23,00	24,8837
	100,0	103,00	13,6	725,0	1,3	MRO 43 - 90S4	50,7	39	11740	33,00	3,9031
	100,0	103,00	13,6	725,0	1,3	MRO 43 - 80C4	50	39	11740	23,00	3,9031
	100,0	105,00	13,3	742,0	0,8	MRO 33 - 80C4	23,5	12,5	5750	23,00	1,7580
	100,0	105,00	13,3	742,0	0,8	MRO 33 - 90S4	24,2	12,5	5750	33,00	1,7580
	112,0	119,00	11,8	836,0	4,0	MRO 63 - 90S4	132,7	121	9800	33,00	17,6270
	112,0	119,00	11,8	836,0	4,0	MRO 63 - 80C4	132	121	9800	23,00	17,6270
	112,0	109,00	12,8	770,0	2,2	MRO 53 - 90S4	84,7	73	11200	33,00	24,8595
	112,0	109,00	12,8	770,0	2,2	MRO 53 - 80C4	84	73	11200	23,00	24,8595
	112,0	116,00	12,1	816,0	1,2	MRO 43 - 90S4	50,7	39	11130	33,00	3,8632
	112,0	116,00	12,1	816,0	1,2	MRO 43 - 80C4	50	39	11130	23,00	3,8632
	125,0	129,00	10,9	908,0	2,7	MRO 63 - 90S4	132,7	121	22060	33,00	17,7600
	125,0	129,00	10,9	908,0	2,7	MRO 63 - 80C4	132	121	22060	23,00	17,7600
	125,0	120,00	11,7	843,0	2,1	MRO 53 - 90S4	84,7	73	7200	33,00	24,7730

MRO-MRV - 1400 rpm

Motorriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
1,1	125,0	120,00	11,7	843,0	2,1	MRO 53 - 80C4	84	73	7200	23,00	24,7730
	125,0	122,00	11,5	859,0	0,9	MRO 43 - 80C4	50	39	13730	23,00	3,9785
	125,0	122,00	11,5	859,0	0,9	MRO 43 - 90S4	50,7	39	13730	33,00	3,9785
	140,0	141,00	9,9	996,0	3,4	MRO 63 - 90S4	132,7	121	9800	33,00	17,5400
	140,0	141,00	9,9	996,0	3,4	MRO 63 - 80C4	132	121	9800	23,00	17,5400
	140,0	141,00	10,0	991,0	1,8	MRO 53 - 90S4	84,7	73	7200	33,00	24,7467
	140,0	141,00	10,0	991,0	1,8	MRO 53 - 80C4	84	73	7200	23,00	24,7467
	140,0	144,00	9,7	1017,0	0,9	MRO 43 - 80C4	50	39	12410	23,00	3,8506
	140,0	144,00	9,7	1017,0	0,9	MRO 43 - 90S4	50,7	39	12410	33,00	3,8506
	160,0	155,00	9,0	1093,0	3,1	MRO 63 - 90S4	132,7	121	9800	33,00	17,5010
	160,0	155,00	9,0	1093,0	3,1	MRO 63 - 80C4	132	121	9800	23,00	17,5010
	160,0	153,00	9,1	1080,0	1,6	MRO 53 - 90S4	84,7	73	10100	33,00	24,7344
	160,0	153,00	9,1	1080,0	1,6	MRO 53 - 80C4	84	73	10100	23,00	24,7344
	180,0	190,00	7,4	1343,0	2,0	MRO 63 - 90S4	132,7	121	19400	33,00	17,4310
	180,0	190,00	7,4	1343,0	2,0	MRO 63 - 80C4	132	121	19400	23,00	17,4310
	180,0	185,00	7,6	1306,0	1,1	MRO 53 - 90S4	84,7	73	17640	33,00	24,7124
	180,0	185,00	7,6	1306,0	1,1	MRO 53 - 80C4	84	73	17640	23,00	24,7124
	200,0	208,00	6,7	1467,0	0,9	MRO 53 - 90S4	84,7	73	19060	33,00	24,7277
	200,0	208,00	6,7	1467,0	0,9	MRO 53 - 80C4	84	73	19060	23,00	24,7277
	224,0	221,00	6,3	1558,0	1,6	MRO 63 - 90S4	132,7	121	22500	33,00	17,4800
	224,0	221,00	6,3	1558,0	1,6	MRO 63 - 80C4	132	121	22500	23,00	17,4800
	224,0	224,00	6,2	1582,0	0,8	MRO 53 - 90S4	84,7	73	19100	33,00	24,7733
	224,0	224,00	6,2	1582,0	0,8	MRO 53 - 80C4	84	73	19100	23,00	24,7733
	280,0	272,00	5,2	1916,0	1,3	MRO 63 - 90S4	132,7	121	22500	33,00	17,4170
	280,0	272,00	5,2	1916,0	1,3	MRO 63 - 80C4	132	121	22500	23,00	17,4170
	315,0	305,00	4,6	2154,0	1,2	MRO 63 - 90S4	132,7	121	22500	33,00	17,3880
	315,0	305,00	4,6	2154,0	1,2	MRO 63 - 80C4	132	121	22500	23,00	17,3880
	1,5	6,3	6,62	211,0	63,7	3,1	MRO 23 - 90L4	25	10,6	3350	40,00
7,1		7,58	185,0	72,9	1,8	MRO 13 - 90L4	20,8	6,4	3310	40,00	0,9150
8,0		8,47	165,0	81,5	2,7	MRO 23 - 90L4	25	10,6	3620	40,00	1,3930
9,0		9,09	154,0	87,4	4,3	MRO 33 - 90L4	26,9	12,5	5710	40,00	4,6310
9,0		8,97	156,0	86,3	2,6	MRO 23 - 90L4	25	10,6	3710	40,00	1,5320
9,0		9,14	153,0	87,9	1,5	MRO 13 - 90L4	20,8	6,4	3740	40,00	0,8480
10,0		10,40	134,0	100,0	2,4	MRO 23 - 90L4	25	10,6	3870	40,00	1,1640
10,0		9,57	146,0	92,0	1,5	MRO 13 - 90L4	20,8	6,4	3600	40,00	0,7740
11,2		11,70	120,0	112,0	3,4	MRO 33 - 90L4	26,9	12,5	5730	40,00	3,8410
11,2		11,50	122,0	110,0	2,1	MRO 23 - 90L4	25	10,6	4040	40,00	1,2320
11,2		11,60	120,0	112,0	1,3	MRO 13 - 90L4	20,8	6,4	3570	40,00	0,6940
12,5		12,70	110,0	122,0	4,4	MRO 33 - 90L4	26,9	12,5	5710	40,00	3,1860
12,5		13,00	107,0	125,0	2,2	MRO 23 - 90L4	25	10,6	3920	40,00	0,9900
14,0		13,90	101,0	133,0	3,9	MRO 43 - 90L4	53,4	39	7190	40,00	5,5410
14,0		13,50	104,0	130,0	3,5	MRO 33 - 90L4	26,9	12,5	5520	40,00	2,5250
14,0		14,10	99,1	136,0	1,7	MRO 23 - 90L4	25	10,6	4340	40,00	1,0580
14,0		14,00	99,9	135,0	1,0	MRO 13 - 90L4	20,8	6,4	4040	40,00	0,6660
16,0		16,20	86,4	156,0	4,7	MRO 43 - 90L4	53,4	39	7420	40,00	6,0497
16,0		16,30	85,9	157,0	3,4	MRO 33 - 90L4	26,9	12,5	5730	40,00	2,8190
16,0		16,70	83,9	160,0	1,9	MRO 23 - 90L4	25	10,6	3620	40,00	0,8580
16,0		15,10	92,5	146,0	1,1	MRO 13 - 90L4	20,8	6,4	3550	40,00	0,6210
18,0		17,60	79,8	169,0	3,6	MRO 43 - 90L4	53,4	39	7740	40,00	5,0261
18,0		17,30	80,8	167,0	3,1	MRO 33 - 90L4	26,9	12,5	5680	40,00	2,2830

Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
1,5	18,0	17,80	78,7	171,0	1,5	MRO 23 - 90L4	25	10,6	4480	40,00	0,6830
	18,0	18,30	76,7	176,0	0,8	MRO 13 - 90L4	20,8	6,4	4240	40,00	0,6040
	20,0	20,20	69,2	194,0	4,0	MRO 43 - 90L4	53,4	39	7980	40,00	5,5318
	20,0	19,10	73,3	184,0	2,1	MRO 33 - 90L4	26,9	12,5	5730	40,00	2,3640
	20,0	20,60	68,1	198,0	1,6	MRO 23 - 90L4	25	10,6	3720	40,00	0,7790
	20,0	19,20	73,1	184,0	0,9	MRO 13 - 90L4	20,8	6,4	3670	40,00	0,5770
	22,4	21,90	63,8	211,0	3,3	MRO 43 - 90L4	53,4	39	8310	40,00	4,6963
	22,4	21,70	64,6	208,0	2,6	MRO 33 - 90L4	26,9	12,5	5740	40,00	2,5320
	22,4	21,90	63,9	211,0	1,3	MRO 23 - 90L4	25	10,6	4420	40,00	0,6310
	22,4	23,30	60,0	224,0	0,8	MRO 13 - 90L4	20,8	6,4	3820	40,00	0,5510
	25,0	26,10	53,6	251,0	3,3	MRO 43 - 90L4	53,4	39	8690	40,00	5,1123
	25,0	26,70	52,4	257,0	2,2	MRO 33 - 90L4	26,9	12,5	5730	40,00	2,0370
	25,0	26,10	53,7	251,0	1,2	MRO 23 - 90L4	25	10,6	3930	40,00	0,7150
	28,0	27,90	50,1	269,0	2,9	MRO 43 - 90L4	53,4	39	8990	40,00	4,4508
	28,0	28,70	48,7	276,0	1,4	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,9940
	28,0	27,40	51,1	263,0	1,2	MRO 23 - 90L4	25	10,6	4180	40,00	0,5920
	31,5	32,50	43,1	313,0	2,8	MRO 43 - 90L4	53,4	39	9390	40,00	4,8644
	31,5	33,30	42,1	320,0	1,7	MRO 33 - 90L4	26,9	12,5	5740	40,00	2,2750
	31,5	33,00	42,5	317,0	0,8	MRO 23 - 90L4	25	10,6	4960	40,00	0,5440
	35,5	34,10	41,1	328,0	2,6	MRO 43 - 90L4	53,4	39	9580	40,00	4,3066
	35,5	34,30	40,9	329,0	1,7	MRO 33 - 90L4	26,9	12,5	5740	40,00	0,1954
	35,5	35,10	39,9	337,0	0,9	MRO 23 - 90L4	25	10,6	4220	40,00	0,5620
	40,0	41,70	33,6	401,0	4,2	MRO 53 - 90L4	87,4	73	8510	40,00	25,4059
	40,0	40,20	34,8	387,0	1,5	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,8490
	40,0	41,20	34,0	396,0	0,8	MRO 23 - 90L4	25	10,6	4600	40,00	0,5270
	45,0	43,10	32,5	415,0	4,1	MRO 53 - 90L4	87,4	73	8540	40,00	25,6370
	45,0	42,50	32,9	409,0	2,1	MRO 43 - 90L4	53,4	39	10020	40,00	4,1893
	45,0	45,50	30,7	438,0	1,3	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,8890
	50,0	51,30	27,3	494,0	3,5	MRO 53 - 90L4	87,4	73	8720	40,00	25,2163
	50,0	51,30	27,3	493,0	2,0	MRO 43 - 90L4	53,4	39	9720	40,00	4,0217
	50,0	51,60	27,2	496,0	1,2	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,8120
	56,0	56,70	24,7	545,0	3,2	MRO 53 - 90L4	87,4	73	8820	40,00	25,3529
	56,0	54,80	25,5	527,0	1,9	MRO 43 - 90L4	53,4	39	9800	40,00	4,0943
	56,0	53,60	26,1	515,0	1,1	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,8620
	63,0	64,90	21,6	624,0	2,8	MRO 53 - 90L4	87,4	73	8950	40,00	25,0608
	63,0	64,00	21,9	615,0	1,6	MRO 43 - 90L4	53,4	39	10090	40,00	3,9699
	71,0	73,40	19,1	706,0	4,6	MRO 63 - 90L4	135,4	121	11430	40,00	18,8420
	71,0	72,60	19,3	698,0	2,4	MRO 53 - 90L4	87,4	73	10800	40,00	25,1812
	71,0	68,30	20,5	657,0	1,4	MRO 43 - 90L4	53,4	39	10970	40,00	4,0382
	71,0	68,50	20,4	659,0	0,9	MRO 33 - 90L4	26,9	12,5	5740	40,00	1,7840
	80,0	84,60	16,6	813,0	4,1	MRO 63 - 90L4	135,4	121	11400	40,00	18,1240
	80,0	79,40	17,6	763,0	1,7	MRO 53 - 90L4	87,4	73	16160	40,00	25,0122
	80,0	82,50	17,0	794,0	1,3	MRO 43 - 90L4	53,4	39	10510	40,00	3,9279
	90,0	90,30	15,5	868,0	3,9	MRO 63 - 90L4	135,4	121	11400	40,00	17,8220
	90,0	91,00	15,4	876,0	2,0	MRO 53 - 90L4	87,4	73	8400	40,00	24,8176
	90,0	89,70	15,6	863,0	1,0	MRO 43 - 90L4	53,4	39	11880	40,00	3,8846
	100,0	101,00	13,9	968,0	3,5	MRO 63 - 90L4	135,4	121	9800	40,00	17,9540
	100,0	100,00	14,0	964,0	1,8	MRO 53 - 90L4	87,4	73	8000	40,00	24,8837
	100,0	103,00	13,6	989,0	1,0	MRO 43 - 90L4	53,4	39	11740	40,00	3,9031
	112,0	119,00	11,8	1140,0	2,9	MRO 63 - 90L4	135,4	121	9800	40,00	17,6270



Tabelle di selezione - Selection tables - Auswahltabelle

RO - RV

MRO-MRV - 1400 rpm
 Motorriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
1,5	112,0	109,00	12,8	1050,0	1,6	MRO 53 - 90L4	87,4	73	11200	40,00	24,8595
	112,0	116,00	12,1	1113,0	0,9	MRO 43 - 90L4	53,4	39	11130	40,00	3,8632
	125,0	129,00	10,9	1238,0	2,0	MRO 63 - 90L4	135,4	121	22060	40,00	17,7600
	125,0	120,00	11,7	1150,0	1,6	MRO 53 - 90L4	87,4	73	7200	40,00	24,7730
	140,0	141,00	9,9	1358,0	2,5	MRO 63 - 90L4	135,4	121	9800	40,00	17,5400
	140,0	141,00	10,0	1352,0	1,3	MRO 53 - 90L4	87,4	73	7200	40,00	24,7467
	160,0	155,00	9,0	1490,0	2,3	MRO 63 - 90L4	135,4	121	9800	40,00	17,5010
	160,0	153,00	9,1	1473,0	1,2	MRO 53 - 90L4	87,4	73	10100	40,00	24,7344
	180,0	190,00	7,4	1832,0	1,5	MRO 63 - 90L4	135,4	121	19400	40,00	17,4310
	180,0	185,00	7,6	1781,0	0,8	MRO 53 - 90L4	87,4	73	17640	40,00	24,7124
	224,0	221,00	6,3	2124,0	1,2	MRO 63 - 90L4	135,4	121	22500	40,00	17,4800
	280,0	272,00	5,2	2612,0	1,0	MRO 63 - 90L4	135,4	121	22500	40,00	17,4170
	315,0	305,00	4,6	2937,0	0,9	MRO 63 - 90L4	135,4	121	22500	40,00	17,3880
2,2	6,3	6,43	218,0	90,7	4,6	MRO 33 - 100A4	31,7	12,5	4550	75,00	5,3400
	6,3	6,43	218,0	90,7	4,6	MRO 33 - 90LC4	30,1	12,5	4550	60,00	5,3400
	6,3	6,62	211,0	93,4	2,1	MRO 23 - 100A4	29,8	10,6	3350	75,00	1,7940
	6,3	6,62	211,0	93,4	2,1	MRO 23 - 90LC4	28,2	10,6	3350	60,00	1,7940
	7,1	7,58	185,0	107,0	1,2	MRO 13 - 90LC4	24	6,4	3310	60,00	0,9150
	8,0	8,35	168,0	118,0	4,5	MRO 43 - 100A4	58,2	39	6000	75,00	9,2271
	8,0	8,35	168,0	118,0	4,5	MRO 43 - 90LC4	56,6	39	6000	60,00	9,2271
	8,0	8,25	170,0	116,0	3,9	MRO 33 - 100A4	31,7	12,5	5540	75,00	4,2720
	8,0	8,25	170,0	116,0	3,9	MRO 33 - 90LC4	30,1	12,5	5540	60,00	4,2720
	8,0	8,47	165,0	119,0	1,8	MRO 23 - 100A4	29,8	10,6	3620	75,00	1,3930
	8,0	8,47	165,0	119,0	1,8	MRO 23 - 90LC4	28,2	10,6	3620	60,00	1,3930
	9,0	9,09	154,0	128,0	3,0	MRO 33 - 100A4	31,7	12,5	5710	75,00	4,6310
	9,0	9,09	154,0	128,0	3,0	MRO 33 - 90LC4	30,1	12,5	5710	60,00	4,6310
	9,0	8,97	156,0	127,0	1,8	MRO 23 - 100A4	29,8	10,6	3710	75,00	1,5320
	9,0	8,97	156,0	127,0	1,8	MRO 23 - 90LC4	28,2	10,6	3710	60,00	1,5320
	9,0	9,14	153,0	129,0	1,0	MRO 13 - 90LC4	24	6,4	3740	60,00	0,8480
	10,0	10,40	134,0	147,0	4,1	MRO 43 - 100A4	58,2	39	3870	75,00	1,1640
	10,0	10,40	134,0	147,0	4,1	MRO 43 - 90LC4	56,6	39	3870	60,00	1,1640
	10,0	10,20	138,0	143,0	3,5	MRO 33 - 100A4	31,7	12,5	5630	75,00	3,6570
	10,0	10,20	138,0	143,0	3,5	MRO 33 - 90LC4	30,1	12,5	5630	60,00	3,6570
	10,0	10,40	134,0	147,0	1,7	MRO 23 - 100A4	29,8	10,6	3870	75,00	1,1640
	10,0	10,40	134,0	147,0	1,7	MRO 23 - 90LC4	28,2	10,6	6430	60,00	7,7706
	10,0	9,57	146,0	135,0	1,0	MRO 13 - 90LC4	24	6,4	3600	60,00	0,7740
	11,2	11,00	127,0	156,0	4,2	MRO 43 - 100A4	58,2	39	6520	75,00	8,3593
	11,2	11,00	127,0	156,0	4,2	MRO 43 - 90LC4	56,6	39	6520	60,00	8,3593
	11,2	11,70	120,0	164,0	2,3	MRO 33 - 100A4	31,7	12,5	5730	75,00	3,8410
	11,2	11,70	120,0	164,0	2,3	MRO 33 - 90LC4	30,1	12,5	5730	60,00	3,8410
	11,2	11,50	122,0	162,0	1,4	MRO 23 - 100A4	29,8	10,6	4040	75,00	1,2320
	11,2	11,50	122,0	162,0	1,4	MRO 23 - 90LC4	28,2	10,6	4040	60,00	1,2320
	11,2	11,60	120,0	164,0	0,9	MRO 13 - 90LC4	24	6,4	3570	60,00	0,6940
	12,5	13,30	105,0	187,0	3,6	MRO 43 - 100A4	58,2	39	6950	75,00	6,6865
	12,5	13,30	105,0	187,0	3,6	MRO 43 - 90LC4	56,6	39	6950	60,00	6,6865
	12,5	12,70	110,0	179,0	3,0	MRO 33 - 100A4	31,7	12,5	5710	75,00	3,1860
12,5	12,70	110,0	179,0	3,0	MRO 33 - 90LC4	30,1	12,5	5710	60,00	3,1860	
12,5	13,00	107,0	184,0	1,5	MRO 23 - 100A4	29,8	10,6	3920	75,00	0,9900	
12,5	13,00	107,0	184,0	1,5	MRO 23 - 90LC4	28,2	10,6	3920	60,00	0,9900	
14,0	13,90	101,0	196,0	2,6	MRO 43 - 100A4	58,2	39	7190	75,00	5,5410	

Tabelle di selezione - Selection tables - Auswahltable

RO - RV

MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
2,2	14,0	13,90	101,0	196,0	2,6	MRO 43 - 90LC4	56,6	39	7190	60,00	5,5410
	14,0	13,50	104,0	191,0	2,4	MRO 33 - 100A4	31,7	12,5	5520	75,00	2,5250
	14,0	13,50	104,0	191,0	2,4	MRO 33 - 90LC4	30,1	12,5	5520	60,00	2,5250
	14,0	14,10	99,1	199,0	1,2	MRO 23 - 100A4	29,8	10,6	4340	75,00	1,0580
	14,0	14,10	99,1	199,0	1,2	MRO 23 - 90LC4	28,2	10,6	4340	60,00	1,0580
	16,0	16,20	86,4	229,0	3,2	MRO 43 - 100A4	58,2	39	7420	75,00	6,0497
	16,0	16,20	86,4	229,0	3,2	MRO 43 - 90LC4	56,6	39	7420	60,00	6,0497
	16,0	16,30	85,9	230,0	2,3	MRO 33 - 100A4	31,7	12,5	5730	75,00	2,8190
	16,0	16,30	85,9	230,0	2,3	MRO 33 - 90LC4	30,1	12,5	5730	60,00	2,8190
	16,0	16,70	83,9	235,0	1,3	MRO 23 - 100A4	29,8	10,6	3620	75,00	0,8580
	16,0	16,70	83,9	235,0	1,3	MRO 23 - 90LC4	28,2	10,6	3620	60,00	0,8580
	16,0	15,10	92,5	214,0	0,8	MRO 13 - 90LC4	24	6,4	3550	60,00	0,6210
	18,0	18,00	77,7	254,0	4,9	MRO 53 - 100A4	92,2	73	11300	75,00	27,8473
	18,0	18,00	77,7	254,0	4,9	MRO 53 - 90LC4	90,6	73	11300	60,00	27,8473
	18,0	17,60	79,8	248,0	2,5	MRO 43 - 100A4	58,2	39	7740	75,00	5,0261
	18,0	17,60	79,8	248,0	2,5	MRO 43 - 90LC4	56,6	39	7740	60,00	5,0261
	18,0	17,30	80,8	244,0	2,1	MRO 33 - 100A4	31,7	12,5	5680	75,00	2,2830
	18,0	17,30	80,8	244,0	2,1	MRO 33 - 90LC4	30,1	12,5	5680	60,00	2,2830
	18,0	17,80	78,7	251,0	1,0	MRO 23 - 100A4	29,8	10,6	4480	75,00	0,6830
	18,0	17,80	78,7	251,0	1,0	MRO 23 - 90LC4	28,2	10,6	4480	60,00	0,6830
	20,0	20,20	69,2	285,0	2,7	MRO 43 - 100A4	58,2	39	7980	75,00	5,5318
	20,0	20,20	69,2	285,0	2,7	MRO 43 - 90LC4	56,6	39	7980	60,00	5,5318
	20,0	19,10	73,3	269,0	1,4	MRO 33 - 100A4	31,7	12,5	5730	75,00	2,3640
	20,0	19,10	73,3	269,0	1,4	MRO 33 - 90LC4	30,1	12,5	5730	60,00	2,3640
	20,0	20,60	68,1	290,0	1,1	MRO 23 - 100A4	29,8	10,6	3720	75,00	0,7790
	20,0	20,60	68,1	290,0	1,1	MRO 23 - 90LC4	28,2	10,6	3720	60,00	0,7790
	22,4	22,90	61,3	322,0	4,4	MRO 53 - 100A4	92,2	73	11180	75,00	26,9452
	22,4	22,90	61,3	322,0	4,4	MRO 53 - 90LC4	90,6	73	11180	60,00	26,9452
	22,4	21,90	63,8	309,0	2,2	MRO 43 - 100A4	58,2	39	8310	75,00	4,6963
	22,4	21,90	63,8	309,0	2,2	MRO 43 - 90LC4	56,6	39	8310	60,00	4,6963
	22,4	21,70	64,6	306,0	1,8	MRO 33 - 100A4	31,7	12,5	5740	75,00	2,5320
	22,4	21,70	64,6	306,0	1,8	MRO 33 - 90LC4	30,1	12,5	5740	60,00	2,5320
22,4	21,90	63,9	309,0	0,9	MRO 23 - 90LC4	28,2	10,6	4420	60,00	0,6310	
22,4	21,90	63,9	309,0	0,9	MRO 23 - 100A4	29,8	10,6	4420	75,00	0,6310	
25,0	27,00	51,9	380,0	4,4	MRO 53 - 100A4	92,2	73	8140	75,00	27,9078	
25,0	27,00	51,9	380,0	4,4	MRO 53 - 90LC4	90,6	73	8140	60,00	27,9078	
25,0	26,10	53,6	368,0	2,3	MRO 43 - 100A4	58,2	39	8690	75,00	5,1123	
25,0	26,10	53,6	368,0	2,3	MRO 43 - 90LC4	56,6	39	8690	60,00	5,1123	
25,0	26,70	52,4	377,0	1,5	MRO 33 - 100A4	31,7	12,5	5730	75,00	2,0370	
25,0	26,70	52,4	377,0	1,5	MRO 33 - 90LC4	30,1	12,5	5730	60,00	2,0370	
25,0	26,10	53,7	368,0	0,8	MRO 23 - 90LC4	28,2	10,6	3930	60,00	0,7150	
25,0	26,10	53,7	368,0	0,8	MRO 23 - 100A4	29,8	10,6	3930	75,00	0,7150	
28,0	27,70	50,6	390,0	4,0	MRO 53 - 100A4	92,2	73	9800	75,00	26,4183	
28,0	27,70	50,6	390,0	4,0	MRO 53 - 90LC4	90,6	73	9800	60,00	26,4183	
28,0	27,90	50,1	394,0	2,0	MRO 43 - 100A4	58,2	39	8990	75,00	4,4508	
28,0	27,90	50,1	394,0	2,0	MRO 43 - 90LC4	56,6	39	8990	60,00	4,4508	
28,0	28,70	48,7	405,0	1,0	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,9940	
28,0	28,70	48,7	405,0	1,0	MRO 33 - 90LC4	30,1	12,5	5740	60,00	1,9940	
28,0	27,40	51,1	386,0	0,8	MRO 23 - 90LC4	28,2	10,6	4180	60,00	0,5920	
28,0	27,40	51,1	386,0	0,8	MRO 23 - 100A4	29,8	10,6	4180	75,00	0,5920	

MRO-MRV - 1400 rpm

Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
2,2	31,5	31,70	44,2	447,0	3,8	MRO 53 - 100A4	92,2	73	8230	75,00	27,3913
	31,5	31,70	44,2	447,0	3,8	MRO 53 - 90LC4	90,6	73	8230	60,00	27,3913
	31,5	32,50	43,1	459,0	1,9	MRO 43 - 100A4	58,2	39	9390	75,00	48644,0
	31,5	32,50	43,1	459,0	1,9	MRO 43 - 90LC4	56,6	39	9390	60,00	4,8644
	31,5	33,30	42,1	469,0	1,2	MRO 33 - 100A4	31,7	12,5	5740	75,00	2,2750
	31,5	33,30	42,1	469,0	1,2	MRO 33 - 90LC4	30,1	12,5	5740	60,00	2,2750
	35,5	34,10	41,0	481,0	3,5	MRO 53 - 100A4	92,2	73	8340	75,00	25,9891
	35,5	34,10	41,0	481,0	3,5	MRO 53 - 90LC4	90,6	73	8340	60,00	25,9891
	35,5	34,10	41,1	480,0	1,7	MRO 43 - 100A4	58,2	39	9580	75,00	4,3066
	35,5	34,10	41,1	480,0	1,7	MRO 43 - 90LC4	56,6	39	9580	60,00	4,3066
	35,5	34,30	40,9	483,0	1,2	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,9540
	35,5	34,30	40,9	483,0	1,2	MRO 33 - 90LC4	30,1	12,5	5740	60,00	19540,0
	40,0	42,80	32,7	603,0	4,9	MRO 63 - 100A4	140,2	121	11390	75,00	20,2710
	40,0	42,80	32,7	603,0	4,9	MRO 63 - 90LC4	138,6	121	11390	60,00	20,2710
	40,0	41,70	33,6	588,0	2,9	MRO 53 - 100A4	92,2	73	8510	75,00	25,4059
	40,0	41,70	33,6	588,0	2,9	MRO 53 - 90LC4	90,6	73	8510	60,00	25,4059
	40,0	40,20	34,8	567,0	1,0	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,8490
	40,0	40,20	34,8	567,0	1,0	MRO 33 - 90LC4	30,1	12,5	5740	60,00	1,8490
	45,0	43,00	32,6	606,0	4,2	MRO 63 - 100A4	140,2	121	16450	75,00	23,3660
	45,0	43,00	32,6	606,0	4,2	MRO 63 - 90LC4	138,6	121	16450	60,00	23,3660
	45,0	43,10	32,5	609,0	2,8	MRO 53 - 100A4	92,2	73	8540	75,00	25,6370
	45,0	43,10	32,5	609,0	2,8	MRO 53 - 90LC4	90,6	73	8540	60,00	25,6370
	45,0	42,50	32,9	599,0	1,4	MRO 43 - 100A4	58,2	39	10020	75,00	4,1893
	45,0	42,50	32,9	599,0	1,4	MRO 43 - 90LC4	56,6	39	10020	60,00	4,1893
	45,0	45,50	30,7	642,0	0,9	MRO 33 - 90LC4	30,1	12,5	5740	60,00	1,8890
	45,0	45,50	30,7	642,0	0,9	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,8890
	50,0	50,90	27,5	718,0	4,7	MRO 63 - 100A4	140,2	121	9810	75,00	18,9780
	50,0	50,90	27,5	718,0	4,7	MRO 63 - 90LC4	138,6	121	9810	60,00	18,9780
	50,0	51,30	27,3	724,0	2,4	MRO 53 - 100A4	92,2	73	8720	75,00	25,2163
	50,0	51,30	27,3	724,0	2,4	MRO 53 - 90LC4	90,6	73	8720	60,00	25,2163
	50,0	51,30	27,3	723,0	1,4	MRO 43 - 100A4	58,2	39	9720	75,00	4,0217
	50,0	51,30	27,3	723,0	1,4	MRO 43 - 90LC4	56,6	39	9720	60,00	4,0217
	50,0	51,60	27,2	727,0	0,8	MRO 33 - 90LC4	30,1	12,5	5740	60,00	1,8120
	50,0	51,60	27,2	727,0	0,8	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,8120
	56,0	56,20	24,9	793,0	4,2	MRO 63 - 100A4	140,2	121	9970	75,00	19,4030
	56,0	56,20	24,9	793,0	4,2	MRO 63 - 90LC4	138,6	121	9970	60,00	19,4030
	56,0	56,70	24,7	799,0	2,2	MRO 53 - 100A4	92,2	73	8820	75,00	25,3529
	56,0	56,70	24,7	799,0	2,2	MRO 53 - 90LC4	90,6	73	8820	60,00	25,3529
	56,0	54,80	25,5	774,0	1,3	MRO 43 - 100A4	58,2	39	9800	75,00	4,0943
	56,0	54,80	25,5	774,0	1,3	MRO 43 - 90LC4	56,6	39	9800	60,00	4,0943
	56,0	53,60	26,1	756,0	0,8	MRO 33 - 90LC4	30,1	12,5	5740	60,00	1,8620
	56,0	53,60	26,1	756,0	0,8	MRO 33 - 100A4	31,7	12,5	5740	75,00	1,8620
	63,0	64,40	21,8	908,0	3,7	MRO 63 - 100A4	140,2	121	10200	75,00	18,5080
	63,0	64,40	21,8	908,0	3,7	MRO 63 - 90LC4	138,6	121	10200	60,00	18,5080
	63,0	64,90	21,6	916,0	1,9	MRO 53 - 100A4	92,2	73	8950	75,00	25,0608
	63,0	64,90	21,6	916,0	1,9	MRO 53 - 90LC4	90,6	73	8950	60,00	25,0608
	63,0	64,00	21,9	902,0	1,1	MRO 43 - 100A4	58,2	39	10090	75,00	3,9699
	63,0	64,00	21,9	902,0	1,1	MRO 43 - 90LC4	56,6	39	10090	60,00	3,9699
	71,0	73,40	19,1	1035,0	3,1	MRO 63 - 100A4	140,2	121	11430	75,00	18,8420
	71,0	73,40	19,1	1035,0	3,1	MRO 63 - 90LC4	138,6	121	11430	60,00	18,8420

Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
2,2	71,0	72,60	19,3	1024,0	1,6	MRO 53 - 100A4	92,2	73	10800	75,00	25,1812
	71,0	72,60	19,3	1024,0	1,6	MRO 53 - 90LC4	90,6	73	10800	60,00	25,1812
	71,0	68,30	20,5	964,0	1,0	MRO 43 - 90LC4	56,6	39	10970	60,00	4,0382
	71,0	68,30	20,5	964,0	1,0	MRO 43 - 100A4	58,2	39	10970	75,00	4,0382
	80,0	84,60	16,6	1193,0	2,8	MRO 63 - 100A4	140,2	121	11400	75,00	18,1240
	80,0	84,60	16,6	1193,0	2,8	MRO 63 - 90LC4	138,6	121	11400	60,00	18,1240
	80,0	79,40	17,6	1120,0	1,1	MRO 53 - 100A4	92,2	73	16160	75,00	25,0122
	80,0	79,40	17,6	1120,0	1,1	MRO 53 - 90LC4	90,6	73	16160	60,00	25,0122
	80,0	82,50	17,0	1164,0	0,9	MRO 43 - 90LC4	56,6	39	10510	60,00	3,9279
	80,0	82,50	17,0	1164,0	0,9	MRO 43 - 100A4	58,2	39	10510	75,00	3,9279
	90,0	90,30	15,5	1273,0	2,6	MRO 63 - 100A4	140,2	121	11400	75,00	17,8220
	90,0	90,30	15,5	1273,0	2,6	MRO 63 - 90LC4	138,6	121	11400	60,00	17,8220
	90,0	91,00	15,4	1284,0	1,4	MRO 53 - 100A4	92,2	73	8400	75,00	24,8176
	90,0	91,00	15,4	1284,0	1,4	MRO 53 - 90LC4	90,6	73	8400	60,00	24,8176
	100,0	101,00	13,9	1420,0	2,4	MRO 63 - 100A4	140,2	121	9800	75,00	17,9540
	100,0	101,00	13,9	1420,0	2,4	MRO 63 - 90LC4	138,6	121	9800	60,00	17,9540
	100,0	100,00	14,0	1413,0	1,3	MRO 53 - 100A4	92,2	73	8000	75,00	24,8837
	100,0	100,00	14,0	1413,0	1,3	MRO 53 - 90LC4	90,6	73	8000	60,00	24,8837
	112,0	119,00	11,8	1673,0	2,0	MRO 63 - 100A4	140,2	121	9800	75,00	17,6270
	112,0	119,00	11,8	1673,0	2,0	MRO 63 - 90LC4	138,6	121	9800	60,00	17,6270
	112,0	109,00	12,8	1540,0	1,1	MRO 53 - 100A4	92,2	73	11200	75,00	24,8595
	112,0	109,00	12,8	1540,0	1,1	MRO 53 - 90LC4	90,6	73	11200	60,00	24,8595
	125,0	129,00	10,9	1816,0	1,4	MRO 63 - 100A4	140,2	121	22060	75,00	17,7600
	125,0	129,00	10,9	1816,0	1,4	MRO 63 - 90LC4	138,6	121	22060	60,00	17,7600
	125,0	120,00	11,7	1687,0	1,1	MRO 53 - 100A4	92,2	73	7200	75,00	24,7730
	125,0	120,00	11,7	1687,0	1,1	MRO 53 - 90LC4	90,6	73	7200	60,00	24,7730
	140,0	141,00	9,9	1992,0	1,7	MRO 63 - 100A4	140,2	121	9800	75,00	17,5400
	140,0	141,00	9,9	1992,0	1,7	MRO 63 - 90LC4	138,6	121	9800	60,00	17,5400
	140,0	141,00	10,0	1982,0	0,9	MRO 53 - 90LC4	90,6	73	7200	60,00	24,7467
	140,0	141,00	10,0	1982,0	0,9	MRO 53 - 100A4	92,2	73	7200	75,00	24,7467
	160,0	155,00	9,0	2185,0	1,5	MRO 63 - 100A4	140,2	121	9800	75,00	17,5010
	160,0	155,00	9,0	2185,0	1,5	MRO 63 - 90LC4	138,6	121	9800	60,00	17,5010
160,0	153,00	9,1	2160,0	0,8	MRO 53 - 90LC4	90,6	73	10100	60,00	24,7344	
160,0	153,00	9,1	2160,0	0,8	MRO 53 - 100A4	92,2	73	10100	75,00	24,7344	
180,0	190,00	7,4	2687,0	1,0	MRO 63 - 100A4	140,2	121	19400	75,00	17,4310	
180,0	190,00	7,4	2687,0	1,0	MRO 63 - 90LC4	138,6	121	19400	60,00	17,4310	
224,0	221,00	6,3	3116,0	0,8	MRO 63 - 90LC4	138,6	121	22500	60,00	17,4800	
224,0	221,00	6,3	3116,0	0,8	MRO 63 - 100A4	140,2	121	22500	75,00	17,4800	
3	6,3	6,60	212,0	127,0	3,7	MRO 43 - 100B4	61,9	39	5570	85,00	11,5009
	6,3	6,43	218,0	124,0	3,4	MRO 33 - 100B4	35,4	12,5	4550	85,00	5,3400
	6,3	6,62	211,0	127,0	1,6	MRO 23 - 100B4	33,5	10,6	3350	85,00	1,7940
	8,0	8,35	168,0	161,0	3,3	MRO 43 - 100B4	61,9	39	6000	85,00	9,2271
	8,0	8,25	170,0	159,0	2,8	MRO 33 - 100B4	35,4	12,5	5540	85,00	4,2720
	8,0	8,47	165,0	163,0	1,4	MRO 23 - 100B4	33,5	10,6	3620	85,00	1,3930
	9,0	8,72	161,0	168,0	3,9	MRO 43 - 100B4	61,9	39	5980	85,00	10,1119
	9,0	9,09	154,0	175,0	2,2	MRO 33 - 100B4	35,4	12,5	5710	85,00	4,6310
	9,0	8,97	156,0	173,0	1,3	MRO 23 - 100B4	33,5	10,6	3710	85,00	1,5320
	10,0	10,40	134,0	201,0	3,0	MRO 43 - 100B4	61,9	39	3870	85,00	1,1640
	10,0	10,20	138,0	196,0	2,6	MRO 33 - 100B4	35,4	12,5	5630	85,00	3,6570
	10,0	10,40	134,0	201,0	1,2	MRO 23 - 100B4	33,5	10,6	3870	85,00	1,1640

MRO-MRV - 1400 rpm

Motorriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
3	11,2	11,00	127,0	212,0	3,1	MRO 43 - 100B4	61,9	39	6520	85,00	8,3593
	11,2	11,70	120,0	224,0	1,7	MRO 33 - 100B4	35,4	12,5	5730	85,00	3,8410
	11,2	11,50	122,0	221,0	1,0	MRO 23 - 100B4	33,5	10,6	4040	85,00	1,2320
	12,5	13,30	105,0	256,0	2,6	MRO 43 - 100B4	61,9	39	6950	85,00	6,6865
	12,5	12,70	110,0	245,0	2,2	MRO 33 - 100B4	35,4	12,5	5710	85,00	3,1860
	12,5	13,00	107,0	251,0	1,1	MRO 23 - 100B4	33,5	10,6	3920	85,00	0,9900
	14,0	13,60	103,0	262,0	4,0	MRO 53 - 100B4	95,9	73	10340	85,00	29,4533
	14,0	13,90	101,0	267,0	1,9	MRO 43 - 100B4	61,9	39	7190	85,00	5,5410
	14,0	13,50	104,0	260,0	1,8	MRO 33 - 100B4	35,4	12,5	5520	85,00	2,5250
	14,0	14,10	99,1	272,0	0,8	MRO 23 - 100B4	33,5	10,6	4340	85,00	1,0580
	16,0	16,20	86,2	312,0	4,7	MRO 53 - 100B4	95,9	73	10150	85,00	30,7169
	16,0	16,20	86,4	312,0	2,3	MRO 43 - 100B4	61,9	39	7420	85,00	6,0497
	16,0	16,30	85,9	314,0	1,7	MRO 33 - 100B4	35,4	12,5	5730	85,00	2,8190
	16,0	16,70	83,9	321,0	1,0	MRO 23 - 100B4	33,5	10,6	3620	85,00	0,8580
	18,0	18,00	77,7	347,0	3,6	MRO 53 - 100B4	95,9	73	11300	85,00	27,8473
	18,0	17,60	79,8	338,0	1,8	MRO 43 - 100B4	61,9	39	7740	85,00	5,0261
	18,0	17,30	80,8	333,0	1,5	MRO 33 - 100B4	35,4	12,5	5680	85,00	2,2830
	20,0	20,50	68,2	395,0	4,1	MRO 53 - 100B4	95,9	73	8650	85,00	29,1621
	20,0	20,20	69,2	389,0	2,0	MRO 43 - 100B4	61,9	39	7980	85,00	5,5318
	20,0	19,10	73,3	367,0	1,1	MRO 33 - 100B4	35,4	12,5	5730	85,00	2,3640
	20,0	20,60	68,1	395,0	0,8	MRO 23 - 100B4	33,5	10,6	3720	85,00	0,7790
	22,4	22,90	61,3	440,0	3,2	MRO 53 - 100B4	95,9	73	11180	85,00	26,9452
	22,4	21,90	63,8	422,0	1,6	MRO 43 - 100B4	61,9	39	8310	85,00	4,6963
	22,4	21,70	64,6	417,0	1,3	MRO 33 - 100B4	35,4	12,5	5740	85,00	2,5320
	25,0	25,50	54,9	490,0	4,7	MRO 63 - 100B4	143,9	121	16820	85,00	25,3770
	25,0	27,00	51,9	519,0	3,2	MRO 53 - 100B4	95,9	73	8140	85,00	27,9078
	25,0	26,10	53,6	502,0	1,7	MRO 43 - 100B4	61,9	39	8690	85,00	5,1123
	25,0	26,70	52,4	514,0	1,1	MRO 33 - 100B4	35,4	12,5	5730	85,00	2,0370
	28,0	27,50	51,0	528,0	4,6	MRO 63 - 100B4	143,9	121	15700	85,00	22,6360
	28,0	27,70	50,6	532,0	2,9	MRO 53 - 100B4	95,9	73	9800	85,00	26,4183
	28,0	27,90	50,1	537,0	1,4	MRO 43 - 100B4	61,9	39	8990	85,00	4,4508
	31,5	31,90	44,0	613,0	4,7	MRO 63 - 100B4	143,9	121	11540	85,00	25,5240
	31,5	31,70	44,2	610,0	2,8	MRO 53 - 100B4	95,9	73	8230	85,00	27,3913
	31,5	32,50	43,1	626,0	1,4	MRO 43 - 100B4	61,9	39	9390	85,00	4,8644
	31,5	33,30	42,1	640,0	0,9	MRO 33 - 100B4	35,4	12,5	5740	85,00	2,2750
	35,5	33,80	41,4	651,0	4,1	MRO 63 - 100B4	143,9	121	13920	85,00	21,3370
	35,5	34,10	41,0	656,0	2,6	MRO 53 - 100B4	95,9	73	8340	85,00	25,9891
	35,5	34,10	41,1	655,0	1,3	MRO 43 - 100B4	61,9	39	9580	85,00	4,3066
	35,5	34,30	40,9	659,0	0,8	MRO 33 - 100B4	35,4	12,5	5740	85,00	1,9540
	40,0	42,80	32,7	823,0	3,6	MRO 63 - 100B4	143,9	121	11390	85,00	20,2710
	40,0	41,70	33,6	801,0	2,1	MRO 53 - 100B4	95,9	73	8510	85,00	25,4059
	45,0	43,00	32,6	826,0	3,1	MRO 63 - 100B4	143,9	121	16450	85,00	23,3660
	45,0	43,10	32,5	830,0	2,0	MRO 53 - 100B4	95,9	73	8540	85,00	25,6370
	45,0	42,50	32,9	817,0	1,0	MRO 43 - 100B4	61,9	39	10020	85,00	4,1893
	50,0	50,90	27,5	979,0	3,4	MRO 63 - 100B4	143,9	121	9810	85,00	18,9780
	50,0	51,30	27,3	988,0	1,7	MRO 53 - 100B4	95,9	73	8720	85,00	25,2163
	50,0	51,30	27,3	986,0	1,0	MRO 43 - 100B4	61,9	39	9720	85,00	4,0217
	56,0	56,20	24,9	1081,0	3,1	MRO 63 - 100B4	143,9	121	9970	85,00	19,4030
	56,0	56,70	24,7	1090,0	1,6	MRO 53 - 100B4	95,9	73	8820	85,00	25,3529
	56,0	54,80	25,5	1055,0	0,9	MRO 43 - 100B4	61,9	39	9800	85,00	4,0943

Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
3	63,0	64,40	21,8	1238,0	2,7	MRO 63 - 100B4	143,9	121	10200	85,00	18,5080
	63,0	64,90	21,6	1249,0	1,4	MRO 53 - 100B4	95,9	73	8950	85,00	25,0608
	63,0	64,00	21,9	1230,0	0,8	MRO 43 - 100B4	61,9	39	10090	85,00	3,9699
	71,0	73,40	19,1	1412,0	2,3	MRO 63 - 100B4	143,9	121	11430	85,00	18,8420
	71,0	72,60	19,3	1396,0	1,2	MRO 53 - 100B4	95,9	73	10800	85,00	25,1812
	80,0	84,60	16,6	1626,0	2,1	MRO 63 - 100B4	143,9	121	11400	85,00	18,1240
	80,0	79,40	17,6	1527,0	0,8	MRO 53 - 100B4	95,9	73	16160	85,00	25,0122
	90,0	90,30	15,5	1736,0	1,9	MRO 63 - 100B4	143,9	121	11400	85,00	17,8220
	90,0	91,00	15,4	1751,0	1,0	MRO 53 - 100B4	95,9	73	8400	85,00	24,8176
	100,0	101,00	13,9	1937,0	1,7	MRO 63 - 100B4	143,9	121	9800	85,00	17,9540
	100,0	100,00	14,0	1927,0	0,9	MRO 53 - 100B4	95,9	73	8000	85,00	24,8837
	112,0	119,00	11,8	2281,0	1,5	MRO 63 - 100B4	143,9	121	9800	85,00	17,6270
	112,0	109,00	12,8	2100,0	0,8	MRO 53 - 100B4	95,9	73	11200	85,00	24,8595
	125,0	129,00	10,9	2476,0	1,0	MRO 63 - 100B4	143,9	121	22060	85,00	17,7600
	125,0	120,00	11,7	2300,0	0,8	MRO 53 - 100B4	95,9	73	7200	85,00	24,7730
	140,0	141,00	9,9	2717,0	1,2	MRO 63 - 100B4	143,9	121	9800	85,00	17,5400
160,0	155,00	9,0	2980,0	1,1	MRO 63 - 100B4	143,9	121	9800	85,00	17,5010	
4	6,3	6,60	212,0	169,0	2,8	MRO 43 - 112A4	68	39	5570	130,00	11,5009
	6,3	6,43	218,0	165,0	2,5	MRO 33 - 112A4	41,5	12,5	4550	130,00	5,3400
	6,3	6,62	211,0	170,0	1,2	MRO 23 - 112A4	39,6	10,6	3350	130,00	1,7940
	8,0	8,35	168,0	214,0	2,5	MRO 43 - 112A4	68	39	6000	130,00	9,2271
	8,0	8,25	170,0	212,0	2,1	MRO 33 - 112A4	41,5	12,5	5540	130,00	4,2720
	8,0	8,47	165,0	217,0	1,0	MRO 23 - 112A4	39,6	10,6	3620	130,00	1,3930
	9,0	8,72	161,0	224,0	2,9	MRO 43 - 112A4	68	39	5980	130,00	10,1119
	9,0	9,09	154,0	233,0	1,6	MRO 33 - 112A4	41,5	12,5	5710	130,00	4,6310
	9,0	8,97	156,0	230,0	1,0	MRO 23 - 112A4	39,6	10,6	3710	130,00	1,5320
	10,0	10,90	129,0	279,0	4,4	MRO 53 - 112A4	102	73	9470	130,00	34,9392
	10,0	10,40	134,0	267,0	2,3	MRO 43 - 112A4	68	39	3870	130,00	1,1640
	10,0	10,20	138,0	261,0	1,9	MRO 33 - 112A4	41,5	12,5	5630	130,00	3,6570
	10,0	10,40	134,0	267,0	0,9	MRO 23 - 112A4	39,6	10,6	6430	130,00	7,7706
	11,2	11,00	127,0	283,0	2,3	MRO 43 - 112A4	68	39	6520	130,00	8,3593
	11,2	11,70	120,0	299,0	1,3	MRO 33 - 112A4	41,5	12,5	5730	130,00	3,8410
	11,2	11,50	122,0	294,0	0,8	MRO 23 - 112A4	39,6	10,6	4040	130,00	1,2320
	12,5	13,20	106,0	338,0	4,1	MRO 53 - 112A4	102	73	10050	130,00	32,6124
	12,5	13,30	105,0	341,0	2,0	MRO 43 - 112A4	68	39	6950	130,00	6,6865
	12,5	12,70	110,0	326,0	1,7	MRO 33 - 112A4	41,5	12,5	5710	130,00	3,1860
	12,5	13,00	107,0	334,0	0,8	MRO 23 - 112A4	39,6	10,6	3920	130,00	0,9900
	14,0	13,50	104,0	346,0	4,7	MRO 63 - 112A4	150	121	14110	130,00	30,9420
	14,0	13,60	103,0	350,0	3,0	MRO 53 - 112A4	102	73	10340	130,00	29,4533
	14,0	13,90	101,0	356,0	1,4	MRO 43 - 112A4	68	39	7190	130,00	5,5410
	14,0	13,50	104,0	347,0	1,3	MRO 33 - 112A4	41,5	12,5	5520	130,00	2,5250
	16,0	16,20	86,2	417,0	3,5	MRO 53 - 112A4	102	73	10150	130,00	30,7169
	16,0	16,20	86,4	416,0	1,8	MRO 43 - 112A4	68	39	7420	130,00	6,0497
	16,0	16,30	85,9	418,0	1,3	MRO 33 - 112A4	41,5	12,5	5730	130,00	2,8190
	18,0	17,90	78,3	458,0	4,3	MRO 63 - 112A4	150	121	15380	130,00	26,9670
	18,0	18,00	77,7	462,0	2,7	MRO 53 - 112A4	102	73	11300	130,00	27,8473
	18,0	17,60	79,8	450,0	1,4	MRO 43 - 112A4	68	39	7740	130,00	5,0261
	18,0	17,30	80,8	444,0	1,1	MRO 33 - 112A4	41,5	12,5	5680	130,00	2,2830
	20,0	20,40	68,8	522,0	4,8	MRO 63 - 112A4	150	121	14100	130,00	31,0610
20,0	20,50	68,2	527,0	3,0	MRO 53 - 112A4	102	73	8650	130,00	29,1621	

MRO-MRV - 1400 rpm

Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
4	20,0	20,20	69,2	519,0	1,5	MRO 43 - 112A4	68	39	7980	130,00	55,3180
	20,0	19,10	73,3	490,0	0,8	MRO 33 - 112A4	41,5	12,5	5730	130,00	2,3640
	22,4	22,70	61,8	581,0	3,8	MRO 63 - 112A4	150	121	16460	130,00	24,2220
	22,4	22,90	61,3	586,0	2,4	MRO 53 - 112A4	102	73	11180	130,00	26,9452
	22,4	21,90	63,8	563,0	1,2	MRO 43 - 112A4	68	39	8310	130,00	4,6963
	22,4	21,70	64,6	556,0	1,0	MRO 33 - 112A4	41,5	12,5	5740	130,00	2,5320
	25,0	25,50	54,9	653,0	3,5	MRO 63 - 112A4	150	121	16820	130,00	25,3770
	25,0	27,00	51,9	692,0	2,4	MRO 53 - 112A4	102	73	8140	130,00	27,9078
	25,0	26,10	53,6	669,0	1,3	MRO 43 - 112A4	68	39	8690	130,00	5,1123
	25,0	26,70	52,4	686,0	0,8	MRO 33 - 112A4	41,5	12,5	5730	130,00	2,0370
	28,0	27,50	51,0	704,0	3,5	MRO 63 - 112A4	150	121	15700	130,00	22,6360
	28,0	27,70	50,6	710,0	2,2	MRO 53 - 112A4	102	73	9800	130,00	26,4183
	28,0	27,90	50,1	716,0	1,1	MRO 43 - 112A4	68	39	8990	130,00	4,4508
	31,5	31,90	44,0	817,0	3,5	MRO 63 - 112A4	150	121	11540	130,00	25,5240
	31,5	31,70	44,2	813,0	2,1	MRO 53 - 112A4	102	73	8230	130,00	27,3913
	31,5	32,50	43,1	834,0	1,1	MRO 43 - 112A4	68	39	9390	130,00	4,8644
	35,5	33,80	41,4	868,0	3,1	MRO 63 - 112A4	150	121	13920	130,00	21,3370
	35,5	34,10	41,0	875,0	1,9	MRO 53 - 112A4	102	73	8340	130,00	25,9891
	35,5	34,10	41,1	874,0	1,0	MRO 43 - 112A4	68	39	9580	130,00	4,3066
	40,0	42,80	32,7	1097,0	2,7	MRO 63 - 112A4	150	121	11390	130,00	20,2710
	40,0	41,70	33,6	1068,0	1,6	MRO 53 - 112A4	102	73	8510	130,00	25,4059
	45,0	43,00	32,6	1102,0	2,3	MRO 63 - 112A4	150	121	16450	130,00	23,3660
	45,0	43,10	32,5	1106,0	1,5	MRO 53 - 112A4	102	73	8540	130,00	25,6370
	45,0	42,50	32,9	1090,0	0,8	MRO 43 - 112A4	68	39	10020	130,00	4,1893
	50,0	50,90	27,5	1306,0	2,6	MRO 63 - 112A4	150	121	9810	130,00	18,9780
	50,0	51,30	27,3	1317,0	1,3	MRO 53 - 112A4	102	73	8720	130,00	25,2163
	56,0	56,20	24,9	1441,0	2,3	MRO 63 - 112A4	150	121	9970	130,00	19,4030
	56,0	56,70	24,7	1453,0	1,2	MRO 53 - 112A4	102	73	8820	130,00	25,3529
	63,0	64,40	21,8	1651,0	2,0	MRO 63 - 112A4	150	121	10200	130,00	18,5080
	63,0	64,90	21,6	1665,0	1,0	MRO 53 - 112A4	102	73	8950	130,00	25,0608
71,0	73,40	19,1	1883,0	1,7	MRO 63 - 112A4	150	121	11430	130,00	18,8420	
71,0	72,60	19,3	1861,0	0,9	MRO 53 - 112A4	102	73	10800	130,00	25,1812	
80,0	84,60	16,6	2168,0	1,5	MRO 63 - 112A4	150	121	11400	130,00	18,1240	
90,0	90,30	15,5	2315,0	1,5	MRO 63 - 112A4	150	121	11400	130,00	17,8220	
90,0	91,00	15,4	2335,0	0,8	MRO 53 - 112A4	102	73	8400	130,00	24,8176	
100,0	101,00	13,9	2583,0	1,3	MRO 63 - 112A4	150	121	9800	130,00	17,9540	
112,0	119,00	11,8	3041,0	1,1	MRO 63 - 112A4	150	121	9800	130,00	17,6270	
125,0	129,00	10,9	3301,0	0,8	MRO 63 - 112A4	150	121	22060	130,00	17,7600	
140,0	141,00	9,9	3622,0	0,9	MRO 63 - 112A4	150	121	9800	130,00	17,5400	
160,0	155,00	9,0	3973,0	0,8	MRO 63 - 112A4	150	121	9800	130,00	17,5010	
5,5	6,3	6,48	216,0	229,0	4,1	MRO 53 - 132S4	112	73	8020	240,00	46,0154
	6,3	6,48	216,0	229,0	4,1	MRO 53 - 112MC4	108,7	73	8020	160,00	46,0154
	6,3	6,60	212,0	233,0	2,0	MRO 43 - 112MC4	74,7	39	5570	160,00	11,5009
	6,3	6,60	212,0	233,0	2,0	MRO 43 - 132S4	78	39	5570	240,00	11,5009
	6,3	6,43	218,0	227,0	1,9	MRO 33 - 112MC4	48,2	12,5	4550	160,00	5,3400
	6,3	6,62	211,0	233,0	0,9	MRO 23 - 112MC4	46,3	10,6	3350	160,00	1,7940
	8,0	8,57	163,0	302,0	3,6	MRO 53 - 132S4	112	73	8770	240,00	38,9230
	8,0	8,57	163,0	302,0	3,6	MRO 53 - 112MC4	108,7	73	8770	160,00	38,9230
	8,0	8,35	168,0	294,0	1,8	MRO 43 - 112MC4	74,7	39	6000	160,00	9,2271
	8,0	8,35	168,0	294,0	1,8	MRO 43 - 132S4	78	39	6000	240,00	9,2271

Tabelle di selezione - Selection tables - Auswahltable

RO - RV

MRO-MRV - 1400 rpm

Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
5,5	8,0	8,25	170,0	291,0	1,5	MRO 33 - 112MC4	48,2	12,5	5540	160,00	4,2720
	9,0	8,72	161,0	308,0	2,1	MRO 43 - 112MC4	74,7	39	5980	160,00	10,1119
	9,0	8,72	161,0	308,0	2,1	MRO 43 - 132S4	78	39	5980	240,00	10,1119
	9,0	9,09	154,0	321,0	1,2	MRO 33 - 112MC4	48,2	12,5	5710	160,00	4,6310
	10,0	10,90	129,0	383,0	3,2	MRO 53 - 132S4	112	73	9470	240,00	34,9392
	10,0	10,90	129,0	383,0	3,2	MRO 53 - 112MC4	108,7	73	9470	160,00	34,9392
	10,0	10,40	134,0	368,0	1,7	MRO 43 - 112MC4	74,7	39	3870	160,00	11,6400
	10,0	10,40	134,0	368,0	1,7	MRO 43 - 132S4	78	39	3870	240,00	11,6400
	10,0	10,20	138,0	359,0	1,4	MRO 33 - 112MC4	48,2	12,5	5630	160,00	3,6570
	11,2	11,00	127,0	389,0	1,7	MRO 43 - 112MC4	74,7	39	6520	160,00	8,3593
	11,2	11,00	127,0	389,0	1,7	MRO 43 - 132S4	78	39	6520	240,00	8,3593
	11,2	11,70	120,0	411,0	0,9	MRO 33 - 112MC4	48,2	12,5	5730	160,00	3,8410
	12,5	13,10	107,0	461,0	4,7	MRO 63 - 132S4	160	121	13550	240,00	41,5040
	12,5	13,10	107,0	461,0	4,7	MRO 63 - 112MC4	156,7	121	13550	160,00	41,5040
	12,5	13,20	106,0	464,0	3,0	MRO 53 - 132S4	112	73	10050	240,00	32,6124
	12,5	13,20	106,0	464,0	3,0	MRO 53 - 112MC4	108,7	73	10050	160,00	32,6124
	12,5	13,30	105,0	469,0	1,4	MRO 43 - 112MC4	74,7	39	6950	160,00	6,6865
	12,5	13,30	105,0	469,0	1,4	MRO 43 - 132S4	78	39	6950	240,00	6,6865
	12,5	12,70	110,0	449,0	1,2	MRO 33 - 112MC4	48,2	12,5	5710	160,00	3,1860
	14,0	13,50	104,0	476,0	3,4	MRO 63 - 132S4	160	121	14110	240,00	30,9420
	14,0	13,50	104,0	476,0	3,4	MRO 63 - 112MC4	156,7	121	14110	160,00	30,9420
	14,0	13,60	103,0	481,0	2,2	MRO 53 - 132S4	112	73	10340	240,00	29,4533
	14,0	13,60	103,0	481,0	2,2	MRO 53 - 112MC4	108,7	73	10340	160,00	29,4533
	14,0	13,90	101,0	489,0	1,1	MRO 43 - 112MC4	74,7	39	7190	160,00	5,5410
	14,0	13,90	101,0	489,0	1,1	MRO 43 - 132S4	78	39	7190	240,00	5,5410
	14,0	13,50	104,0	477,0	1,0	MRO 33 - 112MC4	48,2	12,5	5520	160,00	25,2500
	16,0	16,10	87,0	568,0	4,1	MRO 63 - 132S4	160	121	14450	240,00	35,7680
	16,0	16,10	87,0	568,0	4,1	MRO 63 - 112MC4	156,7	121	14450	160,00	35,7680
	16,0	16,20	86,2	573,0	2,6	MRO 53 - 132S4	112	73	10150	240,00	30,7169
	16,0	16,20	86,2	573,0	2,6	MRO 53 - 112MC4	108,7	73	10150	160,00	30,7169
	16,0	16,20	86,4	572,0	1,3	MRO 43 - 112MC4	74,7	39	7420	160,00	6,0497
	16,0	16,20	86,4	572,0	1,3	MRO 43 - 132S4	78	39	7420	240,00	6,0497
	16,0	16,30	85,9	575,0	0,9	MRO 33 - 112MC4	48,2	12,5	5730	160,00	2,8190
	18,0	17,90	78,3	630,0	3,1	MRO 63 - 132S4	160	121	15380	240,00	26,9670
	18,0	17,90	78,3	630,0	3,1	MRO 63 - 112MC4	156,7	121	15380	160,00	26,9670
	18,0	18,00	77,7	635,0	2,0	MRO 53 - 132S4	112	73	11300	240,00	27,8473
	18,0	18,00	77,7	635,0	2,0	MRO 53 - 112MC4	108,7	73	11300	160,00	27,8473
	18,0	17,60	79,8	619,0	1,0	MRO 43 - 112MC4	74,7	39	7740	160,00	5,0261
	18,0	17,60	79,8	619,0	1,0	MRO 43 - 132S4	78	39	7740	240,00	5,0261
	18,0	17,30	80,8	611,0	0,8	MRO 33 - 112MC4	48,2	12,5	5680	160,00	2,2830
20,0	20,40	68,8	718,0	3,5	MRO 63 - 132S4	160	121	14100	240,00	31,0610	
20,0	20,40	68,8	718,0	3,5	MRO 63 - 112MC4	156,7	121	14100	160,00	31,0610	
20,0	20,50	68,2	724,0	2,2	MRO 53 - 132S4	112	73	8650	240,00	29,1621	
20,0	20,50	68,2	724,0	2,2	MRO 53 - 112MC4	108,7	73	8650	160,00	29,1621	
20,0	20,20	69,2	713,0	1,1	MRO 43 - 112MC4	74,7	39	7980	160,00	5,5318	
20,0	20,20	69,2	713,0	1,1	MRO 43 - 132S4	78	39	7980	240,00	5,5318	
22,4	22,70	61,8	799,0	2,8	MRO 63 - 132S4	160	121	16460	240,00	24,2220	
22,4	22,70	61,8	799,0	2,8	MRO 63 - 112MC4	156,7	121	16460	160,00	24,2220	
22,4	22,90	61,3	806,0	1,8	MRO 53 - 132S4	112	73	11180	240,00	26,9452	
22,4	22,90	61,3	806,0	1,8	MRO 53 - 112MC4	108,7	73	11180	160,00	26,9452	



Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

MRO-MRV - 1400 rpm

Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
5,5	22,4	21,90	63,8	774,0	0,9	MRO 43 - 112MC4	74,7	39	8310	160,00	4,6963
	22,4	21,90	63,8	774,0	0,9	MRO 43 - 132S4	78	39	8310	240,00	4,6963
	25,0	25,50	54,9	899,0	2,6	MRO 63 - 132S4	160	121	16820	240,00	25,3770
	25,0	25,50	54,9	899,0	2,6	MRO 63 - 112MC4	156,7	121	16820	160,00	25,3770
	25,0	27,00	51,9	951,0	1,8	MRO 53 - 132S4	112	73	8140	240,00	27,9078
	25,0	27,00	51,9	951,0	1,8	MRO 53 - 112MC4	108,7	73	8140	160,00	27,9078
	25,0	26,10	53,6	920,0	0,9	MRO 43 - 112MC4	74,7	39	8690	160,00	5,1123
	25,0	26,10	53,6	920,0	0,9	MRO 43 - 132S4	78	39	8690	240,00	5,1123
	28,0	27,50	51,0	968,0	2,5	MRO 63 - 132S4	160	121	15700	240,00	22,6360
	28,0	27,50	51,0	968,0	2,5	MRO 63 - 112MC4	156,7	121	15700	160,00	22,6360
	28,0	27,70	50,6	976,0	1,6	MRO 53 - 132S4	112	73	9800	240,00	26,4183
	28,0	27,70	50,6	976,0	1,6	MRO 53 - 112MC4	108,7	73	9800	160,00	26,4183
	28,0	27,90	50,1	985,0	0,8	MRO 43 - 112MC4	74,7	39	8990	160,00	4,4508
	28,0	27,90	50,1	985,0	0,8	MRO 43 - 132S4	78	39	8990	240,00	4,4508
	31,5	31,90	44,0	1123,0	2,5	MRO 63 - 132S4	160	121	11540	240,00	25,5240
	31,5	31,90	44,0	1123,0	2,5	MRO 63 - 112MC4	156,7	121	11540	160,00	25,5240
	31,5	31,70	44,2	1118,0	1,5	MRO 53 - 132S4	112	73	8230	240,00	27,3913
	31,5	31,70	44,2	1118,0	1,5	MRO 53 - 112MC4	108,7	73	8230	160,00	27,3913
	31,5	32,50	43,1	1147,0	0,8	MRO 43 - 112MC4	74,7	39	9390	160,00	4,8644
	31,5	32,50	43,1	1147,0	0,8	MRO 43 - 132S4	78	39	9390	240,00	4,8644
	35,5	33,80	41,4	1193,0	2,3	MRO 63 - 132S4	160	121	13920	240,00	21,3370
	35,5	33,80	41,4	1193,0	2,3	MRO 63 - 112MC4	156,7	121	13920	160,00	21,3370
	35,5	34,10	41,0	1203,0	1,4	MRO 53 - 132S4	112	73	8340	240,00	25,9891
	35,5	34,10	41,0	1203,0	1,4	MRO 53 - 112MC4	108,7	73	8340	160,00	25,9891
	40,0	42,80	32,7	1509,0	2,0	MRO 63 - 132S4	160	121	11390	240,00	20,2710
	40,0	42,80	32,7	1509,0	2,0	MRO 63 - 112MC4	156,7	121	11390	160,00	20,2710
	40,0	41,70	33,6	1469,0	1,2	MRO 53 - 132S4	112	73	8510	240,00	25,4059
	40,0	41,70	33,6	1469,0	1,2	MRO 53 - 112MC4	108,7	73	8510	160,00	25,4059
	45,0	43,00	32,6	1515,0	1,7	MRO 63 - 132S4	160	121	16450	240,00	23,3660
	45,0	43,00	32,6	1515,0	1,7	MRO 63 - 112MC4	156,7	121	16450	160,00	23,3660
	45,0	43,10	32,5	1521,0	1,1	MRO 53 - 132S4	112	73	8540	240,00	25,6370
	45,0	43,10	32,5	1521,0	1,1	MRO 53 - 112MC4	108,7	73	8540	160,00	25,6370
	50,0	50,90	27,5	1795,0	1,9	MRO 63 - 132S4	160	121	9810	240,00	18,9780
	50,0	50,90	27,5	1795,0	1,9	MRO 63 - 112MC4	156,7	121	9810	160,00	18,9780
	50,0	51,30	27,3	1810,0	1,0	MRO 53 - 112MC4	108,7	73	8720	160,00	25,2163
	50,0	51,30	27,3	1810,0	1,0	MRO 53 - 132S4	112	73	8720	240,00	25,2163
	56,0	56,20	24,9	1981,0	1,7	MRO 63 - 132S4	160	121	9970	240,00	19,4030
	56,0	56,20	24,9	1981,0	1,7	MRO 63 - 112MC4	156,7	121	9970	160,00	19,4030
	56,0	56,70	24,7	1998,0	0,9	MRO 53 - 112MC4	108,7	73	8820	160,00	25,3529
	56,0	56,70	24,7	1998,0	0,9	MRO 53 - 132S4	112	73	8820	240,00	25,3529
63,0	64,40	21,8	2270,0	1,5	MRO 63 - 132S4	160	121	10200	240,00	18,5080	
63,0	64,40	21,8	2270,0	1,5	MRO 63 - 112MC4	156,7	121	10200	160,00	18,5080	
63,0	64,90	21,6	2289,0	0,8	MRO 53 - 112MC4	108,7	73	8950	160,00	25,0608	
63,0	64,90	21,6	2289,0	0,8	MRO 53 - 132S4	112	73	8950	240,00	25,0608	
71,0	73,40	19,1	2589,0	1,3	MRO 63 - 132S4	160	121	11430	240,00	18,8420	
71,0	73,40	19,1	2589,0	1,3	MRO 63 - 112MC4	156,7	121	11430	160,00	18,8420	
80,0	84,60	16,6	2982,0	1,1	MRO 63 - 132S4	160	121	11400	240,00	18,1240	
80,0	84,60	16,6	2982,0	1,1	MRO 63 - 112MC4	156,7	121	11400	160,00	18,1240	
90,0	90,30	15,5	3183,0	1,1	MRO 63 - 132S4	160	121	11400	240,00	17,8220	
90,0	90,30	15,5	3183,0	1,1	MRO 63 - 112MC4	156,7	121	11400	160,00	17,8220	

Tabelle di selezione - Selection tables - Auswahltable
RO - RV
MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor


P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
5,5	100,0	101,00	13,9	3551,0	0,9	MRO 63 - 112MC4	156,7	121	9800	160,00	17,9540
	100,0	101,00	13,9	3551,0	0,9	MRO 63 - 132S4	160	121	9800	240,00	17,9540
	112,0	119,00	11,8	4182,0	0,8	MRO 63 - 112MC4	156,7	121	9800	160,00	17,6270
	112,0	119,00	11,8	4182,0	0,8	MRO 63 - 132S4	160	121	9800	240,00	17,6270
7,5	6,3	6,48	216,0	312,0	3,0	MRO 53 - 132M4	121,5	73	8020	330,00	46,0154
	6,3	6,60	212,0	317,0	1,5	MRO 43 - 132M4	87,5	39	5570	330,00	11,5009
	8,0	8,50	165,0	409,0	4,3	MRO 63 - 132M4	169,5	121	11850	330,00	60,6320
	8,0	8,57	163,0	412,0	2,7	MRO 53 - 132M4	121,5	73	8770	330,00	38,9230
	8,0	8,35	168,0	402,0	1,3	MRO 43 - 132M4	87,5	39	6000	330,00	9,2271
	9,0	8,72	161,0	419,0	1,6	MRO 43 - 132M4	87,5	39	5980	330,00	10,1119
	10,0	10,80	130,0	518,0	3,8	MRO 63 - 132M4	169,5	121	12750	330,00	48,5070
	10,0	10,90	129,0	523,0	2,4	MRO 53 - 132M4	121,5	73	9470	330,00	34,9392
	10,0	10,40	134,0	502,0	1,2	MRO 43 - 132M4	87,5	39	3870	330,00	1,1640
	11,2	11,00	127,0	531,0	1,2	MRO 43 - 132M4	87,5	39	6520	330,00	8,3593
	12,5	13,10	107,0	628,0	3,4	MRO 63 - 132M4	169,5	121	13550	330,00	41,5040
	12,5	13,20	106,0	633,0	2,2	MRO 53 - 132M4	121,5	73	10050	330,00	32,6124
	12,5	13,30	105,0	639,0	1,0	MRO 43 - 132M4	87,5	39	6950	330,00	6,6865
	14,0	13,50	104,0	650,0	2,5	MRO 63 - 132M4	169,5	121	14110	330,00	30,9420
	14,0	13,60	103,0	655,0	1,6	MRO 53 - 132M4	121,5	73	10340	330,00	29,4533
	14,0	13,90	101,0	667,0	0,8	MRO 43 - 132M4	87,5	39	7190	330,00	55,4100
	16,0	16,10	87,0	774,0	3,0	MRO 63 - 132M4	169,5	121	14450	330,00	35,7680
	16,0	16,20	86,2	781,0	1,9	MRO 53 - 132M4	121,5	73	10150	330,00	30,7169
	16,0	16,20	86,4	779,0	0,9	MRO 43 - 132M4	87,5	39	7420	330,00	6,0497
	18,0	17,90	78,3	859,0	2,3	MRO 63 - 132M4	169,5	121	15380	330,00	26,9670
	18,0	18,00	77,7	867,0	1,4	MRO 53 - 132M4	121,5	73	11300	330,00	27,8473
	20,0	20,40	68,8	979,0	2,6	MRO 63 - 132M4	169,5	121	14100	330,00	31,0610
	20,0	20,50	68,2	987,0	1,6	MRO 53 - 132M4	121,5	73	8650	330,00	29,1621
	20,0	20,20	69,2	972,0	0,8	MRO 43 - 132M4	87,5	39	7980	330,00	5,5318
	22,4	22,70	61,8	1090,0	2,0	MRO 63 - 132M4	169,5	121	16460	330,00	24,2220
	22,4	22,90	61,3	1099,0	1,3	MRO 53 - 132M4	121,5	73	11180	330,00	26,9452
	25,0	25,50	54,9	1225,0	1,9	MRO 63 - 132M4	169,5	121	16820	330,00	25,3770
	25,0	27,00	51,9	1297,0	1,3	MRO 53 - 132M4	121,5	73	8140	330,00	27,9078
	28,0	27,50	51,0	1320,0	1,9	MRO 63 - 132M4	169,5	121	15700	330,00	22,6360
	28,0	27,70	50,6	1331,0	1,2	MRO 53 - 132M4	121,5	73	9800	330,00	26,4183
	31,5	31,90	44,0	1532,0	1,9	MRO 63 - 132M4	169,5	121	11540	330,00	25,5240
	31,5	31,70	44,2	1524,0	1,1	MRO 53 - 132M4	121,5	73	8230	330,00	27,3913
	35,5	33,80	41,4	1627,0	1,7	MRO 63 - 132M4	169,5	121	13920	330,00	21,3370
	35,5	34,10	41,0	1641,0	1,0	MRO 53 - 132M4	121,5	73	8340	330,00	25,9891
40,0	42,80	32,7	2057,0	1,4	MRO 63 - 132M4	169,5	121	11390	330,00	20,2710	
40,0	41,70	33,6	2003,0	0,8	MRO 53 - 132M4	121,5	73	8510	330,00	25,4059	
45,0	43,00	32,6	2065,0	1,2	MRO 63 - 132M4	169,5	121	16450	330,00	23,3660	
45,0	43,10	32,5	2074,0	0,8	MRO 53 - 132M4	121,5	73	8540	330,00	25,6370	
50,0	50,90	27,5	2448,0	1,4	MRO 63 - 132M4	169,5	121	9810	330,00	18,9780	
56,0	56,20	24,9	2702,0	1,2	MRO 63 - 132M4	169,5	121	9970	330,00	19,4030	
63,0	64,40	21,8	3095,0	1,1	MRO 63 - 132M4	169,5	121	10200	330,00	18,5080	
71,0	73,40	19,1	3530,0	0,9	MRO 63 - 132M4	169,5	121	11430	330,00	18,8420	
80,0	84,60	16,6	4066,0	0,8	MRO 63 - 132M4	169,5	121	11400	330,00	18,1240	
90,0	90,30	15,5	4341,0	0,8	MRO 63 - 132M4	169,5	121	11400	330,00	17,8220	
9,2	6,3	6,43	218,0	379,0	4,4	MRO 63 - 132ML4	177,5	121	10740	340,00	78,1860
	6,3	6,48	216,0	382,0	2,4	MRO 53 - 132ML4	129,5	73	8020	340,00	46,0154

MRO-MRV - 1400 rpm

Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
9,2	6,3	6,60	212,0	389,0	1,2	MRO 43 - 132ML4	95,5	39	5570	340,00	11,5009
	8,0	8,50	165,0	501,0	3,5	MRO 63 - 132ML4	177,5	121	11850	340,00	60,6320
	8,0	8,57	163,0	506,0	2,2	MRO 53 - 132ML4	129,5	73	8770	340,00	38,9230
	8,0	8,35	168,0	493,0	1,1	MRO 43 - 132ML4	95,5	39	6000	340,00	9,2271
	9,0	8,72	161,0	514,0	1,3	MRO 43 - 132ML4	95,5	39	5980	340,00	10,1119
	10,0	10,80	130,0	636,0	3,1	MRO 63 - 132ML4	177,5	121	12750	340,00	48,5070
	10,0	10,90	129,0	641,0	1,9	MRO 53 - 132ML4	129,5	73	9470	340,00	34,9392
	10,0	10,40	134,0	615,0	1,0	MRO 43 - 132ML4	95,5	39	3870	340,00	11,6400
	11,2	11,00	127,0	651,0	1,0	MRO 43 - 132ML4	95,5	39	6520	340,00	8,3593
	12,5	13,10	107,0	770,0	2,8	MRO 63 - 132ML4	177,5	121	13550	340,00	41,5040
	12,5	13,20	106,0	777,0	1,8	MRO 53 - 132ML4	129,5	73	10050	340,00	32,6124
	12,5	13,30	105,0	784,0	0,9	MRO 43 - 132ML4	95,5	39	6950	340,00	6,6865
	14,0	13,50	104,0	797,0	2,1	MRO 63 - 132ML4	177,5	121	14110	340,00	30,9420
	14,0	13,60	103,0	804,0	1,3	MRO 53 - 132ML4	129,5	73	10340	340,00	29,4533
	16,0	16,10	87,0	950,0	2,5	MRO 63 - 132ML4	177,5	121	14450	340,00	35,7680
	16,0	16,20	86,2	958,0	1,5	MRO 53 - 132ML4	129,5	73	10150	340,00	30,7169
	16,0	16,20	86,4	956,0	0,8	MRO 43 - 132ML4	95,5	39	7420	340,00	6,0497
	18,0	17,90	78,3	1054,0	1,8	MRO 63 - 132ML4	177,5	121	15380	340,00	26,9670
	18,0	18,00	77,7	1063,0	1,2	MRO 53 - 132ML4	129,5	73	11300	340,00	27,8473
	20,0	20,40	68,8	1201,0	2,1	MRO 63 - 132ML4	177,5	121	14100	340,00	31,0610
	20,0	20,50	68,2	1211,0	1,3	MRO 53 - 132ML4	129,5	73	8650	340,00	29,1621
	22,4	22,70	61,8	1337,0	1,7	MRO 63 - 132ML4	177,5	121	16460	340,00	24,2220
	22,4	22,90	61,3	1348,0	1,1	MRO 53 - 132ML4	129,5	73	11180	340,00	26,9452
	25,0	25,50	54,9	1503,0	1,5	MRO 63 - 132ML4	177,5	121	16820	340,00	25,3770
	25,0	27,00	51,9	1591,0	1,0	MRO 53 - 132ML4	129,5	73	8140	340,00	27,9078
	28,0	27,50	51,0	1619,0	1,5	MRO 63 - 132ML4	177,5	121	15700	340,00	22,6360
	28,0	27,70	50,6	1633,0	1,0	MRO 53 - 132ML4	129,5	73	9800	340,00	26,4183
	31,5	31,90	44,0	1879,0	1,5	MRO 63 - 132ML4	177,5	121	11540	340,00	25,5240
	31,5	31,70	44,2	1869,0	0,9	MRO 53 - 132ML4	129,5	73	8230	340,00	27,3913
	35,5	33,80	41,4	1996,0	1,3	MRO 63 - 132ML4	177,5	121	13920	340,00	21,3370
	35,5	34,10	41,0	2013,0	0,8	MRO 53 - 132ML4	129,5	73	8340	340,00	25,9891
	40,0	42,80	32,7	2523,0	1,2	MRO 63 - 132ML4	177,5	121	11390	340,00	20,2710
45,0	43,00	32,6	2534,0	1,0	MRO 63 - 132ML4	177,5	121	16450	340,00	23,3660	
50,0	50,90	27,5	3003,0	1,1	MRO 63 - 132ML4	177,5	121	9810	340,00	18,9780	
56,0	56,20	24,9	3315,0	1,0	MRO 63 - 132ML4	177,5	121	9970	340,00	19,4030	
63,0	64,40	21,8	3796,0	0,9	MRO 63 - 132ML4	177,5	121	10200	340,00	18,5080	
71,0	73,40	19,1	4330,0	0,8	MRO 63 - 132ML4	177,5	121	11430	340,00	18,8420	
11	6,3	6,43	218,0	453,0	3,7	MRO 63 - 160M4	194	121	10740	620,00	78,1860
	6,3	6,43	218,0	453,0	3,7	MRO 63 - 132MC4	185	121	10740	500,00	78,1860
	6,3	6,48	216,0	457,0	2,0	MRO 53 - 160M4	146	73	8020	620,00	46,0154
	6,3	6,48	216,0	457,0	2,0	MRO 53 - 132MC4	137	73	8020	500,00	46,0154
	6,3	6,60	212,0	465,0	1,0	MRO 43 - 132MC4	103	39	5570	500,00	11,5009
	8,0	8,50	165,0	599,0	2,9	MRO 63 - 160M4	194	121	11850	620,00	60,6320
	8,0	8,50	165,0	599,0	2,9	MRO 63 - 132MC4	185	121	11850	500,00	60,6320
	8,0	8,57	163,0	604,0	1,8	MRO 53 - 160M4	146	73	8770	620,00	38,9230
	8,0	8,57	163,0	604,0	1,8	MRO 53 - 132MC4	137	73	8770	500,00	38,9230
	8,0	8,35	168,0	589,0	0,9	MRO 43 - 132MC4	103	39	6000	500,00	9,2271
	9,0	8,72	161,0	615,0	1,1	MRO 43 - 132MC4	103	39	5980	500,00	10,1119
	10,0	10,80	130,0	760,0	2,6	MRO 63 - 160M4	194	121	12750	620,00	48,5070
	10,0	10,80	130,0	760,0	2,6	MRO 63 - 132MC4	185	121	12750	500,00	48,5070

Tabelle di selezione - Selection tables - Auswahltablelle
RO - RV
MRO-MRV - 1400 rpm

Motorriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
11	10,0	10,90	129,0	767,0	1,6	MRO 53 - 160M4	146	73	9470	620,00	34,9392
	10,0	10,90	129,0	767,0	1,6	MRO 53 - 132MC4	137	73	9470	500,00	34,9392
	10,0	10,40	134,0	736,0	0,8	MRO 43 - 132MC4	103	39	3870	500,00	1,1640
	11,2	11,00	127,0	779,0	0,8	MRO 43 - 132MC4	103	39	6520	500,00	8,3593
	12,5	13,10	107,0	921,0	2,3	MRO 63 - 160M4	194	121	13550	620,00	41,5040
	12,5	13,10	107,0	921,0	2,3	MRO 63 - 132MC4	185	121	13550	500,00	41,5040
	12,5	13,20	106,0	929,0	1,5	MRO 53 - 160M4	146	73	10050	620,00	32,6124
	12,5	13,20	106,0	929,0	1,5	MRO 53 - 132MC4	137	73	10050	500,00	32,6124
	14,0	13,50	104,0	953,0	1,7	MRO 63 - 160M4	194	121	14110	620,00	30,9420
	14,0	13,50	104,0	953,0	1,7	MRO 63 - 132MC4	185	121	14110	500,00	30,9420
	14,0	13,60	103,0	961,0	1,1	MRO 53 - 160M4	146	73	10340	620,00	29,4533
	14,0	13,60	103,0	961,0	1,1	MRO 53 - 132MC4	137	73	10340	500,00	29,4533
	16,0	16,10	87,0	1136,0	2,1	MRO 63 - 160M4	194	121	14450	620,00	35,7680
	16,0	16,10	87,0	1136,0	2,1	MRO 63 - 132MC4	185	121	14450	500,00	35,7680
	16,0	16,20	86,2	1145,0	1,3	MRO 53 - 160M4	146	73	10150	620,00	30,7169
	16,0	16,20	86,2	1145,0	1,3	MRO 53 - 132MC4	137	73	10150	500,00	30,7169
	18,0	17,90	78,3	1260,0	1,5	MRO 63 - 160M4	194	121	15380	620,00	26,9670
	18,0	17,90	78,3	1260,0	1,5	MRO 63 - 132MC4	185	121	15380	500,00	26,9670
	18,0	18,00	77,7	1271,0	1,0	MRO 53 - 160M4	146	73	11300	620,00	27,8473
	18,0	18,00	77,7	1271,0	1,0	MRO 53 - 132MC4	137	73	11300	500,00	27,8473
	20,0	20,40	68,8	1436,0	1,8	MRO 63 - 160M4	194	121	14100	620,00	31,0610
	20,0	20,40	68,8	1436,0	1,8	MRO 63 - 132MC4	185	121	14100	500,00	31,0610
	20,0	20,50	68,2	1448,0	1,1	MRO 53 - 160M4	146	73	8650	620,00	29,1621
	20,0	20,50	68,2	1448,0	1,1	MRO 53 - 132MC4	137	73	8650	500,00	29,1621
	22,4	22,70	61,8	1598,0	1,4	MRO 63 - 160M4	194	121	16460	620,00	24,2220
	22,4	22,70	61,8	1598,0	1,4	MRO 63 - 132MC4	185	121	16460	500,00	24,2220
	22,4	22,90	61,3	1612,0	0,9	MRO 53 - 132MC4	137	73	11180	500,00	26,9452
	22,4	22,90	61,3	1612,0	0,9	MRO 53 - 160M4	146	73	11180	620,00	26,9452
	25,0	25,50	54,9	1797,0	1,3	MRO 63 - 160M4	194	121	16820	620,00	25,3770
	25,0	25,50	54,9	1797,0	1,3	MRO 63 - 132MC4	185	121	16820	500,00	25,3770
	25,0	27,00	51,9	1902,0	0,9	MRO 53 - 132MC4	137	73	8140	500,00	27,9078
	25,0	27,00	51,9	1902,0	0,9	MRO 53 - 160M4	146	73	8140	620,00	27,9078
	28,0	27,50	51,0	1936,0	1,3	MRO 63 - 160M4	194	121	15700	620,00	22,6360
	28,0	27,50	51,0	1936,0	1,3	MRO 63 - 132MC4	185	121	15700	500,00	22,6360
	28,0	27,70	50,6	1952,0	0,8	MRO 53 - 132MC4	137	73	9800	500,00	26,4183
	28,0	27,70	50,6	1952,0	0,8	MRO 53 - 160M4	146	73	9800	620,00	26,4183
	31,5	31,90	44,0	2246,0	1,3	MRO 63 - 160M4	194	121	11540	620,00	25,5240
	31,5	31,90	44,0	2246,0	1,3	MRO 63 - 132MC4	185	121	11540	500,00	25,5240
	31,5	31,70	44,2	2235,0	0,8	MRO 53 - 132MC4	137	73	8230	500,00	27,3913
	31,5	31,70	44,2	2235,0	0,8	MRO 53 - 160M4	146	73	8230	620,00	27,3913
	35,5	33,80	41,4	2386,0	1,1	MRO 63 - 160M4	194	121	13920	620,00	21,3370
	35,5	33,80	41,4	2386,0	1,1	MRO 63 - 132MC4	185	121	13920	500,00	21,3370
	40,0	42,80	32,7	3017,0	1,0	MRO 63 - 132MC4	185	121	11390	500,00	20,2710
	40,0	42,80	32,7	3017,0	1,0	MRO 63 - 160M4	194	121	11390	620,00	20,2710
	45,0	43,00	32,6	3029,0	0,8	MRO 63 - 132MC4	185	121	16450	500,00	23,3660
	45,0	43,00	32,6	3029,0	0,8	MRO 63 - 160M4	194	121	16450	620,00	23,3660
	50,0	50,90	27,5	3591,0	0,9	MRO 63 - 132MC4	185	121	9810	500,00	18,9780
	50,0	50,90	27,5	3591,0	0,9	MRO 63 - 160M4	194	121	9810	620,00	18,9780
	56,0	56,20	24,9	3963,0	0,8	MRO 63 - 132MC4	185	121	9970	500,00	19,4030
	56,0	56,20	24,9	3963,0	0,8	MRO 63 - 160M4	194	121	9970	620,00	19,4030



Tabelle di selezione - Selection tables - Auswahltable

RO - RV

MRO-MRV - 1400 rpm
 Motoriduttore - Geared motor - Getriebemotor



P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
15	6,3	6,43	218,0	618,0	2,7	MRO 63 - 160L4	221	121	10740	740,00	78,1860
	6,3	6,48	216,0	623,0	1,5	MRO 53 - 160L4	173	73	8020	740,00	46,0154
	8,0	8,50	165,0	817,0	2,1	MRO 63 - 160L4	221	121	11850	740,00	60,6320
	8,0	8,57	163,0	824,0	1,3	MRO 53 - 160L4	173	73	8770	740,00	38,9230
	10,0	10,80	130,0	1037,0	1,9	MRO 63 - 160L4	221	121	12750	740,00	48,5070
	10,0	10,90	129,0	1045,0	1,2	MRO 53 - 160L4	173	73	9470	740,00	34,9392
	12,5	13,10	107,0	1256,0	1,7	MRO 63 - 160L4	221	121	13550	740,00	41,5040
	12,5	13,20	106,0	1267,0	1,1	MRO 53 - 160L4	173	73	10050	740,00	32,6124
	14,0	13,50	104,0	1299,0	1,3	MRO 63 - 160L4	221	121	14110	740,00	30,9420
	14,0	13,60	103,0	1311,0	0,8	MRO 53 - 160L4	173	73	10340	740,00	29,4533
	16,0	16,10	87,0	1548,0	1,5	MRO 63 - 160L4	221	121	14450	740,00	35,7680
	16,0	16,20	86,2	1562,0	0,9	MRO 53 - 160L4	173	73	10150	740,00	30,7169
	18,0	17,90	78,3	1719,0	1,1	MRO 63 - 160L4	221	121	15380	740,00	26,9670
	20,0	20,40	68,8	1958,0	1,3	MRO 63 - 160L4	221	121	14100	740,00	31,0610
	20,0	20,50	68,2	1974,0	0,8	MRO 53 - 160L4	173	73	8650	740,00	29,1621
	22,4	22,70	61,8	2179,0	1,0	MRO 63 - 160L4	221	121	16460	740,00	24,2220
	25,0	25,50	54,9	2451,0	0,9	MRO 63 - 160L4	221	121	16820	740,00	25,3770
	28,0	27,50	51,0	2640,0	0,9	MRO 63 - 160L4	221	121	15700	740,00	22,6360
	31,5	31,90	44,0	3063,0	0,9	MRO 63 - 160L4	221	121	11540	740,00	25,5240
	35,5	33,80	41,4	3254,0	0,8	MRO 63 - 160L4	221	121	13920	740,00	21,3370
18,5	6,3	6,43	218,0	763,0	2,2	MRO 63 - 180M4	239	121	10740	1300,00	78,1860
	6,3	6,43	218,0	763,0	2,2	MRO 63 - 160MC4	218,5	121	10740	800,00	78,1860
	6,3	6,48	216,0	769,0	1,2	MRO 53 - 180M4	191	73	8020	1300,00	46,0154
	6,3	6,48	216,0	769,0	1,2	MRO 53 - 160MC4	170,5	73	8020	800,00	46,0154
	8,0	8,50	165,0	1008,0	1,7	MRO 63 - 180M4	239	121	11850	1300,00	60,6320
	8,0	8,50	165,0	1008,0	1,7	MRO 63 - 160MC4	218,5	121	11850	800,00	60,6320
	8,0	8,57	163,0	1017,0	1,1	MRO 53 - 180M4	191	73	8770	1300,00	38,9230
	8,0	8,57	163,0	1017,0	1,1	MRO 53 - 160MC4	170,5	73	8770	800,00	38,9230
	10,0	10,80	130,0	1279,0	1,5	MRO 63 - 180M4	239	121	12750	1300,00	48,5070
	10,0	10,80	130,0	1279,0	1,5	MRO 63 - 160MC4	218,5	121	12750	800,00	48,5070
	10,0	10,90	129,0	1289,0	1,0	MRO 53 - 180M4	191	73	9470	1300,00	34,9392
	10,0	10,90	129,0	1289,0	1,0	MRO 53 - 160MC4	170,5	73	9470	800,00	34,9392
	12,5	13,10	107,0	1549,0	1,4	MRO 63 - 180M4	239	121	13550	1300,00	41,5040
	12,5	13,10	107,0	1549,0	1,4	MRO 63 - 160MC4	218,5	121	13550	800,00	41,5040
	12,5	13,20	106,0	1562,0	0,9	MRO 53 - 180M4	191	73	10050	1300,00	32,6124
	12,5	13,20	106,0	1562,0	0,9	MRO 53 - 160MC4	170,5	73	10050	800,00	32,6124
	14,0	13,50	104,0	1603,0	1,0	MRO 63 - 180M4	239	121	14110	1300,00	30,9420
	14,0	13,50	104,0	1603,0	1,0	MRO 63 - 160MC4	218,5	121	14110	800,00	30,9420
	16,0	16,10	87,0	1910,0	1,2	MRO 63 - 180M4	239	121	14450	1300,00	35,7680
	16,0	16,10	87,0	1910,0	1,2	MRO 63 - 160MC4	218,5	121	14450	800,00	35,7680
	16,0	16,20	86,2	1926,0	0,8	MRO 53 - 160MC4	170,5	73	10150	800,00	30,7169
	16,0	16,20	86,2	1926,0	0,8	MRO 53 - 180M4	191	73	10150	1300,00	30,7169
	18,0	17,90	78,3	2120,0	0,9	MRO 63 - 180M4	239	121	15380	1300,00	26,9670
	18,0	17,90	78,3	2120,0	0,9	MRO 63 - 160MC4	218,5	121	15380	800,00	2,6967
	20,0	20,40	68,8	2415,0	1,0	MRO 63 - 180M4	239	121	14100	1300,00	31,0610
	20,0	20,40	68,8	2415,0	1,0	MRO 63 - 160MC4	218,5	121	14100	800,00	31,0610
	22,4	22,70	61,8	2688,0	0,8	MRO 63 - 180M4	239	121	16460	1300,00	24,2220
	22,4	22,70	61,8	2688,0	0,8	MRO 63 - 160MC4	218,5	121	16460	800,00	24,2220
	25,0	25,50	54,9	3022,0	0,8	MRO 63 - 160MC4	218,5	121	16820	800,00	25,3770
	25,0	25,50	54,9	3022,0	0,8	MRO 63 - 180M4	239	121	16820	1300,00	25,3770

Tabelle di selezione - Selection tables - Auswahltablelle

RO - RV

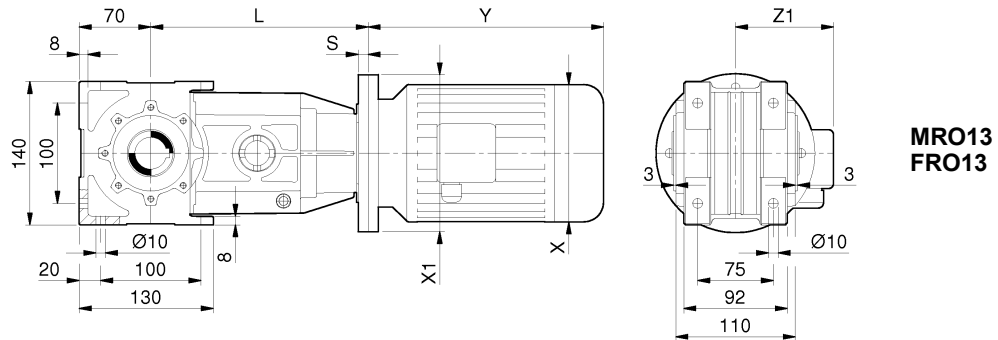
MRO-MRV - 1400 rpm

Motoriduttore - Geared motor - Getriebemotor

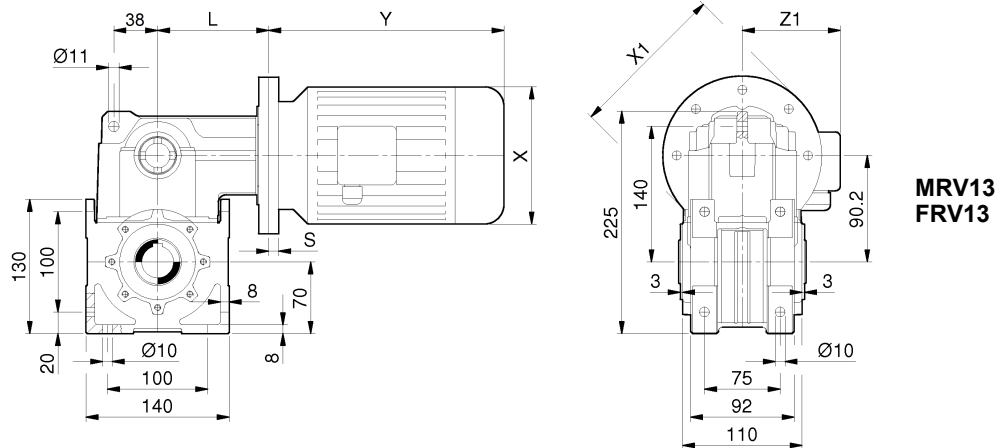


P ₁ [kW]	i _n	i _r	n ₂ [rpm]	M ₂ [Nm]	FS	Tipo - Size - Größe	MRN [kg]	FRN [kg]	F _{r2} [N]	J _m × 10 ⁻⁴	J ₁ × 10 ⁻⁴
18,5	28,0	27,50	51,0	3256,0	0,8	MRO 63 - 160MC4	218,5	121	15700	800,00	22,6360
	28,0	27,50	51,0	3256,0	0,8	MRO 63 - 180M4	239	121	15700	1300,00	22,6360
	31,5	31,90	44,0	3778,0	0,8	MRO 63 - 160MC4	218,5	121	11540	800,00	25,5240
	31,5	31,90	44,0	3778,0	0,8	MRO 63 - 180M4	239	121	11540	1300,00	25,5240
22	6,3	6,43	218,0	907,0	1,8	MRO 63 - 180L4	249	121	10740	1500,00	78,1860
	6,3	6,48	216,0	914,0	1,0	MRO 53 - 180L4	201	73	8020	1500,00	46,0154
	8,0	8,50	165,0	1199,0	1,5	MRO 63 - 180L4	249	121	11850	1500,00	60,6320
	8,0	8,57	163,0	1209,0	0,9	MRO 53 - 180L4	201	73	8770	1500,00	38,9230
	10,0	10,80	130,0	1521,0	1,3	MRO 63 - 180L4	249	121	12750	1500,00	48,5070
	10,0	10,90	129,0	1533,0	0,8	MRO 53 - 180L4	201	73	9470	1500,00	34,9392
	12,5	13,10	107,0	1842,0	1,2	MRO 63 - 180L4	249	121	13550	1500,00	41,5040
	12,5	13,20	106,0	1858,0	0,8	MRO 53 - 180L4	201	73	10050	1500,00	32,6124
	14,0	13,50	104,0	1906,0	0,9	MRO 63 - 180L4	249	121	14110	1500,00	30,9420
	16,0	16,10	87,0	2271,0	1,0	MRO 63 - 180L4	249	121	14450	1500,00	35,7680
	18,0	17,90	78,3	2521,0	0,8	MRO 63 - 180L4	249	121	15380	1500,00	26,9670
	20,0	20,40	68,8	2872,0	0,9	MRO 63 - 180L4	249	121	14100	1500,00	31,0610

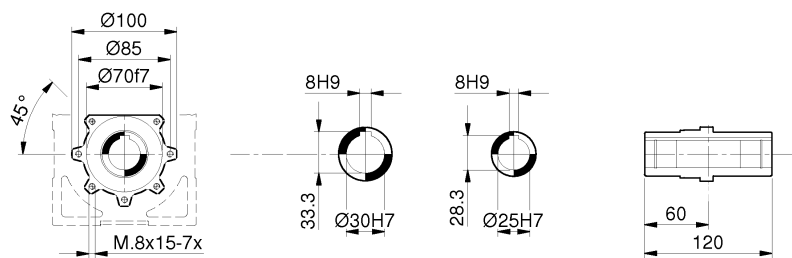
RO13 - RV13



MRO13
FRO13



MRV13
FRV13



AC30
AC25

IEC	56	63	71	80	90 S	90 L	
X / Y / Z1	110/168/108	123/185/110	140/220/121	159/238/138	176/255/149	176/280/149	
X1 (B5) / S	120/13	140/13	160/13.5	200/13.5	---	---	
X1 (B14) / S	---	90/13	105/18.5	120/13.5	140/13.5	140/13.5	
L (RO13)	197	197	197.5 (202.5)	197.5	197.5	197.5	
L (RV13)	107	107	107.5 (112.5)	107.5	107.5	107.5	

Dimensioni e pesi non impegnativi

Not binding dimensions and weights

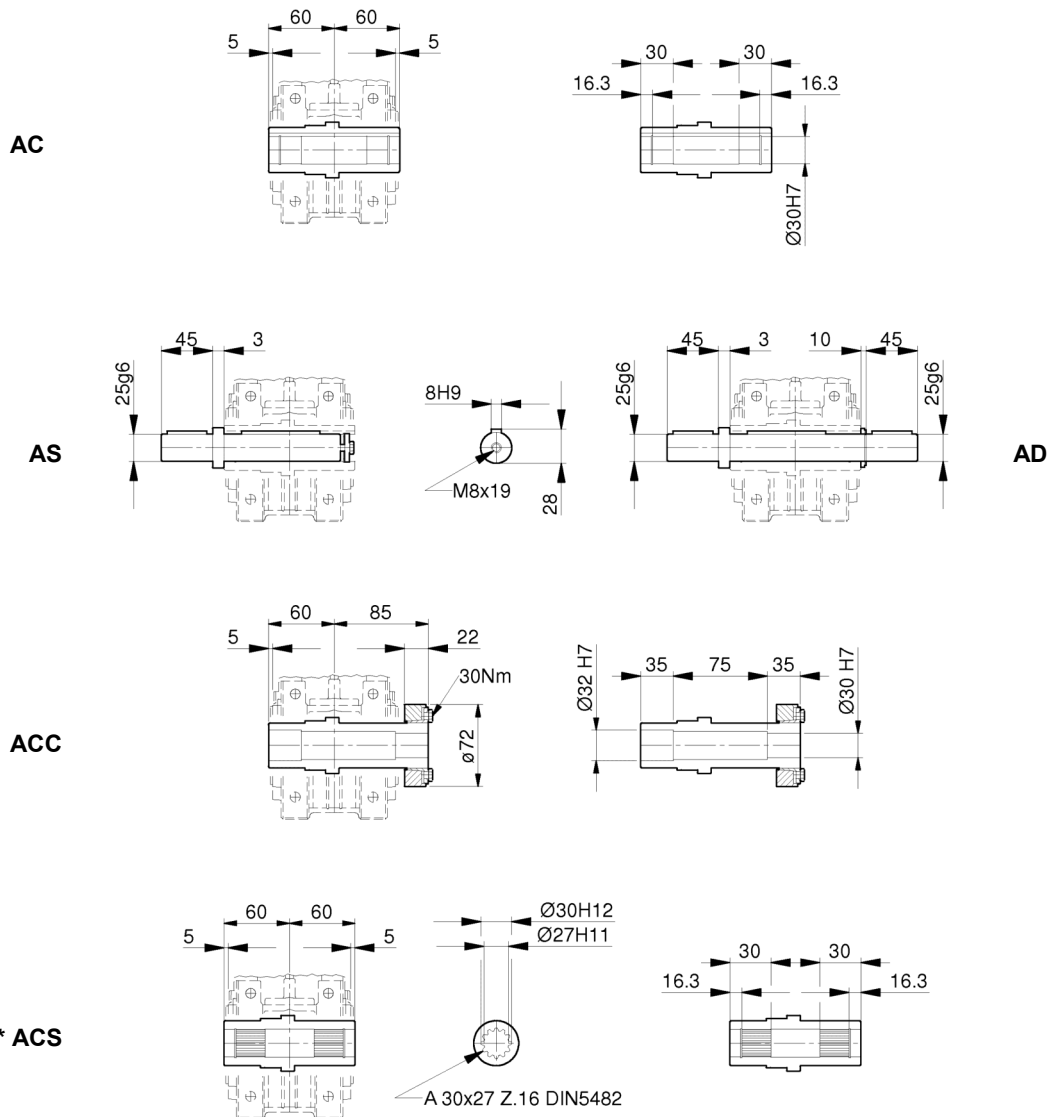
unverbindliche Abmessungen u. Gewichte

Dimensioni - Dimensions - Abmessungen

RO - RV

RO13 - RV13

Alberi uscita
Output shafts
Ausgangswellen



(*) Versione ACS a richiesta
Dimensioni perno macchina: pagine 80-82
Dimensioni e pesi non impegnativi

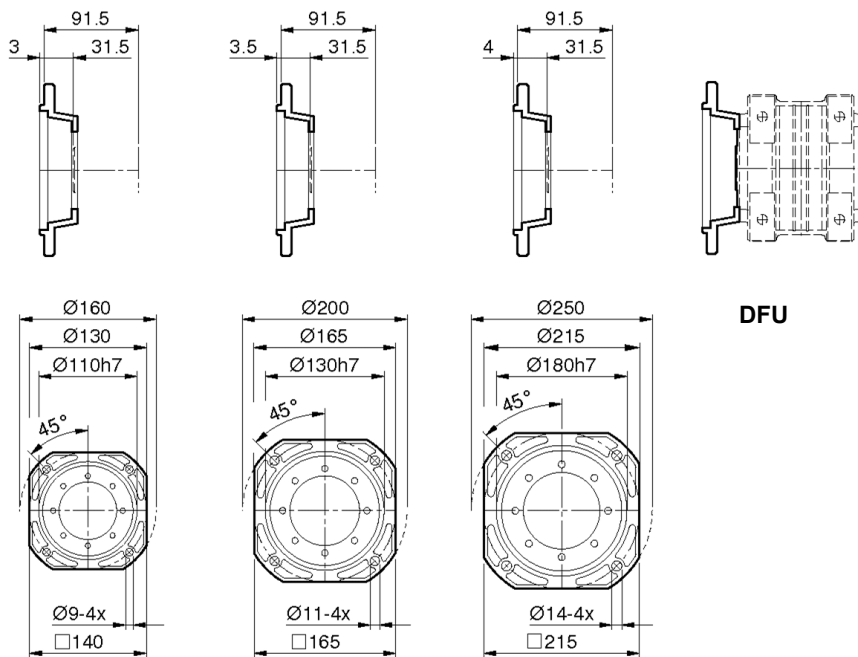
(*) ACS version on demand
Machine shaft dimensions: pages 80-82
Not binding dimensions and weights

(*) ACS-Ausführung: auf Anfrage
Maschinenwelle Abmessungen: Seiten 80-82
unverbindliche Abmessungen u. Gewichte



RO13 - RV13

Flange uscita
Output flanges
Ausgangsflansche

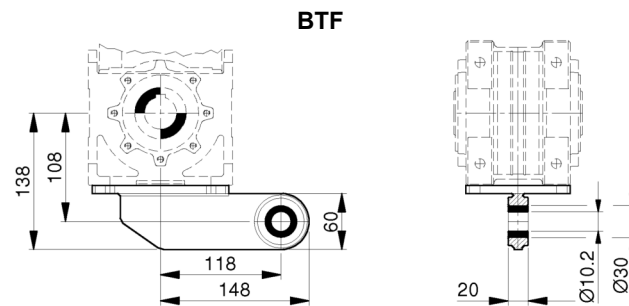
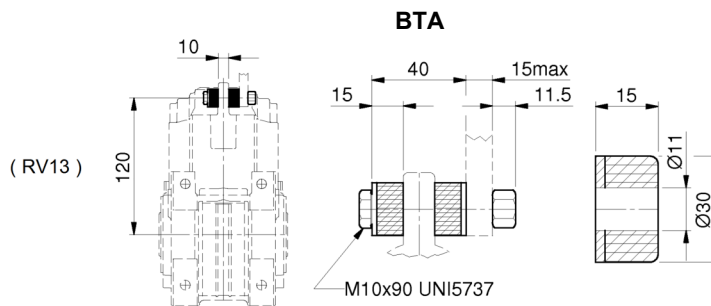
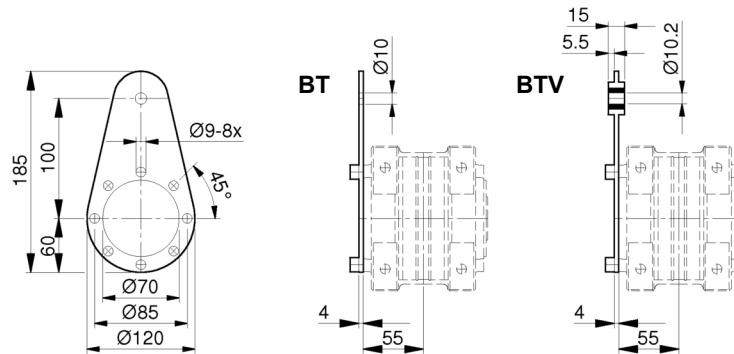


Dimensioni - Dimensions - Abmessungen

RO - RV

RO13 - RV13

Bracci di reazione
Torque arms
Drehmomentstützen

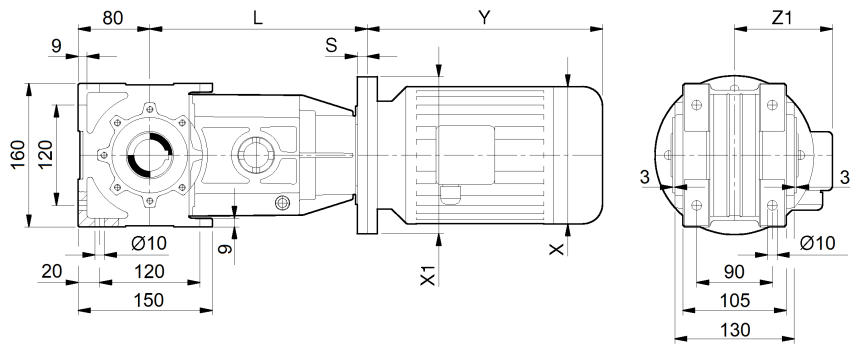


Dimensioni e pesi non impegnativi

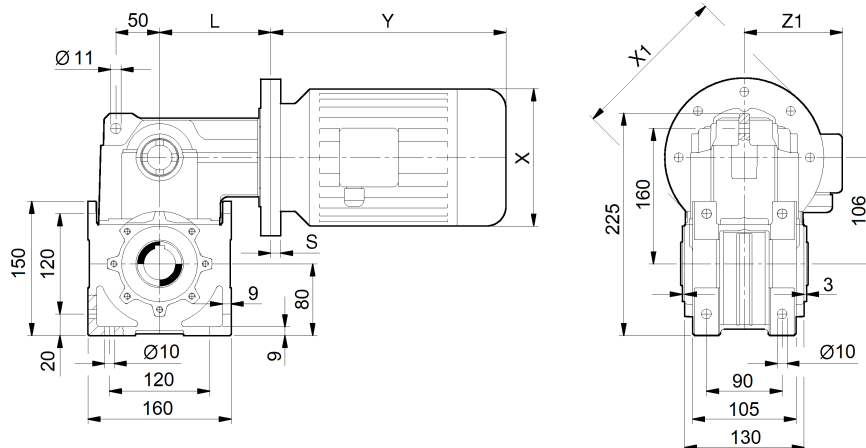
Not binding dimensions and weights

unverbindliche Abmessungen u. Gewichte

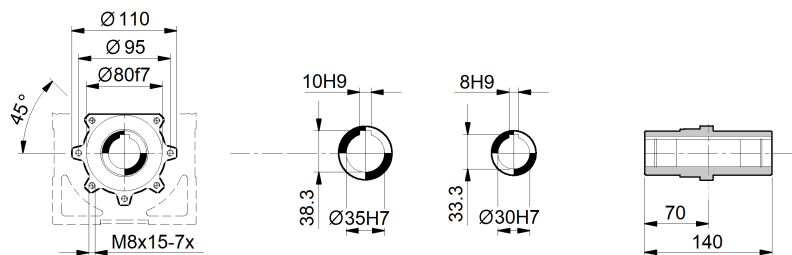
RO23 - RV23



MRO23
FRO23



MRV23
FRV23



AC35
AC30

IEC	56	63	71	80	90 S	90 L	
X / Y / Z1	110/168/108	123/185/110	140/220/121	159/238/138	176/255/149	176/280/149	
X1 (B5) / S	120/13	140/13	160/13.5	200/13.5	---	---	
X1 (B14) / S	---	90/13	105/18.5	120/13.5	140/13.5	140/13.5	
L (RO13)	197	197	197.5 (202.5)	197.5	197.5	197.5	
L (RV13)	107	107	107.5 (112.5)	107.5	107.5	107.5	

Dimensioni e pesi non impegnativi

Not binding dimensions and weights

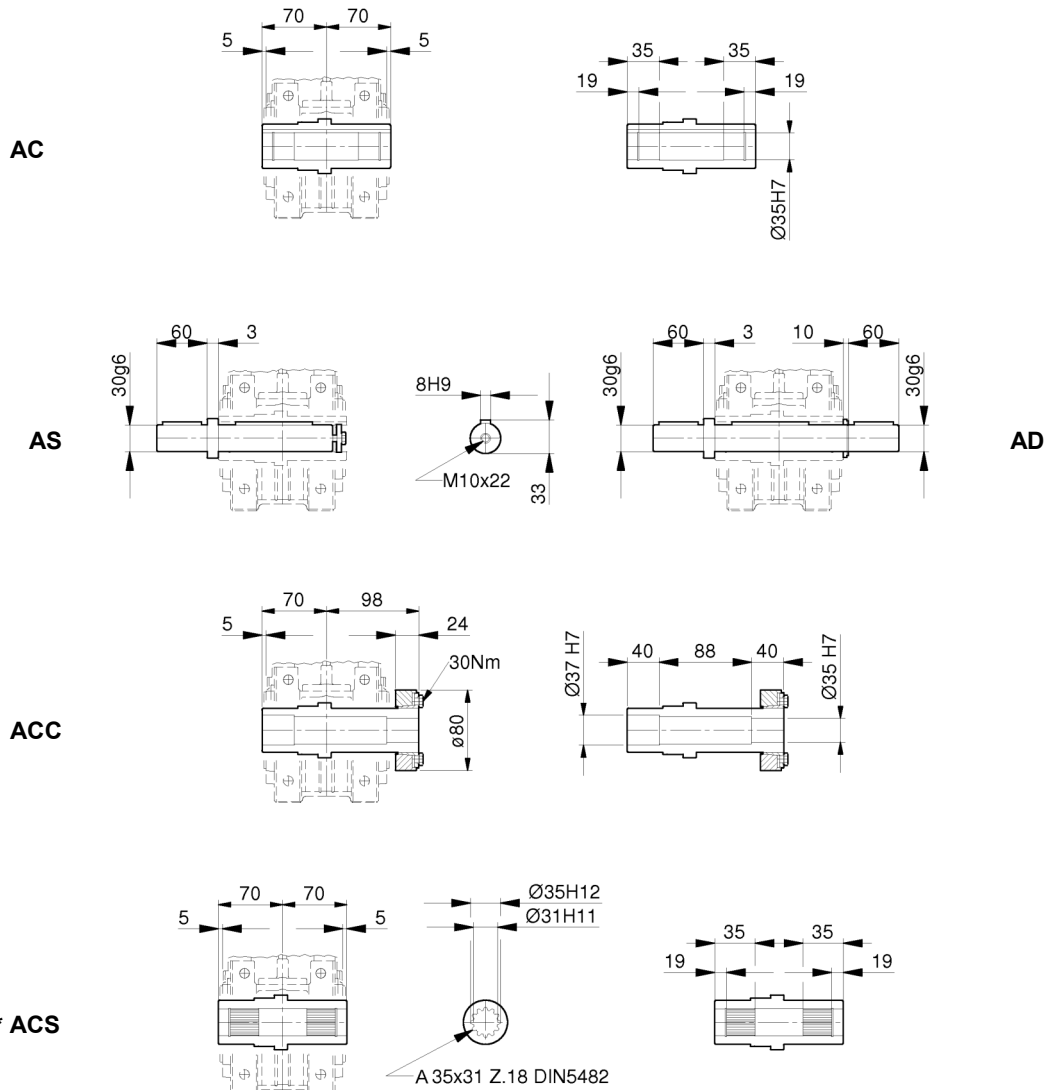
unverbindliche Abmessungen u. Gewichte

Dimensioni - Dimensions - Abmessungen

RO - RV

RO23 - RV23

Alberi uscita
Output shafts
Ausgangswellen



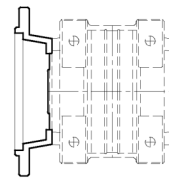
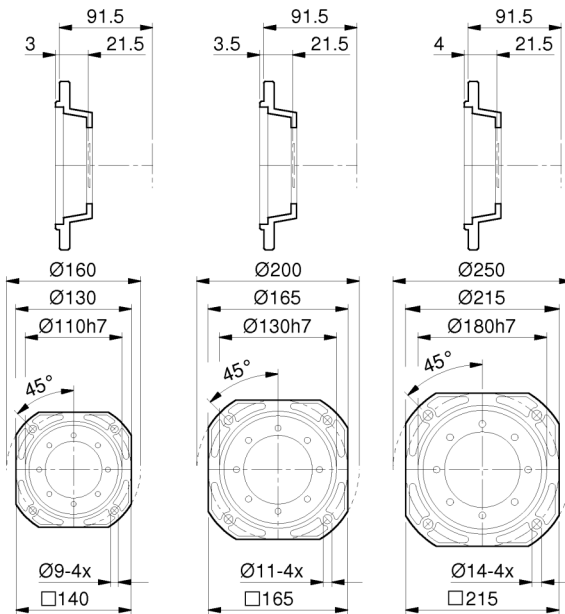
(*) Versione ACS a richiesta
Dimensioni perno macchina: pagine 80-82
Dimensioni e pesi non impegnativi

(*) ACS version on demand
Machine shaft dimensions: pages 80-82
Not binding dimensions and weights

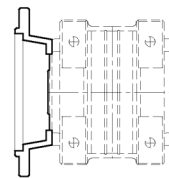
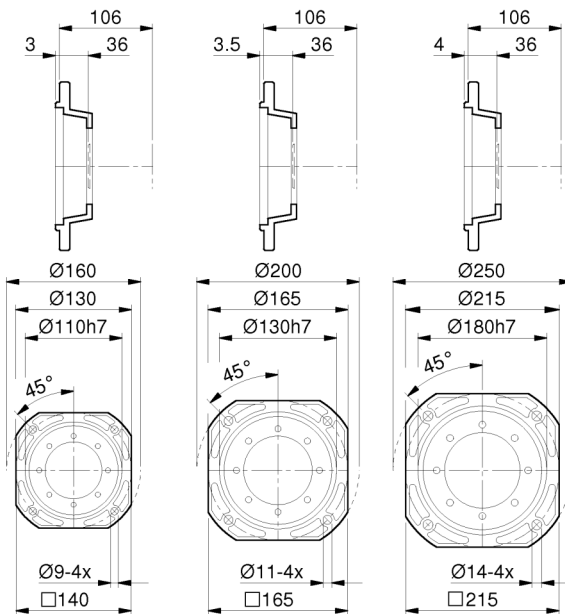
(*) ACS-Ausführung: auf Anfrage
Maschinenwelle Abmessungen: Seiten 80-82
unverbindliche Abmessungen u. Gewichte

RO23 - RV23

Flange uscita
Output flanges
Ausgangsflansche



DFU-A



DFU-F

Dimensioni e pesi non impegnativi

Not binding dimensions and weights

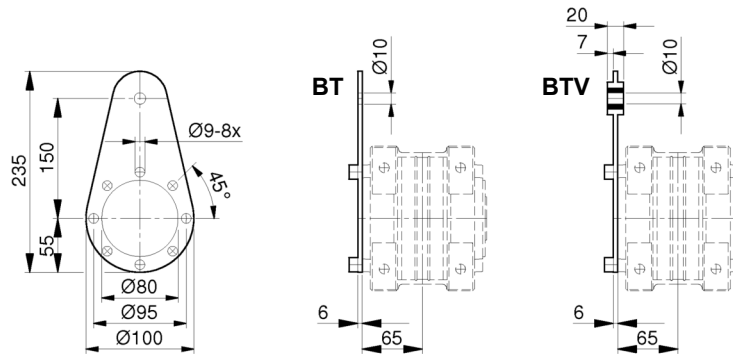
unverbindliche Abmessungen u. Gewichte

Dimensioni - Dimensions - Abmessungen

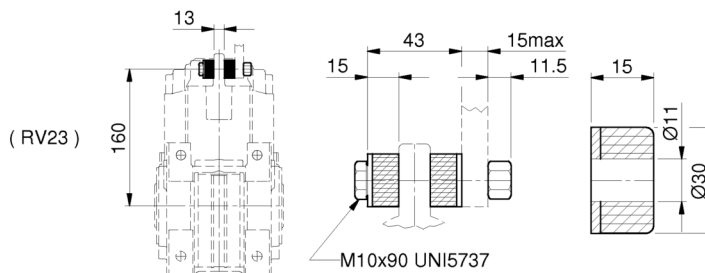
RO - RV

RO23 - RV23

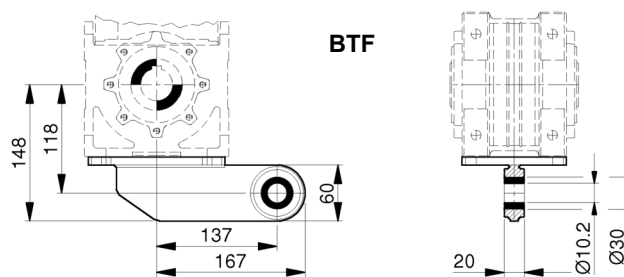
Bracci di reazione
Torque arms
Drehmomentstützen



BTA



BTF

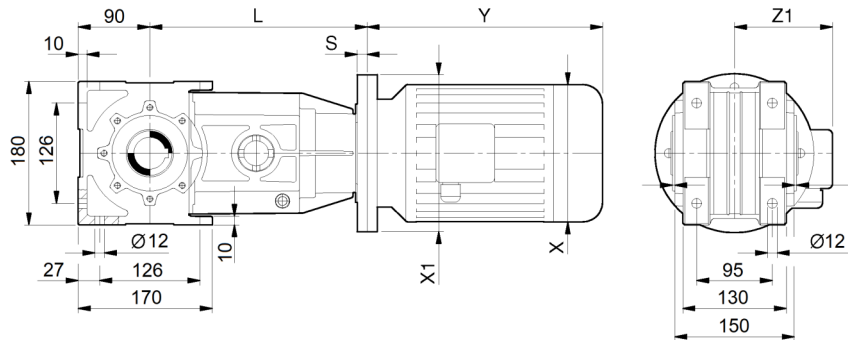


Dimensioni e pesi non impegnativi

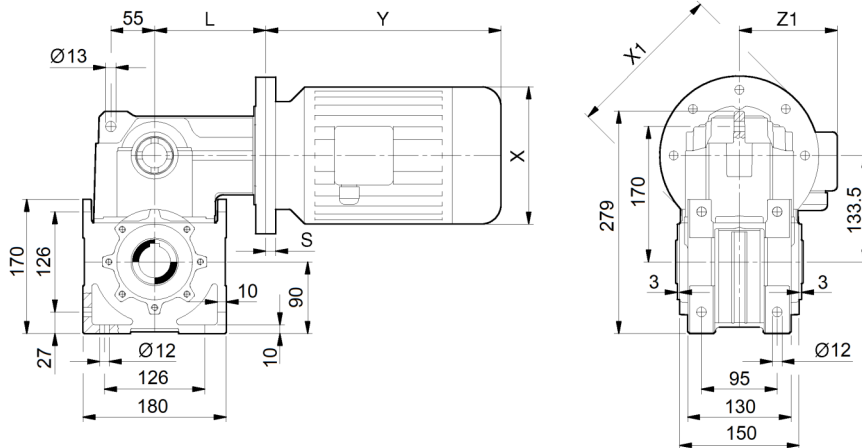
Not binding dimensions and weights

unverbindliche Abmessungen u. Gewichte

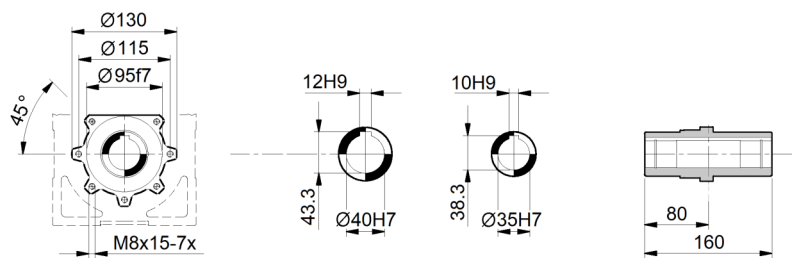
RO33 - RV33



MRO33
FRO33



MRV33
FRV33



AC40
AC35

IEC	71	80	90 S	90 L	100	112	
X / Y / Z1	140/220/121	159/238/138	176/255/149	176/280/149	195/314/160	219/328/172	
X1 (B5) / S	160/15,5	200/15,5	200/18,5	200/18,5	250/16,5	250/16,5	
X1 (B14) / S	---	120/15,5	140/15,5	140/15,5	160/15,5	160/15,5	
L (RO33)	272	272	275 (272)	275 (272)	273 (272)	273 (272)	
L (RV33)	138.5	144.5	138.5 (141.5)	138.5 (141.5)	139.5 (138.5)	139.5 (138.5)	

Dimensioni e pesi non impegnativi

Not binding dimensions and weights

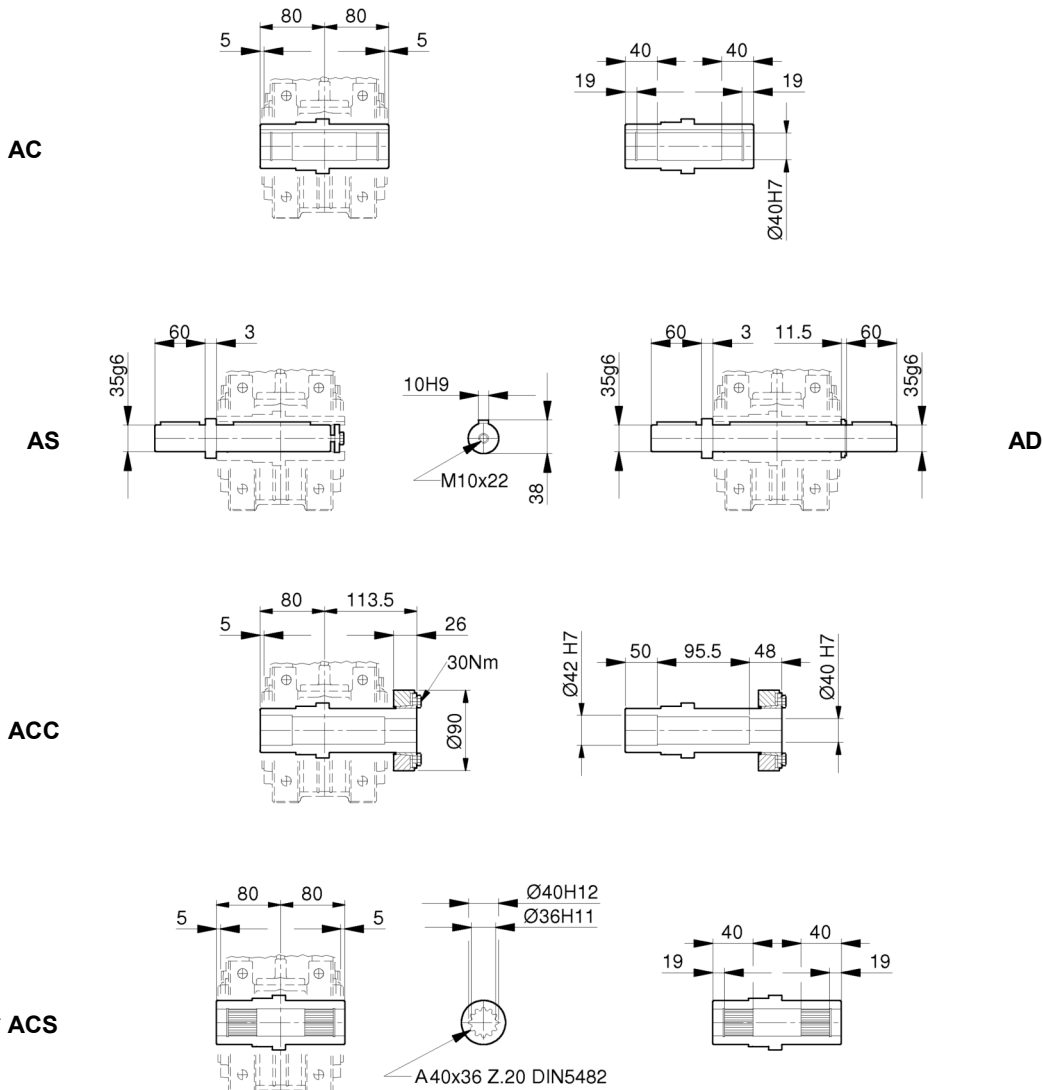
unverbindliche Abmessungen u. Gewichte

Dimensioni - Dimensions - Abmessungen

RO - RV

RO33 - RV33

Alberi uscita
Output shafts
Ausgangswellen



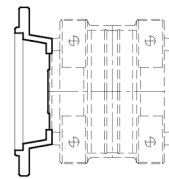
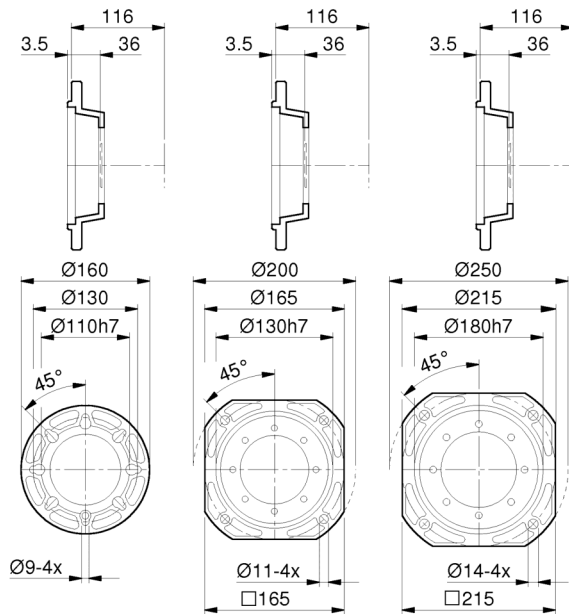
(*) Versione ACS a richiesta
Dimensioni perno macchina: pagine 80-82
Dimensioni e pesi non impegnativi

(*) ACS version on demand
Machine shaft dimensions: pages 80-82
Not binding dimensions and weights

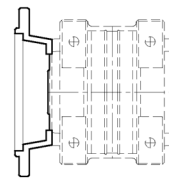
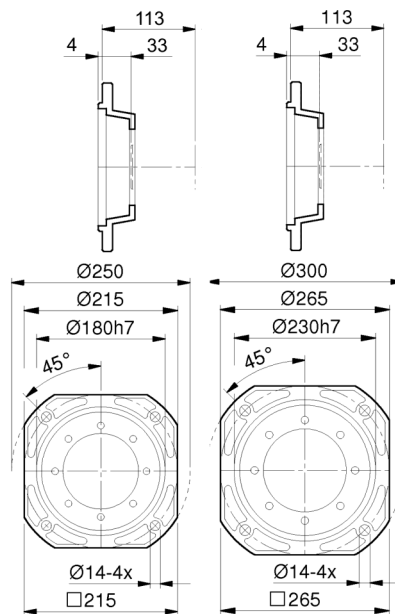
(*) ACS-Ausführung: auf Anfrage
Maschinenwelle Abmessungen: Seiten 80-82
unverbindliche Abmessungen u. Gewichte

RO33 - RV33

Flange uscita
Output flanges
Ausgangsflansche



DFU-A



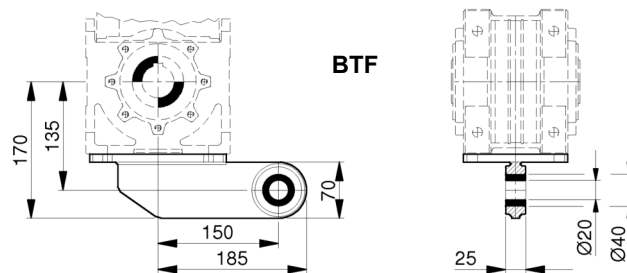
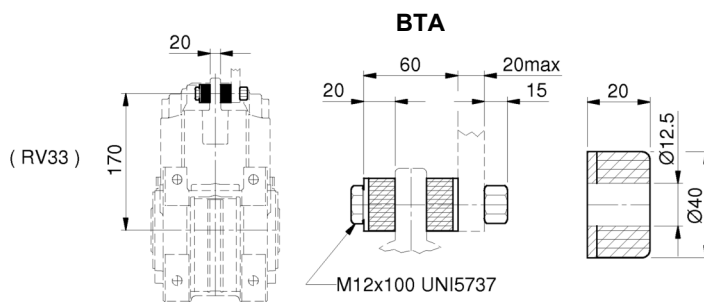
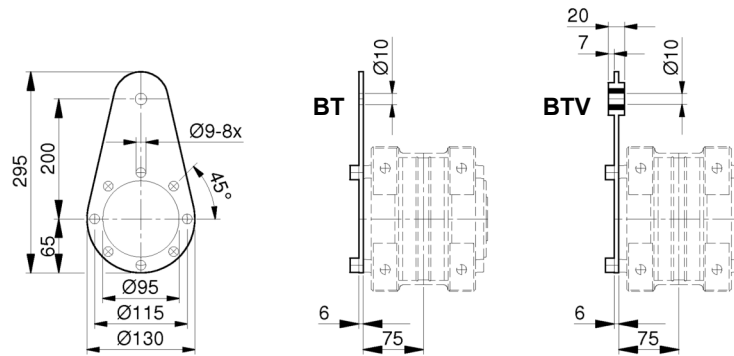
DFU-F

Dimensioni - Dimensions - Abmessungen

RO - RV

RO33 - RV33

Bracci di reazione
Torque arms
Drehmomentstützen



Dimensioni e pesi non impegnativi

Not binding dimensions and weights

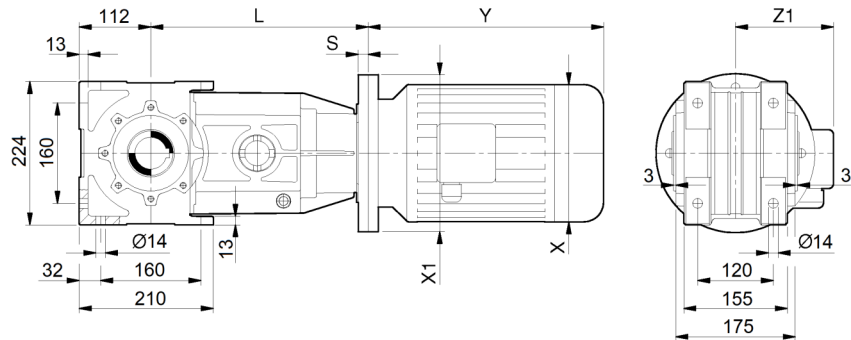
unverbindliche Abmessungen u. Gewichte



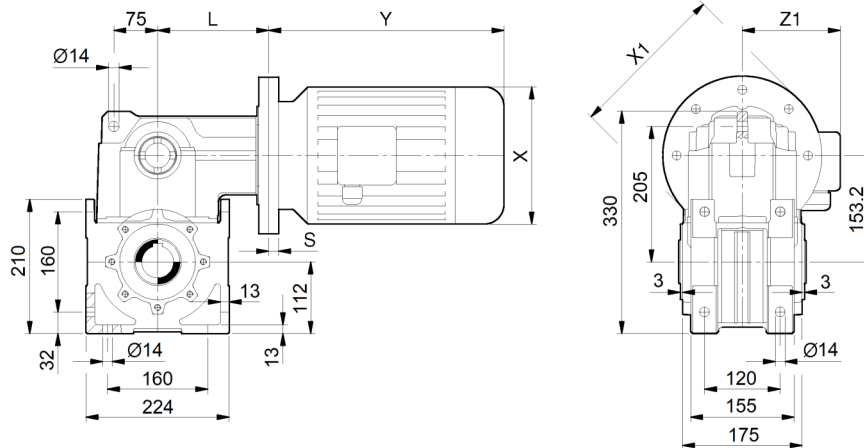
Dimensioni - Dimensions - Abmessungen

RO - RV

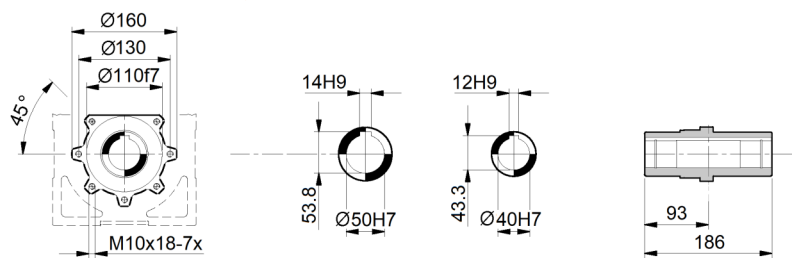
RO43 - RV43



MRO43
FRO43



MRV43
FRV43



AC50
AC40

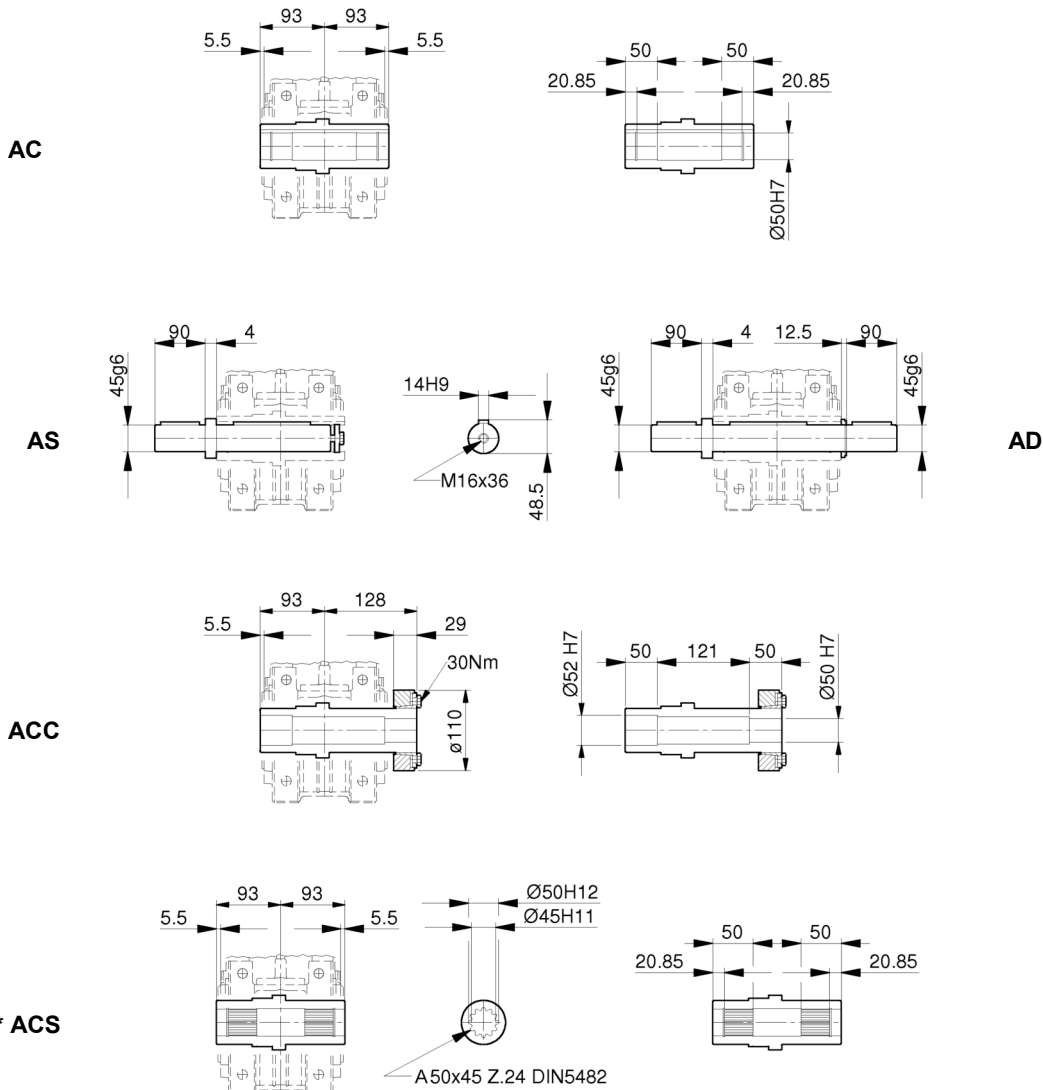
IEC	71	80	90 S	90 L	100	112	
X / Y / Z1	140/220/121	159/238/138	176/255/149	176/280/149	195/314/160	219/328/172	
X1 (B5) / S	160/18	200/18	200/18	200/18	250/18.5	250/18.5	
X1 (B14) / S	---	---	---	---	160/18	160/18	
L (RO43)	308	308	308 (310)	308 (310)	308.5 (308)	308.5 (308)	
L (RV43)	155	155	155 (157)	155 (157)	155.5 (155)	155.5 (155)	

Dimensioni e pesi non impegnativi Not binding dimensions and weights unverbindliche Abmessungen u. Gewichte

Dimensioni - Dimensions - Abmessungen

RO - RV

RO43 - RV43
 Alberi uscita
 Output shafts
 Ausgangswellen



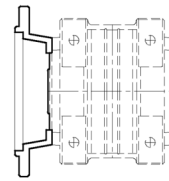
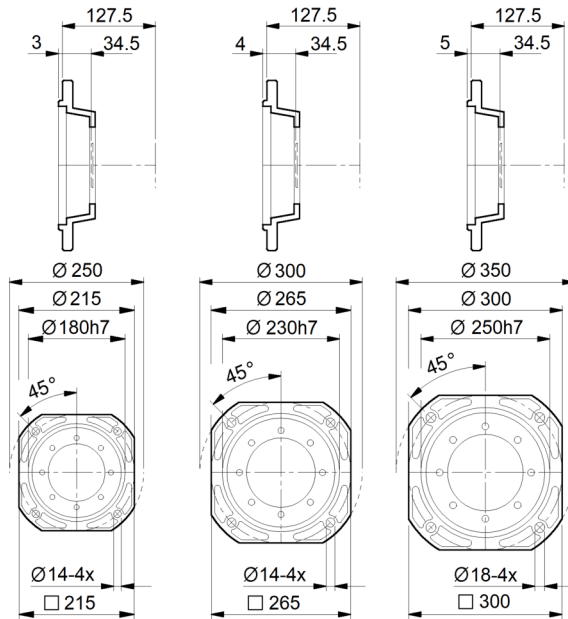
(*) Versione ACS a richiesta
 Dimensioni perno macchina: pagine 80-82
 Dimensioni e pesi non impegnativi

(*) ACS version on demand
 Machine shaft dimensions: pages 80-82
 Not binding dimensions and weights

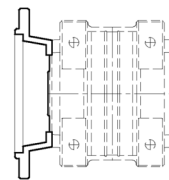
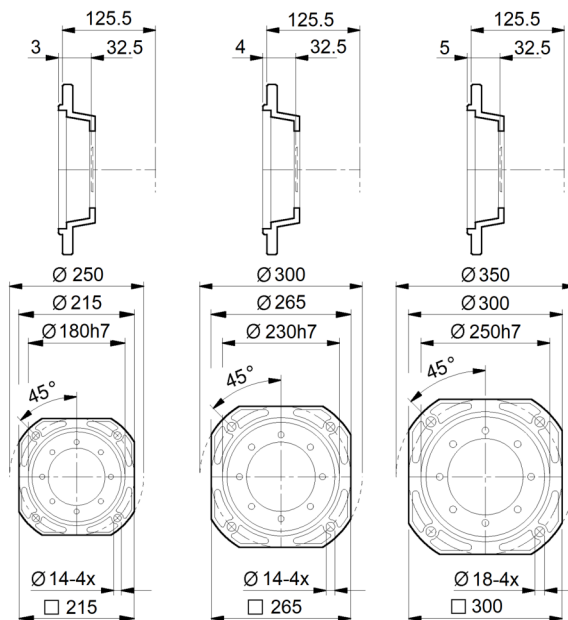
(*) ACS-Ausführung: auf Anfrage
 Maschinenwelle Abmessungen: Seiten 80-82
 unverbindliche Abmessungen u. Gewichte

RO43 - RV43

Flange uscita
Output flanges
Ausgangsflansche



DFU-A



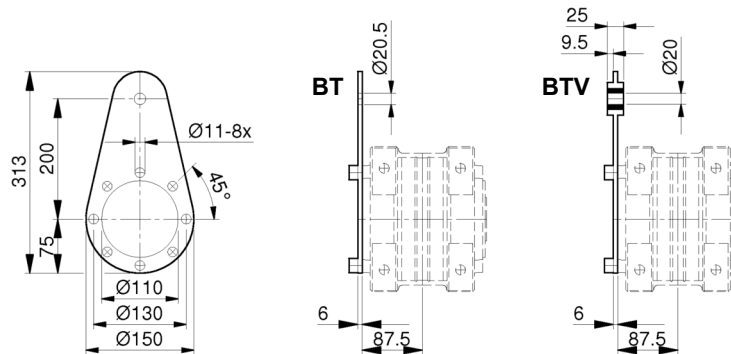
DFU-F

Dimensioni - Dimensions - Abmessungen

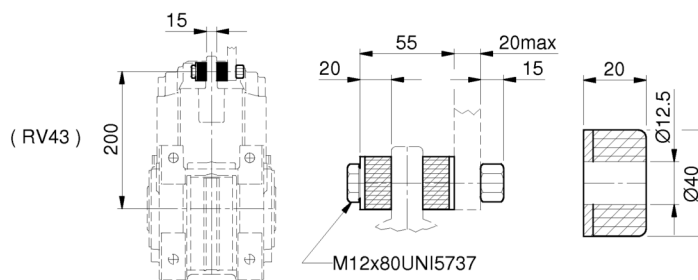
RO - RV

RO43 - RV43

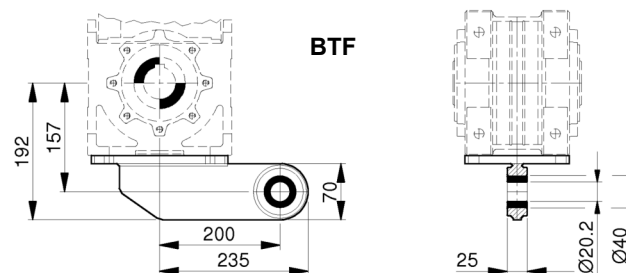
Bracci di reazione
Torque arms
Drehmomentstützen



BTA



BTF

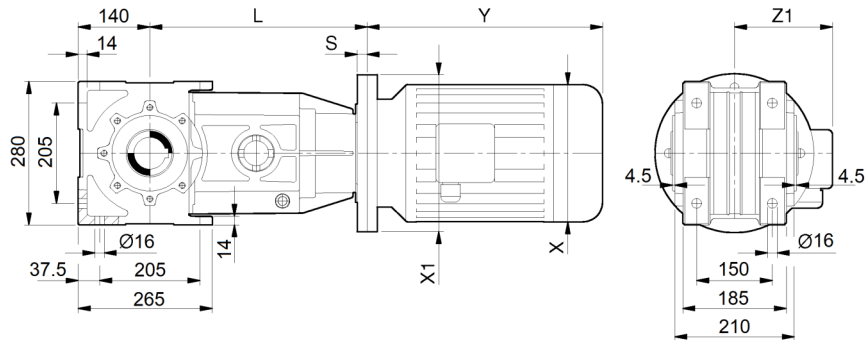


Dimensioni e pesi non impegnativi

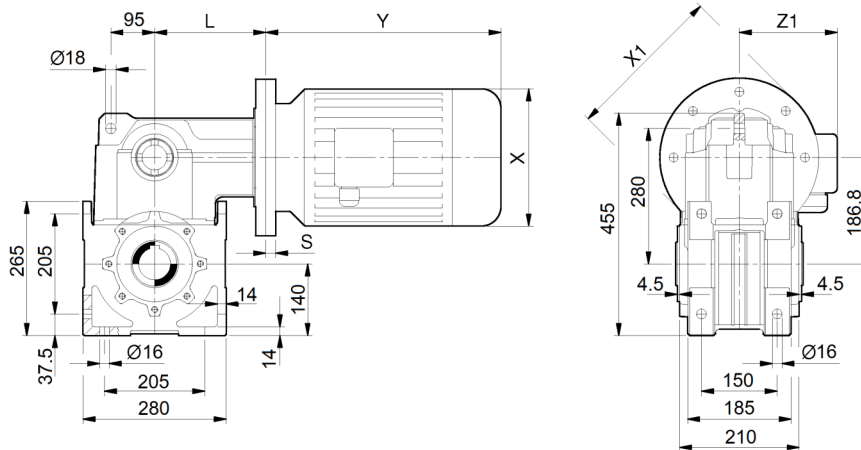
Not binding dimensions and weights

unverbindliche Abmessungen u. Gewichte

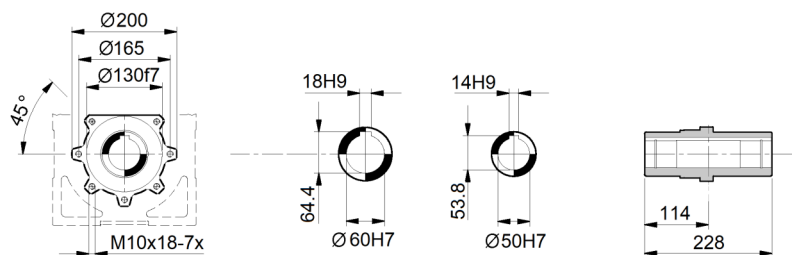
RO53 - RV53



MRO53
FRO53



MRV53
FRV53



AC70
AC60

IEC	80	90 S / L	100	112	132 S / M	160	180
X / Y / Z1	159/238/138	176/255-280/149	195/314/160	219/328/172	258/368-410/192	310/486/235	320/580/245
X1 (B5) / S	200/22	200/22	250/22	250/22	300/22	350/35	350/35
X1 (B14) / S	---	---	---	---	200/22	250/22	300/22
L (RO53)	379	379	379	379	379	392 (379)	392 (379)
L (RV53)	190.5	190.5	190.5	190.5	190.5	203.5 (190.5)	203.5 (190.5)

Dimensioni e pesi non impegnativi

Not binding dimensions and weights

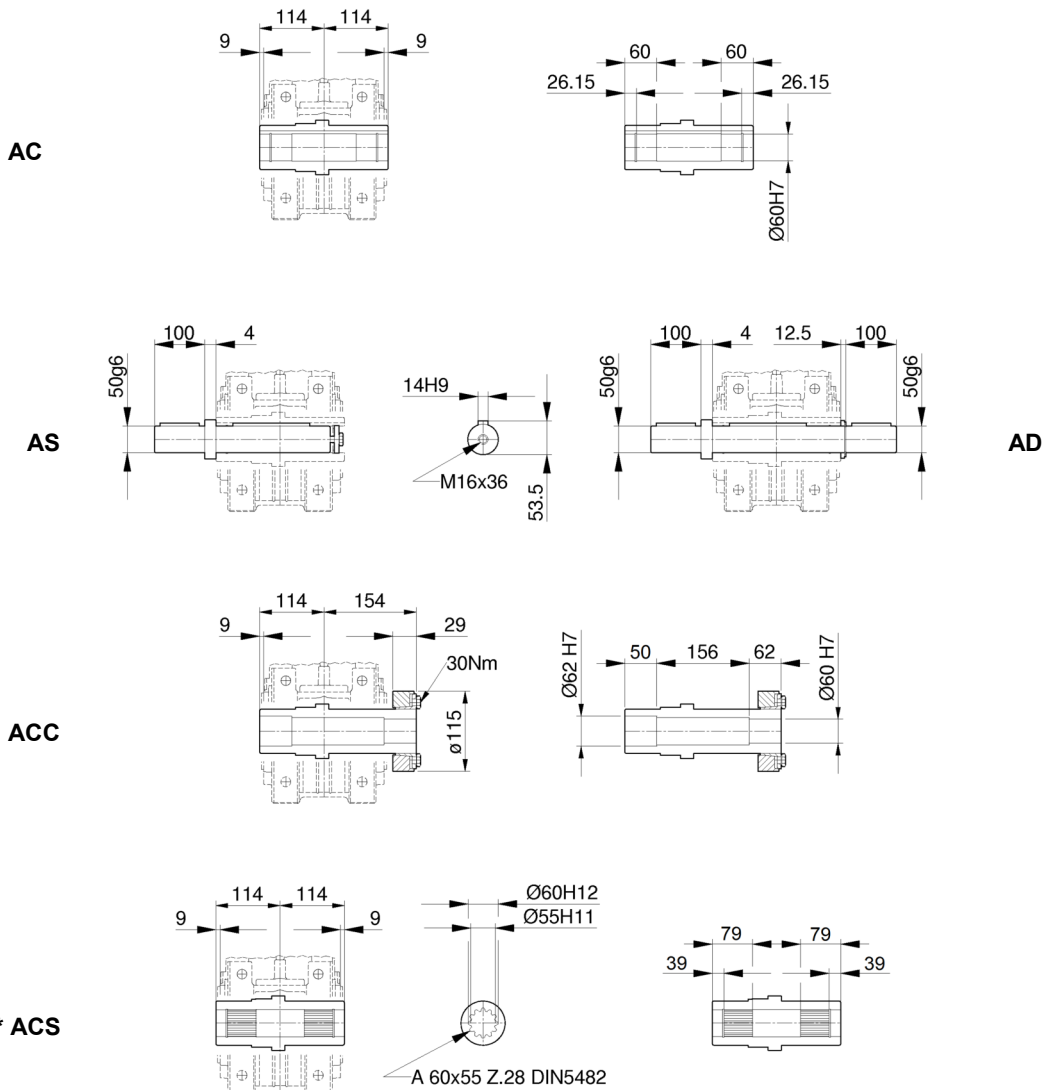
unverbindliche Abmessungen u. Gewichte

Dimensioni - Dimensions - Abmessungen

RO - RV

RO53 - RV53

Alberi uscita
Output shafts
Ausgangswellen



(*) Versione ACS a richiesta
Dimensioni perno macchina: pagine 80-82
Dimensioni e pesi non impegnativi

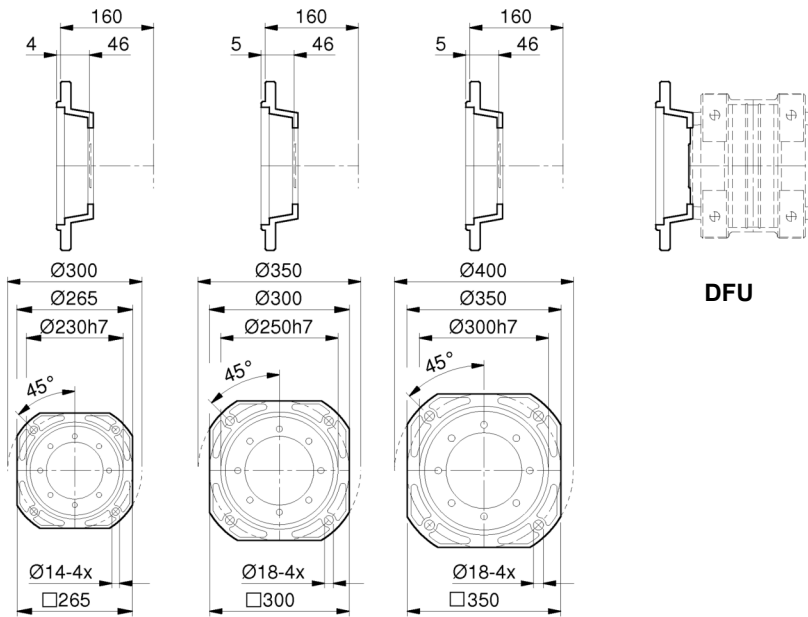
(*) ACS version on demand
Machine shaft dimensions: pages 80-82
Not binding dimensions and weights

(*) ACS-Ausführung: auf Anfrage
Maschinenwelle Abmessungen: Seiten 80-82
unverbindliche Abmessungen u. Gewichte



RO53 - RV53

Flange uscita
Output flanges
Ausgangsflansche

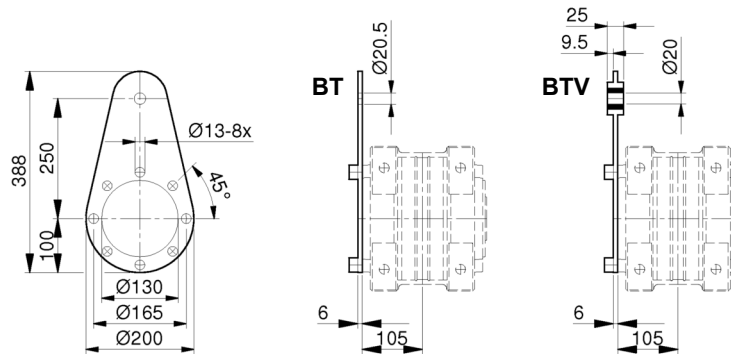


Dimensioni - Dimensions - Abmessungen

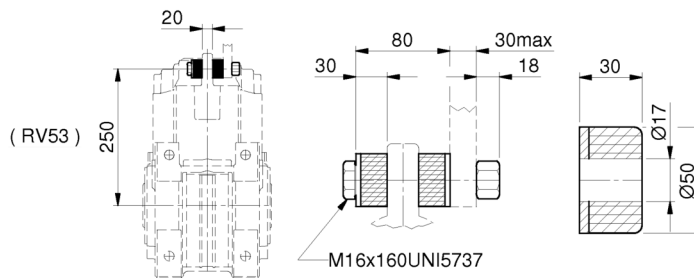
RO - RV

RO53 - RV53

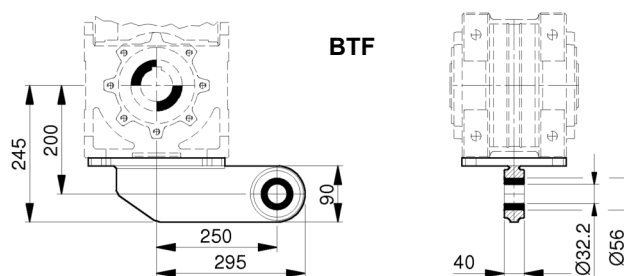
Bracci di reazione
Torque arms
Drehmomentstützen



BTA



BTF



N.B. - Le versioni BT e BTV sono disponibili per $M_2 \leq 1200$ Nm.
Per coppie superiori contattare il Servizio Tecnico Commerciale.

Dimensioni e pesi non impegnativi

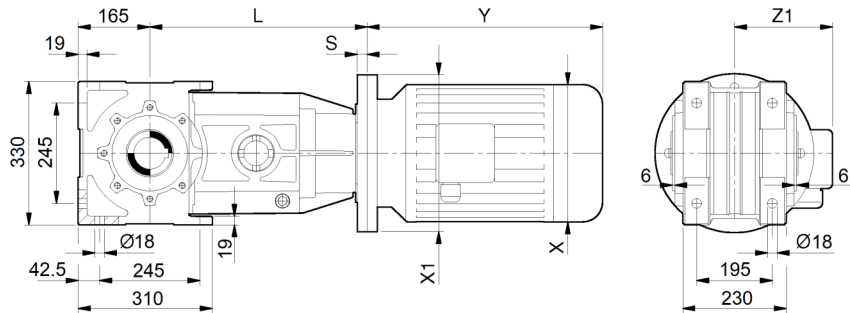
N.B. - BT and BTV versions are available for $M_2 \leq 1200$ Nm.
For higher torques, please contact the Sales Technical Service.

Not binding dimensions and weights

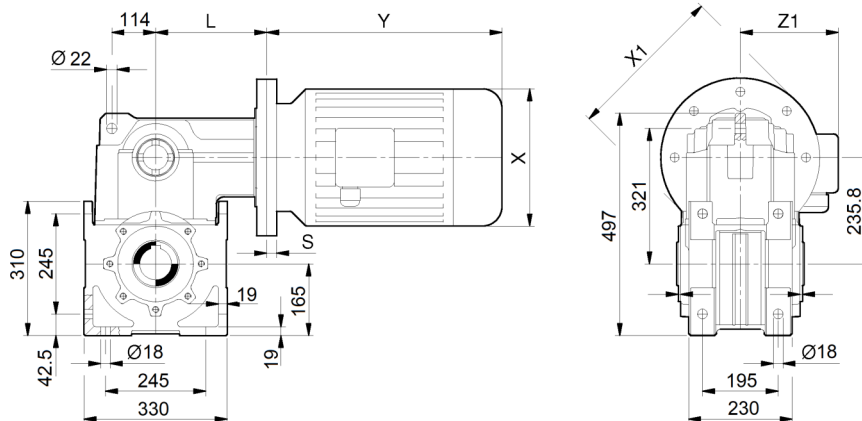
NB - Die Versionen BT und BTV sind für $M_2 \leq 1200$ Nm verfügbar. Für höhere Drehmomente wenden Sie sich bitte an den Technischen Vertrieb.

unverbindliche Abmessungen u. Gewichte

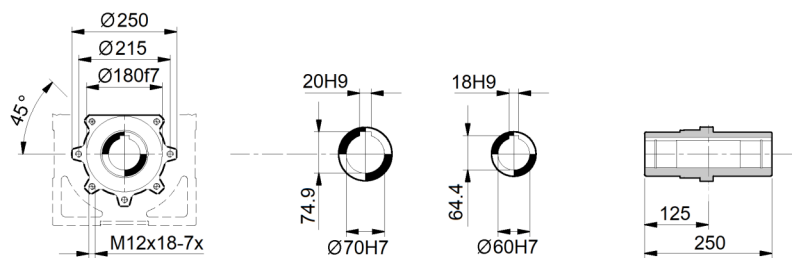
RO63 - RV63



MRO63
FRO6



MRV63
FRV63



AC70
AC60

IEC	80	90 S / L	100	112	132 S / M	160	180
X / Y / Z1	159/238/138	176/255-280/149	195/314/160	219/328/172	258/368-410/192	310/486/235	320/580/245
X1 (B5) / S	200/22	200/22	250/22	250/22	300/22	350/35	350/35
X1 (B14) / S	---	---	---	---	200/22	250/22	300/22
L (RO63)	449.5	449.5	449.5	449.5	449.5	462.5	462.5
L (RV63)	205.5	205.5	205.5	205.5	205.5	218.5 (205.5)	218.5 (205.5)

Dimensioni e pesi non impegnativi

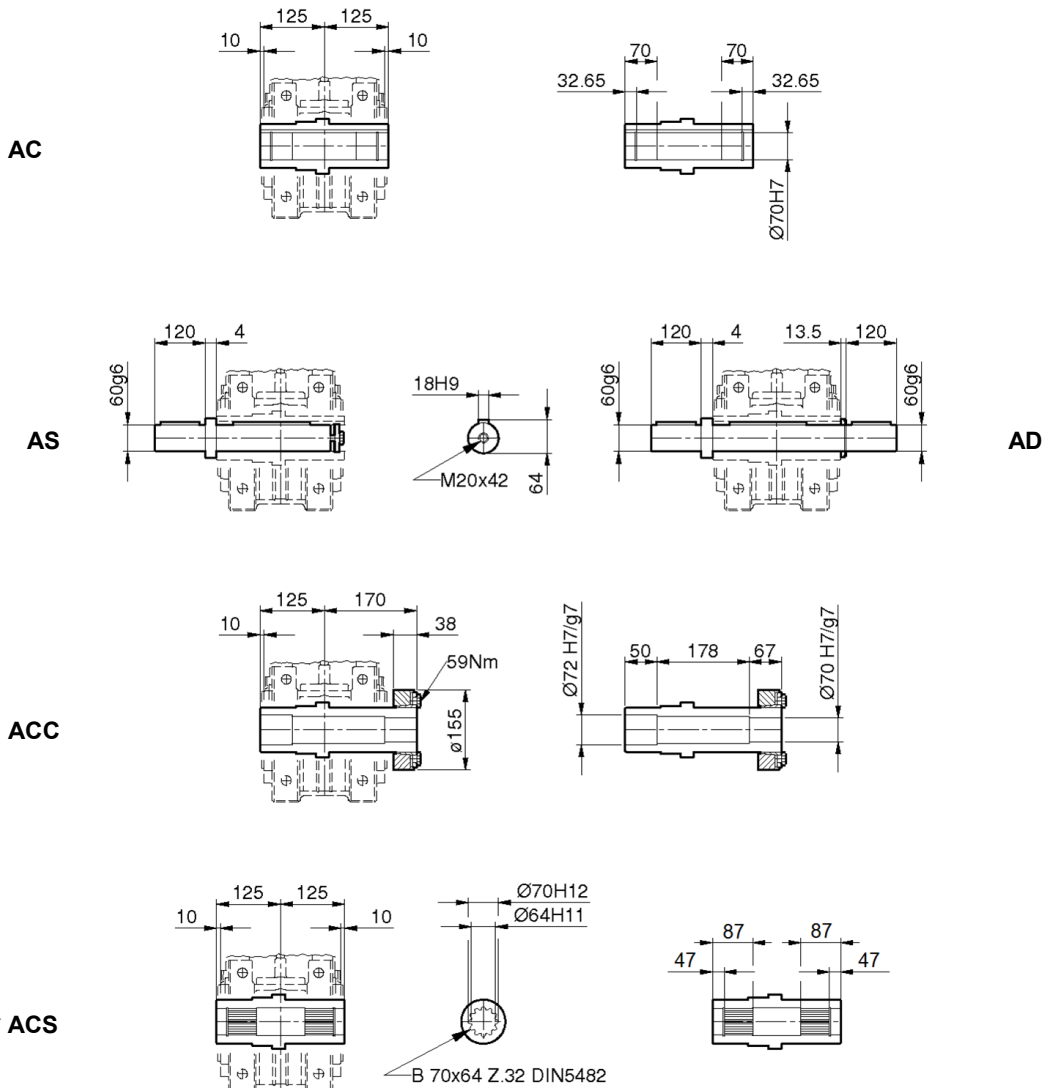
Not binding dimensions and weights

unverbindliche Abmessungen u. Gewichte

Dimensioni - Dimensions - Abmessungen

RO - RV

RN 62-63
 Alberi uscita
 Output shafts
 Ausgangswellen



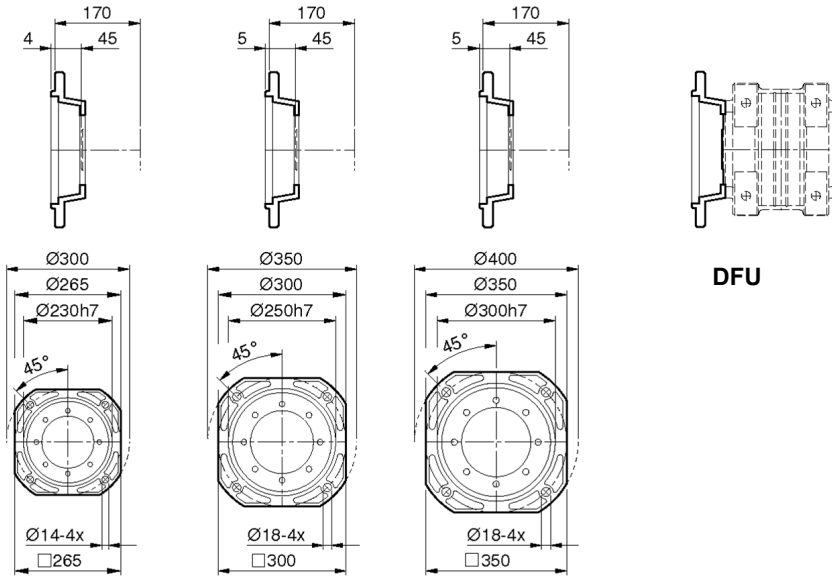
(*) Versione ACS a richiesta
 Dimensioni perno macchina: pagine 80-82
 Dimensioni e pesi non impegnativi

(*) ACS version on demand
 Machine shaft dimensions: pages 80-82
 Not binding dimensions and weights

(*) ACS-Ausführung: auf Anfrage
 Maschinenwelle Abmessungen: Seiten 80-82
 unverbindliche Abmessungen u. Gewichte

RO63 - RV63

Flange uscita
Output flanges
Ausgangsflansche

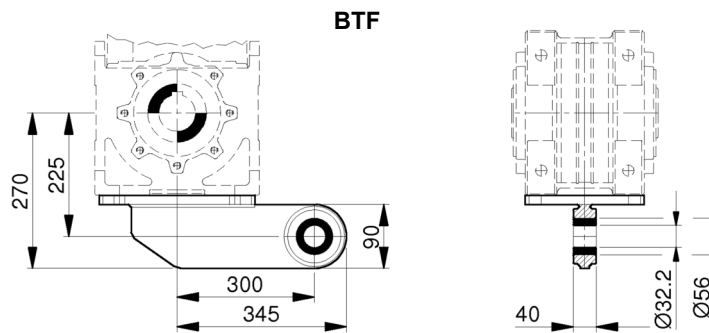
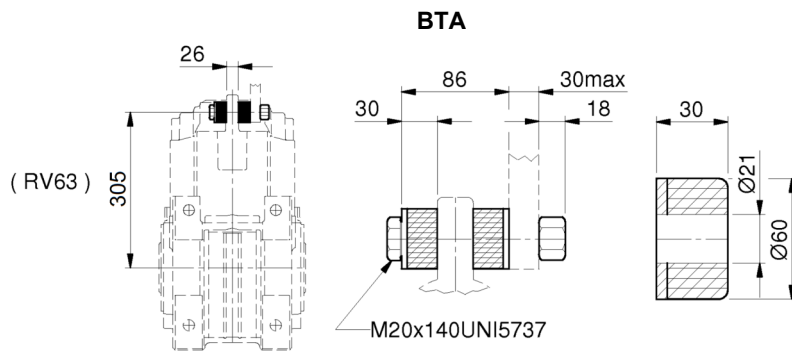


Dimensioni - Dimensions - Abmessungen

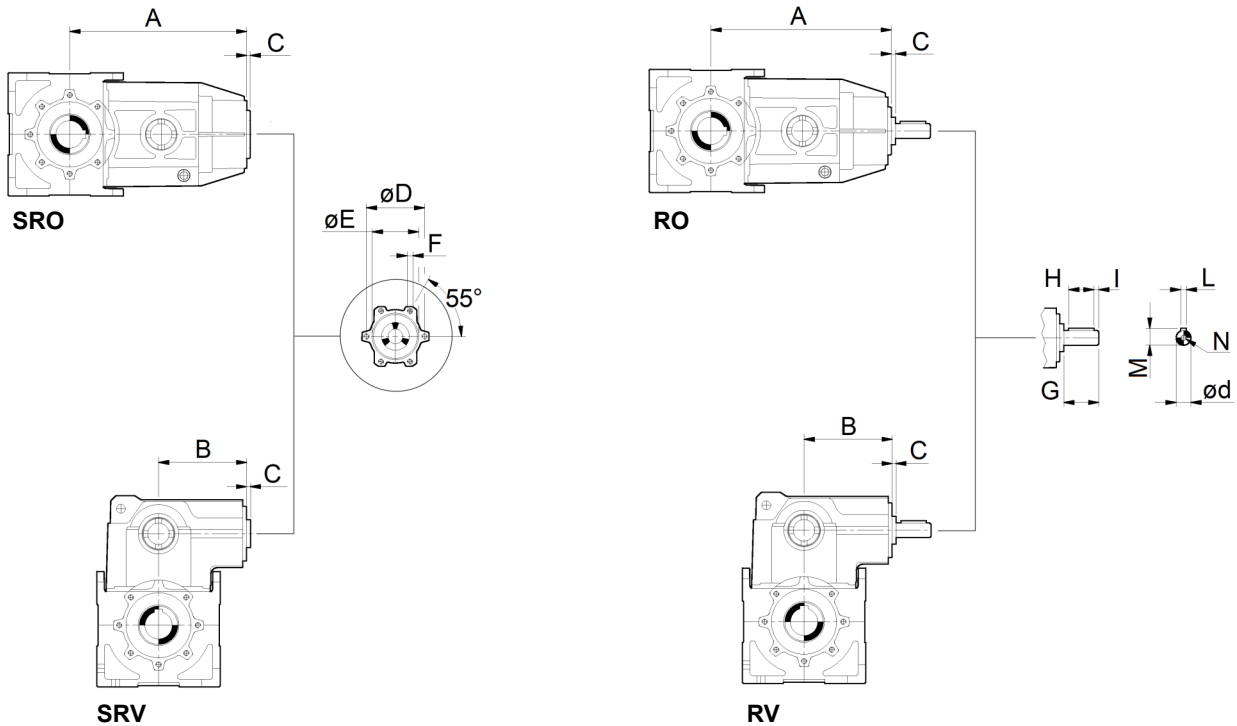
RO - RV

RO63 - RV63

Bracci di reazione
Torque arms
Drehmomentstützen



SRO - RO
SRV - RV
 Dettagli entrata
 Input details
 Eingangseinzelheiten



Tipo Size Größe	Giunto Coupling Kupplung	A	B	C	D	d h6	E g6	F	G	H	I	L H9	M	N
13	G5	184	94	3.5	70	16	60	M6x10 6x	40	35	2.5	5	18	M8x19
23	G6	224	116	5	85	19	70	M8x18 6x	40	35	2.5	6	21.5	M8x19
33	G6	256.5	123	5.5	100	24	80	M8x25 6x	50	40	5	8	27	M8x19
43	G6	290	137	6	106	28	90	M8x18 6x	60	50	5	8	31	M10x22
53	* GS8	357	168.5	5	140	38	120	M10x20 6x	80	70	5	10	43	M10x22
63	* GS8	427.5	191.5	5	140	48	120	M10x20 6x	100	90	5	14	51.5	M10x22

(*) - Giunto GS8: acciaio, chiave e grano di bloccaggio

(*) - Coupling GS8: steel, key and locking grub screw

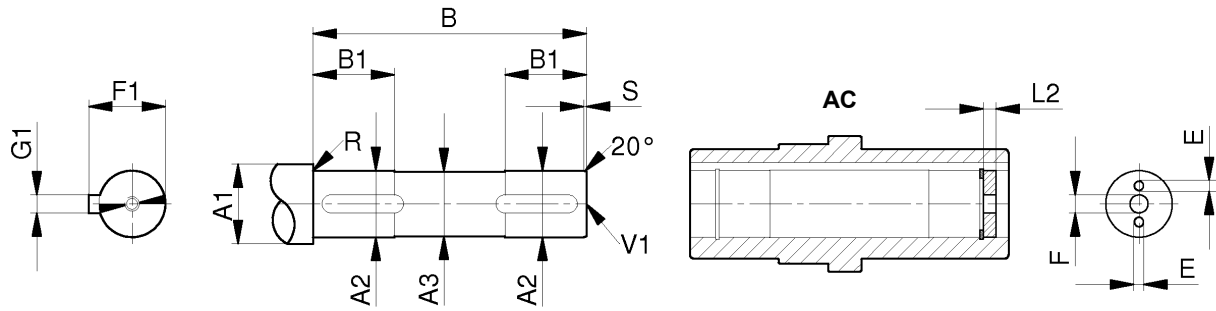
(*) - Kupplung GS8: Stahl, Keil u. Gewinde Stift

Dimensioni - Dimensions - Abmessungen

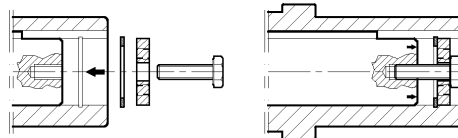
RO - RV

AC

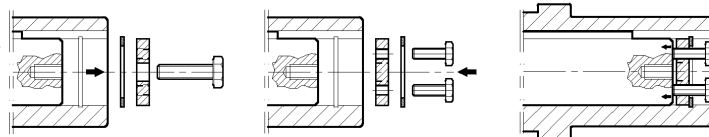
Albero uscita cavo standard
Standard hollow output shaft
Standard-Ausgangshohlwelle



- Montaggio
Mounting
Montage



- Smontaggio
Disassembly
Demontage



Tipo Size Größe	A1	A2	A3	B	B1	E	F	F1	G1	L2	R	S	V1
RO13 - RV13	40	30	29	98	35	M6	11	33	8	5,5	1	2	M10x22
	35	25	24	98	35	M6	9	28	8	4,5	1	2	M8x19
RO22 - RV23	45	35	34	113,5	40	M8	11	38	10	7	1	2	M10x22
	40	30	29	113,5	40	M6	11	33	8	7	1	2	M10x22
RO32 - RV33	50	40	39	133,5	45	M8	13	43	12	7	1	2	M12x28
	45	35	34	133,5	45	M8	11	38	10	7	1	2	M10x22
RO42 - RV43	60	50	49	155,5	55	M10	17	53,5	14	8	1,5	3	M16x36
	55	45	44	155,5	55	M10	17	48,5	14	8	1,5	3	M16x36
	50	40	39	155,5	55	M8	13	43	12	8	1,5	3	M12x28
RO52 - RV53	75	60	59	185	65	M12	17	64	18	12,5	2	4	M16x36
	70	55	54	185	65	M12	17	59	16	12,5	2	4	M16x36
	65	50	49	185	65	M10	17	53,5	14	12,5	2	4	M16x36
RO62 - RV63	85	70	69	205	70	M12	21	74,5	20	12,5	2	4	M20x42
	80	65	64	205	70	M12	21	69	18	12,5	2	4	M20x42
	75	60	59	205	70	M12	21	64	18	12,5	2	4	M16x36

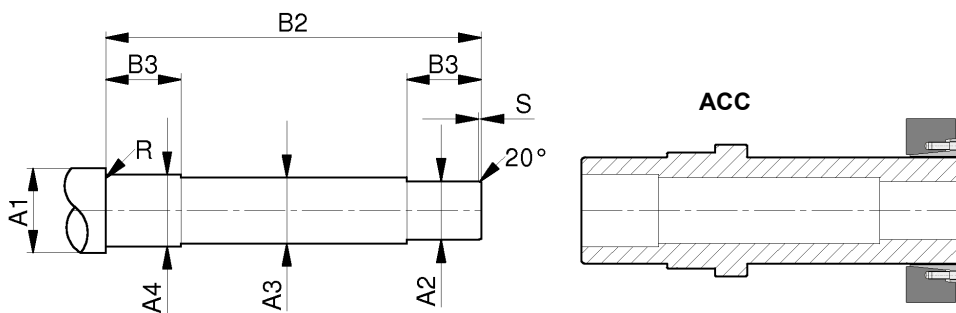
Dimensioni e pesi non impegnativi

Not binding dimensions and weights

unverbindliche Abmessungen u. Gewichte

ACC

Albero uscita cavo con calettatore
Hollow output shaft with shrink-disk
Ausgangshohlwelle mit Schrumpfscheibe



Tipo Size Größe	A1	A2	A3	A4	B2	B3	R	S
RO13 - RV13	40	30	29	32	144	34	1	2
RO23 - RV23	45	35	34	37	167	39	1	2
RO33 - RV33	50	40	39	42	189	49	1	2
RO43 - RV43	60	50	49	52	220	49	1,5	3
RO53 - RV53	75	60	59	62	267	49	2	4
RO63 - RV63	85	70	69	72	294	49	2	4

Il calettatore è basato sullo sperimentato principio del cuneo per creare un accoppiamento meccanico per interferenza senza chiave. Il serraggio assiale delle viti è convertito in pressione di contatto radiale fra albero e mozzo, causandone lo stabile calettamento.

Montaggio

Pulire accuratamente le superfici di contatto dell'albero e del mozzo e applicare un leggero velo d'olio. Serrare le viti in modo graduale ed uniforme fino a raggiungere la coppia di serraggio. Non usare oli contenenti bisolfuro di molibdeno che originano notevole riduzione del coefficiente d'attrito. Durante il serraggio delle viti non avviene nessun spostamento assiale del mozzo rispetto all'albero.

Smontaggio

Allentare le viti con sequenza continua e graduale senza estrarre le viti dalle filettature. In caso di riutilizzo, applicare alle viti e superfici coniche un lubrificante in pasta per garantire un coefficiente d'attrito di 0.04. Coppie di serraggio, tolleranze e rugosità secondo le specifiche del costruttore.

The shrink-disk fit relies upon the proven wedge principle to create a keyless mechanical interference fit. Screw axial locking tension is converted into radial contact pressure on the shaft/hub connection, making the shrink fit steady.

Assembly

Carefully clean the shaft/hub contact surfaces and grease with a fine layer of oil. Tighten the screws gradually and evenly until the locking torque is reached. Do not use lubricants containing molybdenum bisulphite that origins notable lowering of the friction coefficient. No axial hub shifting occurs as regards the shaft when are tightening the screws.

Disassembly

Loose the screws in a continuous and even way without removing the screws. In case of further assembly, apply a lubricant paste on screws and tapered surfaces to guarantee a friction coefficient of 0.04. Locking torques, tolerances and roughness according to manufacturer's specifications.

Die Schrumpfscheibe liegt dem versuchten Prinzip des Keiles zugrunde, um eine mechanische Kupplung zur Interferenz ohne Keilnut zu kreieren. Das axiale Anziehen der Schrauben wurde in radialem Anpressdruck zwischen Welle und Nabe umgesetzt, verursacht Stabilität der Schrumpfscheibe.

Montage

Sorgfältig die Kontaktflächen der Welle und der Nabe reinigen und ein wenig Öl aufbringen. Die Schrauben gradual und einheitlich anziehen bis zur Erzielung des Anzugsdrehmoment. Verwenden Sie keine Öle mit Molybdänsulfid, wegen erheblicher Reduzierung des Reibungskoeffizienten. Während des Anziehens der Schrauben erfolgt keine axiale Verschiebung der Nabe gegenüber der Welle.

Demontage

Lösen Sie die Schrauben kontinuierlich und schrittweise, ohne die Schrauben aus dem Gewinde zu entfernen. Im Falle der Wiederverwendung, tragen Sie auf den Schrauben und Kegelflächen eine Schmierpaste, um ein Reibungskoeffizient von 0,04 zu garantieren. Drehmomente, Toleranzen und Rauigkeit nach Angaben des Herstellers.

Dimensioni e pesi non impegnativi

Not binding dimensions and weights

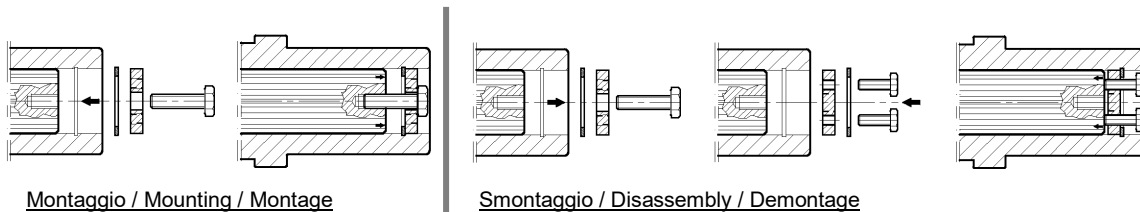
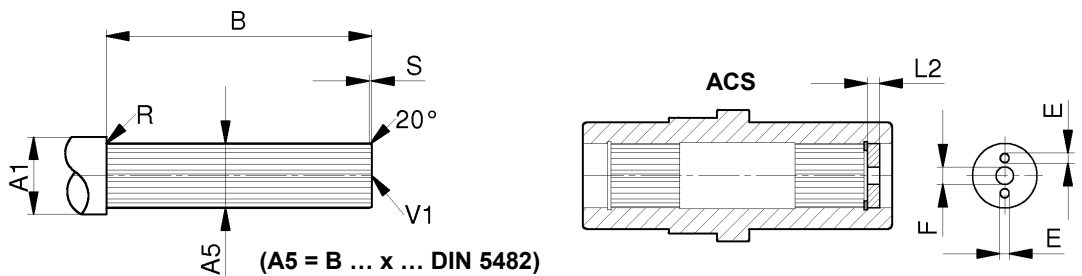
unverbindliche Abmessungen u. Gewichte

Dimensioni - Dimensions - Abmessungen

RO - RV

ACS

Albero uscita cavo scanalato (a richiesta)
Spline hollow output shaft (on demand)
Ausgangskeilhohlwelle (auf Anfrage)



Typo Size Größe	A1	A5	B	E	F	L2	R	S	V1
RO13 - RV13	40	30x27	98	M6	11	5,5	1	2	M8x19
RO23 - RV23	45	35x31	113,5	M8	11	7	1	2	M10x22
RO33 - RV33	50	40x36	133,5	M8	13	7	1	2	M10x22
RO43 - RV43	60	50x45	155,5	M10	17	8	1,5	3	M16x36
RO53 - RV53	75	60x55	185	M12	17	12,5	2	4	M16x36
RO63 - RV63	85	70x64	205	M12	21	12,5	2	4	M20x42

Gli alberi scanalati hanno denti che ingranano con corrispondenti scanalature di un pezzo accoppiante e gli trasferiscono la coppia mantenendo la corrispondenza angolare fra loro.
Alternativi al collegamento cava/chiavetta, gli scanalati forniscono maggior coppia e maggior durata alla fatica.

Spline shafts have teeth that mesh with grooves in a mating piece and transfer torque to it, maintaining the angular correspondence between them.
As alternative to key/keyway connection, splines provide higher torque and longer fatigue lifetime.

Die Keilwellen haben Zähne mit entsprechenden Nuten eines Kupplungsstückes und übertragen das Drehmoment mit Einhaltung des Winkels zwischen Ihnen.
Alternativ zur Verbindung von Schlüssel/Keilnut, die Keilwellen bieten mehr Drehmoment und höhere Lebensdauer an.

AS - ACC - F - BT - BTV - BTF

Posizione accessori
Accessory position
Position der Zubehör

Le posizioni degli accessori, nelle definizioni RH e LH, fanno riferimento alla posizione di montaggio H1 a pag. 14 e sono viste dal lato inferiore del riduttore RN2 o RN3.

Il lato della carcassa con la vite come indicata è la esatta identificazione del lato di riferimento.

Se l'accessorio viene richiesto montato in fabbrica, l'ordine è considerato in sospeso fino alla determinazione del lato RH o LH.

Per altre posizioni di montaggio, riferirsi al Servizio Clienti.

Accessory positions, here defined as RH and LH, refer to H1 mounting position at page 14 and are seen from the bottom side of the gearbox RN2 or RN3 accordingly.

The housing side with the screw as shown is the right identification of the reference side.

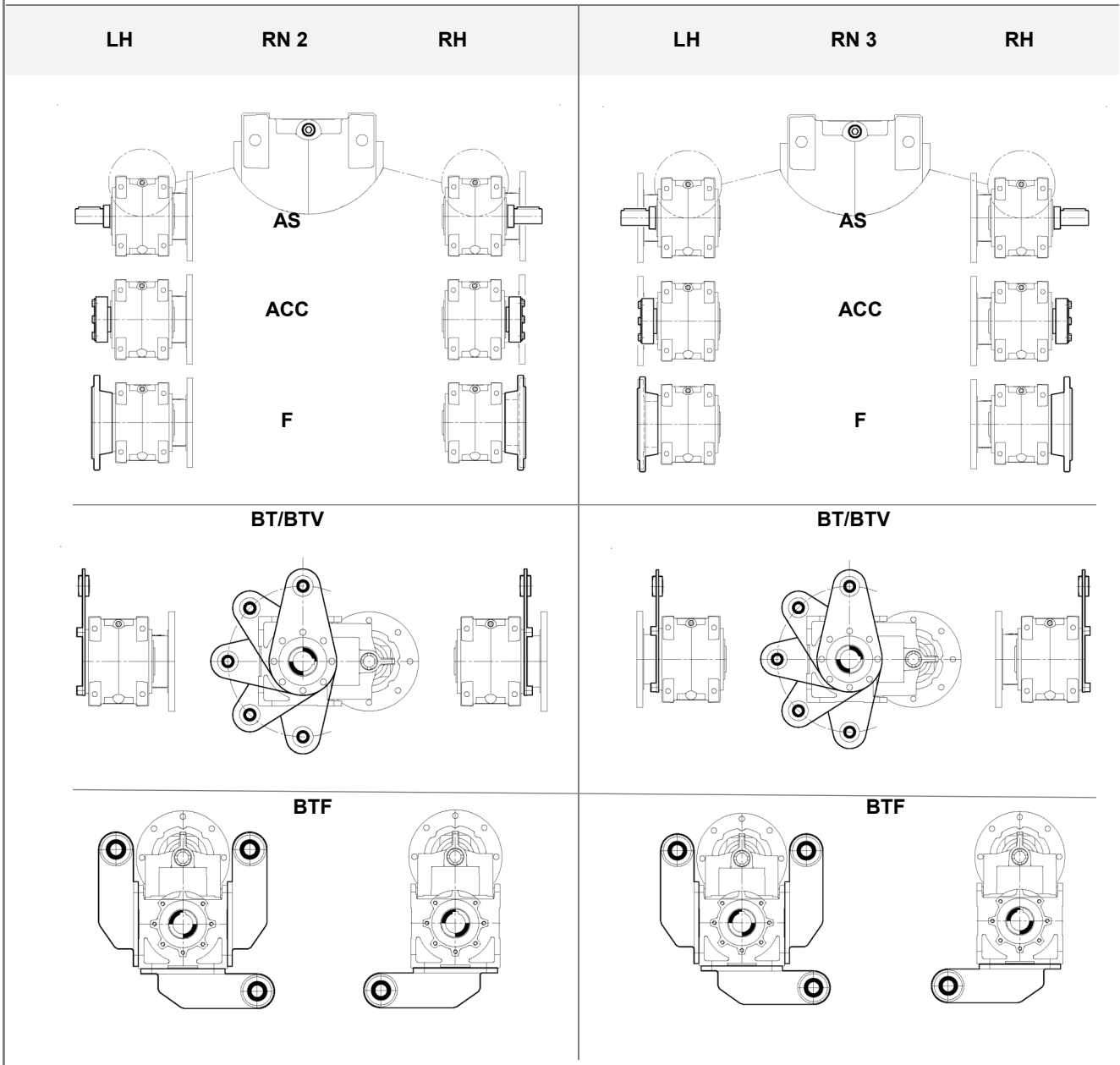
If the accessory is requested in-house assembled, the order is held-on until RH or LH side is defined.

For other mounting positions, please refer to the Customer Service.

Die Zubehörbaulagen, hier als RH und LH definiert, beziehen sich auf H1 Einbaulage auf Seite 14 und werden von der Unterseite des Getriebes RN oder RN3 entsprechend gesehen. Die Seite des Gehäuses mit der Schraube, wie gezeigt ist die genaue Identifizierung der Referenzseite.

Wenn das Zubehör am haus angeforderte gebaut wird die Reihenfolge gehalten, bis Seite RH oder LH definiert ist.


Für andere Einbaulagen entnehmen Sie bitte dem Kundendienst beziehen.

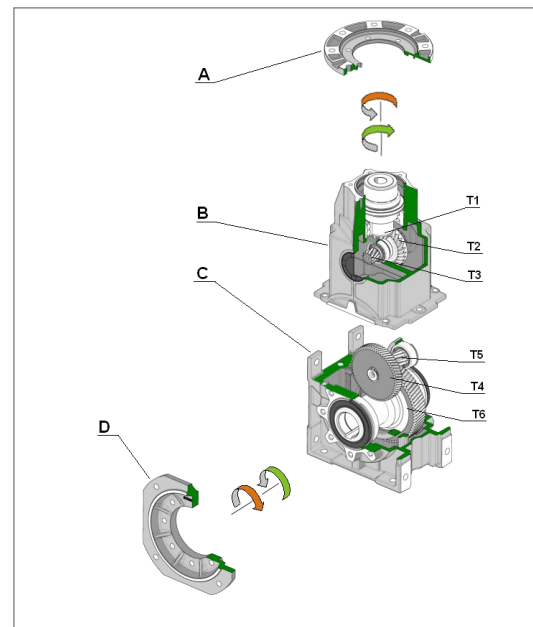


Componenti - Rotazione -
Component Parts - Rotation -
Bauelemente - Drehrichtung

RO - Versione in linea
In-line version
Inlineausführung


- A - Flangia motore
Motor flange adapter
Motorflansch
- B - Coperchio entrata 3 coppie & ingranaggi T1, T2, T3
3-stage input cover + T1, T2, T3 gears
Dreistufige Eingangsdeckel u. Räder T1, T2, T3
- C - Carcassa & ingranaggi T4, T5, T6
Housing + T4, T5, T6 gears
Gehäuse u. Räder T4, T5, T6
- D - Flangia uscita
Output flange
Abtriebsflansch

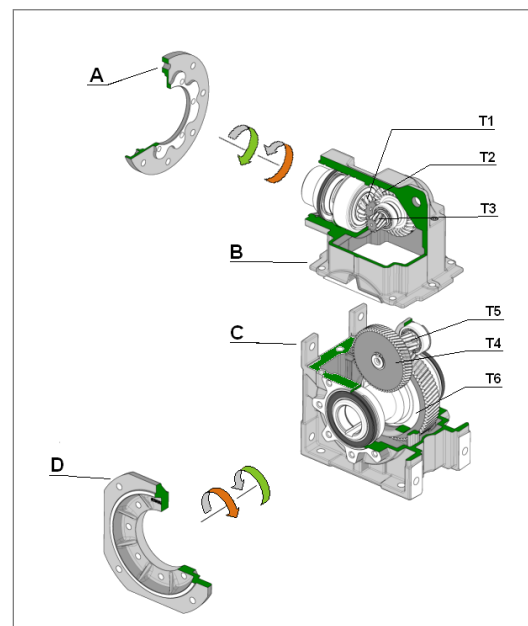
 - Rotazione entrata/uscita
 - Input/output rotation
 - Eingangs- / Ausgangsdrehrichtung



RV - Versione a squadra
Right angle version
Winkelausführung

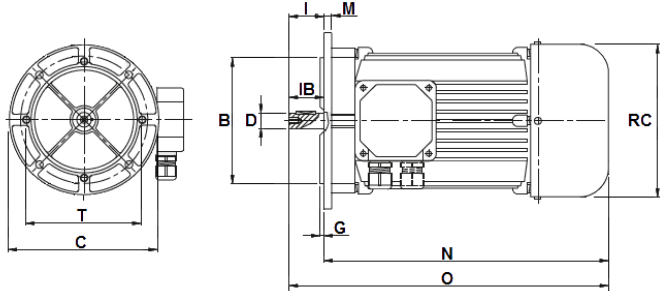
- A - Flangia motore
Motor flange adapter
Motorflansch
- B - Coperchio entrata 3 coppie & ingranaggi T1, T2, T3
3-stage input cover + T1, T2, T3 gears
Dreistufige Eingangsdeckel u. Räder T1, T2, T3
- C - Carcassa & ingranaggi T4, T5, T6
Housing + T4, T5, T6 gears
Gehäuse u. Räder T4, T5, T6
- D - Flangia uscita
Output flange
Abtriebsflansch

 - Rotazione entrata/uscita
 - Input/output rotation
 - Eingangs-/Ausgangsdrehrichtung

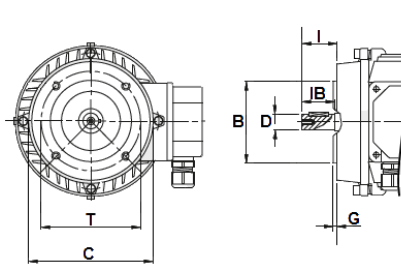


**Motori
Motors
Motoren**

B5



B14



Taglia Size Größe	2 poli - poles - Polig 2800 rpm		4 poli - poles - Polig 1400 rpm		6 poli - poles - Polig 900 rpm		Flangia - Flange Flansch B / C / T	Albero Shaft Welle D x l	G	IB	N	O
	kW	kg	kW	kg	kW	kg						
T56A	0.09	2.6	0.06	2.9	---	---	B5 - 120 / 100 / 80	9 x 20	3.0	20	176	196
T56B	0.12	3.0	0.09	3.2	---	---	B14 - 80 / 65 / 50		2.5			
T63A	0.18	4.0	0.12	3.7	0.09	4.2	B5 - 140 / 115 / 95	11 x 23	3.0	23	197	220
T63B	0.25	4.2	0.18	4.2	0.12	4.5	B14 - 90 / 75 / 60		2.5			
T63C	0.37	4.7	0.25	4.7	---	---						
T71A	0.37	5.2	0.25	5.0	0.18	5.6	B5 - 160 / 130 / 110	14 x 30	3.5	30	211	241
T71B	0.55	6.0	0.37	5.8	0.25	6.0	B14 - 105 / 85 / 70		2.5			
T71C	0.75	7.0	0.55	6.5	0.37	6.5						
T80A	0.75	8.7	0.55	8.1	0.37	6.8	B5 - 200 / 165 / 130	19 x 40	3.5	40	250	290
T80B	1.1	10	0.75	9.1	0.55	9.6	B14 - 120 / 100 / 80		3.0			
T80C	1.5	11.2	1.1	11	0.75	10						
T90S	1.5	12	1.1	11.7	0.75	11.3	B5 - 200 / 165 / 130	24 x 50	3.5	50	262	312
T90L	2.2	14.5	1.5	14.4	1.1	14.4	B14 - 140 / 115 / 95		3.0		287	337
T90LC	3	15	2.2	17.6	1.5	15.5						
T100A	3	20	2.2	17.6	1.5	18.8	B5 - 250 / 215 / 180	28 x 60	4.0	60	309	369
T100B	4	24	3	22.5	2.2	19.8	B14 - 160 / 130 / 110		3.5			
T112A	5.5	29.3	4	29	3	30	B5 - 250 / 215 / 180	28 x 60	4.0	60	335	395
T112MC	7.5	34	5.5	35.7	---	---	B14 - 160 / 130 / 110		3.5			
T132S	7.5	38.4	5.5	39	4.5	47.6	B5 - 300 / 265 / 230	38 x 80	4.0	80	357	437
T132M	9.2	48.2	7.5	48.5	5	50.7	B14 - 200 / 165 / 130		4.0		395	475
T132ML	11	52.5	9.2	56.5	7.5	47			---		421	501
T132MC	---	---	11	64	---	---						
T132S	7.5	38.4	5.5	39	4.5	47.6	B5 - 300 / 265 / 230	38 x 80	4.0	80	357	437
T132M	9.2	48.2	7.5	48.5	5	50.7	B14 - 200 / 165 / 130		4.0		395	475
T132ML	11	52.5	9.2	56.5	7.5	47			---		421	501
T132MC	---	---	11	64	---	---						
T160M	15	77.5	11	73	7.5	70.0	B5 - 350 / 300 / 250	42 x 110	5.0	110	530	640
T160L	18.5	92	15	88.5	11	87.0	B14 - 250 / 215 / 180		4.0			
T160MC	22	107	18.5	97.5	15	124						
T180M	22	121	18.5	118	15	124	B5 - 350 / 300 / 250	48 x 110	5.0	110	620	730
T180L	---	---	22	128	---	---						

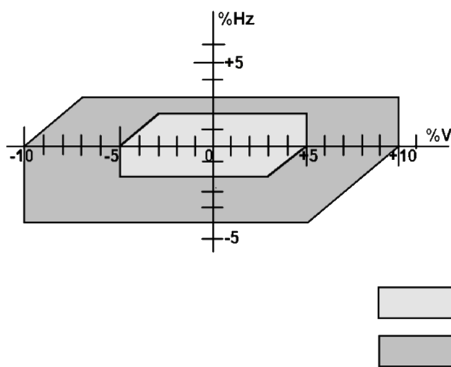
Dimensioni e pesi non impegnativi

Not binding dimensions and weights

unverbindliche Abmessungen u. Gewichte

Specifiche motori elettrici
Electric motor specifications
E-Motoren Spezifikationen

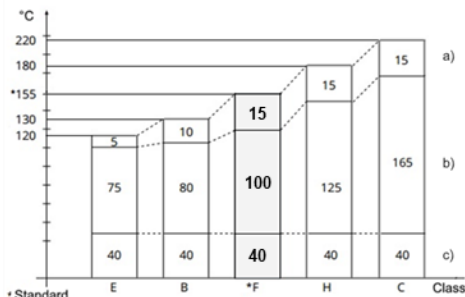
Voltaggio e frequenza - Voltage and frequency - Spannung u. Frequenz



Valori nominali Rated values Nennwerte	Valori utilizzabili Usable values Benutzbarwerte
230/400V 50Hz	240/415V 50Hz 220/380V 50Hz
277/480V 60 Hz	265/460V 60Hz 260/440V 60Hz

Servizio	Duty	Dienst
normale	normal	normal
pesante ma limitato	heavy but limited	schwer aber begrenzt

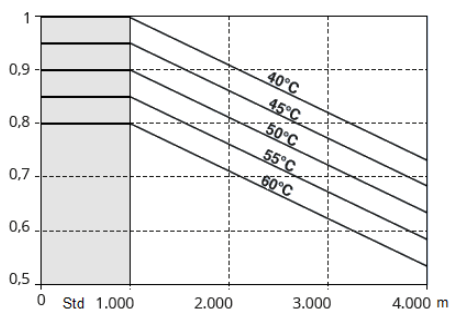
Classe di isolamento - Insulation class - Isolationsklasse



Temperature - Temperatures - Temperaturen

- a) margine di sicurezza
safety margin
Sicherheitspanne
- b) sovratemperatura ammissibile
admissible temperature
annehmbare Übertemperatur
- c) temperatura ambiente convenzionale
conventional ambient temperature
konventionelle Zimmertemperatur

Coefficienti - Factors - Faktoren
di Altitudine e Temperatura - of Altitude and Temperature - für Höhe u. Temperatur



Ambiente convenzionale - Conventional environment - Konventionalbedingungen

- 1000 m - altitudine s.l.m.
altitude above sea level
über dem Meeresspiegel
- 40 °C - temperatura ambiente
ambient temperature
Zimmertemperatur
- 15 °C - min. temperatura ambiente dell'aria
min. ambient air temperature
min. Umgebungstemperatur der Luft
- ≤ 60% - umidità relativa
relative humidity
relative Feuchtigkeit

2014/34/EU ATEX

La Direttiva Europea 2014/34/UE-ATEX riguarda non solo apparecchi elettrici ma tutte le macchine e organi di comando che sono destinati, soli o combinati, per funzionare in atmosfere potenzialmente esplosive nei territori della Comunità Europea.

I riduttori sono identificati nella Direttiva come «componenti», pertanto privati di loro funzione autonoma, ma essenziali per il funzionamento di apparecchi e di sistemi di protezione destinati alla produzione, trasporto, immagazzinamento, misurazione, regolazione e conversione d'energia e trasformazione dei materiali che, per le loro proprie potenzialità d'inflammabilità, rischiano di provocare l'innescò di un'esplosione.

I riduttori VARVEL-ATEX sono fabbricati con

- carcassa e coperchi in materiale metallico, contenenti gli elementi di trasmissione montati su cuscinetti a sfere o a rulli;
- paraolio in fluoro-elastomero FKM (Viton) sugli alberi di entrata e di uscita;
- quantità di lubrificante idonea per assicurare il funzionamento del progetto;
- viteria sigillata con pasta frena-filetti.

La serie VARVEL RD è conforme alle specifiche di progetto richieste dal

- Gruppo II
- Categoria 2 e 3
 - zona 1 e zona 2 per funzionamento in zone con pericolo di esplosione in presenza di gas
 - zona 21 e zona 22 per funzionamento in zone con pericolo di esplosione in presenza di polveri combustibili

I prodotti VARVEL-ATEX sono marcati per la versione con

- cava/chiavetta in entrata

CE **Ex** II 2 G Ex h IIC T4 Gb IP66 T_{amb} -20 /+55°C
II 2 D Ex h IIIC T135°C Db IP66 T_{amb} -20 /+55°C

chiave di lettura del Codice ATEX

- II - Gruppo II (industrie di superficie)
- 2, 3 - Categoria (2, 3)
- G, D - Atmosfera esplosiva (gas, polveri)
- Ex h - Modo di protezione
- IIC, IIIC - Gruppo di esplosione (gas, polveri)
- T4 - Classe di temperatura (gas)
- T135°C - Massima temperatura superficiale (polveri)
- Gb, Db - EPL - Explosion Protection Level: (gas, polveri)
- IP66 - Protezione riduttore
- T_{amb} - Temperatura ambiente -20 /+55°C

N.B. - I gas con temperatura di innesco superiore o uguale alla Classe T4=135 °C sono elencati a pag. 86 del catalogo RO-RV italiano.

The European Directive 2014/34/EC-ATEX relates not only to electric devices but to all the machines and driving units destined, alone or combined, to operate in potentially explosive environments within European Community territory.

The gearboxes are identified as «components» in the Directive and therefore, deprived of their autonomous function but essential for the operation of equipment and protective systems intended for production, transport, storage, measurement, adjustment and conversion of energy and transformation of materials that, due to their own flammability potential, are likely to trigger an explosion.

The gearboxes VARVEL-ATEX are manufactured

- with metallic housings and covers, containing the driving gears fitted on ball or roller bearings;
- FKM-Fluor-elastomer (Viton) oil seals on input and output shafts;
- the needed oil quantity to ensure the unit operation;
- sealed thread screws with sealing paste.

VARVEL RD Series conforms to design directions required for

- Group II
- Category 2 and 3
 - zones 1 and 2 for operation in zones with risk of explosion in presence of gas
 - zones 21 and 22 for operation in zones with risk of explosion in presence of combustible dust

The VARVEL-ATEX products are marked for the

- key/keyway input version

key to ATEX Code

- II - Group II (surface industries)
- 2, 3 - Category (2, 3)
- G, D - Explosive environment (gas, dust)
- Ex h - Mode of protection
- IIC, IIIC - Group of explosion (gas, dust)
- T4 - Class of temperature (gas)
- T 135°C - Max. temperature of surface (dust)
- Gb, Db - EPL - Explosion Protection Level (gas, dust)
- IP66 - Protection of gearbox
- T_{amb} - Ambient temperature -20 /+55°C

Note - Gases with ignition temperature higher than or equal to Class T4=135 °C are listed on page 86 of the English RO-RV catalogue.

Die Europäische Richtlinie 2014/34/EG-ATEX gilt nicht nur für elektrische Ausrüstungen, sondern auch für alle Arten von Maschinen und Steuerungsteile, allein oder kombiniert, für den Gebrauch in potentiell explosiver Atmosphäre in den Gebieten der Europäischen Gemeinschaft.

Die Getriebe sind in der Richtlinie als "Komponenten" identifiziert, von daher ihre autonome Funktion, aber wesentlich für den Betrieb von Geräten und Schutzsystemen für die Produktion, Transport, Lagerung, Messung, Regelung und Umwandlung von Energie und Verarbeitung von Materialien, die wegen ihrer eigenen potenzieller Entflammbarkeit, die Auslösung einer Explosion riskieren.

Die VARVEL-ATEX Getriebe sind hergestellt mit

- Gehäuse und Deckel in Metall, beinhaltet Getriebe montiert auf Kugel- oder Rollenlager;
- FKM-Fluorelaste (Viton) Dichtungen auf Eingangs- und Ausgangswellen;
- ausreichende Ölmenge, um das Funktionieren des Projekts zu gewährleisten;
- Schrauben sind mit Schraubensicherungs-paste abgedichtet.

Die VARVEL RD Serie ist entsprechend mit die Konstruktionsanforderungen gegeben von

- Gruppe II,
- Kategorie 2 u. 3,
 - Zone 1 und Zone 2 für Betrieb in Zonen mit Explosionsgefahr in der Gegenwart von Gas,
 - Zone 21 und Zone 22 für Betrieb in Zonen mit Explosionsgefahr in der Gegenwart von Brennstaub.

Die Produkte VARVEL-ATEX sind markiert für die

- Passfeder/Nut Eingangsausführung

Leseschlüssel des ATEX - Code

- II - Gruppe II (Oberfläche-Industrien)
- 2, 3 - Kategorie (2, 3)
- G, D - explosionsfähige Atmosphäre (Gas, Staube)
- Ex h - Schutzart
- IIC, IIIC - Explosion-Gruppe (Gas, Staube)
- T4 - Temperatur-Klasse
- T 135°C - Maximale Oberflächentemperatur (Staube)
- Gb, Db - EPL - Explosion Protection Level (Gas, Staube)
- IP66 - Getriebes Schütz
- T_{amb} - Zimmertemperatur -20 /+55°C

Anm. - Gase mit einer Zündtemperatur höher oder gleich Klasse T4=135 °C sind auf Seite 86 des deutschen RO_RV-Katalogs aufgeführt.

2014/34/EU ATEX

Sostanze Substances Substanzen	Zone Zones Zonen	Categorie Categories Kategorien			EPL (Equipment Protection Level)		
Gas, Vapori, Nebbie Gas, Vapours, Cloud Gas, Dämpfe, Nebel	0	1G			Ga		
	1		2G			Gb	
	2			3G			Gc
Polveri Dust Stäube	20	1D			Da		
	21		2D			Db	
	22			3D			Dc

Chiave di lettura - Key code - Leserschlüssel

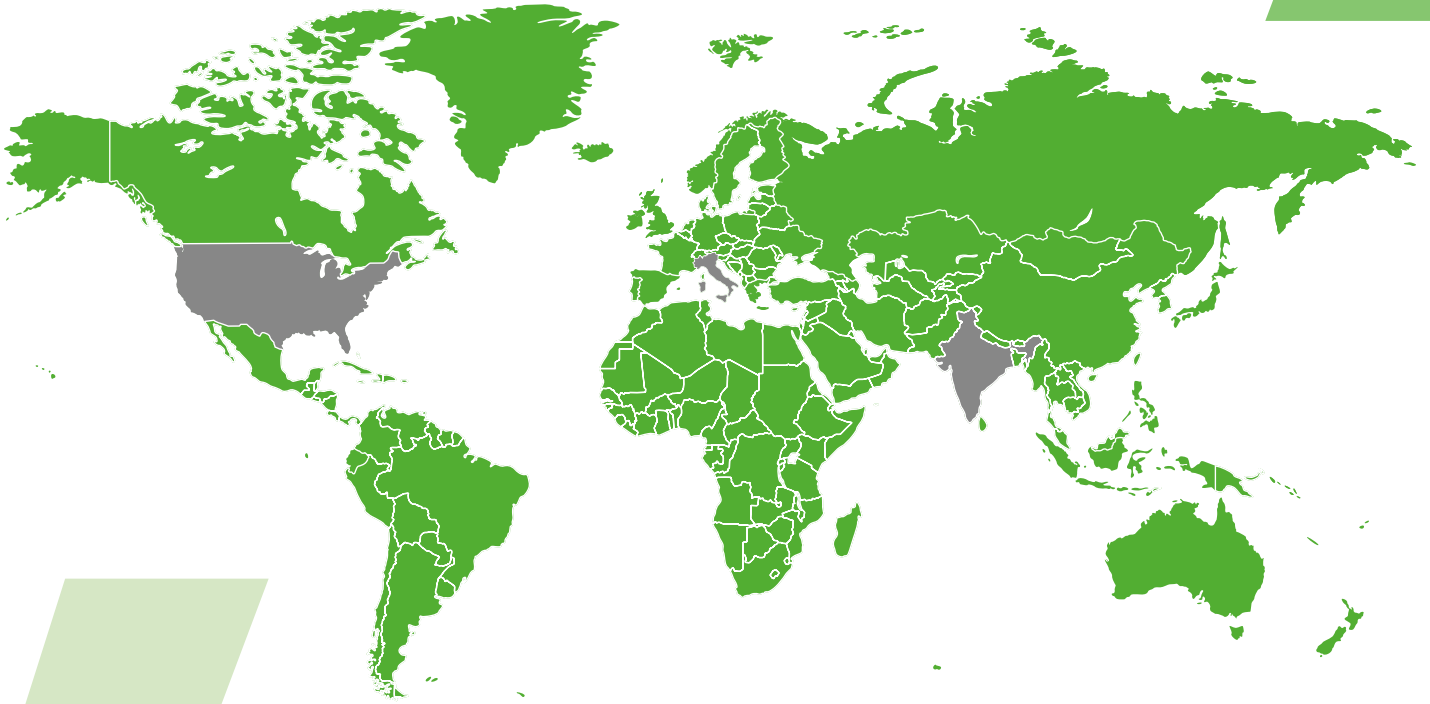
Zona Zone	0	Presenza continua di gas esplosivo Continuous occurrence of explosive gas Dauerndes Vorhandensein explosiver Gase
	1	Presenza occasionale di gas esplosivo Occasional occurrence of explosive gas Gelegentliches Vorhandensein explosiver Gase
	2	Presenza improbabile di gas esplosivo Unlikely occurrence of explosive gas Unwahrscheinliches Vorhandensein explosiver Gase
	20	Presenza continua di polveri esplosive Continuous occurrence of explosive dust Dauerndes Vorhandensein explosiver Staub
	21	Presenza occasionale di polveri esplosive Occasional occurrence of explosive dust Gelegentliches Vorhandensein explosiver Staub
	22	Presenza improbabile di polveri esplosive Unlikely occurrence of explosive Unwahrscheinliches Vorhandensein explosiver Staub
Categoria Category Kategorie	1	Apparecchi a livello di protezione molto alto (1G, 1D) Equipment with very high protection level (1G, 1D) Geräte mit sehr hohem Schutz (1G, 1D)
	2	Apparecchi a livello di protezione alto (2G, 2D) Equipment with high protection level (2G, 2D) Geräte mit hohem Schutz (2G, 2D)
	3	Apparecchi a livello di protezione normale (3G, 3D) Equipment with normal protection level (3G, 3D) Geräte mit normalem Schutz (3G, 3D)
EPL	a	Livello di protezione molto alto (Ga, Da) Very high level of protection (Ga, Da) Sehr hohes Schutzniveau (Ga, Da)
	b	Livello di protezione alto (Gb, Db) High level of protection (Gb, Db) Hohes Schutzniveau (Gb, Db)
	c	Livello di protezione normale (Gc, Dc) Normal level of protection (Gc, Dc) Normales Schutzniveau (Gc, Dc)

Attenzione !
I riduttori VARVEL-ATEX
non sono certificati
per funzionamento nelle **aree tratteggiate**.

Warning !
VARVEL-ATEX gearboxes
are not certified
for operation in **hatched areas**.

Vorsicht !
Die Getriebe VARVEL-ATEX
sind für den Anbau in die
Gestrichelte Zone nicht zertifiziert.

<p>Estratto delle ISTRUZIONI D'USO e MANUTENZIONE (manuale completo su www.varvel.com)</p> <p>Ai sensi della Direttiva Macchine 2006/42/CE e relativa Linea Guida, i riduttori e i variatori di velocità sono considerati "elementi separati di macchine che non hanno un'applicazione specifica e che sono destinati ad essere incorporati nella macchina. La macchina completa dotata di questi componenti deve soddisfare i requisiti essenziali pertinenti di sicurezza e tutela della salute" della citata Direttiva.</p> <p>Installazione Accertarsi che il gruppo da installare abbia le caratteristiche atte a svolgere la funzione richiesta e che la posizione di montaggio sia coerente con quanto ordinato. Tali caratteristiche sono deducibili dalla targhetta d'identificazione apposta sul riduttore. Effettuare la verifica della stabilità del montaggio affinché non si verifichino vibrazioni o sovraccarichi durante il funzionamento.</p> <p>Funzionamento Il riduttore può essere collegato per rotazione oraria o antioraria. Arrestare immediatamente il riduttore in caso di funzionamento difettoso o di rumorosità anomala, rimuovere il difetto o ritornare l'apparecchio alla fabbrica per un'adeguata revisione. Se la parte difettosa non è sostituita, anche altri componenti possono essere danneggiati con conseguenti ulteriori danneggiamenti e più scarsa possibilità di risalire alle cause.</p> <p>Manutenzione Sebbene i gruppi siano provati con funzionamento senza carico prima della spedizione, è consigliabile non usarli a carico massimo durante le prime 20-30 ore di funzionamento affinché le parti interne possano adattarsi reciprocamente. I riduttori sono spediti già riempiti con olio sintetico a lunga durata e, se occorre sostituire o rabboccare il lubrificante, non mescolare oli a base sintetica con oli a base minerale.</p> <p>Movimentazione In caso di sollevamenti con paranco, utilizzare posizioni di aggancio sulla struttura della carcassa, golfari ove esistenti, fori dei piedi o sulle flange, evitando tutte le parti mobili.</p> <p>Verniciatura Qualora il gruppo subisca una verniciatura successiva, è necessario proteggere accuratamente gli anelli di tenuta, i piani di accoppiamento e gli alberi sporgenti.</p> <p>Conservazione prolungata a magazzino Per permanenze maggiori di tre mesi, è consigliata l'applicazione di antiossidanti su alberi esterni e piani lavorati, e di grasso protettivo sui labbri dei paraolio.</p> <p>Gestione Ambientale del prodotto In conformità alla Certificazione Ambientale ISO 14001, sono suggerite le seguenti indicazioni per lo smaltimento del nostro prodotto:</p> <ul style="list-style-type: none"> - i componenti del gruppo che vengono rottamati debbono essere consegnati a centri di raccolta autorizzati per i materiali metallici; - gli oli ed i lubrificanti raccolti dal gruppo devono essere smaltiti consegnandoli ai Consorzi Oli esausti; - gli imballi a corredo dei gruppi (pallet, cartone, carta, plastica, ecc..) vanno avviati per quanto più possibile al recupero/riciclo, consegnandoli a ditte autorizzate per le singole classi di rifiuto. 	<p>Abstract of OPERATION and MAINTENANCE INSTRUCTIONS (complete manual on www.varvel.com)</p> <p>Under the terms of the Machine Directive 2006/42/EC and relevant Guidelines, the speed gearboxes and variators are considered as "machines' separate elements not having a specific application and meant for being incorporated onto the machine. The complete machine and equipped with such components must comply with the essential and relevant requisites for safety and health preservation" of the mentioned Directive.</p> <p>Installation Check if the unit to be installed, is properly selected to perform the required function and that its mounting position complies with the order. The nameplate reports such information. Check mounting stability to ensure the unit runs without vibrations or overloads.</p> <p>Running The unit may be connected for clockwise or counter-clockwise rotation. The unit must be stopped as soon as defective running or unexpected noise occur, remove the faulty part or return the unit to the factory for checking. If the faulty part is not replaced, other parts can also be affected, causing more severe damage and making the identification of initial cause more difficult.</p> <p>Maintenance Although the units are no-load run tested in the factory before despatch, it is recommended not to run them at maximum load for the first 20-30 running hours to allow the proper running in. The gearboxes are delivered already filled with long-life synthetic oil and, in case of replacement or topping, do not mix with mineral lubricants.</p> <p>Handling When hoisting, use relevant housing locations or eyebolts if provided, or foot or flange holes. Never hoist on any moving part.</p> <p>Painting Carefully protect oil seals, coupling faces and shafts when units are repainted.</p> <p>Long-term storage For storages longer than three months, apply anti-oxidants onto shafts and machined surfaces, and protective grease on oil seal lips.</p> <p>Product's Environmental Management In conformity with Environmental Certification ISO 14001, we recommend the following to dispose of our products:</p> <ul style="list-style-type: none"> - scraped components of the units to be delivered to authorized centres for metal object collection; - oils and lubricants drained from the units to be delivered to Exhausted Oil Unions; - packages (pallets, carton boxes, paper, plastic, etc..) to lead into regeneration/recycling circuits as far as possible, by delivering separate waste classes to authorized companies. 	<p>Zusammenfassung der BETRIEBS- u. WARTUNGSANWEISUNGEN (vollständiges Handbuch auf www.varvel.com)</p> <p>Gemäß der Maschinenrichtlinie 2006/42/EC und der zugehörigen Richtlinie gelten Getriebe und Verstellgetriebe als "separate Elemente von Maschinen, die keine spezifische Anwendung haben und die in der Maschine eingebaut werden sollen. Die gesamte Maschine, die mit diesen Komponenten ausgerüstet ist, muss den einschlägigen grundlegenden Sicherheits- und Gesundheitsanforderungen der vorgenannten Richtlinie entsprechen.</p> <p>Aufstellung Vor der Aufstellung ist zu prüfen, dass die Antriebseinheit in Bezug auf die Betriebsbedingungen richtig ausgewählt wurde und die Einbaulage mit der Bestellung übereinstimmt. Angaben hierüber sind auf dem Typenschild zu finden. Die Stützkonstruktion für die Getriebe ist so stabil auszuführen, dass keine Schwingungen oder Überlastungen auftreten, eventuell sind elastische Kupplungen oder Drehmomentbegrenzer zu verwenden.</p> <p>Inbetriebnahme Die Antriebseinheit kann in beiden Drehrichtungen eingesetzt werden. Die Einheit muss sofort angehalten werden, wenn ein unzulässiger Lauf oder unerwartete Geräusche auftreten. Das fehlerhafte Teil ist zu ersetzen oder die Einheit ist zur Überprüfung einzuschicken, Falls das fehlerhafte Teil nicht ersetzt wird, kann dies zu weiteren Schäden an anderen Bauteilen führen, was eine Feststellung der Ursachen sehr schwierig machen kann.</p> <p>Wartung Obwohl die Einheiten vor der Auslieferung im Leerlauf getestet wurden, ist es ratsam sie in den ersten 20-30 Stunden nicht mit Volllast zu betreiben, um ein einwandfreies Einlaufen zu gewährleisten. Die Einheiten werden entsprechend den Angaben auf dem Typenschild mit synthetischem Schmierstoff Lebensdauer geschmiert ausgeliefert. Bei einem eventuellen Ölwechsel oder Nachfüllen darf der Schmierstoff nicht mit Mineralöl vermischt werden.</p> <p>Handhabung und Transport Beim Heben und Transport ist auf standsichere Lage und sorgfältige Befestigung geeigneter Hebel Vorrichtungen zu achten, Bewegliche Teile dürfen nicht zum Anheben benutzt werden.</p> <p>Anstrich Beim Erneuern oder dem zusätzlichen Aufbringen eines Anstriches sind die Dichtungen, Kupplungssitze und Wellen sorgfältig zu schützen.</p> <p>Langzeitlagerung Die Einlagerung der Einheiten muss trocken und staubfrei erfolgen. Bei einer Einlagerungszeit über 3 Monate sind bearbeitete Flächen und Wellen mit Rostschutzmitteln zu besprühen, Dichtlippen sind mit Fett zu schützen.</p> <p>Entsorgung In Übereinstimmung mit ISO 14001 weisen wir darauf hin, im Falle des Verschrottens die einzelnen Metallteile getrennt zu behandeln und Schmiermittel bei den befugten Stellen zu entsorgen. Verpackungen sollten soweit wie möglich wieder verwendet werden.</p>
<p>Liberatoria Il presente catalogo annulla e sostituisce i precedenti. Le dimensioni e pesi non sono impegnativi VARVEL si riserva il diritto di apportare modifiche senza preavviso. È vietata la riproduzione anche parziale senza preventiva autorizzazione.</p>	<p>Disclaimer This catalogue cancels and replaces the previous ones. Dimensions and weights are not binding. VARVEL reserves the right to make changes without notice. Reproduction, even partial, is prohibited without prior authorization.</p>	<p>Haftungsausschluss Dieser Katalog löscht und ersetzt die vorherigen Kataloge. Abmessung u. Gewichte sind unverbindliche. VARVEL behält sich das Recht vor, unangekündigte Änderungen vorzunehmen. Die teilweise Vervielfältigung ohne vorherige Genehmigung ist untersagt.</p>



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India subsidiary:
MGM-VARVEL Power Transmission Pvt Ltd
Warehouse N. G3 and G4 | Ground Floor
Indus Valley's Logistic Park | Unit 3
Mel Ayanambakkam Vellala Street
Chennai - 600 095 | Tamil Nadu | INDIA
info@mgmvarvelindia.com
www.mgmvarvelindia.com

USA subsidiary:
VARVEL USA LLC
2815 Colonnades Court
Peachtree Corners, GA 30071 | USA
T 770-217-4567 | F 770-255-1978
info@varvelusa.com
www.varvelusa.com

