Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Киргизия (996)312-96-26-47
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Казахстан (772)734-952-31
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Таджикистан (992)427-82-92-69
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

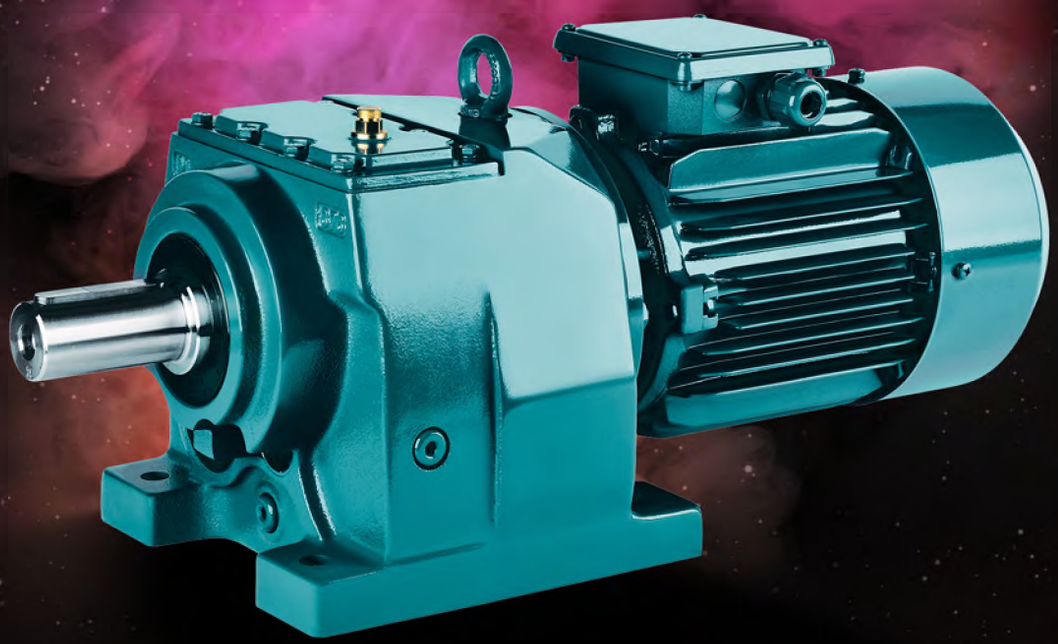
https://danabrevini.nt-rt.ru || dnp@nt-rt.ru

КАТАЛОГ

transmission

BREVINI GEARMOTORS

Foot and Flange Mounted Inline Helical Gearboxes



m SERIES

New Edition 2016

BREVINI GEARMOTORS

m SERIES

brevini power transmission



Indice
Index
Inhaltsverzeichnis

Info generali *General Info.* Einführung	**Significato dei simboli**	*Key of Symbols*	Erklärung der Bezeichnungen	03
	Gamma di produzione	*Production Range*	Produktpalette	04
	Caratteristiche generali dei riduttori serie M	*General Specifications of M Series Gearboxes*	Allgemeine Eigenschaften Von M Serie Getrieben	06
	Spiegazioni tecniche	*Technical Explanations*	Technische Erläuterungen	07
	Caratteristiche tecniche	*Technical Specifications*	Technische Informationen	07
	Accessori	*Accessories*	Zubehör	08
	Designazione unità	*Unit Designation*	Typenbezeichnungen	10
	Esempi di designazione	*Sample Designations*	Typenbezeichnungsbeispiele	13
	Comb. di rapporti geometricamente possibili, in funzione della grandezza del motore	*Geometrically possible Combinations of Ratios According to Motor Size*	Geometrisch Mögliche Kombi. von Übersetz. nach Motorbaugröße	14
	Fattore di servizio	*Service Factor*	Betriebsfaktor	16
	Classificazione dei carichi	*Load Classification*	Belastungsart	17
	Senso di rotazione	*Direction of Rotation*	Getriebedrehrichtungen	19
	Carichi radiali	*Radial Loads*	Querkräfte	20
	Calc. dei carichi radiali	*Calculation Of Radial Loads*	Berechnung der Querkräfte	21
	Calc. della potenza equivalente	*Equivalent Power Calculation*	Äquivalente Leistung	22
	Esempio di calcolo della potenza equivalente	*Equivalent Power Calculation Example*	Beispiel für Äquivalente Leistung	23
	Scelta del riduttore	*Gearbox Selection*	Getriebeauswahl	24
	Modulo di scelta del riduttore	*Gearbox Selection Form*	Formular für Getriebeauswahl	26
	Lubrificazione	*Lubrication*	Schmierung	29
	Vaso di espansione	*Expansion tank*	Olausgleichsbehälter	29
	Tipi di olio	*Oil Types*	Schmierstoffe	31
	Posizioni di montaggio	*Mounting Positions*	Bauformen	32
	Mounting Pos. and Oil plugs	*Mounting Pos. and Oil plugs*	Bauform. und Olverschlussschra.	33
	Quantità di olio	*Oil Quantities*	Olmengen Tabellen	33
Motori *Motors* Motor	**Motori CA**	*AC Motors*	Drehstrommotoren:	39
	a- General Spec. of AC Motors	*a- General Spec. of AC Motors*	a-Eigensc. des Drehstrommotors	40
	b- Modalità di funzionamento	*b-Modes of Operation*	b-Betriebsarten	41
	c- Classe di protezione	*c- Protection Class*	c- Schutzarten	41
	d- Classe di isolamento	*d- Insulation Class*	d- Isolationsklasse	41
	e- Classi di rendimento:	*e- Efficiency Classes*	e- Energieeffizienzklassen	41



Indice
Index
Inhaltsverzeichnis

Freni *Brakes* Bremsen	**f- Convertitori di frequenza in CA**	*f- AC Frequency Inverters*	f- AC Frequenz Umrichter	42
	Motori CC	*DC Motors*	DC Motoren	43
	a- Caratt. generali dei motori CC	*a- General Specif. of DC Motors*	a- Eigenschaften von DC Motoren	43
	b- Principi di funzionamento dei motori CC	*b- Operating principals of DC Motors*	b- Funktionsprinzip der DC Motoren	43
	c- Tipi di motori CC	*c- Types of DC Motors*	c- Arten von DC Motoren	43
	d- Controllo della velocità di rotazione dei motori CC	*d- Speed Control of DC motors*	d- Drehzahl Kontrolle DC Motoren	44
	Freni elettromagnetici	*Electromagnetic Brakes*	Elektromagnetische Bremsen	44
	Tipi di freni	*Brake Types*	Bremsenarten	44
	Tipi di connessione	*Connection Types*	Schaltungsarten	45
	Scelta dei freni	*Brake Selection*	Bremswahl	46
	Capacità termica dei freni	*The Thermal Capacity of Brake*	Therm. Kapazität der Bremsen	47
Tabelle prestazionali *Perform. Tables* Leistung-Drehzahl Tabellen.	**Tabelle prestazionali dei motoriduttori**	*Geared Motors Performance Tables*	Getriebenmotoren Leistung und drehzahl Übersicht	49
	Tabelle prestazionali dei riduttori	*Gear Units Performance Tables*	Getriebe Leistung und Drehzahlübersicht	319
Tabelle dimensionali *Dimension Pages* *Abmesungs* Tabellen	**Serie MR, NR**	*MR, NR series*	MR, NR serien	105
	Serie MN, NN	*MN, NN series*	MN, NN serien	136
	Serie MV, NV	*MV, NV series*	MV, NV serien	176
	Serie MT, NT	*MT, NT series*	MT, NT serien	333
	Serie MRF	*MRF series*	MRF serie	206
	Serie MNF	*MNF series*	MNF serie	222
	Serie MVF	*MVF series*	MVF serie	246
	Serie MTF	*MTF series*	MTF serie	364
	Serie NRB	*NRB series*	NRB serie	262
	Serie NNB	*NNB series*	NNB serie	280
	Serie NVB	*NVB series*	NVB serie	300
	Serie NTB	*NTB series*	NTB serie	376
Motori *Motors* Motor	**Taglie e prestazioni dei motori elettrici**	*Electric Motors Ratings and Performance*	Elektromotoren Leistungsdaten	395



Informazioni generali
General Information
Einführung

Significato dei simboli		*Key of Symbols*		Erklärung der Bezeichnungen	
c_t	:Coefficiente tempo di attivazione.	c_t	:*Coefficient of switch on time.*	c_t	: Koeffizient der Tätigkeitszeit von Schalter
f_s	: Fattore di servizio	f_s	: *Service factor*	f_s	: Betriebsfaktor
F_{ama}	: Carichi assiali ammessi sugli alberi in uscita [kN]	F_{ama}	: *Permissible axial loads which can be applied to output shafts [kN]*	F_{ama}	: Zulässige Axialkräfte auf Abtriebswelle [kN]
F_{ame}	: Carichi assiali ammessi sugli alberi in entrata [kN]	F_{ame}	: *Permissible axial loads which can be applied to input shafts [kN]*	F_{ame}	: Zulässige Axialkräfte auf Antriebswelle [kN]
F_{qam}	: Carichi radiali ammessi sugli alberi in uscita [N]	F_{qam}	: *Permissible radial loads which can be applied to output shafts [N]*	F_{qam}	: Zulässige Querkräfte auf Abtriebswelle [N]
F_{qem}	: Carichi radiali ammessi sugli alberi in entrata [N]	F_{qem}	: *Permissible radial loads which can be applied to input shafts [N]*	F_{qem}	: Zulässige Querkräfte auf Antriebswelle [N]
F_{qa}	: Carichi radiali applicati sull'albero in uscita [N]	F_{qa}	: *Radial loads applied to the output shaft [N]*	F_{qa}	: Querkräfte auf Abtriebswelle [N]
F_{qe}	: Carichi radiali applicati sugli alberi in entrata [N]	F_{qe}	: *Radial loads applied to the input shafts [N]*	F_{qe}	: Querkräfte auf Antriebswelle [N]
F_q	: Carichi radiali sull'albero in uscita [N]	F_q	: *Radial loads on output shaft [N]*	F_q	: Querkräfte auf Abtriebswelle [N]
F_a	: Carichi assiali sull'albero in uscita [N]	F_a	: *Axial loads on output shaft [N]*	F_a	: Axialkräfte auf Abtriebswelle [N]
i	: Rapporto di trasmissione	*i*	: *Transmission ratio*	i	: Übersetzungsverhältnis
J_{ext}	: L'inerzia totale delle parti rotanti sul lato di uscita, ridotta a livello dell'albero motore [kgm^2]	J_{ext}	: *The total inertia of rotating parts on outside reduced at the motor shaft [kgm^2]*	J_{ext}	: Die Gesamtträgheit der rotierende Teile von der Aus gangsseite reduziert auf Motor welle [kgm^2]
M_2	: Coppia trasmessa [N]	M_2	: *Output torque [N]*	M_2	: Ausgangsdrehmoment [N]
M_a	: Coppia nominale [Nm]	M_a	: *Nominal torque [Nm]*	M_a	: Nenndrehmoment [Nm]
n_1	: Velocità di rotazione in entrata al riduttore [giri/min.]	n_1	: *Input speed of gearbox [rpm]*	n_1	: Antriebsdrehzahl [U/min]
n_2	: Velocità di rotazione in uscita dal riduttore [giri/min.]	n_2	: *Output speed of gearbox [rpm]*	n_2	: Abtriebsdrehzahl [U/min]
P_{eq}	: Potenza equivalente [W]	P_{eq}	: *Equivalent power [W]*	P_{eq}	: Äquivalente Leistung [W]
P_e	: Potenza nominale (indicata nelle tabelle prestazionali) [W]	P_e	: *Nominal power (given on performance tables) [W]*	P_e	: Getriebe Nennleistung (siehe Leistung- Drehzahltabellen) [W]
P_M	: Consumo di potenza della macchina azionata dal riduttore (per potenze diverse fare riferimento alla potenza equivalente) [kW]	P_M	: *Power consumption of the driven machine (for alternating power, refer to equivalent power) [kW]*	P_M	: Leistung benötigt an der Ab triebswelle (Zur Berechnung bei variabler Leistungen äqui valente Leistung benutzen) [kW]
t	: Tempo [s]	*t*	: *Time [s]*	t	: Zeit [s]
T_e	: Coppia equivalente [Nm]	T_e	: *Equivalent torque [Nm]*	T_e	: Äquivalentes Drehmoment [Nm]



Informazioni generali
General Information
Einführung

Caratteristiche generali dei riduttori serie M

Brevini Power Transmission S.p.A. nel progettare i riduttori della serie M ha optato per la struttura monoblocco, che offre una serie di vantaggi in termini di rigidità, tenuta, livello di rumorosità e resistenza degli ingranaggi. Tutti i cuscinetti sono supportati dal corpo monoblocco e non da piastre di copertura o altri componenti. Lavorare gli assi con un singolo ciclo operativo garantisce alta precisione e una tolleranza dell'asse molto ridotta. Il corpo, realizzato in ghisa GG20-22 utilizzando tecnologie produttive di alto livello, garantisce un'alta qualità del riduttore. I cuscinetti, gli ingranaggi e gli alberi sono stati dimensionati utilizzando un software professionale. La piastra centrale di supporto è il miglior sistema di supporto per i cuscinetti utilizzato nei riduttori tristadio. Questo consente di ridurre al minimo l'usura e le deformazioni a vantaggio della silenziosità.
I riduttori della serie M sono facili da installare. La connessione dei riduttori al motore può essere realizzata secondo quanto richiesto dal cliente: connessione diretta o mediante flangia IEC B5 o B14. Tutti i modelli possono essere forniti per montaggio su piedini o con flangia, in versione bistadio o tristadio con corpo monoblocco. Tutti i riduttori sono stati progettati per essere modulari rendendo possibile accoppiare due riduttori con una modifica solo minima. Ogni singola tolleranza su tutte le parti che compongono il riduttore viene attivamente controllata dal nostro sistema di assicurazione della qualità.

In sede di progettazione, in Brevini Power Transmission ci lasciamo guidare dai principi seguenti:
- Utilizzo di alta tecnologia
- Affidabilità
- Elevata densità di potenza
- Alto rendimento
- Compatibilità in sede di montaggio
- Soluzioni flessibili

Attenzione ai punti seguenti!
- I disegni hanno scopo puramente indicativo e non sono vincolanti.
- Brevini Power Transmission S.p.A. si riserva il diritto di apportare qualsiasi tipo di cambiamento ai prodotti e ai cataloghi senza alcun preavviso.
- Prima della messa in funzione leggere e attenersi alle istruzioni operative fornite assieme al riduttore.
- Le quantità di olio indicate sono solo indicative. L'esatta quantità di olio andrà verificata con l'aiuto dei tappi di livello olio forniti, a seconda delle posizioni di montaggio. La corretta viscosità dell'olio è indicata sulla targhetta del riduttore.
- Se nell'ordine di acquisto non è specificata la posizione di montaggio richiesta, i riduttori della serie M verranno forniti con posizione di montaggio M1 e quelli della serie N con la posizione di montaggio M4. L'utilizzo del riduttore in una posizione di montaggio diversa da quella indicata sulla targhetta comporta il decadimento della garanzia. I pesi indicati nel presente catalogo sono valori medi. Il peso può variare in funzione del rapporto e degli accessori.

General Specifications of M Series Gearboxes

Brevini Power Transmission S.p.A. M series gearboxes have been developed according to the single piece housing principle (monoblock) which has advantages in rigidity, oil leakage, noise level and gear strength. All bearings are supported by the single piece housing itself and not by cover plates or other components which connect other parts. Machining axes with single operation cycle provide high precision and very tight axis tolerance. The housing made of GG20-22 material provides high gear quality together with the high manufacturing technologies achieved. This design ensures both high bearing and gear lifetime; high radial loads are supported. The bearings, gears and shafts used in the gearbox have been calculated using professional software, and they are implemented according to up-to-date standards. The middle bearing support plate is the best support for bearings used in three stage gearboxes. So wear and deformation caused by working with load are minimized achieving low noise gearbox operation.
M series gearboxes are featured by easy installation and flexible use. The gearboxes motor connection can be provided according to customers request, suitable to direct, IEC B5 or B14 connection. All models can be delivered foot or flange mounted with two or three stages in a single housing. All gearboxes has been designed modular therefore it is possible to couple two gearboxes with minimum change. Every tolerance on all the parts used in the gearbox is actively controlled by our quality assurance system.

As Brevini Power Transmission S.p.A., our design principals are:
-Use of high technology
-Reliability
-High power density
-High efficiency
-Compatible mounting
-Flexible solutions

Attention to the following points !
- Drawings are examples only and the details on the drawings or illustrations are not strictly binding.
- Brevini Power Transmission S.p.A. reserve the right to make all kinds of changes in products and catalogs without any notice.
- Prior to commissioning, the operating instructions provided with the gearbox must be observed.
- Oil quantities given are guide values only. The exact quantity of oil should be checked by using the provided oil level plugs according to the mounting positions. For correct oil viscosity refer to the nameplate.
- If the mounting position is not specified on the order, the M series gear units are delivered with **M1** mounting position and N series gear units are delivered according to **M4** *mounting position. A different operation than the indicated mounting position on the name plate cancels the warranty. The weights given in this catalog are mean values. Depending on the ratio and accessories the weights can differ.*

Allgemeine Eigenschaften von M Serie Getrieben

Brevini Power Transmission S.p.A. M Serie-Getriebe wurde nach dem Prinzip Blockgehäuse, welche Vorteile beim Steifigkeit, Dichtheit, Geräusch und Zahnradfestigkeit hervorbringt, entwickelt. Alle Lagerungen sitzen auf nicht geteilte Oberfläche des Gehäuses, wo es keine Verbindung für Deckel oder ein anderes Teil gibt. Alle Achsen werden mit einer Aufspannung bearbeitet. Dieses Vorgehen erlaubt höchste Genauigkeit bei Achsentoleranzen. Mit hohen Fertigungstechnologien erreichte hohe Zahnqualitäten werden mit Gehäuse aus GG20-22 ergänzt. Diese Konstruktion sorgt für hohe Lager- und Zahnlebensdauer; so können hohe Querkräfte getragen werden. Berechnungen von Lagern, Getrieben und Wellen im Getriebe werden mit professioneller Software, die gemäß aktuellen Standards implementiert sind, durchgeführt. Die mittlere Trägerplatte ermöglicht eine optimale Unterstützung für Lager welches in der drei stufige Getriebe eingesetzt wird. So werden Rundlauffehler und Verformung unter Last minimiert, was Produktion von geräuscharmen Getrieben möglich macht.
M Serie-Getriebe sind leicht montierbar und einsetzbar. Motoranschluss von Getrieben kann nach Kundenwunsch geeignet zu direkte, IEC B5 oder B14-Verbindung angeboten werden. Alle Modelle können mit Fuß oder Flansch in zwei oder drei stufige Getriebegehäusen geliefert werden. Alle Getrieben wurde modular konzipiert, sodass Doppel-Getriebe mit wenigem Aufwand gekoppelt werden kann. Jede Toleranzen auf jedem Teil in Getriebe werden aktiv durch Qualitätssicherungssystem überprüft.

Als Brevini Power Transmission S.p.A. unsere Entwurfsprinzipien sind;
- Verwenden von hohen Fertigungstechniken
- Hohe Betriebssicherheit
- Leistungsdichte
- Hoher Wirkungsgrad
- Universale Montagemoglichkeit
- Sonderlosungen

Bitte folgende Punkte beachten !
- Die Abbildungen sind beispielhaft und nicht verbindlich.
- Alle Änderungen auf dem Katalog und an der Produkte bleiben vorbehalten und konnen ohne Kenntnisnahme erfolgen.
- Vor Inbetriebnahme ist die mit gelieferter Betriebsanleitung zu beachten.
-Angaben uber Ölmengen sind unverbindlich. Maßgebend ist die Ölstandsschraube in der geeigneten Montageposition. Olviskositat und Sorte muss den Angaben des Typenschieldes entsprechen.
- Wenn die Bauform bei der Bestellung nicht angegeben ist, erfolgt die Lieferung in der Bauform **M1** fur M Serie und **M4** fur N Serie**.** Wenn die Getriebe anders als auf dem Namenschild benannte Bauform eingesetzt werden, verliert die Garantie ihre Gultigkeit. Die angegebenen Gewichte sind unverbindliche Mittelwerte ohne Zubehor; genauere Gewichte sind abhangig von Zubehor und Übersetzung.



Informazioni generali
General Information
Einführung

Spiegazioni tecniche

- Coppia trasmessa (M_2): [Nm]
Moltiplicando la coppia in uscita dal motore per il rapporto di trasmissione e il rendimento si ottiene la coppia trasmessa a livello dell'albero in uscita dal riduttore.

- Coppia nominale (M_a): [Nm]
La coppia nominale è la coppia meccanica a cui il riduttore è in grado di resistere in condizioni di f_s=1.

- Potenza nominale (P_e): [kW]
La potenza nominale è la potenza a cui il riduttore, sottoposto a sollecitazioni meccaniche, è in grado di resistere in condizioni di f_s=1. I valori della potenza nominale sono indicati nelle tabelle prestazionali.

- Rapporto (i):
Rapporto tra il numero di giri dell'albero in uscita e quello dell'albero in entrata. I rapporti disponibili per i riduttori Brevini Power Transmission S.p.A. serie M sono compresi tra 3,5 e 23.500.

- Potenza e coppia equivalente
P_{eq}: [kW],T_e [Nm]
Per i riduttori con velocità di rotazione costante ma condizioni di lavoro variabili: corrisponde alla potenza o alla coppia calcolata, equivalente ai valori di esercizio in condizioni di lavoro costanti.

- Potenza richiesta (P_M): [kW]
Potenza richiesta per le applicazioni, necessaria per azionare il sistema.

- Coppia richiesta (T): [Nm]
Coppia richiesta per le applicazioni. La coppia richiesta deve sempre essere uguale o inferiore alla coppia in uscita per il riduttore scelto.

- Carichi assiali e radiali ammessi:
Fqem, Fqam [N]
Carico assiale e radiale ammesso sull'albero in uscita o in entrata dei riduttori.

- Fattore di servizio (f_s):
Il fattore di servizio è un coefficiente di sicurezza che tiene conto delle diverse condizioni di lavoro della macchina azionata. In presenza di carichi uniformi per 8 ore di funzionamento al giorno e fino a 100 cicli all'ora si utilizza il fattore f_s=1.

Caratteristiche tecniche:

- Livello di rumorosità:
Il livello di rumorosità dei nostri riduttori è inferiore ai valori ammessi così come definiti nella direttiva VDI 2159 per i riduttori.

- Verniciatura e protezione contro la corrosione:
I riduttori sono verniciati con vernice di colore RAL 7031 in accordo alla DIN1843. Su richiesta, sono disponibili altri colori. Su richiesta, sono disponibili anche verniciature idonee per ambienti ad alto tasso di umidità o chimicamente aggressivi.

Technical Explanations

- Output Torque (M_2): [Nm]
Multiplication of motor output torque by transmission ratio and efficiency gives the output torque result at the output shaft of the gear unit.

- Nominal Torque (M_a): [Nm]
Nominal torque is the mechanical torque which the gearbox can resist under f_s=1 conditions.

- Nominal Power (P_e): [kW]
The nominal power is the power which the gearbox can mechanically resist under f_s=1 condition. The nominal powers are given on the performance tables.

- Ratio (i):
Ratio between output shaft speed and input shaft speed. Available ratios of Brevini Power Transmission S.p.A. M series are between 3.5 to 23500.

- Equivalent Power and Torque
P_{eq}: [kW],T_e [Nm]
For gearbox unit with constant speed but variable working conditions: This is the calculated power or torque which is equivalent to the working values under constant working conditions.

- Required Power (P_M): **[kW]**
Required power for the applications which is able to drive the system.

- Required Torque (T): [Nm]
Required torque for applications. The required torque always must be equal or minor than the output torque for the selected gearbox.

- Permissible Axial and Radial Loads:
Fqem, Fqam [N]
Permissible axial and radial load at the output or input shaft of gearboxes.

- Service Factor (f_s):
Service factor is a safety coefficient, which takes into account the different working conditions of the driven machine. f_s=1 is used for uniform loads 8 working hours per day and up to 100 cycles per hour.

Technical Specifications:

- Noise Level:
The noise level of our gearboxes is below the permitted values defined in VDI guidelines 2159 for gear units.

- Coating and Corrosion Protection:
The gearboxes are painted with RAL 7031 according to DIN1843. Different colors are available upon request. Paint coating for high humidity or chemically aggressive environments are available upon request .

Technische Erläuterungen

- Ausgangsmoment (M_2): [Nm]
Multiplikation von Ausgangsmoment des Motors mit Übersetzung und Division das Ergebnis mit Wirkungsgrad ergibt den Betrag von Ausgangsmoment der Getriebe.

- Nennmoment (M_a): [Nm]
Mechanisches Belastungsmoment der Getriebe unter dem Bedingung f_s=1.

- Nennleistung (P_e): [kW]
Die Nennleistung ist die mechanische Grenzfestigkeitsleistung fur fs=1. Kann von der Leistung- Drehzahltabelle abgelesen werden.

- Übersetzung (i):
Wird aus dem Verhaltnis von Ausgang- zu Eingangswinkelgeschwindigkeit bestimmt. Gangige Übersetzungen von Brevini Power Transmission S.p.A. M Serie Getrieben liegt zwischen 3,5 bis 23500.

-Äquivalente Leistung und Moment
P_{eq}: [kW], T_e [Nm]
Fur mit konstanten Drehzahl aber unter veranderlichen Betriebsbedingungen arbeitende Getriebe berechnete Leistung und Moment aquivalent zu Werten beim Arbeiten unter konstanten Betriebsbedingungen.

- Notwendige Leistung (P_M): [kW]
Fur das Getriebe notwendige Leistung, um Arbeiten von Getriebe bei der fur das Getriebe gedachten Anwendung zu gewahrleisten.

- Notwendige Moment (T): [Nm]
Notwendige Moment fur Anwendungen. Fur den ausgewahlte Getriebe soll das notwendige Moment gleich dem Ausgangsmoment oder kleiner als diesem Moment sein.

- Zulässige Axial- oder Querkräfte:
Fqem, Fqam [N]
Bei der Anwendungen wahrend der Betrieb zulassige axiale oder radiale Eingangs- oder Ausgangsbelastungen.
- Betriebsfaktor (f_s):
Dieser Faktor f_s ist ein Sicherheitsfaktor, damit die Getriebe unter verschiedenen Bedingungen mit genugender Sicherheit arbeitet. f_s=1 gilt fur gleichformig Belastung, mit 8 Betriebsstunden pro Tag und bis zum 100 Schaltungen pro Stunde.

Technische Informationen:

- Gerauschpegel:
Geräuschstarken aller Getriebe bleiben unter die zulassigen Werte, die fur die Getriebe in der VDI-Richtlinie 2159 festgelegt sind.

- Lackierung und Korrosionsschutz:
Die Getriebe werden mit der Farbe RAL 7031 nach DIN1843 lackiert. Auf Wunsch sind Sonderlackierungen moglich. Alle Getriebe konnen auf Wunsch auch in korrosionsgeschützter Ausführung fur aggressive Umgebungen geliefert werden.



Informazioni generali
General Information
Einführung

- Lubrificazione:

I riduttori della serie M e N utilizzano i tipi di olio riportati nelle tabelle di lubrificazione. Per maggiori informazioni sulla lubrificazione, fare riferimento alla sezione dedicata.

- Accessori:

I riduttori della serie M e N possono essere corredati
dei seguenti accessori.
- Flangia di connessione motore IEC B5/B14
- Flange di uscita
- Dispositivi antiritorno
- Guarnizioni speciali di tenuta
- Indicatore livello olio trasparente
- Freni elettromagnetici.

Per altri accessori, si prega contattare Brevini Power Transmission S.p.A..

- Lubrication:

M and N series gearboxes are filled with the oils indicated on the lubrication tables. For lubrication details please refer to the lubrication section.

- Accessories:

The following accessories can be applied to M and N series gearboxes.
- IEC B5/B14 Motor connection flange
- Output flanges
- Backstops
- Special sealing solutions.
- Transparent oil level indicator,
- Electromagnetic brakes.

For other accessories please contact, Brevini Power Transmission S.p.A..

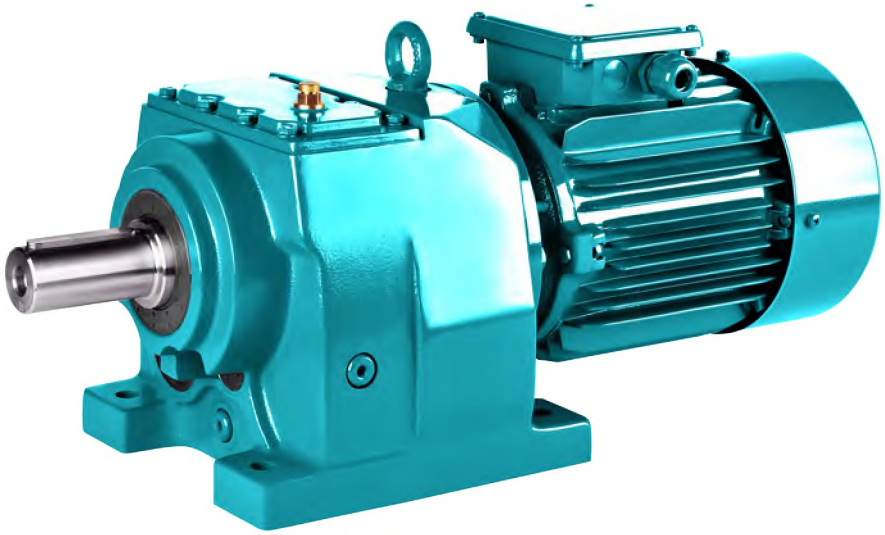
- Schmierung:

M und N Serien Getriebe werden mit Olen entsprechend der Schmierungstabellen, falls nicht anders vereinbart, geliefert. Fur weitere Schmierungsangaben siehe Kapitel Schmierung.

- Zubehör:

Folgendes Zubehor kann fur Getriebe der M und N Serien geliefert werden.
- IEC B5/B14 Motor Adapter,
- Abtriebsflansch,
- Rücklaufsperren,
- Spezielle Dichtungssysteme,
- Transparente Olstandsanzeige
- Elektromagnetische Bremsen

Für weiteres Zubehor kontaktieren Sie bitte mit, Brevini Power Transmission S.p.A..






transmission
power
brevini

Designazione / *Unit Designation* / Typenbezeichnungen

M R 4 7 3 - 3 E90S / 4C - L02

Freno / Brake / Bremse

L-220V **Con ventola** / With Fan / Mit Lufter
P-24V **Con ventola** / With Fan / Mit Lufter
S-220 V **Senza ventola** / Without Fan / Ohne Lufter
Z-24 V **Senza ventola** / Without Fan / Ohne Lüfter

01-10 Nm	**10**-100 Nm
02-25 Nm	**20**-200 Nm
04-40 Nm	**30**-300 Nm
05-50 Nm	**40**-400 Nm

Numero di poli / *Number of poles* / Anzahl der Polen

Grandezza motore / *Motor Size* / Motorbaugroße

Per le versioni MR / NR e MV / NV
For MR / NR and MV / NV Types
Fur die Typen MR / NR und MV / NV

90S / 4

- **Numero di poli** / *Pole Number* / Anzahl der Polen
- **Lunghezza corpo** / *Frame Lenght* / Gehäuselänge des Motors
- **Grandezza motore** / *Motor size* / Motorbaugröße

Per le versioni MN / NN
For MN / NN Types
Fur die Typen MN / NN

A06 :63 B5	**A09** : 90 B5	**A13**:132 B5	**A25**: 250 B5
B06 :63 B14	**B09** : 90 B14	**B13**:132 B14	**A28**: 280 B5
A07 :71 B5	**A10** :100 B5	**A16**:160 B5	**A31**: 315 B5
B07 :71 B14	**B10** :100 B14	**A18**:180 B5	
A08 :80 B5	**A11** :112 B5	**A20**:200 B5	
B08 :80 B14	**B11** :112 B14	**A22**:225 B5	

Classe di efficienza dei motori / *Motor Efficiency Class* / Motor-Effizienzklasse

Stadio / *Stage* / Anzahl der Stufen

2 Stadi / *2 Stages* / 2 stufig	**5 Stadi** / *5 Stages* / 5 stufig
3 Stadi / *3 Stages* / 3 stufig	**6 Stadi** / *6 Stages* / 6 stufig
4 Stadi / *4 Stages* / 4 stufig	

Numero revisione / *Revision Number* / Anderungsnummer

Grandezza corpo / *Housing Size* / Große der Gehause

1...9

Tipo di entrata / *Input Type* / Eingangstyp

- **R** :**Con motore** / *With Motor* / Mit Motor
- **N** :**Flangiato IEC B5 / B14 senza motore** / *IEC B5 / B14 Flanged without Motor* / *Mit* IEC B5/B14 Motorflansch ohne Motor
- **V** : **Flangiato IEC B5 / B14 con motore** /*IEC B5 / B14 Flanged with Motor* / Mit Motor und IEC B5/B14 Motorflansch
- **T** :**Con albero pieno in entrata** /*With Solid Input Shaft* / Eingang ohne Motor

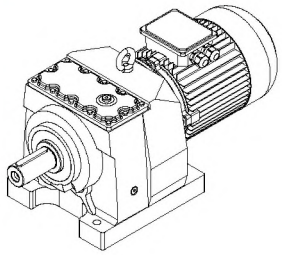
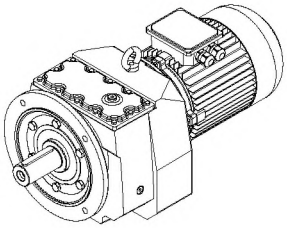
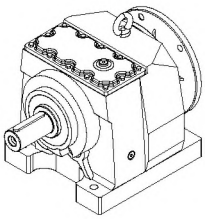
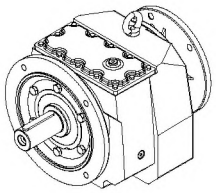
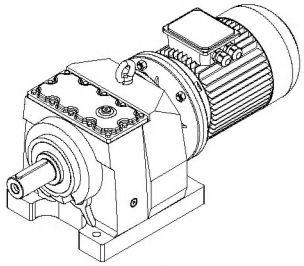
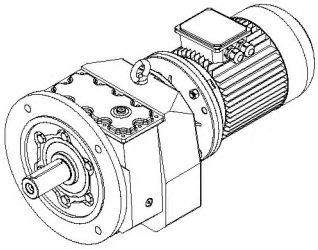
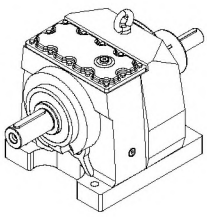
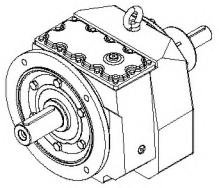
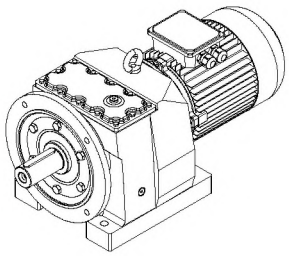
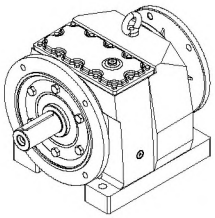
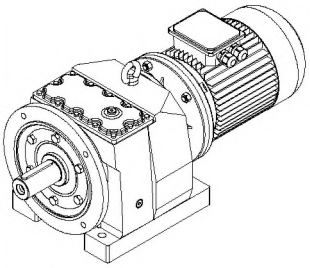
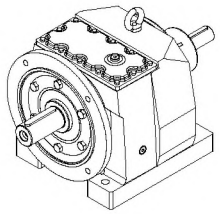
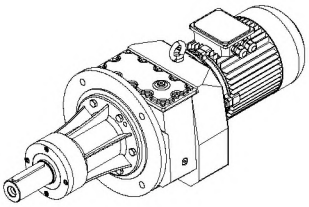
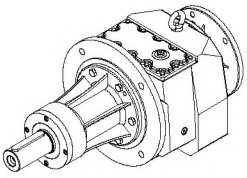
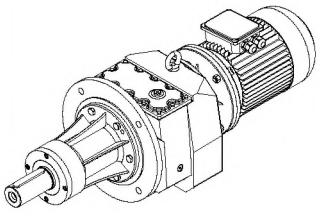
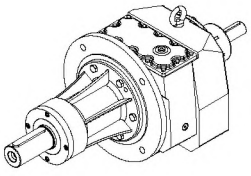
Tipo di riduttore / *Gearbox Type* / Getriebe

Serie M / M Serie / M Serie
Serie N / N Serie / N Serie

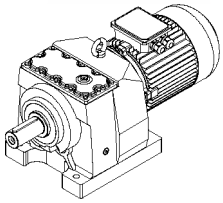
Designazione / *Unit Designation* / Typenbezeichnungen

MR...	**Motoriduttori elicoidali monoblocco, montati su piedini** / *Monoblock type helical geared motors, foot mounted* / Stirnradgetriebemotoren mit Blockgehause, Ausfuhrung mit Fuss
NR...	**Motoriduttori elicoidali monoblocco, montati con flangia** / *Monoblock type helical geared motors, flange mounted* / Stirnradgetriebemotoren mit Blockgehause, Ausfuhrung mit Flansch
MN...	**Motoriduttori elicoidali monoblocco con flangia di connessione motore IEC B5/B14, montati su piedini** / *Monoblock type helical geared units with IEC B5/B14 motor flange, foot mounted* / Stirnradgetriebe mit Blockgehäuse und IEC B5/B14 Motorflansch, Ausführung mit Fuss
NN...	**Motoriduttori elicoidali monoblocco con flangia di connessione motore IEC B5/B14, montati con flangia** / *Monoblock type helical geared units with IEC B5/B14 motor flange, flange mounted* / Stirnradgetriebe mit Blockgehause und IEC B5/B14-Flansch, Ausführung mit Flansch
MV...	**Motoriduttori elicoidali monoblocco con flangia di connessione motore IEC B5/B14, montati su piedini** / *Monoblock type helical geared motors with IEC B5/B14 motor flange, foot mounted* / Stirnradgetriebemotoren mit Blockgehause und IEC B5/B14-Flansch, Ausführung mit Fuss
NV...	**Motoriduttori elicoidali monoblocco con flangia di connessione motore IEC B5/B14, montati con flangia** / *Monoblock type helical geared motors with IEC B5/B14 motor flange, flange mounted* / Strinradgetriebemotoren mit Blockgehause und IEC B5/B14, Ausfuhrung mit Flansch
MT...	**Motoriduttori elicoidali monoblocco con albero pieno all'entrata, montati su piedini** / *Monoblock type helical geared units with solid input shaft, foot mounted* / Stirnradgetriebe mit Blockgehause und Eingangsvollwelle, Ausfuhrung mit Fuss
NT...	**Motoriduttori elicoidali monoblocco con albero pieno all'entrata, montati con flangia** / *Monoblock type helical geared units with solid input shaft, flange mounted* / Strinradgetriebe mit Blockgehause und Eingangsvollwelle, Ausfuhrung mit Flansch
MRF...	**Motoriduttori elicoidali monoblocco, montati su piedini, con flangia all'uscita** / *Monoblock type helical geared motors, foot mounted, with output flange* / Stirnradgetriebemotoren mit Ausgangsflansch, Ausführung mit Fuss
MNF...	**Motoriduttori elicoidali monoblocco, montati su piedini, con flangia IEC B5/B14, flangia all'uscita** / *Monoblock type helical geared units, foot mounted, with IEC B5/B14 flange, with output flange* / Stirnradgetriebemotoren mit Ausgangsflansch und IEC B5/B14-Flansch, Ausführung mit Fuss
MVF...	**Motoriduttori elicoidali monoblocco, montati su piedini, con flangia IEC B5/B14, flangia all'uscita** / *Monoblock type helical geared motors, foot mounted, with IEC B5/B14 flange, with output flange* / Stirnradgetriebemotoren mit Ausgangsflansch und IEC B5/B14-Flansch, Ausführung mit Fuss
MTF...	**Riduttori elicoidali monoblocco, montati su piedini, con albero pieno all'entrata e flangia all'uscita** / *Monoblock type helical geared units, foot mounted, with solid input shaft, with output flange* / Stirnradgetriebe mit Ausgangsflansch und Eingangsvollwelle, Ausführung mit Fuss.
NRB...	**Motoriduttori elicoidali monoblocco, con flangia all'uscita con agitatore** / *Monoblock type helical geared motors, with agitator output flange* / Stirnradgetriebemotoren mit Blockgehäuse und Mischerflansch
NNB...	**Motoriduttori elicoidali monoblocco, con flangia all'uscita con agitatore e flangia IEC B5/B14** / *Monoblock type helical geared units, with agitator output flange with IEC B5/B14 flange* / Stirnradgetriebe mit Blockgehäuse, IEC B5/B14- und Mischerflansch
NVB...	**Motoriduttori elicoidali monoblocco, con flangia all'uscita con agitatore e flangia IEC B5/B14** / *Monoblock type helical geared motors, with agitator output flange with IEC B5/B14 flange* / Stirnradgetriebemotoren mit Blockgehäuse, IEC B5/B14- und Mischerflansch
NTB...	**Motoriduttori elicoidali monoblocco, con flangia all'uscita con agitatore, con albero pieno all'entrata** / *Monoblock type helical geared units, with agitator output flange, with solid input shaft* / Stirnradgetriebe mit Blockgehäuse, Eingangsvollwelle und Mischerflansch

Designazione / *Unit Designation* / Typenbezeichnungen

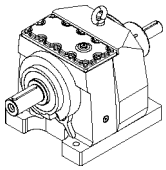
 **MR...**	 **NR...**	 **MN...**	 **NN...**
 **MV...**	 **NV...**	 **MT...**	 **NT...**
 **MRF...**	 **MNF...**	 **MVF...**	 **MTF...**
 **NRB...**	 **NNB...**	 **NVB...**	 **NTB...**

Esempi di designazione
MR172 - 3E90S/4C - L05



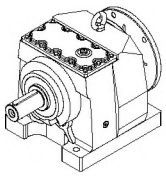
M	**: Riduttore serie M**
R	**: Con connessione motore**
1	**: Grandezza riduttore**
7	**: Numero revisione**
2	**: Numero stadi**
3	**: Classe di efficienza**
E	**: Tipo di motore**
90S	**: Grandezza corpo motore**
4C	**: Numero di poli**
L05	**: Tipo di freni**

MT373



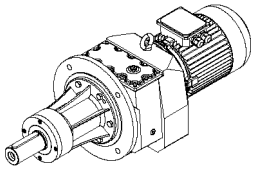
M	**: Riduttore serie M**
T	**: Albero pieno all'entrata**
3	**: Grandezza riduttore**
7	**: Numero revisione**
3	**: Numero stadi**

MN473 - A11



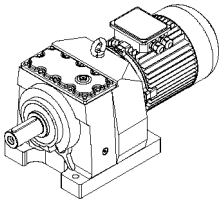
M	**: Riduttore serie M**
N	**: Flangia IEC B5 senza motore all'entrata**
4	**: Grandezza riduttore.**
7	**: Numero revisione**
3	**: Numero stadi**
A11	**: Motore tipo 112, flangia B5**

NRB473 - 3E100L/4C



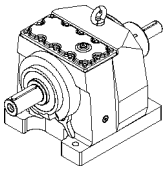
N	**: Riduttore serie N**
R	**: Con motore**
B	**: Flangia con agitatore**
4	**: Grandezza riduttore**
7	**: Numero revisione**
3	**: Numero stadi**
3	**: Classe di efficienza del motore**
E	**: Tipo di motore**
100L	**: Grandezza motore**
4C	**: Numero di poli**

Sample Designations
MR172 - 3E90S/4C - L05



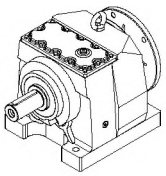
M	*: M series gearbox*
R	*: With motor connection*
1	*: Gear unit size*
7	*: Revision number*
2	*: Stage number*
3	*: Efficiency class*
E	*: Motor type*
90S	*: Motor frame size*
4C	*: Number of poles*
L05	*: Brake type*

MT373



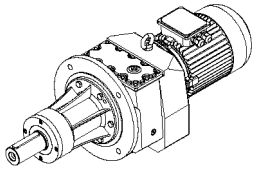
M	*: M series gearbox*
T	*: Solid input shaft*
3	*: Gear unit size*
7	*: Revision number*
3	*: Stage number*

MN473 - A11



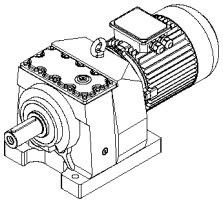
M	*: M series gearbox*
N	*: IEC B5 flange without motor input*
4	*: Gear unit size.*
7	*: Revision number*
3	*: Stage number*
A11	: Motor type 112, B5 flange

NRB473 - 3E100L/4C



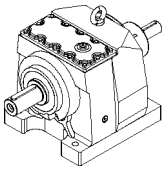
N	: N series gearbox
R	: With motor
B	: Agitator flange
4	: Gear unit size
7	: Revision number
3	: Stage number
3	: Efficiency class
E	: Motor type
100L	: Motor size
4C	: Number of poles

Beispiele für Typenbezeichnung
MR172 - 3E90S/4C - L05



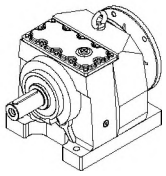
M	: M Serie Getriebe
R	: Motorverbindung
1	: Große der Gehause
7	: Anderungsnummer
2	: Stufenanzahl
3	: Effizienzklasse
E	: Motortyp
90S	: Motorbaugroße
4	: Anzahl der Polen
L05	: Bremse

MT373



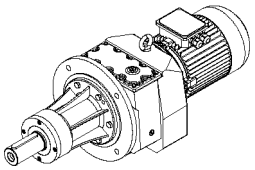
M	: M Serie Getriebe
T	: Vollwelleneingang ohne Motor
3	: Große der Gehause
7	: Änderungsnummer
3	: Stufenanzahl

MN473 - A11



M	: M Serie Getriebe
N	: IEC B5 Flansch ohne Motor
4	: Große der Gehause
7	: Anderungsnummer
3	: Stufenanzahl
A11	: Motortyp 112, B5 Motorflansch

NRB473 - 3E100L/4C



N	: N Serie Getriebe
R	: Mit Motor
B	: Mischerhals
4	: Große der Gehause
7	: Anderungsnummer
3	: Stufenanzahl
3	: Effizienzklasse
E	: Motortyp
100L	: Motorbaugroße
4C	: Anzahl der Pole



Combinazioni di rapporti geometricamente possibili, in funzione della grandezza del motore
Geometrically Possible Combinations of Ratios According to Motor Size
Geometrisch mögliche Kombinationen von Übersetzungen nach Motorbaugröße

Tipo Type Typ	Stadi *Stages* Stufen	Grandezza motore / *Motor Size* / Motorbaugröße 63	71	80	90	100	112	132
MR002	2	3,62 - 11,14	3,62 - 11,14	3,62 - 11,14	3,62 - 11,14	-	-	-
MR003	3	13,61 - 45,18	13,61 - 45,18	13,61 - 32,02	13,61 - 32,02	-	-	-
MR102	2	3,94 - 15,95	3,94 - 15,95	3,94 - 15,95	3,94 - 15,95	-	-	-
MR103	3	17,33 - 50,51	17,33 - 50,51	17,33 - 50,51	17,33 - 50,51	-	-	-
MR172	2	3,38 - 20,92	3,38 - 20,92	3,38 - 20,92	3,38 - 20,92	3,38 - 18,28	3,38 - 6,60 11,08 - 12,66	-
MR173	3	26,10 - 99,21	26,10 - 99,21	26,10 - 99,21	26,10 - 99,21	26,10 - 87,60	26,10 - 30,26 49,81 - 57,76	-
MR202	2	3,50 - 23,01	3,50 - 23,01	3,50 - 23,01	3,50 - 23,01	3,50 - 20,10	3,50 - 13,92	-
MR203	3	23,23 - 68,03	23,23 - 68,03	23,23 - 68,03	23,23 - 68,03	23,23 - 24,77 36,02 - 59,43	36,02 - 41,16	-
MR272	2	3,16 - 25,89	3,16 - 25,89	3,16 - 25,89	3,16 - 25,89	3,16 - 21,43	3,16 - 16,07	-
MR273	3	19,00 - 138,55	19,00 - 138,55	19,00 - 138,55	19,00 - 138,55	19,00 - 121,03	19,00 - 83,83	-
MR275	5	149,02 - 1194,61	149,02 - 1194,61	149,02 - 1194,61	149,02 - 1194,61	-	-	-
MR276	6	1463,49 - 2920,17	1463,49 - 2920,17	1463,49 - 2920,17	1463,49 - 2920,17	-	-	-
MR282	2	-	4,20 - 6,25 9,61 - 30,37	4,20 - 6,25 9,61 - 30,37	4,20 - 6,25 9,61 - 30,37	3,15 - 25,23	3,15 - 19,06	3,15 - 14,31
MR283	3	-	18,33 - 27,80 41,96 - 137,91	18,33 - 27,80 41,96 - 137,91	18,33 - 27,80 41,96 - 137,91	18,33 - 114,14	18,33 - 85,60	18,33 - 27,80 41,96 - 63,65
MR284	4	158,52 - 431,18	158,52 - 431,18	158,52 - 431,18	158,52 - 431,18	-	-	-
MR285	5	376,94 - 1365,28	376,94 - 1365,28	376,94 - 1365,28	376,94 - 1365,28	-	-	-
MR286	6	1817,07 - 3214,82	1817,07 - 3214,82	1817,07 - 3214,82	1817,07 - 3214,82	-	-	-
MR372	2	-	13,53 - 23,33	13,53 - 23,33	13,53 - 23,33	3,28 - 23,33	3,28 - 20,62	3,28 - 16,20
MR373	3	-	18,68 - 20,64 29,47 ; 48,00 - 157,76	18,68 - 20,64 29,47 ; 48,00 - 157,76	18,68 - 20,64 29,47 ; 48,00 - 157,76	18,68 - 138,72	18,68 - 97,92	18,68 - 72,81
MR374	4	181,34 - 524,07	181,34 - 524,07	181,34 - 524,07	181,34 - 524,07	-	-	-
MR375	5	488,82 - 1561,78	488,82 - 1561,78	488,82 - 1561,78	488,82 - 1561,78	-	-	-
MR376	6	1217,14 - 4945,64	1217,14 - 4945,64	1217,14 - 4945,64	1217,14 - 4945,64	-	-	-
MR472	2	-	-	18,72 - 22,15	18,72 - 22,15	4,89 ; 8,47 - 22,15	4,89 ; 8,47 - 22,15	3,27 - 22,15
MR473	3	-	-	86,52 - 219,00	86,52 - 219,00	21,74 ; 30,93 - 157,90	18,04 - 139,54	18,04 - 109,64
MR474	4	-	229,46 - 674,46	229,46 - 674,46	229,46 - 674,46	229,46 - 295,98	229,46 - 259,55	-
MR475	5	726,85 - 2522,85	726,85 - 2522,85	726,85 - 2522,85	726,85 - 2522,85	726,85 - 1631,08	726,85 - 1386,75	-
MR476	6	2148,94 - 7458,85	2148,94 - 7458,85	2148,94 - 7458,85	2148,94 - 7458,85	2148,94 - 5141,34	2148,94 - 4822,33	-
MR572	2	-	-	-	-	17,07 - 27,00	17,07 - 27,00	4,95 - 27,00
MR573	3	-	-	-	-	26,54 - 167,32	22,64 - 134,45	22,64 - 118,95
MR574	4	-	144,37 - 574,90	144,37 - 574,90	144,37 - 574,90	144,37 - 402,12	144,37 - 194,15 301,59	144,37
MR575	5	620,62 - 2736,94	620,62 - 2736,94	620,62 - 2736,94	620,62 - 2736,94	-	-	-
MR576	6	2850,22 - 8091,82	2850,22 - 8091,82	2850,22 - 8091,82	2850,22 - 8091,82	-	-	-
MR672	2	-	-	-	-	-	20,74 - 23,18	5,08 - 5,73 10,62 - 23,18
MR673	3	-	-	-	-	-	110,55 - 196,61	30,20 - 174,89
MR674	4	-	-	-	215,97 - 500,39	215,97 - 500,39	215,97 - 442,20	-
MR675	5	-	730,46 - 2578,93	730,46 - 2578,93	730,46 - 2578,93	583,04 - 2578,93	583,04 - 1113,08	583,04 - 995,91
MR676	6	-	2863,86 - 17441,07	2863,86 - 17441,07	2863,86 - 17441,07	2863,86 - 7490,08	2863,86 - 5287,12	2863,86 - 3931,45
MR772	2	-	-	-	-	-	-	7,26 12,98 - 21,40
MR773	3	-	-	-	-	-	-	17,53 - 19,76 ; 34,89 - 39,33 68,15 - 208,82
MR774	4	-	-	-	190,96 - 594,92	190,96 - 594,92	190,96 - 594,92	190,96 - 467,43
MR775	5		641,40 - 4812,09	641,40 - 4812,09	641,40 - 4812,09	641,40 - 3103,85	641,40 822,02 - 1252,60	822,02 - 984,18
MR776	6		2916,59 - 23464,25	2916,59 - 23464,25	2916,59 - 23464,25	2916,59 - 8428,93	2916,59 - 5949,83	2916,59 - 4424,24
MR872	2	-	-	-	-	-	-	-
MR873	3	-	-	-	-	-	-	56,54 - 110,17
MR874	4	-	-	-	-	188,08 - 446,42	188,08 - 390,74	107,60 - 345,67
MR875	5	-	537,75 - 1924,32	537,75 - 1924,32	537,75 - 1924,32	495,97 - 1924,32	495,97 - 1700,56	495,97 - 1336,15
MR876	6	-	2108,33 - 17501,59	2108,33 - 13014,00	2108,33 - 13014,00	2108,33 - 11443,34	2108,33 - 3892,30	2108,33 - 2894,28
MR972	2	-	-	-	-	-	-	-
MR973	3	-	-	-	-	-	-	-
MR974	4	-	-	-	-	172,08 - 510,11	172,08 - 510,11	172,08 - 510,11
MR975	5	-	-	914,74 - 2027,97	914,74 - 2027,97	588,87 - 2027,97	588,87 - 2027,97	462,18 - 2027,97
MR976	6	-	-	2836,64 - 20051,59	2836,64 - 20051,59	2836,64 - 11064,86	2836,64 - 8620,11	2836,64 - 5357,43

Combinazioni di rapporti geometricamente possibili, in funzione della grandezza del motore
Geometrically Possible Combinations of Ratios According to Motor Size
Geometrisch mögliche Kombinationen von Übersetzungen nach Motorbaugröße

		Grandezza motore / *Motor Size* / Motorbaugröße						
Tipo Type Typ	**Stadi** *Stages* Stufen	**160**	**180**	**200**	**225**	**250**	**280**	**315**
MR002	2	-	-	-	-	-	-	-
MR003	3	-	-	-	-	-	-	-
MR102	2	-	-	-	-	-	-	-
MR103	3	-	-	-	-	-	-	-
MR172	2	-	-	-	-	-	-	-
MR173	3	-	-	-	-	-	-	-
MR202	2	-	-	-	-	-	-	-
MR203	3	-	-	-	-	-	-	-
MR272	2	-	-	-	-	-	-	-
MR273	3	-	-	-	-	-	-	-
MR275	5	-	-	-	-	-	-	-
MR276	6	-	-	-	-	-	-	-
MR282	2	-	-	-	-	-	-	-
MR283	3	-	-	-	-	-	-	-
MR284	4	-	-	-	-	-	-	-
MR285	5	-	-	-	-	-	-	-
MR286	6	-	-	-	-	-	-	-
MR372	2	3,28 - 13,53	-	-	-	-	-	-
MR373	3	21,65 - 25,27 35,25 - 41,16	-	-	-	-	-	-
MR374	4	-	-	-	-	-	-	-
MR375	5	-	-	-	-	-	-	-
MR376	6	-	-	-	-	-	-	-
MR472	2	3,27 - 18,72	3,27 - 15,35	-	-	-	-	-
MR473	3	18,04 - 84,46 ; 91,58	18,04 - 73,09	-	-	-	-	-
MR474	4	-	-	-	-	-	-	-
MR475	5	-	-	-	-	-	-	-
MR476	6	-	-	-	-	-	-	-
MR572	2	4,37 - 23,02	4,37 - 19,15	4,37 - 14,54	-	-	-	-
MR573	3	22,64 - 100,53	22,64 - 39,98 54,74 - 82,45	-	-	-	-	-
MR574	4	-	-	-	-	-	-	-
MR575	5	-	-	-	-	-	-	-
MR576	6	-	-	-	-	-	-	-
MR672	2	3,29 - 23,18	3,29 - 23,18	3,29 - 17,93	3,29 - 11,97	-	-	-
MR673	3	26,66 - 149,11	26,66 - 124,07	26,66 - 94,17	26,66 - 34,36 53,99 - 61,42	-	-	-
MR674	4	-	-	-	-	-	-	-
MR675	5	583,04 - 673,70	-	-	-	-	-	-
MR676	6	-	-	-	-	-	-	-
MR772	2	4,73 - 21,40	4,73 - 21,40	4,73 - 21,40	4,73 - 14,54	4,73 - 14,54	-	-
MR773	3	15,63 - 178,78	15,63 - 148,73	15,63 - 115,06	15,63 - 76,81	15,63 - 76,81	-	-
MR774	4	-	-	-	-	-	-	-
MR775	5	-	-	-	-	-	-	-
MR776	6	-	-	-	-	-	-	-
MR872	2	4,95 ; 5,99 - 10,09	4,95 ; 5,99 - 10,09	4,32 - 10,09	4,32 - 10,09	4,32 - 10,09	4,32 - 10,09	-
MR873	3	13,30 ; 16,09 - 20,28 27,39 - 110,17	13,30 ; 16,09 - 20,28 27,39 - 110,17	11,59 - 86,51	11,59 - 52,86	11,59 - 52,86	11,59 - 46,12	-
MR874	4	107,60 - 292,15	107,60 - 239,61	107,60 - 174,68	-	-	-	-
MR875	5	495,97 - 537,75	-	-	-	-	-	-
MR876	6	-	-	-	-	-	-	-
MR972	2	7,92 - 9,99 ; 12,86 - 16,23	7,92 - 9,99 ; 12,86 - 16,23	7,11 - 16,23	7,11 - 16,23	7,11 - 16,23	7,11 - 16,23	7,11 - 16,23
MR973	3	20,36 - 26,03 ; 33,08 - 42,30 54,80 - 186,95	20,36 - 26,03 ; 33,08 - 42,30 54,80 - 166,73	18,15 - 132,83	18,15 - 91,56	18,15 - 91,56	18,15 - 70,07	18,15 - 70,07
MR974	4	172,08 - 216,03	172,08 - 193,13	-	-	-	-	-
MR975	5	462,18 - 842,80	462,18 - 750,24	-	-	-	-	-
MR976	6	-	-	-	-	-	-	-

Fattore di servizio

Il fattore di servizio (fs) è un coefficiente di sicurezza che tiene conto delle diverse condizioni di lavoro della macchina azionata dal riduttore. In presenza di carichi uniformi per 8 ore di funzionamento al giorno e fino a 100 avviamenti all'ora si utilizza il fattore "fs=1".

Il fattore di servizio dipende da:

- **Tempo di funzionamento**
- **Natura del carico**
- **Frequenza di avviamento**
- **Tipo di azionamento**
- **Altre considerazioni**

Per stabilire quale sia il giusto fattore di servizio per la propria macchina:
1. Determinare il tempo di funzionamento della macchina che viene azionata dal riduttore.
2. Selezionare la natura del carico della macchina che viene azionata (Pagina 17-18).

U - Carichi uniformi
M - Carichi moderati
H - Carichi con forti urti

Per ottimizzare la scelta, si può calcolare la natura del carico utilizzando le formule a pagina 20.

3. Determinare la frequenza di avviamento
4. Dopo aver determinato i fattori di cui sopra, si può facilmente ricavare il fattore di servizio dalla tabella qui sotto.
5. Il fattore di servizio scelto va poi moltiplicato per il fattore "k", il cui valore dipende dal tipo di azionamento;

k=1 : Motore elettrico o idraulico
k=1,25 : Motore multicilindrico a combustione interna
k=1,5 : Motore monocilindrico a combustione interna

Service Factor

Service Factor (fs) is a safety coefficient, which takes into account the different operating conditions of the driven machine." fs=1" is used for uniform loads 8 hours working per day and up to 100 starts per hour.

Service factor depends on:

- *Operating time*
- *Nature of load*
- *Start-up frequency*
- *Driver type*
- *Other considerations*

For the right selection of the needed service factor for your machine;
1. Determine the driven machine operation time .
2. Select the nature of load of the driven machine (Page 17-18).

U - Uniform loads
M - Moderate loads
H - Heavy shock loads

For a better selection, the nature of load can be calculated from the formulas given (page 20).

3. Determine start-up frequency
4. After determining the above mentioned factors, the service factor can be easily selected from the table given bellow.
5. The selected service factor must be multiplied with the "k" factor according to the driver type;

k=1 :Electric motor or Hydrolic motor
k=1.25 :Multicylinder internal combustion engine
k=1.5 :Single cylinder inside the combustion engine

Betriebsfaktor

Der Betriebsfaktor (fs) ist ein Sicherheitsfaktor fur die Getriebe, damit sie unter den Betriebsbedingungen sicher arbeiten. "fs =1" steht fur gleichformige Belastung, 8 Studen pro Tag und bis zu 100 Einschaltungen pro Stunde.

Betriebsfaktor ist abhangig von:

- Betriebsdauer
- Belastungsart
- Schalthäufigkeit
- Antriebsart
- Andere Faktoren

Um die richtigen Betriebsfaktor festzulegen;

1. Betriebsdauer der angetriebenen Maschine bestimmen.
2. Belastungsart der angetriebenen Maschine auswahlen.

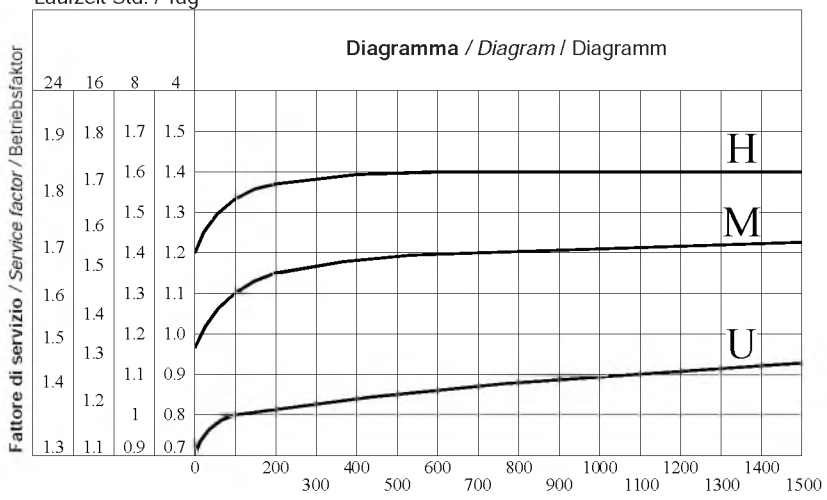
U - Gleichformige Belastung
M - Ungleichförmige Belastung
H - Stark Ungleichförmige Belastung

Um eine bessere Auswahl zu treffen, konnen die Belastungsarten mit den angegebenen Formeln (Seite 20) errechnet werden.
3. Schalhäufigkeit bestimmen.
4. Nach Bestimmen der oben angegebenen Werte, können die Betriebsfaktoren von der unten stehenden Tabelle entnommen werden.
5. Der ausgewahlte Betriebsfaktor muß mit dem Faktor "k" abhangig von der Antriebsart multipliziert werden

k=1 :Elektromotor oder Hydraulikmotor
k=1.25 :Vielzylindermotor

k=1.5 :Einzylindermotor

Tempo di funzionamento ore / giorno
Operating Time hour / day
Laufzeit Std. / Tag



Cicli / ora
Cucle / Hour
Schaltungen / Std.



Informazioni generali
General Information
Einführung

Classificazione dei carichi

Gru:

U	- Meccanismi di montacarico - Meccanismi di sollevamento
M	- Meccanismo del braccio di trivellazione - Meccanismi girevoli
H	- Meccanismi di traslazione

Pompe:

U	- Pompe centrifughe (liquidi leggeri)
M	- Pompe centrifughe (liquidi viscosi)
H	- Pompe a pressione - Pompe a pulsante

Macchine per la lavorazione della pietra e dell'argilla:

H	- Mulini a martelli - Forni rotanti - Laminatoi per raffinare - Interruttori - Mulini a palle - Presse per mattoni - Mulini a martelli

Macchine tessili:

M	- Macchine per la stampa e la tintura - Telai per tessitura - Battitoi - Dosatori - Vasche per la concia

Industria petrolifera:

M	- Pompe conduttrici - Attrezzatura trapanatrice rotante

Industria alimentare:

M	- Coltelli per canna da zucchero - Frantumatori di canna da zucchero - Serbatoi di fermentazione del vino
H	- Macine per canna da zucchero

Lavanderie:

M	- Invertitori - Lavatrici

Laminatoi per metalli:

M	- Comandi di regolazione rulli - Raddrizzatrici a rulli - Macchine avvolgitrici - Banchi da disegno a filo
H	- Cesoie per laminatoi - Tavole a rulli (pesanti) - Treni sbozzatori e lingotti - Laminatoi per lamiera - Manipolatori - Laminatoi a freddo

Load Classification

Cranes:

U	*- Hoist Gears* *- Lifting Gears*
M	*- Defrocking jib Gears* *- Slowing Gears*
H	*- Traveling Gears*

Pumps:

U	*- Centrifugal Pumps (light liquids)*
M	*- Centrifugal Pumps (semi liquid)*
H	*- Pressure Pumps* *- Plunger Pumps*

Stone and Clay Working Machines:

H	*- Hammer Mills* *- Rotary Kilns* *- Beater Mills* *- Breakers* *- Ball Mills* *- Brick Presses* *- Tup Mills*

Textile Machines:

M	*- Printing and Dyeing Machines* *- Looms* *- Willow* *- Batchers* *- Tanning Vats*

Oil Industry:

M	*- Pipeline Pumps* *- Rotary Drilling Equipment*

Food Industry:

M	*- Sugar cane Knives* *- Sugar cane Crushers* *- Wine fermenter tank*
H	*- Sugar cane mills*

Laundries:

M	*- Tumblers* *- Washing Machines*

Metal Rolling Mills:

M	*- Roller Adjustment Drives* *- Roller Straightened* *- Winding Machines* *- Wire Drawing Benches*
H	*- Billet Shears* *- Rotary Tables (heavy)* *- Descaling Machines,* *- Sheet Mills* *- Manipulators* *- Cold Rolling Mills*

Belastungsart

Krananlagen:

U	- Einziehwerke - Hubwerke
M	- Schwenkwerke - Wippwerke
H	- Fahrwerke

Pumpen:

U	- Kreiselpumpen (leichte Flüssigkeit)
M	- Kreiselpumpen (zahe Flussigkeit)
H	- Prebpumpen - Plungerpumpen

Steine und ErdenBearbeitende Masch.

H	- Hammermuhler - Drehofen - Schlagmuhlen - Brecher - Kugelmuhlen - Ziegelpressen - Rohrmühlen

Textilmaschinen:

M	- Druckerei - Farbereimachinen - Aufwickler - Webstuhle - Gerbfasser - Reibwolfe

Erdölgewinnung:

M	- Pipline Pumpen - Rotative Bohranlagen

Nahrungsmittelmachinen:

M	- Rohrschneiden - Knetmaschinen - Maichen
H	- Rohrmuhlen

Waschereimaschinen:

M	- Trommeltrockner - Waschmaschinen

Wälzwerke:

M	- Rollenrichtmaschinen - Walzenantriebe - Drahtzuge - Haspeln
H	- Blechscheren - Rollgange (schwer) - Knuppelscheren - Schopfscheren - Stranggubanlagen - Kaltwalzwerke



Informazioni generali
General Information
Einführung

Macchine per costruzione:

M
- **Betoniere**
- **Montacarichi**

Macchine per la carta:

H
- **Presse a umido**
- **Spappolatori**
- **Tamburi essiccatori**
- **Cilindri essiccatori**

Macchinari per la gomma:

M
- **Calandre**
- **Miscelatori**

H
- **Estrusori**
- **Impastatrici**
- **Laminatoi**

Industria chimica:

M
- **Agitatori (materiali semi-liquidi)**
- **Tamburi di essicazione**
- **Miscelatori e laminatoi**

Convogliatori:

M
- **Convogliatori nastro a sacca**
- **Convogliatori a nastro d'acciaio**
- **Convogliatori a nastro**

H
- **Montacarichi**
- **Convogliatori a nastro per materiali alla rinfusa**

Building Machines:

M
- *Concrete Mixers*
- *Hoist*

Paper Machines:

H
- *Wet Presses*
- *Pulpers*
- *Drying Cylinders*
- *Glazing Cylinders*

Rubber Machinery:

M
- *Calenders*
- *Mixers*

H
- *Extruders*
- *Pug Mills*
- *Rolling Mills*

Chemical Ind.:

M
- *Agitators (semi- liquid)*
- *Drying Drums,*
- *Mixers and Rolling Mills*

Conveyors:

M
- *Band Pocket Conveyors*
- *Steel Belt Conveyors*
- *Belt Conveyors*

H
- *Hoists*
- *Bulk Belt Conveyors*

Baumaschinen:

M
- Betonmischermaschinen
- Bauaufzuge

Papiermaschinen:

H
- Naßpressen
- Gautschen
- Trockenzylinder
- Glattzylinder

Kunststoffmaschinen:

M
- Kalender
- Mischer

H
- Extruder
- Knetwerke
- Walzwerke

Chemische İndustrie:

M
- Ruhrwerke (leichte Flussig.)
- Trockentrommeln
- Mischer und Walzwerke

Förderanlagen:

M
- Gurttaschenbecherwerke
- Stahlbandforderer
- Gurtbandforderer (Schüttgut)

H
- Schrägaufzuge
- Gurtbandforderer(Stuckgut)

U	**Carichi uniformi** *Uniform Loads* Gleichformige Last	$F_i < 0,25$
M	**Carichi moderati** *Moderate Loads* Ungleichformige Last	$F_i < 3$
H	**Carichi con forti urti** *Heavy Shock Loads* Stark Ungleichformige Last	$F_i < 10$

$$J'_{ext} = \frac{J_{ext}}{i^2}$$

$$F_i = \frac{J'_{ext}}{J_{rotor}}$$

J_{ext} : **Momento d'inerzia esterno ridotto all'albero motore**
External moments of inertia reduced to the motor shaft
Externe massentragheitsmomente reduziert auf motorwelle

i : **Rapporto di trasmissione**
Transmission ratio
Übersetzung

J_{rotor} : **Momento d'inerzia al motore**
Moments of inertia to the motor
Massentragheitsmoment

Senso di rotazione

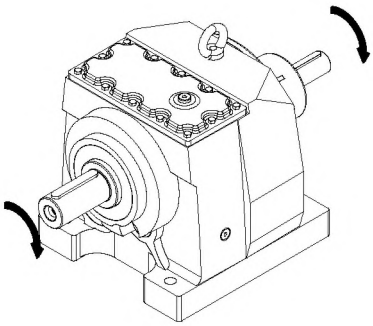
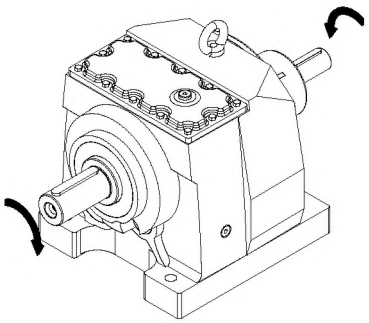
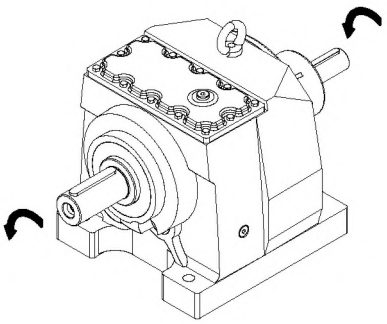
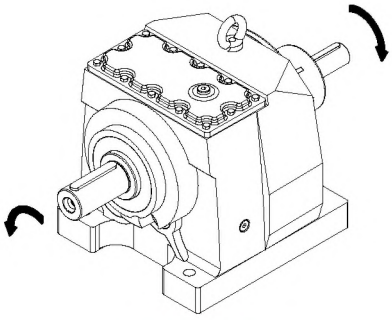
Il senso di rotazione dei prodotti Brevini serie M è definito come segue. Queste definizioni sono valide anche per i riduttori con dispositivo antiritorno.

Direction of Rotation

M Series direction of rotation of Brevini products are defined as follows. The definitions are also valid for gear units with backstop.

Getriebedrehrichtungen

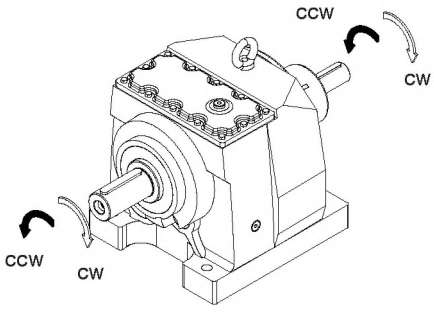
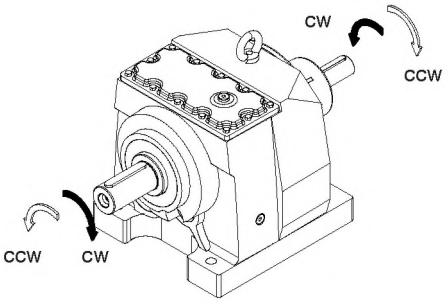
Die Drehrichtungen fur M Serie Getriebe sind wie folgt definiert. Die Definition ist auch bei Getrieben mit Rucklaufsperre gultig.

	2-4-6 Stadi / *2-4-6 Stages* / 2-4-6 Stufig	**3-5 Stadi** / *3-5 Stages* / 3-5 Stufig
Senso orario *Clockwise* im Uhrzeigersinn **CW**		
Senso antiorario Counter Clockwise gegen Uhrzeigersinn **CCW**		

Il senso di rotazione dell'albero in uscita in funzione del senso di rotazione dell'albero in entrata è come segue:

Output shaft rotation directions according to the input shaft rotation directions are as follows.

Drehrichtungen der Abtriebswelle im Abhangigkeit von der Antriebswellen sind wie folgt;

2-4-6 Stadi / *2-4-6 Stages* / 2-4-6 Stufig	**3-5 Stadi** / *3-5 Stages* / 3-5 Stufig
	



Informazioni generali
General Information
Einführung

Carichi radiali

I carichi radiali ammessi sono calcolati tenendo conto della durata operativa, e sono indicati nelle tabelle. I carichi radiali ammessi F_{qam} indicati sono basati sul fattore di sicurezza 1 e sono validi per forze applicate al centro dell'albero. Per applicazioni che prevedono carichi con urti (f_sè1) i carichi radiali ammessi vanno divisi per il fattore di servizio. I carichi radiali ammessi indicati sono basati sulla direzione di carico peggiore. Carichi radiali maggiori possono essere applicati per direzioni di carico diverse (chiedere, se interessati). Il carico radiale effettivo sull'albero del riduttore F_q si determina con le formule indicate a pagina 21.

Scegliendo:

$$F_{qa} \leq F_{qam}$$
$$F_{qe} \leq F_{qem}$$

si deve tener conto di queste formule.
Se il carico non è applicato al centro dell'albero, il carico ammesso indicato va corretto utilizzando le formule seguenti.

$$F_{qam}' = F_{qam} \times \frac{t}{y+u}$$
$$F_{qem}' = F_{qem} \times \frac{t}{y+u}$$

I valori "t" e "y" possono essere ricavati dalla tabella seguente. Il valore "u" corrisponde alla distanza del punto di applicazione del carico, come mostrato qui sotto.

Radial Loads

The permissible radial loads are calculated by considering working life and are listed on the tables. The given permissible radial loads F_{qam} are based on the safety factor 1 and are valid for forces which are applied to the midpoint of the shaft.
For shock loading (f_se1) the permissible radial loads must be divided by the service factor. The listed permissible radial loads are based on the worst loading direction. Higher radial loads can be applied for different loading directions (Please ask if requested). The effective radial load at the gear box shaft F_q will be determined with the formulas given on page 21.

In Selection ;

$$F_{qa} \leq F_{qam}$$
$$F_{qe} \leq F_{qem}$$

these formulas must be taken into consideration. If the load is not applied at the midpoint of the shaft; the given permissible load must be corrected with the following formulas.

$$F_{qam}' = F_{qam} \times \frac{t}{y+u}$$
$$F_{qem}' = F_{qem} \times \frac{t}{y+u}$$

The values "t","y" can be taken from the following table. The value "u" is the length of the application point as shown below.

Querkräfte

Die in den nachfolgenden Tabellen angegebenen zulassigen Radialbelastungen F_{qam} gelten bei Kraftangriff auf die Mitte Wellenende. Den Angaben liegt der Sichheitsfaktor gleich 1 zu Grunde. Bei stoßartigen Belastungsfallen ist auch hier der entsprechende Betriebsfaktor (f_se 1) zu berucksichtigen. Zulassige Axialkrafte F_{ama} oder F_{ame} wurden fur den Fall mit schlechter Belastungsrichtung angegeben. Bei der Ermittlung der zulassige Querkrafte sind hohere Werte moglich (Bitte Ruckfragen). Die auftretende Querkraft F_q ab der Getriebewelle wird wie in der nachfolgenden Formel bestimmt.

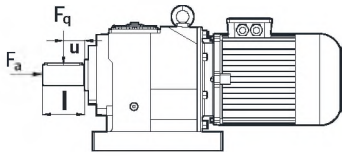
Bei dieser Auswahl;

$$F_{qa} \leq F_{qam}$$
$$F_{qe} \leq F_{qem}$$

mussen die oben angebenen Bedingungen berucksichtigt werden. Ist der Kraftangriff nicht auf Wellenmitte, so kann die zulassige Querkraft mit Hilfe der unten stehenden Formel auf jede beliebige Stelle umgerechnet werden.

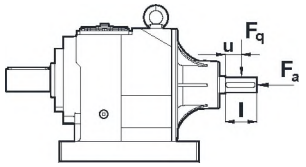
$$F_{qam}' = F_{qam} \times \frac{t}{y+u}$$
$$F_{qem}' = F_{qem} \times \frac{t}{y+u}$$

Die Werte "t" und "y" sind in den nachfolgenden Tabellen angegeben. Der Wert "u" ist die Stelle des Kraftangriffs wie auf der nachsten Seite angegeben.



Valori di correzione dei carichi radiali sull'albero in uscita
Radial Load correcting values on output shaft
Querkraft auf Ausgangwelle Korrigierungszahlen

Tipo *Type* Typ	MR002-003 NR002-003	MR102-103 NR102-103	MR172-173 NR172-173	MR202-203 NR202-203	MR272-273 NR272-273	MR282-283 NR282-283	MR372-373 NR372-373	MR472-473 NR472-473	MR572-573 NR572-573	MR672-673 NR672-673	MR772-773 NR772-773	MR872-873 NR872-873	MR972-973 NR972-973
t	90	108	109	140	141	158	170	214	256	291	314	404	440
y	70	83	84	110	106	123	130	164	196	226	244	299	334
l	40	50	50	60	70	70	80	100	120	130	140	210	210



Valori di correzione dei carichi radiali sull'albero in entrata
Radial load correcting values on input shaft
Querkraft auf Eingangwelle korrigierungszahlen

Tipo *Type* Typ	MT002-003 NT002-003	MT102-103 NT102-103	MT172-173 NT172-173	MT202-203 NT202-203	MT272-273 NT272-273	MT282-283 NT282-283	MT372-373 NT372-373	MT472-473 NT472-473	MT572-573 NT572-573	MT672-673 NT672-673	MT772-773 NT772-773	MT872-873 NT872-873	MT972-973 NT972-973
t	78	108	108	111	111	126	126	137	158	180	207	220	261
y	58	83	83	86	86	96	96	102	113	130	147	165	207
l	40	50	50	50	50	60	60	70	90	100	120	110	110



Calc. dei carichi radiali

Il carico radiale Fq(N) si calcola con le equazioni seguenti, utilizzando il momento M (Nm) e il diametro D (mm) della puleggia o ingranaggio richiesti.

Calc. Of Radial Loads

Radial Load Fq(N) is calculated with the following equations where the required moment M (Nm) and hoop or gear diameter D (mm) is used.

Berechnung der Querkräfte

Der Fall der radialen Belastung Fq(N) kann mit den angegebenen Gleichungen berechnet werden. Antriebsmoment M (Nm) und Zahnrad- oder Riemenscheiben Durchmesser D (mm).

1



1. Giunto elastico
Se il giunto elastico lavora all'interno del suo range operativo affidabile, i carichi radiali possono essere trascurati.

1. Elastic Coupling
If Elastic Coupling is working in its reliable working range, the radial loads can be neglected.

1. Elastische Kupplung
Wenn die elastische Kupplung in ihren zulassige Arbeits toleranz arbeitet, können die radialen Belastungen vernächlaßigt werden.

2



2. Per ingranaggi a denti diritti (angolo pressione 20°)

$$F_q = \frac{2100 \times M_2}{D}$$

2. For Spur Gear
(Pressure angle 20°)

$$F_q = \frac{2100 \times M_2}{D}$$

2. Stirnradgetriebe
(Angriffwinkel=20°)

$$F_q = \frac{2100 \times M_2}{D}$$

3



3. Per catena a bassa velocità (z>17)

$$F_q = \frac{2100 \times M_2}{D}$$

3. For Chain Drive With Low Speed (z>17)

$$F_q = \frac{2100 \times M_2}{D}$$

3. Kettenantrieb mit niedriger Geschwindigkeit (z>17)

$$F_q = \frac{2100 \times M_2}{D}$$

4



4. Per cinghia dentata

$$F_q = \frac{2500 \times M_2}{D}$$

4. For Timing Belt

$$F_q = \frac{2500 \times M_2}{D}$$

4. Zahnriemenantrieb

$$F_q = \frac{2500 \times M_2}{D}$$

5



6. Per cinghia a gole V

$$F_q = \frac{5000 \times M_2}{D}$$

5. For V Belt

$$F_q = \frac{5000 \times M_2}{D}$$

5. Keilriemenantrieb

$$F_q = \frac{5000 \times M_2}{D}$$

6



6. Cinghia piana con puleggia tendicinghia

$$F_q = \frac{5000 \times M_2}{D}$$

6. Flat Belt With Belt tensioner pulley

$$F_q = \frac{5000 \times M_2}{D}$$

6. Flachriemenantrieb mit Spannungstrommel

$$F_q = \frac{5000 \times M_2}{D}$$

Calcolo della potenza nominale equivalente

La potenza equivalente con una coppia costante equivalente può essere calcolata per riduttori che lavorano con velocità di rotazione costante ma coppie (o potenze) variabili. Utilizzando questa potenza equivalente si può selezionare un riduttore con il consueto metodo di selezione dei riduttori con coppie costanti. La coppia equivalente si determina in base alla media delle coppie dominanti. Il riduttore che lavora con una coppia equivalente costante in teoria avrà la stessa durata di vita e lo stesso livello di sicurezza di uno con coppia variabile. Per calcolare le coppie equivalenti, occorre ordinare su una linea temporale orizzontale le coppie variabili all'interno di un ciclo, da quella massima a quella minima (si veda il diagramma qui sotto). Come da diagramma qui sotto, si può calcolare la coppia equivalente utilizzando la formula seguente:

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + ... + \Delta t_n \times T_n^{6.6}}{t}\right)^{\left(\frac{1}{6.6}\right)}$$

Se T_n (la coppia più bassa) è inferiore al 60% di T_e , la coppia di questa parte del ciclo va eliminata dal diagramma, dopodiché va ripetuto il calcolo;

Se $T_n < T_e \times 0.5$ **allora**

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + ... + \Delta t_{n-1} \times T_{n-1}^{6.6}}{t - \Delta t_n}\right)^{\left(\frac{1}{6.6}\right)}$$

Se tutti i valori T_n sono superiori al 60% di T_e, per calcolare la potenza equivalente si può allora utilizzare la formula seguente:

$$P_{eq} = P_N = \frac{T_e \times n}{9550}$$

Una volta determinata la potenza equivalente, la scelta del riduttore viene fatta seguendo le procedure di selezione indicate nella sezione di questo catalogo dedicata alla scelta del riduttore.

Equivalent Power Rating Calculation

The equivalent power by an equivalent constant torque can be calculated for gearboxes working in constant speed but at variable torques (or powers). Using this equivalent power it is possible to make a gearbox selection according the usual gearbox selection method with constant torques. The equivalent torque will be determined according the mean of dominating torques. The gearbox working in constant equivalent torque will theoretically have the same lifetime and safety compared to the variable torque one.
To calculate the equivalent torques, the variable torques in a cycle must be sorted from the maximal to the minimal on a horizontal time line (Check the chart below). According to the chart below the equivalent torque can be calculated with the following formula;

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + ... + \Delta t_n \times T_n^{6.6}}{t}\right)^{\left(\frac{1}{6.6}\right)}$$

If T_n (the lowest torque) is lower than 50 % of T_e ,this torque part must be taken from the torque chart and the calculation must be repeated;

If $T_n < T_e \times 0.5$ *then*

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + ... + \Delta t_{n-1} \times T_{n-1}^{6.6}}{t - \Delta t_n}\right)^{\left(\frac{1}{6.6}\right)}$$

If all T_n values are higher then 50% T_e then the equivalent power can be calculated by the following formula;

$$P_{eq} = P_N = \frac{T_e \times n}{9550}$$

After determining the equivalent power the gearbox selection of is made according to the selection procedures given on the gearbox selection part in this catalog.

Berechnung Äquivalenter Leistung

Die äquivalente Leistung bei äquivalenten Drehmoment kann für Getrieben mit konstanten Drehzahl und variablen Momente berechnet werden. Mit dieser Leistung kann das Getriebe ausgelegt werden, wie bei konstanten Leistung. Man bestimmt hiermit also die maßgebende Belastung. Das ausgelegte Getriebe erreicht theoretisch dem gleichen Lebensdauer und hat die gleiche Sicherheit.

Für die Berechnung der äquivalenten Drehmoment müssen die einzelnen Drehmomentanteile auf eine Zeitachse von größten bis zu kleinsten angeordnet werden (siehe unteres Bild). Das äquivalente Drehmoment wird nach folgender Formel berechnet;

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + ... + \Delta t_n \times T_n^{6.6}}{t}\right)^{\left(\frac{1}{6.6}\right)}$$

Wenn T_n (niedrigstes Drehmoment) kleiner als 50% von T_e ist, muss dieser Anteil vernachlässigt werden und die Berechnung soll neu durchgeführt werden;

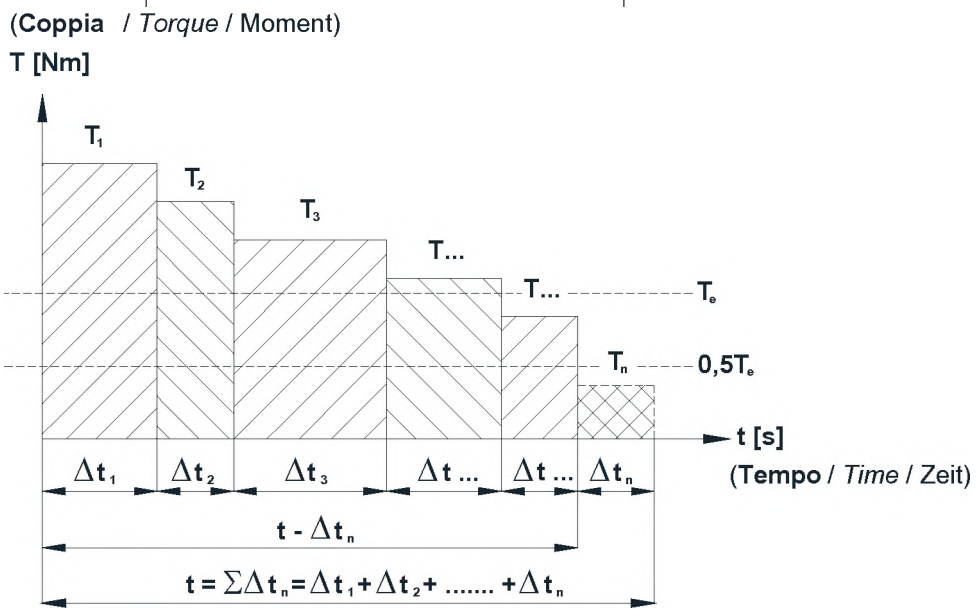
Wenn $T_n < T_e \times 0.5$ dann

$$T_e = \left(\frac{\Delta t_1 \times T_1^{6.6} + ... + \Delta t_{n-1} \times T_{n-1}^{6.6}}{t - \Delta t_n}\right)^{\left(\frac{1}{6.6}\right)}$$

Wenn alle T_n Werte höher als 50% von T_e sind, dann wird die äquivalente Leistung nach folgender Formel berechnet;

$$P_{eq} = P_N = \frac{T_e \times n}{9550}$$

Nach Bestimmung der äquivalenter Leistung, erfolgt die Getriebeauslegung wie bei konstanter Leistung. Die Auswahlverfahren für konstante Leistung ist in diesem Katalog angegeben.



Esempio di calcolo della potenza nominale equivalente

I dati che seguono sono riferiti a un laminatoio blooming reversibile;

Livelli di coppia:
Durata totale di un ciclo: 2 min.
Coppia 1ª parte del ciclo: 48 kNm, 30 s
Coppia 2ª parte del ciclo: 32 kNm, 22 s
Coppia 3ª parte del ciclo: 28 kNm, 15 s
Coppia 4ª parte del ciclo: 16 kNm, 10 s
Coppia 5ª parte del ciclo: 5 kNm, 43 s
Macchina con velocità di rotazione costante: 50 giri/min.
Bisogna determinare la potenza equivalente necessaria per la scelta del riduttore.

Soluzione:
Durata totale di un ciclo:

$$t = t_1 + t_2 + t_3 + t_4 + t_5 = 120\ sn$$

Coppia equivalente:

$$T_e = \left(\frac{30 \times 48^{6,6} + \ldots + 43 \times 5^{6,6}}{120}\right)^{\left(\frac{1}{6,6}\right)}$$

=39,2 kNm

50% della coppia equivalente:

$$0,5 \times T_e = 19,6kNm$$

La coppia di ciascuna parte del ciclo deve essere inferiore a questo valore:

$$T_{4,5} < 0,5 \times T_e$$

Ripetiamo il calcolo escludendo le coppie che sono inferiori al 50%:

$$t' = t_1 - t_4 - t_5 = 120 - 43 - 10 = 67s$$

$$T_e = \left(\frac{30 \times 48^{6,6} + 22 \times 32^{6,6} + 15 \times 28^{6,6}}{67}\right)^{\frac{1}{6,6}}$$

=42,9 kNm

Utilizzando la coppia equivalente e la velocità di rotazione costante calcoliamo la potenza equivalente:

$$P_{eq} = \frac{T_e \times n}{9550} = \frac{42,9 \times 1000 \times 50}{9550} = 225kW$$

Ora, sulla base della potenza equivalente appena calcolata e della velocità di rotazione costante si può procedere alla scelta del riduttore seguendo le procedure descritte in questo catalogo.

Equivalent Power Rating Sample

The following data is given for a reversing blooming mill;

Torque steps:
Total one cycle time: 2 min.
1st torque part: 48 kNm, 30 s
2nd torque part: 32 kNm, 22 s
3rd torque part: 28 kNm, 15 s
4th torque part: 16 kNm, 10 s
5th torque part: 5 kNm, 43 s
Machine constant speed: 50 rpm
The equivalent power, which is required for the gear unit selection, must be determined.

Solution:
Total time in a cycle;

$$t = t_1 + t_2 + t_3 + t_4 + t_5 = 120\ sn$$

Equivalent Torque;

$$T_e = \left(\frac{30 \times 48^{6,6} + \ldots + 43 \times 5^{6,6}}{120}\right)^{\left(\frac{1}{6,6}\right)}$$

=39,2 kNm

50% of Equivalent torque;

$$0,5 \times T_e = 19,6kNm$$

Every torque part must be lower then this value;

$$T_{4,5} < 0,5 \times T_e$$

We are repeating the calculation by taking out the torque parts, which are below 50%;

$$t' = t_1 - t_4 - t_5 = 120 - 43 - 10 = 67s$$

$$T_e = \left(\frac{30 \times 48^{6,6} + 22 \times 32^{6,6} + 15 \times 28^{6,6}}{67}\right)^{\frac{1}{6,6}}$$

=42,9 kNm

By using the equivalent torque and constant speed we calculate the equivalent power;

$$P_{eq} = \frac{T_e \times n}{9550} = \frac{42,9 \times 1000 \times 50}{9550} = 225kW$$

Now by using the above calculated equivalent power and constant speed it is possible to make the gearbox selection with the procedures described in this catalogue.

Beispiel für Äquivalente Leistung

Die nachfolgenden Angaben sind fur eine Blechreversierwalze;

Drehmoment stufen:
Gesamte Zeit fur einem Arbeitszyklus: 2 min.
Drehmomentanteil 1: 48 kNm 30 s
Drehmomentanteil 2: 32 kNm 22 s
Drehmomentanteil 3: 28 kNm 15 s
Drehmomentanteil 4: 16 kNm 10 s
Drehmomentanteil 5: 5 kNm 43 s
Maschine hat konstante Drehzahl: 50 U/min
Gesucht ist die aquivalente Leistung, die für die Getriebeauslegung notig ist.

Lösung:
Gesamte Zeit fur einem Arbeitszyklus;

$$t = t_1 + t_2 + t_3 + t_4 + t_5 = 120\ sn$$

Äquivalentes Drehmoment;

$$T_e = \left(\frac{30 \times 48^{6,6} + \ldots + 43 \times 5^{6,6}}{120}\right)^{\left(\frac{1}{6,6}\right)}$$

=39,2 kNm

50% von aquivalenten Drehmoment;

$$0,5 \times T_e = 19,6kNm$$

Drehmomentanteile mussen größer als dieser Wert sein;

$$T_{4,5} < 0,5 \times T_e$$

Wir wiederholen die Berechnung nochmals ohne die kleine Drehmomentanteile;

$$t' = t_1 - t_4 - t_5 = 120 - 43 - 10 = 67s$$

$$T_e = \left(\frac{30 \times 48^{6,6} + 22 \times 32^{6,6} + 15 \times 28^{6,6}}{67}\right)^{\frac{1}{6,6}}$$

=42,9 kNm

Mit Hilfe von aquivalenten Drehmoment und konstanter Drehzahl berechnet man die aquivalente Leistung;

$$P_{eq} = \frac{T_e \times n}{9550} = \frac{42,9 \times 1000 \times 50}{9550} = 225kW$$

Nach Bestimmung der aquivalente Leistung und konstanter Drehzahl, erfolgt die Getriebeauslegung dann wie die Getriebeauswahl gemaß dem in diesem Katalog beschriebenen Verfahren fur konstante Leistung.

Scelta del riduttore

Per scegliere correttamente il riduttore più appropriato procedere come segue.

1. Determinare il fattore di servizio (fs) in funzione delle condizioni di lavoro (pagina 16).

2. Determinare la coppia M_2 (coppia richiesta in uscita dal riduttore) necessaria per azionare la macchina.
3. Determinare la velocità (numero di giri in uscita dal riduttore) necessaria per la macchina che il riduttore deve azionare.

4. Calcolare la potenza necessaria per la macchina (calcolare la potenza "P_2" necessaria sul lato di uscita del riduttore utilizzando la formula):

$$P_2 = \frac{M_2 \times n_2}{9550}$$

5. Calcolare il carico radiale necessario sull'albero in uscita in base al tipo di accoppiamento tra riduttore e macchina (fare riferimento alle indicazioni e ai valori a pagina 20). Una volta che i suddetti valori sono stati determinati, nelle tabelle prestazionali si può scegliere il riduttore che soddisfa i nostri requisiti (il fattore di servizio e il carico radiale ammesso dovranno essere inferiori o uguali ai valori da noi richiesti). La potenza in uscita dei riduttori elicoidali non è riportata nelle tabelle prestazionali perché questi riduttori hanno un rendimento elevato e come potenza in uscita si può considerare la potenza in entrata. Bisogna però verificare che la coppia trasmessa soddisfi i nostri requisiti. Se la coppia trasmessa è bassa, cercare un riduttore che abbia una potenza in entrata maggiore.

Esempio:
1. Tipo di macchina:
Convogliatore a nastro (materiali alla rinfusa)

2. Coppia richiesta:
La coppia richiesta calcolata per la macchina che si deve azionare è M_2=470 Nm.

3. Velocità di rotazione richiesta:
n_2 = 60 giri/min.

4. Tempo di funzionamento:
16 ore al giorno

5. Frequenza di avviamento:
1 avviamento ogni ora

6. Tipo di accoppiamento del riduttore
Catena (dimensione in uscita-130 mm)

- Dalla tabella di classificazione dei carichi (a pagina 17-18), si può selezionare la classe di carico M per l'applicazione nota.
- Dalla tabella dei fattori di servizio (pagina 16) si può selezionare il fattore di servizio fs = 1,3 che considera 16 ore di funzionamento, un avviamento ogni ora e un carico di classe M.

- Potenza richiesta per la macchina (potenza lato di uscita del riduttore):

$$P_2 = \frac{M_2 \times n_2}{9550} = \frac{470 \times 50}{9550} = 2,46\,kW$$

Gearbox Selection

For the correct selection of the appropriate gear units follow this steps.

1.Determine the service factor (fs) according to the operating conditions (Page 16).

2. Determine the required Torque M_2 (required output torque of gearbox) for the driven machine.

3. Determine the required speed (output speed of gearbox) for the driven machine.

4. Calculate the required power for your machine (Calculate power "P_2" required at output side of gear reducer using the formula);

$$P_2 = \frac{M_2 \times n_2}{9550}$$

5. Calculate radial load required at output shaft according to type of connection between gear unit and machine (Refer to directions and values given on page 20). After determining the above mentioned values, the gear reducer which corresponds to our requirements can be selected from the performance tables (the service factor and the permissible radial load should be less than or equal to our requirement). The output power of Helical gears is not given on the performance tables because they have high efficiency and the output power can be taken as input power. It is necessary to check if the output torque meets our requirements. If the output torque is low, search for a higher input power gearbox.

Example:
1. Machine Type:
Belt Conveyor (Bulk Load)

2. Required Torque:
Required Torque calculated for the driven machine is M_2=470 Nm.

3. Required speed:
n_2 = 50 rpm

4. Operating time:
16 hours per day

5. Start-up frequency:
1 start per hour

6. Gear reducer connection type
Chain drive (output dimension-130 mm)

- From the load classification table (on page 17-18), the load class M can be selected for the known application.
- The service factor can be selected as fs =1.3 from the service factor table (page 16) by taking into consideration 16 hours working time, one start per hour, and load class M.

-Required power for your machine (Power at gear reducer output side) :

$$P_2 = \frac{M_2 \times n_2}{9550} = \frac{470 \times 50}{9550} = 2,46\,kW$$

Getriebeauswahl

Fur die korrekte Auswahl des Antriebes;

1. Den Betriebsfaktor(fs) in Abhangigkeit von den Betriebsbedingungen bestimmen.(Bezug auf seite 16).

2. Die erforderte Drehmoment M_2 fur die angetriebene Machine (Abtriebsdrehmoment für die Getriebe) bestimmen.

3. Erforderte Drehzahl bestimmen (Abtriebsdrehzahl für die Getriebe).

4. Berechnen der erforderte Leistung der angetriebene Maschine (Die an der Abtriebswelle erforderte Leistung"P_2") mit der unten angegebenen Formel.

$$P_2 = \frac{M_2 \times n_2}{9550}$$

5. Die an der Getriebeabtriebswelle erforderte Querkraft in Abhangigkeit von Antriebselement bestimmen (Bezug auf Seite 20). Nach Bestimmen der oben angegebenen Werte, die passende Getriebe kann von den angegebenen Leistungstabellen entnommen werden. Dabei soll darauf geachtet werden, dass der Betriebsfaktor und Querkraft stets unterhalb von angegebenen Werten liegt. Weil Stirnradgetrieben einen hohen Wirkungsgrad haben, sind die Abtriebsleistungen für Stirnradgetrieben nicht angegeben. Bei dieser Getrieben die erforderte Leistung kann als Antriebsleistung benutzt werden. Achten sie darauf, dass der Abtriebsmoment großer als die erforderte Drehmoment ist. T_e

Beispiel:
1. Maschinentyp:
Gurtbandforderer (Schüttgut)

2. Erforderte Drehmoment:
Fur die Machine berechnete Drehmoment
M_2 = 470 Nm.

3. Erforderte Drehzahl:
n_2 = 50 upm

4. Betriebsdauer:
16 stunden pro Tag

5. Schalthäufigkeit:
1 Start pro Stunde

6. Antriebselement für verbindung
Getriebe-Machine:Kettentrieb(Durchmesser-130 mm)
- Von den Belastungsart Tabellen(Seite 17-18) nimmt man Belastungsart M
- Fur den Schaltungzahl 1 und die Laufzeit16 und fur den passenden Belastungsart erhalt man Betriebsfaktor fs =1,3 von Tabelle auf seite 16.

- Erforderte Leistung der angetriebe Machine (Die an der Getriebeabtriebswelle erforderte Leistung)

$$P_2 = \frac{M_2 \times n_2}{9550} = \frac{470 \times 50}{9550} = 2,46\,kW$$

- Per le applicazioni con accoppiamento a catena il carico esterno richiesto può essere calcolato da (pagina 21):

$$F_q = \frac{2100 \times M_2}{D} = \frac{2100 \times 470}{180} = 5484\ N$$

- Il riduttore richiesto è il seguente:

$P_2 \geq$ 2,46 kW
$M_2 \geq$ 470 Nm
fs ≥ 1,3
$n_2 \geq$ 60 giri/min.
Fq ≥ 5484 N

Nella tabella prestazionale

il riduttore scelto è il modello DR373-100L/4b (Pagina 71).

P_2=3kW > 2,46 kW
M_2= 573 Nm > 470 Nm
fs=1,3
n_2=47 giri/min.
F_{qam}=6616 Nm > 5484 Nm

- For chain drive application the requested external load can be calculated from (page 21).;

$$F_q = \frac{2100 \times M_2}{D} = \frac{2100 \times 470}{180} = 5484\ N$$

- The required gearbox is as follows:

$P_2 \geq$ 2,46 kW
$M_2 \geq$ 470 Nm
fs ≥ 1.3
$n_2 \geq$ 50 rpm
Fq ≥ 5484 N

From the performance table,

***DR373-100L/4b** selected (Page 71).*

P_2=3kW > 2,46 kW
M_2= 573 Nm > 470 Nm
fs=1,3
n_2=47 rpm
F_{qam}=6616 Nm > 5484 Nm

- Für Kettentrieb die erforderte Querkraft (seite 21);

$$F_q = \frac{2100 \times M_2}{D} = \frac{2100 \times 470}{180} = 5484\ N$$

- Von den oben angegebenen Berechungen die erforderte Getriebe ist wie folgt;

$P_2 \geq$ 2,46 kW
$M_2 \geq$ 470 Nm
fs ≥ 1.3
$n_2 \geq$ 50 U/min
Fq ≥ 5484 N

Von der Leistung- DrahzahlTabelle ,

wurde **DR373-100L/4b** gewählt (Seite 71).

P_2=3kW > 2,46 kW
M_2= 573 Nm > 470 Nm
fs=1,3
n_2=47 U/min
F_{qam}=6616 Nm > 5484 Nm

Modulo di scelta del riduttore

Settore industriale.....
Applicazione.....
Velocità di rotazione media richiesta .....giri/min.

Potenza richiesta alla macchina azionata:
-Normale..... kW
-Massima..... kW
-Minima..... kW

Azionamento macchina:
Motore CA [ ]
Motore CA + Inverter [ ]
Motore CC [ ]
Motore idraulico [ ]
Motore a pistoni con 1-3 cilindri [ ]
Motore a pistoni con 4-24 cilindri [ ]

Tipo di accoppiamento motore (m. elettrici):
Flangia IEC B5 [ ]
Flangia NEMA [ ]
B3 montato su piedini [ ]

Codice flangia IEC o NEMA.....

Potenza motore:
-Nominale.....kW

Velocità di rotazione del motore:
-Normale.....giri/min.
-Massimo.....giri/min.
-Minimo.....giri/min.

Coppia motore:
-Normale.....Nm
-Massima.....Nm
-Minima.....Nm

Senso di rotazione:
orario [ ] antiorario [ ] variabile [ ]

Ore di funzionamento al giorno:
<4 [ ] 4-8 [ ] 8-16 [ ] >16 [ ]

N. di avviamenti per ciclo:
0-50 [ ] 50-100 [ ] 100-200 [ ]
200-300 [ ] 300-500 [ ] 500-700 [ ]
700-1000 [ ] >1000 [ ]

Rapporto di trasm. tra motore e riduttore.....

Coppia di avviamento richiesta.....Nm

Coppie di picco per ora:
1-5 [ ] 6-30 [ ] 31-100 [ ] >100 [ ]

Tempo effettivo di lavoro in un ciclo (ED):
%100 [ ] %80 [ ] %60 [ ] 40% [ ]
20%[ ]

Altitudine:
<1000 [ ] <2000 [ ] <3000 [ ]
<4000 [ ] <5000 [ ]

Luogo di installazione:
Locale chiuso di piccole dim. (w<1m/sn) [ ]
Locale chiuso (w<3m/sn) [ ]
Locali di grandi dim.(w>=3m/sn) [ ]
All'esterno [ ]

Condizioni ambientali:
Normale [ ] Polveroso [ ] Umido [ ]
Corrosivo [ ] Secco [ ]

Temperatura ambiente:
Media.....^{0}C
Massima.....^{0}C
Minima.....^{0}C

Dispositivo antiritorno necessario:
Sì [ ] No [ ]

Opzioni entrata riduttore:
R..[ ] V..[ ] N..[ ] T..[ ]

Posizione di montaggio:
M1 [ ] M2 [ ] M3 [ ] M4 [ ] M5 [ ] M6 [ ]

Tipo di accoppiamento albero in entrata:
Giunto elastico [ ]
Giunto a tamburo [ ]
Giunto idraulico [ ]
Giunto rigido flangiato [ ]
Puleggia [ ]
Rocchetto e catena [ ]
Pignone [ ]
Diametro dell'elemento di raccordo.....mm
Carico radiale.....N
Distanza "u" del carico radiale.....mm
Carico assiale (in direzione dell'albero)....N

Tipo di accoppiamento albero in uscita:
Giunto elastico [ ]
Giunto a tamburo [ ]
Giunto rigido flangiato [ ]
Puleggia [ ]
Rocchetto e catena [ ]
Pignone [ ]
Diametro dell'elemento di raccordo.....mm
Carico radiale.....N
Distanza "u" del carico radiale.....mm
Carico assiale (in direzione dell'albero)...N

Caratteristiche albero in uscita:
Albero pieno con scanalatura per chiavetta [ ]
Albero pieno senza scanalatura per chiavetta [ ]
Albero speciale [ ]

Caratteristiche albero in entrata:
Albero pieno con scanalatura per chiavetta [ ]
Albero pieno senza scanalatura per chiavetta [ ]
Albero speciale [ ]

Alimentazione elettrica:
Monofase in CA [ ] Trifase in CA [ ] CC [ ]
Tensione.....Volt
Frequenza.....Hz

Classe di protezione:
IP55 [ ] IP65 [ ] Antidefl. [ ]
Altra classe IP.....

Allegati:
Diagramma di carico [ ]
Progetto [ ]
Dimensioni richieste [ ]
Specifiche tecniche [ ]

Note:

Gearbox Selection Form

Industry sector.....
Application.....
Required Average Speed..... rpm

Required Power on Driven Machine:
-Normal..... kW
-Maximum..... kW
-Minimum..... kW

Driving Machine:
AC Motor [ ]
AC Motor + Inverter [ ]
DC Motor [ ]
Hydraulic Motor [ ]
Piston Engine with 1-3 cylinders [ ]
Piston Engine with 4-24 cylinders [ ]

Motor Connection Type (Electric Motors):
IEC B5 Flange [ ]
NEMA Flange [ ]
B3 Foot Mounted [ ]

IEC or NEMA Flange Code.....

Motor Power:
-Nominal.....kW

Motor Speed:
-Normal.....rpm
-Maximum.....rpm
-Minimum.....rpm

Motor Torque:
-Normal.....Nm
-Maximum.....Nm
-Minimum.....Nm

Direction of Rotation:
cw [ ] ccw [ ] variable [ ]

Working hours per day:
<4 [ ] 4-8 [ ] 8-16 [ ] >16 [ ]

Start-ups per cycle:
0-50 [ ] 50-100 [ ] 100-200 [ ]
200-300 [ ] 300-500 [ ] 500-700 [ ]
700-1000 [ ] >1000 [ ]

Transmission ratio between motor and gear unit.....

Required Start-up Torque.....Nm

Peak torques per hour:
1-5 [ ] 6-30 [ ] 31-100 [ ] >100 [ ]

Effective working time in a cycle (ED):
%100 [ ] %80 [ ] %60 [ ] 40% [ ]
20%[ ]

Altitude:
<1000 [ ] <2000 [ ] <3000 [ ]
<4000 [ ] <5000 [ ]

Mounting Place:
Small closed room (w<1m/sn) [ ]
Closed room (w<3m/sn) [ ]
Big rooms and halls (w>=3m/sn) [ ]
Outdoor [ ]

Ambient Conditions:
Normal [ ] Dusty [ ] Humid [ ]
Corrosive [ ] Dry [ ]

Ambient Temperature:
Average.....^{0}C
Maximum.....^{0}C
Minimum.....^{0}C

Backstop Required:
Yes [ ] No [ ]

Gearbox input options:
R..[ ] V..[ ] N..[ ] T..[ ]

Mounting Position:
M1 [ ] M2 [ ] M3 [ ] M4 [ ] M5 [ ] M6 [ ]

Input Shaft Connection Type:
Elastic Coupling [ ]
Barrel Type Coupling [ ]
Hydraulic Coupling [ ]
Rigid Flange Coupling [ ]
Pulley [ ]
Chain Sprocket [ ]
Pinion [ ]
Diameter of Connection element.....mm
Radial Load.....N
"u" Distance of Radial Load.....mm
Axial Load (Towards Shaft) .....N

Output Shaft Connection Type:
Elastic Coupling [ ]
Barrel Type Coupling [ ]
Rigid Flange Coupling [ ]
Pulley [ ]
Chain Sprocket [ ]
Pinion [ ]
Diameter of Connection Element.....mm
Radial Load.....N
"u" Distance of Radial Load.....mm
Axial Load (Towards Shaft) .....N

Output Shaft Specification:
Solid Shaft with Keyway [ ]
Solid Shaft without Keyway [ ]
Special Shaft [ ]

Input Shaft Specification:
Solid Shaft with Keyway [ ]
Solid Shaft without Keyway [ ]
Special Shaft [ ]

Electrical Supply:
AC-1 Phase [ ] AC-3 Phase [ ] DC [ ]
Voltage.....Volt
Frequency..... Hz

Protection Class:
IP55 [ ] IP65 [ ] Exproof [ ]
Other IP.....

Attachments:
Load Diagram [ ]
Project [ ]
Required Dimensions [ ]
Technical Specifications [ ]

Notes:

Formular für Getriebeauswahl

Industriebereich.....
Anwendung.....
Erforderliche Drehzahl.....U/min

Erforderliche Leistung für die Maschine:
-Normal.....kW
-Minimal.....kW
-Maximal.....kW

Antriebsmaschine:
AC Motor [ ]
AC Motor mit Frequenzumrichter [ ]
DC Motor [ ]
Hydromotor [ ]
Kolbenmachinen mit 1-3 Zylinder [ ]
Kolbenmachinen mit 2-4 Zylinder [ ]

Motorverbindungsart (Elektromotoren):
IEC B5 Flansch [ ]
NEMA Flansch [ ]
B3 Fussausfuhrung [ ]

IEC oder NEMA Flanschkode.....

Motorleistung:
-Nominal.....kW

Motordrehzahl:
-Normal.....U/min
-Maximal .....U/min
-Minimal.....U/min

Motordrehmoment:
-Normal.....Nm
-Maximal.....Nm
-Minimal.....Nm

Drehrichtung:
in Uhrzeigersinn [ ] gegen Uhrzeigersinn[ ]
veranderlich [ ]

Betriebsdauer in Stunden pro Tag:
<4 [ ] 4-8 [ ] 8-16 [ ] >16 [ ]

Anzahl der Anläufe pro Stunde:
0-50 [ ] 50-100 [ ] 100-200 [ ]
200-300 [ ] 300-500 [ ] 500-700 [ ]
700-1000 [ ] >1000 [ ]

Übersetzung zwischen Motor und Antriebs-
welle.....
Erforderliches Anlaufmoment.....Nm

Häufigkeit von Lastspitzen pro Stunde:
1-5 [ ] 6-30 [ ] 31-100 [ ] >100 [ ]

Einschaltdauer je Stunde (ED):
%100 [ ] %80 [ ] %60 [ ] 40% [ ] %20 [ ]

Höhenlage über Meeresspiegel (m):
<1000 [ ] <2000 [ ] <3000 [ ]
<4000 [ ] <5000 [ ]

Betriebsort:
Kleine geschlossene Raume (w<1m/sn) [ ]
Geschlossene Raume (w<3m/sn) [ ]
Große Raume und Hallen (w>=3m/sn) [ ]
im Freien [ ]

Umgebungsbedingungen:
Normal [ ] Staubig [ ] Feucht [ ]
Korrodierend [ ] Trocken [ ] Verklebend [ ]

Umgebungstemperatur:
Mittelwert .....^{0}C
Maximal.....^{0}C
Minimal.....^{0}C

Rücklaufsperre erforderlich:
Ja [ ] Nein [ ]

Getriebeeingangsvarianten:
R..[ ] V..[ ] N..[ ] T..[ ]

Montageposition:
M1 [ ] M2 [ ] M3 [ ] M4 [ ] M5 [ ] M6 [ ]

Antriebswellenanschluss:
Elastische Kupplung [ ]
Trommelkupplung [ ]
Hydrokupplung [ ]
Starre Flanschkupplung [ ]
Keilriementrieb [ ]
Kettenrad [ ]
Ritzel [ ]
Durchmesser von Anschlusselement.....mm
Querkraft.....N
"u" Abstand von der Wellenschulter.....mm
Axialkraft (in Richtung der Welle +) .....N

Abtriebswellenanschluss:
Elastische Kupplung [ ]
Trommelkupplung [ ]
Starre Flanschkupplung [ ]
Keilriementrieb [ ]
Kettenrad [ ]
Ritzel [ ]
Durchmesser von Anschlusselement.....mm
Querkraft.....N
"u" Abstand von der Wellenschulter.....mm
Axialkraft (in Richtung der Welle +) .....N

Eigenschaften der Abtriebswelle:
Vollwelle mit Passfeder [ ]
Vollwelle ohne Passfeder [ ]
Sonderwelle [ ]

Eigenschaften der Antriebswelle:
Vollwelle mit Paßfeder [ ]
Vollwelle ohne Paßfeder [ ]
Sonderwelle [ ]

Spannungsversorgung:
AC-1 phasig [ ] AC-3 phasig [ ] DC [ ]
Spannung.....Volt
Frequenz.....Hz

Schutzart:
IP55 [ ] IP65 [ ] Exproof [ ]
Andere IP.....

Anhang:
Lastdiagramm [ ]
Projekt [ ]
Erforderliche Abmessungen [ ]
Technische Spezifikationen [ ]

Andere Merkmale:



Lubrificazione

Affinché il regolatore possa lavorare nelle condizioni migliori e il più a lungo possibile bisogna utilizzare il tipo di lubrificante adeguato e sostituirlo con regolarita.

Quando si sceglie l'olio da utilizzare è importante tener conto di fattori quali la velocità di rotazione, la temperatura ambiente, la temperatura dell'olio nel riduttore, le condizioni di lavoro e la durata che ci si aspetta dal lubrificante. Tutti gli apparecchi vengono riempiti di olio lubrificante prima di essere spediti. Se il riduttore deve essere stoccato in magazzino per lungo tempo o prima di metterlo in funzione rimuovere il tappo superiore (a seconda della posizione di lavoro) e sostituirlo con il tappo di sfiato supplementare fornito a corredo. Questo evita che si crei sovrappressione nell'apparecchio, con conseguenti perdite di olio.

*I lubrificanti per i riduttori standard sono indicati nella tabella a pagina seguente. Verificare sulla targhetta apposta direttamente sul riduttore qual e il tipo di olio da utilizzare per lo specifico riduttore. Se sul modulo di scelta del riduttore non è specificata la posizione di montaggio richiesta, i riduttori di tipo M vengono forniti con posizione di montaggio **M1** e quelli di tipo N con la posizione di montaggio **M4**. Se la posizione di montaggio e diversa, fare riferimento alla tabella nelle pagine seguenti. Per condizioni di lavoro particolari vi invitiamo a contattarci.*

Se il lubrificante è di tipo minerale va sostituito ogni 10.000 ore di servizio, se invece e di tipo sintetico ogni 20.000 ore. In presenza di condizioni di lavoro estremamente gravose (p.es. forti escursioni termiche, alto tasso di umidita) si consiglia di ridurre i tempi tra una sostituzione e l'altra. L'olio minerale e quello sintetico non devono essere mischiati. Quando si procede alla sostituzione dell'olio lubrificante si consiglia di effettuare anche una pulizia completa. La sostituzione dell'olio è bene venga fatta al termine di una fase di lavoro perché, in queste condizioni, l'olio è caldo e le impurita sono in sospensione. La regolare sostituzione dell'olio permette al riduttore di lavorare con risultati migliori e all'olio di defluire facilmente.

Lubrication

To work in perfect condition and ensure gearbox long life, the lubricant must be chosen correctly and changed in time.

When selecting the oil it is important to consider speed, ambient temperature, gear box oil temperature, working conditions and the life required from the lubricant. All units are filled with lubricant before shipping. Before the gearbox is stored for a long time or before starting up, the top plug (according to the working position) must be removed and the extra vent plug must be replaced. This prevents excessive pressure which causes oil leakages.

*The lubricants for standard gear units are given on the table on next page. Please look at the label of your gear unit to check the oil type for filling the gear unit. If the mounting position is not specified on the gearbox selection form, the M type gearboxes are supplied with **M1** mounting position and N type gearboxes are supplied with **M4** mounting position. For other mounting positions please refer to the table given on the next pages. For special working conditions please contact us.*

The mineral lubricant should be changed every 10.000 service hours and the synthetic lubricant should be changed every 20.000 working hours. If the operation conditions are very heavy (e.g. high temperature differences, high humidity) shorter intervals between changes are recommended. Mineral and synthetic oils must not be mixed up. When changing the lubricant a complete cleaning is recommended. The oil change should be done after a working period. Because oil in this condition is hot and the impurities are mixed with it. If oil is changed the unit will work with better results and the oil will drain easily.

Schmierung

Um eine lange Lebensdauer zu gewahrleisten muss der Schmierstoff richtig ausgewahlt werden.

Fur die richtige Ölauswahl mussen Drehzahl, Umgebugstemparatur, Belastungsart und Lebensdauer des Öls berucksichtigt werden. Die mitgelieferte Entluftungsschraube ist vor Inbetriebnahme oder langeren Lagern gegen die Einfullschraube auszutauschen, um einen Überdruck im Getriebe und damit eine Undichtigkeit des Getriebes zu vermeiden. Getriebe und Getriebemotoren sind bei Auslieferung betriebsfertig gefullt.

Ohne besondere Bestellangaben werden die Getriebe grundsatzlich mit den auf der folgenden Seite in der grau unterlegten Spalte angegebenen Schmierstoffen gefullt. Bitte im Getriebe verwendetes Öl von dem Namenschild ablesen. Die fußbefestigten Getriebe (M Serie) sind gefullt für Bauform **M1** und die flanschbefestigten Getriebe (N Serie) fur Bauform **M4**, wenn bei der Bestellung keine Angaben vorgegeben sind. Fur andere Bauformen sind die auf der nachsten Seite angegebenen Fullmengen zu beachten.

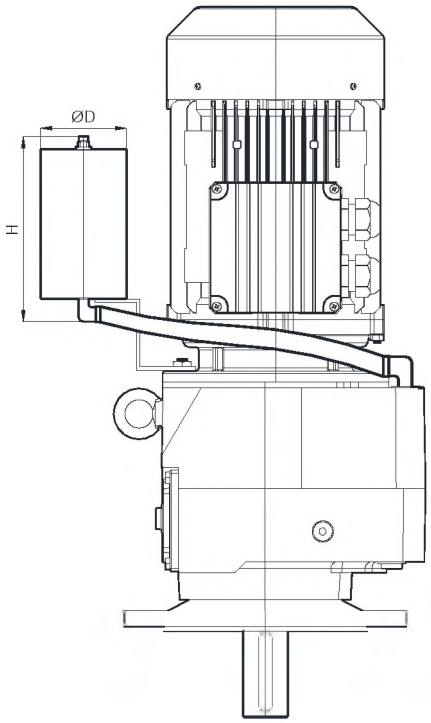
Ein Schmierstoffwechsel sollte alle 10.000 Betriebsstunden durchgefuhrt werden. Fur synthetische Produkte verdoppeln sich diese Fristen. Bei extremen Betriebsbedingungen, z.B. hohe Luftfeuchtigkeit, aggresiver Umgebung und hohen Temparatur-schwankungen sind kurzere Schmierstoffintervalle vorteilhaft. Es ist empfehlenswert, dem Schmierstoffwechsel mit einer grundlichen Reinigung des Getriebes zu verbinden. Synthetische und mineralische Schmierstoffe durfen nicht miteinander vermischt werden. Das Ablassen des Ols soll unmittelbar nach dem Abschalten erfolgen, solange das Ol noch warm ist. In dieser Zustand ist das Öl mit den Schmutzpartickeln vermischt, so dass eine Entfernung des Altols eine gute Reinigung benotigt.

Vaso di espansione / *Expansion Tank for M4 Mounting Position* / Olausgleichsbehälter für M4 Bauform

Come si può vedere nel disegno tecnico di seguito, per i riduttori con posizione di montaggio M4 (montaggio posizioni p. 32) , il livello dell'olio deve essere sufficientemente alto per consentire la corretta lubrificazione del pignone superiore; questo potrebbe causa perdite di olio dal tappo sfiato a causa della formazione di schiuma e l'aumento del volume d'olio nei motoriduttori con rapporti inferiori a 20.
Brevini Power Transmission, consiglia vivamente di utilizzare un vaso di espansione per posizione di montaggio M4 per riduttori M57, M67, M77, M87 e M97 con rapporti totali (i) inferiore a 20, per evitare questo tipo di problematiche. Si possono trovare le dimensioni raccomandate di vasi di espansione al di sotto.
Ogni qualvolta il rapporto totale (i) è inferiore a 20 e la velocità di ingresso è superiore a 1800 giri al minuto, si consiglia di utilizzare il vaso di espansione per tutte le dimensioni del riduttore per posizione di montaggio M4.

*As you can see at the technical drawing below, for gear units with **M4** (mounting positions p. 32) mounting position, oil level is very high for proper lubrication of upper pinion gear and this leads to oil leakage from venting plug, because of foaming and expansion of oil at geared motors with ratios below 20.*
*We ; Brevini Power Transmission, strongly recommend using expansion tank for **M4** mounting position for gear units M57, M67, M77, M87 and M97 with total ratios (i) below 20, to prevent this. You can find the recommended dimensions of expansion tanks below.*
*If your gear units total ratio (i) is below 20 and input speed is higher then 1800 rpm we recommend using of expansion tank for all gear unit sizes for **M4** mounting position.*

Wie in der folgenden technischen Zeichnung dergestellt ist, sollte der Olstand auf der gleichen Hohe der ersten Getriebestufe sein, um eine ausreichende Schmierung des oberen Zahnrads bei der **M4** Bauform (s. Seite 32) sicher zu stellen. Aufgrund dieeses hohen Olstands bildet sich Olschaum aus, welcher aus der Entluftungsschraube austritt.
Um das verhindern zu müssen, empfiehlt Brevini Power Transmission bei allen M-Serie Getrieben ab Getriebebaugroße M57 mit niedrigen Übersetzungen (i<20) einen Olausgleichsbehalter bei der **M4** Bauform einzusetzen. Die empfehlenen Dimensionen des Olausgleichsbehalters sind in der unteren Tabelle angegeben.
Bei Getrieben mit Übersetzungen (i<20) und bei Motor-Eingangsdrehzahlen>1800 min^{-1} empfiehlt Brevini Power Transmission einen Olausgleichsbehalter unabhangig von der Getriebebaugroße einzusetzen.



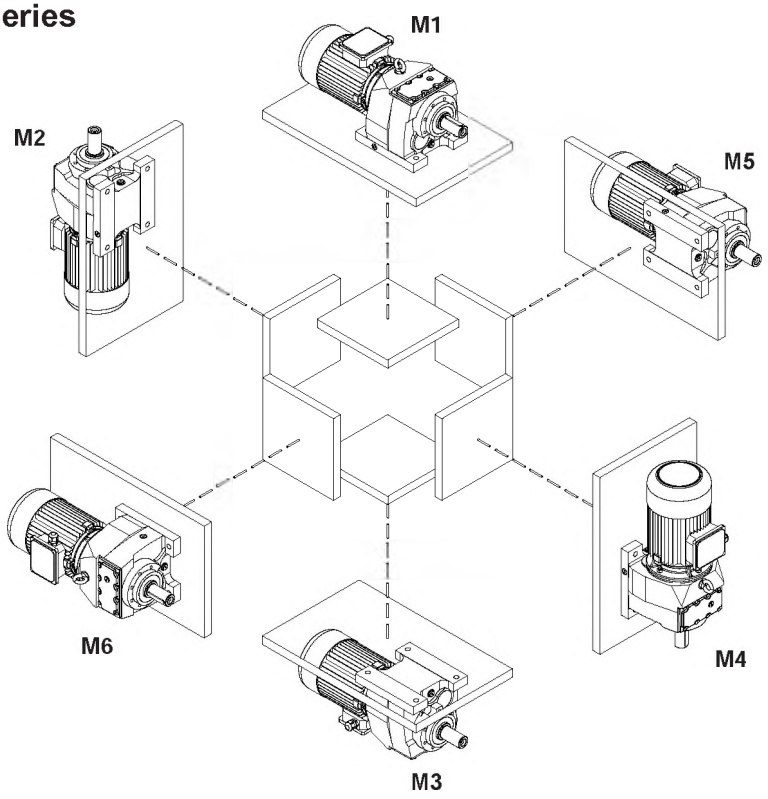
Dimension of the housing	Expansion tank	D [mm]	H [mm]	Weight [kg]
M57..	G1	100	150	4
M67.. , M77..	G2	150	250	5
M87.., M97..	G3	180	400	9

Tipi di olio / *Oil Types* / Schmierstoffe

Lubrificante *Lubricant* Art des Schmiers	DIN 51517-3	Temp. ambiente [°C] *Ambient Temp. [°C]* Umgebungstemp. [°C] / Lubrificazione per immersione *Dip Lubrication* Tauchschmier.	ISO VG	Aral	Beyond Petroleum	Castrol	Klüber Lubrication	Mobil	Shell	Total
Olio minerale *Mineral Oil* Mineralöl	CLP	0 ... +50	680	Degol BG 680	Energol GR-XP 680	Alpha SP 680	Kluberoil GEM 1-680 N	Mobilgear XMP 680	Omala 680	Carter EP 680
		-5 ... +45	460	Degol BG 460	Energol GR-XP 460	Alpha SP 460	Klüberoil GEM 1-460 N	Mobilgear XMP 460	Omala F460	Carter EP 460
		-10 ... +40	320	Degol BG 320	Energol GR-XP 320	Alpha SP 320	Klüberoil GEM 1-320 N	Mobilgear XMP 320	Omala F320	Carter EP 320
		-15 ... +30	**220**	**Degol BG 220**	**Energol GR-XP 220**	**Alpha SP 220**	**Klüberoil GEM 1-220 N**	**Mobilgear XMP 220**	**Omala F220**	**Carter EP 220**
		-20 ... +20	150	Degol BG 150	Energol GR-XP 150	Alpha SP 150	Kluberoil GEM 1-150 N	Mobilgear XMP 150	Omala 150	Carter EP 150
		-25... +10	100	Degol BG 100	Energol GR-XP 100	Alpha SP 100	Klüberoil GEM 1-100 N	–	Omala 100	Carter EP 100
Olio sintetico *Synthetic Oil* Synthetisches Öl	CLP PG	-10 ... +60	680	Degol GS 680	Energsyn SG-XP 680	–	Klubersynth GH 6 -680	Mobil Glygoyle 680	Tivela S 680	Carter SY 680
		-20 ... +50	460	Degol GS 460	Energsyn SG-XP 460	Aphasyn PG 460	Klubersynth GH 6 -460	Mobil Glygoyle 460	Tivela S 460	Carter SY 460
		-25 ... +40	320	Degol GS 320	Energsyn SG-XP 320	Aphasyn PG 320	Klübersynth GH 6 -320	Mobil Glygoyle 320	Tivela S 320	Carter SY 320
		-30 ...+30	220	Degol GS 220	Energsyn SG-XP 220	Aphasyn PG 220	Klübersynth GH 6 -220	–	Tivela S 220	Carter SY 220
		-35 ... +20	150	Degol GS 150	Energsyn SG-XP 150	Aphasyn PG 150	Klubersynth GH 6 -150	–	Tivela S 150	Carter SY 150
		-40 ... +10	100	–	–	–	Klübersynth GH 6 -100	–	–	–
	CLP HC	-10 ... +60	680	–	–	–	Klubersynth GEM 4-680 N	Mobilgear SHC XMP 680	–	Carter SH 680
		-20 ... +50	460	Degol PAS 460	Enersyn EP-XF 460	Alphasyn T 460	Klübersynth GEM 4-460 N	Mobilgear SHC XMP 460	Omala HD 460	Carter SH 460
		-25 ... +40	320	Degol PAS 320	Enersyn EP-XF 320	Alphasyn T 320	Klübersynth GEM 4-320 N	Mobilgear SHC XMP 320	Omala HD 320	Carter SH 320
		-30 ... +30	220	Degol PAS 220	Enersyn EP-XF 220	Alphasyn T 220	Klübersynth GEM 4-220 N	Mobilgear SHC XMP 220	Omala HD 220	Carter SH 220
		-35 ... +20	150	Degol PAS 150	Enersyn EP-XF 150	Alphasyn T 150	Klübersynth GEM 4-150 N	Mobilgear SHC XMP 150	Omala HD 150	Carter SH 150
		-40 ... +10	100	–	–	–	Klubersynth GEM 4-100 N	–	–	–
Olio alimentare *Food Grade Oil* Lebensmittelöl	CLP NSF H1	-15 ... +25	320	–	–	Optileb GT 320	Kluberoil 4 UH1-320 N	Mobil SHC Cibus 320	Cassida Fluid GL-320	Nevastane SL 320
Olio biodegradabile *Biodegradable Oil* Biologisch abbaubares Öl	CLP E	-25 ... +40	320	–	–	Tribol BioTop 1418-320	Klübersynth GEM 2-320	–	–	Carter Bio 320
Grasso minerale [temperatura di esercizio -20 .... +120°C] *Mineral Grease [-20 .... +120 Working Temperature °C]* Mineral-Fett [-20 .... +120 Betriebstemperatur °C]				Aralub HL3	Energrease LS 3	Spheerol AP3	Centoplex 2 EP	Mobilux EP 3	Alvania RL3	Multis Complex EP 2
Grasso sintetico [temperatura di esercizio -30 .... +100°C] *Synthetic Grease [-30 .... +100 Working Temperature °C]* Synthetisches Fett [-30 .... +100 Betriebstemperatur °C]				–	Energrease SY 2202	–	Petamo GHY 133 N	Mobiltemp SHC 100	Cassida RLS 2	Multis Complex SHD 220

Posizioni di montaggio / *Mounting Positions* / Bauformen

M Series



Le posizioni di montaggio M1 a M6 ipotizzate sono raffigurate come riferimento della posizione direzionale del riduttore. Le superfici di montaggio non sono vincolanti.

The supposed mounting positions of M1 to M6 are determined as reference of directional position of the gearbox. Mounting surfaces are not binding.

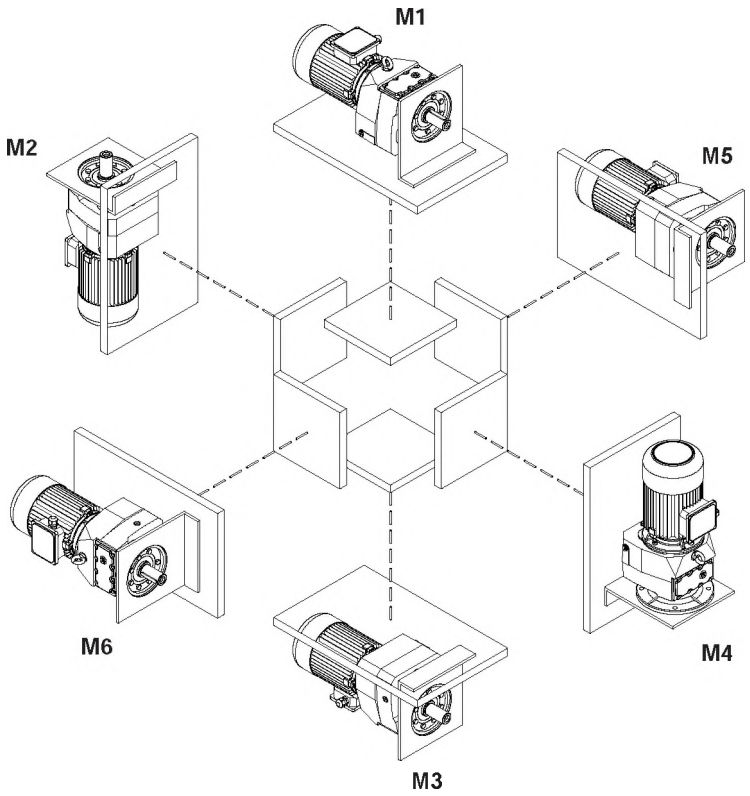
Dargestellte Montagepositionen M1 bis M6 wurden nach der Stehrichtung von Getriebe bestimmt. Montageoberflächen sind unverbindlich.

N Series

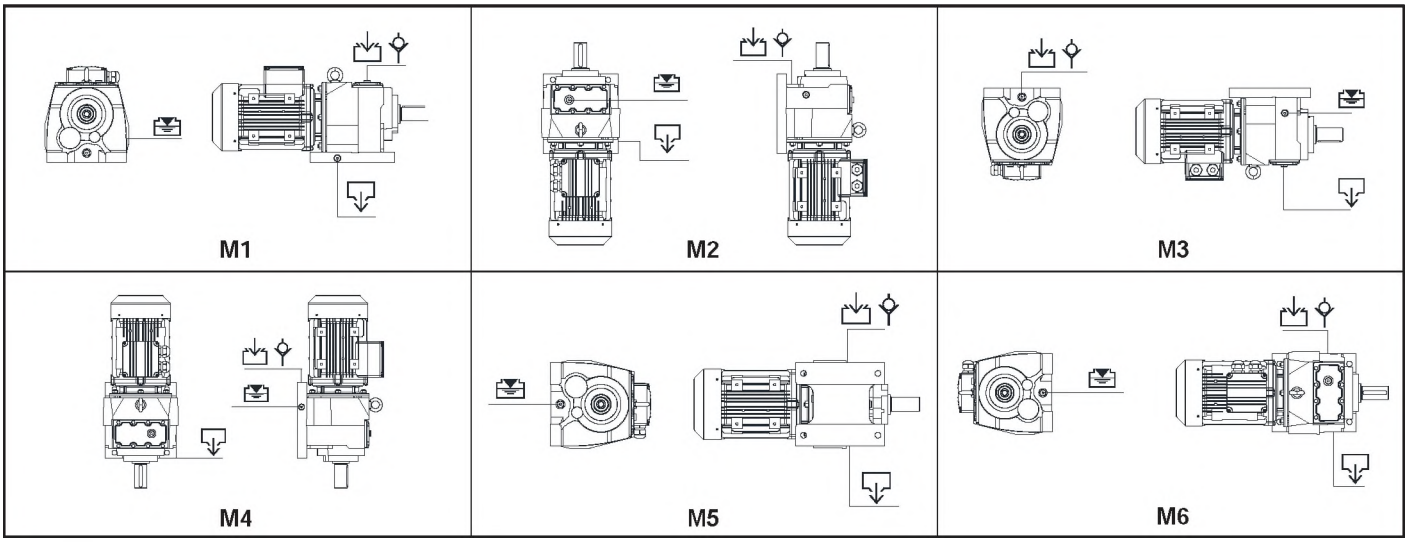
Le posizioni di montaggio M1 a M6 ipotizzate sono raffigurate come riferimento della posizione direzionale del riduttore. Le superfici di montaggio non sono vincolanti.

The supposed mounting positions of M1 to M6 are determined as reference of directional position of the gearbox. Mounting surfaces are not binding.

Dargestellte Montagepositionen M1 bis M6 wurden nach der Stehrichtung von Getriebe bestimmt. Montageoberflächen sind unverbindlich.



Tappi di livello olio per riduttori elicoidali ad assi paralleli bi-/tristadio Serie M
Two -Three Stage Helical Geared Parallel shaft Gearboxes Oil Level Plugs M Series
Zwei-Dreistufig Stirnradgetriebe mit Hohlwelle Ölverschlußschrauben M Serie

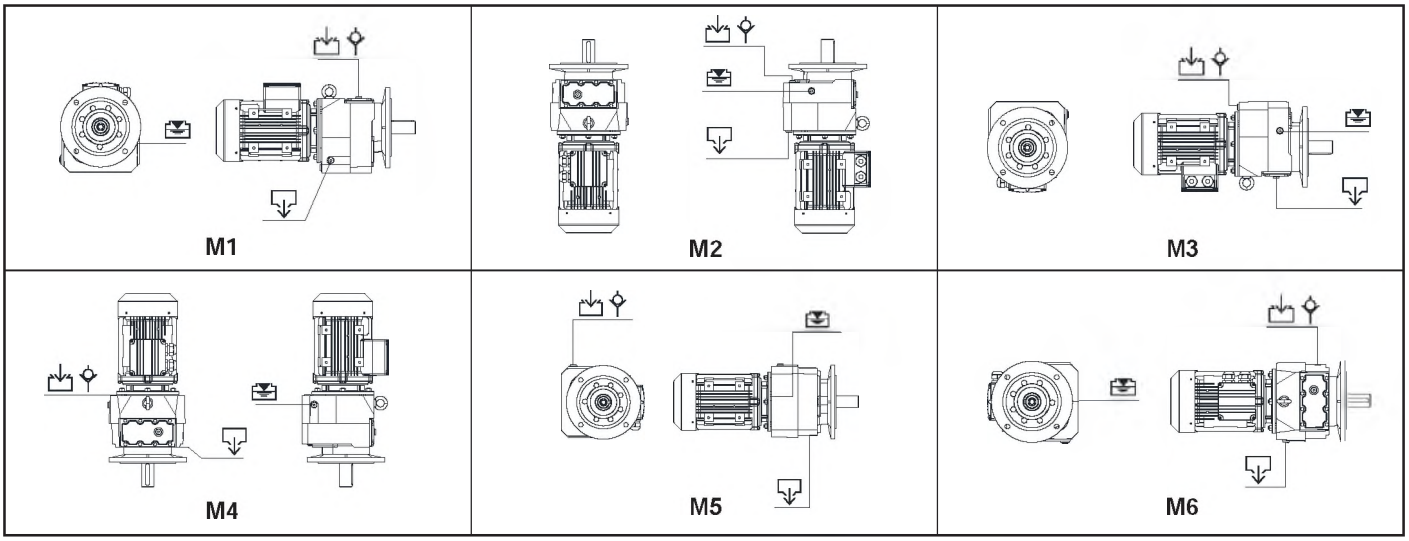


Quantità di olio (l) / *Oil Quantities (lt)* / *Olmengen (lt)*

Tipo *Type* Typ	**Quantità di olio per la serie M 2-3 stadi** *M Series 2-3 Stages Oil Quantities* Olmengen von M Serie mit 2-3 Stufen					
	M1	**M2**	**M3**	**M4**	**M5**	**M6**
M002 / 003	0.4 / 0.35	0.6 / 0.55	0.5 / 0.5	0.6 / 0.55	0.5 / 0.4	0.5 / 0.4
M102 / 103	0.65 / 0.6	0.95 / 0.8	0.7 / 0.7	0.95 / 0.8	0.7 / 0.7	0.7 / 0.7
M172 / 173	0.7 / 0.65	0.95 / 0.9	0.8 / 0.8	0.95 / 0.9	0.8 / 0.7	0.8 / 0.7
M202 / 203	1.2 / 1.1	2.1 / 2	2 / 1.9	2.1 / 2	1.4 / 1.3	1.4 / 1.3
M272 / 273	1.1 / 1	2 / 1.7	1.9 / 1.5	2 / 1.7	1.3 / 1.2	1.3 / 1.2
M282 / 283	1.7 / 1.6	3 / 2.85	2.8 / 2.5	3 / 2.85	2.6 / 2.4	2.6 / 2.4
M372 / 373	2 / 1.9	3.4 / 3.3	3.1 / 3	3.4 / 3.3	2.8 / 2.6	2.8 / 2.6
M472 / 473	4.5 / 4	8 / 7.6	7.5 / 7	8 / 7.6	5.5 / 5	5.5 / 5
M572 / 573	7 / 6	12.8 / 11.7	11.5 / 10.5	12.8 / 11.7	8 / 7.5	8 / 7.5
M672 / 673	10 / 8.5	22.5 / 20	20 / 18	22.5 / 20	11 / 11	11 / 11
M772 / 773	20 / 18	35 / 32	30 / 28	35 / 32	22 / 20	22 / 20
M872 / 873	28 / 20	53 / 45	45 / 39	53 / 45	30 / 28	30 / 28
M972 / 973	53 / 50	90 / 87	82 / 80	90 / 87	70 / 65	70 / 65

Simboli : : **Tappo di riempimento** : **Tappo di scarico** : **Livello olio** : **Tappo sfiato**
Symbols : : *Oil Filling* : *Drain plug* : *Oil level* : *Vent plug*
Symbole : : Ölfüllung : Ölauslass : Ölstand : Entlüftungschraube

Tappi di livello olio per riduttori elicoidali bi-/tristadio Serie N
N Series Two -Three Stage Helical Gearboxes Oil Level Plugs
N Serie Zwei-Dreistufig Stirnradgetriebe Ölverschlußschrauben

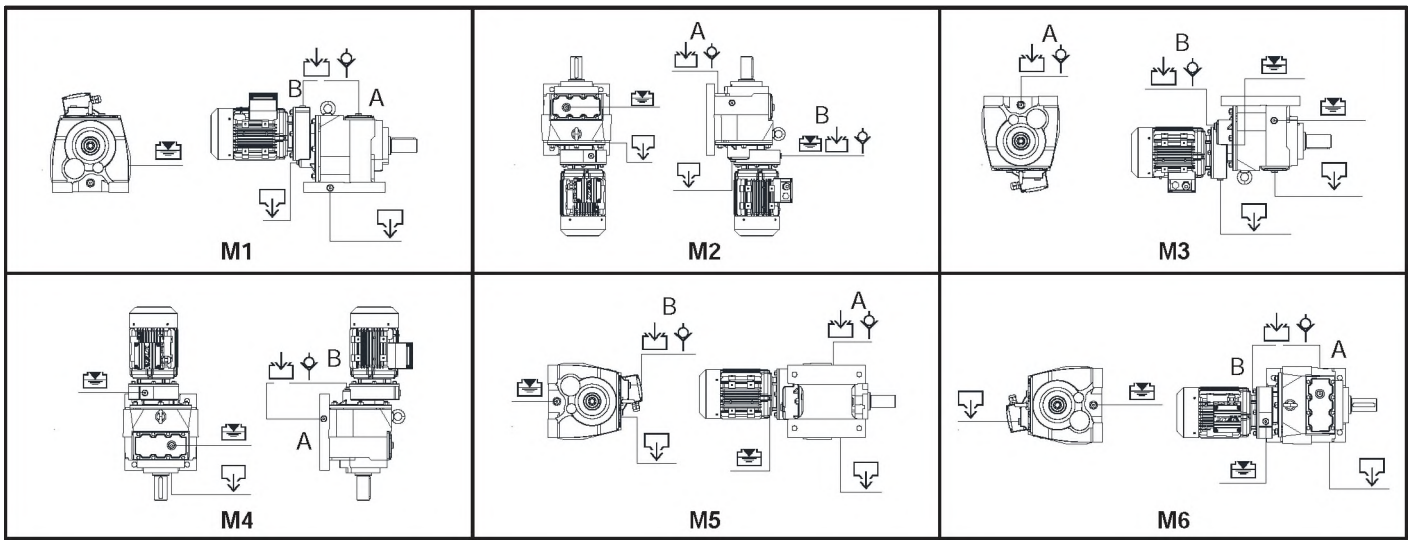


Quantità di olio (l) / *Oil Quantities (lt)* / *Ölmengen (lt)*

Tipo *Type* Typ	**Quantità di olio per la serie N 2-3 stadi** *N Series 2-3 Stages Oil Quantities* Olmengen von N Serie mit 2-3 Stufen					
	M1	**M2**	**M3**	**M4**	**M5**	**M6**
N002 / 003	0.4 / 0.35	0.6 / 0.55	0.5 / 0.5	0.6 / 0.55	0.5 / 0.4	0.5 / 0.4
N102 / 103	0.65 / 0.6	0.95 / 0.8	0.7 / 0.7	0.95 / 0.8	0.7 / 0.7	0.7 / 0.7
N172 / 173	0.7 / 0.65	0.95 / 0.9	0.8 / 0.8	0.95 / 0.9	0.8 / 0.7	0.8 / 0.7
N202 / 203	1.2 / 1.1	2.1 / 2	2 / 1.9	2.1 / 2	1.4 / 1.3	1.4 / 1.3
N272 / 273	1.1 / 1	2 / 1.7	1.9 / 1.5	2 / 1.7	1.3 / 1.2	1.3 / 1.2
N282 / 283	1.7 / 1.6	3 / 2.85	2.8 / 2.5	3 / 2.85	2.6 / 2.4	2.6 / 2.4
N372 / 373	2 / 1.9	3.4 / 3.3	3.1 / 3	3.4 / 3.3	2.8 / 2.6	2.8 / 2.6
N472 / 473	4.5 / 4	8 / 7.6	7.5 / 7	8 / 7.6	5.5 / 5	5.5 / 5
N572 / 573	7 / 6	12.8 / 11.7	11.5 / 10.5	12.8 / 11.7	8 / 7.5	8 / 7.5
N672 / 673	10 / 8.5	22.5 / 20	20 / 18	22.5 / 20	11 / 11	11 / 11
N772 / 773	20 / 18	35 / 32	30 / 28	35 / 32	22 / 20	22 / 20
N872 / 873	28 / 20	53 / 45	45 / 39	53 / 45	30 / 28	30 / 28
N972 / 973	53 / 50	90 / 87	82 / 80	90 / 87	70 / 65	70 / 65

Simboli : : **Tappo di riempimento** : **Tappo di scarico** : **Livello olio** : **Tappo sfiato**
Symbols : : *Oil Filling* : *Drain plug* : *Oil level* : *Vent plug*
Symbole : : Ölfüllung : Ölauslass : Ölstand : Entlüftungschraube

Tappi di livello olio per riduttori elicoidali a quattro stadi Serie M
M Series Four Stage Helical Gearboxes Oil Level Plugs
M Serie Vierstufig Stirnradgetriebe mit Ölverschlußschrauben

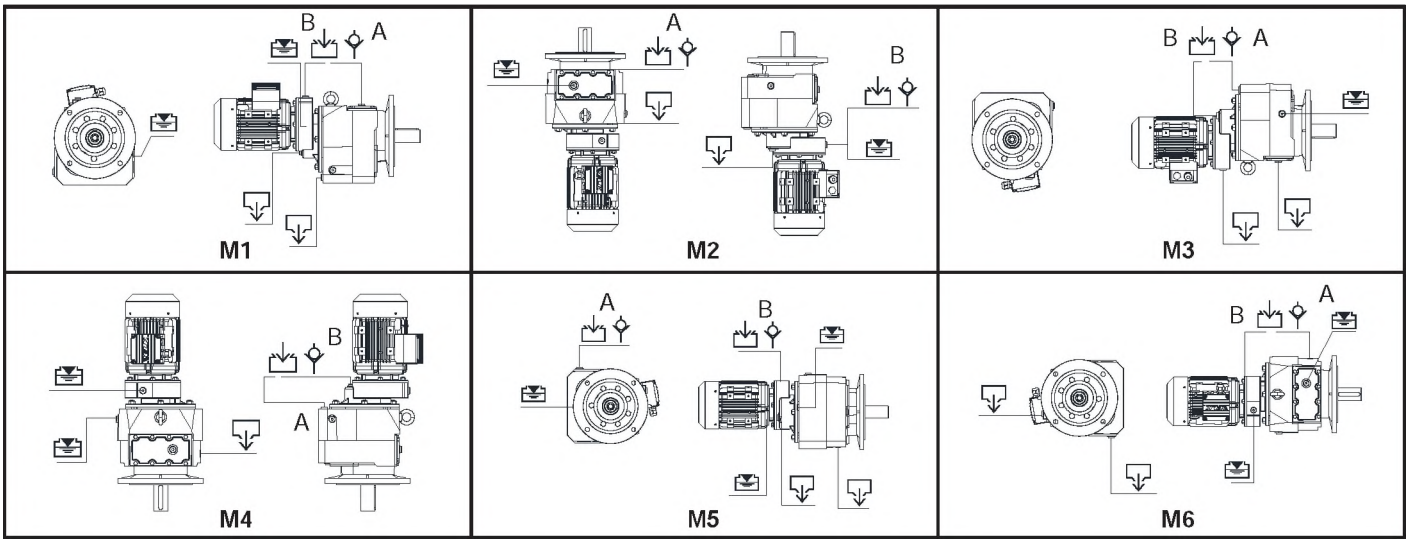


Quantità di olio (l) / *Oil Quantities (lt)* / *Olmengen (lt)*

Tipo *Type* Typ	**Quantità di olio per la serie M 4 stadi** *M Series 4 Stages Oil Quantities* Olmengen von M Serie mit 4 Stufen					
	M1 A / B	**M2** A / B	**M3** A / B	**M4** A / B	**M5** A / B	**M6** A / B
M284	1.6 / 0.25	2.85 / 0.25	2.5 / 0.25	2.85 / 0.25	2.4 / 0.25	2.4 / 0.25
M374	1.9 / 0.25	3.3 / 0.25	3 / 0.25	3.3 / 0.25	2.6 / 0.25	2.6 / 0.25
M474	4 / 0.4	7.6 / 0.4	7 / 0.4	7.6 / 0.4	5 / 0.4	5 / 0.4
M574	6 / 0.50	11.7 / 0.50	10.5 / 0.50	11.7 / 0.50	7.5 / 0.50	7.5 / 0.50
M674	8.5 / 0.90	20 / 0.90	18 / 0.90	20 / 0.90	11 / 0.90	10.5 / 0.90
M774	18 / 1	32 / 1	28 / 1	32 / 1	20 / 1	20 / 1
M874	20 / 2.15	45 / 2.15	39 / 2.15	45 / 2.15	28 / 2.15	28 / 2.15
M974	50 / 7	87 / 7	80 / 7	87 / 7	65 / 7	65 / 7

Simboli : : **Tappo di riempimento** : **Tappo di scarico** : **Livello olio** : **Tappo sfiato**
Symbols : : *Oil Filling* : *Drain plug* : *Oil level* : *Vent plug*
Symbole : : Ölfüllung : Ölauslass : Ölstand : Entlüftungschraube

Tappi di livello olio per riduttori elicoidali a quattro stadi Serie N
N Series Four Stage Helical Gearboxes Oil Level Plugs
N Serie Vierstufig Stirnradgetriebe mit Ölverschlußschrauben

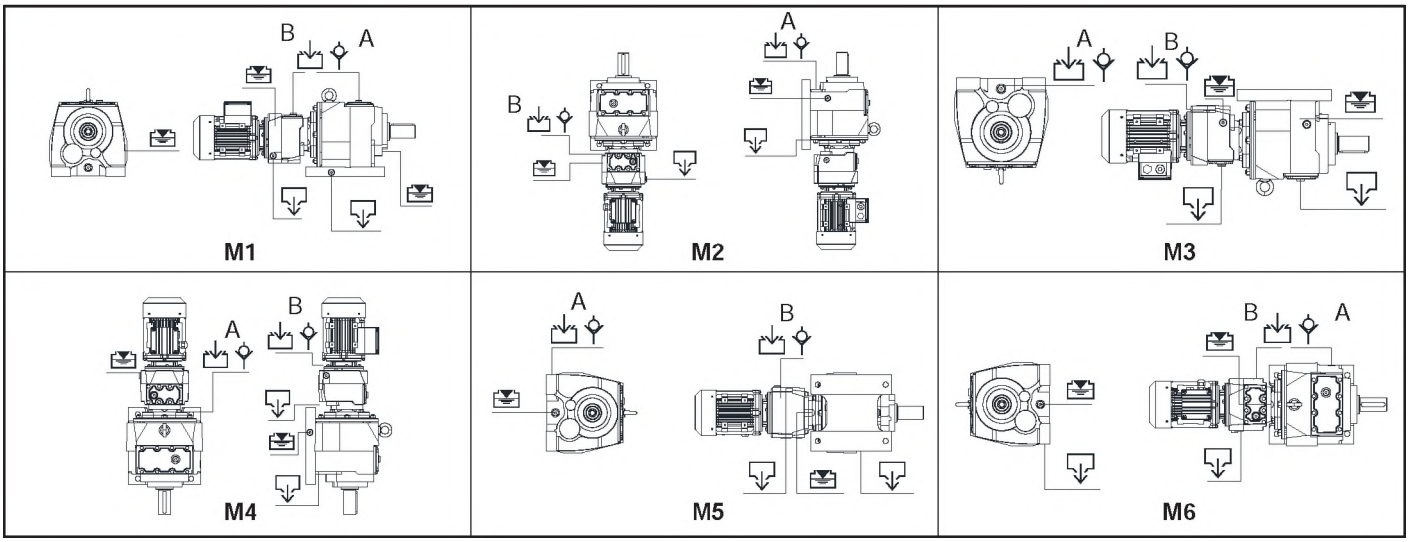


Quantità di olio (l) / *Oil Quantities (lt)* / *Olmengen (lt)*

Tipo *Type* Typ	**Quantità di olio per la serie N 4 stadi** *N Series 4 Stages Oil Quantities* Olmengen von N Serie mit 4 Stufen					
	M1 A / B	**M2** A / B	**M3** A / B	**M4** A / B	**M5** A / B	**M6** A / B
N284	1.6 / 0.25	2.85 / 0.25	2.5 / 0.25	2.85 / 0.25	2.4 / 0.25	2.4 / 0.25
N374	1.9 / 0.25	3.3 / 0.25	3 / 0.25	3.3 / 0.25	2.6 / 0.25	2.6 / 0.25
N474	4 / 0.4	7.6 / 0.4	7 / 0.4	7.6 / 0.4	5 / 0.4	5 / 0.4
N574	6 / 0.50	11.7 / 0.50	10.5 / 0.50	11.7 / 0.50	7.5 / 0.50	7.5 / 0.50
N674	8.5 / 0.90	20 / 0.90	18 / 0.90	20 / 0.90	11 / 0.90	10.5 / 0.90
N774	18 / 1	32 / 1	28 / 1	32 / 1	20 / 1	20 / 1
N874	20 / 2.15	45 / 2.15	39 / 2.15	45 / 2.15	28 / 2.15	28 / 2.15
N974	50 / 7	87 / 7	80 / 7	87 / 7	65 / 7	65 / 7

Simboli : : **Tappo di riempimento** : **Tappo di scarico** : **Livello olio** : **Tappo sfiato**
Symbols : : *Oil Filling* : *Drain plug* : *Oil level* : *Vent plug*
Symbole : : Ölfüllung : Ölauslass : Ölstand : Entlüftungschraube

Tappi di livello olio per riduttori elicoidali a cinque-sei stadi Serie M
M Series Five-Six Stage Helical Gearboxes Oil Level Plugs
M Serie Fünf-Sechsstufig Stirnradgetriebe Ölverschlußschrauben

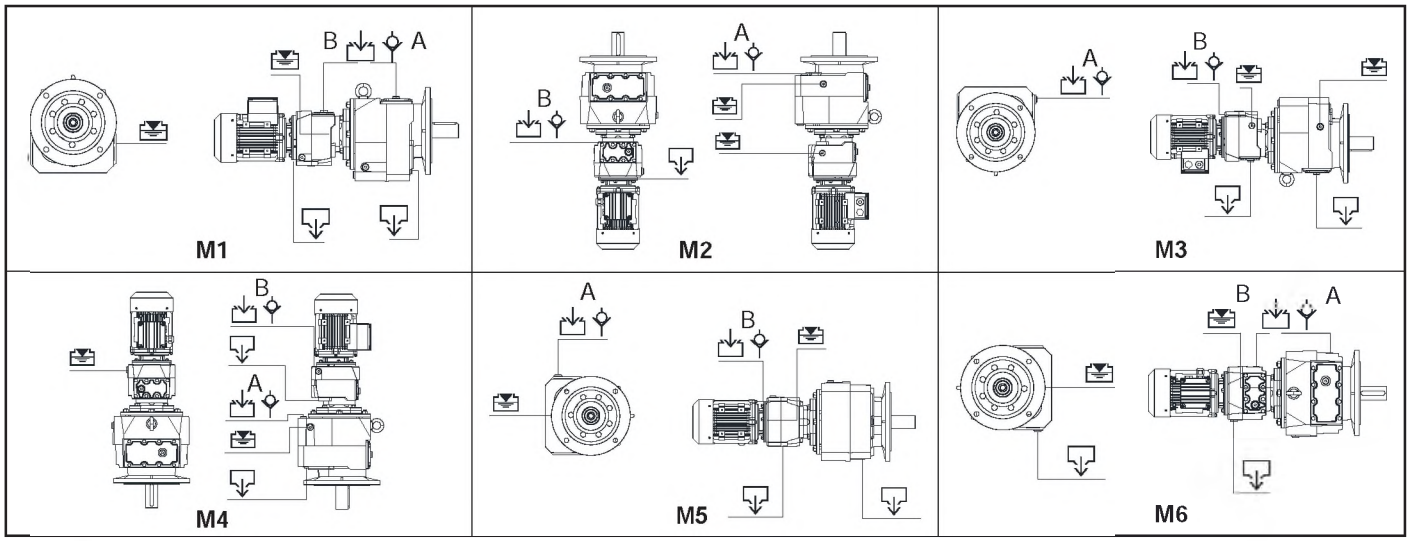


Quantità di olio (l) / *Oil Quantities (lt)* / *Olmengen (lt)*

Tipo *Type* Typ	**Quantità di olio per la serie M 5-6 stadi** *M Series 5-6 Stages Oil Quantities* Olmengen von M Serie mit 5-6 Stufen					
	M1 A / B	**M2** A / B	**M3** A / B	**M4** A / B	**M5** A / B	**M6** A / B
M275	1 / 0.4	1.7 / 0.6	1.5 / 0.5	1.7 / 0.6	1.2 / 0.5	1.2 / 0.5
M285	1.6 / 0.7	2.85 / 0.95	2.5 / 0.7	2.85 / 0.95	2.4 / 0.7	2.4 / 0.7
M375	1.9 / 0.7	3.3 / 0.95	3 / 0.7	3.3 / 0.95	2.6 / 0.7	2.6 / 0.7
M475	4 / 1.2	7.6 / 2.1	7.01 / 2.1	7.6 / 2.1	5 / 1.4	5 / 1.4
M575	6 / 1.2	11.7 / 2.1	10.5 / 2	11.7 / 2.1	7.5 / 1.4	7.5 / 1.4
M675	8.5 / 2	20 / 3.4	18 / 3.1	20 / 3.4	11 / 2.8	10.5 / 2.8
M775	18 / 2	32 / 3.4	28 / 3.1	32 / 3.4	20 / 2.8	20 / 2.8
M875	20 / 2	45 / 3.4	39 / 3.1	45 / 3.4	28 / 2.8	28 / 2.8
M975	50 / 4.5	87 / 8	80 / 7.5	87 / 8	65 / 5.5	65 / 5.5
M276	1 / 0.4	1.7 / 0.55	1.5 / 0.5	1.7 / 0.55	1.2 / 0.4	1.2 / 0.4
M286	1.6 / 0.6	2.85 / 0.8	2.5 / 0.7	2.85 / 0.8	2.4 / 0.7	2.4 / 0.65
M376	1.9 / 0.6	3.3 / 0.8	3 / 0.7	3.3 / 0.8	2.6 / 0.7	2.6 / 0.65
M476	4 / 1.1	7.6 / 2	7 / 1.9	7.6 / 2	5 / 1.3	5 / 1.3
M576	6 / 1.1	11.7 / 2	10.5 / 1.9	11.7 / 2	7.5 / 1.3	7.5 / 1.3
M676	8.5 / 1.9	20 / 3.3	18 / 3	20 / 3.3	11 / 2.6	10.5 / 2.6
M776	18 / 1.9	32 / 3.3	28 / 3	32 / 3.3	20 / 2.6	20 / 2.6
M876	20 / 1.9	45 / 3.3	39 / 3	45 / 3.3	28 / 2.6	28 / 2.6
M976	50 / 4	87 / 7.6	80 / 7	87 / 7.6	65 / 5	65 / 5

Simboli : : **Tappo di riempimento** : **Tappo di scarico** : **Livello olio** : **Tappo sfiato**
Symbols : : *Oil Filling* : *Drain plug* : *Oil level* : *Vent plug*
Symbole : : Ölfüllung : Ölauslass : Ölstand : Entlüftungschraube

Tappi di livello olio per riduttori elicoidali a cinque-sei stadi Serie N
N Series Five-Six Stage Helical Gearboxes Oil Level Plugs
N Serie Fünf-Sechsstufig Stirnradgetriebe Ölverschlußschrauben



Quantità di olio (l) / *Oil Quantities (lt)* / *Ölmengen (lt)*

Tipo *Type* Typ	**Quantità di olio per la serie N 5-6 stadi** *N Series 5-6 Stages Oil Quantities* Olmengen von N Serie mit 5-6 Stufen					
	M1 A / B	**M2** A / B	**M3** A / B	**M4** A / B	**M5** A / B	**M6** A / B
N275	1 / 0.4	1.7 / 0.6	1.5 / 0.5	1.7 / 0.6	1.2 / 0.5	1.2 / 0.5
N285	1.6 / 0.7	2.85 / 0.95	2.5 / 0.7	2.85 / 0.95	2.4 / 0.7	2.4 / 0.7
N375	1.9 / 0.7	3.3 / 0.95	3 / 0.7	3.3 / 0.95	2.6 / 0.7	2.6 / 0.7
N475	4 / 1.2	7.6 / 2.1	7.01 / 2.1	7.6 / 2.1	5 / 1.4	5 / 1.4
N575	6 / 1.2	11.7 / 2.1	10.5 / 2	11.7 / 2.1	7.5 / 1.4	7.5 / 1.4
N675	8.5 / 2	20 / 3.4	18 / 3.1	20 / 3.4	11 / 2.8	10.5 / 2.8
N775	18 / 2	32 / 3.4	28 / 3.1	32 / 3.4	20 / 2.8	20 / 2.8
N875	20 / 2	45 / 3.4	39 / 3.1	45 / 3.4	28 / 2.8	28 / 2.8
N975	50 / 4.5	87 / 8	80 / 7.5	87 / 8	65 / 5.5	65 / 5.5
N276	1 / 0.4	1.7 / 0.55	1.5 / 0.5	1.7 / 0.55	1.2 / 0.4	1.2 / 0.4
N286	1.6 / 0.6	2.85 / 0.8	2.5 / 0.7	2.85 / 0.8	2.4 / 0.7	2.4 / 0.65
N376	1.9 / 0.6	3.3 / 0.8	3 / 0.7	3.3 / 0.8	2.6 / 0.7	2.6 / 0.65
N476	4 / 1.1	7.6 / 2	7 / 1.9	7.6 / 2	5 / 1.3	5 / 1.3
N576	6 / 1.1	11.7 / 2	10.5 / 1.9	11.7 / 2	7.5 / 1.3	7.5 / 1.3
N676	8.5 / 1.9	20 / 3.3	18 / 3	20 / 3.3	11 / 2.6	10.5 / 2.6
N776	18 / 1.9	32 / 3.3	28 / 3	32 / 3.3	20 / 2.6	20 / 2.6
N876	20 / 1.9	45 / 3.3	39 / 3	45 / 3.3	28 / 2.6	28 / 2.6
N976	50 / 4	87 / 7.6	80 / 7	87 / 7.6	65 / 5	65 / 5

Simboli : : **Tappo di riempimento** : **Tappo di scarico** : **Livello olio** : **Tappo sfiato**
Symbols : : *Oil Filling* : *Drain plug* : *Oil level* : *Vent plug*
Symbole : : Ölfüllung : Ölauslass : Ölstand : Entlüftungschraube

MOTORI
Motori CA
a- Caratteristiche generali:

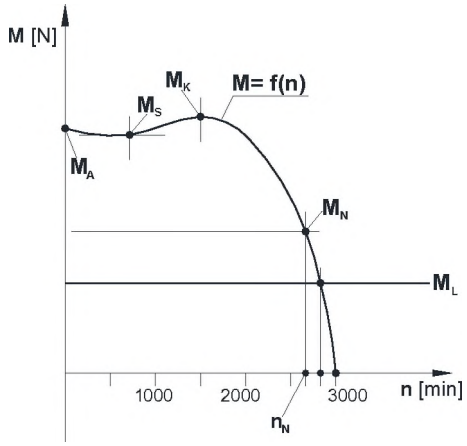
Grazie alla sua semplicità di costruzione, al fatto che non necessita di manutenzione, alla sua buona affidabilità e al prezzo interessante, il motore trifase a gabbia di scoiattolo è uno dei motori elettrici maggiormente utilizzati. Il comportamento di un motore trifase a gabbia di scoiattolo durante il funzionamento è rappresentato dalla curva caratteristica coppia-velocità. La figura qui sotto ne mostra un esempio.

MOTORS
AC Motors
a- General Specifications:

Due to its simple and maintenance free construction, good reliability and price, the three phase squirrel cage motor is one of the most frequently employed electric motors. The operating behavior of a three phase squirrel cage motor is described by the torque-speed characteristic curve. An example is shown below.

MOTOREN
Drehstrommotoren:
a- Allgemeine Eigenschaften

Wegen die wartungsarme und leichte Konstruktion, hohe Sicherheit bei Nutzung und gunstige Preise werden die asynchrone Drehstrommotoren am meisten benutzt. Motoranlaufverhalten wird mit Moment-Drehzahl-Kurve charakterisiert. Ein Beispiel ist unten angegeben.



M_A: **Coppia di avviamento** / *Start-up torque* / Anlaufmoment

M_S: **Coppia d'insellamento** / *Pull-up torque* / Anziehungsmoment

M_K: **Coppia massima** / *Pull -out torque* / Bremsungsmoment

M_N: **Coppia nominale motore** / *Motor rated torque* / Treibmoment

M_L: **Coppia di carico** / *Load torque* / Lastmoment

Il motore segue questa coppia caratteristica finché non raggiunte il punto di stabilizzazione ogni volta che viene acceso. Il punto di funzionamento è il punto in cui la curva della velocità istantanea interseca la linea della coppia di carico M_L.
Il campo magnetico all'interno dello statore ruota a una velocità sincrona n_s. Lo sfasamento di ciascun polo è di 120° nei motori trifase.

$$n_S = 120 \times \frac{f}{p_S}$$

f : frequenza di alimentazione [Hz]

p_s : numero dei poli dello statore

Attivato dal campo magnetico alternato presente al suo interno, il rotore inizia a ruotare nella stessa direzione seguita dal flusso nello statore e cerca di mettersi alla pari del flusso rotante. Il rotore non raggiunge mai il campo statorico. Il rotore avanza a una velocità inferiore a quella del campo statorico. Questa velocità è nota come velocità base n_N.
Una diminuzione del carico porterà il rotore ad accelerare o a ridurre lo scorrimento. Lo scorrimento è definito come segue:

$$s = \frac{n_S - n_N}{n_S} \times 100$$

A seconda dello scorrimento, i valori nominali del motore elettrico possono modificarsi come segue:

Scorrimento s	**:± 20%**
Corrente di avviamento	**:± 20%**
Coppia di avviamento	**:-15 /+25%**
Momento di inerzia	**:± 10%**
Rendimento (fino a 37 kW)	**:-0,15 (1-η)**

The motor follows this torque characteristics up to its stable operating point every time, when it is switched on. Operating point is that point, where the moment speed curve intersects with load torque M_L line.
The magnetic field in the stator rotates at a synchronous speed n_s. Phase shift of each pole is 120° at 3 phase motors.

$$n_S = 120 \times \frac{f}{p_S}$$

f : supply frequency [Hz]

p_s : number of stator poles

Because of the alternating magnetic field in the rotor, the rotor starts working in the same direction of the stator flux and tries to catch up with the rotating flux. The rotor never catches up the stator field. The rotor runs slower than the speed of the stator field. This speed is known as the base speed n_N.
A decrease in load will cause the rotor to speed up or decrease slip. The slip is defined as follows:

$$s = \frac{n_S - n_N}{n_S} \times 100$$

According to the slip, the nominal values of the electric motor can alter as follows:

Slip s	*:± 20%*
Start-up current	*:± 20%*
Start-up torque	*:-15 /+25 %*
Moment of inertia	*:± 10%*
Efficiency (up to 37 kW)	*:-0,15 (1-η)*

Der Drehstrommotor lauft diese Kurve bei jeder Anlauf, bis dem stabilen Betriebspunkt erreicht wird. Betriebspunkt ist der Zustand, bei dem die Moment-Drehzahl-Kurve sich mit der Linie von erforderlichen Moment M_L schneidet.
Magnetisches Feld von Stator dreht sich mit synchroner Geschwindigkeit n_s. Phasen-verschiebung von den Polen ist 120° bei 3 phasigen Drehstrommotoren.

$$n_S = 120 \times \frac{f}{p_S}$$

f : Frequenz der Spannung [Hz]

p_s : Anzahl der Polen von Stator

Durch das magnetische Wechselfeld in den Rotor, beginnt der Rotor sich in der gleichen Richtung des Statorflusses zu drehen und versucht diese Bewegung aufzuholen. Der Rotor kann den Statorfeld nie aufholen. Die Rotorgeschwindigkeit nennt man Basisgeschwindigkeit n_N. Eine Abnahme der Belastung bewirkt, dass der Rotor sich beschleunigt und der Schlupf sich verringert. Der Schlupf wird wie folgt definiert:

$$s = \frac{n_S - n_N}{n_S} \times 100$$

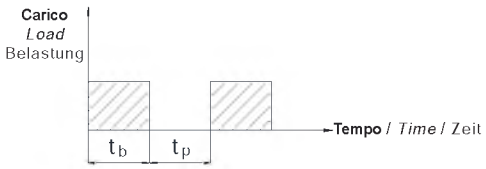
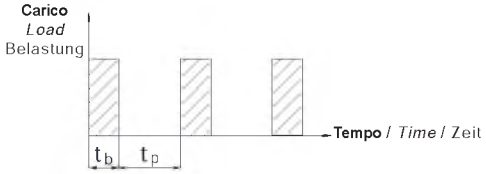
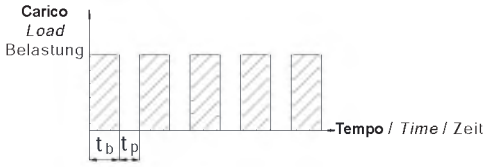
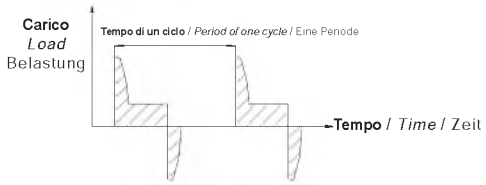
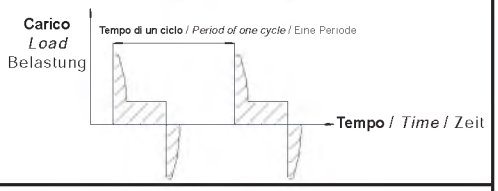
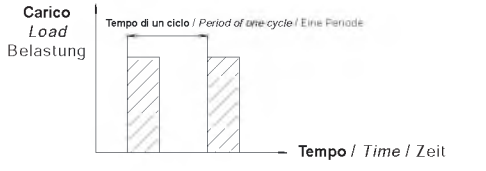
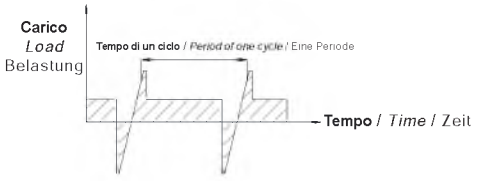
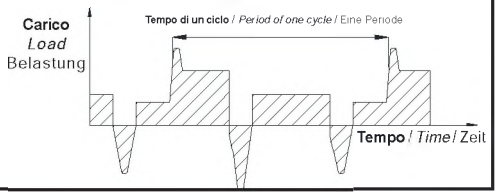
Für die nominale Werte der Drehstrommotoren sind folgende Abweichungen zulässig:

Schlumpf s	:± 20%
Anzugsstrom	:± 20%
Anzugsmomet	:-15 /+25 %
Massentagheitsmoment	:± 10%
Wirkungsgrad (bis 37 kW)	:-0,15 (1-η)

b- Modalità di funzionamento
Tutti i motori presentati in questo catalogo sono stati predisposti per operare in servizio S1 (servizio continuativo). Altri tipi di servizio sono riportati nella tabella seguente.

b-Modes of Operation
All motors of the catalogue have been arranged for duty S1 (continuous operation). Other duty types are given on the following table.

b-Betriebsarten
Die im Katalog angefuhrten Motoren sind fur Betriebsart S1 (Dauerbetrieb) ausgelegt. Andere Betriebsarten sind unten angegeben.

Servizio *Operation* Betriebsarten	**Spiegazione** *Explanation* Erlauterung	**Diagramma di carico** *Load Chart* Lastverlaufe
S1	**Servizio continuativo con carico costante** *Continuous operation under constant load* Dauerbetrieb mit konstanter Belastung	
S2	**Servizio di durata limitata con carico costante** *Short-time duty under constant load* Kurzbetrieb mit konstanter Belastung	
S3	**Servizio periodico senza avviamenti che influiscono sulla temperatura** *Periodic duty without influence of start-up on temperature* Aussetzbetrieb ohne Einfluß des Anlaufens auf die Temparatur	
S4	**Servizio periodico con avviamenti che influiscono sulla temperatura** *Periodic duty with influence of start up on temperature* Aussetzbetrieb mit Einfluß des Anlaufes auf die Temparatur	
S5	**Servizio periodico con avviamenti e frenature che influiscono sulla temperatura** *Periodic duty with influence of startup and braking on temp.* Aussetzbetrieb mit Einfluß des Anlaufens / Bremsung auf die Temp.	
S6	**Servizio continuativo con carico intermittente** *Continuous operation with intermittent loading* Durchlaufbetrieb mit Ausetzungsbelastung	
S7	**Servizio continuativo con carico intermittente e frenature** *Continuous operation with intermittent loading and breaking* Ununterbrochener Betrieb mit Anlauf und Bremsung	
S8	**Servizio di tipo continuativo con variazioni correlate di carico e velocità** *Continuous operation duty type with related load-speed changes* Ununterbrochener periodischer Betrieb mit Drehzahlanderung	

c- Classe di protezione:
Brevini Power Transmission S.p.A. utilizza di serie motori elettrici con classe di protezione IP54 (IEC 34-5). Se sono richieste classi di protezione diverse, vi invitiamo a contattarci.

d- Classe di isolamento:
Brevini Power Transmission S.p.A. utilizza di serie motori elettrici con classe di isolamento F (IEC 317-8). Su richiesta, è disponibile anche la classe di isolamento H.

e- Classi di rendimento:
Il metodo per misurare il rendimento dei motori asincroni trifase in bassa tensione è stato modificato con l'entrata in vigore della nuova norma IEC 60034-2-1:2007. La nuova classe IE si applica per i motori CA di potenza compresa tra 0,75 e 375 kW. Diversamente da quanto avviene per la classe EFF, la classe IE può essere utilizzata per motori CA a 6 poli. Riportiamo qui sotto la tabella delle classi di rendimento. Le direttive per le classi di rendimento possono essere diverse da un Paese all'altro. Vi invitiamo a contattarci se avete bisogno di maggiori informazioni. I requisiti concernenti il rendimento dei motori che sono completamente integrati in un prodotto (p.es. riduttore, pompa) e il cui rendimento energetico non può quindi essere identificato separatamente non si applicano in Europa.

c- Protection Class:
Brevini Power Transmission S.p.A. *uses IP54 (IEC 34-5) protection class electric motors for standard products. If different kind of protection class is requested please contact us.*

d- Insulation Class:
Brevini Power Transmission S.p.A. *uses F (IEC 317-8) insulation class electric motors for standard products. H insolation class is available upon request.*

e- Efficiency Classes:
The method for measuring the low voltage three-phase asynchronous motors efficiency was revised with the new IEC 60034-2-1:2007 standard. The new IE class is valid for AC Motors in power range from 0,75 to 375 kW. Unlike the EFF class IE class can be used for 6-pole AC motors. Bellow is the table of efficiency classes. The instructions for efficiency classes can differ from country to country. Please contact with us for more information. The efficiency requirements for motors, which are fully integrated into a product (for example gear, pump) so their energy efficiency can not be recognized independently, are not valid in Europe.

c- Schutzarten:
Brevini Power Transmission S.p.A. Getriebemotoren werden serienmäßig mit Schutzart IP54 (IEC34-5) ausgeführt. Für andere Schutzarten bitte rückfragen.

d- Isolationsklasse:
Brevini Power Transmission S.p.A. Getriebemotoren werden serienmäßig in Warmeklasse F (IEC317-8) ausgeführt. H Warmeklasse ist moglich auf Kundenwunsch.

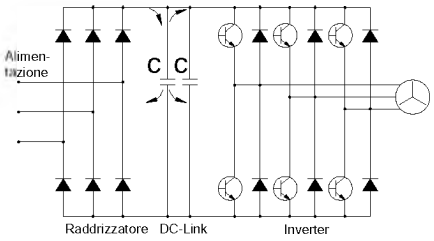
e- Energieeffizienzklassen:
Die Methode für Messung die Effizienz von drei phasigen gering Spannung Asynchronmotoren hat neu mit IEC 60034-2-1:2007 Norm festgestellt. Die neue IE-Klassen gelten für alle Drehstrommotoren im Leistungsbereich von 0,75 bis 375 kW. Anders als EFF-Klassen die IE-Klassen konnen auch für 6-polige Drehstrommotoren verwendet werden. Unten steht die Tabelle der Effizienzklassen. Die Richtlinien für Effizienzklassen konnen sich je nach dem Land unterscheiden. Bitte mit unserem Firma Kontakt aufnehmen. Für die Motoren, die vollstandig in ein Produkt (zum Beispiel Getriebe, Pumpe) eingebaut sind und deren Energieeffizienz nicht unabhängig von diesem Produkt erfasst werden kann, gelten in Europa die Anforderungen der Effizienzklassen nicht.

Classi di rendimento *Efficiency Classes* Energieeffizienzklassen			**Calcolo dei valori di rendimento di motori a 4 poli** *Calculating Efficiency Values of 4-Pole Motors* Berechnung der Wirkungsgrade von Elektromotoren mit 4 Polen	
IE1	EFF 2	**Rendimento standard** *Standart Efficiency* Standarte Energieeffizienz	A=0,5234 B=-5,0499 C=17,4180 D=74,3171	$\eta_{Mn} = A \times [\log_{10}(P_L)] + B \times [\log_{10}(P_L)]^2 + C \times \log_{10}(P_L) + D$
IE2	EFF 1	**Rendimento elevato** *High Efficiency* Hohe Energieeffizienz	A=0,0278 B=-1,9247 C=10,4395 D=80,9761	P_L : **Carico nominale [kW]** / *Nominal Load [kW]* / Nennlast [kW]
IE3	-	**Rendimento Premium** *Premium Efficiency* Premium Energieeffizienz	A=0,0773 B=-1,8951 C=9,2984 D=83,7025	η_{Mn} : **Rendimento nominale [kW]** / *Nominal Efficiency [kW]* / Sollwirkungsgrad
IE4	-	**Rendimento Super Premium** *Super Premium Efficiency* Super Premium Energieeffizienz	-	

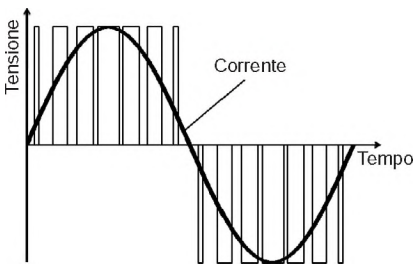
Valori di rendimento di motori a 4 poli *Efficiency Values of Motor with 4 poles* Sollwirkungsgrad des Motors mit 4 Polen	**Carico nominale [kW]** *Nominal Load [kW]* Nennlast [kW]	**Classe di rendimento** / *Efficiency Class* / Energieeffizienzklasse		
		IE1	IE2	IE3
	0,75	72,1 %	79,6 %	82,5 %
	1,5	77,2 %	82,8 %	85,3 %
	3	81,5 %	85,5 %	87,7 %
	7,5	86 %	88,7 %	90,4 %
	15	88,7 %	90,6 %	92,1 %
	22	89,9 %	91,6 %	93 %
	37	91,2 %	92,7 %	93,9 %
	45	91,7 %	93,1 %	94,2 %
	75	92,7 %	94 %	95 %
	90	93 %	94,2 %	95,2 %
	330	94 %	95,1 %	96 %

f- Convertitori di frequenza in CA

Un convertitore elettronico che converte la corrente continua (CC) in corrente alternata (CA) è chiamato inverter. I controller elettronici di velocità per motori CA generalmente convertono la corrente CA in corrente CC utilizzando un rettificatore, dopodiché la riconvertono in corrente CA a frequenza e tensione variabili utilizzando un inverter bridge. Il collegamento tra il rettificatore e l'inverter è chiamato DC-link. Qui sotto è raffigurato lo schema a blocchi di un controller di velocità (spesso chiamato inverter).

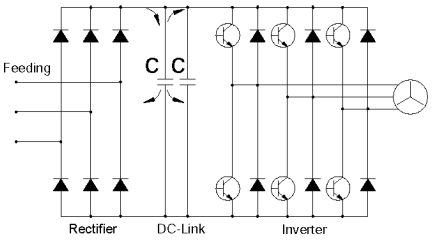


La corrente trifase arriva a un raddrizzatore a onda intera che, a sua volta, alimenta i condensatori del DC-link. I condensatori riducono l'ondulazione della tensione (soprattutto con alimentazioni singole) e forniscono energia da utilizzare in caso di brevi interruzioni di corrente. La tensione nei condensatori non è controllata e varia in funzione del picco della tensione di alimentazione in CA. La tensione in CC viene riconvertita in tensione in CA utilizzando la modulazione ad ampiezza di impulsi (Pulse Width Modulation, PWM). La forma d'onda desiderata si ottiene attivando e disattivando i transistor in uscita (Transistor bipolari a gate isolato; IGBTs, Insulated Gate Bipolar Transistors in inglese) con una frequenza fissa (frequenza di commutazione). Variando la frequenza di attivazione e disattivazione degli IGBT si riesce a generare la corrente desiderata. La tensione in uscita corrisponde a una serie di impulsi ad onda quadra e l'induttanza degli avvolgimenti del motore determina una corrente sinusoidale nel motore stesso. La figura qui sotto mostra la modulazione ad ampiezza di impulsi.

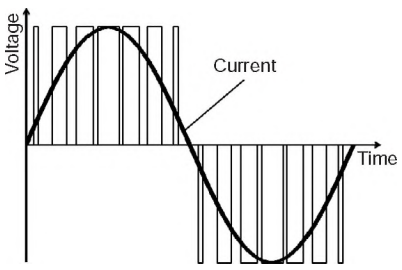


f- AC Frequency Inverters

An electronic converter is a device which converts Direct Current (DC) to Alternating Current (AC) is known as an inverter. Electronic speed controllers for AC motors usually convert the AC supply to DC using a rectifier, and then converts it back to a variable frequency, variable voltage AC supply using an inverter bridge. The connection between the rectifier and inverter is called DC link. The block diagram of a speed controller (often called inverter) is shown below.

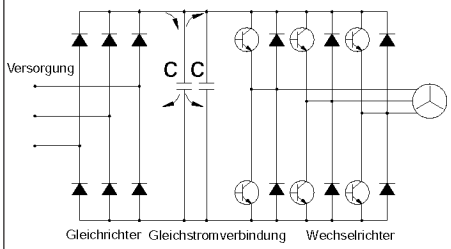


The three phase supply is fed into a full wave rectifier which supplies the DC link capacitors. The capacitors reduce the voltage ripple (especially on single supplies) and supply energy for short mains breaks. The voltage on the capacitors is uncontrolled and depends on the AC supply voltage peak. The DC voltage is converted back to AC using Pulse Width Modulation (PWM). The desired waveform is built up by switching the output transistors (Insulated Gate Bipolar Transistors; IGBTs) on and off at a fixed frequency (switching frequency). By varying the on and off time of the IGBTs, the desired current can be generated. The output voltage is still a series of square wave pulses and the inductance of the motor windings results in a sinusodial motor current. Pulse Width Modulation is shown in the figure below.

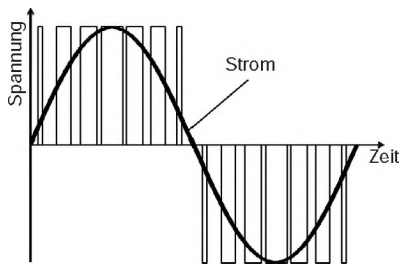


f- AC Frequenz Umrichter

Ein elektronischer Wandler, der den Gleichstrom (DC) in Wechselstrom (AC) umwandelt, wird als Umrichter bezeichnet. Ein Frequenzumrichter benutzt einen ungesteuerten Eingangsgleichrichter, um die Netzspannung in Gleichspannung umzuwandeln. Diese wird dann in den Zwischenkreiskondensatoren gespeichert. An diesem Gleichspannungszwischenkreis ist ein Wechselrichter angeschlossen. Dieser Wechselrichter erzeugt am Ausgang eine variable Frequenz und eine variable Spannung. Der Anschluss zwischen dem Gleichrichter und dem Wechselrichter nennt man Gleichstromverbindung. Das Blockschaltbild von diesem System wurde unten dargestellt:



Auch bei dreiphasiger Versorgung wird die gleichrichtete Netzspannung den Zwischenkreiskondensatoren zugeführt. Die Kondensatoren reduzieren die Oberwelligkeit der Spannung (was besonders bei einphasiger Versorgung entscheidend ist) und liefern Energie, die kurze Unterbrechungen der Netzstromversorgung ermoglicht. Die Spannung der Kondensatoren ist vom Spitzenwert der Wechselspannung abhangig. Die Gleichspannung wird im Wechselrichter durch Pulsweitenmodulation (PWM) in Wechselspannung umgewandelt. Die gewunschte Wellenform wird durch Ein- und Ausschalten der Ausgangstransistoren (IGBT's Isolierte Gate Bipolar Transistoren) mit einer festen Frequenz (der Pulsfrequenz) erzeugt. Der gewunschte Strom kann durch die Variation der Ein- und Ausschaltzeit der Ausgangstransistoren generiert werden. Die Ausgangsspannung ist dadurch eine Reihe von Spannungsimpulsen, die in Verbindung mit der Induktivitat der Motorspulen zu einem sinusformigen Motorstrom führt. Die Pulsweitenmodulation wird wie folgt dargestellt



MOTORI CC

a- Caratteristiche generali dei motori CC

A seguito dello sviluppo del settore dei componenti elettronici, i sistemi di azionamento a CC hanno trovato nuove possibili applicazioni. Ciò che un tempo era estremamente costoso e in alcuni casi economicamente non fattibile, oggi viene realizzato grazie alla tecnologia dei convertitori di potenza miniaturizzati. Ulteriori funzioni quali l'avviamento guidato dopo un tempo prestabilito, il monitoraggio delle coppie e della corrente con dispositivi elettronici di protezione contro i sovraccarichi e molte applicazioni tutt'altro che costose hanno fatto crescere l'interesse per i sistemi di azionamento in CC.

b- Principi di funzionamento dei motori CC

Il motore CC ha bisogno di un convertitore con uscita in CC. Il motore include degli avvolgimenti come per esempio quelli di indotto, di campo, di commutazione e di compensazione, che sono posizionati sia nello statore che sul rotore. Il rotore viene alimentato in tensione e corrente tramite le spazzole al carbonio e il commutatore. Le spazzole al carbonio sono componenti soggetti a usura, pertanto un motore CC necessita di interventi di manutenzione a intervalli stabiliti. Per via delle sue buone caratteristiche di controllo, il motore CC è un elemento essenziale della tecnologia dell'automazione.

c- Tipi di motori CC

A seconda del cablaggio dell'avvolgimento di eccitazione o dell'avvolgimento di campo si distinguono due varianti sostanzialmente diverse sotto il profilo delle caratteristiche di coppia e velocità di rotazione.

d- Controllo della velocità di rotazione dei motori CC

Nei motori CC la velocità di rotazione viene regolata modificando la tensione CC. I motori CC eccitati in derivazione funzionano in maniera simile ai motori trifase a induzione in servizio senza carico e con carico massimo. La velocità di rotazione diminuisce man mano che aumenta il carico sul motore. Questa differenza è maggiore nei motori di piccole dimensioni, ed è minore nei motori di dimensioni più grandi. La differenza di velocità di rotazione può essere compensata nel convertitore CC regolando (I x R). Laddove è necessaria una grande precisione di controllo, si può utilizzare un controller di velocità con misurazione dei valori effettivi da parte di una dinamo tachimetrica. Potenza di un motore CC:

$$P_g = U \times I = \frac{P_c}{\eta}$$

P_g	**: Potenza in entrata W**
P_c	**: Potenza in uscita W**
U	**: Tensione di armatura V**
I	**: Corrente di armatura A**
η	**: Rendimento motore**

DC MOTORS

a- General Specifications of DC Motors

DC drive systems have found new possible applications with the development of the electronic components sector. What was previously extremely expensive and in some cases not economically feasible is nowadays realized by the miniaturised power converter technology. Additional functions such as guided startup after a predetermined time, torque and current monitoring with electronic protection against overloading, and many inexpensive special applications have made DC drive systems more attractive.

b- Operating principles of DC Motors

The DC motor requires a converter with DC output. The motor includes windings, such as armature, field, commutation and compensation windings, which are arranged in the stator as well as on the rotor. Voltage and current are supplied to the rotor via the carbon brushes and the commutator. The carbon brushes are wearing parts therefore a DC motor requires maintenance at service intervals. Due to its good control properties, the DC motor is an essential item in automation technology.

c- Types of DC Motors

Depending on the wiring of the exciting winding or field winding, two basically different variants regarding torque speed characteristics may be distinguished.

d- DC motors Speed Control

In DC motors the speed is adjusted by altering the DC voltage. DC shunt wound motors operate similarly to three phase induction motors in no load and maximum load operation. The speed drops with increased loading on the motor. This difference is greater in small motors and smaller in larger motors. The speed difference can be compensated in the DC converter device by adjusting (I x R). If great control accuracy is required, a speed control with measurement of the actual values by a tachogenerator can be used. The power of DC motor;

$$P_g = U \times I = \frac{P_c}{\eta}$$

P_g	*: Input Power W*
P_c	*: Output Power W*
U	*: Armature Voltage V*
I	*: Armature Current A*
η	*: Motor efficiency*

DC MOTOREN

a- Eigenschaften von DC Motoren

Mit den Entwicklungen bei elektronischen Komponenten haben DC Motoren neue Anwendungsbereiche gefunden. Regelungssysteme, die früher sehr teuer und im manchen Anwendungsfallen ungunstig waren, sind jetzt kompakt und gunstig. Bei den DC Motoren ist kontrolliertes Anlauf, Moment- und Stromuberwachung mit Überlastschutz moglich. Es gibt viele gunstige Sonderanwendungen fur diese Motoren. Wegen oben genannten Eigenschaften werden die DC Motoren immer mehr bei unterschiedlichen Anwendungen benutzt.

b- Funktionsprinzip der DC Motoren

Bei DC Motoren ist eine Kommutatorwicklung im Rotor angeordnet, während der magnetische Fluss vom Stator erzeugt wird. Dies kann wiederum mittels einer Erregerwicklung oder durch Permanentmagnete geschehen. Wie bei der Synchronmaschine wird durch das Erregerfeld in der Ankerwicklung eine Wechselspannung, die bei der Gleichstrommaschine jedoch durch den mechanischen Kommutator und die darauf schleifenden Bürsten in eine Gleichspannung umgeformt wird, induziert.

c- Arten von DC Motoren

Es gibt zwei verschiedene Wicklungen, nämlich Shunt- und Serial-Wicklung. Das Drehmoment-Drehzahl-Verhaltnis ist fur beide Wicklungen unterschiedlich.

d- Drehzahl Kontrolle für DC Motoren

Drehzahl von DC Motoren kann man mit Steuerung der DC Spannung andern. DC Motoren mit Shunt Wicklungen ist ahnlich zu drei phasen AC Motoren zwischen maximalen Last und ohne Last. Drehzahl wird mit der Last reduziert. Mit kleineren Motoren wird dieser Differenz hoher mit großeren Motoren kleiner. Der Drehzahlunterschied kann geregelt werden mit (IxR) Veranderung. Wenn eine genaue Kontrolle gebraucht, soll ein Tachogenerator benutzt werden. Leistung des DC Motors;

$$P_g = U \times I = \frac{P_c}{\eta}$$

P_g	: Eingangsleistung W
P_c	: Ausgangsleistung W
U	: Ankerspannung V
I	: Ankerstrom A
η	: Wirkungsgrad des Motors

Freni elettromagnetici

Questo tipo di freni ha due superfici di attrito. Se non viene applicata tensione, la coppia frenante viene generata da molle. Il freno è azionato elettromagneticamente. Eccitando l'unità elettromagnetica di corrente l'ancora viene attirata verso l'elettromagnete, caricando con spinta assiale la molla di pressione e consentendo al disco frizione, che può muoversi sulla chiavetta in direzione assiale, di ruotare liberamente. In caso di assenza di corrente, le molle pressurizzate azionano l'ancora spingendola verso il disco, frenando così l'albero motore.

Tipi di freni
a) Freni senza raffreddamento
Questo tipo di freno viene montato sulla calotta posteriore del motore elettrico. In questo caso il motore è privo di ventola. Questo tipo di freno viene generalmente scelto quando si hanno tempi di funzionamento brevi e cicli di lavoro corti.
b) Freni con ventola di raffreddamento
Questo tipo di freno viene montato sulla calotta posteriore del motore elettrico togliendo la ventola del motore elettrico. Al lato posteriore del freno viene fissata una ventola allungando l'albero del rotore del motore elettrico. Si preferisce utilizzare freni con ventola di raffreddamento quando si hanno lunghi tempi di funzionamento e il motore è installato in ambienti chiusi privi di ventilazione.
c) Freni con azionamento manuale
Questo freno può essere azionato a mano. Può essere montato su entrambe le tipologie di freni sopra descritte e utilizzato in casi particolari (mancanza di corrente elettrica, problemi meccanici, ecc.). Questi freni vengono generalmente scelti se c'è bisogno di poterli utilizzare (azionare) in assenza di corrente (porte a controllo automatico, cancelli, elevatori per operazioni di verniciatura dei muri di edifici, ecc.).

Tensioni di esercizio
I freni elettromagnetici possono essere ordinati nelle versioni con tensione di alimentazione da 230 V CA o 400 V CA. La bobina dei freni ha bisogno di tensione CC pertanto, a seconda del tipo di freno, è opportuno inserire un raddrizzatore a mezz'onda, un raddrizzatore a onda intera o un trasformatore tra la tensione di alimentazione e la tensione della bobina. In assenza di specifica richiesta, i freni vengono forniti come standard con una tensione di alimentazione a 230 V e un raddrizzatore a mezz'onda. Per applicazioni particolari si prega contattare Brevini Power Transmission S.p.A.
a) Freni con tensione di alimentazione a 230 V
La tensione di alimentazione in CA a 230 V proveniente dalla morsettiera del motore viene portata alla tensione idonea per la bobina da un raddrizzatore a mezz'onda o a onda intera, a seconda del tipo di freno. La tensione CC della bobina del freno è indicata sulla targhetta.
B) Freni con tensione di alimentazione a 400 V
La tensione di alimentazione in CA a 400 V proveniente dalla morsettiera del motore viene portata alla tensione idonea per la bobina da un raddrizzatore a mezz'onda. La tensione CC della bobina del freno è indicata sulla targhetta.
c) Freni in CC a 24 V
Le dimensioni del trasformatore sono scelte in base al valore della coppia frenante. La corrente viene presa dalla morsettiera del motore elettrico o dal quadro elettrico e viene trasformata in corrente CC a 29 V. Questa, a sua volta, viene trasformata in corrente CC a 24 V con un raddrizzatore a mezz'onda e va ad alimentare la bobina del freno.

Electromagnetic Brakes

This type of brake has two friction surfaces. The brake torque is generated by springs when no voltage is applied. The brake is electromagnetically released. On exciting the current electromagnet unit, the armature plate is pulled towards the electromagnet itself, thrust loading the pressure spring and enabling the friction disc which is axially movable on the key, to turn freely. In case of current failure, the pressured springs drive the armature plate towards the disc, thus braking the motor shaft.

Brake Types
a) Brakes without cooling
This type of brake is assembled on the back cover of the electric motor. There is no fan on the backside. This brake type is mostly preferred in short working times and short working cycles.
b) Fan cooled brakes
This type of brake is assembled on the back cover of electric motor by removing the electric motor fan. A fan is coupled to the backside of the brake by extending the rotor shaft of the electric motor. Fan cooled brakes are preferred in long working times and closed places without airflow.
c) Brakes with hand release
This brake can be released by using an arm. It can be applied to both above mentioned brakes and used in special cases (electric current failure, mechanical problems etc.). These brakes are mostly preferred if operation (releasing) without current is needed (automatic controlled doors, gates, building wall painting elevators etc.).

Working Voltages
Electromagnetic brakes can be ordered with 230V AC or 400V AC supply voltage. The coil of brakes needs DC voltage and therefore depending on the brake type a half-wave, a full-wave rectifier or transformer should be used between supply and coil voltage. As standard the brakes will be delivered with 230V supply voltage and half wave rectifier, if there is no special request. For special cases please contact ***Brevini Power Transmission S.p.A.***
a) Brakes with 230V supply voltage
230V AC supply voltage from the motor terminal box will be reduced to the coil voltage depending on the brake type with half-wave or full-wave rectifier. DC brake coil voltage is indicated on the label.
b) Brakes with 400V supply voltage
400V AC supply voltage from the motor terminal box will be reduced to the coil voltage with half-wave rectifier. DC brake coil voltage indicated on the label.
c) 24V DC Brakes
The transformer size is selected according to the brake torque value. The current is taken from the electric motor terminal box or from the electric panel and is transformed to 29V DC current. This current is transferred to 24V DC current with full-wave rectifier and supplies the brake coil.

Elektromagnetische Bremsen

Die Bremse hat zwei Reibflächen und arbeitet nach dem Ruhestromprinzip. Im stromlosen Zustand wird das Bremsmoment durch den Druck der Feder erzeugt, wahrend die Bremse beim Betrieb elektromagnetisch losgelassen wird. Durch die Erregung der Elektromagneten wird die Ankerscheibe zu den Elektromagneten gezogen und die Feder zusammengedruckt. Dadurch kann sich die Bremsscheibe, die axial beweglich auf dem Mitnehmer angeordnet ist, frei drehen. Wird der Strom unterbrochen, drucken die Feder die Ankerscheibe gegen die Bremsscheibe und halten die Motorwelle an.

Bremsearten:
a)Bremsen ohne Kuhlung
Diese Bremsen sind fur Kurzlaufzeiten geeignet. Die Lufterhaube und Lufter des Motors ist ausgebaut und die Bremse ist an dem Ende der Motorwelle befestigt.
b)Bremsen mit Kuhlung
Diese Bremsen sind fur lange Laufzeiten und kleine, abgedeckte Raume geeignet. Durch die Verlangerung der Motorwelle wurde Lüfter hinter dem Bremse und dem Motor verbunden. Somit wurde eine konstante Luftung ermoglicht.
c)Bremsen mit Hebelarm
Diese Bremsenart kann mit oder ohne Kühlung verwendet werden. Diese Bremsen sind bei der speziellen Falle, wie keine Spannung an der Leitung, mechanische Probleme usw. , anwendbar. Die Bremse wird mit einem Hebelarm manuell betatigt. Diese Bremsen werden am meisten an den Stellen, wo die Lüftung ohne Spannung erfolgen soll, benutzt (automatische Ture, Wandaufzuge).

Betriebsspannungen
Elektromagnetische Bremsen konnen mit 230V AC oder 400V AC Versorgungsspannung bestellt werden. Die Wicklungen der Bremsen brauchen Gleichspannung und deswegen abhangig von Bremsenart zwischen Versorgungsspannung und Wicklungsspannung soll Halbwellen-, Vollweggleichrichter oder Transformator verwendet werden. Als Standard die Bremsen werden mit 230V Versorgungsspannung und Halbwellengleichrichter geliefert.
a) Bremsen mit 230V Versorgungsspannung
230V AC Versorgungsspannung von Klemmenkasten wird auf die Wicklungsspannung abhangig von der Bremsentyp mit Halbwellen-oder Vollweggleichrichter reduziert. Wicklungsspannung ist auf dem Etikett angegeben.
b) Bremsen mit 400V Versorgungsspannung
400V AC Versorgungsspannung von Klemmenkasten wird auf die Wicklungsspannung mit Halbwellengleichrichter reduziert. Wicklungsspannung ist auf dem Etikett angegeben.
c) 24V DC Bremsen
Die Spannung wird von den Klemmkasten des Motors oder Elektrikschrank entnommen. Diese Spannung wird zuerst mittels Transformator zu 24 V reduziert. Danach wird diese Spannung mit Hilfe von Gleichrichter zu Gleichstromspannung umgewandelt. Die Große des Transformators ist abhangig von der Große des Bremsmoments.

d) Trasformatore generante tensioni d'urto
I freni che hanno potenza e coppie elevate impiegano molto tempo per generare il campo elettromagnetico. I trasformatori generanti tensioni d'urto provvisti di relè temporizzato servono per vincere la pressione della molla che ritarda l'azionamento dei freni. Questi trasformatori, inoltre, aprono repentinamente il sistema applicando una tensione di alimentazione doppia (in CC a 48 V) per un breve lasso di tempo e impedendo le perdite di attrito che si verificano quando l'apertura è rallentata.

d) Shock voltage supply transformer
Brakes which consist of high power and torques take long time to obtain the electromagnetic field. Shock voltage supply transformers with time relay aim to overcome spring pressure delaying for brakes. Also these transformers open the system suddenly by double power supply (48V DC) voltage in a short time and preventing frictional losses that occur in delayed opening.

d) Trafos mit Schock-Spannung
Diese Transformatoren werden bei großen Bremsen mit hohen Momenten verwendet. Da die große Bremsen eine lange Zeit braucht, um die erforderliche magnetische Feld zu erzeugen, wird an der Bremse kurz 48V Gleichstromspannung angelegt, um die Zeit zur Bildung von magnetischem Feld zu kurzen. Dies ermoglicht kurzere Reibungszeiten beim Start.

Tipi di connessione
a) Frenatura ritardata
Generalmente questo tipo di connessione viene utilizzato per sistemi in cui è richiesta una frenatura lenta e graduale. Tipo di connessione ritardata usata per prevenire carichi con urti in sistemi di azionamento di gru. In assenza di richieste diverse da parte del cliente, vengono montati freni con connessione ritardata

Connection Types
a) Delayed Braking
Generally this type of connection is used in slow and sliding brake intended systems. Delayed connection type used to prevent shock loadings in crane driving systems. Brakes are setting up to delayed connection if other types are not specified by customer

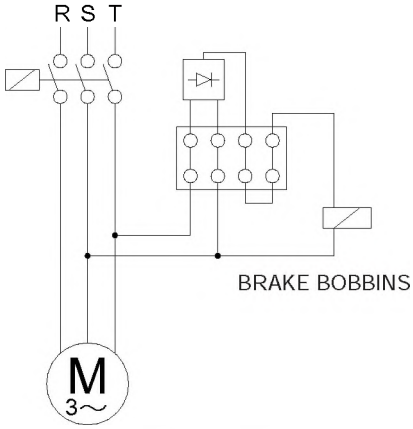
Schaltungsarten:
a)Verspatetes Bremsen
Diese Schaltung wird benutzt, wenn ein langsames und gleitendes Bremsen erforderlich ist. Am meisten wird es bei Fahrgetriebemotoren von Aufzugen verwendet. Wenn keine Angabe bei der Bestellung gegeben wird, werden die Bremsen mit verspateter Schaltung geliefert.

b) Immediata/Rapida
Questo tipo di connessione è generalmente adottata per sistemi in cui sono richiesti tempi di frenatura brevi. La coppia frenante si genera immediatamente nel momento in cui il sistema non riceve più corrente. Questi freni sono per lo più utilizzati per apparecchiature di sollevamento e ascensori.

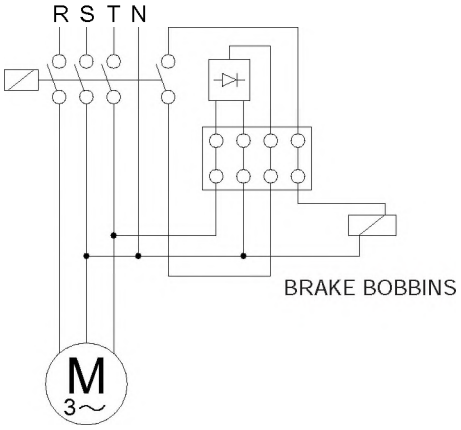
b) Immediate/Fast
This type of connection is mostly used in systems when short braking times are needed. The braking torque will be produced as soon as there is a current failure. These brakes are mostly used in hoisting operations of lifting units and elevators.

b)Schnelles Bremsen:
Allgemein verwendet man diese Schaltung bei Bedarf an plotzlichen Bremsen in dem Augenblick, in dem das System keine Energie mehr erhalt. Diese Schaltungsart wird meist bei Krane und Motoren von Aufzuge verwendet.

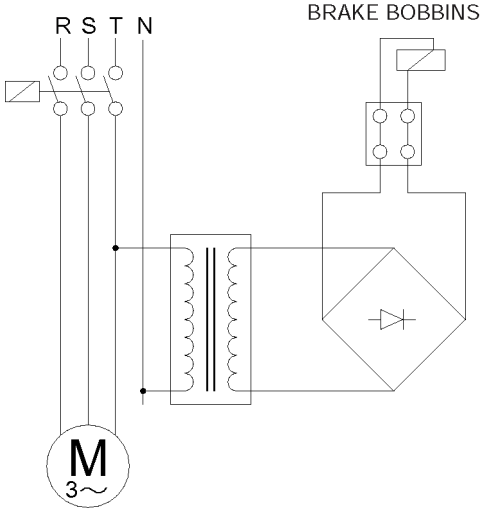
Frenata ad effetto ritardato / *Delayed Working Brake* / Verspatete Bremsung
(230 V)



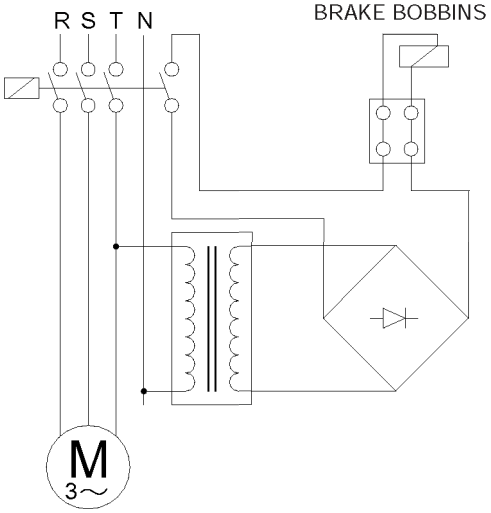
Frenata improvvisa / *Fast Brake* / Plotzliche Bremsung
(230 V)



Frenata ad effetto ritardato / *Delayed Working Brake* / Verspatete Bremsung
(24 V)



Frenata improvvisa / *Fast Brake* / Plotzliche Bremsung
(24 V)





Informazioni generali
General Information
Einführung

Scelta dei freni:

Per scegliere correttamente i freni sono necessari i dati seguenti:

- I_{tot} [kg . m²] : **L'inerzia totale delle parti rotanti ridotta all'albero motore**
- n_0 [giri/min.]: **Velocità massima di rotazione del motore.**
- t_f [s] : **Il tempo massimo di frenatura ammesso.**
- c_t : **Coefficiente tempo di attivazione (valore medio 0,995).**
- M_L [Nm] : **Coppia statica richiesta per il sistema.**
- C_S : **Fattore di sicurezza ($C_S \geq 2$)**

La coppia frenante necessaria si calcola come segue:

a) La coppia di carico statica M_L, stesso senso di rotazione del motore (riduzione del carico o coppia resistente costante per favorire la rotazione del motore)

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} + M_L$$

b) La coppia di carico statica M_L, opposta al senso di rotazione del motore (aumento del carico o coppia resistente costante per resistere alla rotazione del motore)

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} - M_L$$

La coppia frenante necessaria si calcola con l'equazione seguente, utilizzando C_S ($C_S \geq 2$):

$$M_f = M_{fc} \times C_s$$

Scelta orientativa dei freni
Se si conoscono solo la potenza del motore e la sua velocità di rotazione massima:

W [Watt]: Potenza nominale motore

$$M_f = \frac{W}{(\frac{2\pi \times n_0}{60})} \times C_s \quad (C_s \geq 2)$$

Brake Selection:

To correctly select a brake the following data is necessary;

- ***I_{tot} [kg . m²]****: The total inertia of rotating parts reduced at the motor shaft*
- ***n_0 [rpm]*** *: Maximum motor speed.*
- ***t_f[s]*** *: The maximum admitted braking time.*
- ***c_t*** *: Coefficient of switch on time (average 0.995).*
- ***M_L [Nm]*** *: Required static torque of the system.*
- ***C_S*** *: Safety coefficient ($C_S \geq 2$)*

The necessary braking torque is calculated below;

a) The static load torque M_L ,same direction of motor rotation (load descent or steady resisting torque which favors the motor rotation)

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} + M_L$$

b)The static load torque M_L ,opposes the motor rotation (load lifting or steady resisting torque which opposes the motor rotation)

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} - M_L$$

The necessary braking torque will result from the following equation using C_S ($C_S \geq 2$);

$$M_f = M_{fc} \times C_s$$

Approximated Brake Selection
It is only the motor power and its maximum speed is known:

W [Watt]: Motor Nominal Power

$$M_f = \frac{W}{(\frac{2\pi \times n_0}{60})} \times C_s \quad (C_s \geq 2)$$

Bremsauswahl:

Um die richtige Bremse auszuwahlen, braucht man unten aufgelistete Variablen;

- I_{tot} [kg . m²] :Die Gesamttragheit der rotierenden Teile(siehe Anwendungsbeispiele)
- n_0 [U/min] : Die höchste Drehzahl desMotors
- t_f [s] :Die längste zulässige Bremszeit
- c_t : Reduktionskoeffizient der Tatigkeitszeit (gemittelt 0,995).
- M_L [Nm] : Vom system benotigtes, statisches drehmoment.
- C_S : Sicherheitskoeffizient ($C_S \geq 2$)

Die benotigte Bremskraft wird wie folgt berechnet:

a) konstantes Belastungsmoment M_L, das die Motordrehung fordert (konstante Erhöhung der Motorgeschwindigkeit oder Herunterlassen der Last)

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tot}}{t_f \times c_t} + M_L$$

b) konstantes Belastungsmoment M_L, das sich entgegen der Motordrehung widersetzt (konstante Verminderung der Motorgeschwindigkeit oder Aufheben der Last)

$$M_{fc} = \frac{(2\pi \times n_0 \div 60) \times I_{tct}}{t_f \times c_t} - M_L$$

Wenn die Bremskraft mit dem Sicherheitskoeffizient C_S ($C_S \geq 2$) multipliziert wird, erhalt man die erforderliche Bremskraft;

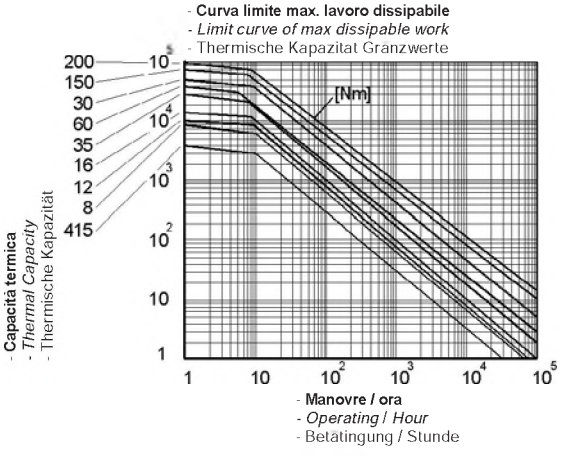
$$M_f = M_{fc} \times C_s$$

Abschätzung zur Bremswahl
Wenn man nur die Motorleistung und die hochste Drehzahl kennt, kann die Bremskraft mit der folgenden Formel annahernd berechnet werden:
W [Watt] : Nennleistung des Motors

$$M_f = \frac{W}{(\frac{2\pi \times n_0}{60})} \times C_s \quad (C_s \geq 2)$$

Freni standard / *Standard Brakes* / Standart Bremsen

Coppia frenante statica [Nm] *Brake Static Torque [Nm]* Statische Bremskraft [Nm]	4,5	8	12	16	35	60	80	150	200
Coppia frenante dinamica [Nm] *Brake Dynamic Torque [Nm]* Dynamische Bremskraft [Nm]	3,6	6,4	9,6	12,8	28	48	64	120	160
Velocità di rotazione massima del motore [giri/min.] *Maximum Motor Speed [rpm]* Maximale Motordrehzahl [U/min]	3000	3000	3000	3000	3000	3000	3000	1500	1500
Potenza in entrata [W] *Input Power [W]* Antriebsleistung [W]	15	20	25	30	45	50	55	60	65



Capacità termica dei freni

Dopo aver effettuato i calcoli suddetti occorre verificare anche la capacità termica dei freni. L'energia di dissipazione del calore L (joule) la si può calcolare utilizzando l'equazione seguente, e va verificata se il risultato si situa al di sotto della curva limite illustrata nel diagramma "Curva limite max. lavoro dissipabile".

a) La coppia di carico statica M_L, favorisce la rotazione del motore (riduzione del carico)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \left(\frac{M_f}{M_f - M_L}\right)$$

b) La coppia di carico statica M_L, resiste alla rotazione del motore (aumento del carico)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \frac{M_f}{M_f + M_L}$$

c) La coppia di carico statica M_L, è costante e resiste o favorisce la rotazione del motore (eccetto aumento del carico)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2}$$

Regolazione dell'air-gap:

Affinché le prestazioni dei freni rimangano inalterate per tutta la loro durata di vita è necessario che l'air-gap venga regolato dopo un certo numero di ore di lavoro. Vi invitiamo a contattarci per maggiori dati sull'air-gap e sull'intervallo di tempo tra una regolazione e l'altra.

Esempio di selezione:
Tempo massimo di frenata consentito 0,5 s
Velocità di rotazione del motore: 1400 giri/min.
Inerzia totale ridotta all'albero motore: 0,08 kgm^2

Coppia di lavoro richiesta: 50 Nm
Natura del carico: la direzione di carico è uguale alla direzione di rotazione del motore (processo di scarico: tempo di avvio-arresto per ora: 30)

$$M_{fc} = \frac{(2\pi \times 1400 \div 60)}{0,5 \times 0,995} + 50 = 73,6 \text{ Nm}$$

$$M_f = 73,6 \times 2 = 147,2 \text{ Nm}$$

In base alla tabella di selezione dei freni, la scelta si porta su un freno standard da 160 Nm.
Capacità termica necessaria

$$L = \frac{0,08 \times (2\pi \times 1400 \div 60)^2}{2} \times \left(\frac{147,2}{147,2 - 50}\right)$$

=1302,0<18000 Joule (dalla curva dei 160 Nm)
Il freno selezionato, da 160 Nm, è adeguato.

Brake Thermal Capacity

The thermal capacity of the brake must also be checked after the above mentioned calculations. The heat dissipation energy L (joule) can be calculated from the following equation and must be checked if the result is under the limit curve shown on "Limit curve of possible dissipable work".

a) The static load torque M_L, favors the motor rotation of the (load descent which favors the motor rotation)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \left(\frac{M_f}{M_f - M_L}\right)$$

b) The static load torque M_L, opposes the motor rotation (load lifting which opposes the motor rotation)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \frac{M_f}{M_f + M_L}$$

c) The static load torque M_L, is constant and opposes or favors the motor rotation (except load lifting)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2}$$

Adjustment of the air-gap:

In order to obtain the same performance from the brake during its lifetime, the brake air-gap must be re-adjusted after a limited time of operation For the air-gap and the time interval of the adjustment please contact us.

Selection Example:
Maximum permitted braking time for 0.5 s
Motor speed: 1400 rpm
Total inertia reduced at motor shaft: 0.08 kgm^2

Required operating torque: 50 Nm
Nature of load: Load direction is same as motor direction (Unloading process: Start-stop time per hour: 30)

$$M_{fc} = \frac{(2\pi \times 1400 \div 60)}{0,5 \times 0,995} + 50 = 73,6 \text{ Nm}$$

$$M_f = 73,6 \times 2 = 147,2 \text{ Nm}$$

From the brake selection table a standard brake of 150 Nm is selected.
Necessary thermal capacity

$$L = \frac{0,08 \times (2\pi \times 1400 \div 60)^2}{2} \times \left(\frac{147,2}{147,2 - 50}\right)$$

=1302,0<18000 Joule (from 150 Nm curve)
The selected brake with 150 Nm is suitable.

Thermische Kapazität der Bremsen

Nach den oben genannten Berechnungen muss die Thermische Kapazitat uberpruft werden. Die Warme, d.h. die gebrauchte Energie L, werden mit den folgenden Formeln berechnet. Die gerechnete Kapazitatswerte sollen unter dem Grenzkurve "Thermische Kapazitat Grenzwerte" der gewahlten Bremse liegen.

a) Konstantes Belastungsmoment M_L, das die Motordrehung fördert (Herunterlassen der Last)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \left(\frac{M_f}{M_f - M_L}\right)$$

b) Konstantes Belastungsmoment M_L, das sich entgegen der Motordrehung widersetzt (Aufheben der Last)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2} \times \frac{M_f}{M_f + M_L}$$

c) Konstantes Belastungsmoment M_L, das sich gegen der Motorbewegung widersetzt oder die Motorrotation fördert (Konstante Verminderung oder Erhöhung der Motorgeschwindigkeit, kein Herunterlassen oder Aufheben der Last)

$$L = \frac{I_{tot} \times (2\pi \times n_0 \div 60)^2}{2}$$

Einstellung des Luftspaltes:

Um eine immer konstant bleibende Bremsfahigkeit zu erhalten, muss das Luftspalt nach einer bestimmten Arbeitszeit neu eingestellt werden. Fur die Bestimmung des Luftspaltes und die Einstellzeiten bitten wir Sie um Ruckfrage.

Beispiel für eine Auswahl:
Die hochste zulassige Bremszeit: 0,5 s
Motordrehzahl: 1400 U/min
Gesamttragheit der rotierenden Teile: 0,08 kgm^2

Das auf das System wirkende Drehmoment: 50 Nm
Belastungsart: Drehmoment, das die Motor-rotation fördert (Herunterlassen der Last)
Betatigungen pro Stunde:30

$$M_{fc} = \frac{(2\pi \times 1400 \div 60)}{0,5 \times 0,995} + 50 = 73,6 \text{ Nm}$$

$$M_f = 73,6 \times 2 = 147,2 \text{ Nm}$$

Eine Bremse von 150 Nm kann man auswahlen.

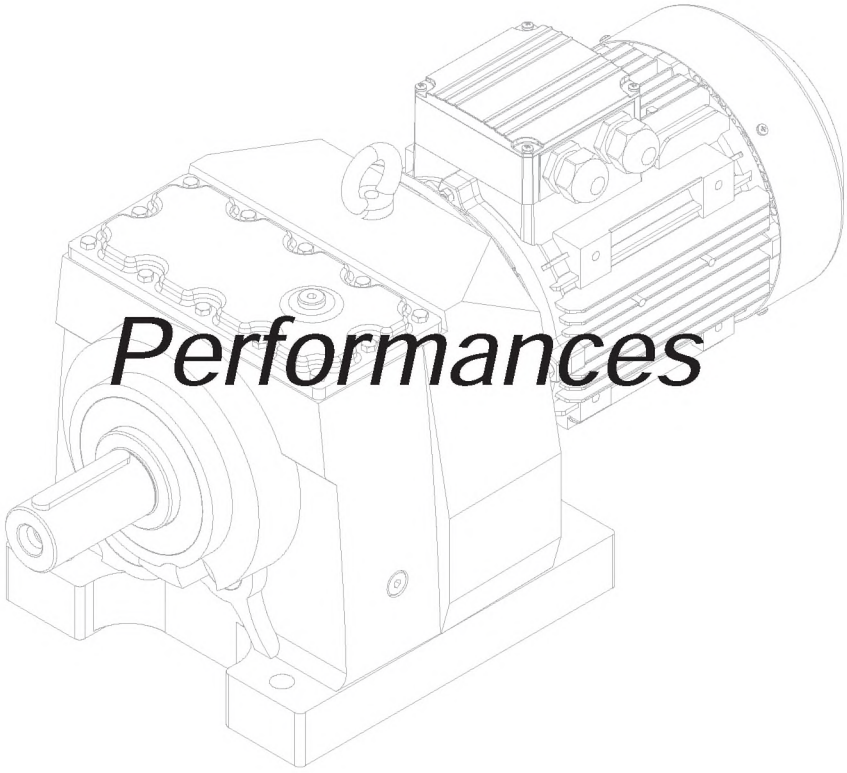
Die thermische Kapazitat;

$$L = \frac{0,08 \times (2\pi \times 1400 \div 60)^2}{2} \times \left(\frac{147,2}{147,2 - 50}\right)$$

=1302,0<18000 Joule (von 150 Nm Kurve) Die ausgewahlte 150 Nm Bremse ist ausreichend.

Note / *Notes* / Notizen

Prestazioni



Performances

Leistung und Drehzahlübersicht



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
0,12 0,18	0,28 0,31 0,40 0,48	3242 2883 2212 1872	**4953,44** **4402,68** **3372,36** **2850,22**	18152 20503 24025 25448	0,9 1,0 1,4 1,6	**MR576-G63/4a** **NR576-G63/4a**	0,41	157 151	123	IE1
	0,50 0,59 0,72 0,81 0,92 1,1 1,2	1832 1550 1270 1123 998 845 767	**2736,94** **2313,18** **1897,20** **1675,43** **1489,14** **1259,61** **1140,65**	25606 26663 27612 28077 28449 28915 29101	1,6 1,9 2,4 2,7 3,0 3,5 3,9	**MR575-G63/4a** **NR575-G63/4a**	0,41	155 149	123	IE1
	0,50 0,65 0,69 0,78 0,84 0,98 1,1 1,1 1,3 1,5	1691 1413 1336 1169 1097 933 867 812 712 633	**2522,85** **2107,15** **1990,76** **1738,98** **1631,08** **1386,75** **1285,79** **1204,49** **1053,93** **934,94**	13294 17344 18266 20032 20714 22094 22653 23070 23786 24312	0,9 1,1 1,2 1,3 1,4 1,7 1,8 1,9 2,2 2,4	**MR475-G63/4a** **NR475-G63/4a**	0,41	100 103	120	IE1
	0,90 1,0 1,2 1,4 1,6 1,8 2,0 2,2 2,6	1045 925 778 662 568 514 455 425 360	**1561,78** **1380,71** **1161,33** **987,33** **845,97** **765,58** **676,02** **631,45** **533,70**	6910 9830 12320 13863 14931 15470 16025 16286 16828	0,8 0,9 1,1 1,2 1,4 1,6 1,8 1,9 2,3	**MR375-G63/4a** **NR375-G63/4a**	0,41	76 78	117	IE1
	2,6 3,2 3,7	361 291 255	**524,07** **421,85** **369,93**	16815 17348 17599	2,3 2,8 3,2	**MR374-G63/4a** **NR374-G63/4a**	0,41	55 58	116	IE1
	1,1 1,3 1,6 1,8 2,0 2,4 2,8	809 681 580 497 450 385 330	**1206,98** **1015,21** **863,11** **739,53** **669,25** **573,81** **491,50**	2333 7487 9637 10983 11641 12445 13057	0,7 0,9 1,0 1,2 1,3 1,6 1,8	**MR285-G63/4a** **NR285-G63/4a**	0,41	74 75	114	IE1
	3,2 3,7 4,2	298 254 223	**431,18** **368,77** **323,39**	13388 13798 14073	2,0 2,4 2,7	**MR284-G63/4a** **NR284-G63/4a**	0,41	74 75	113	IE1
	1,6 1,9 2,3 2,7 3,3 3,8 4,1 5,4	555 486 403 336 282 242 225 170	**827,44** **724,01** **598,70** **499,32** **418,57** **358,33** **332,52** **252,20**	5855 6465 7080 7505 7806 8008 8090 8331	0,8 0,9 1,1 1,3 1,6 1,9 2,0 2,6	**MR275-G63/4a** **NR275-G63/4a**	0,41	41 43	111	IE1



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
0,12	6,3	146	**215,91**	8429	3,1	**MR275-G63/4a**	0,41	41	111	IE1
0,18	6,6	139	**205,95**	8457	3,2	**NR275-G63/4a**		43		
	7,6	122	**180,21**	8523	3,7					
	9,2	101	**149,02**	8760	4,0					
	9,9	107	**138,55**	8650	4,0	**MR273-G63/4a**	0,41	30	110	IE1
	11	94	**121,03**	8864	4,0	**NR273-G63/4a**		32		
	12	88	**113,52**	8944	4,0					
	14	77	**99,21**	5764	2,6	**MR173-G63/4a**	0,41	30	108	IE1
	16	68	**87,60**	5565	2,9	**NR173-G63/4a**		32		
	17	63	**81,82**	5457	3,2					
	20	54	**69,16**	5197	3,7					
	24	45	**57,76**	4928	4,0					
	27	39	**49,81**	4715	4,0					
	30	35	**45,18**	2835	2,4	**MR003-G63/4a**	0,41	12	106	IE1
	34	31	**40,04**	2857	2,6	**NR003-G63/4a**		13		
	43	25	**32,02**	2894	3,3					
	48	22	**28,38**	2906	3,7					
	57	19	**24,13**	2797	4,0					
	64	17	**21,26**	2679	4,0					
	66	16	**20,66**	2649	4,0					
	71	15	**19,17**	2581	4,0					
	75	14	**18,20**	2537	4,0					
	81	13	**16,89**	2472	4,0					
	93	11	**14,67**	2357	4,0					
	100	11	**13,61**	2297	4,0					
	123	9	**11,14**	2156	4,0	**MR002-G63/4a**	0,41	11	106	IE1
	138	8	**9,87**	2068	4,0	**NR002-G63/4a**		12		
	157	7	**8,70**	1980	4,0					
	162	7	**8,45**	1959	4,0					
	174	6	**7,84**	1909	4,0					
	183	6	**7,45**	1876	4,0					
	198	5	**6,91**	1828	4,0					
	228	5	**6,00**	1743	4,0					
	245	4	**5,57**	1698	4,0					
	300	4	**4,56**	1588	4,0					
	350	3	**3,90**	1506	4,0					
	377	3	**3,62**	1467	4,0					
0,18	0,11	12679	**8345,18**	74316	1,0	**MR876-3E71M/6C**	0,55	607	132	IE3
0,25	0,13	10968	**7233,00**	83155	1,2	**NR876-3E71M/6C**		622		
	0,15	9582	**6313,78**	89283	1,4	**MR876-2E71M/6B**	0,60	606		IE2
	0,17	8459	**5569,66**	93713	1,5	**NR876-2E71M/6B**		621		
	0,19	7530	**4954,95**	96997	1,7					
	0,21	6749	**4438,59**	99684	1,9					
	0,24	5928	**3892,30**	102261	2,2					
	0,27	5248	**3441,02**	104265	2,5					
	0,32	4423	**2894,28**	106552	2,9					
	0,38	3768	**2460,65**	108262	3,5					
	0,16	9031	**5949,83**	44490	0,9	**MR776-3E71M/6C**	0,55	260	129	IE3
	0,18	7996	**5260,00**	48911	1,0	**NR776-3E71M/6C**		322		
						MR776-2E71M/6B	0,60	259		IE2
						NR776-2E71M/6B		321		

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
0,18	0,19	7482	**4812,09**	50862	1,1	**MR775-3E71M/6C**	0,55	257	129	IE3
0,25	0,22	6629	**4263,81**	53816	1,2	**NR775-3E71M/6C**		317		
	0,24	5935	**3814,39**	55991	1,3	**MR775-2E71M/6B**	0,60	256		IE2
	0,30	4842	**3103,85**	59051	1,7	**NR775-2E71M/6B**		316		
	0,35	4180	**2684,10**	60717	1,9					
	0,40	3623	**2324,10**	62017	2,2					
	0,46	3171	**2032,66**	62935	2,5					
	0,52	2798	**1791,91**	63725	2,9					
	0,59	2484	**1589,68**	64362	3,2					
	0,66	2216	**1417,41**	64885	3,6					
	0,74	1962	**1252,60**	65684	4,0					
	0,32	4378	**2863,86**	25882	1,0	**MR676-3E71M/6C**	0,55	240	126	IE3
						NR676-3E71M/6C		249		
						MR676-2E71M/6B	0,60	239		IE2
						NR676-2E71M/6B		248		
	0,36	4025	**2578,93**	27987	1,1	**MR675-3E71M/6C**	0,55	230	126	IE3
	0,42	3422	**2196,86**	30945	1,3	**NR675-3E71M/6C**		244		
	0,49	2945	**1888,53**	32984	1,5	**MR675-2E71M/6B**	0,60	229		IE2
	0,57	2558	**1638,93**	34461	1,7	**NR675-2E71M/6B**		243		
	0,65	2238	**1432,74**	35578	1,9					
	0,74	1969	**1259,54**	36451	2,2					
	0,84	1743	**1113,08**	37141	2,5					
	0,93	1560	**995,91**	37624	2,8					
	1,1	1372	**874,56**	38151	3,1					
	1,3	1149	**730,46**	38748	3,7					
	0,47	3019	**2850,22**	19665	1,0	**MR576-G63/4b**	0,60	160	123	IE1
						NR576-G63/4b		153		
	0,49	2955	**2736,94**	20068	1,0	**MR575-G63/4b**	0,60	152	123	IE1
	0,58	2499	**2313,18**	22617	1,2	**NR575-G63/4b**		148		
	0,71	2049	**1897,20**	24715	1,5					
	0,80	1811	**1675,43**	25689	1,7					
	0,90	1610	**1489,14**	26424	1,9					
	1,1	1363	**1259,61**	27307	2,2					
	1,2	1237	**1140,65**	27718	2,4					
	1,6	923	**574,90**	28639	3,3	**MR574-3E71M/6C**	0,55	137	122	IE3
	1,9	781	**485,89**	29040	3,8	**NR574-3E71M/6C**		135		
	2,3	648	**402,12**	30397	4,0	**MR574-2E71M/6B**	0,60	136		IE2
						NR574-2E71M/6B		134		
	0,77	1885	**1738,98**	9150	0,8	**MR475-G63/4b**	0,60	111	120	IE1
	0,82	1769	**1631,08**	11836	0,9	**NR475-G63/4b**		115		
	0,97	1505	**1386,75**	16156	1,0					
	1,0	1399	**1285,79**	17525	1,1					
	1,1	1309	**1204,49**	18560	1,2					
	1,4	1083	**674,46**	20840	1,4	**MR474-3E71M/6C**	0,55	96	119	IE3
	1,5	968	**603,46**	21841	1,6	**NR474-3E71M/6C**		100		
	1,8	852	**529,93**	22771	1,8	**MR474-2E71M/6B**	0,60	95		IE2
	2,1	712	**442,61**	23780	2,2	**NR474-2E71M/6B**		99		
	2,2	673	**418,16**	24045	2,3					
	2,7	559	**346,07**	24743	2,8					
	3,1	478	**295,98**	25231	3,2					

*

*: I [illegible] dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor [illegible] are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
0,18	1,4	1068	**987,33**	6178	0,8	**MR375-G63/4b**	0,60	76	117	IE1
0,25	1,6	916	**845,97**	10009	0,9	**NR375-G63/4b**		81		
	1,8	839	**524,07**	11377	1,0	**MR374-3E71M/6C**	0,55	60	116	IE3
	2,2	676	**421,85**	13699	1,2	**NR374-3E71M/6C**		63		
	2,5	593	**369,93**	14655	1,4	**MR374-2E71M/6B**	0,60	59		IE2
						NR374-2E71M/6B		62		
	2,6	582	**524,07**	14771	1,4	**MR374-G63/4b**	0,60	55	116	IE1
	3,2	469	**421,85**	15919	1,7	**NR374-G63/4b**		58		
	3,6	412	**369,93**	16379	2,0					
	5,9	271	**157,76**	16454	3,0	**MR373-3E71M/6C**	0,55	56	115	IE3
	6,7	239	**138,72**	15843	3,4	**NR373-3E71M/6C**		59		
						MR373-2E71M/6B	0,60	55		IE2
						NR373-2E71M/6B		58		
	2,2	691	**431,18**	7218	0,9	**MR284-3E71M/6C**	0,55	64	113	IE3
	2,5	591	**368,77**	9393	1,0	**NR284-3E71M/6C**		67		
	2,9	519	**323,39**	10665	1,2	**MR284-2E71M/6B**	0,60	63		IE2
						NR284-2E71M/6B		66		
	3,1	480	**431,18**	11227	1,3	**MR284-G63/4b**	0,60	60	113	IE1
	3,6	410	**368,77**	12144	1,5	**NR284-G63/4b**		63		
	4,1	360	**323,39**	12730	1,7					
	4,7	319	**285,89**	13180	1,9					
	5,6	268	**240,47**	13658	2,2					
	6,7	240	**137,91**	13106	2,5	**MR283-3E71M/6C**	0,55	42	112	IE3
	8,1	199	**114,14**	12414	3,1	**NR283-3E71M/6C**		44		
						MR283-2E71M/6B	0,60	41		IE2
						NR283-2E71M/6B		43		
	2,7	542	**499,32**	5982	0,8	**MR275-G63/4b**	0,60	41	111	IE1
	3,2	455	**418,57**	6713	1,0	**NR275-G63/4b**		43		
	3,7	390	**358,33**	7169	1,2					
	4,0	362	**332,52**	7346	1,2					
	5,3	275	**252,20**	7844	1,6					
	6,7	238	**138,55**	8024	1,9	**MR273-3E71M/6C**	0,55	32	110	IE3
	7,7	208	**121,03**	8154	2,2	**NR273-3E71M/6C**		34		
	8,2	196	**113,52**	8212	2,3	**MR273-2E71M/6B**	0,60	31		IE2
	9,6	166	**96,52**	8339	2,7	**NR273-2E71M/6B**		33		
	9,7	165	**138,55**	8352	2,7	**MR273-G63/4b**	0,60	28	110	IE1
	11	144	**121,03**	8436	3,1	**NR273-G63/4b**		30		
	12	135	**113,52**	8470	3,3					
	14	117	**68,03**	8475	2,4	**MR203-3E71M/6C**	0,55	30	109	IE3
	16	103	**59,43**	8504	2,7	**NR203-3E71M/6C**		32		
	17	96	**55,74**	8346	2,9	**MR203-2E71M/6B**	0,60	29		IE2
						NR203-2E71M/6B		31		
	20	81	**68,03**	7944	3,4	**MR203-G63/4b**	0,60	27	109	IE1
						NR203-G63/4b		29		

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
0,18	9,4	171	**99,21**	5822	1,2	**MR173-3E71M/6C**	0,55	18	109	IE3
0,25	11	151	**87,60**	5895	1,3	**NR173-3E71M/6C**		20		
	11	141	**81,82**	5801	1,4	**MR173-2E71M/6B**	0,60	17		IE2
	13	119	**69,16**	5568	1,7	**NR173-2E71M/6B**		19		
	14	118	**99,21**	5561	1,7	**MR173-G63/4b**	0,60	13	109	IE1
	15	104	**87,60**	5389	1,9	**NR173-G63/4b**		15		
	16	98	**81,82**	5294	2,1					
	19	82	**69,16**	5063	2,4					
	23	69	**57,76**	4820	2,9					
	27	60	**49,81**	4624	3,4					
	18	87	**50,51**	3512	1,6	**MR103-3E71M/6C**	0,55	17	107	IE3
	21	77	**44,60**	3411	1,8	**NR103-3E71M/6C**		19		
	22	72	**41,66**	3355	1,9	**MR103-2E71M/6B**	0,60	16		IE2
						NR103-2E71M/6B		18		
	27	60	**50,51**	3213	2,3	**MR103-G63/4b**	0,60	16	107	IE1
	30	53	**44,60**	3112	2,6	**NR103-G63/4b**		18		
	32	50	**41,66**	3056	2,8					
	38	42	**35,21**	2921	3,3					
	21	77	**45,18**	2530	1,1	**MR003-3E71M/6C**	0,55	16	106	IE3
	23	69	**40,04**	2603	1,2	**NR003-3E71M/6C**		17		
	29	55	**32,02**	2707	1,5	**MR003-2E71M/6B**	0,60	15		IE2
						NR003-2E71M/6B		16		
	30	54	**45,18**	2717	1,5	**MR003-G63/4b**	0,60	13	106	IE1
	33	48	**40,04**	2757	1,7	**NR003-G63/4b**		14		
	42	38	**32,02**	2818	2,2					
	47	34	**28,38**	2840	2,4					
	56	29	**24,13**	2733	2,8					
	63	25	**21,26**	2664	3,2					
	65	25	**20,66**	2672	3,3					
	70	23	**19,17**	2628	3,6					
	74	22	**18,20**	2584	3,8					
	79	20	**16,89**	2516	4,0					
	91	18	**14,67**	2398	4,0					
	98	16	**13,61**	2336	4,0					
	120	13	**11,14**	2197	4,0	**MR002-G63/4b**	0,60	12	106	IE1
	136	12	**9,87**	2105	4,0	**NR002-G63/4b**		13		
	154	11	**8,70**	2014	4,0					
	159	10	**8,45**	1992	4,0					
	171	9,5	**7,84**	1940	4,0					
	180	9,0	**7,45**	1907	4,0					
	194	8,4	**6,91**	1857	4,0					
	223	7,3	**6,00**	1770	4,0					
	241	6,8	**5,57**	1724	4,0					
	294	5,5	**4,56**	1612	4,0					
	344	4,7	**3,90**	1527	4,0					
	370	4,4	**3,62**	1488	4,0					
	408	3,9	**6,91**	1433	4,0	**MR002-G63/2a**	0,50	12	106	IE1
	470	3,4	**6,00**	1366	4,0	**NR002-G63/2a**		13		
	506	3,2	**5,57**	1332	4,0					
	619	2,6	**4,56**	1245	4,0					
	723	2,2	**3,90**	1181	4,0					
	779	2,0	**3,62**	1151	4,0					

* : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
0,25	0,13	15953	**11443,34**	50996	0,8	**MR876-3E71M/4C**	0,67	612	132	IE3
0,34	0,17	11653	**8345,18**	79805	1,1	**NR876-3E71M/4C**		627		
	0,20	10080	**7233,00**	87174	1,3	**MR876-2E71M/4B**	0,71	611		IE2
	0,23	8807	**6313,78**	92433	1,5	**NR876-2E71M/4B**		626		
	0,26	7774	**5569,66**	96350	1,7					
	0,29	6921	**4954,95**	99123	1,9					
	0,32	6203	**4438,59**	101418	2,1					
	0,37	5448	**3892,30**	103687	2,4					
	0,42	4824	**3441,02**	105462	2,7					
	0,50	4065	**2894,28**	107497	3,2					
	0,58	3463	**2460,65**	109026	3,8					
	0,68	2972	**2108,33**	112703	4,0					
	0,24	8300	**5949,83**	47686	1,0	**MR776-3E71M/4C**	0,67	260	129	IE3
	0,27	7349	**5260,00**	51346	1,1	**NR776-3E71M/4C**		322		
						MR776-2E71M/4B	0,71	259		IE2
						NR776-2E71M/4B		321		
	0,30	6877	**4812,09**	52918	1,2	**MR775-3E71M/4C**	0,67	257	129	IE3
	0,34	6093	**4263,81**	55512	1,3	**NR775-3E71M/4C**		318		
	0,38	5454	**3814,39**	57388	1,5	**MR775-2E71M/4B**	0,71	258		IE2
	0,46	4451	**3103,85**	59975	1,8	**NR775-2E71M/4B**		317		
	0,53	3842	**2684,10**	61455	2,1					
	0,62	3330	**2324,10**	62616	2,4					
	0,71	2915	**2032,66**	63505	2,7					
	0,80	2571	**1791,91**	64207	3,1					
	0,90	2283	**1589,68**	64804	3,5					
	1,0	2037	**1417,41**	65267	3,9					
	1,1	1803	**1252,60**	67039	4,0					
	0,43	4687	**3342,43**	23925	0,9	**MR676-3E71M/4C**	0,67	232	126	IE3
	0,50	4023	**2863,86**	27958	1,1	**NR676-3E71M/4C**		244		
						MR676-2E71M/4B	0,71	231		IE2
						NR676-2E71M/4B		243		
	0,56	3699	**2578,93**	29635	1,2	**MR675-3E71M/4C**	0,67	230	126	IE3
	0,65	3145	**2196,86**	32126	1,4	**NR675-3E71M/4C**		245		
	0,76	2707	**1888,53**	33910	1,6	**MR675-2E71M/4B**	0,71	229		IE2
	0,88	2351	**1638,93**	35136	1,8	**NR675-2E71M/4B**		244		
	1,0	2057	**1432,74**	36125	2,1					
	1,1	1809	**1259,54**	36903	2,4					
	1,3	1602	**1113,08**	37520	2,7					
	1,4	1433	**995,91**	37997	3,0					
	1,6	1261	**874,56**	38465	3,4					
	2,0	1056	**730,46**	39205	4,0					
	0,76	2713	**1897,20**	21484	1,1	**MR575-3E71M/4C**	0,67	153	123	IE3
	0,86	2398	**1675,43**	23125	1,3	**NR575-3E71M/4C**		149		
	0,96	2132	**1489,14**	24354	1,4	**MR575-2E71M/4B**	0,71	152		IE2
	1,1	1805	**1259,61**	25710	1,7	**NR575-2E71M/4B**		148		
	1,3	1639	**1140,65**	26299	1,8					
	1,6	1309	**574,90**	27486	2,3	**MR574-3E71M/6D**	0,77	139	122	IE3
	1,9	1108	**485,89**	28085	2,7	**NR574-3E71M/6D**		135		
	2,3	919	**402,12**	28650	3,3	**MR574-2E71M/6C**	0,78	138		IE2
						NR574-2E71M/6C		134		
	2,5	848	**574,90**	28862	3,5	**MR574-3E71M/4C**	0,67	134	122	IE3
	3,0	718	**485,89**	29566	4,0	**NR574-3E71M/4C**		130		

*: I [illegible] dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor [illegible] are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *</br>*Motor Eff. Class* Motor Effizienz-klasse
0,25 0,34	2,5 3,0	848 718	**574,90** **485,89**	28862 29566	3,5 4,0	**MR574-2E71M/4B** **NR574-2E71M/4B**	0,71	133 129	122	IE2
	1,1 1,2	1852 1734	**1285,79** **1204,49**	9956 12492	0,8 0,9	**MR475-3E71M/4C** **NR475-3E71M/4C**	0,67	102 107	120	IE3
						MR475-2E71M/4B **NR475-2E71M/4B**	0,71	101 106		IE2
	1,4 1,5 1,8 2,1	1536 1373 1208 1010	**674,46** **603,46** **529,93** **442,61**	15720 17825 19641 21487	1,0 1,1 1,3 1,5	**MR474-3E71M/6D** **NR474-3E71M/6D** **MR474-2E71M/6C** **NR474-2E71M/6C**	0,77 0,78 	97 102 96 101	119	IE3 IE2
	2,1 2,4 2,7 3,2 3,4 4,1	996 890 783 655 619 513	**674,46** **603,46** **529,93** **442,61** **418,16** **346,07**	21612 22474 23243 24138 24374 25032	1,6 1,7 2,0 2,4 2,5 3,0	**MR474-3E71M/4C** **NR474-3E71M/4C** **MR474-2E71M/4B** **NR474-2E71M/4B**	0,67 0,71 	97 102 96 101	119	IE3 IE2
	2,2 2,5	958 841	**421,85** **369,93**	9124 11344	0,9 1,0	**MR374-3E71M/6D** **NR374-3E71M/6D** **MR374-2E71M/6C** **NR374-2E71M/6C**	0,77 0,78 	60 65 59 64	116	IE3 IE2
	2,7 3,4 3,9 4,4 5,2	771 621 545 482 406	**524,07** **421,85** **369,93** **327,04** **275,08**	12424 14316 15160 15771 16422	1,1 1,3 1,5 1,7 2,0	**MR374-3E71M/4C** **NR374-3E71M/4C** **MR374-2E71M/4B** **NR374-2E71M/4B**	0,67 0,71 	60 65 59 64	116	IE3 IE2
	5,9 6,7 8,3	377 332 268	**157,76** **138,72** **111,67**	16059 15496 14570	2,2 2,5 3,1	**MR373-3E71M/6D** **NR373-3E71M/6D** **MR373-2E71M/6C** **NR373-2E71M/6C**	0,77 0,78 	60 65 59 64	115	IE3 IE2
	9,1	244	**157,76**	14203	3,4	**MR373-3E71M/4C** **NR373-3E71M/4C** **MR373-2E71M/4B** **NR373-2E71M/4B**	0,67 0,71 	54 59 53 58	115	IE3 IE2
	2,5 2,9	839 736	**368,77** **323,39**	5902	0,7 0,8	**MR284-3E71M/6D** **NR284-3E71M/6D** **MR284-2E71M/6C** **NR284-2E71M/6C**	0,77 0,78 	64 66 63 65	113	IE3 IE2
	3,3 3,9 4,4 5,0 6,0	636 543 477 422 356	**431,18** **368,77** **323,39** **285,89** **240,47**	8530 10258 11268 11998 12782	0,9 1,1 1,3 1,4 1,7	**MR284-3E71M/4C** **NR284-3E71M/4C** **MR284-2E71M/4B** **NR284-2E71M/4B**	0,67 0,71 	64 66 63 65	113	IE3 IE2
	6,7 8,1 9,5	330 274 234	**137,91** **114,14** **97,62**	12726 12099 11590	1,8 2,2 2,6	**MR283-3E71M/6D** **NR283-3E71M/6D** **MR283-2E71M/6C** **NR283-2E71M/6C**	0,77 0,78 	32 34 31 33	112	IE3 IE2

* : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
0,25	10	214	**137,91**	11308	2,8	**MR283-3E71M/4C**	0,67	32	112	IE3
0,34	13	177	**114,14**	10715	3,4	**NR283-3E71M/4C**		34		
						MR283-2E71M/4B	0,71	31		IE2
						NR283-2E71M/4B		33		
	4,0	516	**358,33**	6211	0,9	**MR275-3E71M/4C**	0,67	47	111	IE3
	4,3	480	**332,52**	6518	0,9	**NR275-3E71M/4C**		49		
	5,7	364	**252,20**	7338	1,2	**MR275-2E71M/4B**	0,71	46		IE2
						NR275-2E71M/4B		48		
	6,7	332	**138,55**	7529	1,4	**MR273-3E71M/6D**	0,77	32	110	IE3
	7,7	290	**121,03**	7762	1,6	**NR273-3E71M/6D**		34		
	8,2	272	**113,52**	7855	1,7	**MR273-2E71M/6C**	0,78	31		IE2
	9,6	232	**96,52**	8057	1,9	**NR273-2E71M/6C**		33		
	10	215	**138,55**	8128	2,1	**MR273-3E71M/4C**	0,67	32	110	IE3
	12	188	**121,03**	8249	2,4	**NR273-3E71M/4C**		34		
	13	176	**113,52**	8299	2,6	**MR273-2E71M/4B**	0,71	31		IE2
	15	150	**96,52**	8413	3,0	**NR273-2E71M/4B**		33		
	17	130	**83,83**	8486	3,4					
	14	163	**68,03**	8313	1,7	**MR203-3E71M/6D**	0,77	30	109	IE3
	16	143	**59,43**	8306	2,0	**NR203-3E71M/6D**		32		
	17	134	**55,74**	8159	2,1	**MR203-2E71M/6C**	0,78	29		IE2
						NR203-2E71M/6C		31		
	21	106	**68,03**	7635	2,6	**MR203-3E71M/4C**	0,67	30	109	IE3
	24	93	**59,43**	7342	3,0	**NR203-3E71M/4C**		32		
	26	87	**55,74**	7206	3,2	**MR203-2E71M/4B**	0,71	29		IE2
	30	74	**47,39**	6868	3,8	**NR203-2E71M/4B**		31		
	9,4	237	**99,21**	5448	0,8	**MR173-3E71M/6D**	0,77	19	109	IE3
	11	210	**87,60**	5550	1,0	**NR173-3E71M/6D**		21		
						MR173-2E71M/6C	0,78	18		IE2
						NR173-2E71M/6C		20		
	14	154	**99,21**	5213	1,3	**MR173-3E71M/4C**	0,67	20	108	IE3
	16	136	**87,60**	5070	1,5	**NR173-3E71M/4C**		21		
	18	127	**81,82**	4991	1,6	**MR173-2E71M/4B**	0,71	19		IE2
	21	107	**69,16**	4794	1,9	**NR173-2E71M/4B**		20		
	25	90	**57,76**	4582	2,2					
	29	78	**49,81**	4408	2,6					
	31	71	**45,90**	4313	2,8					
	33	67	**42,87**	4234	3,0					
	40	56	**36,24**	4043	3,5					
	18	121	**50,51**	3300	1,2	**MR103-3E71M/6D**	0,77	19	107	IE3
	21	107	**44,60**	3224	1,3	**NR103-3E71M/6D**		21		
	22	100	**41,66**	3180	1,4	**MR103-2E71M/6C**	0,78	18		IE2
						NR103-2E71M/6C		20		
	28	79	**50,51**	3020	1,8	**MR103-3E71M/4C**	0,67	18	107	IE3
	32	69	**44,60**	2935	2,0	**NR103-3E71M/4C**		19		
	34	65	**41,66**	2888	2,2	**MR103-2E71M/4B**	0,71	17		IE2
	41	55	**35,21**	2771	2,6	**NR103-2E71M/4B**		18		
	44	50	**32,25**	2710	2,8					
	49	46	**29,40**	2646	3,0					

*

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
0,25 0,34	57	39	**24,86**	2508	3,3	**MR103-3E71M/4C** **NR103-3E71M/4C** **MR103-2E71M/4B** **NR103-2E71M/4B**	0,67 0,71 	18 19 17 18	107	IE3 IE2
	21 23 29	108 96 77	**45,18** **40,04** **32,02**	1892 2009 2248	0,8 0,9 1,1	**MR003-3E71M/6D** **NR003-3E71M/6D** **MR003-2E71M/6C** **NR003-2E71M/6C**	0,77 0,78 	15 16 14 15	106	IE3 IE2
	32 36 45 51 59 68 69 75 79 85 98 105	70 62 50 44 38 33 32 30 28 26 23 21	**45,18** **40,04** **32,02** **28,38** **24,13** **21,26** **20,66** **19,17** **18,20** **16,89** **14,67** **13,61**	2304 2337 2418 2410 2406 2364 2385 2370 2335 2317 2248 2226	1,2 1,3 1,7 1,9 2,2 2,5 2,5 2,7 2,9 3,1 3,6 3,8	**MR003-3E71M/4C** **NR003-3E71M/4C** **MR003-2E71M/4B** **NR003-2E71M/4B**	0,67 0,71 	14 15 13 14	106	IE3 IE2
	129 145 165 170 183 193 208 239 258 315 368 397	18 16 14 13 12 12 11 10 9 7 6 6	**11,14** **9,87** **8,70** **8,45** **7,84** **7,45** **6,91** **6,00** **5,57** **4,56** **3,90** **3,62**	2172 2080 1990 1967 1915 1881 1832 1745 1699 1588 1503 1464	3,7 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0	**MR002-3E71M/4C** **NR002-3E71M/4C** **MR002-2E71M/4B** **NR002-2E71M/4B**	0,67 0,71 	14 15 13 14	106	IE3 IE2
	411 473 510 623 728 785	5 5 4 4 3 3	**6,91** **6,00** **5,57** **4,56** **3,90** **3,62**	1439 1372 1337 1250 1184 1154	4,0 4,0 4,0 4,0 4,0 4,0	**MR002-G63/2b** **NR002-G63/2b**	0,67 	13 14	106	IE1
0,37 0,50	0,20 0,23 0,26 0,29 0,32 0,37 0,42 0,50 0,58 0,68	15380 13437 11862 10559 9464 8312 7360 6203 5283 4535	**7233,00** **6313,78** **5569,66** **4954,95** **4438,59** **3892,30** **3441,02** **2894,28** **2460,65** **2108,33**	56000 69831 78738 85048 89697 94366 97651 101417 104164 106252	0,8 1,0 1,1 1,2 1,4 1,6 1,8 2,1 2,5 2,9	**MR876-3E71M/4D** **NR876-3E71M/4D** **MR876-2E71M/4C** **NR876-2E71M/4C**	0,97 1,00 	600 612 599 611	132	IE3 IE2
	0,75 0,84 0,94	4223 3738 3345	**1924,32** **1700,56** **1521,55**	107085 108338 109316	3,1 3,5 3,9	**MR875-3E71M/4D** **NR875-3E71M/4D** **MR875-2E71M/4C** **NR875-2E71M/4C**	0,97 1,00 	597 607 596 606	132	IE3 IE2

*

✱ : I pesi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor weights are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
0,37	0,38	8322	**3814,39**	47598	1,0	**MR775-3E71M/4D**	0,97	265	129	IE3
0,50	0,46	6791	**3103,85**	53223	1,2	**NR775-3E71M/4D**		323		
	0,53	5862	**2684,10**	56209	1,4	**MR775-2E71M/4C**	1,00	264		IE2
	0,62	5081	**2324,10**	58419	1,6	**NR775-2E71M/4C**		322		
	0,71	4447	**2032,66**	59983	1,8					
	0,80	3923	**1791,91**	61263	2,0					
	0,90	3483	**1589,68**	62276	2,3					
	1,0	3107	**1417,41**	63098	2,6					
	1,1	2751	**1252,60**	63844	2,9					
	1,3	2462	**1120,74**	64424	3,2					
	1,5	2166	**984,18**	65025	3,7					
	1,6	2072	**594,92**	65180	3,9	**MR774-3E80M/6B**	1,03	245	128	IE3
	1,7	1855	**532,29**	66612	4,0	**NR774-3E80M/6B**		302		
						MR774-2E80M/6A	1,08	244		IE2
						NR774-2E80M/6A		301		
	0,76	4130	**1888,53**	27370	1,0	**MR675-3E71M/4D**	0,97	229	126	IE3
	0,88	3587	**1638,93**	30178	1,2	**NR675-3E71M/4D**		245		
	1,0	3138	**1432,74**	32158	1,4	**MR675-2E71M/4C**	1,00	228		IE2
	1,1	2761	**1259,54**	33706	1,6	**NR675-2E71M/4C**		244		
	1,3	2444	**1113,08**	34869	1,8					
	1,4	2187	**995,91**	35696	2,0					
	1,6	1924	**874,56**	36548	2,2					
	1,9	1742	**500,39**	37113	2,5	**MR674-3E80M/6B**	1,03	219	125	IE3
	2,1	1542	**442,20**	37697	2,8	**NR674-3E80M/6B**		235		
	2,5	1312	**376,69**	38334	3,3	**MR674-2E80M/6A**	1,08	218		IE2
	2,9	1130	**323,82**	38814	3,8	**NR674-2E80M/6A**		234		
	3,3	982	**281,02**	40076	4,0					
	1,1	2754	**1259,61**	21254	1,1	**MR575-3E71M/4D**	0,97	153	123	IE3
	1,3	2500	**1140,65**	22616	1,2	**NR575-3E71M/4D**		150		
	1,5	2115	**964,05**	24428	1,4	**MR575-2E71M/4C**	1,00	152		IE2
						NR575-2E71M/4C		149		
	1,6	1997	**574,90**	24897	1,5	**MR574-3E80M/6B**	1,03	139	122	IE3
	1,9	1690	**485,89**	26116	1,8	**NR574-3E80M/6B**		135		
	2,3	1402	**402,12**	27150	2,1	**MR574-2E80M/6A**	1,08	138		IE2
						NR574-2E80M/6A		134		
	2,5	1294	**574,90**	27504	2,3	**MR574-3E71M/4D**	0,97	134	122	IE3
	3,0	1095	**485,89**	28136	2,7	**NR574-3E71M/4D**		130		
	3,6	909	**402,12**	28679	3,3	**MR574-2E71M/4C**	1,00	133		IE2
	4,2	778	**343,91**	29072	3,9	**NR574-2E71M/4C**		129		
	4,8	683	**301,59**	29992	4,0					
	4,9	659	**291,25**	30274	4,0					
	1,8	1843	**529,93**	10176	0,8	**MR474-3E80M/6B**	1,03	137	119	IE3
	2,1	1541	**442,61**	15686	1,0	**NR474-3E80M/6B**		142		
						MR474-2E80M/6A	1,08	136		IE2
						NR474-2E80M/6A		141		
	2,1	1519	**674,46**	15971	1,0	**MR474-3E71M/4D**	0,97	132	119	IE3
	2,4	1358	**603,46**	18007	1,1	**NR474-3E71M/4D**		137		
	2,7	1194	**529,93**	19777	1,3	**MR474-2E71M/4C**	1,00	131		IE2
	3,2	999	**442,61**	21584	1,6	**NR474-2E71M/4C**		136		
	3,4	944	**418,16**	22042	1,6					

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
0,37 0,50	4,1	783	**346,07**	23240	2,0	**MR474-3E71M/4D** **NR474-3E71M/4D** **MR474-2E71M/4C** **NR474-2E71M/4C**	0,97 1,00 	132 137 131 136	119	IE3 IE2
	4,2 4,8 5,9 6,7 7,4	776 688 561 496 444	**219,00** **194,05** **157,90** **139,54** **124,85**	23300 23923 24750 25142 25445	2,0 2,3 2,8 3,1 3,5	**MR473-3E80M/6B** **NR473-3E80M/6B** **MR473-2E80M/6A** **NR473-2E80M/6A**	1,03 1,08 	87 90 86 89	118	IE3 IE2
	3,4 3,9 4,4 5,2	948 832 736 620	**421,85** **369,93** **327,04** **275,08**	9355 11517 12918 14359	0,9 1,0 1,1 1,3	**MR374-3E71M/4D** **NR374-3E71M/4D** **MR374-2E71M/4C** **NR374-2E71M/4C**	0,97 1,00 	60 65 59 64	116	IE3 IE2
	5,9 6,7 8,3	558 491 396	**157,76** **138,72** **111,67**	15027 14902 14092	1,5 1,7 2,1	**MR373-3E80M/6B** **NR373-3E80M/6B** **MR373-2E80M/6A** **NR373-2E80M/6A**	1,03 1,08 	65 70 64 69	115	IE3 IE2
	9,1 10 13 15	363 319 257 226	**157,76** **138,72** **111,67** **97,92**	13765 13294 12515 12056	2,3 2,6 3,2 3,6	**MR373-3E71M/4D** **NR373-3E71M/4D** **MR373-2E71M/4C** **NR373-2E71M/4C**	0,97 1,00 	54 59 53 58	115	IE3 IE2
	5,0	644	**285,89**	8353	0,9	**MR284-3E71M/4D** **NR284-3E71M/4D** **MR284-2E71M/4C** **NR284-2E71M/4C**	0,97 1,00 	64 66 63 65	113	IE3 IE2
	6,7 8,1 9,5	488 405 346	**137,91** **114,14** **97,62**	11107 11559 11129	1,2 1,5 1,7	**MR283-3E80M/6B** **NR283-3E80M/6B** **MR283-2E80M/6A** **NR283-2E80M/6A**	1,03 1,08 	44 46 43 45	112	IE3 IE2
	10 13 15 17	317 263 225 198	**137,91** **114,14** **97,62** **85,60**	10885 10365 9940 9588	1,9 2,3 2,7 3,0	**MR283-3E71M/4D** **NR283-3E71M/4D** **MR283-2E71M/4C** **NR283-2E71M/4C**	0,97 1,00 	40 43 39 42	112	IE3 IE2
	6,7 7,7 8,2 9,6	491 429 403 342	**138,55** **121,03** **113,52** **96,52**	6429 6901 7085 7456	0,9 1,0 1,1 1,3	**MR273-3E80M/6B** **NR273-3E80M/6B** **MR273-2E80M/6A** **NR273-2E80M/6A**	1,03 1,08 	32 35 	110	IE3 IE2
	10 12 13 15 17 20 24	319 279 262 223 194 170 140	**138,55** **121,03** **113,52** **96,52** **83,83** **73,35** **60,66**	7603 7811 7900 8092 8224 8328 7788	1,4 1,6 1,7 2,0 2,3 2,7 3,2	**MR273-3E71M/4D** **NR273-3E71M/4D** **MR273-2E71M/4C** **NR273-2E71M/4C**	0,97 1,00 	30 33 29 32	110	IE3 IE2

*

✱ : I pesi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor weights are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
0,37 0,50	14 16 17	242 211 198	**68,03** **59,43** **55,74**	8002 7965 7840	1,2 1,3 1,4	**MR203-3E80M/6B** **NR203-3E80M/6B** **MR203-2E80M/6A** **NR203-2E80M/6A**	1,03 1,08	37 39 36 38	109	IE3 IE2
	21 24 26 30 33 35 40	157 137 129 110 102 95 84	**68,03** **59,43** **55,74** **47,39** **43,94** **41,16** **36,02**	7382 7121 6998 6692 6552 6432 6190	1,8 2,0 2,2 2,6 2,7 2,9 3,4	**MR203-3E71M/4D** **NR203-3E71M/4D** **MR203-2E71M/4C** **NR203-2E71M/4C**	0,97 1,00	35 38 34 37	109	IE3 IE2
	14 16 18 21 25 29 31 33 40 47 55	228 202 189 159 133 115 106 99 84 70 61	**99,21** **87,60** **81,82** **69,16** **57,76** **49,81** **45,90** **42,87** **36,24** **30,26** **26,10**	4779 4687 4633 4491 4329 4190 4112 4047 3884 3710 3568	0,9 1,0 1,1 1,3 1,5 1,7 1,9 2,0 2,4 2,9 3,3	**MR173-3E71M/4D** **NR173-3E71M/4D** **MR173-2E71M/4C** **NR173-2E71M/4C**	0,97 1,00	20 21 19 20	108	IE3 IE2
	18 21 22	179 159 148	**50,51** **44,60** **41,66**	2938 2904 2881	0,8 0,9 0,9	**MR103-3E80M/6B** **NR103-3E80M/6B** **MR103-2E80M/6A** **NR103-2E80M/6A**	1,03 1,08	22 24 21 23	107	IE3 IE2
	28 32 34 41 44 49 58 65 70 83	117 103 96 81 75 68 57 51 48 40	**50,51** **44,60** **41,66** **35,21** **32,25** **29,40** **24,86** **21,96** **20,51** **17,33**	2785 2727 2694 2607 2560 2509 2374 2308 2272 2181	1,2 1,4 1,5 1,7 1,9 2,1 2,3 2,4 2,5 2,7	**MR103-3E71M/4D** **NR103-3E71M/4D** **MR103-2E71M/4C** **NR103-2E71M/4C**	0,97 1,00	19 20 18 19	107	IE3 IE2
	90 102 109	37 33 31	**15,95** **14,08** **13,15**	2161 2091 2053	3,1 3,3 3,4	**MR102-3E71M/4D** **NR102-3E71M/4D** **MR102-2E71M/4C** **NR102-2E71M/4C**	0,97 1,00	19 20 18 19	107	IE3 IE2
	32 36 45 51 59 68 69 75 79 85 98 105	104 92 74 66 56 49 48 44 42 39 34 32	**45,18** **40,04** **32,02** **28,38** **24,13** **21,26** **20,66** **19,17** **18,20** **16,89** **14,67** **13,61**	1350 1480 1741 1803 1890 1896 1943 1960 1935 1946 1911 1913	0,8 0,9 1,1 1,3 1,5 1,7 1,7 1,8 1,9 2,1 2,4 2,5	**MR003-3E71M/4D** **NR003-3E71M/4D** **MR003-2E71M/4C** **NR003-2E71M/4C**	0,97 1,00	15 16 14 15	106	IE3 IE2

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
0,37	129	26	**11,14**	2084	2,5	**MR002-3E71M/4D**	0,97	15	106	IE3
0,50	145	23	**9,87**	2038	3,4	**NR002-3E71M/4D**		16		
	165	20	**8,70**	1981	3,6	**MR002-2E71M/4C**	1,00	14		IE2
	170	20	**8,45**	1987	3,7	**NR002-2E71M/4C**		15		
	183	18	**7,84**	1950	3,9					
	193	18	**7,45**	1916	4,0					
	208	16	**6,91**	1864	4,0					
	239	14	**6,00**	1774	4,0					
	258	13	**5,57**	1726	4,0					
	315	11	**4,56**	1614	4,0					
	368	9	**3,90**	1525	4,0					
	397	9	**3,62**	1484	4,0					
	410	8	**6,91**	1458	4,0	**MR002-3E71M/2B**	0,86	15	106	IE3
	472	7	**6,00**	1388	4,0	**NR002-3E71M/2B**		16		
	508	7	**5,57**	1352	4,0	**MR002-2E71M/2A**	0,90	14		IE2
	621	5	**4,56**	1264	4,0	**NR002-2E71M/2A**		15		
	726	5	**3,90**	1197	4,0					
	782	4	**3,62**	1166	4,0					
0,55	0,21	21545	**6842,29**	68090	0,8	**MR976-3E80M/4C**	1,34	1103	135	IE3
0,75	0,27	16906	**5357,43**	101458	1,1	**NR976-3E80M/4C**		1153		
	0,32	14152	**4474,67**	115408	1,3	**MR976-2E80M/4B**	1,45	1102		IE2
	0,34	13380	**4227,50**	118840	1,3	**NR976-2E80M/4B**		1152		
	0,40	11392	**3594,81**	126893	1,6					
	0,51	9019	**2836,64**	135261	2,0					
	0,71	6576	**2027,97**	142495	2,7	**MR975-3E80M/4C**	1,34	1101	135	IE3
	0,80	5908	**1820,78**	144369	3,0	**NR975-3E80M/4C**		1151		
	0,93	5033	**1552,10**	146710	3,6	**MR975-2E80M/4B**	1,45	1100		IE2
						NR975-2E80M/4B		1150		
	0,29	15534	**4954,95**	54775	0,8	**MR876-3E80M/4C**	1,34	603	132	IE3
	0,33	13922	**4438,59**	66738	0,9	**NR876-3E80M/4C**		613		
	0,37	12229	**3892,30**	76803	1,1	**MR876-2E80M/4B**	1,45	602		IE2
	0,42	10827	**3441,02**	83816	1,2	**NR876-2E80M/4B**		612		
	0,50	9125	**2894,28**	91140	1,4					
	0,59	7772	**2460,65**	96066	1,7					
	0,69	6671	**2108,33**	99936	1,9					
	0,75	6212	**1924,32**	101388	2,1	**MR875-3E80M/4C**	1,34	599	132	IE3
	0,85	5499	**1700,56**	103540	2,4	**NR875-3E80M/4C**		609		
	0,95	4921	**1521,55**	105192	2,6	**MR875-2E80M/4B**	1,45	598		IE2
	1,1	4328	**1336,15**	106805	3,0	**NR875-2E80M/4B**		608		
	1,2	3924	**1210,51**	107862	3,3					
	1,4	3395	**1049,18**	109192	3,8					
	0,62	7474	**2324,10**	50893	1,1	**MR775-3E80M/4C**	1,34	340	129	IE3
	0,71	6542	**2032,66**	54099	1,2	**NR775-3E80M/4C**		415		
	0,81	5772	**1791,91**	56474	1,4	**MR775-2E80M/4B**	1,45	339		IE2
	0,91	5124	**1589,68**	58302	1,6	**NR775-2E80M/4B**		414		
	1,0	4571	**1417,41**	59749	1,8					
	1,2	4047	**1252,60**	61036	2,0					
	1,3	3622	**1120,74**	61934	2,2					
	1,5	3186	**984,18**	62905	2,5					

*

*: I pesi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor weights are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
0,55	1,6	3064	**594,92**	63237	2,6	**MR774-3E80M/6C**	1,47	318	128	IE3
0,75	1,8	2742	**532,29**	63901	2,9	**NR774-3E80M/6C**		393		
	2,0	2412	**467,43**	64555	3,3	**MR774-2E80M/6B**	1,50	318		IE2
	2,2	2160	**418,17**	65036	3,7	**NR774-2E80M/6B**		393		
	2,4	1976	**594,92**	65557	4,0	**MR774-3E80M/4C**	1,34	315	128	IE3
	2,7	1768	**532,29**	67316	4,0	**NR774-3E80M/4C**		391		
						MR774-2E80M/4B	1,45	314		IE2
						NR774-2E80M/4B		390		
	1,0	4616	**1432,74**	24312	0,9	**MR675-3E80M/4C**	1,34	245	126	IE3
	1,2	4061	**1259,54**	27791	1,1	**NR675-3E80M/4C**		255		
	1,3	3595	**1113,08**	30140	1,2	**MR675-2E80M/4B**	1,45	244		IE2
	1,5	3218	**995,91**	31852	1,3	**NR675-2E80M/4B**		254		
	1,7	2831	**874,56**	33435	1,5					
	1,9	2576	**500,39**	34368	1,7	**MR674-3E80M/6C**	1,47	223	125	IE3
	2,1	2280	**442,20**	35434	1,9	**NR674-3E80M/6C**		233		
	2,5	1940	**376,69**	36540	2,2	**MR674-2E80M/6B**	1,50	223		IE2
						NR674-2E80M/6B		233		
	2,9	1661	**500,39**	37329	2,6	**MR674-3E80M/4C**	1,34	220	125	IE3
	3,3	1471	**442,20**	37879	2,9	**NR674-3E80M/4C**		231		
	3,8	1251	**376,69**	38481	3,4	**MR674-2E80M/4B**	1,45	219		IE2
	4,5	1077	**323,82**	38934	4,0	**NR674-2E80M/4B**		230		
	5,2	936	**281,02**	40572	4,0					
	1,6	2953	**574,90**	20079	1,0	**MR574-3E80M/6C**	1,47	153	122	IE3
	1,9	2499	**485,89**	22620	1,2	**NR574-3E80M/6C**		149		
	2,3	2073	**402,12**	24611	1,4	**MR574-2E80M/6B**	1,50	153		IE2
						NR574-2E80M/6B		149		
	2,5	1904	**574,90**	25317	1,6	**MR574-3E80M/4C**	1,34	151	122	IE3
	3,0	1611	**485,89**	26441	1,9	**NR574-3E80M/4C**		146		
	3,6	1337	**402,12**	27394	2,2	**MR574-2E80M/4B**	1,45	150		IE2
	4,2	1144	**343,91**	27973	2,6	**NR574-2E80M/4B**		145		
	4,8	1005	**301,59**	28399	3,0					
	5,0	969	**291,25**	28504	3,1					
	5,6	863	**258,87**	28839	3,5					
	6,5	738	**221,40**	29303	4,0					
	7,5	649	**194,15**	30390	4,0					
	2,7	1769	**529,93**	12048	0,9	**MR474-3E80M/4C**	1,34	133	119	IE3
	3,3	1480	**442,61**	16591	1,1	**NR474-3E80M/4C**		137		
	3,4	1399	**418,16**	17641	1,1	**MR474-2E80M/4B**	1,45	132		IE2
	4,2	1160	**346,07**	20191	1,3	**NR474-2E80M/4B**		136		
	4,3	1150	**219,00**	20209	1,3	**MR473-3E80M/6C**	1,47	111	118	IE3
	4,8	1019	**194,05**	21411	1,5	**NR473-3E80M/6C**		114		
	5,9	831	**157,90**	22920	1,9	**MR473-2E80M/6B**	1,50	111		IE2
						NR473-2E80M/6B		114		
	6,6	743	**219,00**	23568	2,1	**MR473-3E80M/4C**	1,34	111	118	IE3
	7,5	658	**194,05**	24146	2,4	**NR473-3E80M/4C**		114		
	9,2	537	**157,90**	24420	2,9	**MR473-2E80M/4B**	1,45	110		IE2
	10	475	**139,54**	23561	3,3	**NR473-2E80M/4B**		113		
	12	425	**124,85**	22805	3,6					

*: I [illegible] dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor [illegible] are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
0,55 0,75	5,3	912	**275,08**	10080	0,9	**MR374-3E80M/4C** **NR374-3E80M/4C** **MR374-2E80M/4B** **NR374-2E80M/4B**	1,34 1,45 	66 70 65 69	116	IE3 IE2
	5,9 6,7 8,4	827 728 586	**157,76** **138,72** **111,67**	11575 13026 13358	1,0 1,1 1,4	**MR373-3E80M/6C** **NR373-3E80M/6C** **MR373-2E80M/6B** **NR373-2E80M/6B**	1,47 1,50 	58 61 58 61	115	IE3 IE2
	9,2 10 13 15 17 20 23	534 470 379 333 294 248 211	**157,76** **138,72** **111,67** **97,92** **86,57** **72,81** **61,91**	13077 12684 12018 11616 11242 10724 10249	1,5 1,7 2,2 2,5 2,8 3,3 3,9	**MR373-3E80M/4C** **NR373-3E80M/4C** **MR373-2E80M/4B** **NR373-2E80M/4B**	1,34 1,45 	66 70 65 69	115	IE3 IE2
	6,8 8,2 9,6	724 600 513	**137,91** **114,14** **97,62**	6313 9261 10425	0,8 1,0 1,2	**MR283-3E80M/6C** **NR283-3E80M/6C** **MR283-2E80M/6B** **NR283-2E80M/6B**	1,47 1,50 	46 49 46 49	112	IE3 IE2
	11 13 15 17 19 23 27	467 387 331 291 258 217 185	**137,91** **114,14** **97,62** **85,60** **75,68** **63,65** **54,12**	10229 9817 9468 9171 8892 8502 8140	1,3 1,5 1,8 2,1 2,3 2,8 3,2	**MR283-3E80M/4C** **NR283-3E80M/4C** **MR283-2E80M/4B** **NR283-2E80M/4B**	1,34 1,45 	48 51 47 50	112	IE3 IE2
	9,7	507	**96,52**	6289	0,9	**MR273-3E80M/6C** **NR273-3E80M/6C** **MR273-2E80M/6B** **NR273-2E80M/6B**	1,47 1,50 	31 34 31 34	110	IE3 IE2
	10 12 13 15 17 20 24 29 34 40	470 411 385 328 285 250 207 173 145 125	**138,55** **121,03** **113,52** **96,52** **83,83** **73,35** **60,66** **50,59** **42,41** **36,55**	6598 7030 7199 7553 7789 7970 7896 7388 6930 6568	1,0 1,1 1,2 1,4 1,6 1,8 2,2 2,6 3,1 3,6	**MR273-3E80M/4C** **NR273-3E80M/4C** **MR273-2E80M/4B** **NR273-2E80M/4B**	1,34 1,45 	33 36 32 35	110	IE3 IE2
	14 16 17	358 313 294	**68,03** **59,43** **55,74**	7417 7446 7352	0,8 0,9 1,0	**MR203-3E80M/6C** **NR203-3E80M/6C** **MR203-2E80M/6B** **NR203-2E80M/6B**	1,47 1,50 	34 35 34 35	109	IE3 IE2
	21 24 26 31 33 35	231 202 190 161 150 140	**68,03** **59,43** **55,74** **47,39** **43,94** **41,16**	6986 6773 6671 6411 6290 6185	1,2 1,4 1,5 1,7 1,9 2,0	**MR203-3E80M/4C** **NR203-3E80M/4C** **MR203-2E80M/4B** **NR203-2E80M/4B**	1,34 1,45 	34 36 33 35	109	IE3 IE2

* : I pesi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor weights are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
0,55	40	123	**36,02**	5973	2,3	**MR203-3E80M/4C**	1,34	34	109	IE3
0,75	51	97	**28,35**	6418	2,9	**NR203-3E80M/4C**		36		
	59	84	**24,77**	6107	3,3	**MR203-2E80M/4B**	1,45	33		IE2
	62	79	**23,23**	5966	3,4	**NR203-2E80M/4B**		35		
	21	235	**69,16**	4033	0,9	**MR173-3E80M/4C**	1,34	23	108	IE3
	25	196	**57,76**	3944	1,0	**NR173-3E80M/4C**		25		
	29	169	**49,81**	3857	1,2	**MR173-2E80M/4B**	1,45	22		IE2
	32	156	**45,90**	3804	1,3	**NR173-2E80M/4B**		24		
	34	146	**42,87**	3758	1,4					
	40	123	**36,24**	3639	1,6					
	48	103	**30,26**	3503	1,9					
	56	89	**26,10**	3388	2,2					
	69	72	**20,92**	3816	2,8	**MR172-3E80M/4C**	1,34	22	108	IE3
	79	63	**18,28**	3633	3,2	**NR172-3E80M/4C**		24		
						MR172-2E80M/4B	1,45	21		IE2
						NR172-2E80M/4B		23		
	29	172	**50,51**	2432	0,8	**MR103-3E80M/4C**	1,34	23	107	IE3
	33	152	**44,60**	2414	0,9	**NR103-3E80M/4C**		24		
	35	142	**41,66**	2401	1,0	**MR103-2E80M/4B**	1,45	22		IE2
	41	120	**35,21**	2358	1,2	**NR103-2E80M/4B**		23		
	45	110	**32,25**	2331	1,3					
	49	100	**29,40**	2300	1,4					
	58	85	**24,86**	2178	1,5					
	66	75	**21,96**	2134	1,6					
	71	70	**20,51**	2108	1,7					
	84	59	**17,33**	2042	1,9					
	91	55	**15,95**	2045	2,1	**MR102-3E80M/4C**	1,34	22	107	IE3
	103	49	**14,08**	1988	2,3	**NR102-3E80M/4C**		23		
	110	46	**13,15**	1956	2,3	**MR102-2E80M/4B**	1,45	21		IE2
	130	39	**11,12**	1877	2,6	**NR102-2E80M/4B**		22		
	142	35	**10,18**	1836	2,8					
	156	32	**9,29**	1793	2,9					
	181	28	**8,01**	1724	3,2					
	209	24	**6,93**	1641	3,7					
	45	109	**32,02**	746	0,8	**MR003-3E80M/4C**	1,34	19	106	IE3
	51	96	**28,38**	908	0,9	**NR003-3E80M/4C**		20		
	60	82	**24,13**	1128	1,0	**MR003-2E80M/4B**	1,45	18		IE2
	68	72	**21,26**	1206	1,1	**NR003-2E80M/4B**		19		
	70	70	**20,66**	1290	1,2					
	76	65	**19,17**	1353	1,3					
	80	62	**18,20**	1343	1,3					
	86	58	**16,89**	1396	1,4					
	99	50	**14,67**	1412	1,6					
	107	46	**13,61**	1450	1,7					
	130	38	**11,14**	1789	1,7	**MR002-3E80M/4C**	1,34	17	106	IE3
	147	34	**9,87**	1772	2,3	**NR002-3E80M/4C**		18		
	167	30	**8,70**	1738	2,5	**MR002-2E80M/4B**	1,45	16		IE2
	172	29	**8,45**	1758	2,5	**NR002-2E80M/4B**		17		
	185	27	**7,84**	1747	2,6					
	195	26	**7,45**	1719	2,8					
	210	24	**6,91**	1706	2,9					
	242	21	**6,00**	1651	3,2					
	260	19	**5,57**	1636	3,3					
	318	16	**4,56**	1528	3,7					

*

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
0,55	372	14	**3,90**	1494	4,0	**MR002-3E80M/4C**	1,34	17	106	IE3
0,75	401	13	**3,62**	1476	4,0	**NR002-3E80M/4C**		18		
						MR002-2E80M/4B	1,45	16		IE2
						NR002-2E80M/4B		17		
	410	12	**6,91**	1482	4,0	**MR002-3E71M/2C**	1,19	15	106	IE3
	472	11	**6,00**	1410	4,0	**NR002-3E71M/2C**		16		
	508	10	**5,57**	1373	4,0	**MR002-2E71M/2B**	1,25	14		IE2
	621	8	**4,56**	1283	4,0	**NR002-2E71M/2B**		15		
	726	7	**3,90**	1213	4,0					
	782	6	**3,62**	1181	4,0					
0,75	0,27	23053	**5357,43**	51426	0,8	**MR976-3E80M/4D**	1,77	1093	135	IE3
1,0	0,32	19298	**4474,67**	86315	0,9	**NR976-3E80M/4D**		1143		
	0,34	18245	**4227,50**	93574	1,0	**MR976-2E80M/4C**	1,89	1092		IE2
	0,40	15535	**3594,81**	108770	1,2	**NR976-2E80M/4C**		1142		
	0,51	12298	**2836,64**	123352	1,5					
	0,71	8968	**2027,97**	135224	2,0	**MR975-3E80M/4D**	1,77	1091	135	IE3
	0,80	8057	**1820,78**	138145	2,2	**NR975-3E80M/4D**		1141		
	0,93	6863	**1552,10**	141735	2,6	**MR975-2E80M/4C**	1,89	1090		IE2
	1,1	6056	**1368,27**	144020	3,0	**NR975-2E80M/4C**		1140		
	1,2	5376	**1213,85**	145857	3,3					
	0,42	14764	**3441,02**	60861	0,9	**MR876-3E80M/4D**	1,77	608	132	IE3
	0,50	12443	**2894,28**	75635	1,0	**NR876-3E80M/4D**		613		
	0,59	10599	**2460,65**	84867	1,2	**MR876-2E80M/4C**	1,89	607		IE2
	0,69	9097	**2108,33**	91252	1,4	**NR876-2E80M/4C**		612		
	0,75	8471	**1924,32**	93667	1,5	**MR875-3E80M/4D**	1,77	605	132	IE3
	0,85	7498	**1700,56**	97048	1,7	**NR875-3E80M/4D**		610		
	0,95	6710	**1521,55**	99810	1,9	**MR875-2E80M/4C**	1,89	604		IE2
	1,1	5902	**1336,15**	102338	2,2	**NR875-2E80M/4C**		609		
	1,2	5351	**1210,51**	103968	2,4					
	1,4	4630	**1049,18**	105993	2,8					
	1,6	4046	**915,85**	107547	3,2					
	1,8	3573	**807,91**	108753	3,6					
	0,81	7871	**1791,91**	49401	1,0	**MR775-3E80M/4D**	1,77	260	129	IE3
	0,91	6987	**1589,68**	52618	1,1	**NR775-3E80M/4D**		318		
	1,0	6234	**1417,41**	55079	1,3	**MR775-2E80M/4C**	1,89	259		IE2
	1,2	5518	**1252,60**	57207	1,4	**NR775-2E80M/4C**		317		
	1,3	4939	**1120,74**	58706	1,6					
	1,5	4345	**984,18**	60240	1,8					
	1,6	4134	**594,92**	60775	1,9	**MR774-3E90S/6B**	1,96	241	128	IE3
	1,8	3700	**532,29**	61799	2,2	**NR774-3E90S/6B**		299		
	2,0	3255	**467,43**	62793	2,5	**MR774-2E90S/6A**	2,00	239		IE2
	2,3	2915	**418,17**	63516	2,7	**NR774-2E90S/6A**		297		
	2,4	2694	**594,92**	63960	3,0	**MR774-3E80M/4D**	1,77	230	128	IE3
	2,7	2411	**532,29**	64524	3,3	**NR774-3E80M/4D**		283		
	3,1	2121	**467,43**	65082	3,8	**MR774-2E80M/4C**	1,89	229		IE2
	3,5	1900	**418,17**	66231	4,0	**NR774-2E80M/4C**		282		

*: I pesi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor weights are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
0,75	1,5	4388	**995,91**	25927	1,0	**MR675-3E80M/4D**	1,77	241	126	IE3
1,0	1,7	3860	**874,56**	28823	1,1	**NR675-3E80M/4D**		252		
						MR675-2E80M/4C	1,89	240		IE2
						NR675-2E80M/4C		251		
	1,9	3476	**500,39**	30699	1,2	**MR674-3E90S/6B**	1,96	229	125	IE3
	2,1	3077	**442,20**	32446	1,4	**NR674-3E90S/6B**		239		
	2,5	2618	**376,69**	34190	1,6	**MR674-2E90S/6A**	2,00	227		IE2
						NR674-2E90S/6A		237		
	2,9	2265	**500,39**	35432	1,9	**MR674-3E80M/4D**	1,77	226	125	IE3
	3,3	2005	**442,20**	36291	2,1	**NR674-3E80M/4D**		236		
	3,8	1706	**376,69**	37214	2,5	**MR674-2E80M/4C**	1,89	225		IE2
	4,5	1469	**323,82**	37899	2,9	**NR674-2E80M/4C**		235		
	5,2	1276	**281,02**	38425	3,4					
	5,9	1117	**245,67**	38842	3,8					
	6,7	983	**215,97**	40060	4,0					
	2,4	2797	**402,12**	21008	1,1	**MR574-3E90S/6B**	1,96	145	122	IE3
						NR574-3E90S/6B		141		
						MR574-2E90S/6A	2,00	143		IE2
						NR574-2E90S/6A		139		
	2,5	2596	**574,90**	22116	1,2	**MR574-3E80M/4D**	1,77	138	122	IE3
	3,0	2197	**485,89**	24064	1,4	**NR574-3E80M/4D**		135		
	3,6	1823	**402,12**	25640	1,6	**MR574-2E80M/4C**	1,89	137		IE2
	4,2	1560	**343,91**	26587	1,9	**NR574-2E80M/4C**		134		
	4,8	1371	**301,59**	27250	2,2					
	5,0	1322	**291,25**	27413	2,3					
	5,6	1176	**258,87**	27885	2,6					
	6,5	1007	**221,40**	28404	3,0					
	7,5	884	**194,15**	28760	3,4					
	8,4	783	**171,64**	29042	3,8					
	10	660	**144,37**	30258	4,0					
	3,5	1894	**418,16**	8853	0,8	**MR474-3E80M/4D**	1,77	138	119	IE3
	4,2	1571	**346,07**	15203	1,0	**NR474-3E80M/4D**		142		
						MR474-2E80M/4C	1,89	137		IE2
						NR474-2E80M/4C		141		
	4,3	1551	**219,00**	15551	1,0	**MR473-3E90S/6B**	1,96	99	118	IE3
	4,9	1374	**194,05**	17820	1,1	**NR473-3E90S/6B**		101		
	6,0	1120	**157,90**	20498	1,4	**MR473-2E90S/6A**	2,00	97		IE2
						NR473-2E90S/6A		99		
	6,6	1014	**219,00**	21451	1,5	**MR473-3E80M/4D**	1,77	95	118	IE3
	7,5	899	**194,05**	22407	1,7	**NR473-3E80M/4D**		98		
	9,2	733	**157,90**	23603	2,1	**MR473-2E80M/4C**	1,89	94		IE2
	10	648	**139,54**	23025	2,4	**NR473-2E80M/4C**		97		
	12	580	**124,85**	22325	2,7					
	13	510	**109,64**	21522	3,0					
	16	427	**91,58**	20436	3,6					
	6,8	982	**138,72**	8562	0,8	**MR373-3E90S/6B**	1,96	59	115	IE3
	8,5	791	**111,67**	12140	1,0	**NR373-3E90S/6B**		61		
						MR373-2E90S/6A	2,00	57		IE2
						NR373-2E90S/6A		59		

*

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
0,75 1,0	9,2 10 13 15 17 20 23 27 30	729 642 517 454 402 339 288 247 224	**157,76** **138,72** **111,67** **97,92** **86,57** **72,81** **61,91** **53,04** **48,00**	12354 12049 11507 11168 10846 10391 9965 9564 9307	1,1 1,3 1,6 1,8 2,0 2,4 2,8 3,3 3,7	**MR373-3E80M/4D** **NR373-3E80M/4D** **MR373-2E80M/4C** **NR373-2E80M/4C**	1,77 1,89 	54 56 53 55	115	IE3 IE2
	9,7	692	**97,62**	7187	0,9	**MR283-3E90S/6B** **NR283-3E90S/6B** **MR283-2E90S/6A** **NR283-2E90S/6A**	1,96 2,00 	46 48 44 46	112	IE3 IE2
	11 13 15 17 19 23 27 31 35	638 529 453 397 352 296 252 216 196	**137,91** **114,14** **97,62** **85,60** **75,68** **63,65** **54,12** **46,37** **41,96**	8472 9240 8974 8738 8509 8180 7866 7567 7374	0,9 1,1 1,3 1,5 1,7 2,0 2,4 2,6 2,8	**MR283-3E80M/4D** **NR283-3E80M/4D** **MR283-2E80M/4C** **NR283-2E80M/4C**	1,77 1,89 	44 49 43 48	112	IE3 IE2
	12 13 15 17 20 24 29 34 40 48	561 526 448 389 341 282 236 198 171 142	**121,03** **113,52** **96,52** **83,83** **73,35** **60,66** **50,59** **42,41** **36,55** **30,48**	5581 5868 6462 6842 7104 7338 7441 7036 6660 6232	0,8 0,9 1,0 1,2 1,3 1,6 1,9 2,3 2,6 3,2	**MR273-3E80M/4D** **NR273-3E80M/4D** **MR273-2E80M/4C** **NR273-2E80M/4C**	1,77 1,89 	35 37 34 36	110	IE3 IE2
	21 24 26 31 33 35 40 51 59 62	316 276 259 221 205 192 168 132 115 108	**68,03** **59,43** **55,74** **47,39** **43,94** **41,16** **36,02** **28,35** **24,77** **23,23**	6569 6409 6329 6121 6021 5933 5752 6540 6214 6067	0,9 1,0 1,1 1,3 1,4 1,5 1,7 2,1 2,4 2,5	**MR203-3E80M/4D** **NR203-3E80M/4D** **MR203-2E80M/4C** **NR203-2E80M/4C**	1,77 1,89 	33 35 32 34	109	IE3 IE2
	63 72 77 90	109 95 89 76	**23,01** **20,10** **18,85** **16,03**	5957 5671 5541 5227	2,6 2,7 2,9 3,2	**MR202-3E80M/4D** **NR202-3E80M/4D** **MR202-2E80M/4C** **NR202-2E80M/4C**	1,77 1,89 	33 34 32 33	109	IE3 IE2
	29 32 34 40 48 56	231 213 199 169 141 122	**49,81** **45,90** **42,87** **36,24** **30,26** **26,10**	3498 3473 3449 3377 3285 3200	0,9 0,9 1,0 1,2 1,4 1,6	**MR173-3E80M/4D** **NR173-3E80M/4D** **MR173-2E80M/4C** **NR173-2E80M/4C**	1,77 1,89 	23 24 22 23	108	IE3 IE2

* : I pesi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor weights are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
0,75	69	99	**20,92**	3487	2,0	**MR172-3E80M/4D**	1,77	23	108	IE3
1,0	79	87	**18,28**	3476	2,3	**NR172-3E80M/4D**		25		
	85	81	**17,14**	3464	2,5	**MR172-2E80M/4C**	1,89	22		IE2
	99	69	**14,57**	3394	2,8	**NR172-2E80M/4C**		24		
	115	60	**12,66**	3224	3,2					
	131	53	**11,08**	3071	3,4					
	41	164	**35,21**	2088	0,9	**MR103-3E80M/4D**	1,77	22	107	IE3
	45	150	**32,25**	2084	0,9	**NR103-3E80M/4D**		25		
	49	137	**29,40**	2074	1,0	**MR103-2E80M/4C**	1,89	21		IE2
	58	116	**24,86**	1965	1,1	**NR103-2E80M/4C**		24		
	66	102	**21,96**	1946	1,2					
	71	96	**20,51**	1933	1,3					
	84	81	**17,33**	1894	1,4					
	91	75	**15,95**	1923	1,5	**MR102-3E80M/4D**	1,77	22	107	IE3
	103	67	**14,08**	1880	1,7	**NR102-3E80M/4D**		23		
	110	62	**13,15**	1855	1,7	**MR102-2E80M/4C**	1,89	21		IE2
	130	53	**11,12**	1792	1,9	**NR102-2E80M/4C**		22		
	142	48	**10,18**	1758	2,1					
	156	44	**9,29**	1722	2,2					
	181	38	**8,01**	1663	2,4					
	209	33	**6,93**	1582	2,7					
	224	31	**6,48**	1556	2,8					
	265	26	**5,47**	1492	3,1					
	289	24	**5,01**	1459	3,4					
	317	22	**4,57**	1424	3,5					
	60	112	**24,13**	276	0,7	**MR003-3E80M/4D**	1,77	19	106	IE3
	68	99	**21,26**	434	0,8	**NR003-3E80M/4D**		20		
	70	96	**20,66**	560	0,9	**MR003-2E80M/4C**	1,89	18		IE2
	76	89	**19,17**	676	0,9	**NR003-2E80M/4C**		19		
	80	85	**18,20**	683	1,0					
	86	79	**16,89**	783	1,0					
	99	68	**14,67**	857	1,2					
	107	63	**13,61**	934	1,3					
	130	53	**11,14**	1465	1,2	**MR002-3E80M/4D**	1,77	19	106	IE3
	147	47	**9,87**	1480	1,7	**NR002-3E80M/4D**		20		
	167	41	**8,70**	1472	1,8	**MR002-2E80M/4C**	1,89	18		IE2
	172	40	**8,45**	1508	1,8	**NR002-2E80M/4C**		19		
	185	37	**7,84**	1515	1,9					
	195	35	**7,45**	1491	2,0					
	210	33	**6,91**	1495	2,1					
	242	28	**6,00**	1458	2,3					
	260	26	**5,57**	1457	2,4					
	318	22	**4,56**	1360	2,7					
	372	19	**3,90**	1350	3,0					
	401	17	**3,62**	1343	3,1					
	417	16	**6,91**	1421	3,3	**MR002-3E80M/2B**	1,59	19	106	IE3
	480	14	**6,00**	1371	3,6	**NR002-3E80M/2B**		20		
	517	13	**5,57**	1355	3,9	**MR002-2E80M/2A**	1,67	18		IE2
	632	11	**4,56**	1266	4,0	**NR002-2E80M/2A**		19		
	738	9	**3,90**	1223	4,0					
	796	9	**3,62**	1190	4,0					

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
1,1	0,40	22784	**3594,81**	54822	0,8	**MR976-3E90S/4C**	2,46	1097	135	IE3
1,5	0,51	18037	**2836,64**	94915	1,0	**NR976-3E90S/4C**		1147		
						MR976-2E90S/4B	2,60	1095		IE2
						NR976-2E90S/4B		1145		
	0,71	13153	**2027,97**	119815	1,4	**MR975-3E90S/4C**	2,46	1095	135	IE3
	0,80	11817	**1820,78**	125260	1,5	**NR975-3E90S/4C**		1145		
	0,93	10066	**1552,10**	131719	1,8	**MR975-2E90S/4B**	2,60	1093		IE2
	1,1	8881	**1368,27**	135508	2,0	**NR975-2E90S/4B**		1143		
	1,2	7885	**1213,85**	138679	2,3					
	1,3	7035	**1082,31**	141234	2,6					
	1,6	5960	**914,74**	144282	3,0					
	1,7	5488	**842,80**	145559	3,3					
	0,75	12424	**1924,32**	75738	1,0	**MR875-3E90S/4C**	2,46	600	132	IE3
	0,85	10997	**1700,56**	83016	1,2	**NR875-3E90S/4C**		605		
	0,95	9841	**1521,55**	88196	1,3	**MR875-2E90S/4B**	2,60	598		IE2
	1,1	8657	**1336,15**	92964	1,5	**NR875-2E90S/4B**		603		
	1,2	7849	**1210,51**	95787	1,7					
	1,4	6791	**1049,18**	99548	1,9					
	1,6	5934	**915,85**	102241	2,2					
	1,8	5240	**807,91**	104289	2,5					
	2,0	4665	**718,74**	105897	2,8					
	2,3	4182	**643,84**	107191	3,1					
	2,7	3502	**537,75**	108929	3,7					
	1,2	8093	**1252,60**	48526	1,0	**MR775-3E90S/4C**	2,46	338	129	IE3
	1,3	7244	**1120,74**	51722	1,1	**NR775-3E90S/4C**		408		
	1,5	6373	**984,18**	54641	1,3	**MR775-2E90S/4B**	2,60	336		IE2
						NR775-2E90S/4B		406		
	1,6	6095	**594,92**	55503	1,3	**MR774-3E90L/6C**	2,75	310	128	IE3
	1,8	5455	**532,29**	57384	1,5	**NR774-3E90L/6C**		376		
	2,0	4799	**467,43**	59184	1,7	**MR774-2E90L/6B**	2,90	308		IE2
	2,2	4297	**418,17**	60431	1,9	**NR774-2E90L/6B**		374		
	2,4	3951	**594,92**	61197	2,0	**MR774-3E90S/4C**	2,46	305	128	IE3
	2,7	3536	**532,29**	62157	2,3	**NR774-3E90S/4C**		371		
	3,1	3111	**467,43**	63092	2,6	**MR774-2E90S/4B**	2,60	303		IE2
	3,5	2786	**418,17**	63773	2,9	**NR774-2E90S/4B**		369		
	4,0	2406	**361,62**	64534	3,3					
	4,6	2087	**313,11**	65147	3,8					
	5,3	1828	**273,85**	66837	4,0					
	2,1	4537	**442,20**	24922	0,9	**MR674-3E90L/6C**	2,75	234	125	IE3
	2,5	3860	**376,69**	28823	1,1	**NR674-3E90L/6C**		244		
						MR674-2E90L/6B	2,90	232		IE2
						NR674-2E90L/6B		242		
	2,9	3322	**500,39**	31393	1,3	**MR674-3E90S/4C**	2,46	230	125	IE3
	3,3	2941	**442,20**	33000	1,5	**NR674-3E90S/4C**		240		
	3,8	2502	**376,69**	34662	1,7	**MR674-2E90S/4B**	2,60	228		IE2
	4,5	2154	**323,82**	35806	2,0	**NR674-2E90S/4B**		238		
	5,2	1872	**281,02**	36711	2,3					
	5,9	1638	**245,67**	37414	2,6					
	6,7	1442	**215,97**	37974	3,0					

*

✱ : I pesi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor weights are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
1,1 1,5	3,6 4,2 4,8 5,0 5,6 6,5 7,5 8,4 10	2674 2288 2010 1939 1725 1477 1297 1149 969	**402,12** **343,91** **301,59** **291,25** **258,87** **221,40** **194,15** **171,64** **144,37**	21701 23647 24880 25139 26019 26885 27495 27971 28517	1,1 1,3 1,5 1,5 1,7 2,0 2,3 2,6 3,1	**MR574-3E90S/4C** **NR574-3E90S/4C** **MR574-2E90S/4B** **NR574-2E90S/4B**	2,46 2,60	151 147 149 145	122	IE3 IE2
	6,0	1654	**157,90**	13930	0,9	**MR473-3E90L/6C** **NR473-3E90L/6C** **MR473-2E90L/6B** **NR473-2E90L/6B**	2,75 2,90	98 100 96 98	118	IE3 IE2
	6,6 7,5 9,2 10 12 13 16 17	1489 1319 1075 951 851 748 626 592	**219,00** **194,05** **157,90** **139,54** **124,85** **109,64** **91,58** **86,52**	16399 18456 20912 21983 21485 20784 19820 19519	1,0 1,2 1,4 1,6 1,8 2,1 2,5 2,6	**MR473-3E90S/4C** **NR473-3E90S/4C** **MR473-2E90S/4B** **NR473-2E90S/4B**	2,46 2,60	97 99 95 97	118	IE3 IE2
	10 13 15 17 20 23 27 30	942 759 666 590 497 423 363 329	**138,72** **111,67** **97,92** **86,57** **72,81** **61,91** **53,04** **48,00**	9428 10612 10383 10152 9807 9469 9139 8923	0,9 1,1 1,2 1,4 1,7 1,9 2,3 2,5	**MR373-3E90S/4C** **NR373-3E90S/4C** **MR373-2E90S/4B** **NR373-2E90S/4B**	2,46 2,60	58 61 56 59	115	IE3 IE2
	40 46	249 221	**23,33** **20,62**	9617 9198	3,3 3,7	**MR372-3E90L/6C** **NR372-3E90L/6C** **MR372-2E90L/6B** **NR372-2E90L/6B**	2,75 2,90	60 64 58 62	115	IE3 IE2
	15 17 19 23 27 31 35	664 583 516 435 370 317 288	**97,62** **85,60** **75,68** **63,65** **54,12** **46,37** **41,96**	7865 7981 7840 7617 7388 7157 7003	0,9 1,0 1,2 1,4 1,6 1,8 1,9	**MR283-3E90S/4C** **NR283-3E90S/4C** **MR283-2E90S/4B** **NR283-2E90S/4B**	2,46 2,60	50 54 48 52	112	IE3 IE2
	37 43	269 231	**25,23** **21,66**	8462 7998	2,2 2,5	**MR282-3E90L/6C** **NR282-3E90L/6C** **MR282-2E90L/6B** **NR282-2E90L/6B**	2,75 2,90	48 52 46 50	112	IE3 IE2
	48 57 67	210 175 150	**30,37** **25,23** **21,66**	7724 7220 6832	2,7 3,0 3,3	**MR282-3E90S/4C** **NR282-3E90S/4C** **MR282-2E90S/4B** **NR282-2E90S/4B**	2,46 2,60	50 53 48 51	112	IE3 IE2

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
1,1	17	571	**83,83**	3638	0,8	**MR273-3E90S/4C**	2,46	40	110	IE3
1,5	20	500	**73,35**	4300	0,9	**NR273-3E90S/4C**		41		
	24	414	**60,66**	5020	1,1	**MR273-2E90S/4B**	2,60	38		IE2
	29	346	**50,59**	5507	1,3	**NR273-2E90S/4B**		39		
	34	290	**42,41**	5828	1,5					
	40	250	**36,55**	6004	1,8					
	48	209	**30,48**	6122	2,2					
	56	180	**25,89**	5979	2,5	**MR272-3E90S/4C**	2,46	41	110	IE3
	68	149	**21,43**	5575	3,0	**NR272-3E90S/4C**		43		
	79	127	**18,33**	5265	3,5	**MR272-2E90S/4B**	2,60	39		IE2
						NR272-2E90S/4B		41		
	31	324	**47,39**	5612	0,9	**MR203-3E90S/4C**	2,46	39	109	IE3
	33	301	**43,94**	5549	0,9	**NR203-3E90S/4C**		42		
	35	281	**41,16**	5492	1,0	**MR203-2E90S/4B**	2,60	37		IE2
	40	247	**36,02**	5366	1,1	**NR203-2E90S/4B**		40		
	51	193	**28,35**	5583	1,4					
	59	169	**24,77**	5753	1,6					
	62	159	**23,23**	5811	1,7					
	63	159	**23,01**	6089	1,8	**MR202-3E90S/4C**	2,46	41	109	IE3
	72	139	**20,10**	5787	1,9	**NR202-3E90S/4C**		43		
	77	131	**18,85**	5650	2,0	**MR202-2E90S/4B**	2,60	39		IE2
	90	111	**16,03**	5319	2,2	**NR202-2E90S/4B**		41		
	98	103	**14,86**	5173	2,3					
	104	97	**13,92**	5050	2,4					
	119	85	**12,18**	4810	2,7					
	134	75	**10,81**	4605	2,9					
	144	70	**10,07**	4490	3,0					
	173	59	**8,40**	4207	3,4					
	40	247	**36,24**	2920	0,8	**MR173-3E90S/4C**	2,46	30	108	IE3
	48	207	**30,26**	2903	1,0	**NR173-3E90S/4C**		32		
	56	179	**26,10**	2870	1,1	**MR173-2E90S/4B**	2,60	28		IE2
						NR173-2E90S/4B		30		
	69	145	**20,92**	2679	1,4	**MR172-3E90S/4C**	2,46	29	108	IE3
	79	127	**18,28**	2770	1,6	**NR172-3E90S/4C**		30		
	85	119	**17,14**	2803	1,7	**MR172-2E90S/4B**	2,60	27		IE2
	99	101	**14,57**	2857	1,9	**NR172-2E90S/4B**		28		
	115	88	**12,66**	2877	2,2					
	131	77	**11,08**	2877	2,3					
	152	66	**9,53**	2710	2,6					
	162	62	**8,94**	2706	2,6					
	191	53	**7,60**	2683	3,0					
	220	46	**6,60**	2618	3,1					
	251	40	**5,78**	2492	3,3					
	58	170	**24,86**	1593	0,8	**MR103-3E90S/4C**	2,46	29	107	IE3
	66	150	**21,96**	1618	0,8	**NR103-3E90S/4C**		31		
	71	140	**20,51**	1626	0,9	**MR103-2E90S/4B**	2,60	27		IE2
	84	119	**17,33**	1634	0,9	**NR103-2E90S/4B**		29		
	91	111	**15,95**	1708	1,0	**MR102-3E90S/4C**	2,46	30	107	IE3
	103	98	**14,08**	1691	1,1	**NR102-3E90S/4C**		31		
	110	91	**13,15**	1678	1,1	**MR102-2E90S/4B**	2,60	28		IE2
	130	77	**11,12**	1643	1,3	**NR102-2E90S/4B**		29		

*

✱ : I pesi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor weights are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
1,1	142	71	**10,18**	1621	1,4	**MR102-3E90S/4C**	2,46	30	107	IE3
1,5	156	65	**9,29**	1597	1,5	**NR102-3E90S/4C**		31		
	181	56	**8,01**	1555	1,6	**MR102-2E90S/4B**	2,60	28		IE2
	209	48	**6,93**	1479	1,9	**NR102-2E90S/4B**		29		
	224	45	**6,48**	1460	1,9					
	265	38	**5,47**	1410	2,1					
	289	35	**5,01**	1384	2,3					
	317	32	**4,57**	1356	2,4					
	368	28	**3,94**	1310	2,5					
	415	24	**6,93**	1271	2,9	**MR102-3E80M/2C**	2,26	25	107	IE3
	445	23	**6,48**	1250	3,1	**NR102-3E80M/2C**		26		
	526	19	**5,47**	1197	3,4	**MR102-2E80M/2B**	2,36	24		IE2
						NR102-2E80M/2B		25		
	99	100	**14,67**	-	0,8	**MR003-3E90S/4C**	2,46	24	106	IE3
	107	93	**13,61**	33	0,9	**NR003-3E90S/4C**		25		
						MR003-2E90S/4B	2,60	22		IE2
						NR003-2E90S/4B		23		
	130	77	**11,14**	896	0,8	**MR002-3E90S/4C**	2,46	24	106	IE3
	147	69	**9,87**	969	1,1	**NR002-3E90S/4C**		25		
	167	60	**8,70**	1007	1,2	**MR002-2E90S/4B**	2,60	22		IE2
	172	59	**8,45**	1070	1,3	**NR002-2E90S/4B**		23		
	185	55	**7,84**	1109	1,3					
	195	52	**7,45**	1093	1,4					
	210	48	**6,91**	1125	1,4					
	242	42	**6,00**	1121	1,6					
	260	39	**5,57**	1144	1,7					
	318	32	**4,56**	1066	1,8					
	372	27	**3,90**	1098	2,0					
	401	25	**3,62**	1109	2,1					
	417	24	**6,91**	1234	2,2	**MR002-3E80M/2C**	2,26	18	106	IE3
	480	21	**6,00**	1202	2,5	**NR002-3E80M/2C**		20		
	517	20	**5,57**	1197	2,6	**MR002-2E80M/2B**	2,36	17		IE2
	632	16	**4,56**	1118	2,9	**NR002-2E80M/2B**		19		
	738	14	**3,90**	1105	3,2					
	796	13	**3,62**	1097	3,3					
1,5	0,71	17935	**2027,97**	95566	1,0	**MR975-3E90L/4D**	3,30	1031	135	IE3
2,0	0,80	16114	**1820,78**	105780	1,1	**NR975-3E90L/4D**		1081		
	0,93	13727	**1552,10**	117320	1,3	**MR975-2E90L/4C**	3,40	1030		IE2
	1,1	12111	**1368,27**	124101	1,5	**NR975-2E90L/4C**		1080		
	1,2	10752	**1213,85**	129104	1,7					
	1,3	9594	**1082,31**	133120	1,9					
	1,6	8128	**914,74**	137923	2,2					
	1,7	7484	**842,80**	139900	2,4					
	1,9	6675	**750,24**	142278	2,7					
	2,2	5906	**662,54**	144432	3,0					
	2,5	5259	**588,87**	146168	3,4					
	0,85	14996	**1700,56**	59105	0,9	**MR875-3E90L/4D**	3,30	595	132	IE3
	0,95	13420	**1521,55**	69941	1,0	**NR875-3E90L/4D**		600		
	1,1	11805	**1336,15**	79031	1,1	**MR875-2E90L/4C**	3,40	594		IE2
	1,2	10703	**1210,51**	84391	1,2	**NR875-2E90L/4C**		599		
	1,4	9260	**1049,18**	90598	1,4					
	1,6	8092	**915,85**	95067	1,6					
	1,8	7145	**807,91**	98483	1,8					

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
1,5	2,1	6145	**446,42**	101594	2,1	**MR874-3E100L/6B**	3,50	587	131	IE3
2,0	2,4	5389	**390,74**	103902	2,4	**NR874-3E100L/6B**		592		
	2,8	4775	**345,67**	105596	2,7	**MR874-2E100L/6A**	3,72	584		IE2
	3,3	4044	**292,15**	107551	3,2	**NR874-2E100L/6A**		589		
	4,0	3320	**239,61**	109333	3,9					
	1,6	8181	**594,92**	48173	1,0	**MR774-3E100L/6B**	3,50	323	128	IE3
	1,8	7322	**532,29**	51444	1,1	**NR774-3E100L/6B**		394		
	2,0	6441	**467,43**	54425	1,2	**MR774-2E100L/6A**	3,72	320		IE2
	2,3	5768	**418,17**	56392	1,4	**NR774-2E100L/6A**		391		
	2,4	5388	**594,92**	57573	1,5	**MR774-3E90L/4D**	3,30	318	128	IE3
	2,7	4822	**532,29**	59016	1,7	**NR774-3E90L/4D**		385		
	3,1	4242	**467,43**	60495	1,9	**MR774-2E90L/4C**	3,40	317		IE2
	3,5	3799	**418,17**	61555	2,1	**NR774-2E90L/4C**		384		
	4,0	3281	**361,62**	62723	2,4					
	4,6	2845	**313,11**	63650	2,8					
	5,3	2492	**273,85**	64365	3,2					
	6,0	2200	**241,42**	64933	3,6					
	6,8	1954	**214,17**	65755	4,0					
	2,9	4531	**500,39**	25002	0,9	**MR674-3E90L/4D**	3,30	237	125	IE3
	3,3	4010	**442,20**	28028	1,1	**NR674-3E90L/4D**		248		
	3,8	3412	**376,69**	30992	1,3	**MR674-2E90L/4C**	3,40	236		IE2
	4,5	2937	**323,82**	33014	1,5	**NR674-2E90L/4C**		247		
	5,2	2553	**281,02**	34480	1,7					
	5,9	2234	**245,67**	35538	1,9					
	6,7	1966	**215,97**	36416	2,2					
	4,2	3120	**343,91**	19040	1,0	**MR574-3E90L/4D**	3,30	153	122	IE3
	4,8	2741	**301,59**	21328	1,1	**NR574-3E90L/4D**		137		
						MR574-2E90L/4C	3,40	152		IE2
						NR574-2E90L/4C		136		
	5,7	2351	**167,32**	23351	1,3	**MR573-3E100L/6B**	3,50	140	121	IE3
	6,2	2158	**153,61**	24242	1,4	**NR573-3E100L/6B**		136		
	7,1	1891	**134,45**	25329	1,6	**MR573-2E100L/6A**	3,72	137		IE2
	8,0	1675	**118,95**	26174	1,8	**NR573-2E100L/6A**		133		
	9,5	1418	**100,53**	27098	2,1					
	12	1163	**82,45**	27932	2,6					
	13	1028	**72,81**	28345	2,9					
	15	915	**64,72**	28677	3,3					
	17	775	**54,74**	29069	3,9					
	20	691	**48,74**	29444	4,0					
	7,5	1800	**194,05**	11156	0,9	**MR473-3E90L/4D**	3,30	100	118	IE3
	9,2	1468	**157,90**	16686	1,1	**NR473-3E90L/4D**		102		
	10	1298	**139,54**	18683	1,2	**MR473-2E90L/4C**	3,40	99		IE2
	12	1162	**124,85**	20098	1,3	**NR473-2E90L/4C**		101		
	13	1021	**109,64**	19941	1,5					
	16	855	**91,58**	19117	1,8					
	17	808	**86,52**	18854	1,9					
	18	733	**157,90**	18431	2,1	**MR473-3E90S/2B**	2,97	98	118	IE3
	21	648	**139,54**	17860	2,4	**NR473-3E90S/2B**		100		
	23	580	**124,85**	17348	2,7	**MR473-2E90S/2A**	3,19	97		IE2
	26	510	**109,64**	16756	3,0	**NR473-2E90S/2A**		99		

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
1,5	15	910	**97,92**	9486	0,9	**MR373-3E90L/4D**	3,30	61	115	IE3
2,0	17	805	**86,57**	9359	1,0	**NR373-3E90L/4D**		64		
	20	678	**72,81**	9140	1,2	**MR373-2E90L/4C**	3,40	60		IE2
	23	577	**61,91**	8902	1,4	**NR373-2E90L/4C**		63		
	27	495	**53,04**	8653	1,7					
	30	448	**48,00**	8483	1,8					
	41	335	**23,33**	9704	2,4	**MR372-3E100L/6B**	3,50	62	115	IE3
	46	296	**20,62**	9272	2,8	**NR372-3E100L/6B**		64		
	52	265	**18,45**	8902	3,1	**MR372-2E100L/6A**	3,72	59		IE2
	59	233	**16,20**	8491	3,5	**NR372-2E100L/6A**		61		
	62	221	**23,33**	8331	3,6	**MR372-3E90L/4D**	3,30	60	115	IE3
	70	196	**20,62**	7967	3,9	**NR372-3E90L/4D**		62		
	79	175	**18,45**	7656	4,0	**MR372-2E90L/4C**	3,40	59		IE2
						NR372-2E90L/4C		61		
	19	704	**75,68**	6867	0,9	**MR283-3E90L/4D**	3,30	52	112	IE3
	23	593	**63,65**	6973	1,0	**NR283-3E90L/4D**		54		
	27	505	**54,12**	6841	1,2	**MR283-2E90L/4C**	3,40	51		IE2
	31	433	**46,37**	6688	1,3	**NR283-2E90L/4C**		53		
	35	392	**41,96**	6579	1,4					
	38	362	**25,23**	8572	1,7	**MR282-3E100L/6B**	3,50	55	112	IE3
	44	310	**21,66**	8096	1,9	**NR282-3E100L/6B**		57		
						MR282-2E100L/6A	3,72	52		IE2
						NR282-2E100L/6A		54		
	48	287	**30,37**	7858	1,9	**MR282-3E90L/4D**	3,30	51	112	IE3
	57	239	**25,23**	7332	2,2	**NR282-3E90L/4D**		53		
	67	205	**21,66**	6930	2,4	**MR282-2E90L/4C**	3,40	50		IE2
	76	181	**19,06**	6612	2,7	**NR282-2E90L/4C**		52		
	86	161	**16,91**	6330	2,9					
	101	136	**14,31**	5959	3,2					
	24	565	**60,66**	2371	0,8	**MR273-3E90L/4D**	3,30	43	110	IE3
	29	472	**50,59**	3298	1,0	**NR273-3E90L/4D**		45		
	34	396	**42,41**	3976	1,1	**MR273-2E90L/4C**	3,40	42		IE2
	40	342	**36,55**	4408	1,3	**NR273-2E90L/4C**		44		
	48	285	**30,48**	4791	1,6					
	56	245	**25,89**	5025	1,8	**MR272-3E90L/4D**	3,30	42	110	IE3
	68	203	**21,43**	5190	2,2	**NR272-3E90L/4D**		44		
	79	174	**18,33**	5256	2,6	**MR272-2E90L/4C**	3,40	41		IE2
	90	153	**16,07**	5098	2,8	**NR272-2E90L/4C**		43		
	102	135	**14,21**	4871	3,0					
	121	114	**11,95**	4571	3,4					
	40	337	**36,02**	4924	0,8	**MR203-3E90L/4D**	3,30	43	109	IE3
	51	264	**28,35**	3749	1,1	**NR203-3E90L/4D**		44		
	59	231	**24,77**	4150	1,2	**MR203-2E90L/4C**	3,40	42		IE2
	62	217	**23,23**	4309	1,2	**NR203-2E90L/4C**		43		
	63	218	**23,01**	5238	1,3	**MR202-3E90L/4D**	3,30	41	109	IE3
	72	190	**20,10**	5393	1,4	**NR202-3E90L/4D**		43		
	77	179	**18,85**	5446	1,5	**MR202-2E90L/4C**	3,40	40		IE2
	90	152	**16,03**	5423	1,6	**NR202-2E90L/4C**		42		

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
1,5	98	141	**14,86**	5270	1,7	**MR202-3E90L/4D**	3,30	41	109	IE3
2,0	104	132	**13,92**	5141	1,8	**NR202-3E90L/4D**		43		
	119	116	**12,18**	4890	1,9	**MR202-2E90L/4C**	3,40	40		IE2
	134	103	**10,81**	4676	2,1	**NR202-2E90L/4C**		42		
	144	96	**10,07**	4556	2,2					
	173	80	**8,40**	4262	2,5					
	206	67	**7,04**	3997	2,8					
	250	55	**5,80**	3772	3,2					
	69	198	**20,92**	1757	1,0	**MR172-3E90L/4D**	3,30	31	108	IE3
	79	173	**18,28**	1964	1,2	**NR172-3E90L/4D**		33		
	85	163	**17,14**	2047	1,2	**MR172-2E90L/4C**	3,40	30		IE2
	99	138	**14,57**	2214	1,4	**NR172-2E90L/4C**		32		
	115	120	**12,66**	2319	1,6					
	131	105	**11,08**	2388	1,7					
	152	91	**9,53**	2236	1,9					
	162	85	**8,94**	2262	1,9					
	191	72	**7,60**	2304	2,2					
	220	63	**6,60**	2320	2,3					
	251	55	**5,78**	2319	2,4					
	303	46	**4,78**	2297	2,8					
	355	39	**4,09**	2195	3,1					
	429	32	**3,38**	2095	3,4					
	439	31	**6,60**	2062	4,0	**MR172-3E90S/2B**	2,97	30	108	IE3
	502	27	**5,78**	1964	4,0	**NR172-3E90S/2B**		32		
	607	23	**4,78**	1834	4,0	**MR172-2E90S/2A**	3,19	29		IE2
	710	19	**4,09**	1744	4,0	**NR172-2E90S/2A**		31		
	858	16	**3,38**	1629	4,0					
	103	134	**14,08**	1474	0,8	**MR102-3E90L/4D**	3,30	30	107	IE3
	110	125	**13,15**	1476	0,8	**NR102-3E90L/4D**		31		
	130	106	**11,12**	1472	0,9	**MR102-2E90L/4C**	3,40	29		IE2
	142	97	**10,18**	1465	1,0	**NR102-2E90L/4C**		30		
	156	88	**9,29**	1454	1,1					
	181	76	**8,01**	1432	1,2					
	209	66	**6,93**	1360	1,4					
	224	62	**6,48**	1349	1,4					
	265	52	**5,47**	1317	1,5					
	289	48	**5,01**	1298	1,7					
	317	44	**4,57**	1278	1,7					
	368	38	**3,94**	1242	1,9					
	418	33	**6,93**	1210	2,1	**MR102-3E90S/2B**	2,97	28	107	IE3
	448	31	**6,48**	1192	2,3	**NR102-3E90S/2B**		30		
	530	26	**5,47**	1148	2,5	**MR102-2E90S/2A**	3,19	27		IE2
	578	24	**5,01**	1125	2,5	**NR102-2E90S/2A**		29		
	634	22	**4,57**	1100	2,8					
	736	19	**3,94**	1060	2,9					
	147	94	**9,87**	384	0,8	**MR002-3E90L/4D**	3,30	27	106	IE3
	167	82	**8,70**	475	0,9	**NR002-3E90L/4D**		28		
	172	80	**8,45**	569	0,9	**MR002-2E90L/4C**	3,40	26		IE2
	185	74	**7,84**	644	1,0	**NR002-2E90L/4C**		27		
	195	71	**7,45**	637	1,0					
	210	66	**6,91**	703	1,1					
	242	57	**6,00**	735	1,2					
	260	53	**5,57**	786	1,2					
	318	43	**4,56**	730	1,3					
	372	37	**3,90**	811	1,5					
	401	34	**3,62**	842	1,5					

* : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
1,5	420	33	**6,91**	1023	1,7	**MR002-3E90S/2B**	2,97	25	106	IE3
2,0	483	28	**6,00**	1008	1,8	**NR002-3E90S/2B**		27		
	521	26	**5,57**	1018	1,9	**MR002-2E90S/2A**	3,19	24		IE2
	637	22	**4,56**	949	2,1	**NR002-2E90S/2A**		26		
	744	19	**3,90**	960	2,4					
	801	17	**3,62**	962	2,4					
2,2	0,93	20133	**1552,10**	80517	0,9	**MR975-3E100L/4C**	4,65	1117	135	IE3
3,0	1,1	17763	**1368,27**	96442	1,0	**NR975-3E100L/4C**		1167		
	1,2	15770	**1213,85**	107571	1,1	**MR975-2E100L/4B**	4,85	1116		IE2
	1,3	14070	**1082,31**	115554	1,3	**NR975-2E100L/4B**		1166		
	1,6	11921	**914,74**	124687	1,5					
	1,7	10977	**842,80**	128448	1,6					
	1,9	9790	**750,24**	132559	1,8					
	2,2	8662	**662,54**	136320	2,1					
	2,5	7713	**588,87**	139289	2,3					
	2,7	7151	**546,94**	140965	2,5					
	2,8	6816	**510,11**	141940	2,6	**MR974-3E100L/4C**	4,65	1132	134	IE3
	3,2	6126	**457,99**	143886	2,9	**NR974-3E100L/4C**		1182		
	3,7	5221	**390,41**	146314	3,4	**MR974-2E100L/4B**	4,85	1131		IE2
						NR974-2E100L/4B		1181		
	1,2	15697	**1210,51**	53401	0,8	**MR875-3E100L/4C**	4,65	622	132	IE3
	1,4	13582	**1049,18**	68923	1,0	**NR875-3E100L/4C**		627		
	1,6	11869	**915,85**	78704	1,1	**MR875-2E100L/4B**	4,85	621		IE2
	1,8	10480	**807,91**	85242	1,2	**NR875-2E100L/4B**		626		
	2,0	9331	**718,74**	90183	1,4					
	2,5	7821	**390,74**	95889	1,7	**MR874-3E112M/6B**	4,95	606	131	IE3
	2,8	6931	**345,67**	98966	1,9	**NR874-3E112M/6B**		611		
						MR874-2E112M/6A	5,32	603		IE2
						NR874-2E112M/6A		608		
	3,2	5936	**446,42**	102173	2,2	**MR874-3E100L/4C**	4,65	607	131	IE3
	3,7	5205	**390,74**	104336	2,5	**NR874-3E100L/4C**		612		
	4,2	4612	**345,67**	105998	2,8	**MR874-2E100L/4B**	4,85	606		IE2
	5,0	3907	**292,15**	107872	3,3	**NR874-2E100L/4B**		611		
	6,1	3208	**239,61**	109927	4,0					
	2,4	7903	**594,92**	49168	1,0	**MR774-3E100L/4C**	4,65	331	128	IE3
	2,7	7073	**532,29**	52235	1,1	**NR774-3E100L/4C**		404		
	3,1	6222	**467,43**	55047	1,3	**MR774-2E100L/4B**	4,85	330		IE2
	3,5	5572	**418,17**	57040	1,4	**NR774-2E100L/4B**		403		
	4,0	4812	**361,62**	59086	1,7					
	4,6	4173	**313,11**	60698	1,9					
	5,3	3655	**273,85**	61916	2,2					
	6,0	3226	**241,42**	62867	2,5					
	6,8	2865	**214,17**	63629	2,8					
	7,6	2557	**190,96**	64253	3,1					
	4,9	4012	**196,61**	28019	1,1	**MR673-3E112M/6B**	4,95	196	124	IE3
	5,5	3573	**174,89**	30245	1,2	**NR673-3E112M/6B**		197		
	6,5	3050	**149,11**	32556	1,4	**MR673-2E112M/6A**	5,32	193		IE2
	7,8	2539	**124,07**	34480	1,7	**NR673-2E112M/6A**		194		
	8,7	2265	**110,55**	35446	1,9					

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
2,2	7,2	2748	**134,45**	21288	1,1	**MR573-3E112M/6B**	4,95	144	121	IE3
3,0	8,1	2434	**118,95**	22947	1,2	**NR573-3E112M/6B**		150		
						MR573-2E112M/6A	5,32	141		IE2
						NR573-2E112M/6A		147		
	8,7	2280	**167,32**	23646	1,3	**MR573-3E100L/4C**	4,65	140	121	IE3
	9,4	2093	**153,61**	24525	1,4	**NR573-3E100L/4C**		146		
	11	1835	**134,45**	25569	1,6	**MR573-2E100L/4B**	4,85	139		IE2
	12	1625	**118,95**	26371	1,8	**NR573-2E100L/4B**		145		
	14	1376	**100,53**	24667	2,2					
	18	1129	**82,45**	28045	2,7					
	20	998	**72,81**	28440	3,0					
	22	888	**64,72**	27611	3,4					
	26	752	**54,74**	26326	4,0					
	30	671	**48,74**	25458	4,0					
	10	1905	**139,54**	8420	0,8	**MR473-3E100L/4C**	4,65	108	118	IE3
	12	1705	**124,85**	13075	0,9	**NR473-3E100L/4C**		111		
	13	1499	**109,64**	16237	1,0	**MR473-2E100L/4B**	4,85	109		IE2
	16	1254	**91,58**	17885	1,2	**NR473-2E100L/4B**		110		
	17	1185	**86,52**	17690	1,3					
	17	1156	**84,46**	17607	1,3					
	20	1002	**73,09**	17091	1,5					
	23	874	**63,70**	16584	1,8					
	26	767	**55,82**	16087	2,0					
	30	674	**49,05**	15595	2,3					
	34	588	**42,75**	15070	2,6					
	39	516	**37,45**	14566	3,0					
	47	427	**30,93**	13844	3,6					
	20	995	**72,81**	7973	0,8	**MR373-3E100L/4C**	4,65	67	115	IE3
	23	847	**61,91**	7909	1,0	**NR373-3E100L/4C**		68		
	27	727	**53,04**	7802	1,1	**MR373-2E100L/4B**	4,85	66		IE2
	30	658	**48,00**	7713	1,2	**NR373-2E100L/4B**		67		
	35	564	**41,16**	7552	1,5					
	41	484	**35,25**	7365	1,6					
	49	406	**29,47**	7127	1,8					
	57	348	**25,27**	6908	2,0					
	62	325	**23,33**	8493	2,5	**MR372-3E100L/4C**	4,65	66	115	IE3
	70	287	**20,62**	8112	2,7	**NR372-3E100L/4C**		69		
	79	257	**18,45**	7786	2,9	**MR372-2E100L/4B**	4,85	65		IE2
	90	226	**16,20**	7423	3,1	**NR372-2E100L/4B**		68		
	107	189	**13,53**	6953	3,5					
	116	174	**12,48**	6753	3,7					
	27	741	**54,12**	5713	0,8	**MR283-3E100L/4C**	4,65	60	112	IE3
	31	636	**46,37**	5867	0,9	**NR283-3E100L/4C**		62		
	35	576	**41,96**	5836	1,0	**MR283-2E100L/4B**	4,85	59		IE2
	40	493	**35,98**	5760	1,0	**NR283-2E100L/4B**		61		
	47	423	**30,82**	5657	1,1					
	57	351	**25,23**	6888	1,5	**MR282-3E100L/4C**	4,65	57	112	IE3
	67	301	**21,66**	7074	1,7	**NR282-3E100L/4C**		61		
	76	265	**19,06**	6759	1,8	**MR282-2E100L/4B**	4,85	56		IE2
	86	236	**16,91**	6461	2,0	**NR282-2E100L/4B**		60		
	101	200	**14,31**	6071	2,2					
	118	171	**12,24**	5731	2,5					
	137	148	**10,57**	5430	2,8					
	151	135	**9,61**	5246	3,0					

* : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
2,2 3,0	174	116	**8,33**	4981	3,3	**MR282-3E100L/4C** **NR282-3E100L/4C** **MR282-2E100L/4B** **NR282-2E100L/4B**	4,65 4,85 	57 61 56 60	112	IE3 IE2
	40 48 57	501 419 352	**36,55** **30,48** **25,55**	1614 2461 3087	0,9 1,1 1,2	**MR273-3E100L/4C** **NR273-3E100L/4C** **MR273-2E100L/4B** **NR273-2E100L/4B**	4,65 4,85 	50 52 49 51	110	IE3 IE2
	68 79 90 102 121 143 167 233 274	299 255 224 198 167 142 122 87 74	**21,43** **18,33** **16,07** **14,21** **11,95** **10,16** **8,71** **6,21** **5,28**	3552 3855 4043 4173 4290 4343 4150 3709 3493	1,5 1,7 1,9 2,1 2,3 2,6 3,0 3,8 3,6	**MR272-3E100L/4C** **NR272-3E100L/4C** **MR272-2E100L/4B** **NR272-2E100L/4B**	4,65 4,85 	48 50 47 49	110	IE3 IE2
	59 62	339 318	**24,77** **23,23**	1346 1678	0,8 0,8	**MR203-3E100L/4C** **NR203-3E100L/4C** **MR203-2E100L/4B** **NR203-2E100L/4B**	4,65 4,85 	48 50 47 49	109	IE3 IE2
	72 77 90 98 104 119 134 144 173 206 250 286 322 345 414	279 262 223 207 194 170 151 141 117 99 81 71 63 59 49	**20,10** **18,85** **16,03** **14,86** **13,92** **12,18** **10,81** **10,07** **8,40** **7,04** **5,80** **5,08** **4,50** **4,20** **3,50**	3486 3657 4011 4140 4236 4389 4485 4525 4358 4078 3859 3669 3507 3417 3195	0,9 1,0 1,1 1,2 1,2 1,3 1,4 1,5 1,7 1,9 2,2 2,3 2,4 2,5 2,5	**MR202-3E100L/4C** **NR202-3E100L/4C** **MR202-2E100L/4B** **NR202-2E100L/4B**	4,65 4,85 	48 50 47 49	109	IE3 IE2
	79 85 99 115 131 152 162 191 220 251 303 355 429	254 239 203 177 155 133 125 106 92 81 67 57 47	**18,28** **17,14** **14,57** **12,66** **11,08** **9,53** **8,94** **7,60** **6,60** **5,78** **4,78** **4,09** **3,38**	554 724 1089 1342 1534 1406 1483 1643 1745 1816 1882 1807 1833	0,8 0,8 1,0 1,1 1,2 1,3 1,3 1,5 1,6 1,7 1,9 2,1 2,3	**MR172-3E100L/4C** **NR172-3E100L/4C** **MR172-2E100L/4B** **NR172-2E100L/4B**	4,65 4,85 	38 40 37 39	108	IE3 IE2
	439 502 607 710 858	46 40 33 29 24	**6,60** **5,78** **4,78** **4,09** **3,38**	1916 1906 1867 1777 1656	2,7 3,0 3,3 3,5 3,6	**MR172-3E90L/2C** **NR172-3E90L/2C** **MR172-2E90L/2B** **NR172-2E90L/2B**	4,25 4,48 	31 33 30 32	108	IE3 IE2

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
3,0	1,2	21504	**1213,85**	68484	0,8	**MR975-3E100L/4D**	6,26	1131	135	IE3
4,0	1,3	19187	**1082,31**	87173	0,9	**NR975-3E100L/4D**		1181		
	1,6	16256	**914,74**	105024	1,1	**MR975-2E100L/4C**	6,42	1129		IE2
	1,7	14968	**842,80**	111316	1,2	**NR975-2E100L/4C**		1179		
	1,9	13350	**750,24**	118765	1,3					
	2,2	11812	**662,54**	125117	1,5					
	2,5	10517	**588,87**	129906	1,7					
	2,7	9752	**546,94**	132691	1,8					
	2,8	9295	**510,11**	134243	1,9	**MR974-3E100L/4D**	6,26	1145	134	IE3
	3,2	8353	**457,99**	137305	2,2	**NR974-3E100L/4D**		1195		
	3,7	7119	**390,41**	141059	2,5	**MR974-2E100L/4C**	6,42	1143		IE2
	4,2	6284	**344,17**	143447	2,9	**NR974-2E100L/4C**		1193		
	4,7	5581	**305,33**	145364	3,2					
	2,8	9402	**345,67**	90007	1,4	**MR874-3E132S/6B**	6,55	619	131	IE3
						NR874-3E132S/6B		624		
						MR874-2E132S/6A	6,85	614		IE2
						NR874-2E132S/6A		619		
	3,2	8095	**446,42**	95060	1,6	**MR874-3E100L/4D**	6,26	604	131	IE3
	3,7	7098	**390,74**	98451	1,8	**NR874-3E100L/4D**		609		
	4,2	6290	**345,67**	101078	2,1	**MR874-2E100L/4C**	6,42	602		IE2
	5,0	5327	**292,15**	103984	2,4	**NR874-2E100L/4C**		607		
	6,1	4374	**239,61**	106644	3,0					
	6,9	3869	**211,60**	107969	3,4					
	7,7	3444	**188,08**	109043	3,8					
	8,3	3193	**174,68**	110099	4,0					
	9,8	2705	**147,61**	115458	4,0					
	12	2308	**125,70**	118854	4,0					
	13	1980	**107,60**	121258	4,0					
	3,5	7598	**418,17**	50336	1,1	**MR774-3E100L/4D**	6,26	320	128	IE3
	4,0	6562	**361,62**	53959	1,2	**NR774-3E100L/4D**		391		
						MR774-2E100L/4C	6,42	318		IE2
						NR774-2E100L/4C		389		
	4,6	5781	**208,82**	56440	1,4	**MR773-3E132S/6B**	6,55	317	127	IE3
	5,4	4956	**178,78**	58748	1,6	**NR773-3E132S/6B**		383		
	6,5	4124	**148,73**	60850	1,9	**MR773-2E132S/6A**	6,85	312		IE2
	7,3	3693	**133,05**	61793	2,2	**NR773-2E132S/6A**		378		
	8,4	3191	**115,06**	63024	2,5					
	9,7	2767	**99,63**	63850	2,9					
	11	2423	**87,13**	64534	3,3					
	13	2139	**76,81**	65077	3,7					
	14	1899	**68,15**	66229	4,0					
	6,5	4135	**149,11**	27341	1,0	**MR673-3E132S/6B**	6,55	226	124	IE3
	7,8	3441	**124,07**	30850	1,2	**NR673-3E132S/6B**		228		
	8,8	3070	**110,55**	32471	1,4	**MR673-2E132S/6A**	6,85	221		IE2
	10	2613	**94,17**	34257	1,6	**NR673-2E132S/6A**		223		
	12	2249	**80,96**	35537	1,9					
	14	1955	**70,26**	36494	2,2					
	16	1711	**61,42**	37234	2,5					
	18	1506	**53,99**	36465	2,9					
	18	1468	**52,68**	36219	2,9					
	21	1264	**45,29**	34729	3,4					
	25	1099	**39,30**	33361	3,9					
	28	962	**34,36**	32093	4,0					

* : I [illegible] dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor [illegible] are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
3,0	8,7	3111	**167,32**	19059	1,0	**MR573-3E100L/4D**	6,26	144	121	IE3
4,0	9,4	2856	**153,61**	20666	1,1	**NR573-3E100L/4D**		138		
	11	2503	**134,45**	22555	1,2	**MR573-2E100L/4C**	6,42	142		IE2
	12	2217	**118,95**	23939	1,4	**NR573-2E100L/4C**		136		
	14	1877	**100,53**	25413	1,6					
	18	1540	**82,45**	26678	1,9					
	20	1362	**72,81**	27295	2,2					
	22	1212	**64,72**	26831	2,5					
	26	1027	**54,74**	25667	2,9					
	30	916	**48,74**	24870	3,3					
	36	751	**39,98**	23535	3,8					
	41	664	**35,31**	22718	4,0					
	46	591	**31,38**	21958	4,0					
	16	1711	**91,58**	12963	0,9	**MR473-3E100L/4D**	6,26	109	118	IE3
	17	1617	**86,52**	14572	1,0	**NR473-3E100L/4D**		112		
	17	1577	**84,46**	15128	1,0	**MR473-2E100L/4C**	6,42	107		IE2
	20	1367	**73,09**	15967	1,1	**NR473-2E100L/4C**		110		
	23	1192	**63,70**	15605	1,3					
	26	1046	**55,82**	15229	1,5					
	30	920	**49,05**	14841	1,7					
	34	803	**42,75**	14412	1,9					
	39	704	**37,45**	13990	2,2					
	44	628	**22,15**	13591	2,5	**MR472-3E132S/6B**	6,55	119	118	IE3
	52	531	**18,72**	13041	2,9	**NR472-3E132S/6B**		122		
	56	489	**17,25**	12773	3,0	**MR472-2E132S/6A**	6,85	114		IE2
	63	436	**15,35**	12394	3,3	**NR472-2E132S/6A**		117		
	27	991	**53,04**	6831	0,8	**MR373-3E100L/4D**	6,26	69	115	IE3
	30	898	**48,00**	6834	0,9	**NR373-3E100L/4D**		72		
	35	769	**41,16**	6798	1,1	**MR373-2E100L/4C**	6,42	67		IE2
	41	660	**35,25**	6719	1,2	**NR373-2E100L/4C**		70		
	49	554	**29,47**	6587	1,4					
	57	475	**25,27**	6445	1,5					
	62	443	**23,33**	8279	1,8	**MR372-3E100L/4D**	6,26	67	115	IE3
	70	392	**20,62**	8271	2,0	**NR372-3E100L/4D**		69		
	79	351	**18,45**	7929	2,1	**MR372-2E100L/4C**	6,42	65		IE2
	90	308	**16,20**	7551	2,3	**NR372-2E100L/4C**		67		
	107	258	**13,53**	7061	2,6					
	116	238	**12,48**	6852	2,7					
	134	206	**10,80**	6498	3,0					
	154	180	**9,41**	6179	3,3					
	176	158	**8,25**	5890	3,6					
	47	578	**30,82**	5034	0,8	**MR283-3E100L/4D**	6,26	61	112	IE3
						NR283-3E100L/4D		63		
						MR283-2E100L/4C	6,42	59		IE2
						NR283-2E100L/4C		61		
	57	479	**25,23**	4803	1,1	**MR282-3E100L/4D**	6,26	59	112	IE3
	67	411	**21,66**	5284	1,2	**NR282-3E100L/4D**		61		
	76	362	**19,06**	5589	1,3	**MR282-2E100L/4C**	6,42	57		IE2
	86	322	**16,91**	5806	1,5	**NR282-2E100L/4C**		59		
	101	272	**14,31**	6014	1,6					
	118	233	**12,24**	5838	1,8					
	137	202	**10,57**	5523	2,0					
	151	184	**9,61**	5331	2,2					
	174	159	**8,33**	5055	2,5					

*: I [illegible] dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor [illegible] are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
3,0	201	138	**7,21**	4794	2,7	**MR282-3E100L/4D**	6,26	59	112	IE3
4,0	232	119	**6,25**	4614	3,0	**NR282-3E100L/4D**		61		
	271	102	**5,35**	4355	3,1	**MR282-2E100L/4C**	6,42	57		IE2
	314	88	**4,62**	4125	3,2	**NR282-2E100L/4C**		59		
	345	80	**4,20**	3985	3,2					
	398	70	**3,64**	3783	3,5					
	57	480	**25,55**	855	0,9	**MR273-3E100L/4D**	6,26	51	110	IE3
						NR273-3E100L/4D		53		
						MR273-2E100L/4C	6,42	49		IE2
						NR273-2E100L/4C		51		
	68	407	**21,43**	1680	1,1	**MR272-3E100L/4D**	6,26	50	110	IE3
	79	348	**18,33**	2254	1,3	**NR272-3E100L/4D**		52		
	90	306	**16,07**	2639	1,4	**MR272-2E100L/4C**	6,42	48		IE2
	102	271	**14,21**	2932	1,5	**NR272-2E100L/4C**		50		
	121	228	**11,95**	3246	1,7					
	143	194	**10,16**	3455	1,9					
	167	166	**8,71**	3591	2,2					
	233	119	**6,21**	3454	2,8					
	274	101	**5,28**	3496	2,6					
	320	87	**4,53**	3357	2,7					
	90	304	**16,03**	2273	0,8	**MR202-3E100L/4D**	6,26	50	109	IE3
	98	283	**14,86**	2529	0,8	**NR202-3E100L/4D**		52		
	104	265	**13,92**	2726	0,9	**MR202-2E100L/4C**	6,42	48		IE2
	119	232	**12,18**	3069	1,0	**NR202-2E100L/4C**		50		
	134	206	**10,81**	3314	1,0					
	144	192	**10,07**	3434	1,1					
	173	160	**8,40**	3671	1,2					
	206	134	**7,04**	3819	1,4					
	250	111	**5,80**	3447	1,6					
	286	97	**5,08**	3527	1,7					
	322	86	**4,50**	3570	1,7					
	345	80	**4,20**	3489	1,8					
	414	67	**3,50**	3255	1,9					
	502	55	**5,80**	3026	2,5	**MR202-3E100L/2C**	5,58	48	109	IE3
	574	48	**5,08**	2879	2,6	**NR202-3E100L/2C**		50		
	647	43	**4,50**	2755	2,8	**MR202-2E100L/2B**	5,80	46		IE2
	694	40	**4,20**	2684	2,9	**NR202-2E100L/2B**		48		
	833	33	**3,50**	2512	3,0					
	115	241	**12,66**	225	0,8	**MR172-3E100L/4D**	6,26	40	108	IE3
	131	211	**11,08**	556	0,9	**NR172-3E100L/4D**		41		
	152	182	**9,53**	458	0,9	**MR172-2E100L/4C**	6,42	38		IE2
	162	170	**8,94**	594	1,0	**NR172-2E100L/4C**		39		
	191	145	**7,60**	887	1,1					
	220	126	**6,60**	1088	1,2					
	251	110	**5,78**	1242	1,2					
	303	91	**4,78**	1406	1,4					
	355	78	**4,09**	1364	1,5					
	429	65	**3,38**	1466	1,7					
	441	63	**6,60**	1589	2,0	**MR172-3E100L/2C**	5,58	40	108	IE3
	505	55	**5,78**	1619	2,2	**NR172-3E100L/2C**		41		
	610	45	**4,78**	1640	2,4	**MR172-2E100L/2B**	5,80	38		IE2
	713	39	**4,09**	1571	2,6	**NR172-2E100L/2B**		39		
	863	32	**3,38**	1567	2,6					

*

✱ : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
4,0	1,7	19821	**842,80**	82433	0,9	**MR975-3E112M/4D**	8,05	1137	135	IE3
5,5	1,9	17678	**750,24**	97186	1,0	**NR975-3E112M/4D**		1187		
	2,2	15641	**662,54**	108230	1,2	**MR975-2E112M/4C**	8,20	1135		IE2
	2,5	13927	**588,87**	116428	1,3	**NR975-2E112M/4C**		1185		
	2,7	12913	**546,94**	120825	1,4					
	2,9	12308	**510,11**	123313	1,5	**MR974-3E112M/4D**	8,05	1187	134	IE3
	3,2	11061	**457,99**	128136	1,6	**NR974-3E112M/4D**		1237		
	3,7	9428	**390,41**	133687	1,9	**MR974-2E112M/4C**	8,20	1185		IE2
	4,2	8321	**344,17**	137316	2,2	**NR974-2E112M/4C**		1235		
	4,8	7390	**305,33**	140184	2,4					
	5,4	6596	**272,24**	142505	2,7					
	6,8	5244	**216,03**	146207	3,4					
	2,8	12536	**345,67**	75126	1,0	**MR874-3E132M/6C**	8,52	627	131	IE3
	3,3	10618	**292,15**	84759	1,2	**NR874-3E132M/6C**		632		
						MR874-2E132M/6B	8,80	622		IE2
						NR874-2E132M/6B		627		
	3,7	9399	**390,74**	90037	1,4	**MR874-3E112M/4D**	8,05	623	131	IE3
	4,2	8329	**345,67**	94199	1,6	**NR874-3E112M/4D**		628		
	5,0	7055	**292,15**	98633	1,8	**MR874-2E112M/4C**	8,20	621		IE2
	6,1	5792	**239,61**	102551	2,2	**NR874-2E112M/4C**		626		
	7,8	4561	**188,08**	106097	2,9					
	8,4	4228	**174,68**	106993	3,1					
	8,8	4078	**110,17**	107463	3,2	**MR873-3E132M/6C**	8,52	592	130	IE3
	9,7	3695	**99,81**	108446	3,5	**NR873-3E132M/6C**		597		
						MR873-2E132M/6B	8,80	587		IE2
						NR873-2E132M/6B		592		
	4,6	7714	**208,82**	49983	1,0	**MR773-3E132M/6C**	8,52	329	127	IE3
	5,4	6614	**178,78**	53856	1,2	**NR773-3E132M/6C**		397		
	6,5	5504	**148,73**	57240	1,5	**MR773-2E132M/6B**	8,80	324		IE2
	7,3	4929	**133,05**	58820	1,6	**NR773-2E132M/6B**		392		
	8,4	4259	**115,06**	60524	1,9					
	9,7	3693	**99,63**	61795	2,2					
	11	3234	**87,13**	62923	2,5					
	13	2854	**76,81**	63672	2,8					
	14	2535	**68,15**	64315	3,2					
	8,3	4310	**174,89**	26324	1,0	**MR673-3E112M/4D**	8,05	224	124	IE3
	9,8	3680	**149,11**	29726	1,2	**NR673-3E112M/4D**		233		
	12	3064	**124,07**	32500	1,4	**MR673-2E112M/4C**	8,20	222		IE2
	13	2733	**110,55**	33811	1,6	**NR673-2E112M/4C**		231		
	16	2283	**61,42**	35422	1,9	**MR673-3E132M/6C**	8,52	224	124	IE3
	18	2009	**53,99**	35379	2,1	**NR673-3E132M/6C**		232		
	18	1960	**52,68**	35160	2,2	**MR673-2E132M/6B**	8,80	219		IE2
	21	1687	**45,29**	33818	2,5	**NR673-2E132M/6B**		227		
	25	1466	**39,30**	32570	2,9					
	28	1284	**34,36**	31402	3,3					
	32	1130	**30,20**	30300	3,7					
	12	2937	**118,95**	20176	1,0	**MR573-3E112M/4D**	8,05	149	121	IE3
	15	2486	**100,53**	22685	1,2	**NR573-3E112M/4D**		143		
	18	2040	**82,45**	24752	1,5	**MR573-2E112M/4C**	8,20	147		IE2
	20	1804	**72,81**	25715	1,7	**NR573-2E112M/4C**		141		

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
4,0	23	1605	**64,72**	25814	1,9	**MR573-3E112M/4D**	8,05	149	121	IE3
5,5	27	1360	**54,74**	24800	2,2	**NR573-3E112M/4D**		143		
	30	1213	**48,74**	24094	2,5	**MR573-2E112M/4C**	8,20	147		IE2
	37	995	**39,98**	22891	2,9	**NR573-2E112M/4C**		141		
	41	880	**35,31**	22145	3,1					
	47	783	**31,38**	21445	3,4					
	54	681	**27,00**	20567	4,0	**MR572-3E112M/4D**	8,05	142	121	IE3
	63	581	**23,02**	19657	4,0	**NR572-3E112M/4D**		136		
						MR572-2E112M/4C	8,20	140		IE2
						NR572-2E112M/4C		134		
	20	1810	**73,09**	10931	0,9	**MR473-3E112M/4D**	8,05	122	118	IE3
	23	1580	**63,70**	14370	1,0	**NR473-3E112M/4D**		130		
	26	1386	**55,82**	14143	1,1	**MR473-2E112M/4C**	8,20	120		IE2
	30	1219	**49,05**	13884	1,3	**NR473-2E112M/4C**		128		
	34	1064	**42,75**	13575	1,5					
	39	933	**37,45**	13253	1,7					
	47	772	**30,93**	12756	2,0					
	57	642	**25,67**	12247	2,4					
	66	559	**22,15**	11834	2,6	**MR472-3E112M/4D**	8,05	115	118	IE3
	78	473	**18,72**	11358	3,1	**NR472-3E112M/4D**		123		
	85	435	**17,25**	11126	3,0	**MR472-2E112M/4C**	8,20	113		IE2
	95	388	**15,35**	10797	3,2	**NR472-2E112M/4C**		121		
	41	874	**35,25**	5913	0,9	**MR373-3E112M/4D**	8,05	76	115	IE3
	50	734	**29,47**	5910	1,0	**NR373-3E112M/4D**		78		
	58	629	**25,27**	5863	1,1	**MR373-2E112M/4C**	8,20	74		IE2
	67	539	**21,65**	5782	1,2	**NR373-2E112M/4C**		76		
	71	520	**20,62**	6457	1,5	**MR372-3E112M/4D**	8,05	76	115	IE3
	79	465	**18,45**	6779	1,6	**NR372-3E112M/4D**		79		
	90	409	**16,20**	7066	1,7	**MR372-2E112M/4C**	8,20	74		IE2
	108	342	**13,53**	7172	2,0	**NR372-2E112M/4C**		77		
	117	315	**12,48**	6955	2,1					
	135	273	**10,80**	6586	2,3					
	155	238	**9,41**	6257	2,5					
	177	209	**8,25**	5957	2,7					
	213	173	**6,84**	5605	3,2					
	77	480	**19,06**	3648	1,0	**MR282-3E112M/4D**	8,05	69	112	IE3
	86	426	**16,91**	4081	1,1	**NR282-3E112M/4D**		71		
	102	361	**14,31**	4552	1,2	**MR282-2E112M/4C**	8,20	67		IE2
	119	309	**12,24**	4872	1,4	**NR282-2E112M/4C**		69		
	138	267	**10,57**	5086	1,5					
	152	243	**9,61**	5184	1,6					
	175	211	**8,33**	5133	1,9					
	202	183	**7,21**	4861	2,0					
	234	158	**6,25**	4693	2,3					
	273	135	**5,35**	4422	2,4					
	316	117	**4,62**	4182	2,4					
	348	107	**4,20**	4037	2,4					
	401	92	**3,64**	3827	2,6					
	463	80	**3,15**	3629	2,8					

* : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
4,0 5,5	545	68	**5,35**	3420	3,8	**MR282-3E112M/2C** **NR282-3E112M/2C** **MR282-2E112M/2A** **NR282-2E112M/2A**	7,28 7,50 	69 70 66 67	112	IE3 IE2
	77	472	**19,00**		0,9	**MR273-3E112M/4D** **NR273-3E112M/4D** **MR273-2E112M/4C** **NR273-2E112M/4C**	8,05 8,20 	59 61 57 59	110	IE3 IE2
	91 103 122 144 168 235 276 323	405 359 302 257 221 157 134 115	**16,07** **14,21** **11,95** **10,16** **8,71** **6,21** **5,28** **4,53**	914 1405 1960 2361 2652 2693 2848 2946	1,0 1,1 1,3 1,5 1,6 2,1 2,0 2,0	**MR272-3E112M/4D** **NR272-3E112M/4D** **MR272-2E112M/4C** **NR272-2E112M/4C**	8,05 8,20 	59 61 57 59	110	IE3 IE2
	469 552 644	79 67 58	**6,21** **5,28** **4,53**	2962 2788 2633	3,6 2,9 3,1	**MR272-3E112M/2C** **NR272-3E112M/2C** **MR272-2E112M/2A** **NR272-2E112M/2A**	7,28 7,50 	58 60 55 57	110	IE3 IE2
	135 145 174 207 252 288 324 348 417	273 254 212 178 146 128 114 106 89	**10,81** **10,07** **8,40** **7,04** **5,80** **5,08** **4,50** **4,20** **3,50**	1872 2088 2548 2875 2520 2714 2849 2912 3030	0,8 0,8 0,9 1,0 1,2 1,2 1,3 1,4 1,4	**MR202-3E112M/4D** **NR202-3E112M/4D** **MR202-2E112M/4C** **NR202-2E112M/4C**	8,05 8,20 	59 61 57 59	109	IE3 IE2
	502 574 647 694 833	73 64 57 53 44	**5,80** **5,08** **4,50** **4,20** **3,50**	3088 2934 2803 2729 2550	1,8 1,9 2,1 2,2 2,3	**MR202-3E112M/2C** **NR202-3E112M/2C** **MR202-2E112M/2A** **NR202-2E112M/2A**	7,28 7,50 	56 58 53 55	109	IE3 IE2
	221 253 306 357 432	167 146 121 104 86	**6,60** **5,78** **4,78** **4,09** **3,38**	282 535 821 817 1013	0,9 0,9 1,1 1,2 1,3	**MR172-3E112M/4D** **NR172-3E112M/4D** **MR172-2E112M/4C** **NR172-2E112M/4C**	8,05 8,20 	49 51 47 49	108	IE3 IE2
	441 505 610 713 863	84 73 61 52 43	**6,60** **5,78** **4,78** **4,09** **3,38**	1180 1262 1344 1295 1339	1,5 1,6 1,8 1,9 2,0	**MR172-3E112M/2C** **NR172-3E112M/2C** **MR172-2E112M/2A** **NR172-2E112M/2A**	7,28 7,50 	47 49 44 46	108	IE3 IE2
5,5 7,5	2,2 2,5 2,7	21507 19149 17756	**662,54** **588,87** **546,94**	68481 87436 96484	0,8 0,9 1,0	**MR975-3E132S/4C** **NR975-3E132S/4C** **MR975-2E132S/4B** **NR975-2E132S/4B**	10,65 11,05 	1167 1217 1161 1211	135	IE3 IE2

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
5,5	2,9	16923	**510,11**	101358	1,1	**MR974-3E132S/4C**	10,65	1217	134	IE3
7,5	3,2	15209	**457,99**	110131	1,2	**NR974-3E132S/4C**		1267		
	3,7	12963	**390,41**	120425	1,4	**MR974-2E132S/4B**	11,05	1211		IE2
	4,2	11441	**344,17**	126552	1,6	**NR974-2E132S/4B**		1261		
	4,8	10161	**305,33**	131221	1,8					
	5,4	9070	**272,24**	135142	2,0					
	6,8	7210	**216,03**	140792	2,5					
	7,6	6458	**193,13**	142959	2,8					
	8,5	5765	**172,08**	144871	3,1					
	4,2	11452	**345,67**	80614	1,1	**MR874-3E132S/4C**	10,65	632	131	IE3
	5,0	9700	**292,15**	88651	1,3	**NR874-3E132S/4C**		637		
	6,1	7964	**239,61**	95432	1,6	**MR874-2E132S/4B**	11,05	626		IE2
	6,9	7044	**211,60**	98670	1,8	**NR874-2E132S/4B**		631		
	7,8	6271	**188,08**	101138	2,1					
	8,4	5814	**174,68**	102544	2,2					
	9,9	4925	**147,61**	105133	2,6					
	12	4203	**125,70**	107100	3,1					
	6,5	7573	**148,73**	50526	1,1	**MR773-3E132M/6D**	11,55	329	127	IE3
						NR773-3E132M/6D		397		
						MR773-2E132M/6C	12,00	324		IE2
						NR773-2E132M/6C		392		
	7,0	7075	**208,82**	52227	1,1	**MR773-3E132S/4C**	10,65	337	127	IE3
	8,2	6066	**178,78**	55529	1,3	**NR773-3E132S/4C**		405		
	9,8	5049	**148,73**	58498	1,6	**MR773-2E132S/4B**	11,05	331		IE2
	11	4521	**133,05**	59836	1,8	**NR773-2E132S/4B**		399		
	13	3907	**115,06**	61334	2,0					
	15	3388	**99,63**	62514	2,4					
	17	2967	**87,13**	63418	2,7					
	19	2619	**76,81**	64130	3,1					
	21	2326	**68,15**	64706	3,4					
	12	4213	**124,07**	26896	1,0	**MR673-3E132S/4C**	10,65	248	124	IE3
	13	3758	**110,55**	29275	1,1	**NR673-3E132S/4C**		258		
	16	3199	**94,17**	31883	1,3	**MR673-2E132S/4B**	11,05	242		IE2
	18	2754	**80,96**	33692	1,6	**NR673-2E132S/4B**		252		
	21	2394	**70,26**	32677	1,8					
	24	2095	**61,42**	31668	2,1					
	27	1844	**53,99**	30693	2,3					
	28	1799	**52,68**	30506	2,4					
	32	1549	**45,29**	29360	2,7					
	37	1346	**39,30**	28291	3,0					
	42	1178	**34,36**	27288	3,2					
	48	1037	**30,20**	26340	3,5					
	18	2806	**82,45**	20959	1,1	**MR573-3E132S/4C**	10,65	176	121	IE3
	20	2481	**72,81**	22669	1,2	**NR573-3E132S/4C**		170		
	23	2207	**64,72**	23984	1,4	**MR573-2E132S/4B**	11,05	170		IE2
	27	1870	**54,74**	23571	1,6	**NR573-2E132S/4B**		164		
	30	1669	**48,74**	23000	1,8					
	37	1368	**39,98**	21994	2,1					
	41	1210	**35,31**	21352	2,3					
	47	1077	**31,38**	20741	2,5					
	54	937	**27,00**	19961	2,9	**MR572-3E132S/4C**	10,65	167	121	IE3
	63	800	**23,02**	19140	3,3	**NR572-3E132S/4C**		160		
	54	937	**27,00**	19961	2,9	**MR572-2E132S/4B**	11,05	161		IE2
	63	800	**23,02**	19140	3,3	**NR572-2E132S/4B**		154		

* : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
5,5	76	666	**19,15**	18208	3,8	**MR572-3E132S/4C**	10,65	167	121	IE3
7,5	86	594	**17,07**	17634	4,0	**NR572-3E132S/4C**		160		
						MR572-2E132S/4B	11,05	161		IE2
						NR572-2E132S/4B		154		
	26	1906	**55,82**	8412	0,8	**MR473-3E132S/4C**	10,65	143	118	IE3
	30	1676	**49,05**	12479	0,9	**NR473-3E132S/4C**		145		
	34	1463	**42,75**	12351	1,1	**MR473-2E132S/4B**	11,05	137		IE2
	39	1283	**37,45**	12181	1,2	**NR473-2E132S/4B**		139		
	47	1062	**30,93**	11870	1,5					
	57	882	**25,67**	11512	1,8					
	66	769	**22,15**	11200	1,9	**MR472-3E132S/4C**	10,65	138	118	IE3
	78	650	**18,72**	10822	2,2	**NR472-3E132S/4C**		141		
	85	599	**17,25**	10632	2,2	**MR472-2E132S/4B**	11,05	132		IE2
	95	534	**15,35**	10358	2,3	**NR472-2E132S/4B**		135		
	108	472	**13,56**	10060	2,6					
	121	420	**12,05**	9776	2,8					
	135	375	**10,79**	9455	2,9					
	153	332	**9,53**	9162	3,2					
	58	865	**25,27**	5001	0,8	**MR373-3E132S/4C**	10,65	97	115	IE3
	67	742	**21,65**	5044	0,9	**NR373-3E132S/4C**		99		
	71	707	**20,64**	4882	0,9	**MR373-2E132S/4B**	11,05	91		IE2
	78	641	**18,68**	4894	1,0	**NR373-2E132S/4B**		93		
	90	562	**16,20**	4684	1,3	**MR372-3E132S/4C**	10,65	97	115	IE3
	108	470	**13,53**	5341	1,4	**NR372-3E132S/4C**		99		
	117	433	**12,48**	5572	1,5	**MR372-2E132S/4B**	11,05	91		IE2
	135	375	**10,80**	5899	1,7	**NR372-2E132S/4B**		93		
	155	328	**9,41**	6122	1,8					
	177	287	**8,25**	6076	1,9					
	213	238	**6,84**	5720	2,3					
	245	208	**5,97**	5429	2,5					
	279	182	**5,23**	5165	2,8					
	295	173	**4,96**	5131	2,7					
	340	150	**4,29**	4857	3,0					
	390	131	**3,74**	4612	3,1					
	311	163	**9,41**	4921	2,8	**MR372-3E132S/2B**	9,90	90	115	IE3
	355	143	**8,25**	4688	3,1	**NR372-3E132S/2B**		92		
	428	119	**6,84**	4410	3,6	**MR372-2E132S/2A**	10,20	86		IE2
	491	103	**5,97**	4194	4,0	**NR372-2E132S/2A**		88		
	561	91	**5,23**	3998	4,0					
	591	86	**4,96**	3956	4,0					
	683	74	**4,29**	3753	4,0					
	784	65	**3,74**	3571	4,0					
	102	496	**14,31**	2350	0,9	**MR282-3E132S/4C**	10,65	90	112	IE3
	119	425	**12,24**	2987	1,0	**NR282-3E132S/4C**		92		
	138	367	**10,57**	3459	1,1	**MR282-2E132S/4B**	11,05	84		IE2
	152	335	**9,61**	3705	1,2	**NR282-2E132S/4B**		86		
	175	290	**8,33**	4003	1,3					
	202	251	**7,21**	4226	1,5					
	234	217	**6,25**	3795	1,7					
	273	186	**5,35**	3989	1,7					
	316	161	**4,62**	4111	1,7					
	348	147	**4,20**	4128	1,8					
	401	127	**3,64**	3906	1,9					
	463	110	**3,15**	3698	2,0					

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
5,5	551	92	**5,35**	3466	2,8	**MR282-3E132S/2B**	9,90	84	112	IE3
7,5	638	80	**4,62**	3281	2,9	**NR282-3E132S/2B**		86		
	701	72	**4,20**	3168	2,9	**MR282-2E132S/2A**	10,20	80		IE2
	809	63	**3,64**	3006	3,0	**NR282-2E132S/2A**		82		
	935	54	**3,15**	2852	3,1					
	122	415	**11,95**	-	0,9	**MR272-3E132S/4C**	10,65	81	110	IE3
	144	354	**10,16**	708	1,1	**NR272-3E132S/4C**		83		
	168	303	**8,71**	1236	1,2	**MR272-2E132S/4B**	11,05	75		IE2
	235	216	**6,21**	1548	1,5	**NR272-2E132S/4B**		77		
	276	184	**5,28**	1874	1,4					
	323	158	**4,53**	2112	1,5					
	396	129	**3,69**	2087	1,6					
	462	110	**3,16**	2238	1,8					
	474	107	**6,21**	2467	2,6	**MR272-3E132S/2B**	9,90	75	110	IE3
	557	91	**5,28**	2539	2,1	**NR272-3E132S/2B**		79		
	651	78	**4,53**	2576	2,3	**MR272-2E132S/2A**	10,20	71		IE2
						NR272-2E132S/2A		73		
7,5	3,2	20669	**457,99**	76047	0,9	**MR974-3E132M/4D**	14,40	1168	134	IE3
10	3,8	17616	**390,41**	97327	1,0	**NR974-3E132M/4D**		1218		
	4,3	15549	**344,17**	108424	1,2	**MR974-2E132M/4C**	15,00	1163		IE2
	4,8	13809	**305,33**	116736	1,3	**NR974-2E132M/4C**		1213		
	5,2	13010	**186,95**	120420	1,4	**MR973-3E160M/6**	15,00	1115	133	IE3
	5,8	11616	**166,73**	126036	1,5	**NR973-3E160M/6**		1165		
	6,5	10463	**150,02**	130315	1,7	**MR973-2E160M/6**	15,00	1115		IE2
	7,3	9256	**132,83**	134478	1,9	**NR973-2E160M/6**		1165		
	8,3	8108	**116,17**	138161	2,2					
	9,4	7176	**102,69**	140965	2,5					
	11	6405	**91,56**	142982	2,8					
	12	5757	**82,20**	144783	3,1					
	5,0	13182	**292,15**	71383	1,0	**MR874-3E132M/4D**	14,40	628	131	IE3
	6,1	10823	**239,61**	83659	1,2	**NR874-3E132M/4D**		633		
	6,9	9573	**211,60**	89182	1,4	**MR874-2E132M/4C**	15,00	623		IE2
	7,8	8522	**188,08**	93365	1,5	**NR874-2E132M/4C**		628		
	8,4	7901	**174,68**	95659	1,6					
	8,8	7647	**110,17**	96658	1,7	**MR873-3E160M/6**	15,00	635	130	IE3
	9,7	6928	**99,81**	99100	1,9	**NR873-3E160M/6**		640		
	11	6004	**86,51**	102028	2,2	**MR873-2E160M/6**	15,00	635		IE2
	13	5241	**75,51**	104284	2,5	**NR873-2E160M/6**		640		
	15	4496	**64,77**	106230	2,9					
	17	3925	**56,54**	107756	3,3					
	8,2	8246	**178,78**	47910	1,0	**MR773-3E132M/4D**	14,40	357	127	IE3
	9,9	6863	**148,73**	52957	1,2	**NR773-3E132M/4D**		443		
	11	6146	**133,05**	55281	1,3	**MR773-2E132M/4C**	15,00	352		IE2
	13	5311	**115,06**	57788	1,5	**NR773-2E132M/4C**		338		
	15	4606	**99,63**	59702	1,7					
	17	4034	**87,13**	61034	2,0					
	19	3561	**76,81**	62131	2,2					
	21	3162	**68,15**	63005	2,5					

*

✱ : I pesi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor weights are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
7,5	16	4349	**94,17**	26093	1,0	**MR673-3E132M/4D**	14,40	246	124	IE3
10	18	3744	**80,96**	29344	1,1	**NR673-3E132M/4D**		257		
	21	3254	**70,26**	30780	1,3	**MR673-2E132M/4C**	15,00	241		IE2
	24	2848	**61,42**	30006	1,5	**NR673-2E132M/4C**		252		
	27	2507	**53,99**	29229	1,7					
	28	2445	**52,68**	29077	1,8					
	32	2106	**45,29**	28127	2,0					
	37	1830	**39,30**	27218	2,2					
	43	1602	**34,36**	26347	2,4					
	49	1410	**30,20**	25510	2,6					
	63	1094	**23,18**	23803	3,4	**MR672-3E132M/4D**	14,40	241	124	IE3
	71	980	**20,74**	23095	3,7	**NR672-3E132M/4D**		251		
						MR672-2E132M/4C	15,00	236		IE2
						NR672-2E132M/4C		246		
	23	3001	**64,72**	19779	1,0	**MR573-3E132M/4D**	14,40	180	121	IE3
	27	2542	**54,74**	21922	1,2	**NR573-3E132M/4D**		173		
	30	2268	**48,74**	21529	1,3	**MR573-2E132M/4C**	15,00	175		IE2
	37	1860	**39,98**	20784	1,5	**NR573-2E132M/4C**		168		
	41	1645	**35,31**	20281	1,7					
	47	1464	**31,38**	19787	1,8					
	54	1273	**27,00**	19138	2,2	**MR572-3E132M/4D**	14,40	173	121	IE3
	64	1087	**23,02**	18436	2,4	**NR572-3E132M/4D**		166		
	76	905	**19,15**	17620	2,8	**MR572-2E132M/4C**	15,00	168		IE2
	86	807	**17,07**	17108	3,0	**NR572-2E132M/4C**		161		
	101	687	**14,54**	16401	3,5					
	117	591	**12,50**	15743	3,9					
	39	1744	**37,45**	10751	0,9	**MR473-3E132M/4D**	14,40	150	118	IE3
	47	1443	**30,93**	10687	1,1	**NR473-3E132M/4D**		153		
	57	1200	**25,67**	10528	1,3	**MR473-2E132M/4C**	15,00	145		IE2
						NR473-2E132M/4C		148		
	66	1045	**22,15**	10350	1,4	**MR472-3E132M/4D**	14,40	143	118	IE3
	78	884	**18,72**	10102	1,6	**NR472-3E132M/4D**		146		
	85	814	**17,25**	9968	1,6	**MR472-2E132M/4C**	15,00	138		IE2
	95	726	**15,35**	9766	1,7	**NR472-2E132M/4C**		141		
	108	641	**13,56**	9537	1,9					
	122	571	**12,05**	9310	2,0					
	136	510	**10,79**	9017	2,2					
	154	451	**9,53**	8774	2,3					
	173	401	**8,47**	8540	2,6					
	186	372	**7,87**	8391	2,7					
	220	315	**6,65**	8051	3,1					
	90	767	**16,20**	1533	0,9	**MR372-3E132M/4D**	14,40	104	115	IE3
	108	641	**13,53**	2708	1,0	**NR372-3E132M/4D**		106		
	117	591	**12,48**	3143	1,1	**MR372-2E132M/4C**	15,00	99		IE2
	136	512	**10,80**	3795	1,2	**NR372-2E132M/4C**		101		
	156	447	**9,41**	4287	1,3					
	178	392	**8,25**	4659	1,4					
	214	325	**6,84**	4633	1,7					
	246	284	**5,97**	4879	1,9					
	280	249	**5,23**	5050	2,1					

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
7,5	313	222	**9,41**	5002	2,1	**MR372-3E132S/2C**	13,20	93	115	IE3
10	357	194	**8,25**	4759	2,3	**NR372-3E132S/2C**		95		
	430	161	**6,84**	4479	2,7	**MR372-2E132S/2B**	13,60	88		IE2
	494	141	**5,97**	4254	3,0	**NR372-2E132S/2B**		90		
	563	123	**5,23**	4050	3,2					
	594	117	**4,96**	4018	3,2					
	686	101	**4,29**	3806	3,5					
	788	88	**3,74**	3617	3,7					
	899	77	**3,28**	3445	3,9					
	139	500	**10,57**	1307	0,8	**MR282-3E132M/4D**	14,40	96	112	IE3
	152	455	**9,61**	1746	0,9	**NR282-3E132M/4D**		98		
	176	394	**8,33**	2305	1,0	**MR282-2E132M/4C**	15,00	91		IE2
	203	341	**7,21**	2755	1,1	**NR282-2E132M/4C**		93		
	234	296	**6,25**	2308	1,2					
	274	253	**5,35**	2715	1,3					
	317	219	**4,62**	3012	1,3					
	349	199	**4,20**	3163	1,3					
	403	172	**3,64**	3342	1,4					
	465	150	**3,15**	3469	1,5					
	551	126	**5,35**	3542	2,1	**MR282-3E132S/2C**	13,20	95	112	IE3
	638	109	**4,62**	3347	2,1	**NR282-3E132S/2C**		97		
	701	99	**4,20**	3229	2,1	**MR282-2E132S/2B**	13,60	90		IE2
	809	86	**3,64**	3058	2,2	**NR282-2E132S/2B**		92		
	935	74	**3,15**	2898	2,3					
	144	481	**10,16**	-	0,8	**MR272-3E132M/4D**	14,40	87	110	IE3
	168	412	**8,71**	-	0,9	**NR272-3E132M/4D**		89		
	236	294	**6,21**	-	1,1	**MR272-2E132M/4C**	15,00	82		IE2
	277	250	**5,28**	586	1,1	**NR272-2E132M/4C**		84		
	324	215	**4,53**	1008	1,1					
	397	175	**3,69**	1097	1,2					
	464	150	**3,16**	1389	1,3					
	474	146	**6,21**	1710	1,9	**MR272-3E132S/2C**	13,20	86	110	IE3
	557	125	**5,28**	1896	1,6	**NR272-3E132S/2C**		88		
	651	107	**4,53**	2025	1,7	**MR272-2E132S/2B**	13,60	81		IE2
						NR272-2E132S/2B		83		
11	5,2	19092	**186,95**	88052	0,9	**MR973-3E160L/6**	21,50	1151	133	IE3
15	5,8	17047	**166,73**	100656	1,1	**NR973-3E160L/6**		1201		
	7,3	13584	**132,83**	117951	1,3	**MR973-2E160L/6**	22,00	1151		IE2
						NR973-2E160L/6		1201		
	7,9	12639	**186,95**	121960	1,4	**MR973-3E160M/4C**	21,00	1124	133	IE3
	8,8	11286	**166,73**	127289	1,6	**NR973-3E160M/4C**		1174		
	9,8	10167	**150,02**	131366	1,8	**MR973-2E160M/4B**	21,00	1134		IE2
	11	8994	**132,83**	135325	2,0	**NR973-2E160M/4B**		1184		
	13	7879	**116,17**	138864	2,3					
	14	6974	**102,69**	141553	2,6					
	16	6225	**91,56**	143669	2,9					
	18	5596	**82,20**	145376	3,2					
	8,8	11215	**110,17**	81975	1,2	**MR873-3E160L/6**	21,50	670	130	IE3
	9,7	10160	**99,81**	86825	1,3	**NR873-3E160L/6**		675		
	11	8806	**86,51**	92391	1,5	**MR873-2E160L/6**	22,00	670		IE2
	13	7687	**75,51**	96366	1,7	**NR873-2E160L/6**		675		
	15	6594	**64,77**	100069	2,0					

* : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
11	13	7400	**110,17**	97507	1,8	**MR873-3E160M/4C**	21,00	661	130	IE3
15	15	6705	**99,81**	99712	1,9	**NR873-3E160M/4C**		666		
	17	5811	**86,51**	102735	2,2	**MR873-2E160M/4B**	21,00	671		IE2
	19	5072	**75,51**	104765	2,6	**NR873-2E160M/4B**		676		
	23	4351	**64,77**	106745	3,0					
	26	3798	**56,54**	108184	3,4					
	28	3551	**52,86**	108779	3,7					
	11	8986	**133,05**	44711	0,9	**MR773-3E160M/4C**	21,00	429	127	IE3
	13	7765	**115,06**	49800	1,0	**NR773-3E160M/4C**		521		
	15	6734	**99,63**	53467	1,2	**MR773-2E160M/4B**	21,00	439		IE2
	17	5898	**87,13**	56099	1,4	**NR773-2E160M/4B**		531		
	19	5206	**76,81**	58078	1,5					
	22	4623	**68,15**	59610	1,7					
	24	4127	**60,76**	60845	1,9					
	25	3976	**58,59**	61203	2,0					
	29	3449	**50,75**	62406	2,3					
	33	3005	**44,17**	63359	2,7					
	37	2683	**39,33**	64020	3,0					
	42	2383	**34,89**	64611	3,4					
	47	2127	**31,11**	65098	3,8					
	49	2050	**30,00**	65243	3,9					
	24	4164	**61,42**	27133	1,0	**MR673-3E160M/4C**	21,00	298	124	IE3
	27	3665	**53,99**	26699	1,2	**NR673-3E160M/4C**		311		
	28	3575	**52,68**	26608	1,2	**MR673-2E160M/4B**	21,00	308		IE2
	32	3078	**45,29**	26002	1,4	**NR673-2E160M/4B**		321		
	37	2676	**39,30**	25370	1,5					
	43	2342	**34,36**	24729	1,6					
	49	2062	**30,20**	24085	1,8					
	55	1823	**26,66**	23442	1,9					
	63	1600	**23,18**	22704	2,3	**MR672-3E160M/4C**	21,00	296	124	IE3
	71	1433	**20,74**	22110	2,5	**NR672-3E160M/4C**		306		
	82	1238	**17,93**	21331	2,8	**MR672-2E160M/4B**	21,00	306		IE2
	95	1073	**15,53**	20560	3,1	**NR672-2E160M/4B**		316		
	108	940	**13,58**	19847	3,5					
	123	829	**11,97**	19184	3,8					
	37	2720	**39,98**	18691	1,1	**MR573-3E160M/4C**	21,00	229	121	IE3
	42	2405	**35,31**	18431	1,1	**NR573-3E160M/4C**		221		
	47	2141	**31,38**	18140	1,2	**MR573-2E160M/4B**	21,00	239		IE2
	55	1814	**26,54**	17668	1,4	**NR573-2E160M/4B**		231		
	64	1589	**23,02**	17224	1,7	**MR572-3E160M/4C**	21,00	226	121	IE3
	77	1323	**19,15**	16608	1,9	**NR572-3E160M/4C**		218		
	86	1180	**17,07**	16205	2,1	**MR572-2E160M/4B**	21,00	236		IE2
	101	1004	**14,54**	15630	2,4	**NR572-2E160M/4B**		228		
	118	865	**12,50**	15078	2,7					
	136	751	**10,85**	14558	3,0					
	155	658	**9,48**	14065	3,3					
	176	579	**8,34**	13596	3,7					
	198	514	**7,41**	13081	4,0					
	68	1484	**21,74**	8663	1,0	**MR473-3E160M/4C**	21,00	198	118	IE3
	81	1233	**18,04**	8662	1,3	**NR473-3E160M/4C**		200		
						MR473-2E160M/4B	21,00	208		IE2
						NR473-2E160M/4B		210		

*

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
11	85	1190	**17,25**	8819	1,1	**MR472-3E160M/4C**	21,00	196	118	IE3
15	96	1061	**15,35**	8741	1,2	**NR472-3E160M/4C**		198		
	108	938	**13,56**	8631	1,3	**MR472-2E160M/4B**	21,00	206		IE2
	122	834	**12,05**	8504	1,4	**NR472-2E160M/4B**		208		
	136	746	**10,79**	8261	1,5					
	154	660	**9,53**	8105	1,6					
	174	587	**8,47**	7944	1,7					
	187	544	**7,87**	7838	1,9					
	221	460	**6,65**	7582	2,1					
	260	393	**5,66**	7327	2,4					
	301	340	**4,89**	6966	2,4					
	324	315	**4,54**	6853	2,3					
	383	266	**3,83**	6589	2,4					
	429	238	**3,27**	6404	2,5					
15	7,3	18431	**132,83**	92255	1,0	**MR973-3E180L/6**	29,00	1227	133	IE3
20						**NR973-3E180L/6**		1277		
						MR973-2E180L/6	29,00	1207		IE2
						NR973-2E180L/6		1257		
	7,9	17238	**186,95**	99559	1,0	**MR973-3E160L/4D**	29,00	1160	133	IE3
	8,8	15393	**166,73**	109734	1,2	**NR973-3E160L/4D**		1210		
	9,8	13866	**150,02**	116899	1,3	**MR973-2E160L/4C**	29,30	1157		IE2
	11	12267	**132,83**	123637	1,5	**NR973-2E160L/4C**		1207		
	13	10746	**116,17**	129424	1,7					
	14	9512	**102,69**	133728	1,9					
	16	8491	**91,56**	136978	2,1					
	18	7632	**82,20**	139612	2,4					
	21	6508	**70,07**	142944	2,8					
	24	5745	**61,77**	145030	3,1					
	27	5103	**54,80**	146712	3,5					
	8,9	15215	**110,17**	57310	0,9	**MR873-3E180L/6**	29,00	695	130	IE3
	9,8	13784	**99,81**	67627	0,9	**NR873-3E180L/6**		700		
	11	11947	**86,51**	78415	1,1	**MR873-2E180L/6**	29,00	675		IE2
	13	10429	**75,51**	85637	1,2	**NR873-2E180L/6**		680		
	13	10091	**110,17**	87265	1,3	**MR873-3E160L/4D**	29,00	635	130	IE3
	15	9143	**99,81**	91189	1,4	**NR873-3E160L/4D**		640		
	17	7924	**86,51**	95767	1,6	**MR873-2E160L/4C**	29,30	632		IE2
	19	6917	**75,51**	99209	1,9	**NR873-2E160L/4C**		637		
	23	5933	**64,77**	102335	2,2					
	26	5179	**56,54**	104512	2,5					
	28	4842	**52,86**	105493	2,7					
	32	4224	**46,12**	107118	3,1					
	36	3714	**40,55**	108429	3,5					
	15	9184	**99,63**	43792	0,9	**MR773-3E160L/4D**	29,00	426	127	IE3
	17	8044	**87,13**	48824	1,0	**NR773-3E160L/4D**		510		
	19	7100	**76,81**	52306	1,1	**MR773-2E160L/4C**	29,30	423		IE2
	22	6306	**68,15**	54916	1,3	**NR773-2E160L/4C**		507		
	24	5629	**60,76**	56964	1,4					
	25	5423	**58,59**	57526	1,5					
	29	4704	**50,75**	59383	1,7					
	33	4099	**44,17**	60911	2,0					
	37	3659	**39,33**	61963	2,2					
	42	3251	**34,89**	62863	2,5					
	47	2902	**31,11**	63595	2,8					
	49	2796	**30,00**	63811	2,9					
	57	2425	**25,99**	64545	3,3					
	65	2114	**22,62**	65137	3,8					

* : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse	*
15 20	69	2015	**21,40**	65319	4,0	**MR772-3E160L/4D** **NR772-3E160L/4D** **MR772-2E160L/4C** **NR772-2E160L/4C**	29,00 29,30 	396 480 393 477	127	IE3 IE2 	
	32 37 43 49 55	4199 3649 3195 2812 2486	**45,29** **39,30** **34,36** **30,20** **26,66**	23597 23284 22905 22481 22027	1,0 1,1 1,2 1,3 1,4	**MR673-3E160L/4D** **NR673-3E160L/4D** **MR673-2E160L/4C** **NR673-2E160L/4C**	29,00 29,30 	325 337 322 334	124	IE3 IE2 	
	63 71 82 95 108 123 138 155 161 186	2182 1954 1688 1464 1282 1131 1005 896 864 749	**23,18** **20,74** **17,93** **15,53** **13,58** **11,97** **10,62** **9,47** **9,13** **7,91**	21474 21009 20379 19736 19126 18548 17998 17473 17307 16656	1,7 1,8 2,1 2,3 2,5 2,8 3,1 3,4 3,5 3,9	**MR672-3E160L/4D** **NR672-3E160L/4D** **MR672-2E160L/4C** **NR672-2E160L/4C**	29,00 29,30 	320 332 317 329	124	IE3 IE2 	
	47 55	2920 2474	**31,38** **26,54**	16274 16090	0,9 1,0	**MR573-3E160L/4D** **NR573-3E160L/4D** **MR573-2E160L/4C** **NR573-2E160L/4C**	29,00 29,30 	271 262 268 259	121	IE3 IE2 	
	64 77 86 101 118 136 155 176 198 228 261 297 337	2168 1804 1610 1370 1179 1025 897 789 702 610 534 469 415	**23,02** **19,15** **17,07** **14,54** **12,50** **10,85** **9,48** **8,34** **7,41** **6,43** **5,63** **4,95** **4,37**	15855 15470 15190 14765 14335 13913 13501 13101 12607 12178 11771 11383 11010	1,2 1,4 1,5 1,7 2,0 2,2 2,5 2,7 3,1 3,4 3,7 4,0 4,0	**MR572-3E160L/4D** **NR572-3E160L/4D** **MR572-2E160L/4C** **NR572-2E160L/4C**	29,00 29,30 	265 257 262 254	121	IE3 IE2 	
	81	1681	**18,04**	7230	0,9	**MR473-3E160L/4D** **NR473-3E160L/4D** **MR473-2E160L/4C** **NR473-2E160L/4C**	29,00 29,30 	222 225 219 222	118	IE3 IE2 	
	85 96 108 122 136 154 174 187 221 260 301 324 383 450	1624 1447 1279 1138 1018 900 801 742 628 536 463 430 364 310	**17,25** **15,35** **13,56** **12,05** **10,79** **9,53** **8,47** **7,87** **6,65** **5,66** **4,89** **4,54** **3,83** **3,27**	7511 7577 7603 7590 7404 7349 7272 7213 7055 6877 6535 6452 6250 6047	0,8 0,9 0,9 1,0 1,1 1,2 1,3 1,4 1,6 1,7 1,7 1,7 1,8 1,9	**MR472-3E160L/4D** **NR472-3E160L/4D** **MR472-2E160L/4C** **NR472-2E160L/4C**	29,00 29,30 	220 223 217 220	118	IE3 IE2 	

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
18,5	8,8	18921	**166,73**	89083	1,0	**MR973-3E180M/4**	34,50	1187	133	IE3
25	9,8	17045	**150,02**	100675	1,1	**NR973-3E180M/4**		1237		
	11	15079	**132,83**	111022	1,2	**MR973-2E180M/4**	34,50	1187		IE2
	13	13209	**116,17**	119563	1,4	**NR973-2E180M/4**		1237		
	14	11692	**102,69**	125735	1,5					
	16	10437	**91,56**	130404	1,7					
	18	9382	**82,20**	134057	1,9					
	21	8000	**70,07**	138616	2,3					
	24	7062	**61,77**	141298	2,5					
	27	6272	**54,80**	143539	2,9					
	30	5599	**48,86**	145367	3,2					
	35	4852	**42,30**	147309	3,7					
	13	12862	**75,51**	73297	1,0	**MR873-3G200L/6a**	36,50	725	130	IE3
	15	11033	**64,77**	82825	1,2	**NR873-3G200L/6a**		730		
						MR873-2G200L/6a	36,50	725		IE2
						NR873-2G200L/6a		730		
	17	9740	**86,51**	88619	1,3	**MR873-3E180M/4**	34,50	687	130	IE3
	20	8502	**75,51**	93547	1,5	**NR873-3E180M/4**		692		
	23	7293	**64,77**	97873	1,8	**MR873-2E180M/4**	34,50	687		IE2
	26	6366	**56,54**	100811	2,0	**NR873-2E180M/4**		692		
	28	5951	**52,86**	102270	2,2					
	32	5192	**46,12**	104425	2,5					
	36	4565	**40,55**	106169	2,8					
	19	8727	**76,81**	45867	0,9	**MR773-3E180M/4**	34,50	450	127	IE3
	22	7751	**68,15**	49852	1,0	**NR773-3E180M/4**		542		
	24	6919	**60,76**	52845	1,2	**MR773-2E180M/4**	34,50	450		IE2
	25	6666	**58,59**	53691	1,2	**NR773-2E180M/4**		542		
	29	5782	**50,75**	56440	1,4					
	33	5039	**44,17**	58529	1,6					
	38	4498	**39,33**	59872	1,8					
	42	3996	**34,89**	61193	2,0					
	47	3567	**31,11**	62143	2,2					
	49	3437	**30,00**	62433	2,3					
	57	2981	**25,99**	63409	2,7					
	65	2598	**22,62**	64190	3,1					
	69	2477	**21,40**	64428	3,2	**MR772-3E180M/4**	34,50	445	127	IE3
	79	2160	**18,63**	65037	3,7	**NR772-3E180M/4**		537		
						MR772-2E180M/4	34,50	445		IE2
						NR772-2E180M/4		537		
	38	4486	**39,30**	21455	0,9	**MR673-3E180M/4**	34,50	341	124	IE3
	43	3927	**34,36**	21304	1,0	**NR673-3E180M/4**		355		
	49	3457	**30,20**	21071	1,1	**MR673-2E180M/4**	34,50	341		IE2
	55	3056	**26,66**	20779	1,2	**NR673-2E180M/4**		355		
	64	2682	**23,18**	20387	1,4	**MR672-3E180M/4**	34,50	338	124	IE3
	71	2402	**20,74**	20035	1,5	**NR672-3E180M/4**		349		
	82	2075	**17,93**	19534	1,7	**MR672-2E180M/4**	34,50	338		IE2
	95	1799	**15,53**	19001	1,9	**NR672-2E180M/4**		349		
	109	1576	**13,58**	18482	2,1					
	123	1391	**11,97**	17978	2,3					
	139	1235	**10,62**	17491	2,5					
	156	1102	**9,47**	17019	2,7					
	162	1062	**9,13**	16868	2,8					
	186	921	**7,91**	16274	3,2					
	214	802	**6,88**	15701	3,6					

* : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
18,5 25	257	668	**5,73**	14781	4,0	**MR672-3E180M/4** **NR672-3E180M/4** **MR672-2E180M/4** **NR672-2E180M/4**	34,50 34,50 	338 349 338 349	124	IE3 IE2
	77 86 101 118 136 156 177 199 229 262 298 338	2218 1979 1684 1450 1260 1103 970 862 749 656 577 510	**19,15** **17,07** **14,54** **12,50** **10,85** **9,48** **8,34** **7,41** **6,43** **5,63** **4,95** **4,37**	14469 14297 14002 13677 13341 12999 12658 12183 11809 11447 11096 10756	1,1 1,2 1,4 1,6 1,8 2,0 2,2 2,5 2,8 3,0 3,3 3,6	**MR572-3E180M/4** **NR572-3E180M/4** **MR572-2E180M/4** **NR572-2E180M/4**	34,50 34,50 	289 277 289 277	121	IE3 IE2
	109 122 137 155 174 188 222 261 302 325 385 452	1573 1399 1251 1106 984 912 772 658 570 528 447 381	**13,56** **12,05** **10,79** **9,53** **8,47** **7,87** **6,65** **5,66** **4,89** **4,54** **3,83** **3,27**	6706 6792 6656 6687 6683 6666 6591 6481 6155 6098 5951 5791	0,8 0,8 0,9 0,9 1,0 1,1 1,3 1,4 1,4 1,3 1,5 1,5	**MR472-3E180M/4** **NR472-3E180M/4** **MR472-2E180M/4** **NR472-2E180M/4**	34,50 34,50 	269 272 269 272	118	IE3 IE2
22 30	11 13 14 16 18 21 24 27 30 35 40	17933 15709 13905 12413 11157 9514 8398 7460 6659 5771 5094	**132,83** **116,17** **102,69** **91,56** **82,20** **70,07** **61,77** **54,80** **48,86** **42,30** **37,29**	95428 107874 116512 122880 127771 133612 137204 140128 142455 144908 146689	1,0 1,1 1,3 1,5 1,6 1,9 2,1 2,4 2,7 3,1 3,5	**MR973-3E180L/4** **NR973-3E180L/4** **MR973-2E180L/4** **NR973-2E180L/4**	42,50 42,50 	1212 1262 1212 1262	133	IE3 IE2
	13 15	15296 13120	**75,51** **64,77**	56641 71797	0,8 1,0	**MR873-3G200L/6b** **NR873-3G200L/6b** **MR873-2G200L/6b** **NR873-2G200L/6b**	43,00 43,00 	740 745 740 745	130	IE3 IE2
	17 20 23 26 28 32 36	11583 10111 8673 7571 7077 6175 5429	**86,51** **75,51** **64,77** **56,54** **52,86** **46,12** **40,55**	80155 87034 92898 96919 98601 101504 103743	1,1 1,3 1,5 1,7 1,8 2,1 2,4	**MR873-3E180L/4** **NR873-3E180L/4** **MR873-2E180L/4** **NR873-2E180L/4**	42,50 42,50 	687 692 687 692	130	IE3 IE2
	24 25 29 33	8228 7928 6877 5993	**60,76** **58,59** **50,75** **44,17**	47975 49172 52987 55813	1,0 1,0 1,2 1,3	**MR773-3E180L/4** **NR773-3E180L/4** **MR773-2E180L/4** **NR773-2E180L/4**	42,50 42,50 	489 587 489 587	127	IE3 IE2

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
22 30	38	5350	**39,33**	57678	1,5	**MR773-3E180L/4**	42,50	489	127	IE3
	42	4752	**34,89**	59285	1,7	**NR773-3E180L/4**		587		
	47	4242	**31,11**	60614	1,9	**MR773-2E180L/4**	42,50	489		IE2
	49	4087	**30,00**	61022	2,0	**NR773-2E180L/4**		587		
	57	3546	**25,99**	62191	2,3					
	65	3090	**22,62**	63181	2,6					
	69	2946	**21,40**	63482	2,7	**MR772-3E180L/4**	42,50	457	127	IE3
	79	2569	**18,63**	64248	3,1	**NR772-3E180L/4**		557		
	90	2262	**16,39**	65386	3,4	**MR772-2E180L/4**	42,50	457		IE2
	101	2009	**14,54**	66349	3,7	**NR772-2E180L/4**		557		
	49	4111	**30,20**	19673	0,9	**MR673-3E180L/4**	42,50	370	124	IE3
	55	3634	**26,66**	19544	1,0	**NR673-3E180L/4**		384		
						MR673-2E180L/4	42,50	370		IE2
						NR673-2E180L/4		384		
	64	3190	**23,18**	19314	1,2	**MR672-3E180L/4**	42,50	345	124	IE3
	71	2857	**20,74**	19075	1,3	**NR672-3E180L/4**		349		
	82	2468	**17,93**	18704	1,4	**MR672-2E180L/4**	42,50	345		IE2
	95	2140	**15,53**	18283	1,6	**NR672-2E180L/4**		349		
	109	1874	**13,58**	17853	1,7					
	123	1654	**11,97**	17424	1,9					
	139	1469	**10,62**	16999	2,1					
	156	1311	**9,47**	16580	2,3					
	162	1263	**9,13**	16446	2,4					
	186	1095	**7,91**	15908	2,7					
	214	954	**6,88**	15383	3,0					
	257	795	**5,73**	14484	4,0					
	290	706	**5,08**	14055	4,0					
	325	630	**4,53**	13645	4,0					
	338	607	**4,37**	13516	4,0					
	390	526	**3,79**	13008	4,0					
	77	2638	**19,15**	13476	1,0	**MR572-3E180L/4**	42,50	311	121	IE3
	86	2353	**17,07**	13412	1,0	**NR572-3E180L/4**		298		
	101	2003	**14,54**	13249	1,2	**MR572-2E180L/4**	42,50	311		IE2
	118	1724	**12,50**	13029	1,3	**NR572-2E180L/4**		298		
	136	1498	**10,85**	12778	1,5					
	156	1311	**9,48**	12508	1,7					
	177	1154	**8,34**	12226	1,9					
	199	1026	**7,41**	11769	2,1					
	229	891	**6,43**	11450	2,3					
	262	780	**5,63**	11133	2,5					
	298	686	**4,95**	10820	2,8					
	338	607	**4,37**	10513	3,0					
	155	1316	**9,53**	6027	0,8	**MR472-3E180L/4**	42,50	269	118	IE3
	174	1170	**8,47**	6096	0,9	**NR472-3E180L/4**		271		
	188	1085	**7,87**	6121	0,9	**MR472-2E180L/4**	42,50	269		IE2
	222	918	**6,65**	6131	1,1	**NR472-2E180L/4**		271		
	261	783	**5,66**	6089	1,2					
	302	678	**4,89**	5778	1,2					
	325	628	**4,54**	5749	1,1					
	385	532	**3,83**	5655	1,2					
	452	453	**3,27**	5539	1,3					

* : I [illegible] dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor [illegible] are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
30	14	18963	**102,69**	88796	0,9	**MR973-3G200L/4**	55,00	1271	133	IE3
40	16	16928	**91,56**	101334	1,1	**NR973-3G200L/4**		1321		
	18	15216	**82,20**	110352	1,2	**MR973-2G200L/4**	55,00	1258		IE2
	21	12975	**70,07**	120559	1,4	**NR973-2G200L/4**		1308		
	24	11453	**61,77**	126654	1,6					
	27	10173	**54,80**	131340	1,8					
	30	9081	**48,86**	135053	2,0					
	35	7870	**42,30**	138982	2,3					
	40	6948	**37,29**	141629	2,6					
	45	6172	**33,08**	143817	2,9					
	50	5509	**29,49**	145605	3,3					
	20	13787	**75,51**	67641	0,9	**MR873-3G200L/4**	55,00	777	130	IE3
	23	11826	**64,77**	78916	1,1	**NR873-3G200L/4**		782		
	26	10323	**56,54**	86098	1,3	**MR873-2G200L/4**	55,00	764		IE2
	28	9651	**52,86**	88992	1,3	**NR873-2G200L/4**		769		
	32	8420	**46,12**	93855	1,5					
	36	7403	**40,55**	97498	1,8					
	43	6305	**34,53**	101037	2,1					
	49	5543	**30,36**	103477	2,3					
	54	5002	**27,39**	104965	2,6					
	62	4359	**23,87**	106724	3,0					
	73	3702	**20,28**	107951	3,5					
	83	3255	**17,83**	105255	4,0					
	92	2937	**16,09**	103054	4,0					
	105	2559	**14,02**	100062	4,0					
	38	7296	**39,33**	51530	1,1	**MR773-3G200L/4**	55,00	528	127	IE3
	42	6481	**34,89**	54292	1,2	**NR773-3G200L/4**		631		
	47	5785	**31,11**	56432	1,4	**MR773-2G200L/4**	55,00	515		IE2
	49	5574	**30,00**	57045	1,4	**NR773-2G200L/4**		618		
	57	4836	**25,99**	58976	1,7					
	65	4214	**22,62**	60692	1,9					
	69	4018	**21,40**	61103	2,0	**MR772-3G200L/4**	55,00	496	127	IE3
	79	3503	**18,63**	62280	2,3	**NR772-3G200L/4**		601		
	90	3085	**16,39**	63789	2,5	**MR772-2G200L/4**	55,00	483		IE2
	101	2739	**14,54**	65036	2,7	**NR772-2G200L/4**		588		
	114	2449	**12,98**	66035	2,9					
	127	2200	**11,65**	66899	3,1					
	134	2076	**11,00**	67301	3,3					
	153	1817	**9,62**	68157	3,6					
	82	3366	**17,93**	16806	1,0	**MR672-3G200L/4**	55,00	417	124	IE3
	95	2919	**15,53**	16639	1,1	**NR672-3G200L/4**		411		
	109	2556	**13,58**	16416	1,3	**MR672-2G200L/4**	55,00	404		IE2
	123	2256	**11,97**	16157	1,4	**NR672-2G200L/4**		398		
	139	2003	**10,62**	15875	1,5					
	156	1788	**9,47**	15578	1,7					
	162	1722	**9,13**	15479	1,7					
	186	1493	**7,91**	15071	2,0					
	214	1301	**6,88**	14654	2,2					
	257	1084	**5,73**	13804	2,9					
	290	963	**5,08**	13452	3,0					
	325	859	**4,53**	13107	3,1					
	338	828	**4,37**	12997	3,2					
	390	718	**3,79**	12559	3,3					
	448	625	**3,29**	12133	3,4					

*

*: I gruppi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor groups are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
30	101	2731	**14,54**	11526	0,9	**MR572-3G200L/4**	55,00	335	121	IE3
40	118	2352	**12,50**	11548	1,0	**NR572-3G200L/4**		322		
	136	2043	**10,85**	11493	1,1	**MR572-2G200L/4**	55,00	322		IE2
	156	1788	**9,48**	11384	1,2	**NR572-2G200L/4**		309		
	177	1574	**8,34**	11238	1,4					
	199	1399	**7,41**	10823	1,6					
	229	1216	**6,43**	10629	1,7					
	262	1064	**5,63**	10415	1,9					
	298	936	**4,95**	10190	2,0					
	338	827	**4,37**	9956	2,2					
37	18	18767	**82,20**	90116	1,0	**MR973-3G225S/4**	67,00	1295	133	IE3
50	21	16003	**70,07**	106356	1,1	**NR973-3G225S/4**		1345		
	24	14127	**61,77**	115513	1,3	**MR973-2G225S/4**	67,00	1279		IE2
	27	12548	**54,80**	122331	1,4	**NR973-2G225S/4**		1329		
	30	11201	**48,86**	127606	1,6					
	35	9707	**42,30**	132957	1,9					
	40	8569	**37,29**	136744	2,1					
	45	7612	**33,08**	139875	2,4					
	50	6795	**29,49**	142067	2,6					
	57	5993	**26,03**	144306	3,0					
	64	5291	**22,95**	146178	3,4					
	32	10385	**46,12**	85826	1,3	**MR873-3G225S/4**	67,00	855	130	IE3
	36	9131	**40,55**	91113	1,4	**NR873-3G225S/4**		860		
	43	7776	**34,53**	96200	1,7	**MR873-2G225S/4**	67,00	839		IE2
	49	6837	**30,36**	99396	1,9	**NR873-2G225S/4**		844		
	54	6169	**27,39**	101500	2,1					
	62	5376	**23,87**	104015	2,4					
	73	4566	**20,28**	104029	2,8					
	83	4014	**17,83**	101807	3,2					
	92	3622	**16,09**	99942	3,6					
	105	3157	**14,02**	97350	4,0					
	111	2995	**13,30**	102064	4,0					
	42	7993	**34,89**	48915	1,0	**MR773-3G225S/4**	67,00	619	127	IE3
	47	7136	**31,11**	52098	1,1	**NR773-3G225S/4**		730		
	49	6875	**30,00**	52994	1,2	**MR773-2G225S/4**	67,00	603		IE2
	57	5964	**25,99**	55899	1,3	**NR773-2G225S/4**		714		
	65	5198	**22,62**	58099	1,5					
	76	4486	**19,52**	60422	1,7					
	85	4004	**17,40**	62238	1,9					
	101	3379	**14,54**	63785	2,2	**MR772-3G225S/4**	67,00	610	127	IE3
	114	3020	**12,98**	65037	2,4	**NR772-3G225S/4**		720		
	127	2714	**11,65**	66028	2,5	**MR772-2G225S/4**	67,00	594		IE2
	134	2560	**11,00**	66517	2,6	**NR772-2G225S/4**		704		
	153	2241	**9,62**	67520	2,9					
	174	1972	**8,46**	66564	3,1					
	203	1695	**7,26**	63620	2,8					
	226	1523	**6,52**	61453	2,9					
	123	2782	**11,97**	15049	1,1	**MR672-3G225S/4**	67,00	495	124	IE3
	139	2471	**10,62**	14892	1,3	**NR672-3G225S/4**		511		
	156	2205	**9,47**	14701	1,4	**MR672-2G225S/4**	67,00	479		IE2
	162	2124	**9,13**	14634	1,4	**NR672-2G225S/4**		495		
	186	1842	**7,91**	14339	1,6					
	214	1605	**6,88**	14017	1,8					
	257	1337	**5,73**	13209	2,4					
	290	1187	**5,08**	12924	2,5					
	325	1060	**4,53**	12637	2,5					

*: I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
37	338	1021	**4,37**	12543	2,6	**MR672-3G225S/4**	67,00	495	124	IE3
50	390	885	**3,79**	12166	2,7	**NR672-3G225S/4**		511		
	448	771	**3,29**	11791	2,8	**MR672-2G225S/4**	67,00	479		IE2
						NR672-2G225S/4		495		
45	24	17182	**61,77**	99890	1,0	**MR973-3G225M/4**	80,00	1264	133	IE3
60	27	15262	**54,80**	110125	1,2	**NR973-3G225M/4**		1314		
	30	13623	**48,86**	117766	1,3	**MR973-2G225M/4**	80,00	1264		IE2
	35	11806	**42,30**	125294	1,5	**NR973-2G225M/4**		1314		
	40	10423	**37,29**	130457	1,7					
	45	9258	**33,08**	134468	1,9					
	50	8265	**29,49**	137659	2,2					
	57	7290	**26,03**	140631	2,5					
	64	6436	**22,95**	143083	2,8					
	72	5717	**20,36**	144221	3,1					
	81	5104	**18,15**	140115	3,5					
	32	12630	**46,12**	74597	1,0	**MR873-3G225M/4**	80,00	875	130	IE3
	36	11105	**40,55**	82498	1,2	**NR873-3G225M/4**		879		
	43	9457	**34,53**	89792	1,4	**MR873-2G225M/4**	80,00	875		IE2
	49	8315	**30,36**	94247	1,6	**NR873-2G225M/4**		879		
	54	7503	**27,39**	97155	1,7					
	62	6538	**23,87**	100203	2,0					
	73	5553	**20,28**	99546	2,3					
	83	4882	**17,83**	97866	2,7					
	92	4405	**16,09**	96386	3,0					
	105	3839	**14,02**	94251	3,4					
	111	3642	**13,30**	100362	3,6					
	127	3174	**11,59**	97147	4,0					
	146	2822	**10,09**	95212	4,0	**MR872-3G225M/4**	80,00	871	130	IE3
	166	2481	**8,87**	92101	4,0	**NR872-3G225M/4**		875		
	195	2113	**7,55**	83381	4,0	**MR872-2G225M/4**	80,00	871		IE2
	222	1858	**6,64**	81001	4,0	**NR872-2G225M/4**		875		
	246	1676	**5,99**	79097	4,0					
	282	1461	**5,22**	76555	4,0					
	298	1386	**4,95**	78185	4,0					
	342	1208	**4,32**	75338	4,0					
	57	7254	**25,99**	51679	1,1	**MR773-3G225M/4**	80,00	631	127	IE3
	65	6322	**22,62**	54798	1,3	**NR773-3G225M/4**		741		
	76	5456	**19,52**	57912	1,4	**MR773-2G225M/4**	80,00	631		IE2
	85	4871	**17,40**	60147	1,5	**NR773-2G225M/4**		741		
	101	4110	**14,54**	62270	1,8	**MR772-3G225M/4**	80,00	621	127	IE3
	114	3673	**12,98**	63756	1,9	**NR772-3G225M/4**		731		
	127	3301	**11,65**	64959	2,1	**MR772-2G225M/4**	80,00	621		IE2
	134	3114	**11,00**	65547	2,2	**NR772-2G225M/4**		731		
	153	2725	**9,62**	66742	2,4					
	174	2398	**8,46**	66950	2,6					
	203	2062	**7,26**	64002	2,3					
	226	1853	**6,52**	61796	2,4					
	240	1748	**6,15**	60656	2,5					
	123	3384	**11,97**	13782	0,9	**MR672-3G225M/4**	80,00	511	124	IE3
	139	3005	**10,62**	13768	1,0	**NR672-3G225M/4**		526		
	156	2682	**9,47**	13699	1,1	**MR672-2G225M/4**	80,00	511		IE2
	162	2584	**9,13**	13668	1,2	**NR672-2G225M/4**		526		
	186	2241	**7,91**	13502	1,3					
	214	1952	**6,88**	13289	1,5					

*: I [illegible] dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor [illegible] are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore *Motor Eff. Class* Motor Effizienz-klasse
45	257	1626	**5,73**	12529	1,9	**MR672-3G225M/4**	80,00	511	124	IE3
60	290	1444	**5,08**	12321	2,0	**NR672-3G225M/4**		526		
	325	1289	**4,53**	12099	2,1	**MR672-2G225M/4**	80,00	511		IE2
	338	1242	**4,37**	12025	2,2	**NR672-2G225M/4**		526		
	390	1077	**3,79**	11717	2,2					
	448	938	**3,29**	11400	2,3					
55	27	18591	**54,80**	91281	1,0	**MR973-3G250M/4**	96,00	1470	133	IE3
75	30	16595	**48,86**	103185	1,1	**NR973-3G250M/4**		1520		
	35	14382	**42,30**	114338	1,3	**MR973-2G250M/4**	96,00	1470		IE2
	40	12696	**37,29**	121719	1,4	**NR973-2G250M/4**		1520		
	45	11278	**33,08**	127317	1,6					
	50	10068	**29,49**	131709	1,8					
	57	8880	**26,03**	135710	2,0					
	64	7840	**22,95**	138999	2,3					
	73	6964	**20,36**	141581	2,6					
	82	6217	**18,15**	137811	2,9					
	91	5604	**16,23**	135067	3,2	**MR972-3G250M/4**	96,00	1430	133	IE3
	103	4978	**14,40**	131013	3,6	**NR972-3G250M/4**		1480		
						MR972-2G250M/4	96,00	1430		IE2
						NR972-2G250M/4		1480		
	43	11520	**34,53**	80469	1,1	**MR873-3G250M/4**	96,00	935	130	IE3
	49	10128	**30,36**	86955	1,3	**NR873-3G250M/4**		940		
	54	9139	**27,39**	91078	1,4	**MR873-2G250M/4**	96,00	935		IE2
	62	7964	**23,87**	94730	1,6	**NR873-2G250M/4**		940		
	73	6764	**20,28**	93920	1,9					
	83	5947	**17,83**	92909	2,2					
	92	5366	**16,09**	91905	2,4					
	106	4676	**14,02**	90336	2,8					
	111	4436	**13,30**	98164	2,9					
	128	3866	**11,59**	95221	3,3					
	147	3437	**10,09**	93806	3,3	**MR872-3G250M/4**	96,00	930	130	IE3
	167	3022	**8,87**	90856	3,7	**NR872-3G250M/4**		935		
	196	2574	**7,55**	81238	4,0	**MR872-2G250M/4**	96,00	930		IE2
	223	2263	**6,64**	79109	4,0	**NR872-2G250M/4**		935		
	247	2042	**5,99**	77384	4,0					
	283	1779	**5,22**	75055	4,0					
	299	1688	**4,95**	77325	4,0					
	343	1471	**4,32**	74581	4,0					
	65	7701	**22,62**	50040	1,0	**MR773-3G250M/4**	96,00	652	127	IE3
	76	6646	**19,52**	54372	1,2	**NR773-3G250M/4**		780		
	85	5933	**17,40**	57388	1,3	**MR773-2G250M/4**	96,00	652		IE2
						NR773-2G250M/4		780		
	102	5006	**14,54**	60112	1,5	**MR772-3G250M/4**	96,00	622	127	IE3
	114	4475	**12,98**	61998	1,6	**NR772-3G250M/4**		750		
	127	4021	**11,65**	63534	1,7	**MR772-2G250M/4**	96,00	622		IE2
	134	3794	**11,00**	64258	1,8	**NR772-2G250M/4**		750		
	154	3320	**9,62**	65717	1,9					
	175	2922	**8,46**	66864	2,1					
	204	2512	**7,26**	64406	1,9					
	227	2257	**6,52**	62155	2,0					
	240	2129	**6,15**	60992	2,0					

* : I pesi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor weights are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocita di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore * *Motor Eff. Class* Motor Effizienz-klasse
75 97	40	17256	**37,29**	99467	1,0	**MR973-3G280S/4**	133,0	1637	133	IE3
	45	15328	**33,08**	109791	1,2	**NR973-3G280S/4**		1687		
	50	13684	**29,49**	117497	1,3	**MR973-2G280S/4**	133,0	1637		IE2
	57	12069	**26,03**	124256	1,5	**NR973-2G280S/4**		1687		
	65	10655	**22,95**	129617	1,7					
	73	9466	**20,36**	133773	1,9					
	82	8450	**18,15**	133347	2,1					
	92	7616	**16,23**	131419	2,4	**MR972-3G280S/4**	133,0	1597	133	IE3
	103	6766	**14,40**	127765	2,7	**NR972-3G280S/4**		1637		
	115	6050	**12,86**	124330	3,0	**MR972-2G280S/4**	133,0	1597		IE2
	129	5439	**11,56**	121086	3,3	**NR972-2G280S/4**		1637		
	149	4704	**9,99**	115903	2,6					
	168	4178	**8,86**	112471	2,7					
	188	3736	**7,92**	109274	2,9					
	209	3358	**7,11**	106276	3,0					
	54	12420	**27,39**	75762	1,0	**MR873-3G280S/4**	133,0	1017	130	IE3
	62	10824	**23,87**	81614	1,2	**NR873-3G280S/4**		1022		
	73	9193	**20,28**	82767	1,4	**MR873-2G280S/4**	133,0	1017		IE2
	83	8082	**17,83**	83092	1,6	**NR873-2G280S/4**		1022		
	92	7293	**16,09**	83039	1,8					
	106	6355	**14,02**	82599	2,0					
	112	6029	**13,30**	93867	2,2					
	128	5254	**11,59**	91468	2,4					
	147	4671	**10,09**	91091	2,5	**MR872-3G280S/4**	133,0	1012	130	IE3
	167	4107	**8,87**	88460	2,7	**NR872-3G280S/4**		1017		
	197	3498	**7,55**	77035	3,0	**MR872-2G280S/4**	133,0	1012		IE2
	224	3075	**6,64**	75407	3,3	**NR872-2G280S/4**		1017		
	248	2775	**5,99**	74037	3,6					
	284	2418	**5,22**	72130	3,9					
	300	2294	**4,95**	75684	3,9					
	344	1999	**4,32**	73144	4,0					
90 117	50	16421	**29,49**	104131	1,1	**MR973-3G280M/4**	158,0	1643	133	IE3
	57	14484	**26,03**	113862	1,2	**NR973-3G280M/4**		1693		
	65	12787	**22,95**	121338	1,4	**MR973-2G280M/4**	158,0	1643		IE2
	73	11359	**20,36**	127007	1,6	**NR973-2G280M/4**		1693		
	82	10141	**18,15**	130083	1,8					
	92	9140	**16,23**	128770	2,0	**MR972-3G280M/4**	158,0	1603	133	IE3
	103	8119	**14,40**	125414	2,2	**NR972-3G280M/4**		1653		
	115	7260	**12,86**	122231	2,5	**MR972-2G280M/4**	158,0	1603		IE2
	129	6527	**11,56**	119200	2,8	**NR972-2G280M/4**		1653		
	149	5645	**9,99**	114107	2,2					
	168	5014	**8,86**	110878	2,3					
	188	4483	**7,92**	107851	2,4					
	209	4031	**7,11**	104997	2,5					
	73	11031	**20,28**	74419	1,2	**MR873-3G280M/4**	158,0	1043	130	IE3
	83	9699	**17,83**	75752	1,3	**NR873-3G280M/4**		1048		
	92	8751	**16,09**	76416	1,5	**MR873-2G280M/4**	158,0	1043		IE2
	106	7626	**14,02**	76828	1,7	**NR873-2G280M/4**		1048		
	112	7235	**13,30**	90699	1,8					
	128	6305	**11,59**	88706	2,0					

*: I [redacted] dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor [redacted] are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.



Tabelle prestazionali dei motoriduttori
Geared Motors Performance Tables
Leistung und Drehzahlübersicht von Getriebemotoren

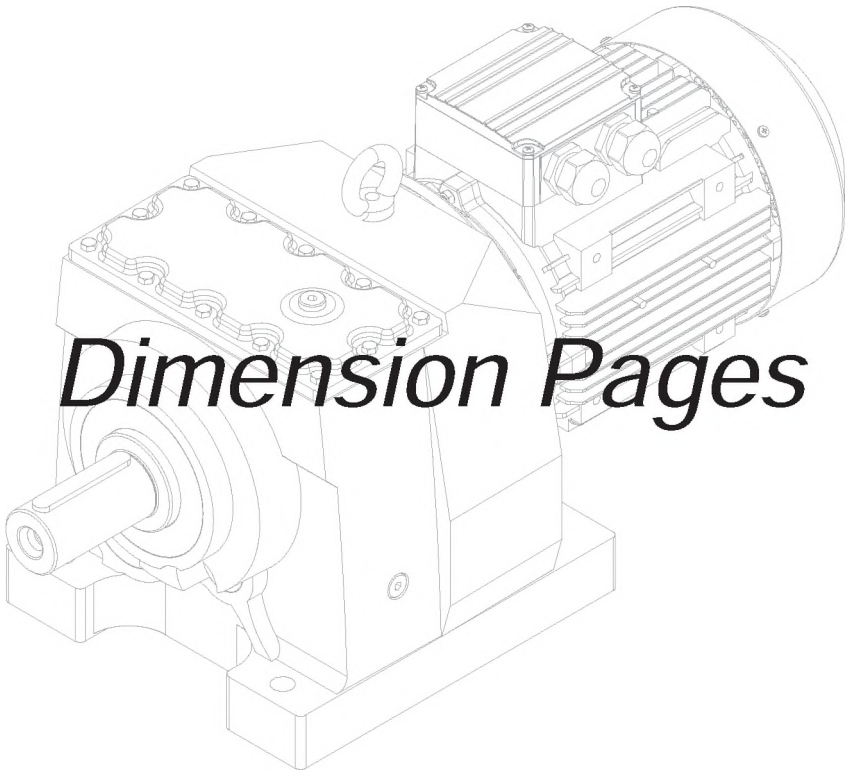
Potenza *Power* Leistung) P_g [kW] P_g [HP]	IE3 Velocità di rotazione in uscita *Output Speeds* Abtriebswelle Drehzahlen n_2 [r.p.m]	IE3 Coppia trasmessa *Output Torque* Abtriebswelle Drehmomente M_2 [Nm]	Rapporto *Ratio* Übersetzung i	IE3 Carichi radiali ammessi (uscita) *Permissible Radial Loads (Output)* Zul.Querkräfte (Abtrieb) F_{qam} [N]	IE3 Fattori di servizio *Service Factors* Betriebsfaktor f_s	Tipo *Type* Typ	Corrente nominale *Rated Current* Nennstrom [A]	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite	Classe eff. del motore* *Motor Eff. Class* Motor Effizienz-klasse
90	147	5605	**10,09**	89112	2,1	**MR872-3G280M/4**	158,0	1038	130	IE3
117	167	4928	**8,87**	86721	2,3	**NR872-3G280M/4**		1043		
	197	4197	**7,55**	73925	2,5	**MR872-2G280M/4**	158,0	1038		IE2
	224	3690	**6,64**	72672	2,8	**NR872-2G280M/4**		1043		
	248	3330	**5,99**	71570	3,0					
	284	2902	**5,22**	69980	3,3					
	300	2753	**4,95**	74505	3,3					
	344	2399	**4,32**	72116	3,6					
110	65	15608	**22,95**	108281	1,2	**MR973-3G315S/4**	194,0	1899	133	IE3
150	73	13865	**20,36**	116605	1,3	**NR973-3G315S/4**		1949		
	82	12378	**18,15**	122950	1,5	**MR973-2G315S/4**	195,0	1822		IE2
						NR973-2G315S/4		1872		
	92	11157	**16,23**	125205	1,6	**MR972-3G315S/4**	194,0	1859	133	IE3
	103	9910	**14,40**	122246	1,8	**NR972-3G315S/4**		1909		
	116	8862	**12,86**	119396	2,0	**MR972-2G315S/4**	195,0	1782		IE2
	129	7967	**11,56**	116650	2,3	**NR972-2G315S/4**		1832		
	149	6890	**9,99**	111679	1,8					
	168	6120	**8,86**	108720	1,9					
	188	5473	**7,92**	105919	2,0					
	209	4920	**7,11**	103259	2,0					
132	73	16639	**20,36**	102822	1,1	**MR973-3G315M/4a**	230,0	1943	133	IE3
180	82	14854	**18,15**	112011	1,2	**NR973-3G315M/4a**		1993		
						MR973-2G315M/4a	235,0			IE2
						NR973-2G315M/4a				
	92	13388	**16,23**	118708	1,3	**MR972-3G315M/4a**	230,0	1903	133	IE3
	103	11893	**14,40**	118803	1,5	**NR972-3G315M/4a**		1953		
	116	10634	**12,86**	116321	1,7	**MR972-2G315M/4a**	235,0	1882		IE2
	129	9561	**11,56**	113887	1,9	**NR972-2G315M/4a**		1932		
	149	8269	**9,99**	109049	1,5					
	168	7345	**8,86**	106386	1,6					
	188	6567	**7,92**	103834	1,6					
	209	5904	**7,11**	101386	1,7					
160	103	14406	**14,40**	114086	1,2	**MR972-3G315M/4b**	275,0	1954	133	IE3
218	116	12882	**12,86**	112393	1,4	**NR972-3G315M/4b**		2004		
	129	11582	**11,56**	110358	1,6	**MR972-2G315M/4b**	280,0	1906		IE2
	149	10016	**9,99**	105688	1,2	**NR972-2G315M/4b**		1956		
	168	8897	**8,86**	103402	1,3					
	188	7956	**7,92**	101167	1,3					
	209	7152	**7,11**	98988	1,4					

* : I prezzi dei motoriduttori IE2 e IE3 sono differenti. / *Geared motor prices are different for IE2 and IE3 motors.* / Preise von Getrieben mit IE2 und IE3 Motoren sind unterschiedlich.

Note / *Notes* / Notizen

Note / *Notes* / Notizen

Tabelle dimensionali

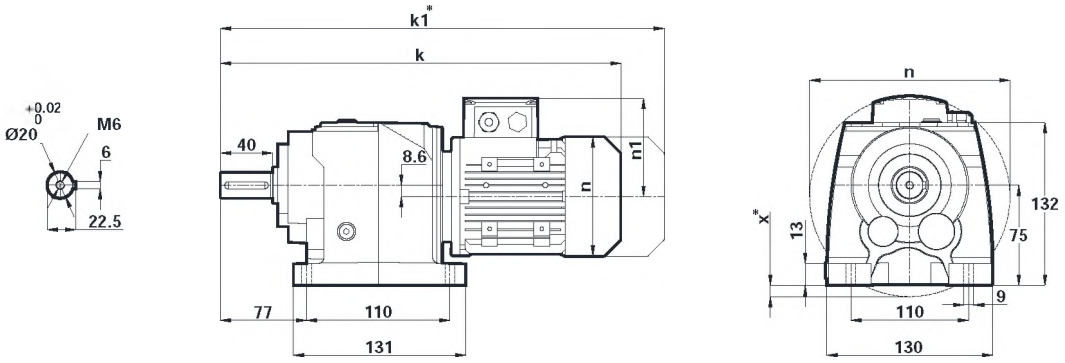


Dimension Pages

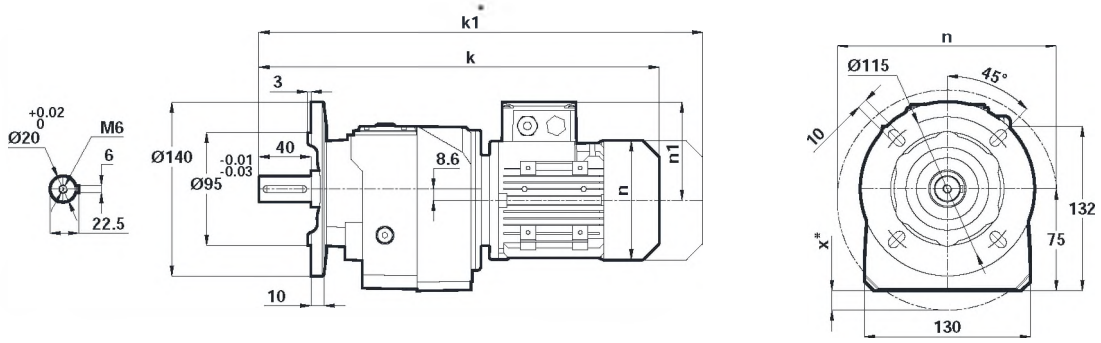
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR002
MR003

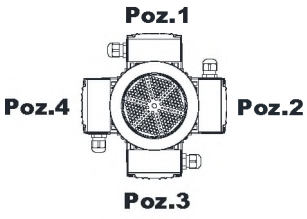


NR002
NR003



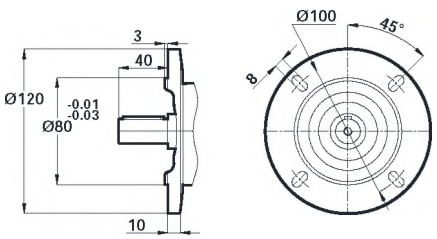
Taglia motore / *Motor Size* / Motorbaugroße					
	63	71	80	90S	90L
k	368	397	431	470	470
k1	429	488	524	574.5	574.5
n	121	137	155	176	176
n1	97	112	121	132	132
x	-	3	12	22	22

Morsettiera / *Terminal Box* / Klemmenkasten

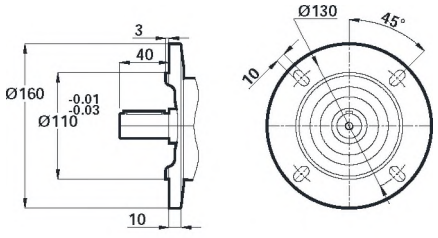


63-71-80-90

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

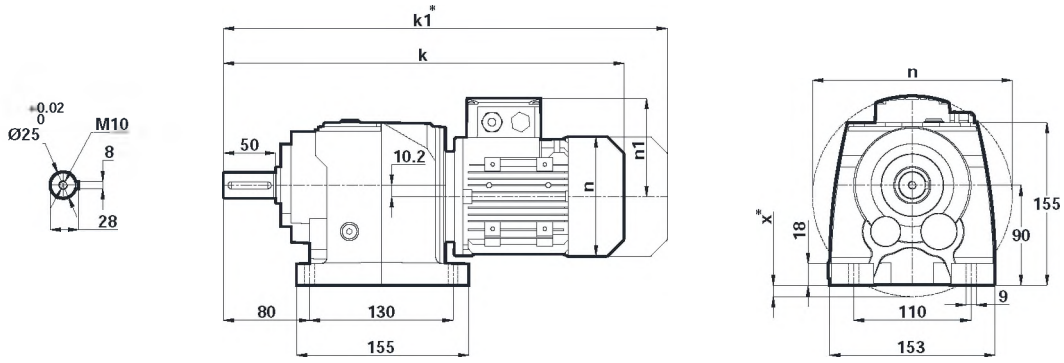
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



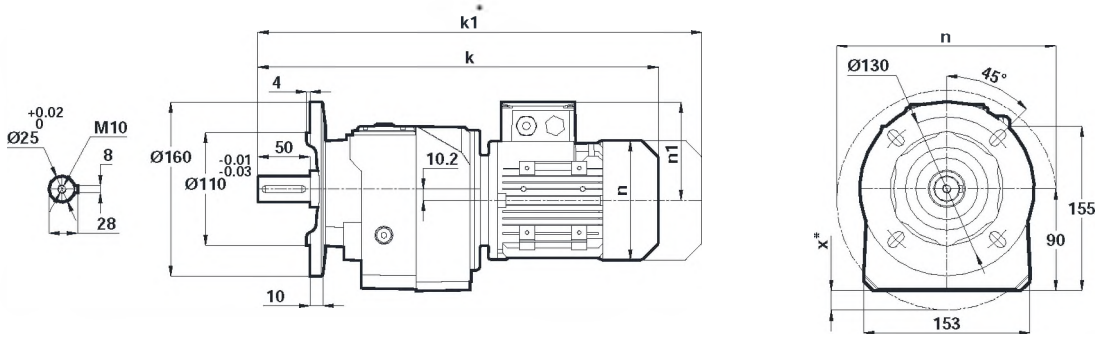
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR102
MR103

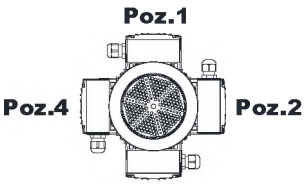


NR102
NR103



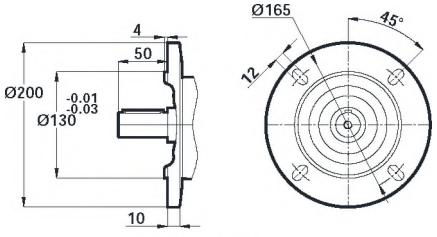
Taglia motore / *Motor Size* / Motorbaugroße					
	63	71	80	90S	90L
k	394	424	458	497	497
k1	455	515	551	601.5	601.5
n	121	137	155	176	176
n1	97	112	121	132	132
x	-	-	-	9	9

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80-90

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

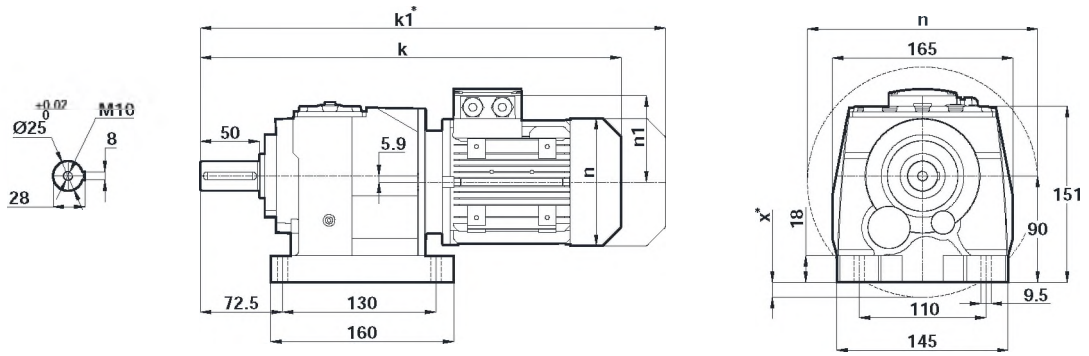


Opt. 1

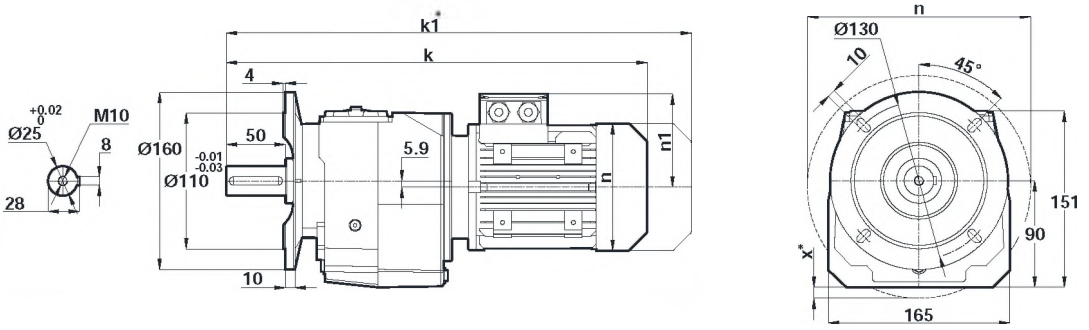
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR172
MR173

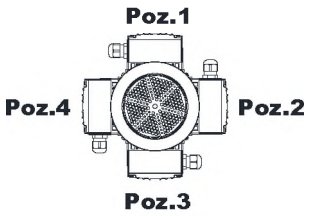


NR172
NR173



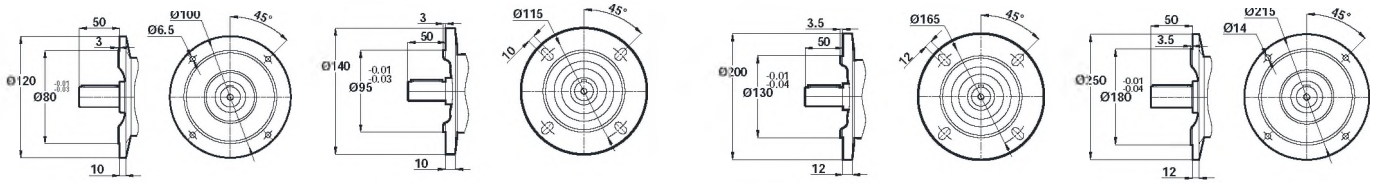
Taglia motore / *Motor Size* / Motorbaugroße							
	63	71	80	90S	90L	100L	112M
k	395	424	458	497	497	545	569
k1	456	515	551	601.5	601.5	664.5	673.5
n	121	137	155	176	176	193	215
n1	97	112	121	132	132	147	158
x	-	-	-	4	4	13	24

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80-90-100-112

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1 **Opt. 2** **Opt. 3** **Opt. 4**

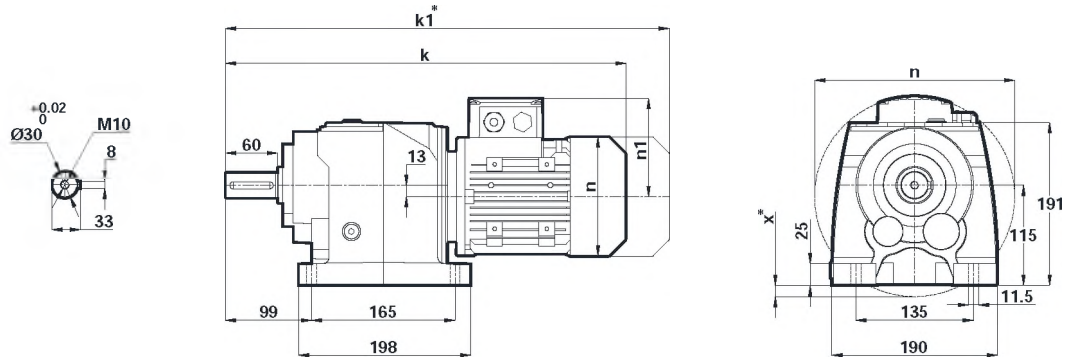
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



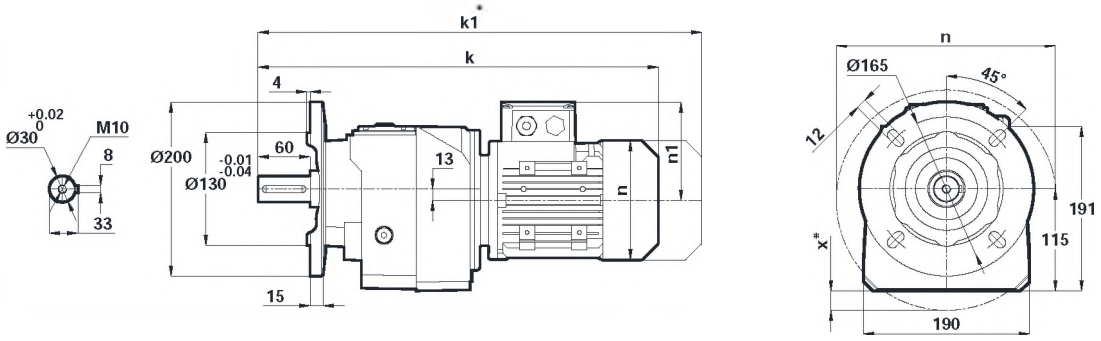
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR202
MR203

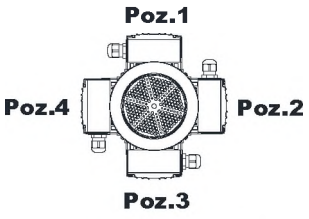


NR202
NR203



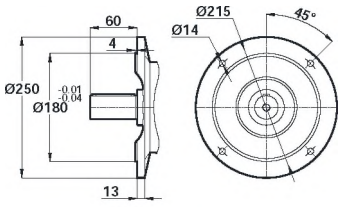
Taglia motore / *Motor Size* / Motorbaugroße							
	63	71	80	90S	90L	100L	112M
k	442	470	504	543	543	591	615
k1	503	561	597	647.5	647.5	710.5	719.5
n	121	137	155	176	176	193	215
n1	97	112	121	132	132	147	158
x	-	-	-	-	-	-	6

Morsettiera / *Terminal Box* / Klemmenkasten

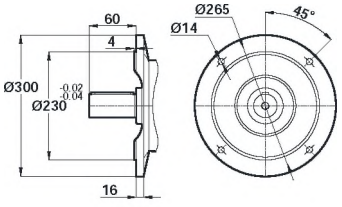


63-71-80-90-100-112

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

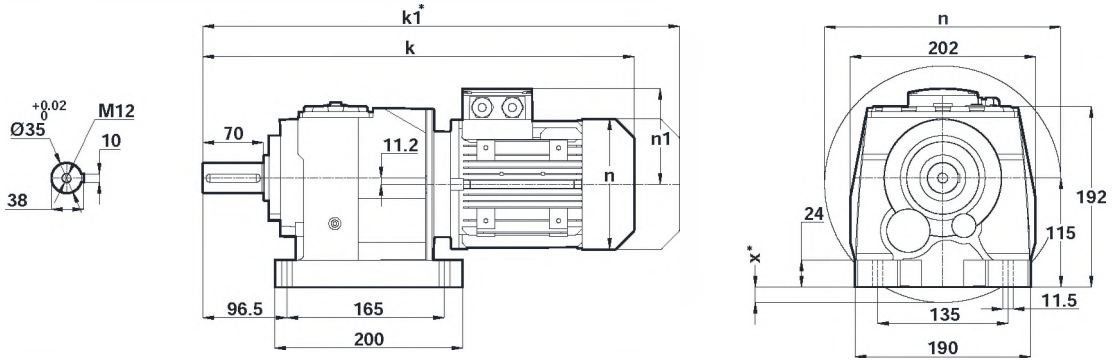


Opt. 2

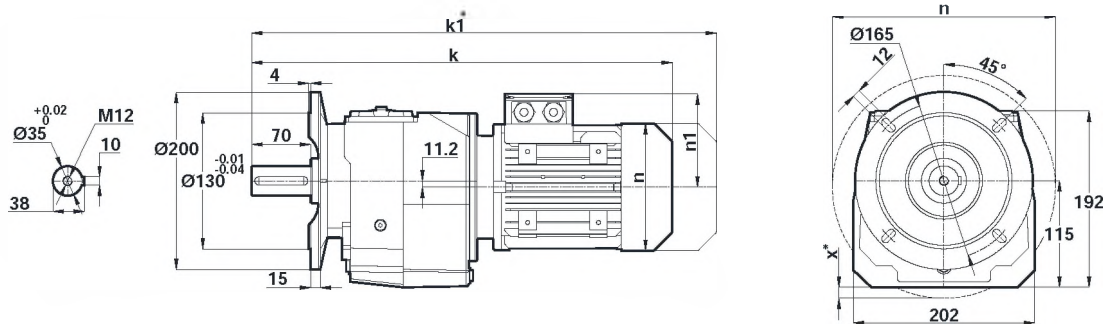
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR272
MR273

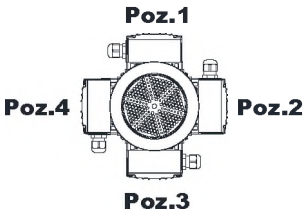


NR272
NR273



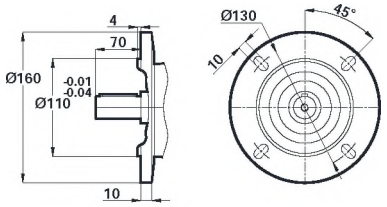
Taglia motore / *Motor Size* / Motorbaugroße									
	63	71	80	90S	90L	100L	112M	132S	132M
k	443	471	505	544	544	592	616	698	698
k1	504	562	598	648.5	648.5	711.5	720.5	828	828
n	121	137	155	176	176	193	215	257	257
n1	97	112	121	132	132	147	158	179	179
x	-	-	-	-	-	-	4	25	25

Morsettiera / *Terminal Box* / Klemmenkasten

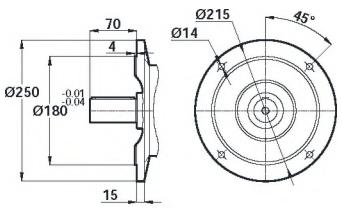


63-71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

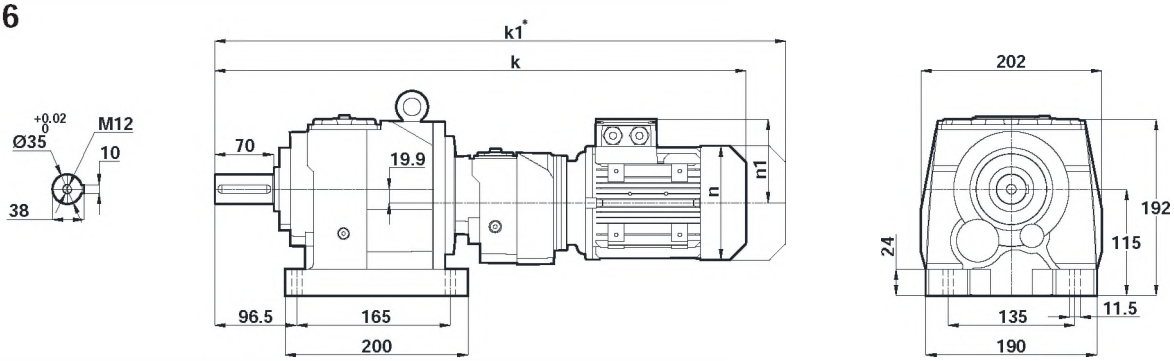
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



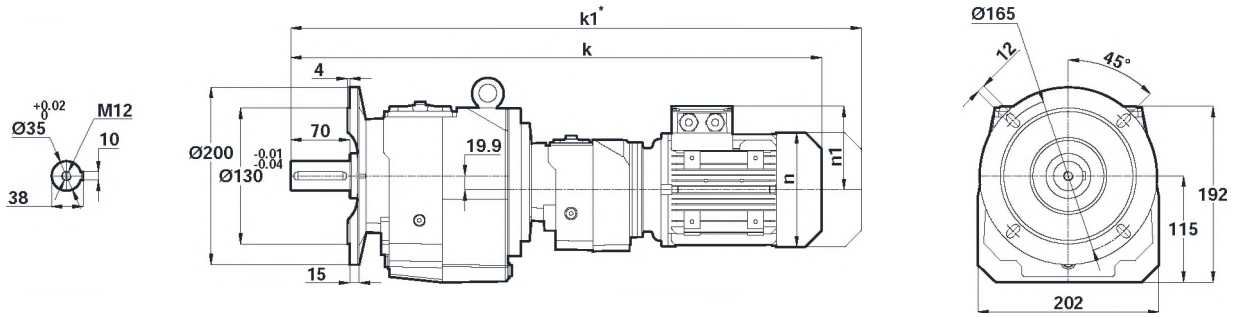
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR275
MR276

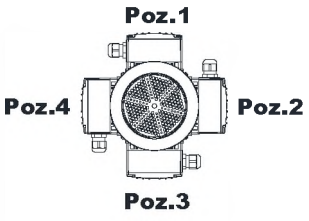


NR275
NR276



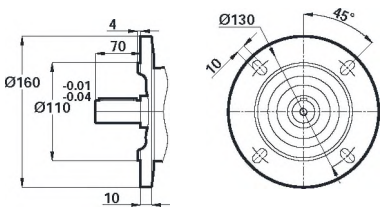
Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	593	622
k1	654	713
n	121	137
n1	97	112

Morsettiera / *Terminal Box* / Klemmenkasten

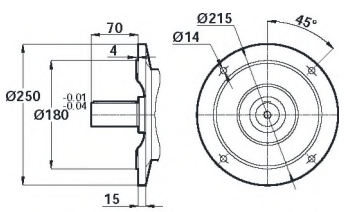


63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

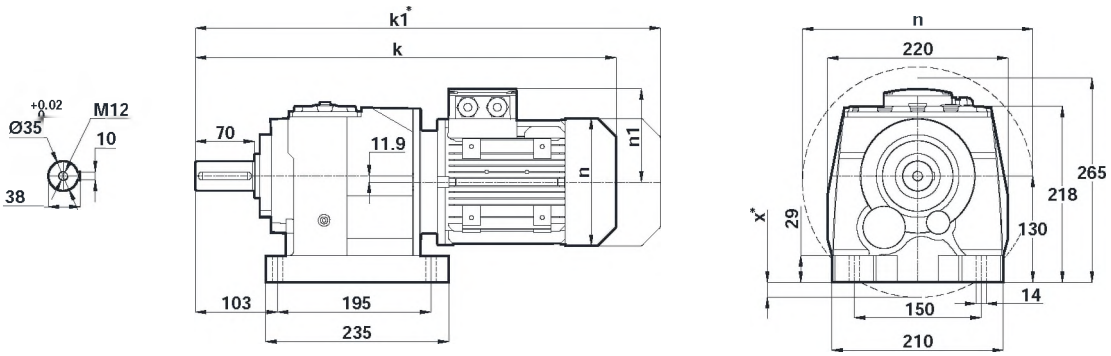


Opt. 2

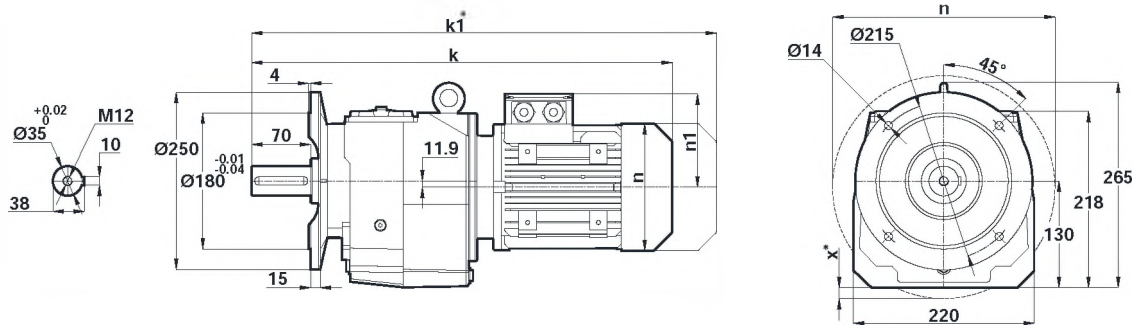
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR282
MR283

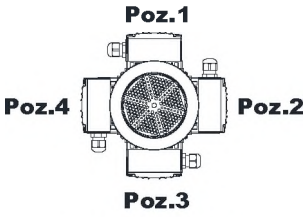


NR282
NR283



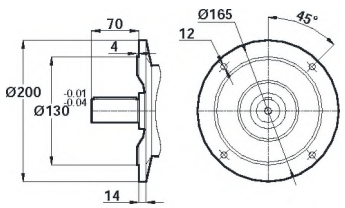
Taglia motore / *Motor Size* / Motorbaugroße								
	71	80	90S	90L	100L	112M	132S	132M
k	489	523	562	562	609	634	720	720
k1	580	616	666.5	666.5	728.5	738.5	850	850
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
x	-	-	-	-	-	-	11	11

Morsettiera / *Terminal Box* / Klemmenkasten

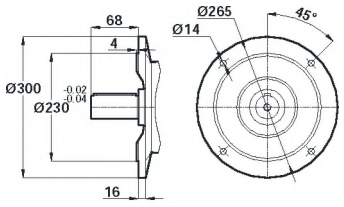


71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

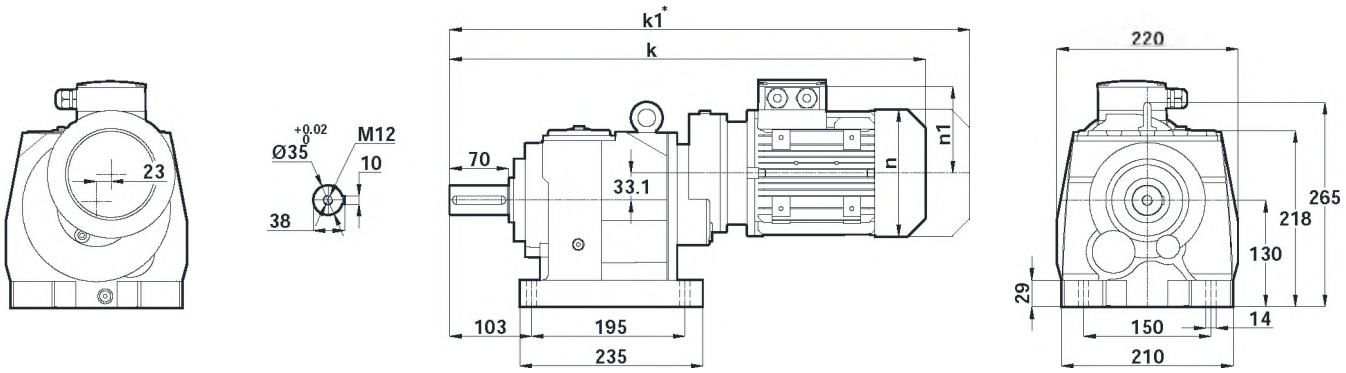
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



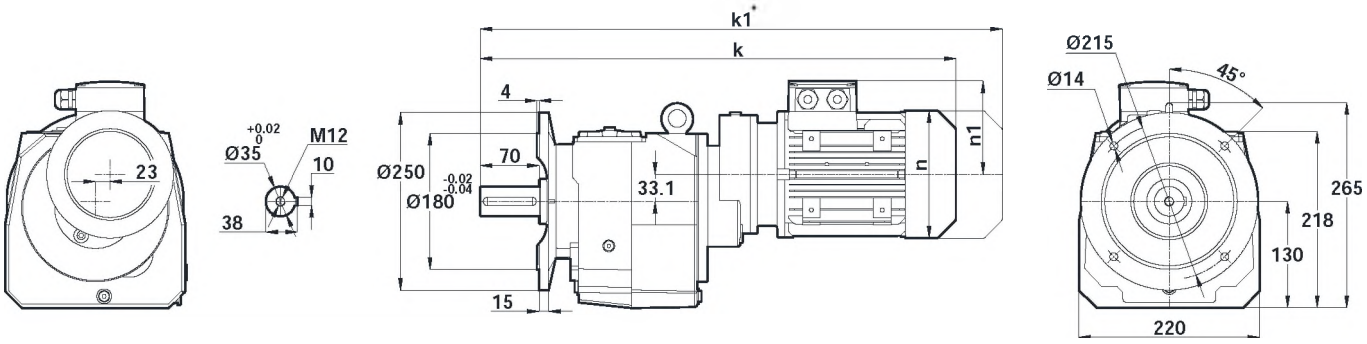
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR284

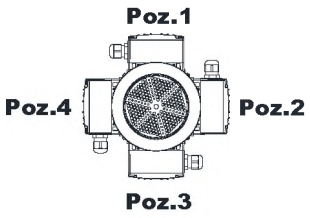


NR284



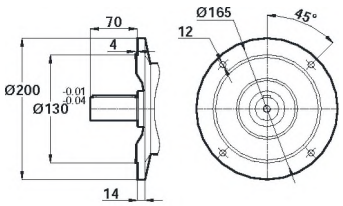
Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	540	568
k1	601	659
n	121	137
n1	97	112

Morsettiera / *Terminal Box* / Klemmenkasten

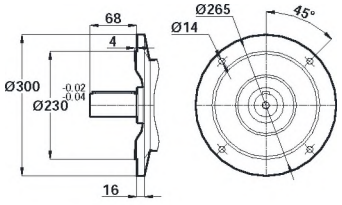


63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

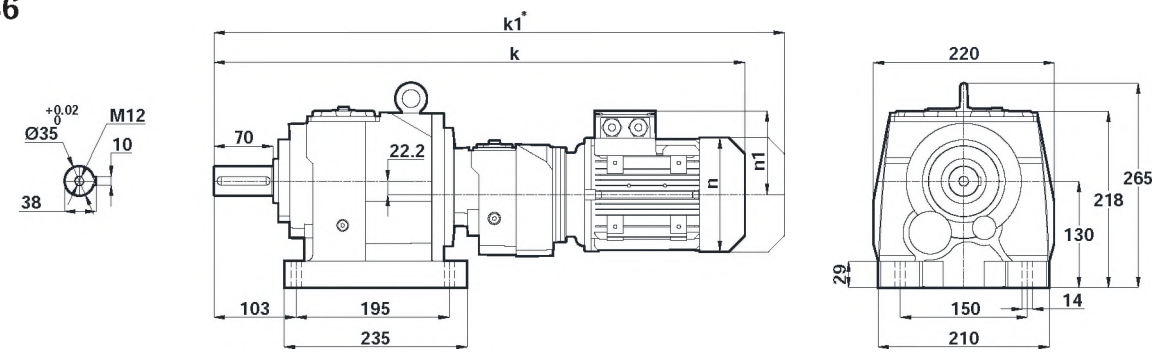


Opt. 2

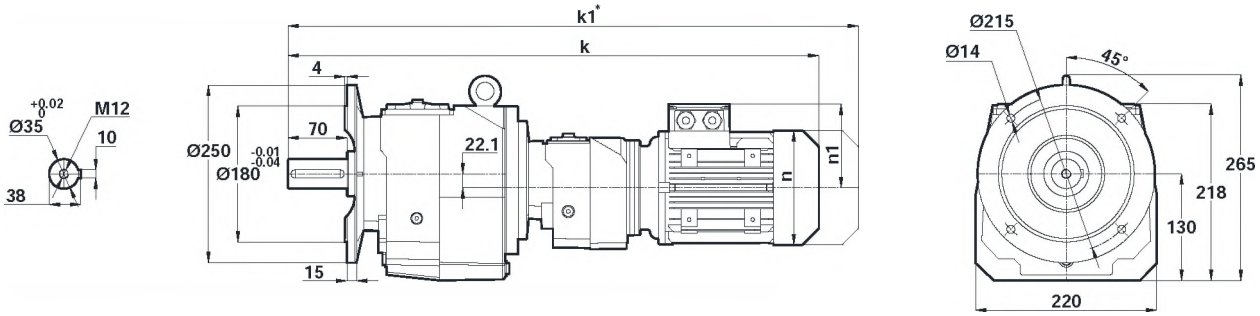
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR285
MR286

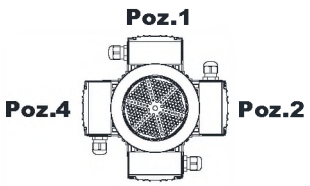


NR285
NR286



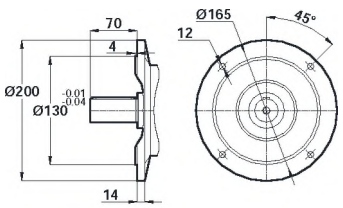
Taglia motore / *Motor Size* / Motorbaugroße	
	63
k	641
k1	702
n	121
n1	97

Morsettiera / *Terminal Box* / Klemmenkasten

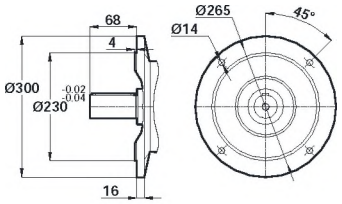


63

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

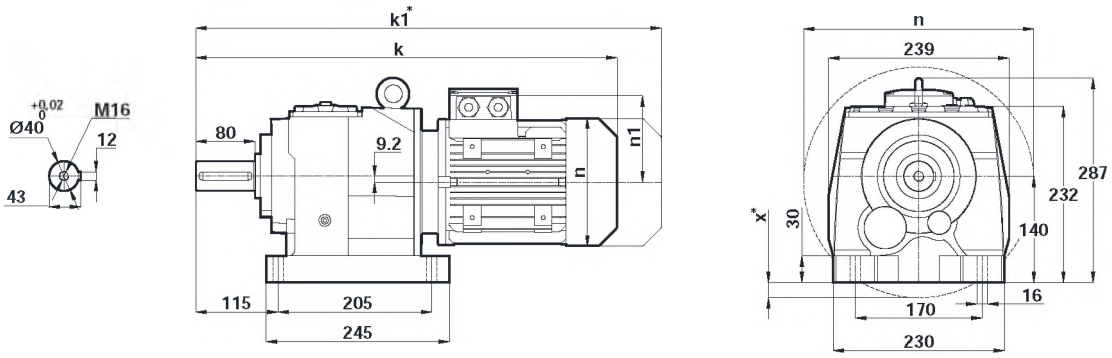
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



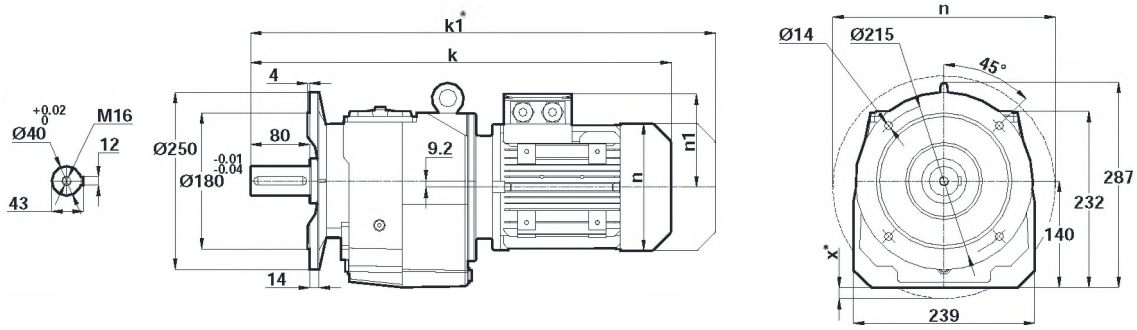
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR372
MR373

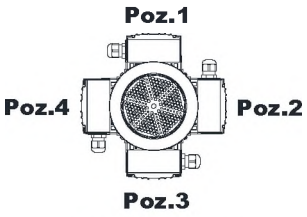


NR372
NR373



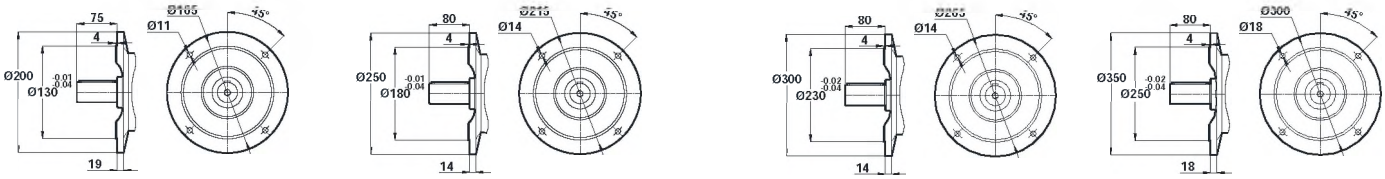
Taglia motore / *Motor Size* / Motorbaugroße								
	71	80	90S	90L	100L	112M	132S	132M
k	510	544	583	583	630	655	741	741
k1	601	637	687.5	687.5	749.5	759.5	871	871
n	137	155	176	176	193	215	257	179
n1	112	121	132	132	147	158	257	179
x	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten



71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*

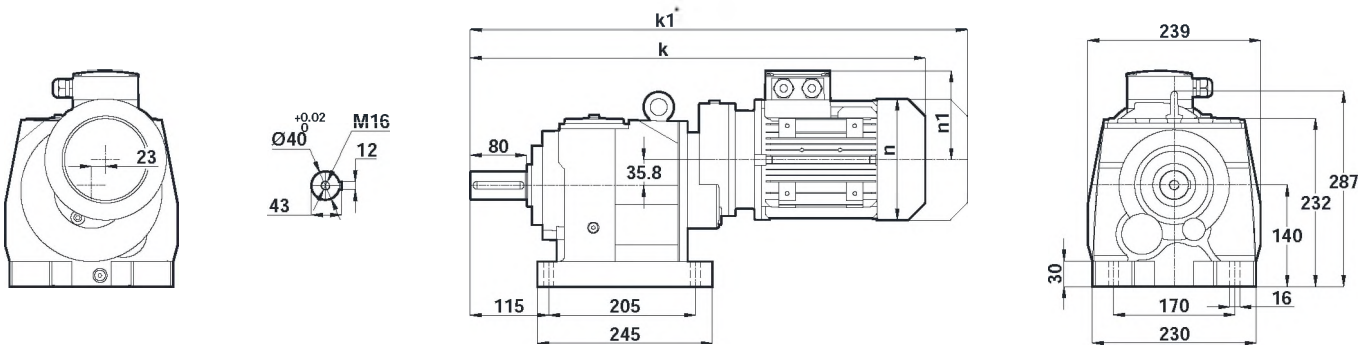


Opt. 1 **Opt. 2** **Opt. 3** **Opt. 4**

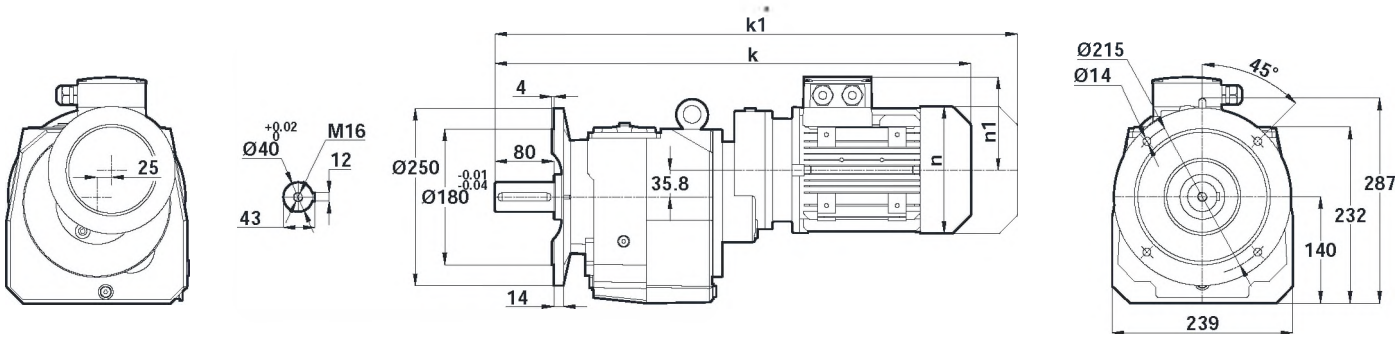
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR374

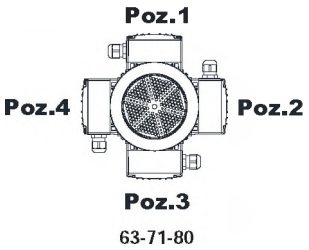


NR374



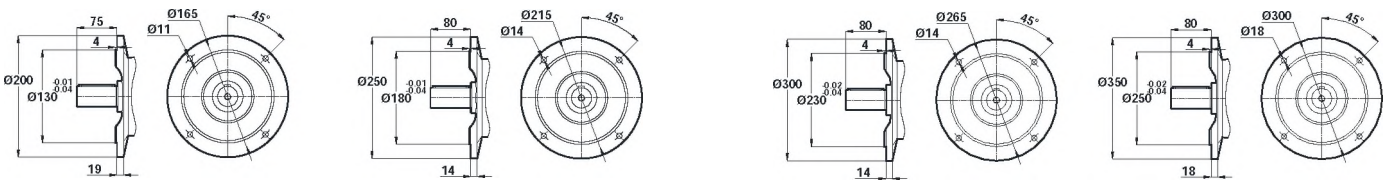
Taglia motore / *Motor Size* / Motorbaugroße			
	63	71	80
k	561	589	623
k1	622	680	716
n	121	137	155
n1	97	112	121

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1 **Opt. 2** **Opt. 3** **Opt. 4**

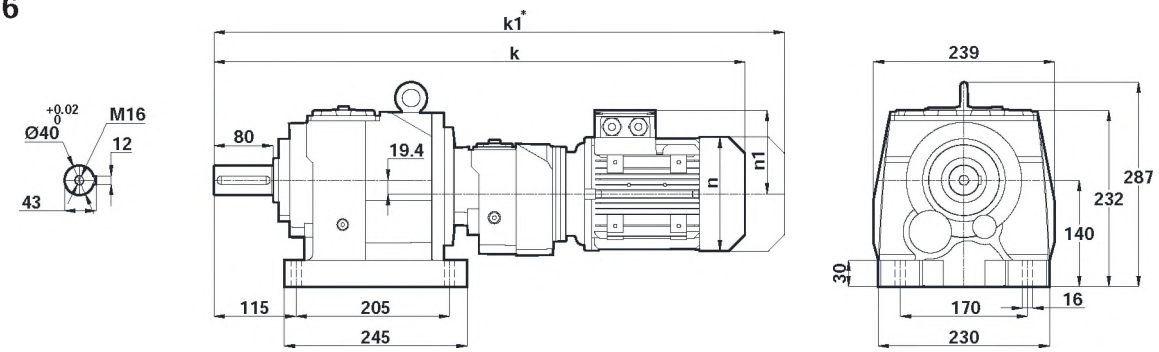
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



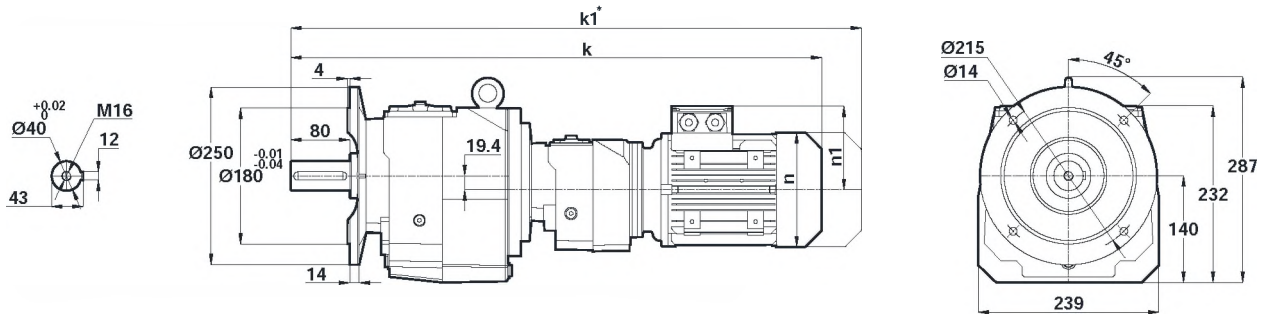
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR375
MR376

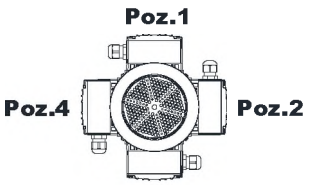


NR375
NR376



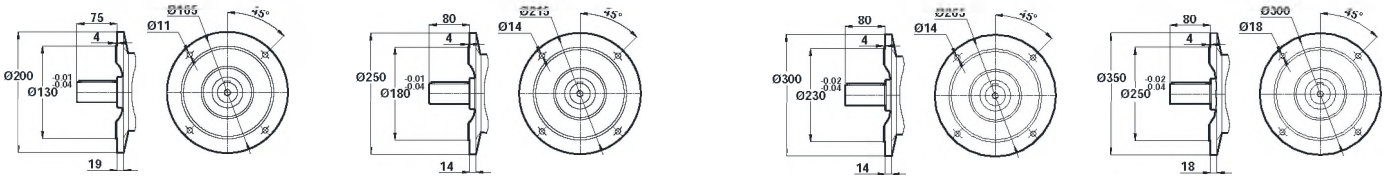
Taglia motore / *Motor Size* / Motorbaugroße	
	63
k	662
k1	723
n	121
n1	97

Morsettiera / *Terminal Box* / Klemmenkasten



63

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*



Opt. 1 **Opt. 2** **Opt. 3** **Opt. 4**

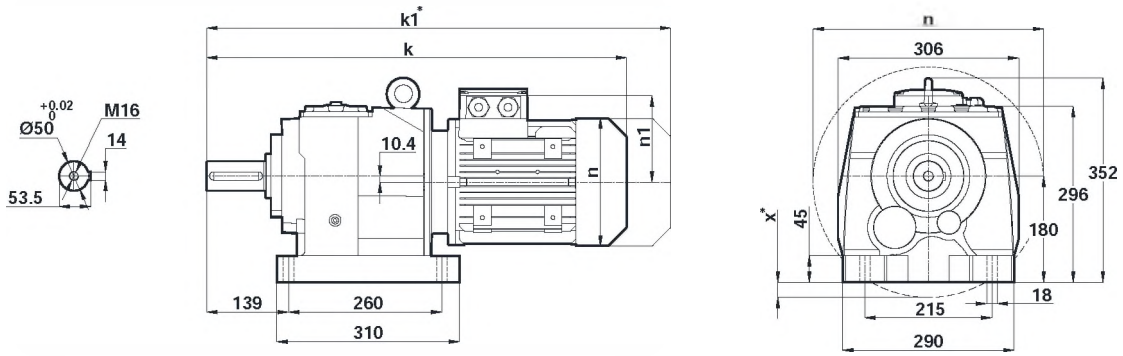
* **La misura "k1" e per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



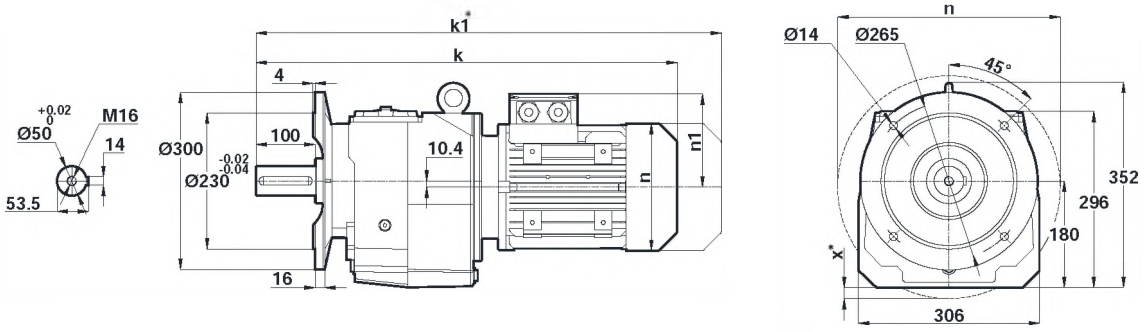
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR472
MR473

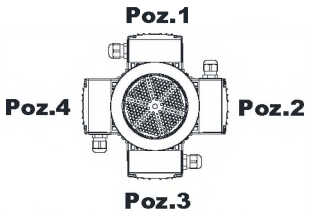


NR472
NR473



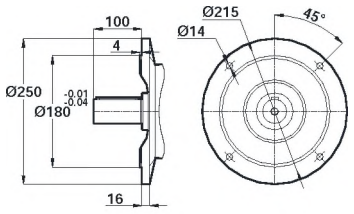
Taglia motore / *Motor Size* / Motorbaugroße											
	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	611	650	650	694	719	804	804	900	900	971	971
k1	704	754.5	754.5	813.5	823.5	934	934	1080	1080	1141.5	1141.5
n	155	176	176	193	215	257	257	315	315	347	347
n1	121	132	132	147	158	179	179	219	219	234	234
x	-	-	-	-	-	-	-	-	-	3	3

Morsettiera / *Terminal Box* / Klemmenkasten

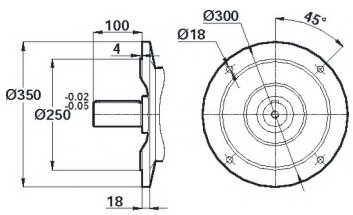


80-90-100-112-132-160-180

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

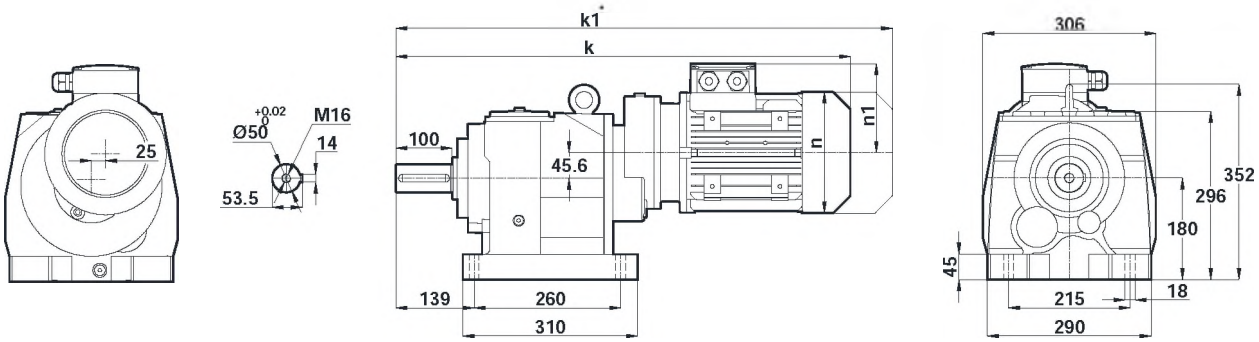
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



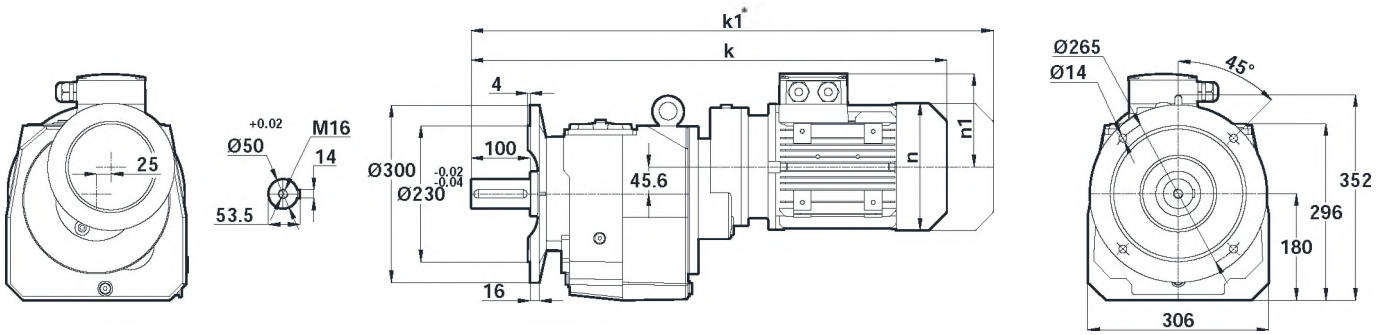
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR474

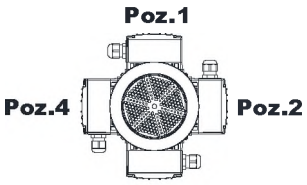


NR474



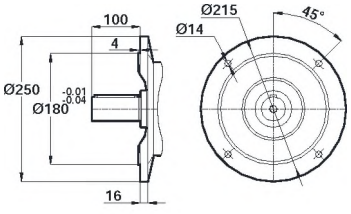
Taglia motore / *Motor Size* / Motorbaugroße		
	71	80
k	670	806
k1	761	899
n	137	155
n1	112	121

Morsettiera / *Terminal Box* / Klemmenkasten

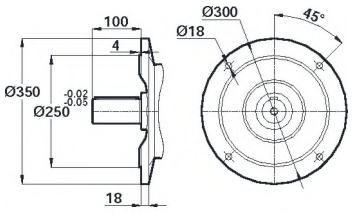


71-80

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

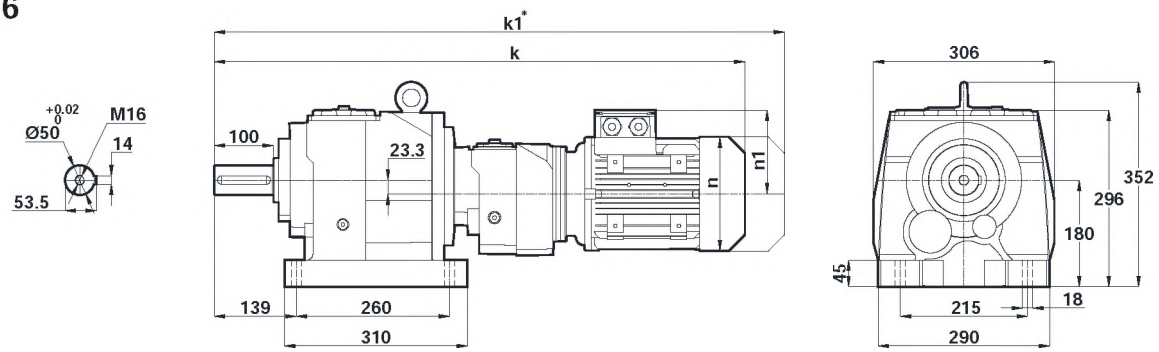


Opt. 2

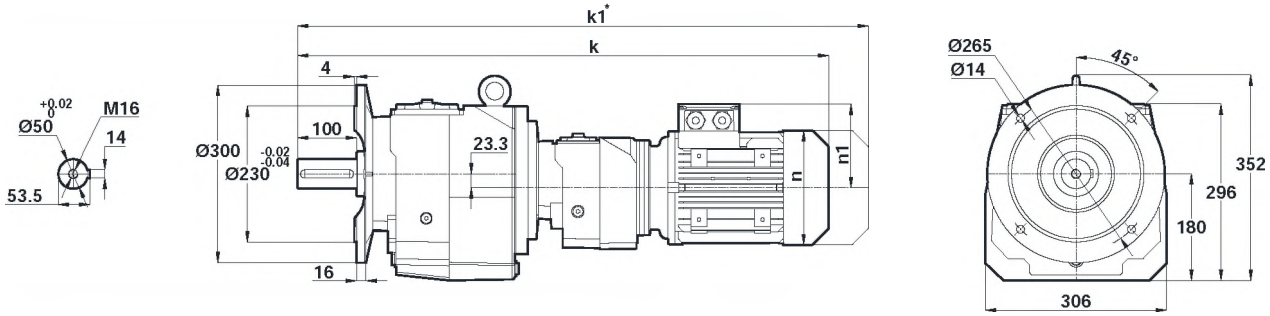
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR475
MR476

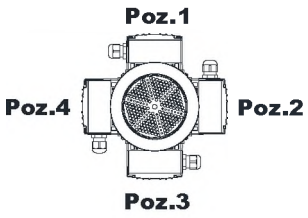


NR475
NR476



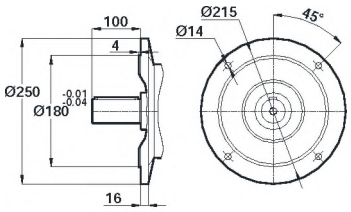
Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	722	800
k1	783	891
n	121	137
n1	97	112

Morsettiera / *Terminal Box* / Klemmenkasten

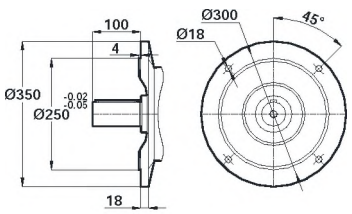


63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

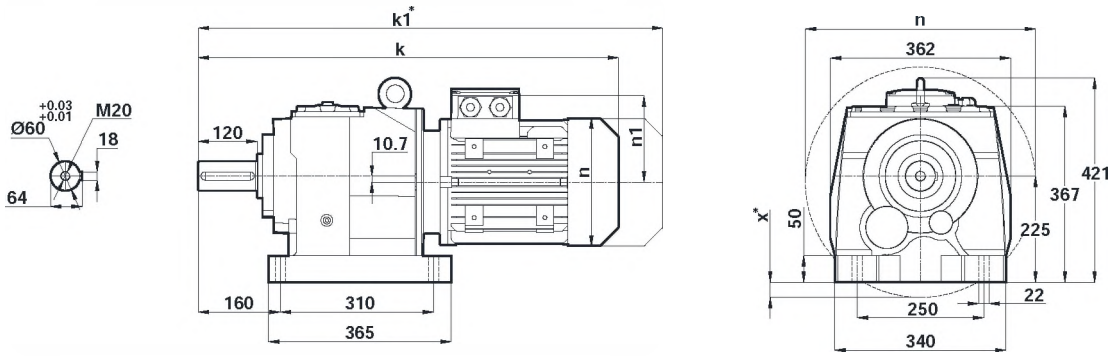
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



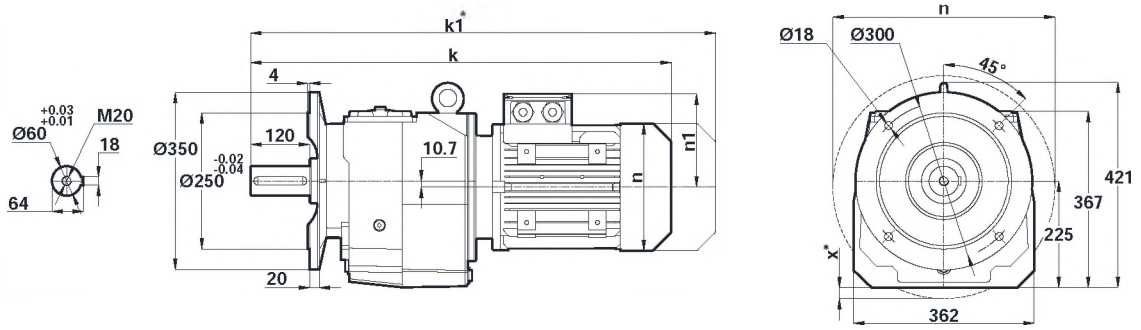
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR572
MR573

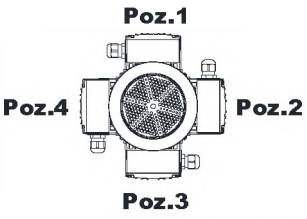


NR572
NR573



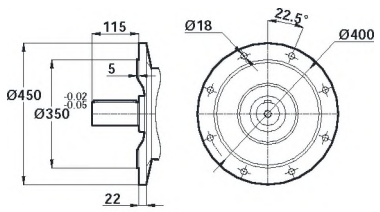
Taglia motore / *Motor Size* / Motorbaugroße									
	100L	112M	132S	132M	160M	160L	180M	180L	200L
k	752	776	863	863	959	959	1030	1030	1072
k1	871.5	880.5	993	993	1139	1139	1200.5	1200.5	1258.5
n	193	215	257	257	315	315	347	347	390
n1	147	158	179	179	219	219	234	234	275
x	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten

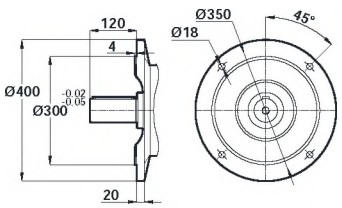


100-112-132-160-180-200

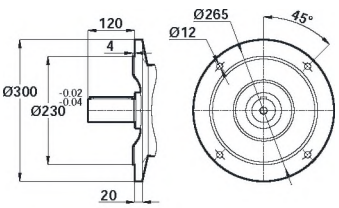
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*



Opt. 1



Opt. 2



Opt. 3

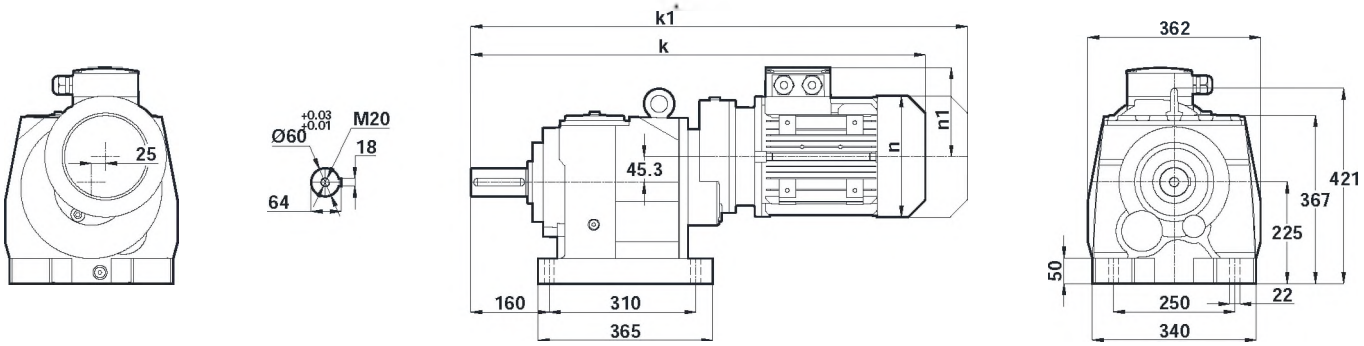
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



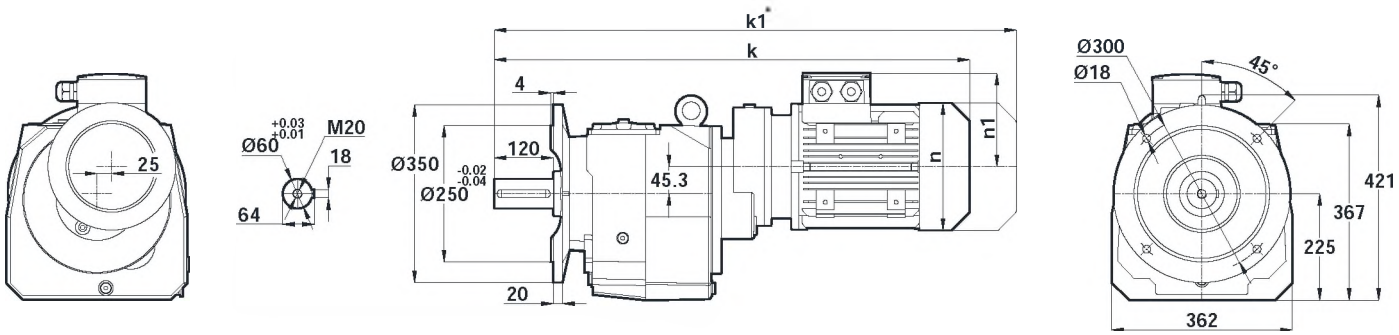
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR574

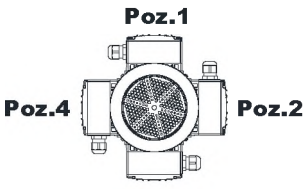


NR574



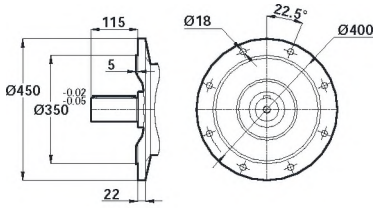
Taglia motore / *Motor Size* / Motorbaugroße				
	71	80	90S	90L
k	732	766	805	805
k1	823	859	909.5	909.5
n	137	155	176	176
n1	112	121	132	132

Morsettiera / *Terminal Box* / Klemmenkasten

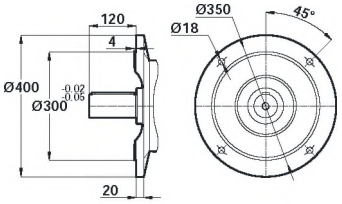


71-80-90

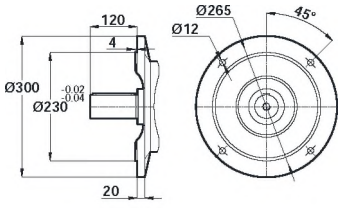
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2



Opt. 3

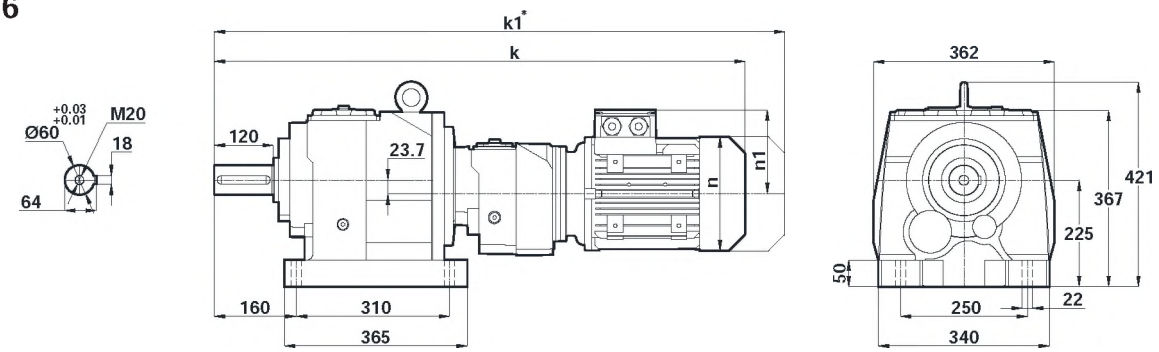
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



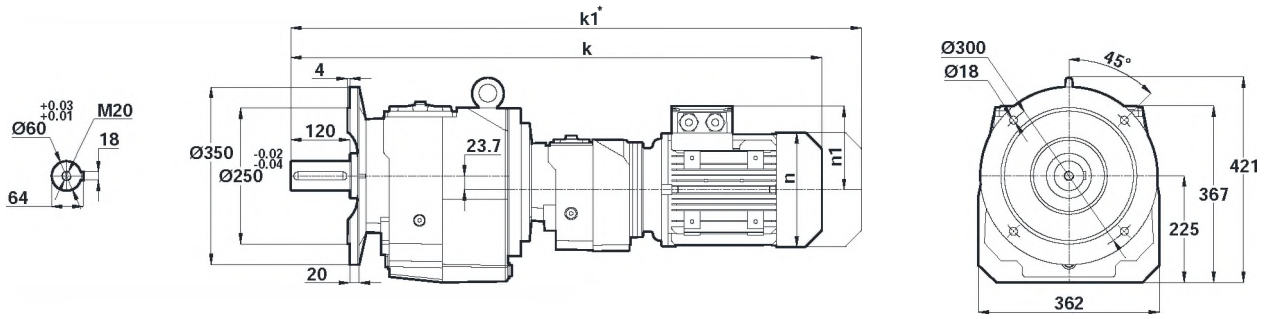
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR575
MR576

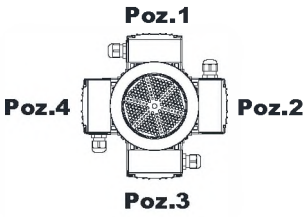


NR575
NR576



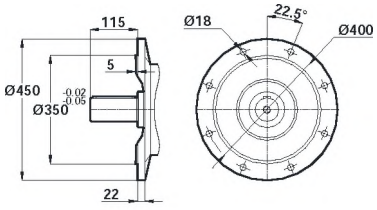
Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	836	864
k1	897	955
n	121	137
n1	97	112

Morsettiera / *Terminal Box* / Klemmenkasten

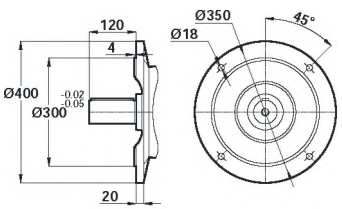


63-71

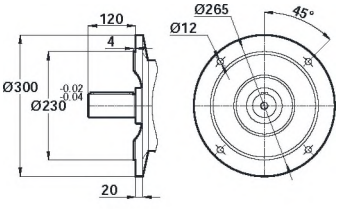
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*



Opt. 1



Opt. 2

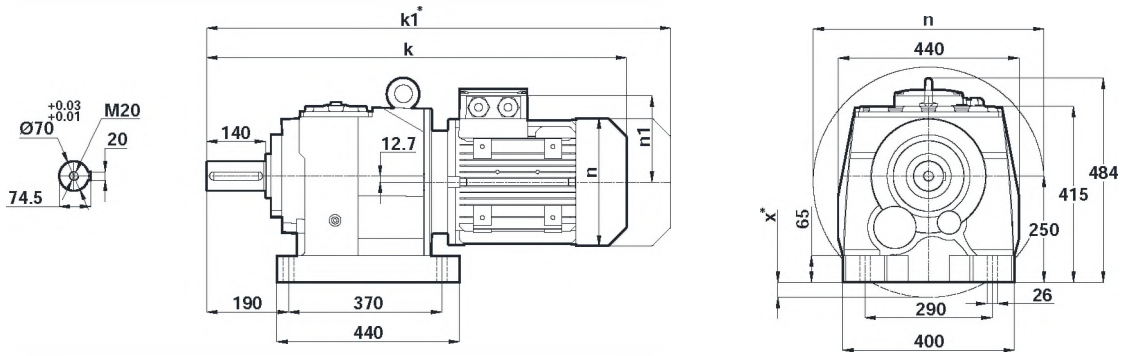


Opt. 3

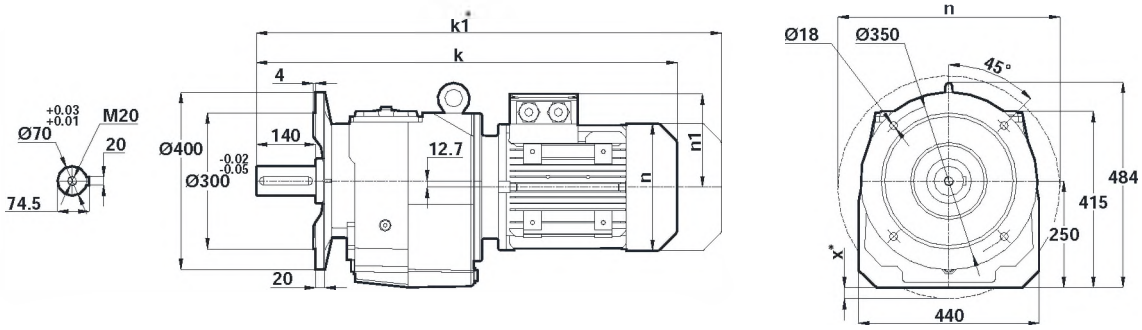
* **La misura "k1" e per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR672
MR673

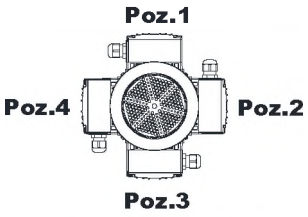


NR672
NR673



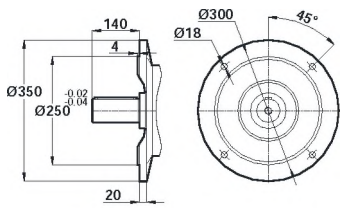
Taglia motore / *Motor Size* / Motorbaugroße										
	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
k	823	920	920	1016	1016	1087	1087	1129	1155	1180
k1	927.5	1050	1050	1196	1196	1257.5	1257.5	1315.5	1320	1345
n	215	257	257	315	315	347	347	390	434	434
n1	158	179	179	219	219	234	234	275	285	285
x	-	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten

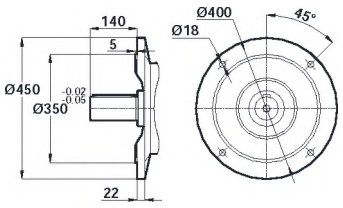


112-132-160-180-200-225

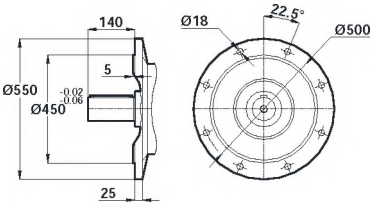
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*



Opt. 1



Opt. 2



Opt. 3

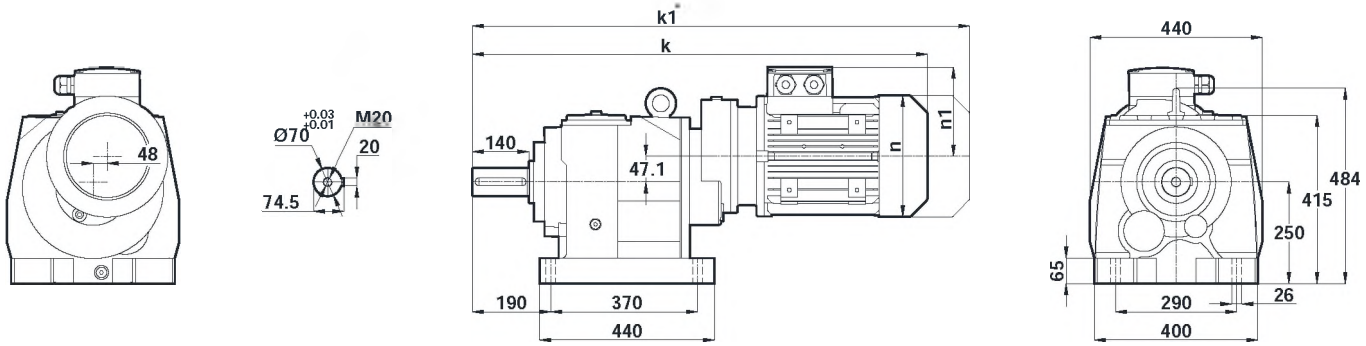
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



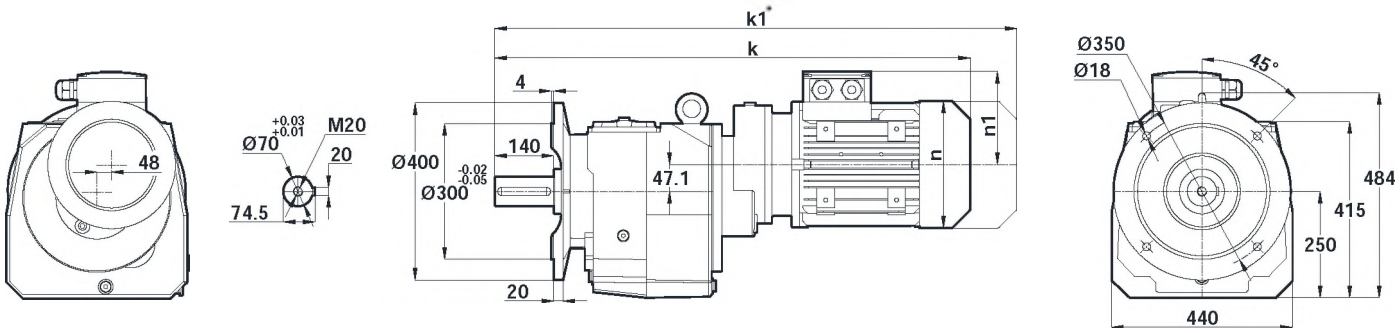
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR674

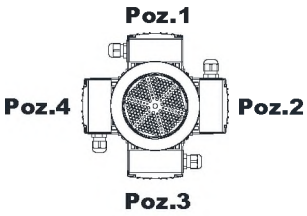


NR674



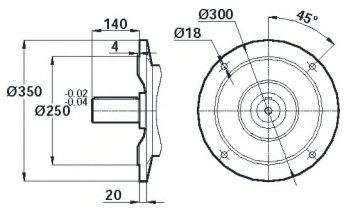
Taglia motore / *Motor Size* / Motorbaugroße			
	80	90S	90L
k	842	881	881
k1	935	985.5	985.5
n	155	176	176
n1	121	132	132

Morsettiera / *Terminal Box* / Klemmenkasten

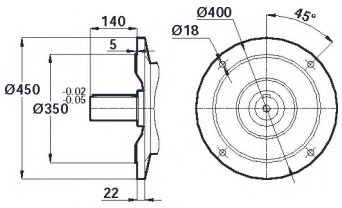


80-90

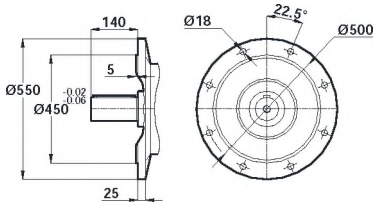
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*



Opt. 1



Opt. 2

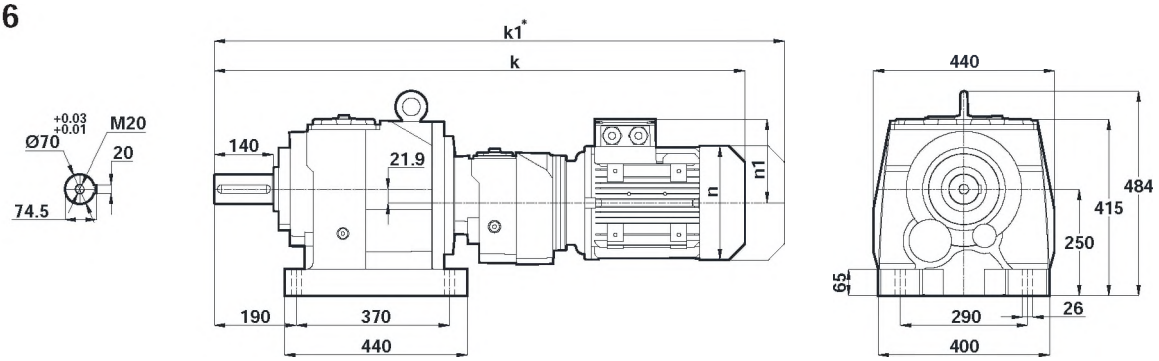


Opt. 3

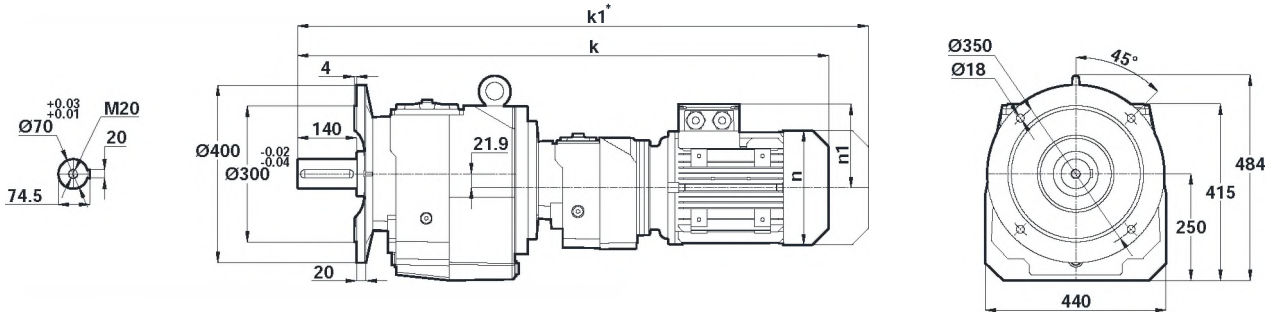
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR675
MR676

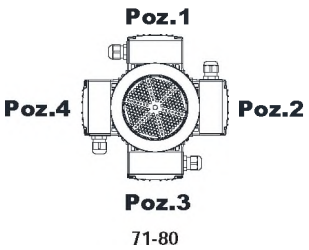


NR675
NR676



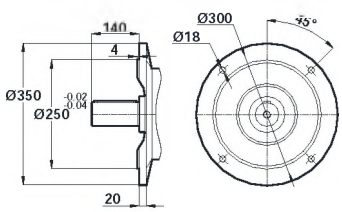
Taglia motore / *Motor Size* / Motorbaugroße		
	71	80
k	954	988
k1	1045	1081
n	137	155
n1	112	121

Morsettiera / *Terminal Box* / Klemmenkasten

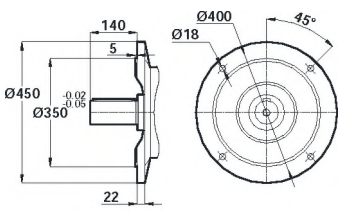


71-80

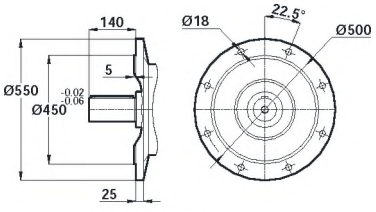
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2



Opt. 3

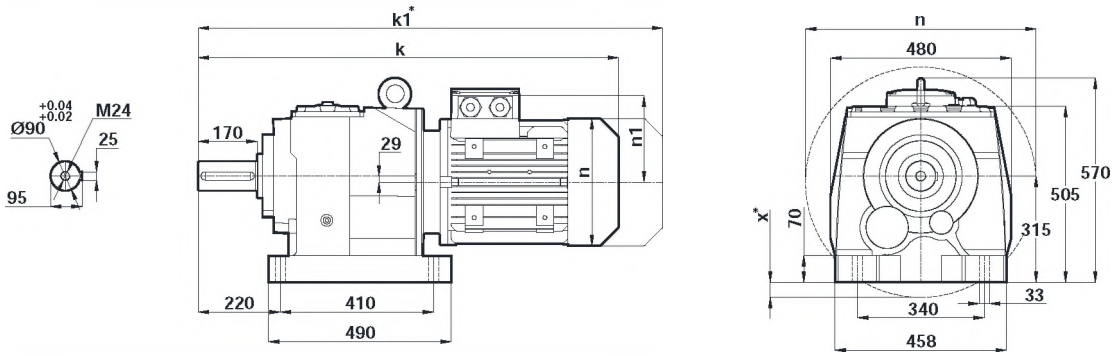
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



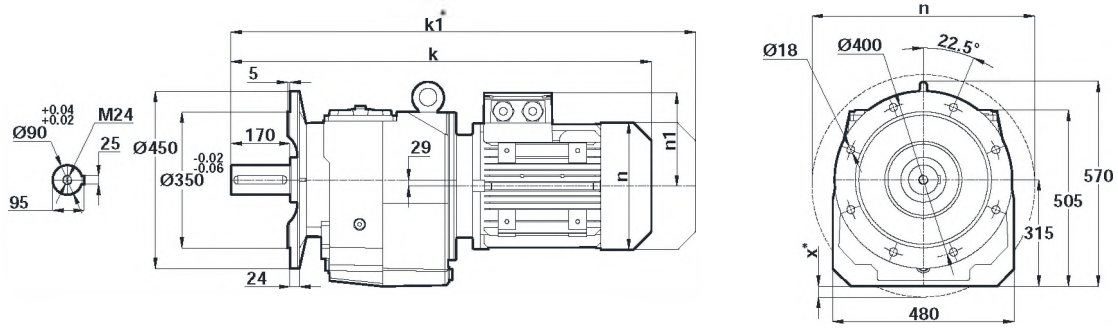
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR772
MR773

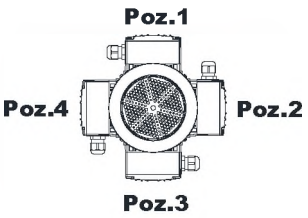


NR772
NR773



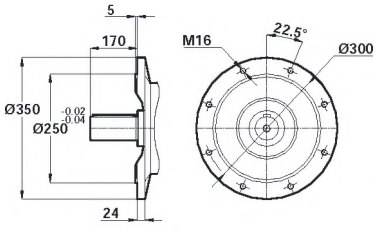
Taglia motore / *Motor Size* / Motorbaugroße										
	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M
k	1001	1001	1097	1097	1168	1168	1210	1237	1262	1366
k1	1131	1131	1277	1277	1338.5	1338.5	1396.5	1402	1427	1536.5
n	257	257	315	315	347	347	390	434	434	480
n1	179	179	219	219	234	234	275	285	285	322
x	-	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten

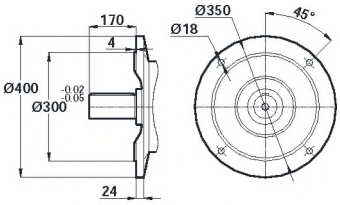


132-160-180-200-225-250

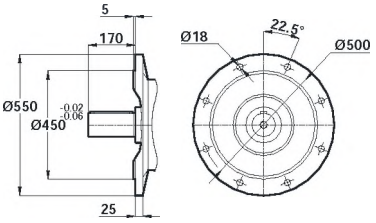
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*



Opt. 1



Opt. 2

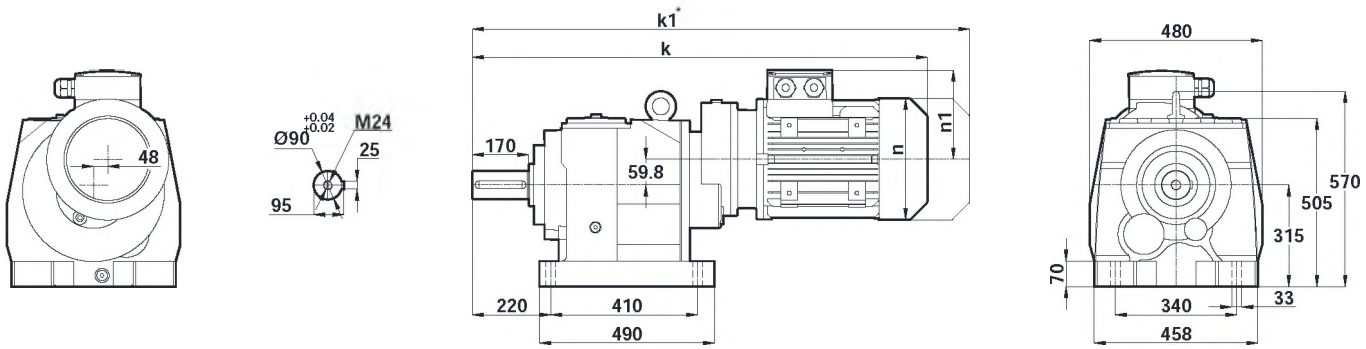


Opt. 3

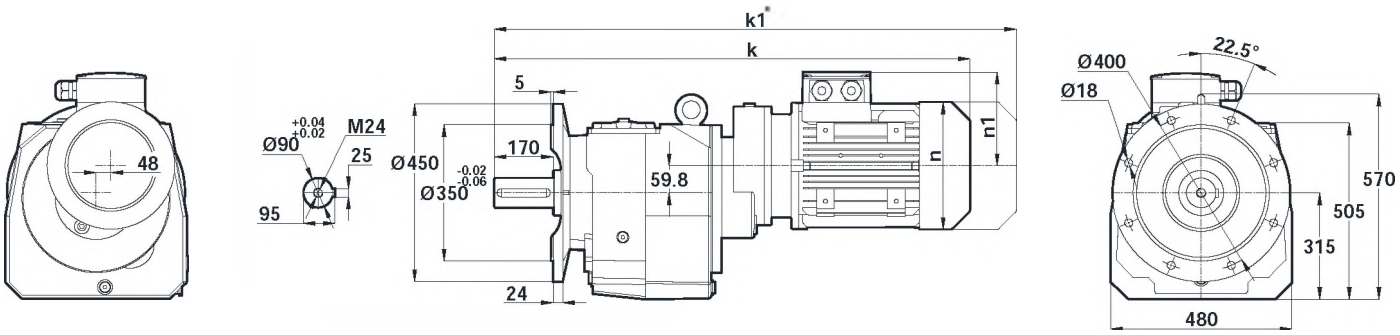
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR774

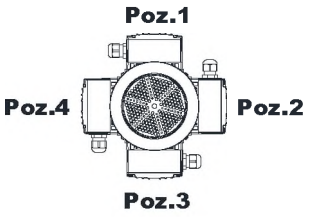


NR774



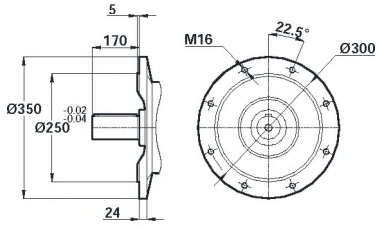
Taglia motore / *Motor Size* / Motorbaugroße				
	80	90S	90L	100L
k	927	966	966	1010
k1	1020	1070.5	1070.5	1129.5
n	155	176	176	193
n1	121	132	132	147

Morsettiera / *Terminal Box* / Klemmenkasten

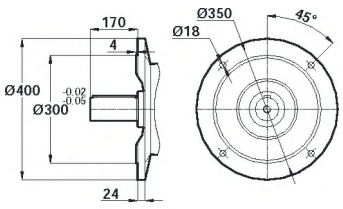


80-90-100

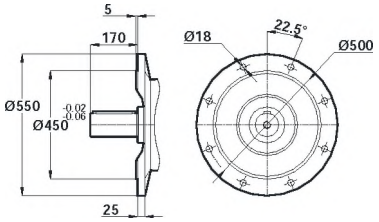
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2



Opt. 3

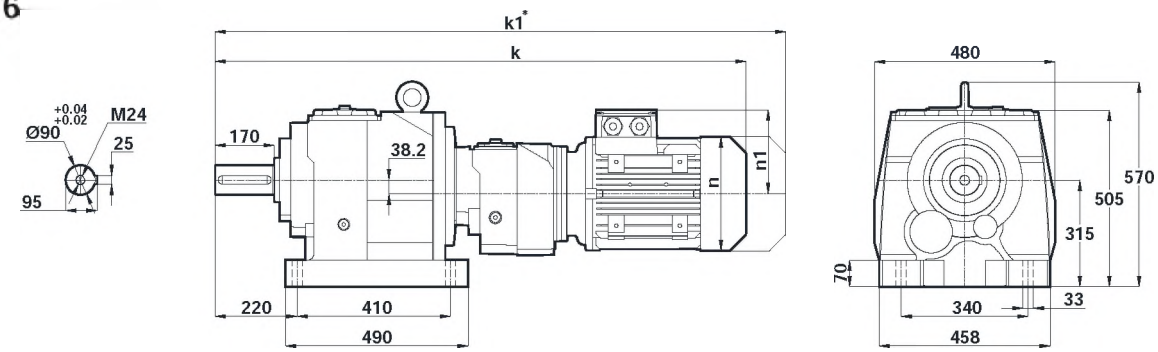
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



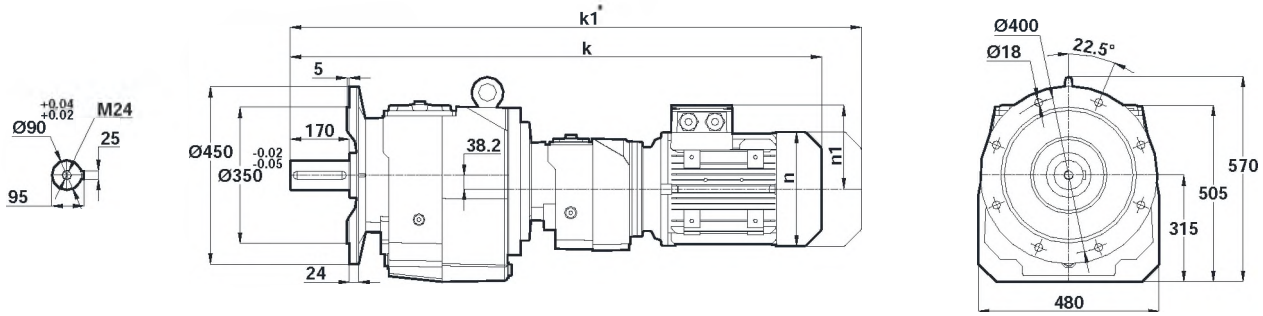
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR775
MR776

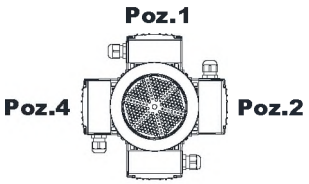


NR775
NR776



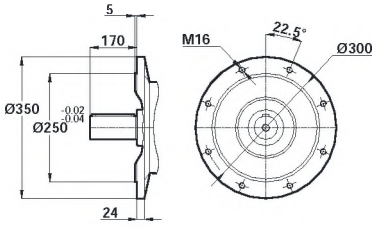
Taglia motore / *Motor Size* / Motorbaugroße				
	71	80	90S	90L
k	1042	1076	1115	1115
k1	1133	1169	1219.5	1219.5
n	137	155	176	176
n1	112	121	132	132

Morsettiera / *Terminal Box* / Klemmenkasten

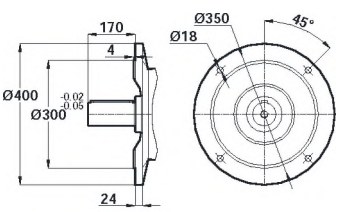


71-80-90

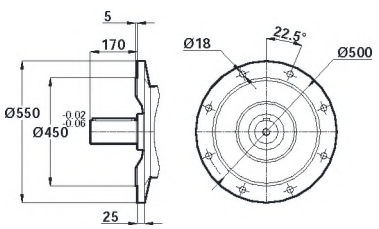
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*



Opt. 1



Opt. 2

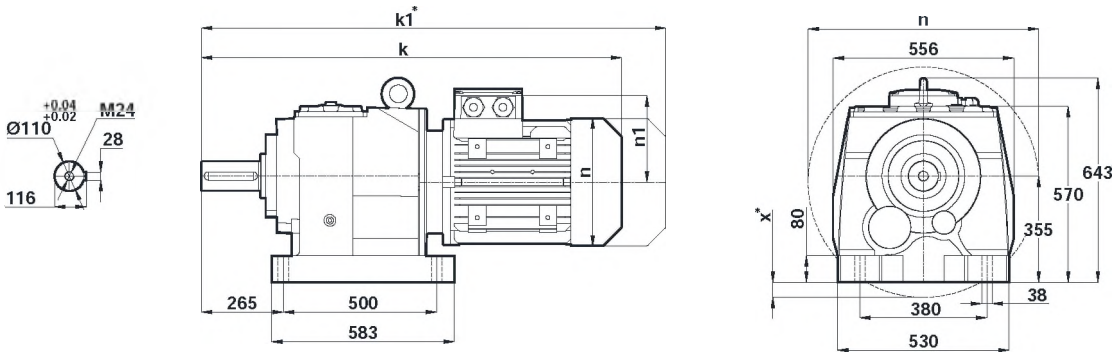


Opt. 3

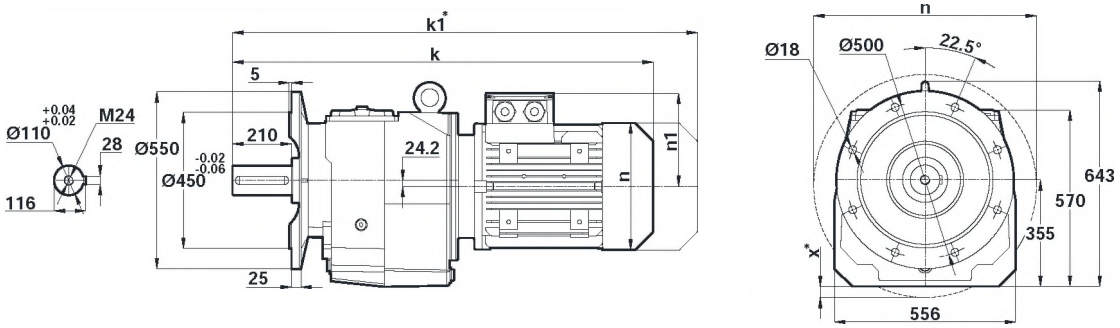
* **La misura "k1" e per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR872
MR873

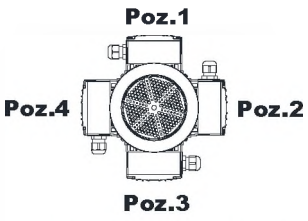


NR872
NR873



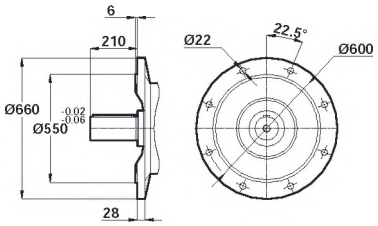
Taglia motore / *Motor Size* / Motorbaugroße											
	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k	1130	1206	1206	1277	1277	1319	1348	1373	1476	1537	1537
k1	1260	1386	1386	1447.5	1447.5	1505.5	1513	1538	1646.5	1710	1716
n	257	315	315	347	347	390	434	434	480	544	544
n1	179	219	219	234	234	275	285	285	322	350	350
x	-	-	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten



132-160-180-200-225-250-280

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

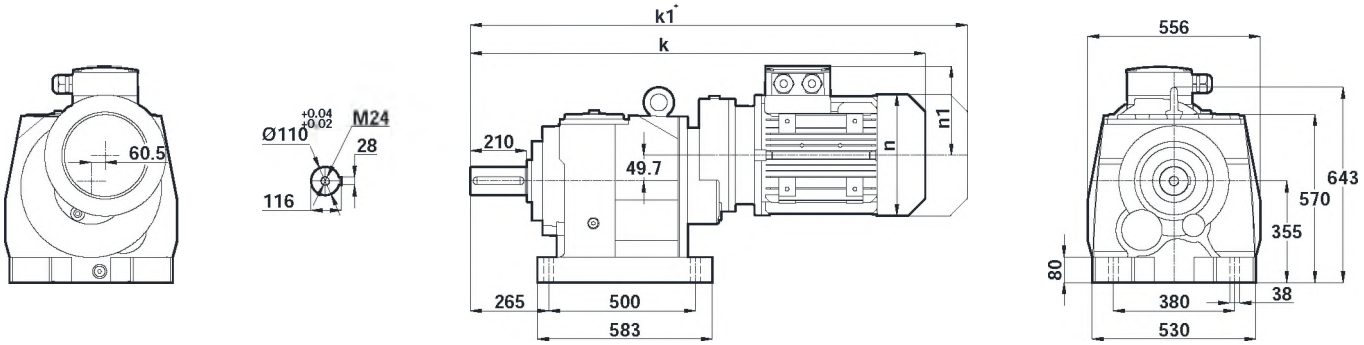
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



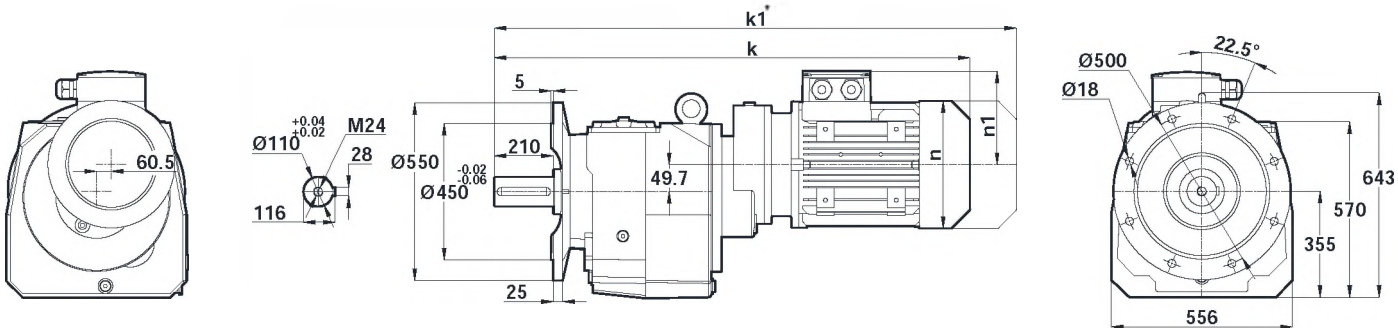
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR874

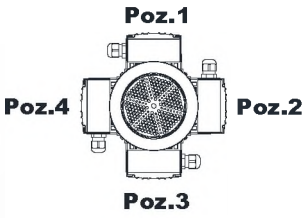


NR874



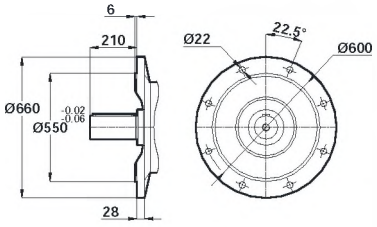
Taglia motore / *Motor Size* / Motorbaugroße				
	100L	112M	132S	132M
k	1141	1165	1252	1252
k1	1260.5	1269.5	1382	1382
n	193	215	257	257
n1	147	158	179	179

Morsettiera / *Terminal Box* / Klemmenkasten



100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

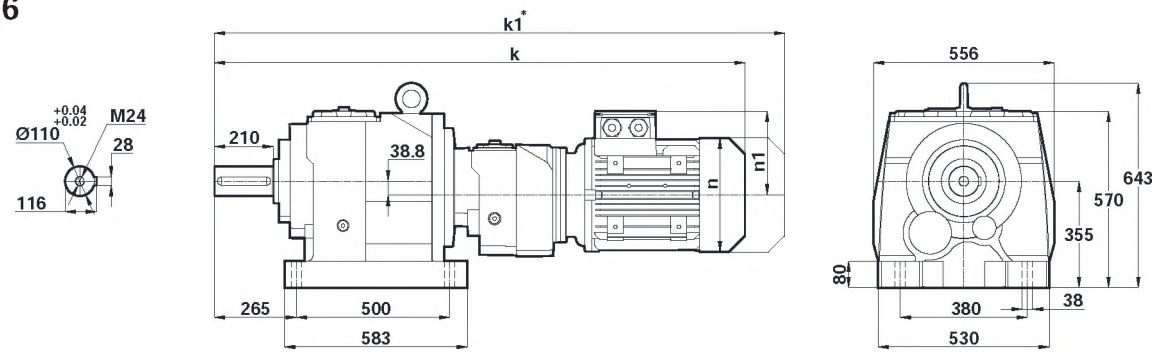


Opt. 1

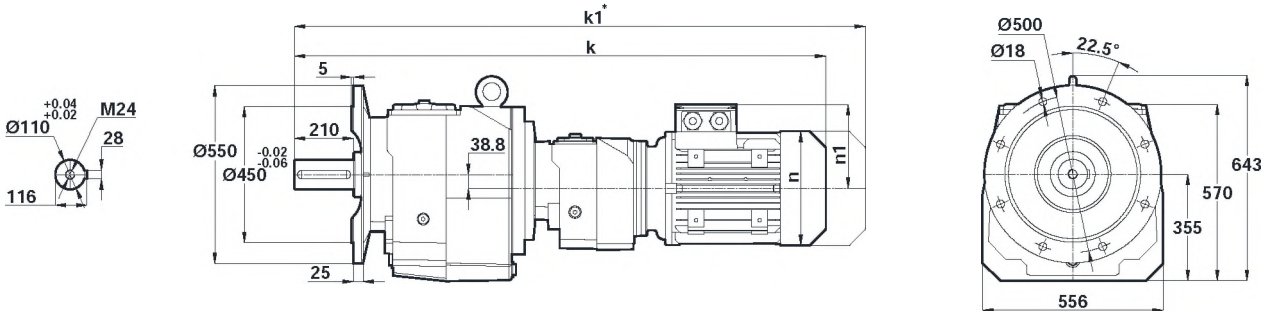
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR875
MR876

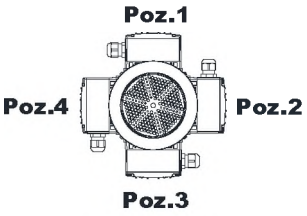


NR875
NR876



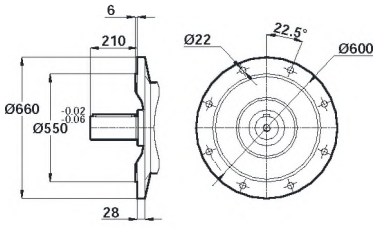
Taglia motore / *Motor Size* / Motorbaugroße					
	71	80	90S	90L	100L
k	1159	1193	1232	1232	1279
k1	1250	1286	1336.5	1336.5	1398.5
n	137	155	176	176	193
n1	112	121	132	132	147

Morsettiera / *Terminal Box* / Klemmenkasten



71-80-90-100

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

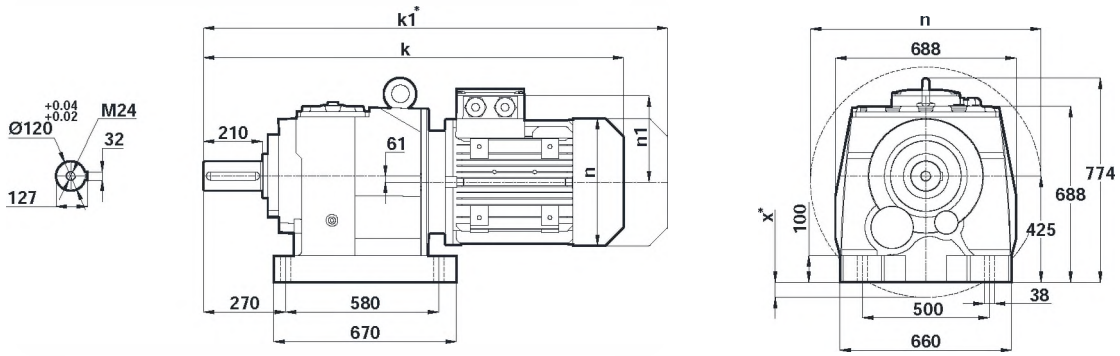
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



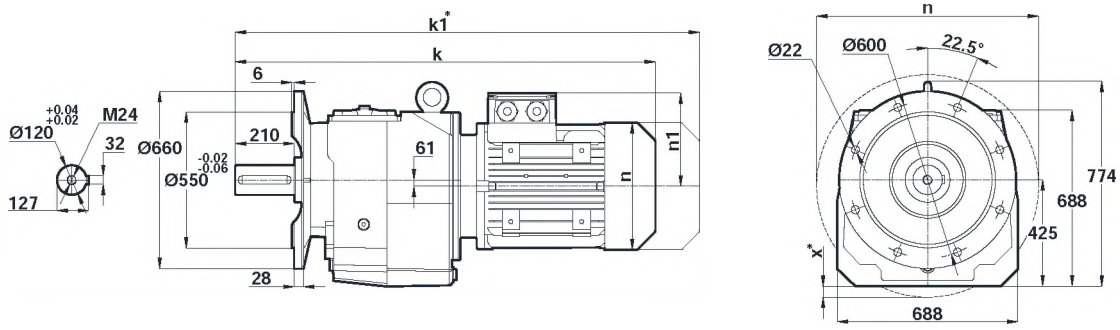
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR972
MR973

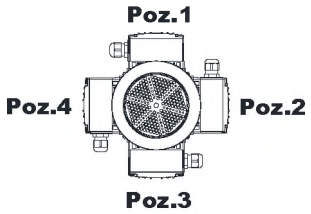


NR972
NR973



Taglia motore / *Motor Size* / Motorbaugroße												
	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M
k	1272	1272	1343	1343	1385	1403	1426	1529	1590	1590	1702	1754
k1	1452	1452	1513.5	1513.5	1571.5	1568	1591	1699.5	1763	1769	-	-
n	315	315	347	347	390	434	434	480	544	544	614	614
n1	219	219	234	234	275	285	285	322	350	350	510	510
x	-	-	-	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten

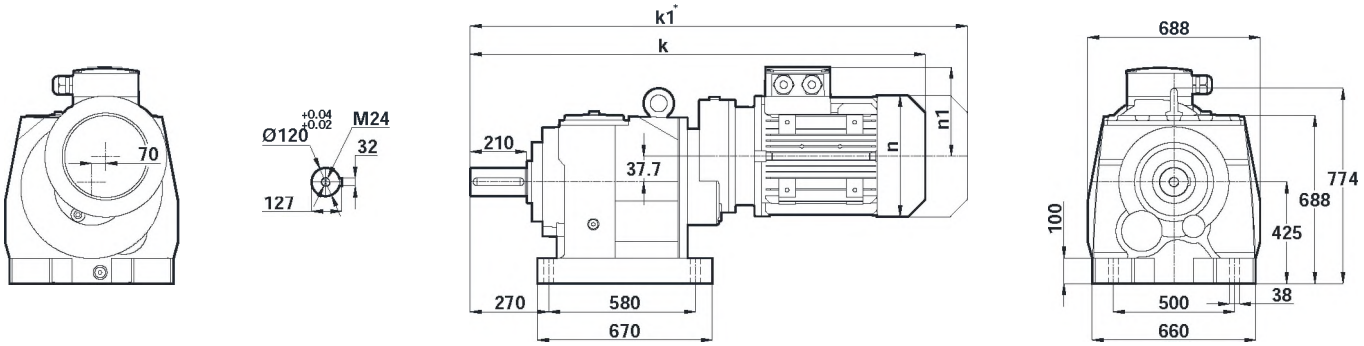


160-180-200-225-250-280-315

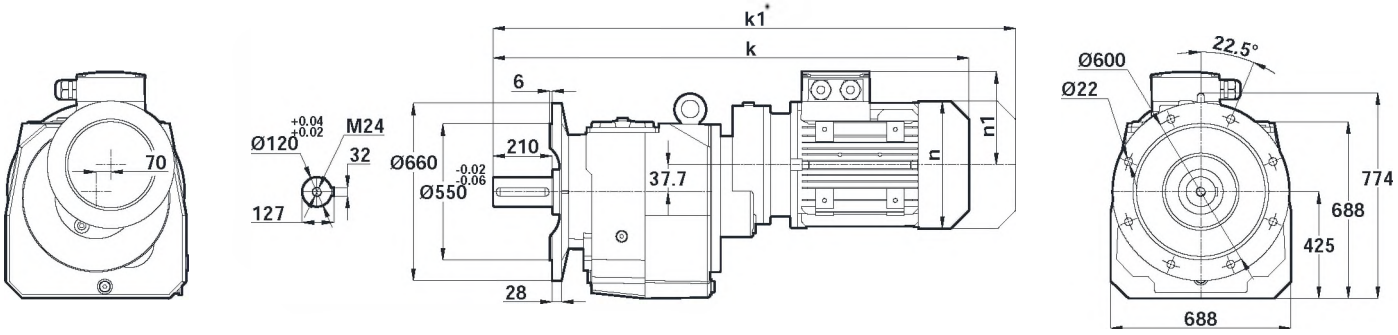
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede/ *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR974

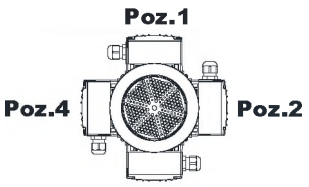


NR974



Taglia motore / *Motor Size* / Motorbaugroße				
	100L	112M	132S	132M
k	1241	1265	1352	1352
k1	1360.5	1369.5	1482	1482
n	193	215	257	257
n1	147	158	179	179

Morsettiera / *Terminal Box* / Klemmenkasten



100-112-132

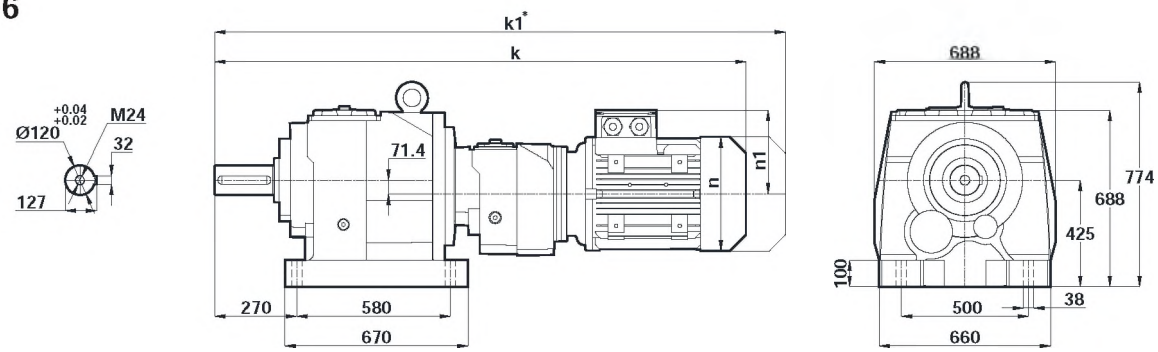
* **La misura "k1" e per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



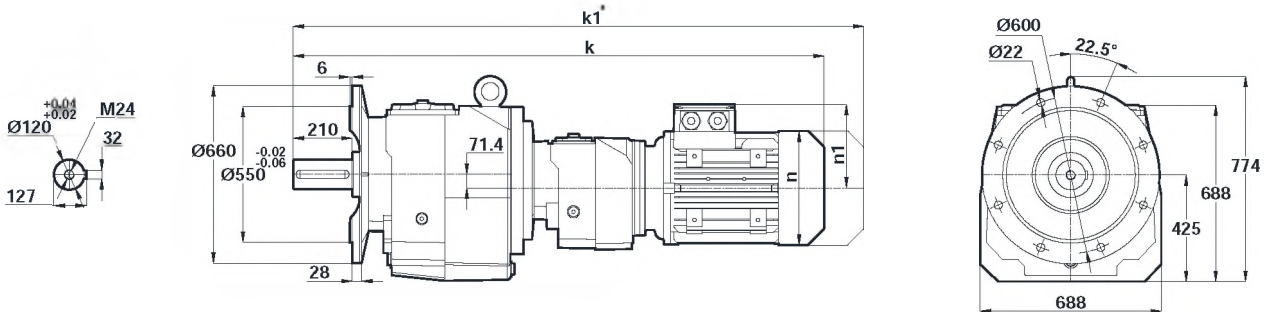
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MR975
MR976

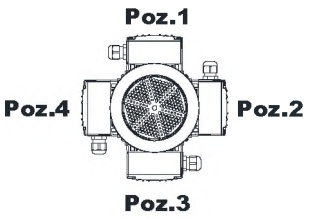


NR975
NR976



Taglia motore / *Motor Size* / Motorbaugroße						
	80	90S	90L	100L	112M	132S
k	1320	1359	1359	1403	1428	1513
k1	1413	1463.5	1463.5	1522.5	1532.5	1643
n	155	176	176	193	215	257
n1	121	132	132	147	158	179

Morsettiera / *Terminal Box* / Klemmenkasten

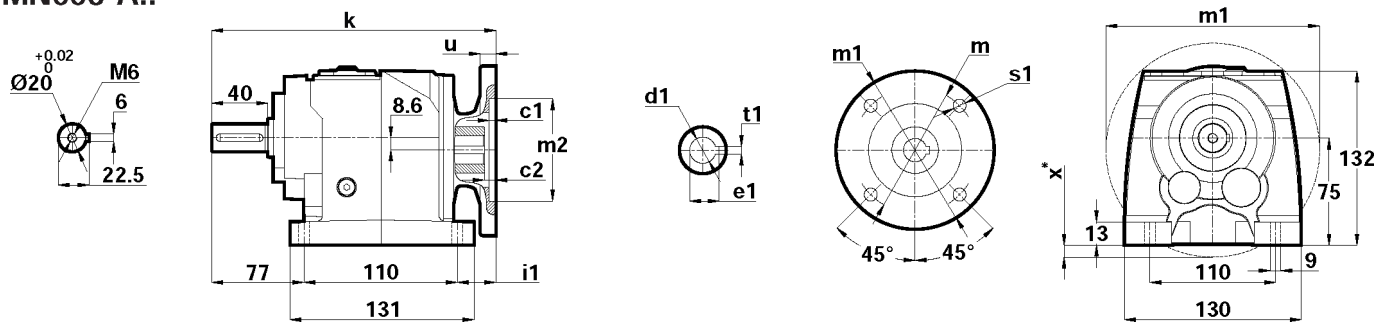


80-90-100-112-132

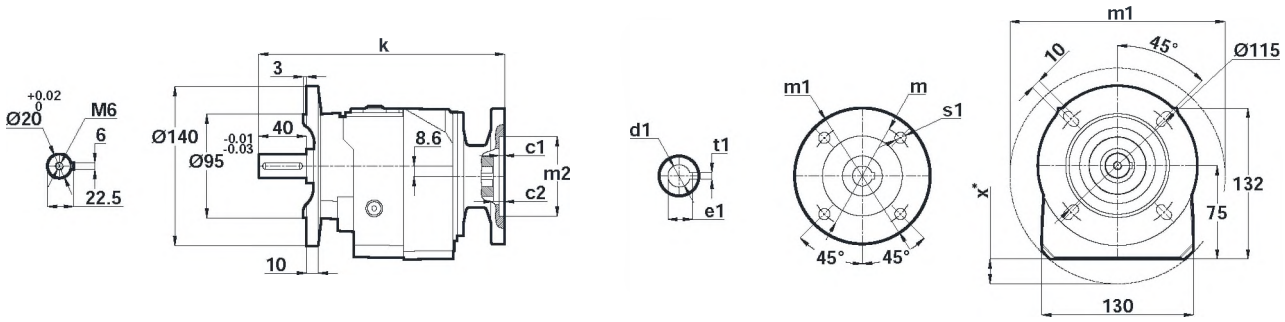
* **La misura "k1" e per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN002-A..
MN003-A..

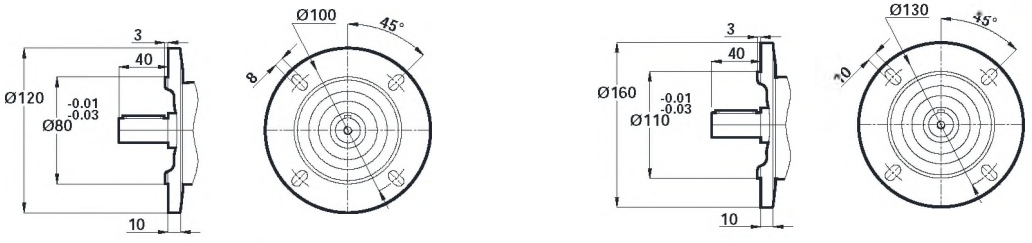


NN002-A..
NN003-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B5	3.5	5	10	115	140	95	28	10	214	11	4	12.8	4
71/B5	4	4.5	11	130	160	110	29.5	12	216	14	5	16.3	14
80/B5	4	5	12	165	200	130	44.5	12	231	19	6	21.8	34
90/B5	4	5	12	165	200	130	44.5	12	231	24	8	27.3	34

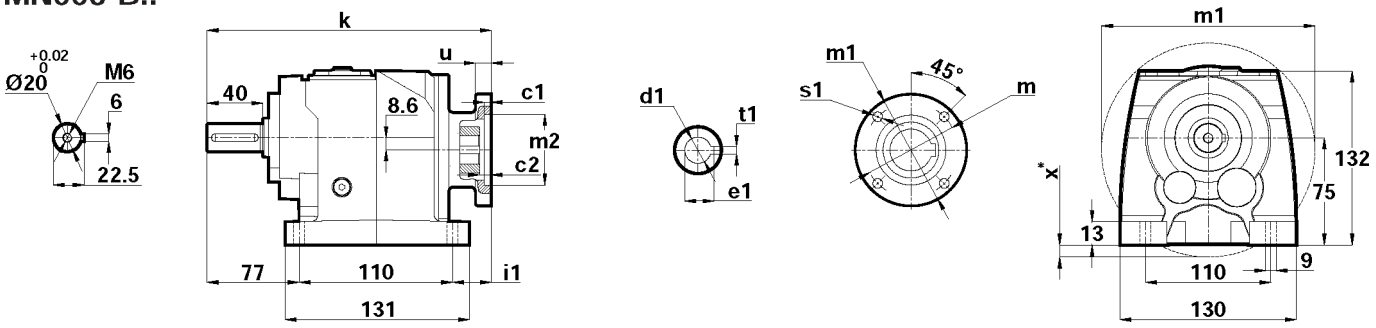
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



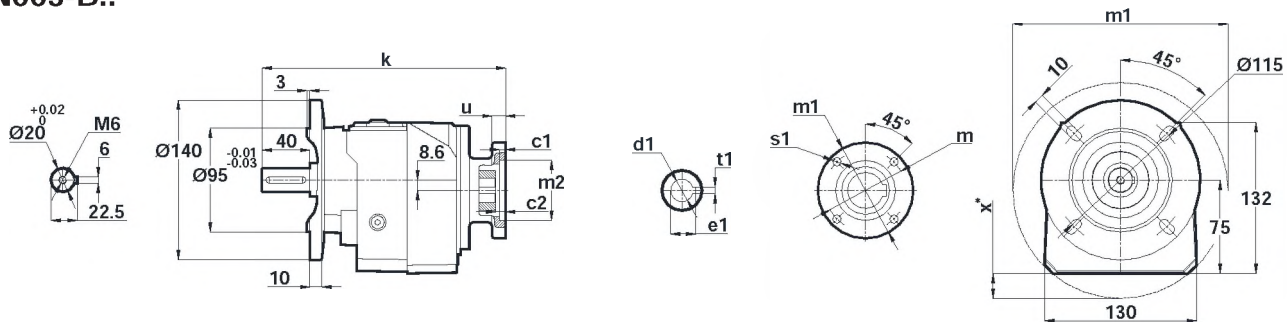
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN002-B..
MN003-B..

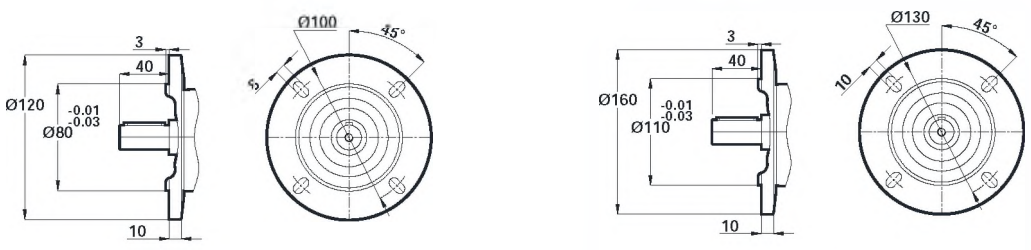


NN002-B..
NN003-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B14	2.5	5	5.5	75	90	60	28	10	214	11	4	12.8	-
71/B14	3	4.5	7	85	105	70	29.5	10	216	14	5	16.3	-
80/B14	4	5	7	100	120	80	44.5	12	231	19	6	21.8	-
90/B14	4	5	9	115	140	95	44.5	12	231	24	8	27.3	4

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

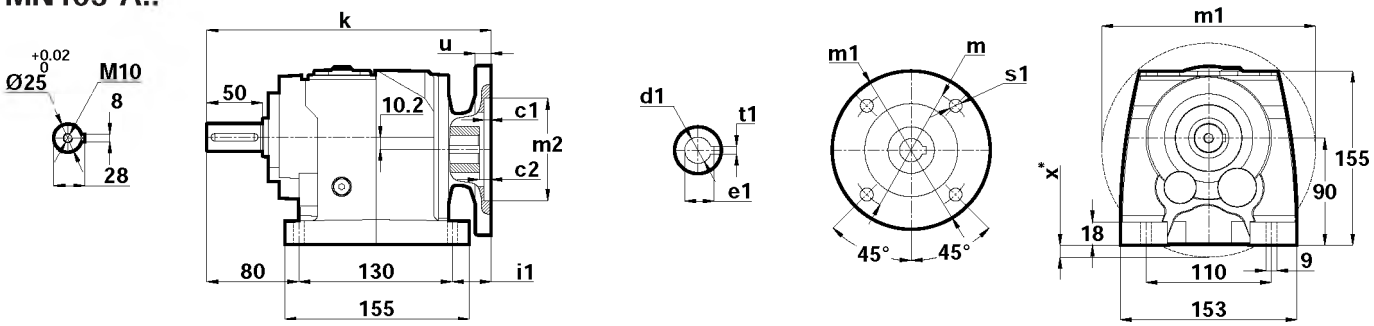


Opt. 1 **Opt. 2**

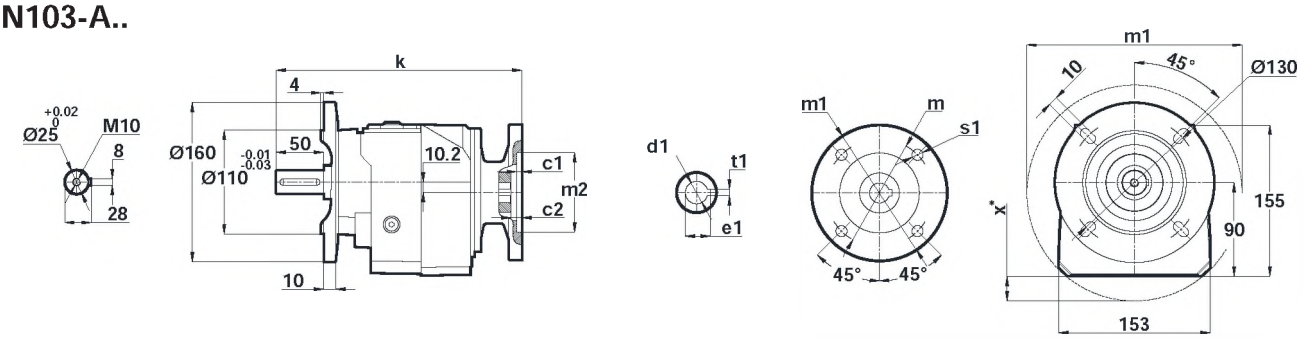
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN102-A..
MN103-A..

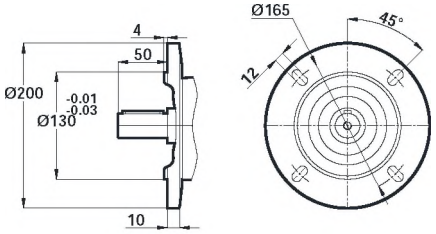


NN102-A..
NN103-A..

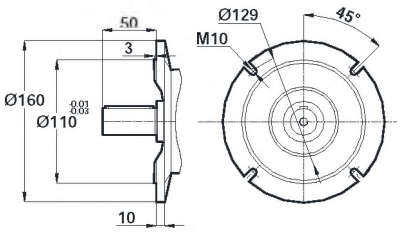


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B5	3.5	7	10	115	140	95	28.5	12	240	11	4	12.8	-
71/B5	4	4.5	12	130	160	110	28.5	12	240	14	5	16.3	0.5
80/B5	4	5	12	165	200	130	43.5	12	255	19	6	21.8	20
90/B5	4	5	12	165	200	130	43.5	12	255	24	8	27.3	20

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

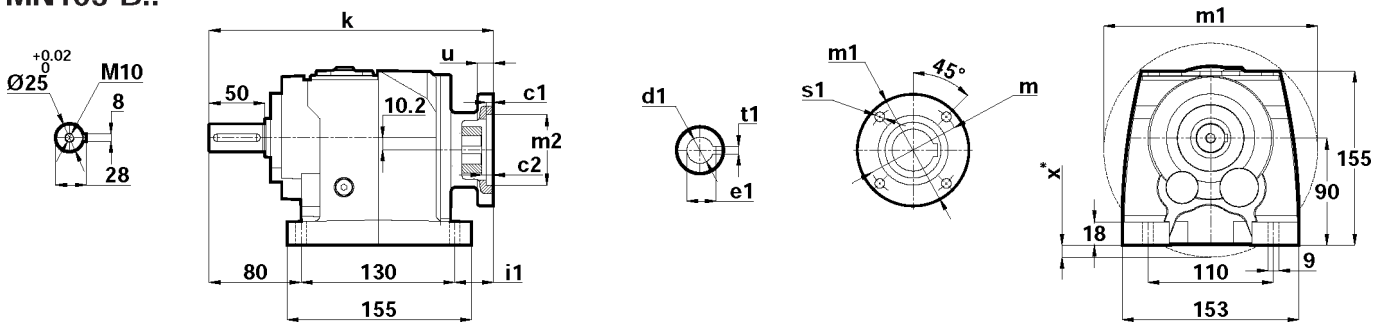


Opt. 2

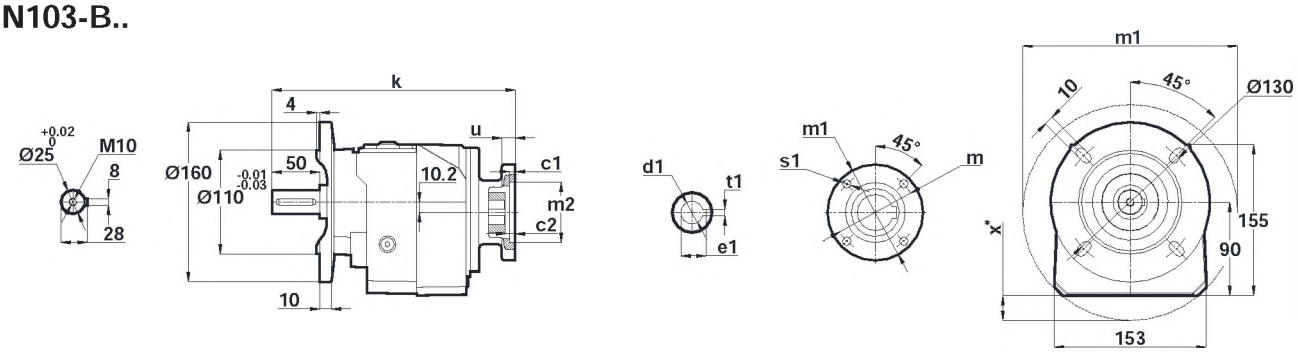
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN102-B..
MN103-B..

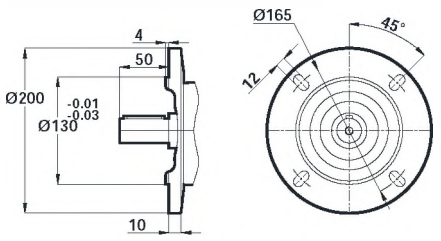


NN102-B..
NN103-B..

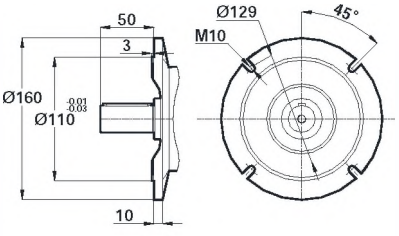


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B14	2.5	5	5.5	75	90	60	28.5	10	240	11	4	12.8	-
71/B14	3	4.5	7	85	105	70	28.5	10	240	14	5	16.3	-
80/B14	4	5	7	100	120	80	43.5	12	255	19	6	21.8	-
90/B14	4	5	9	115	140	95	43.5	12	255	24	8	27.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

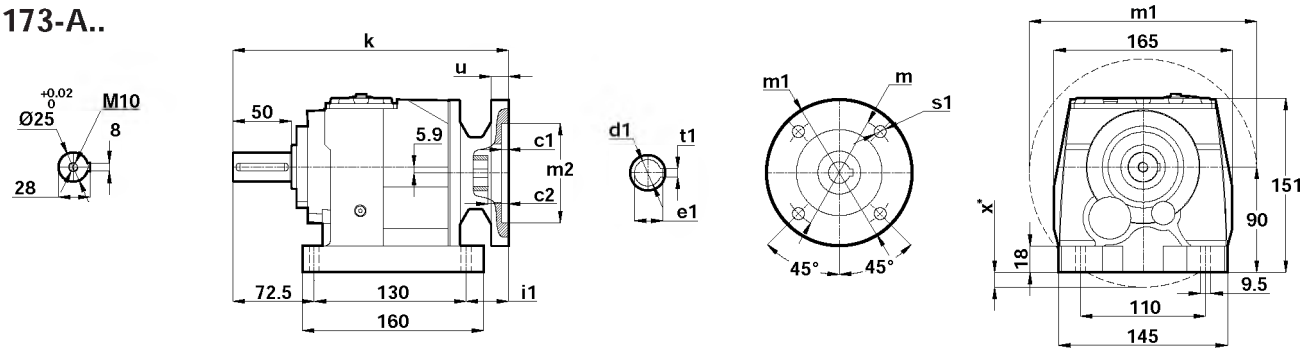


Opt. 2

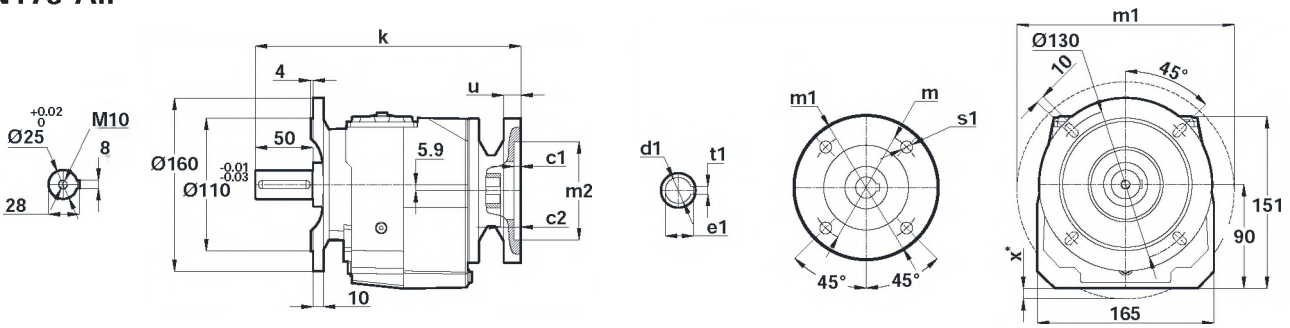
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN172-A..
MN173-A..

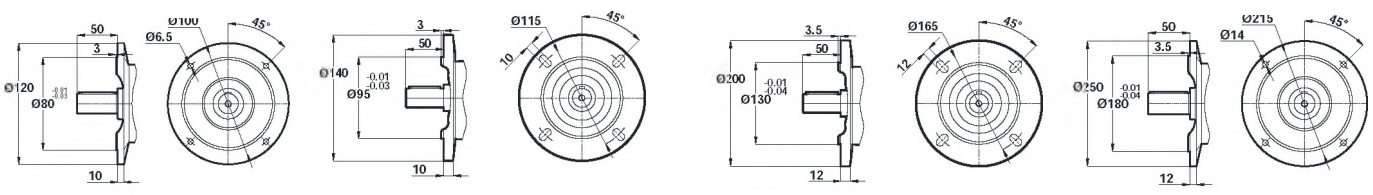


NN172-A..
NN173-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B5	3.5	5	10	115	140	95	38.5	10	241	11	4	12.8	-
71/B5	4	4.5	11	130	160	110	40	12	243	14	5	16.3	-
80/B5	4	5	12	165	200	130	55	12	258	19	6	21.8	16
90/B5	4	5	12	165	200	130	55	12	258	24	8	27.3	16
100/B5	4.5	5	15	215	250	180	66	12	269	28	8	31.3	41
112/B5	4.5	5	15	215	250	180	66	12	269	28	8	31.3	41

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

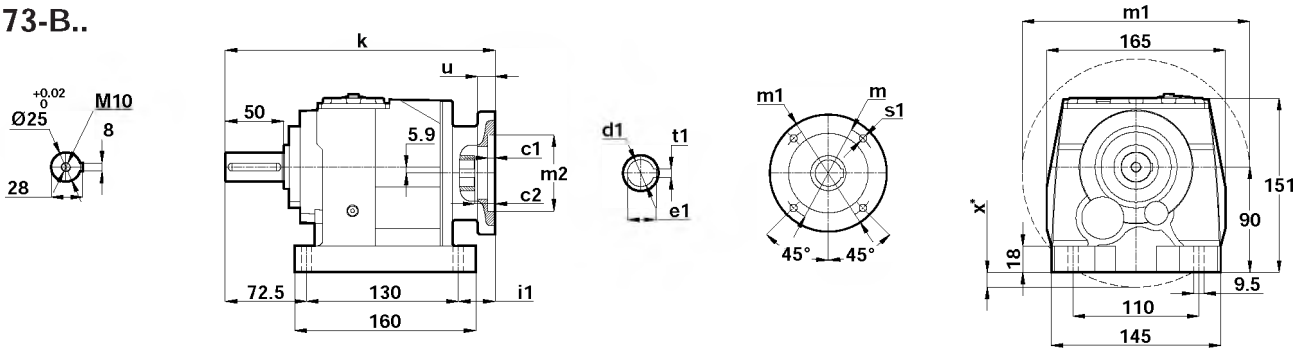


Opt. 1 | Opt. 2 | Opt. 3 | Opt. 4

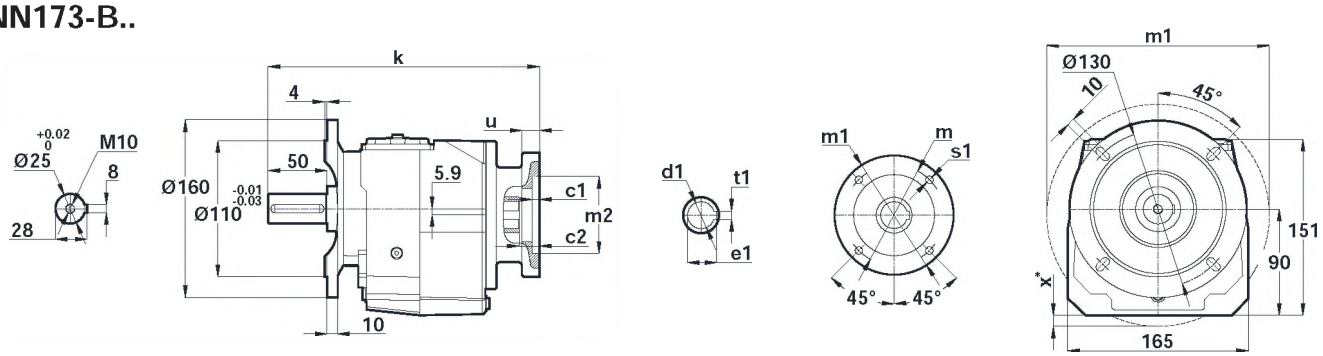
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN172-B..
MN173-B..

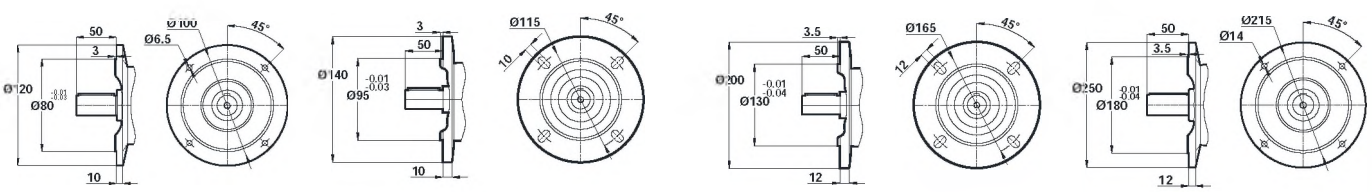


NN172-B..
NN173-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B14	2.5	5	5.5	75	90	60	28.5	10	240	11	4	12.8	-
71/B14	3	4.5	7	85	105	70	40	10	243	14	5	16.3	-
80/B14	4	5	7	100	120	80	55	12	258	19	6	21.8	-
90/B14	4	5	9	115	140	95	55	12	258	24	8	27.3	-
100/B14	3.5	5.5	9	130	160	110	66	12	269	28	8	31.3	-
112/B14	3.5	5.5	9	130	160	110	66	12	269	28	8	31.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

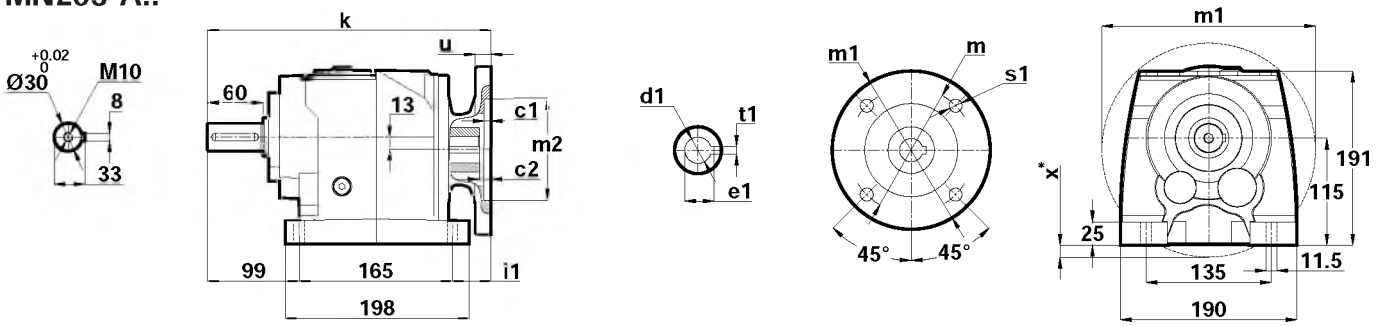


Opt. 1 Opt. 2 Opt. 3 Opt. 4

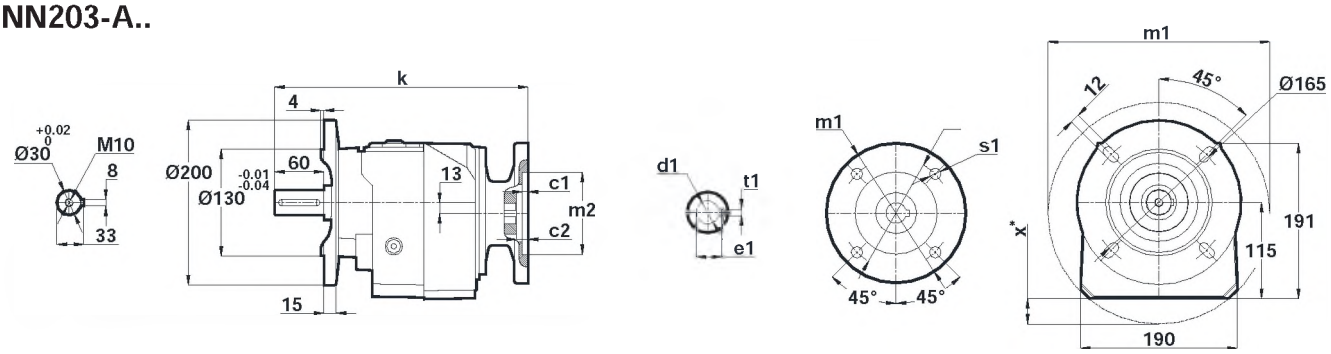
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN202-A..
MN203-A..

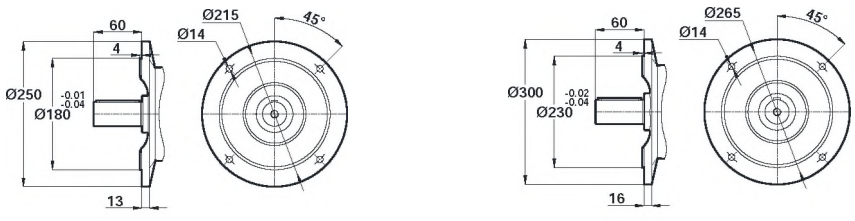


NN202-A..
NN203-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B5	3.5	5	9	115	140	95	58.5	12	323	11	4	12.8	-
71/B5	4	8.5	11	130	160	110	29.5	12	294	14	5	16.3	-
80/B5	4	5	12	165	200	130	58.5	12	323	19	6	21.8	-
90/B5	4	5	12	165	200	130	58.5	12	323	24	8	27.3	-
100/B5	4.5	5.5	15	215	250	180	51.5	12	316	28	8	31.3	23
112/B5	4.5	5.5	15	215	250	180	51.5	12	316	28	8	31.3	23

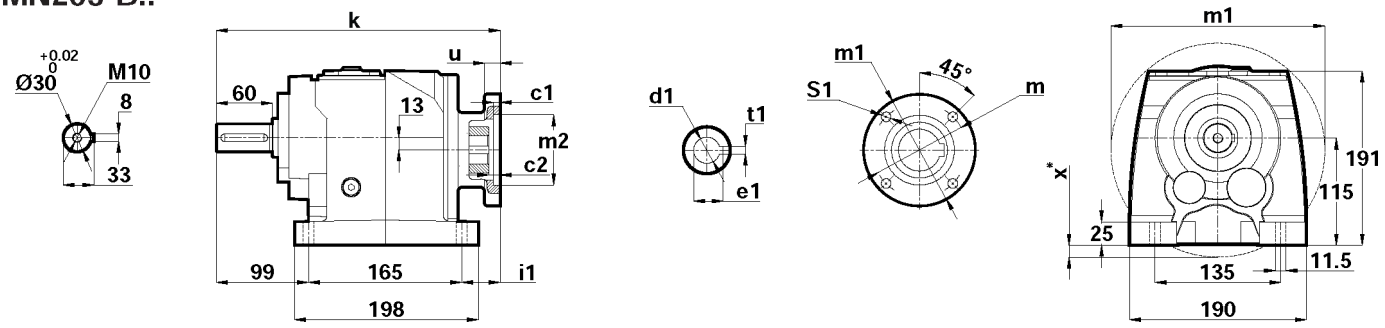
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



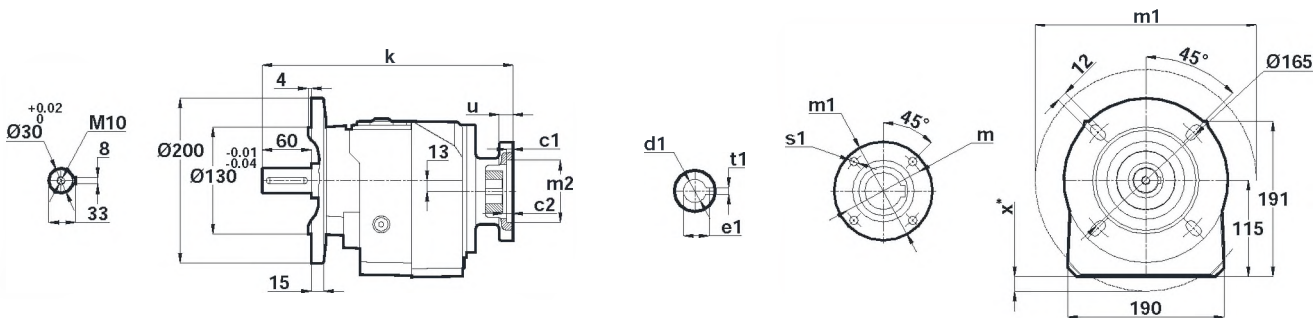
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN202-B..
MN203-B..

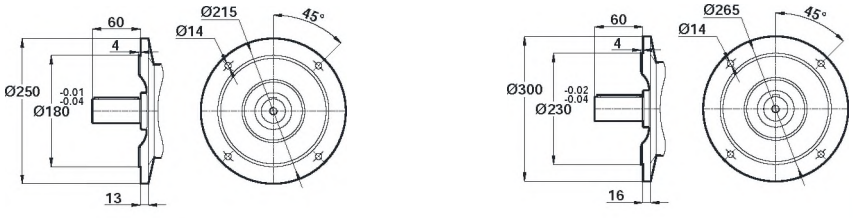


NN202-B..
NN203-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
71/B14	3	8.5	7	85	105	70	29.5	10	294	14	5	16.3	-
80/B14	4	5	7	100	120	80	58.5	12	323	19	6	21.8	-
90/B14	4	5	9	115	140	95	58.5	12	323	24	8	27.3	-
100/B14	3.5	5.5	9	130	160	110	51.5	12	316	28	8	31.3	-
112/B14	3.5	5.5	9	130	160	110	51.5	12	316	28	8	31.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



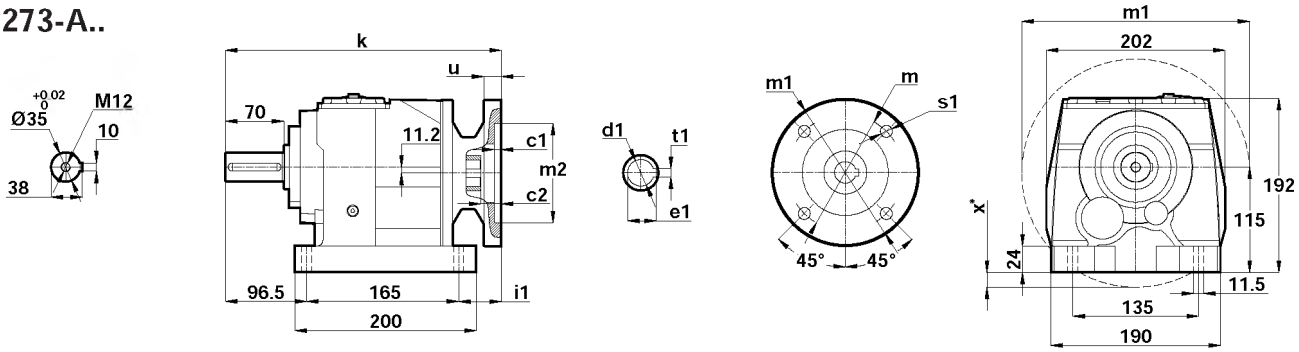
Opt. 1

Opt. 2

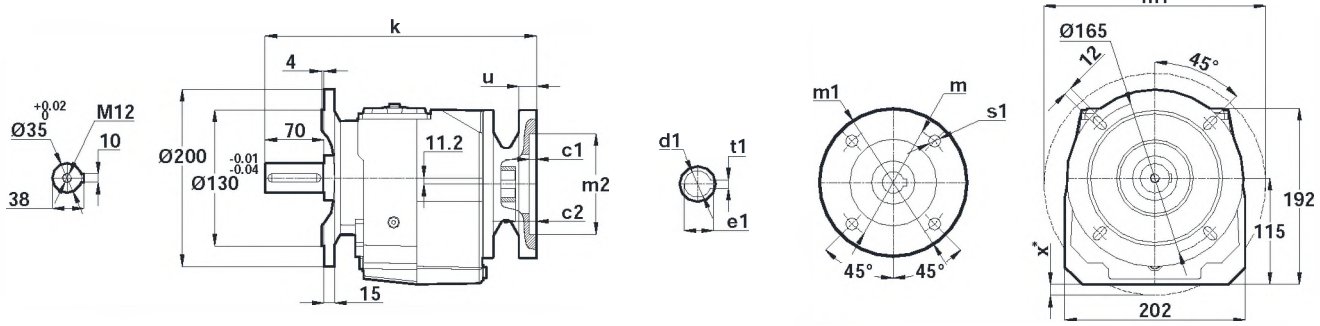
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN272-A..
MN273-A..

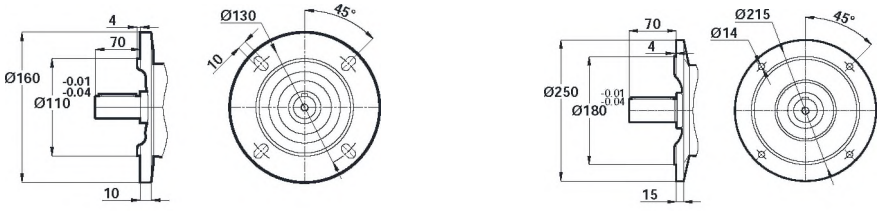


NN272-A..
NN273-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B5	3.5	5	9	115	140	95	62	12	324	11	4	12.8	-
71/B5	4	8.5	11	130	160	110	33	12	295	14	5	16.3	-
80/B5	4	5	12	165	200	130	62	12	324	19	6	21.8	-
90/B5	4	5	12	165	200	130	62	12	324	24	8	27.3	-
100/B5	4.5	5.5	15	215	250	180	55	12	317	28	8	31.3	22
112/B5	4.5	5.5	15	215	250	180	55	12	317	28	8	31.3	22
132/B5	4.5	7	15	265	300	230	92	15	354	38	10	41.3	47

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

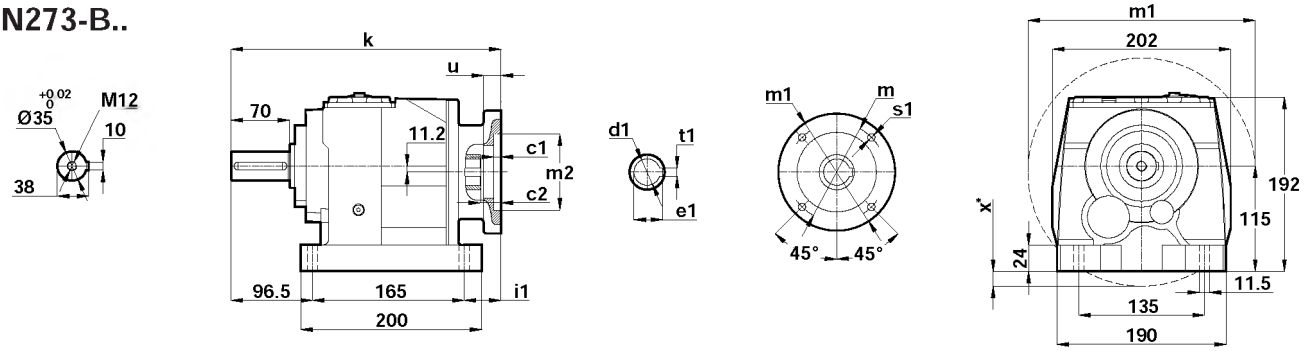


Opt. 1 **Opt. 2**

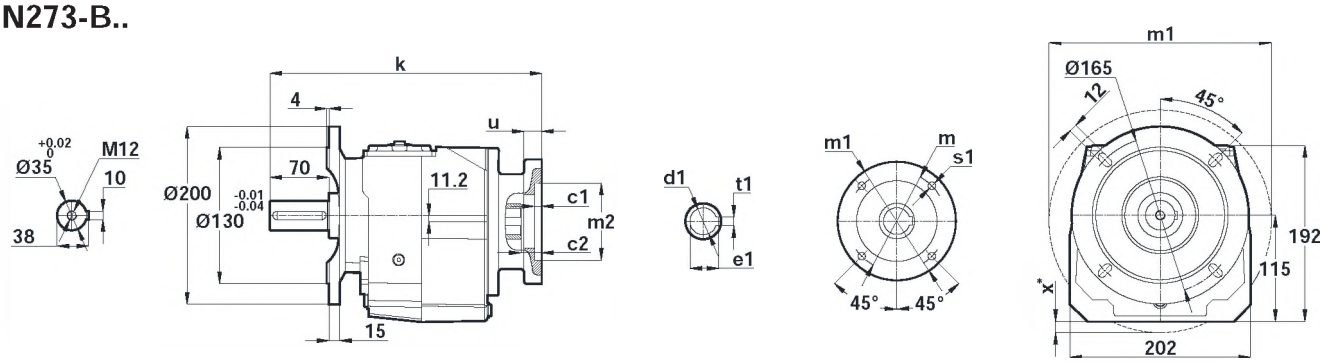
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN272-B..
MN273-B..

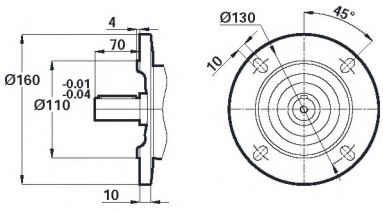


NN272-B..
NN273-B..

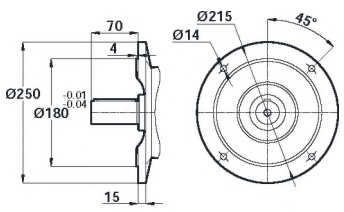


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
71/B14	3	8.5	7	85	105	70	33	10	295	14	5	16.3	-
80/B14	4	5	7	100	120	80	62	12	324	19	6	21.8	-
90/B14	4	5	9	115	140	95	62	12	324	24	8	27.3	-
100/B14	3.5	5.5	9	130	160	110	55	12	317	28	8	31.3	-
112/B14	3.5	5.5	9	130	160	110	55	12	317	28	8	31.3	-
132/B14	4.4	6	11	165	200	130	92	15	354	35	10	41.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

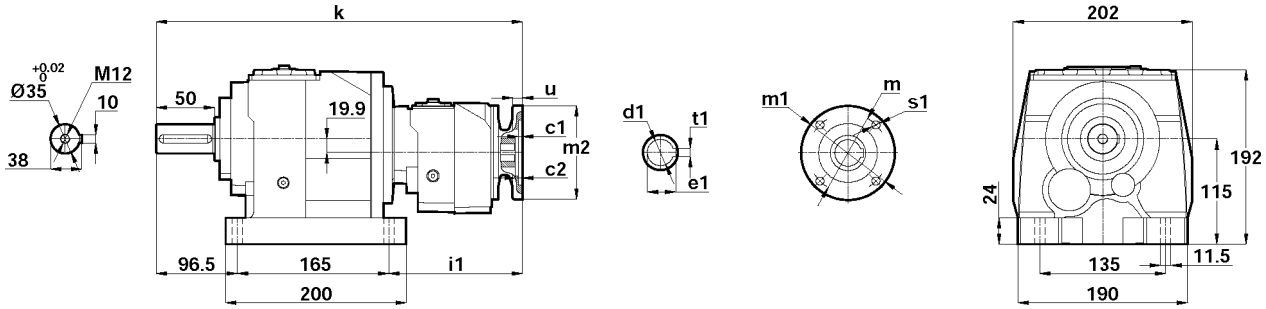


Opt. 2

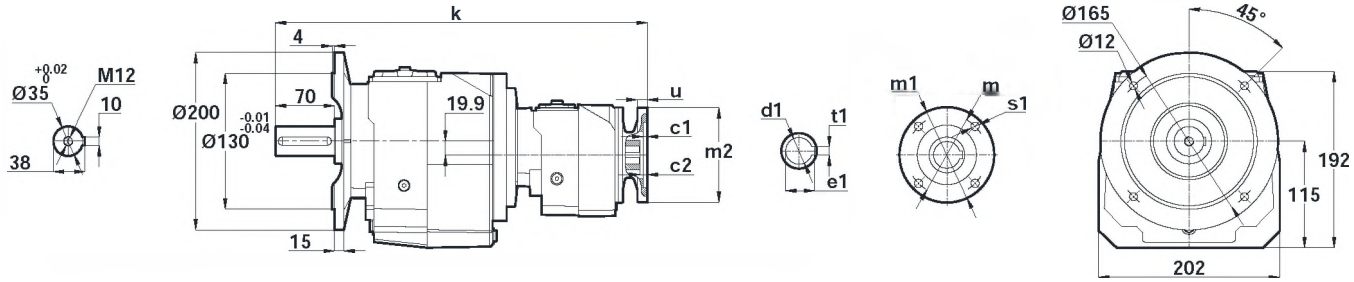
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN275-A..
MN276-A..

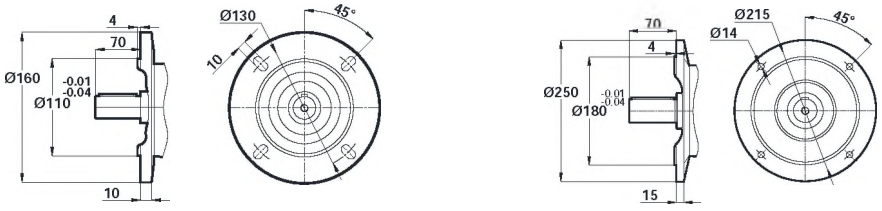


NN275-A..
NN276-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	177.5	10	439	11	4	12.8
71/B5	4	4.5	11	130	160	110	179	12	441	14	5	16.3

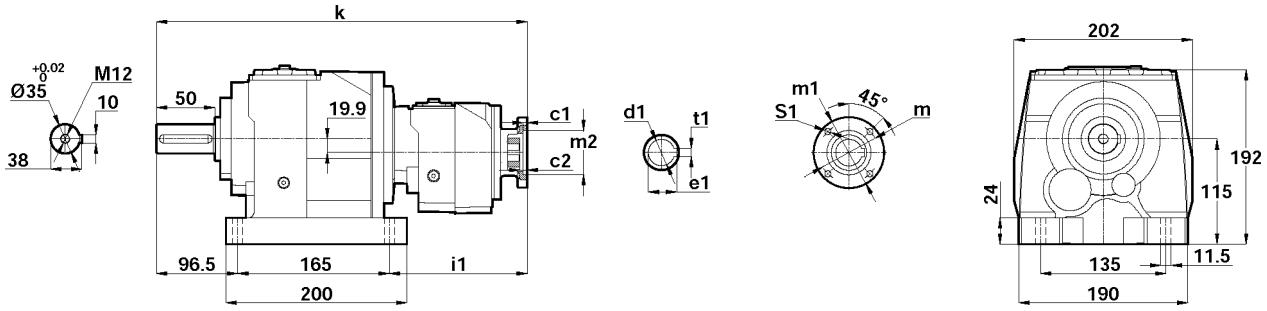
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



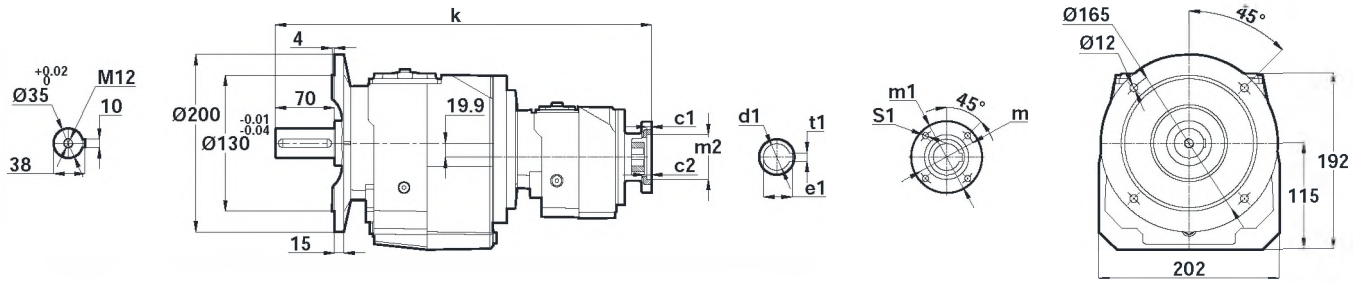
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN275-B..
MN276-B..

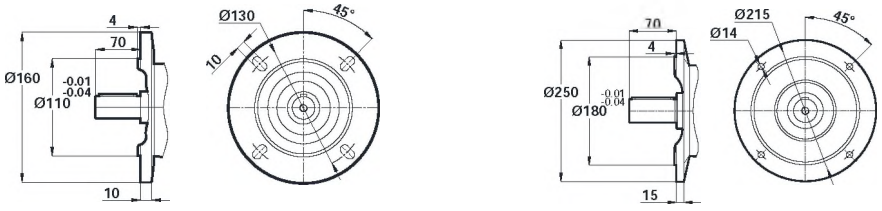


NN275-B..
NN276-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B14	2.5	5	5.5	75	90	60	177.5	10	439	11	4	12.8
71/B14	3	4.5	7	85	105	70	179	10	441	14	5	16.3

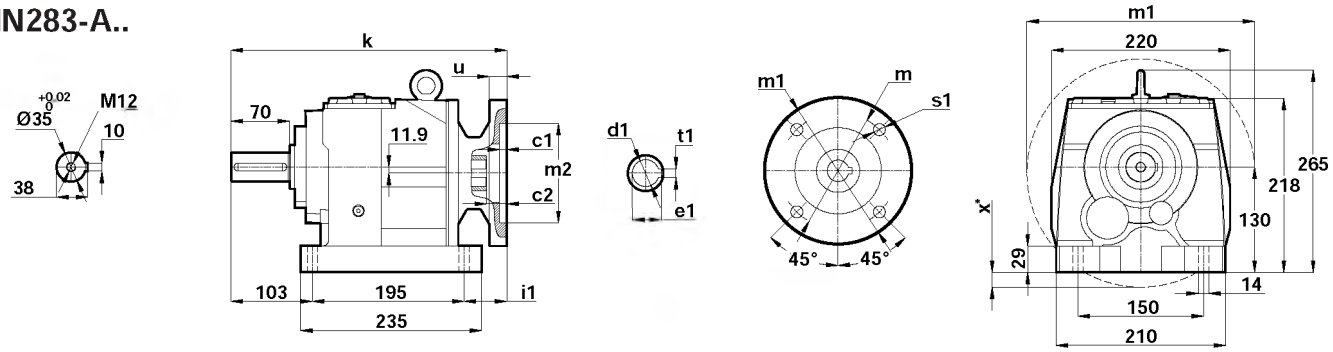
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



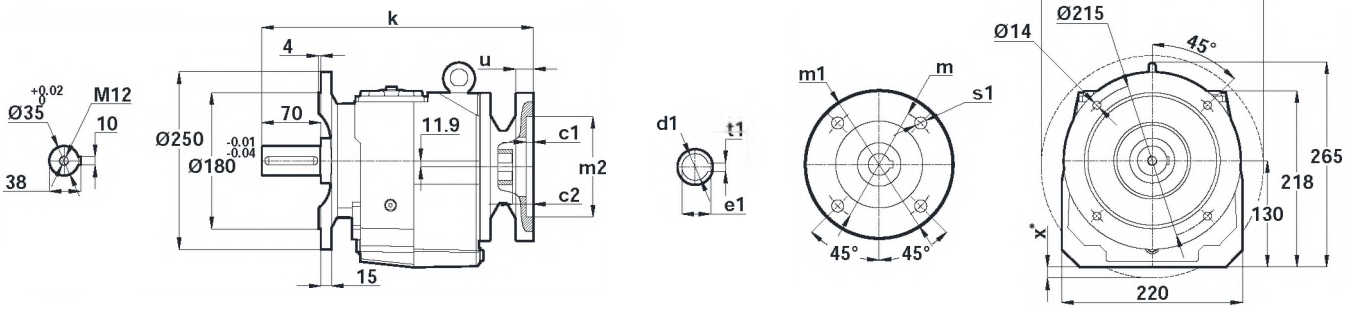
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN282-A..
MN283-A..

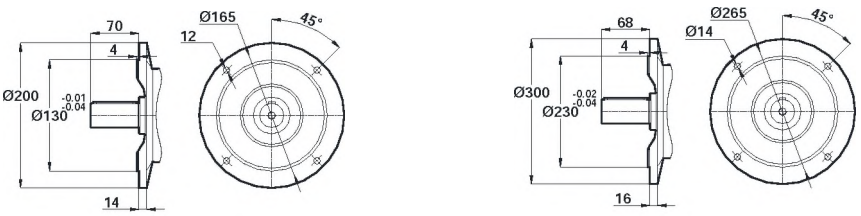


NN282-A..
NN283-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
71/B5	4	9	11	130	160	110	45	12	343	14	5	16.3	-
80/B5	4	9	12	165	200	130	45	12	343	19	6	21.8	-
90/B5	4	9	12	165	200	130	45	12	343	24	8	27.3	-
100/B5	4.5	9	15	215	250	180	52	15	350	28	8	31.3	7
112/B5	4.5	9	15	215	250	180	52	15	350	28	8	31.3	7
132/B5	4.5	7	15	265	300	230	82	15	380	38	10	41.3	32

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

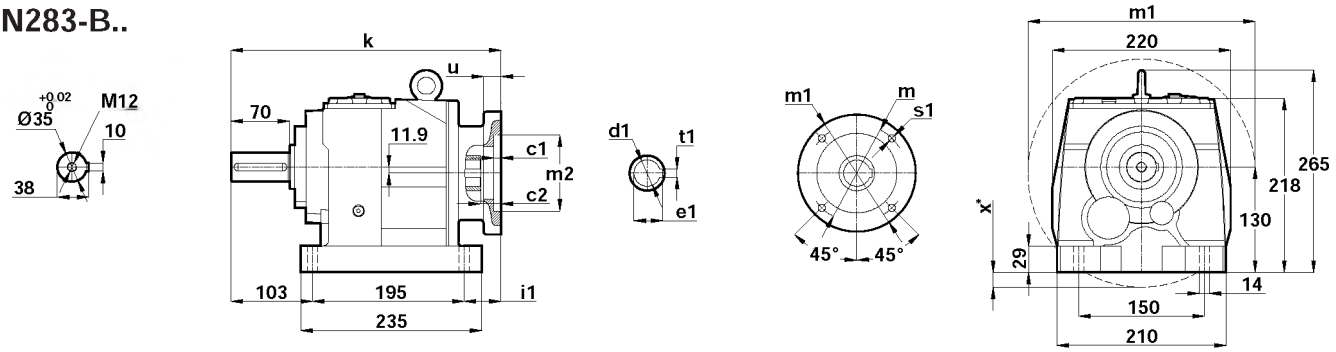


Opt. 1 **Opt. 2**

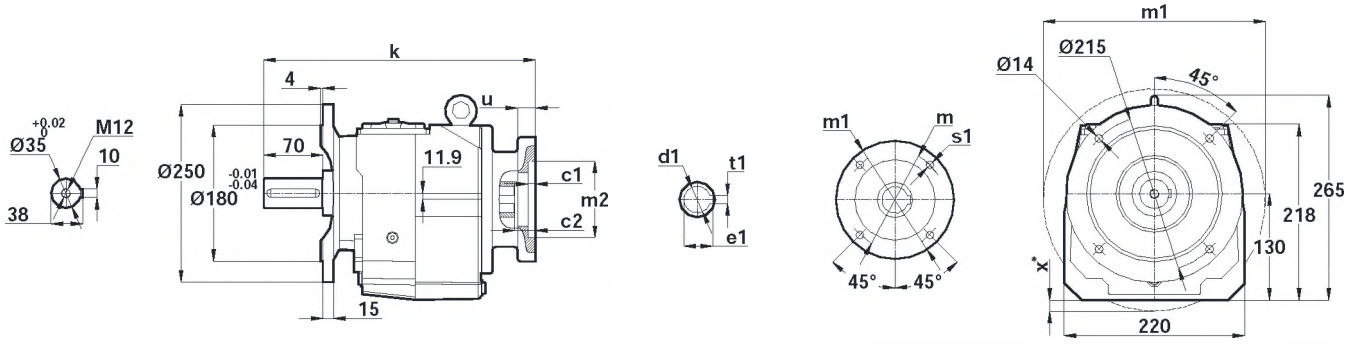
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN282-B..
MN283-B..

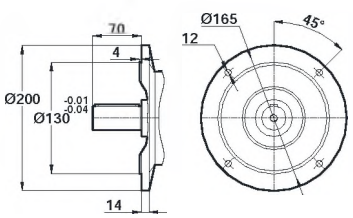


NN282-B..
NN283-B..

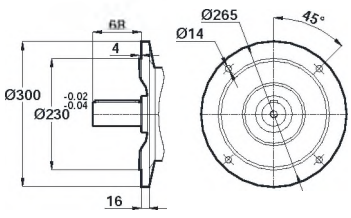


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
80/B14	4	9	7	100	120	80	45	12	343	19	6	21.8	-
90/B14	4	9	9	115	140	95	45	12	343	24	8	26.3	-
100/B14	3.5	9	9	130	160	110	52	15	350	28	8	31.3	-
112/B14	3.5	9	9	130	160	110	52	15	350	28	8	31.3	-
132/B14	4.5	7	11	165	200	130	82	15	380	38	10	41.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

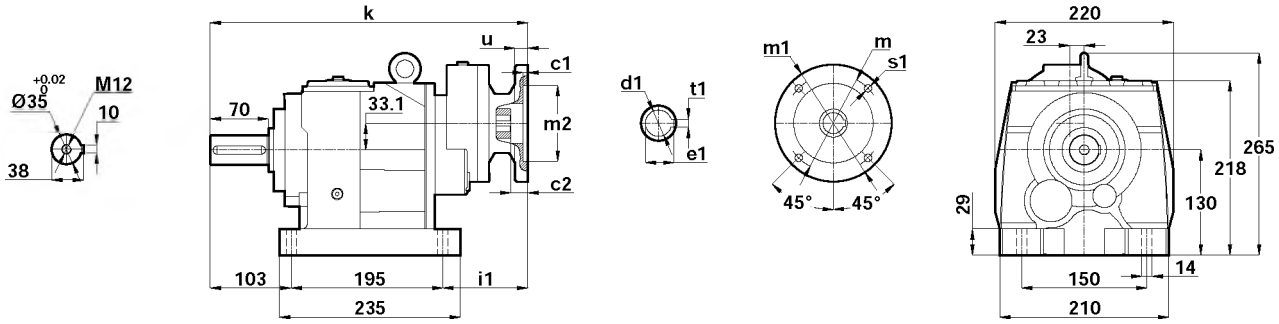


Opt. 2

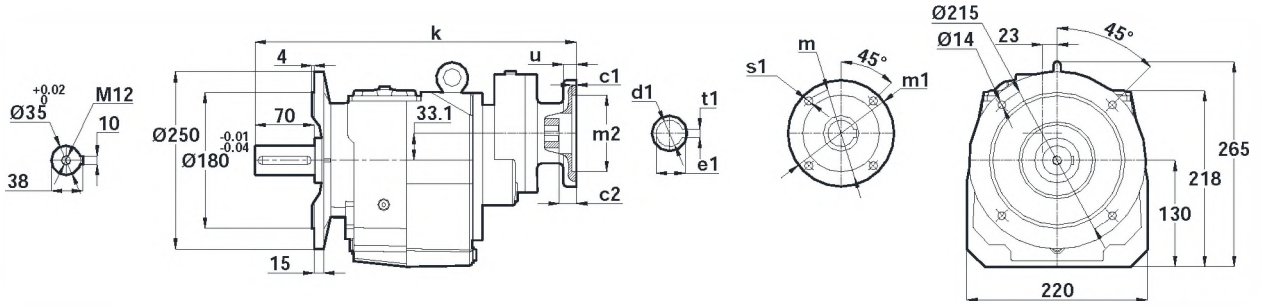
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN284-A..
MN284-B..

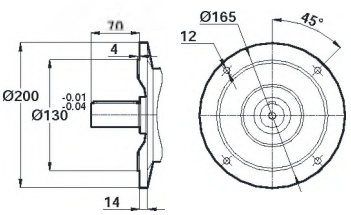


NN284-A..
NN284-B..

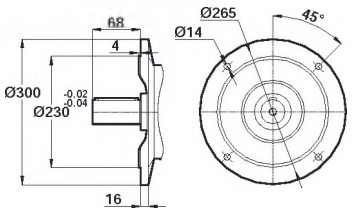


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	122	10	420	11	4	12.8
71/B5	4	4.5	11	130	160	110	93	12	391	14	5	16.3
71/B14	3	4.5	7	85	105	70	93	10	391	14	5	16.3

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



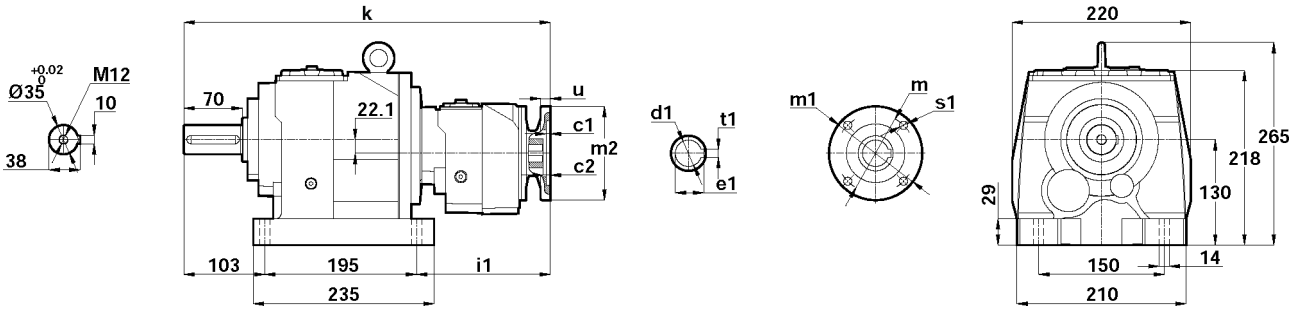
Opt. 1



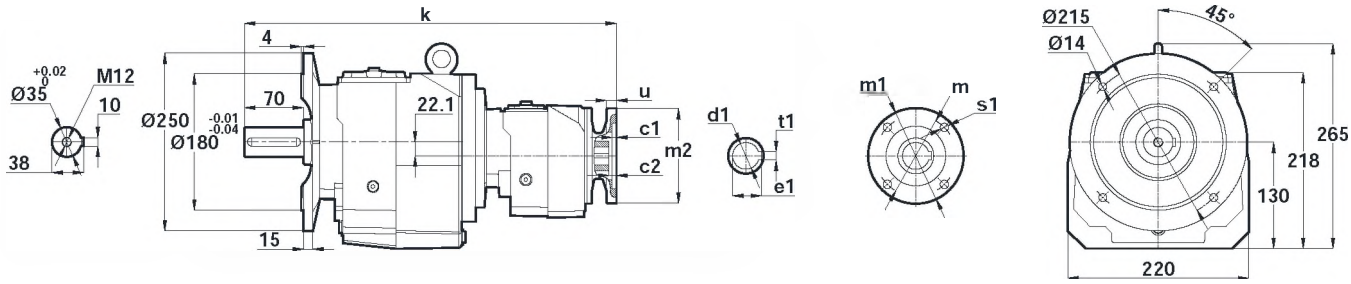
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN285-A.. / B..
MN286-A.. / B..

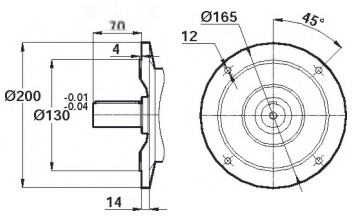


NN285-A.. / B..
NN286-A.. / B..

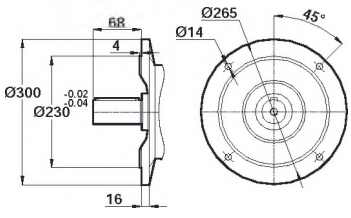


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	3.5	7	10	115	140	95	188	12	486	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	188	10	486	11	4	12.8

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*



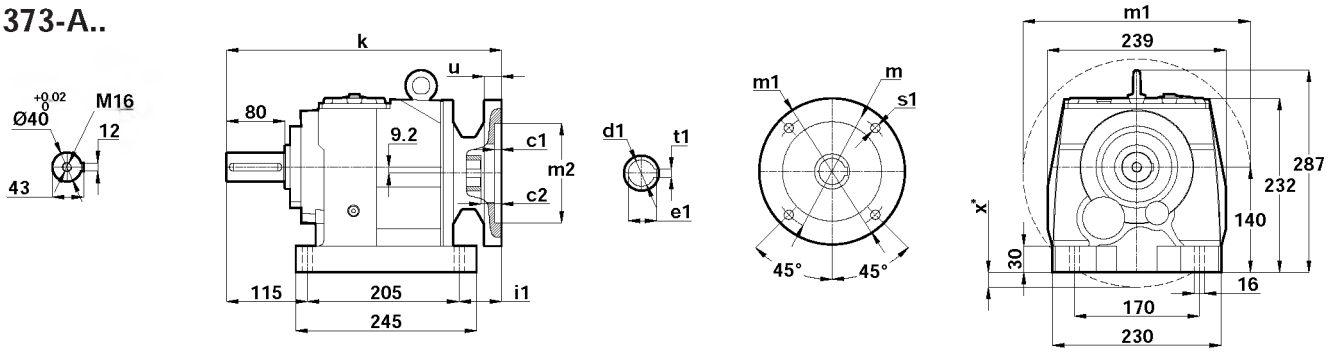
Opt. 1



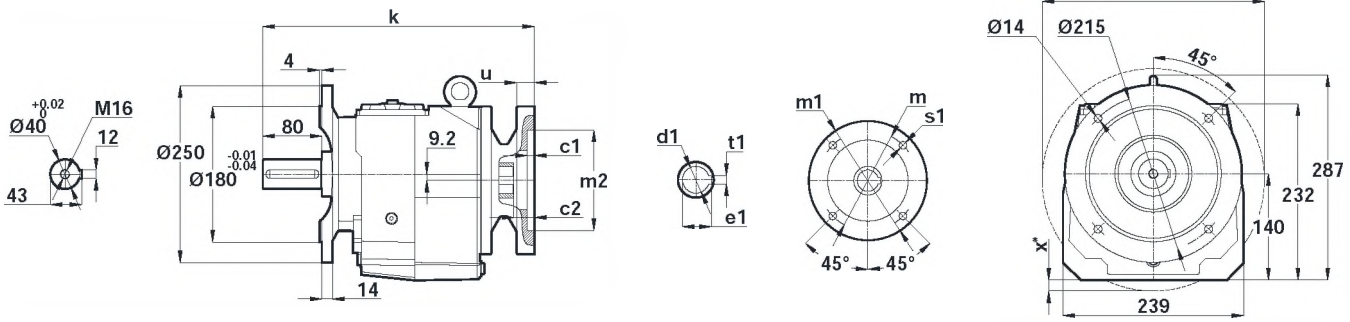
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN372-A..
MN373-A..

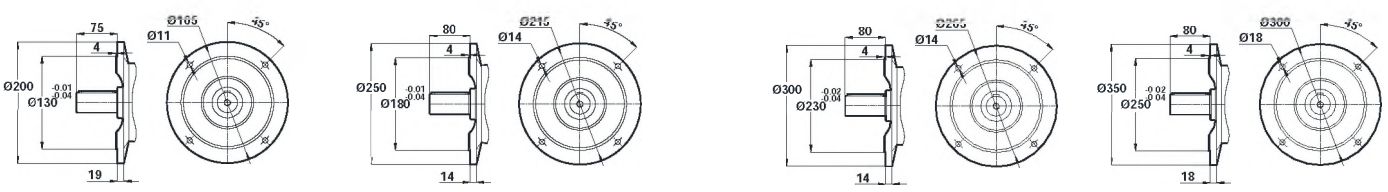


NN372-A..
NN373-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
71/B5	4	9	11	130	160	110	43.5	12	364	14	5	16.3	-
80/B5	4	9	12	165	200	130	43.5	12	364	19	6	21.8	-
90/B5	4	9	12	165	200	130	43.5	12	364	24	8	27.3	-
100/B5	4.5	9	15	215	250	180	60.5	15	381	28	8	31.3	-
112/B5	4.5	9	15	215	250	180	60.5	15	381	28	8	31.3	-
132/B5	4.5	7	15	265	300	230	80.5	15	401	38	10	41.3	20

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

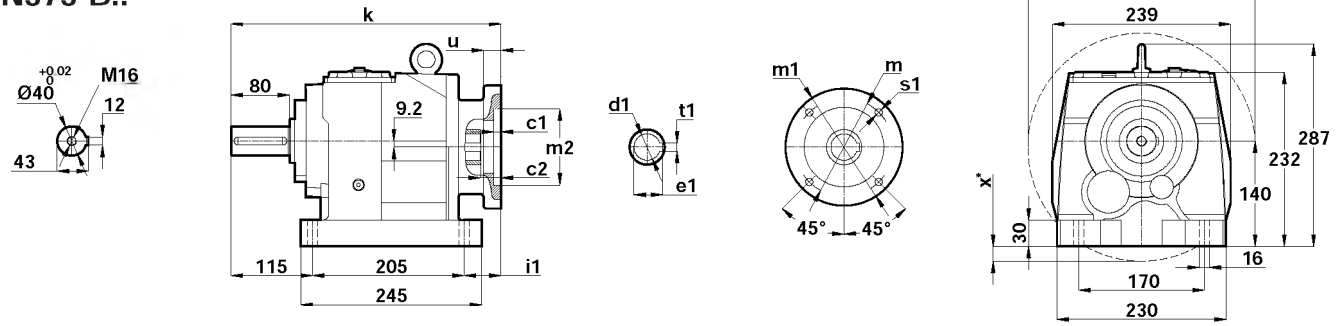


Opt. 1 **Opt. 2** **Opt. 3** **Opt. 4**

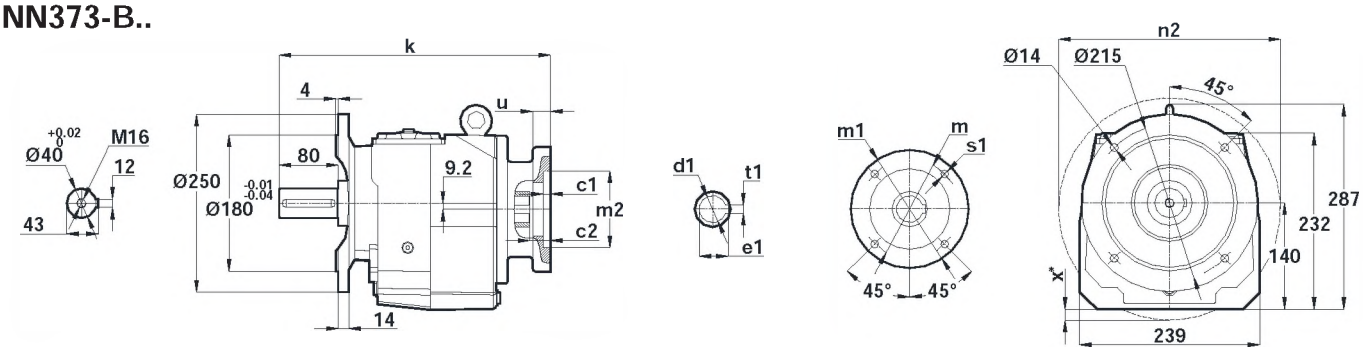
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN372-B..
MN373-B..

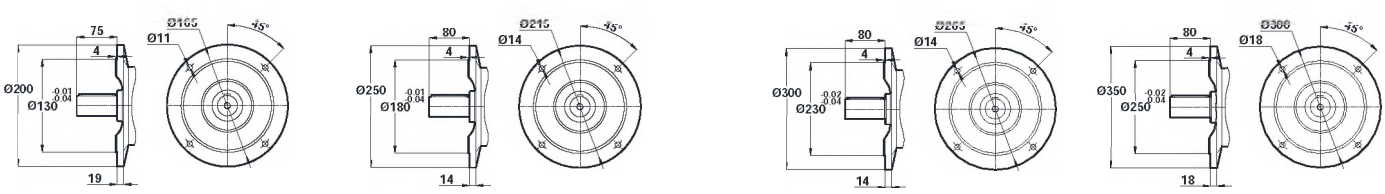


NN372-B..
NN373-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
80/B14	4	9	7	100	120	80	43.5	12	364	19	6	21.8	-
90/B14	4	9	9	115	140	95	43.5	12	364	24	8	27.3	-
100/B14	3.5	9	9	130	160	110	60.5	15	381	28	8	31.3	-
112/B14	3.5	9	9	130	160	110	60.5	15	381	28	8	31.3	-
132/B14	4.5	9	11	165	200	130	80.5	15	401	38	10	41.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

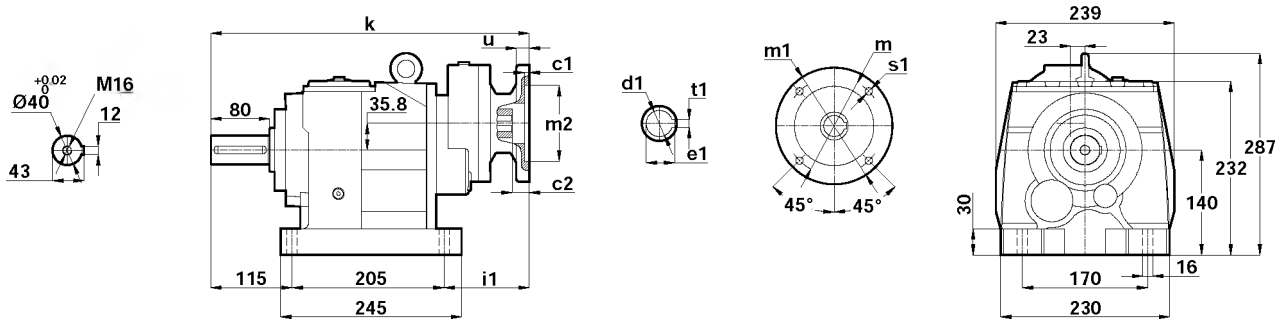


Opt. 1 | Opt. 2 | Opt. 3 | Opt. 4

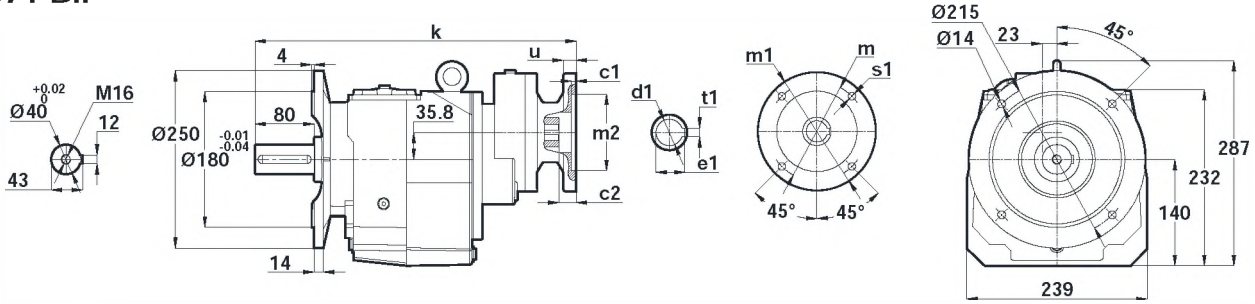
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN374-A..
MN374-B..

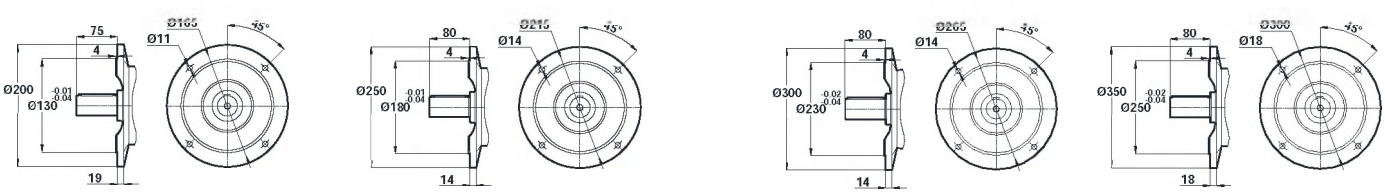


NN374-A..
NN374-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	3.5	5	9	115	140	95	120.5	12	441	11	4	12.8
71/B5	4	8.5	11	130	160	110	91.5	12	412	14	5	16.3
80/B5	4	5	12	165	200	130	120.5	12	441	19	6	21.8
71/B14	3	8.5	7	85	105	70	91.5	10	412	14	5	16.3
80/B14	4	5	7	100	120	80	120.5	12	441	19	6	21.8

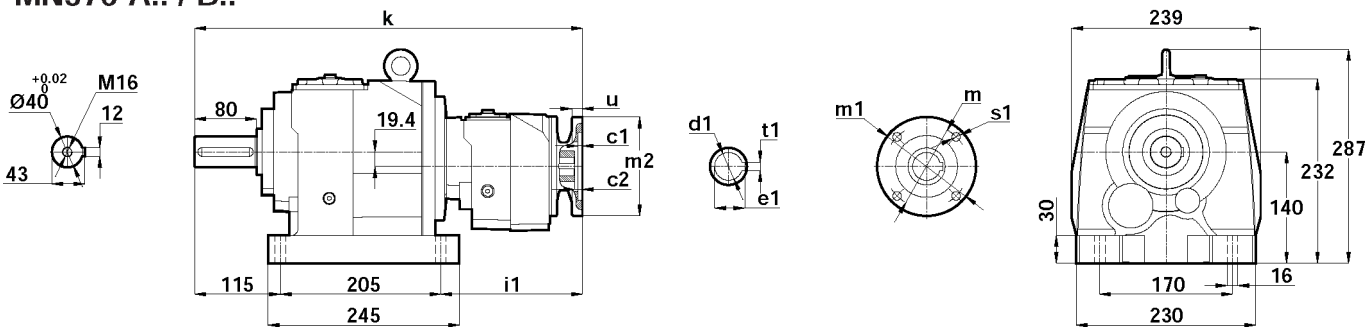
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



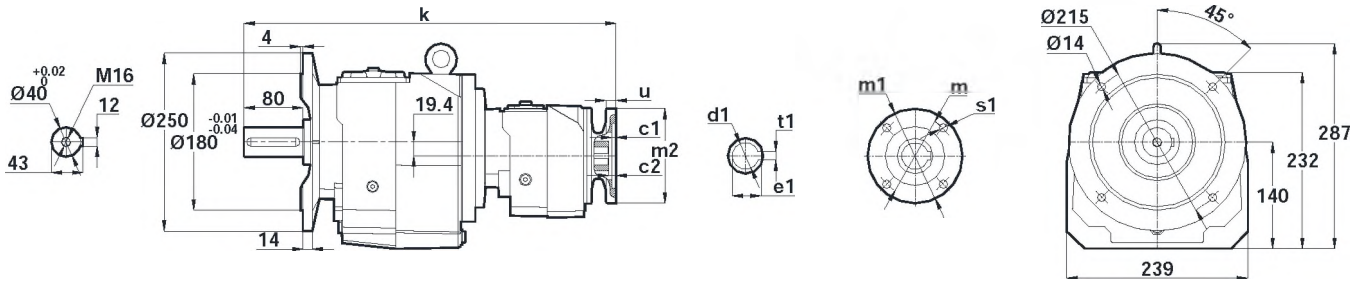
Opt. 1 **Opt. 2** **Opt. 3** **Opt. 4**

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN375-A.. / B..
MN376-A.. / B..

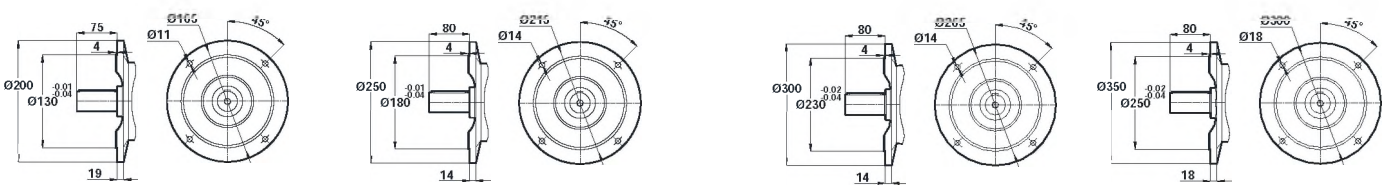


NN375-A.. / B..
NN376-A.. / B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	186.5	10	507	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	186.5	10	507	11	4	12.8

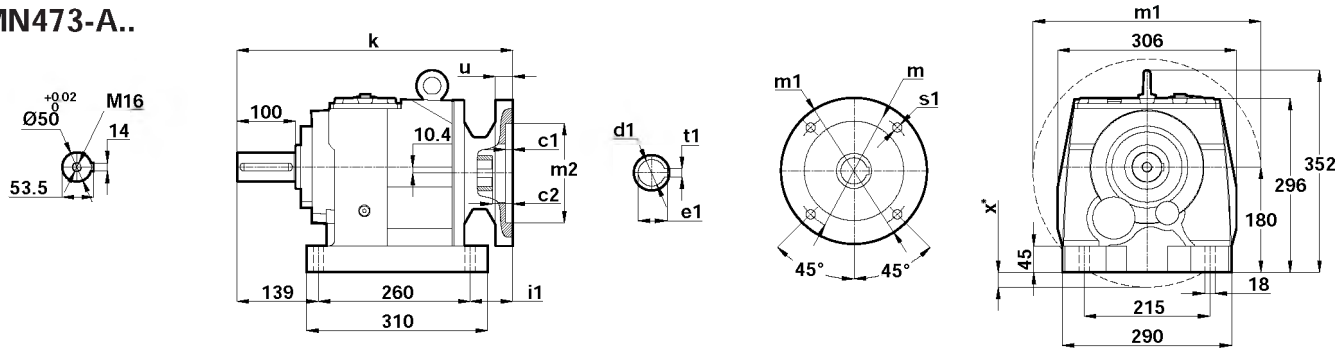
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



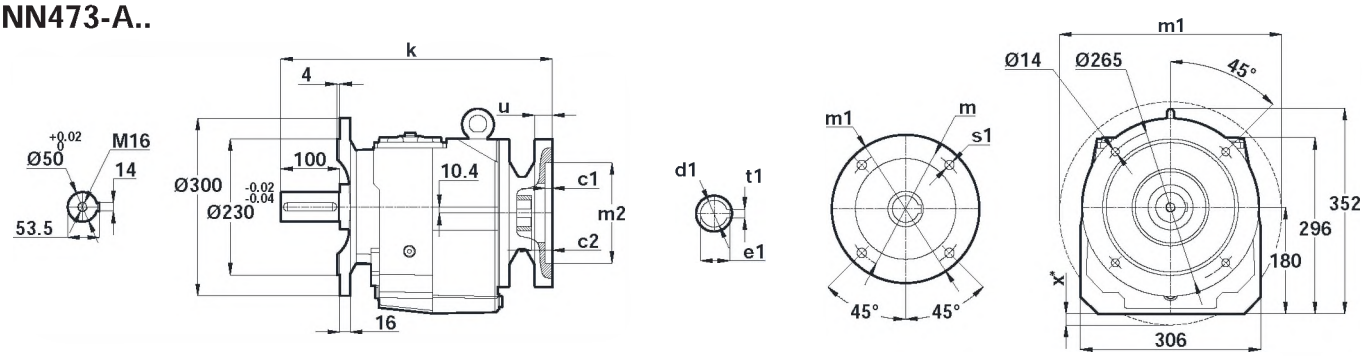
Opt. 1 | Opt. 2 | Opt. 3 | Opt. 4

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN472-A..
MN473-A..

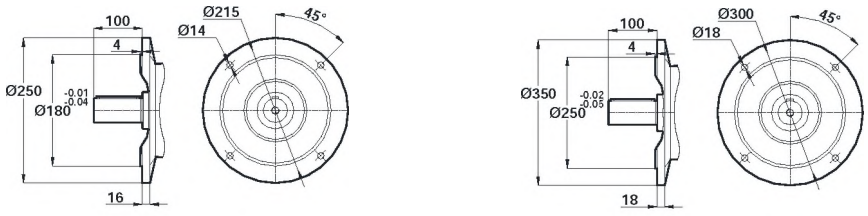


NN472-A..
NN473-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
80/B5	4	5	12	165	200	130	27.5	12	427	19	6	21.8	-
90/B5	4	5	12	165	200	130	27.5	12	427	24	8	27.3	-
100/B5	4.5	9	15	215	250	180	46	15	445	28	8	31.3	-
112/B5	4.5	9	15	215	250	180	46	15	445	28	8	31.3	-
132/B5	4.5	6	15	265	300	230	64.5	15	464	38	10	41.3	-
160/B5	5.5	10	19	300	350	250	144	20	543	42	12	45.3	6
180/B5	5.5	10	19	300	350	250	144	20	543	48	14	51.8	6

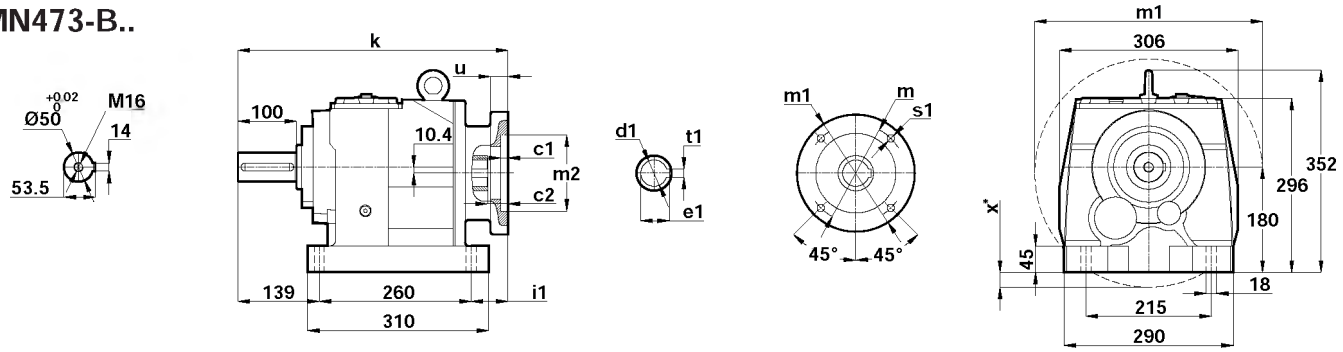
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



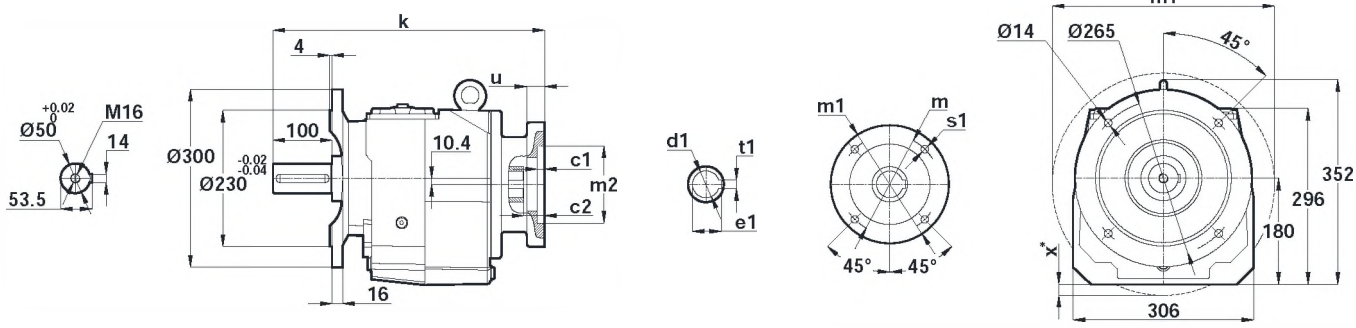
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN472-B..
MN473-B..

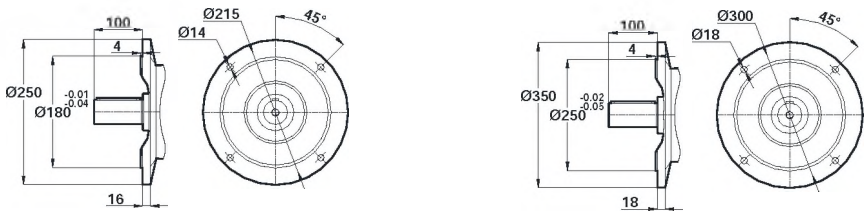


NN472-B..
NN473-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
90/B14	4	5	9	115	140	95	27.5	12	427	24	8	27.3	-
100/B14	3.5	9	9	130	160	110	46	15	445	28	8	31.3	-
112/B14	3.5	9	9	130	160	110	46	15	445	28	8	31.3	-
132/B14	4.5	6	11	165	200	130	64.5	15	464	38	10	41.3	-

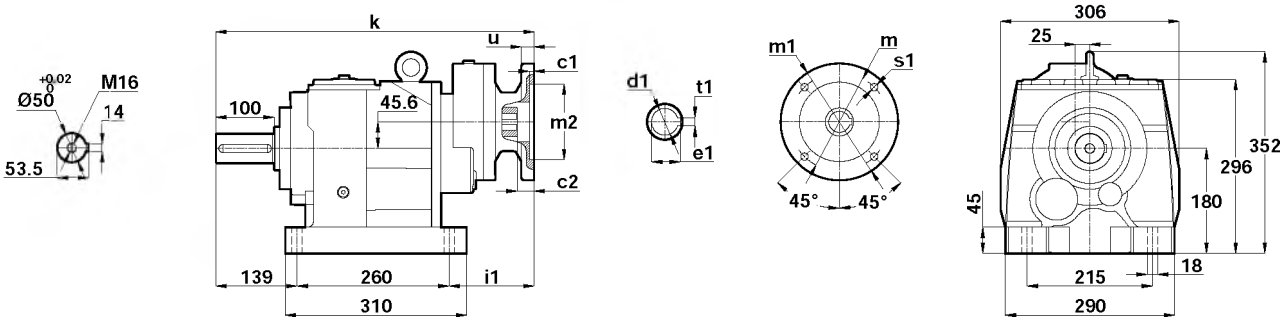
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



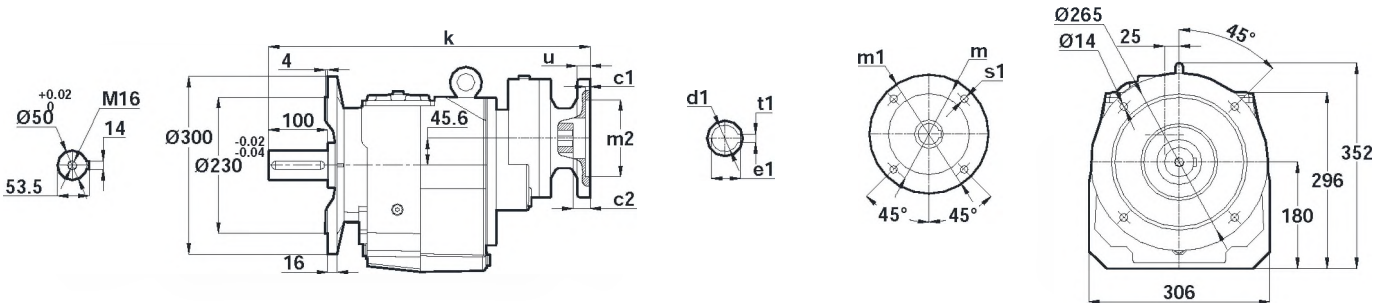
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN474-A..
MN474-B..

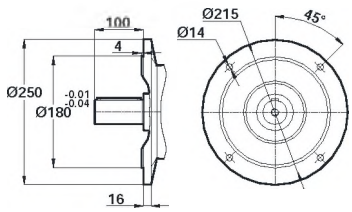


NN474-A..
NN474-B..

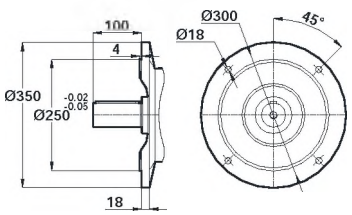


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	125.5	12	525	14	5	16.3
80/B5	4	9	12	165	200	130	125.5	12	525	19	6	21.8
80/B14	4	9	7	100	120	80	125.5	12	525	19	6	21.8

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



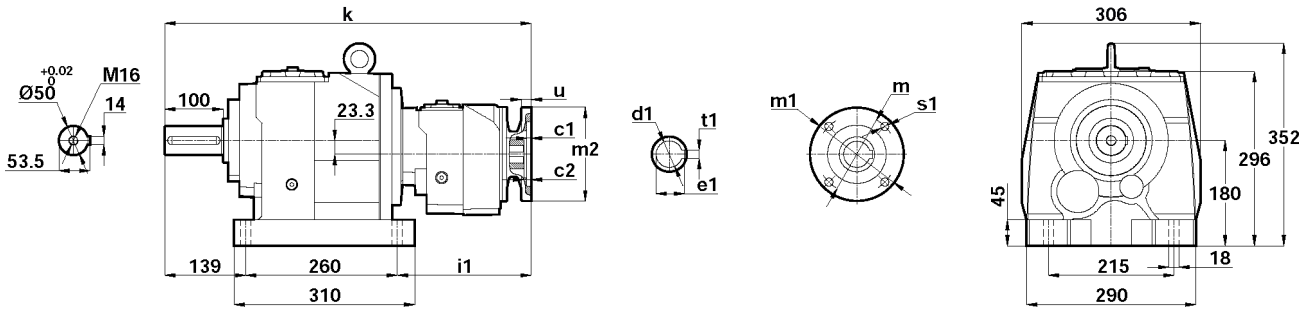
Opt. 1



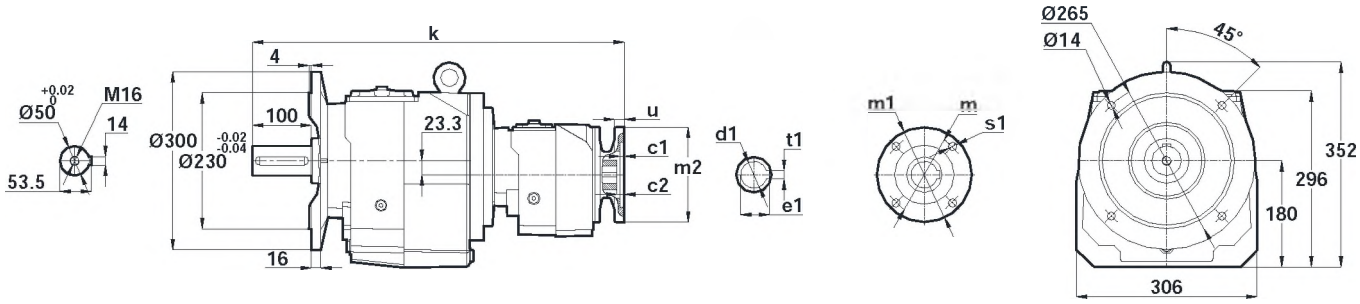
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN475-A.. / B..
MN476-A.. / B..

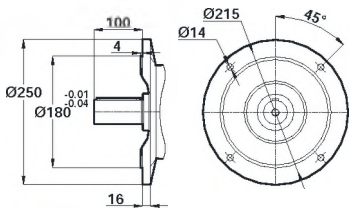


NN475-A.. / B..
NN476-A.. / B..

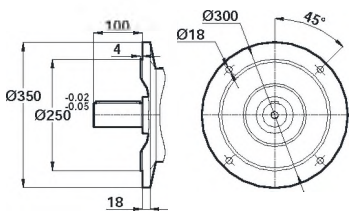


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	3.5	5	9	115	140	95	253.5	12	653	11	4	12.8
71/B5	4	8.5	11	130	160	110	224.5	12	624	14	5	16.3
71/B14	3	8.5	7	85	105	70	224.5	10	624	14	5	16.3

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



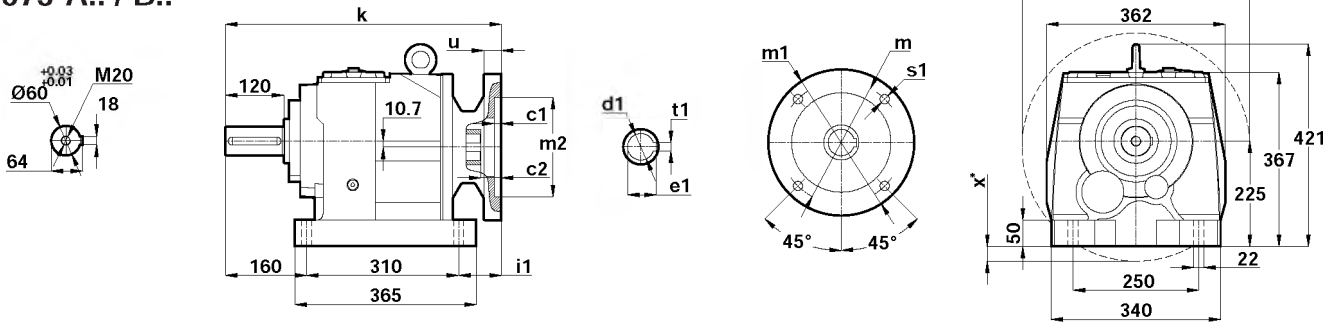
Opt. 1



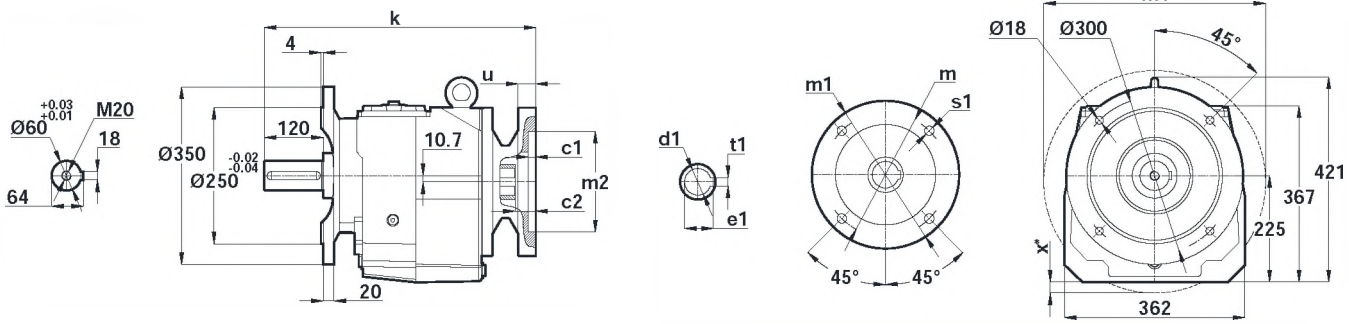
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN572-A.. / B..
MN573-A.. / B..

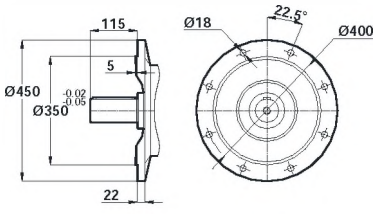


NN572-A.. / B..
NN573-A.. / B..

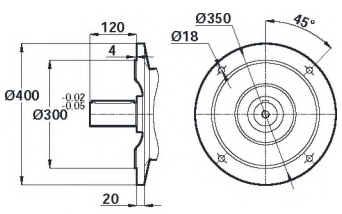


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
100/B5	4.5	20	15	215	250	180	33.5	15	507	28	8	31.3	-
112/B5	4.5	20	15	215	250	180	33.5	15	507	28	8	31.3	-
132/B5	4.5	9	15	265	300	230	54.5	15	528	38	10	41.3	-
160/B5	5.5	10	19	300	350	250	130	18	603	42	12	45.3	-
180/B5	5.5	10	19	300	350	250	130	18	603	48	14	51.8	-
200/B5	5.5	10	19	350	400	300	150	22	623	55	16	59.3	-
132/B14	4.5	9	11	165	200	130	54.5	15	528	38	10	41.3	-

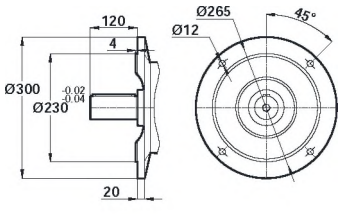
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

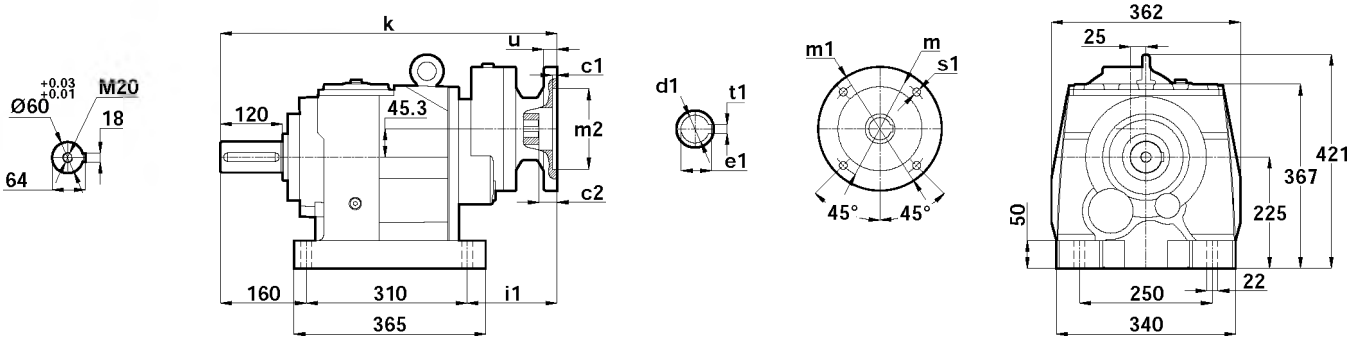


Opt. 3

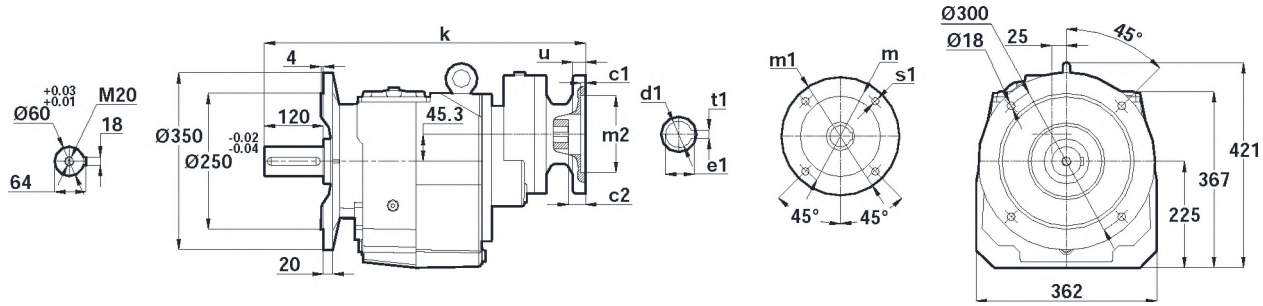
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN574-A..
MN574-B..

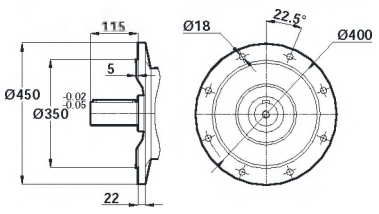


NN574-A..
NN574-B..

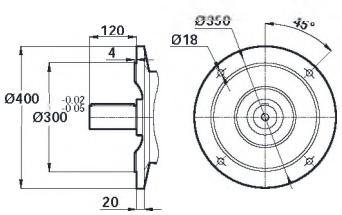


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	116.5	12	587	14	5	16.3
80/B5	4	9	12	165	200	130	116.5	12	587	14	6	21.8
90/B5	4	9	12	165	200	130	116.5	12	587	19	8	27.3
80/B14	4	9	7	100	120	80	116.5	12	587	19	6	21.8
90/B14	4	9	9	115	140	95	116.5	12	587	24	8	26.3

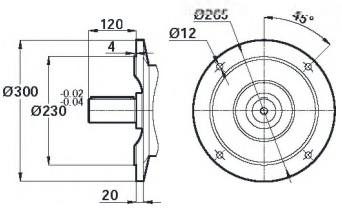
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



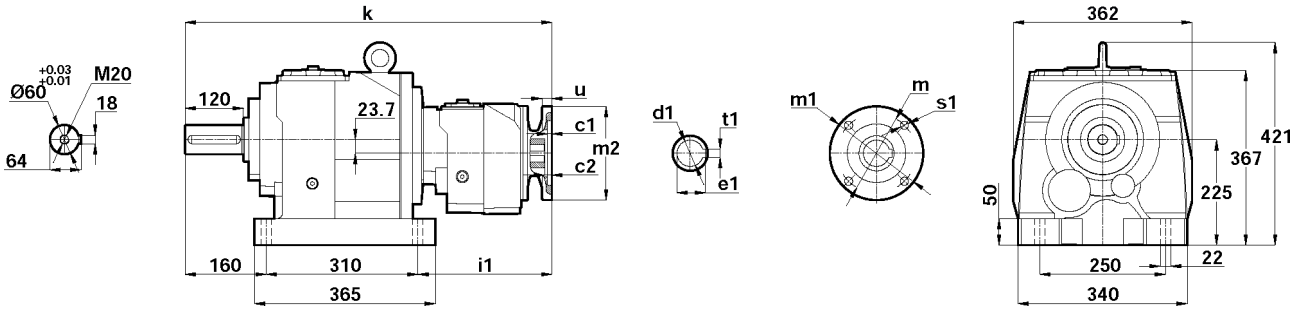
Opt. 2



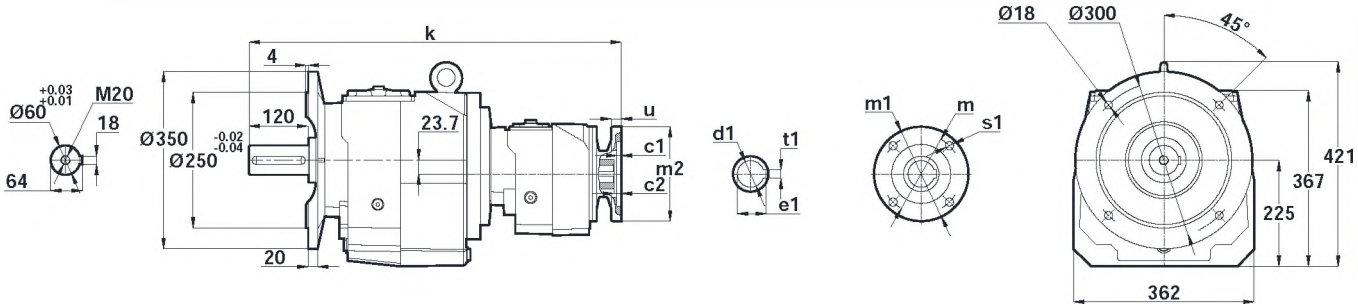
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN575-A.. / B..
MN576-A.. / B..

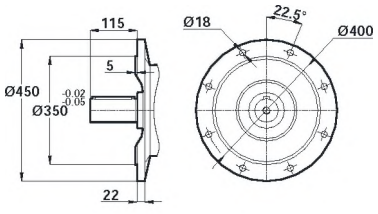


NN575-A.. / B..
NN576-A.. / B..

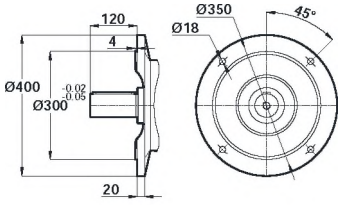


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	3.5	5	9	115	140	95	246.5	12	717	11	4	12.8
71/B5	4	8.5	11	130	160	110	217.5	12	688	14	5	16.3
71/B14	3	8.5	7	85	105	70	217.5	10	688	14	5	16.3

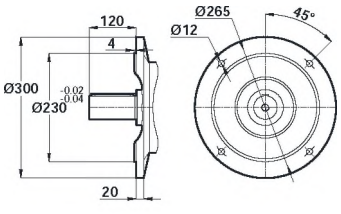
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2



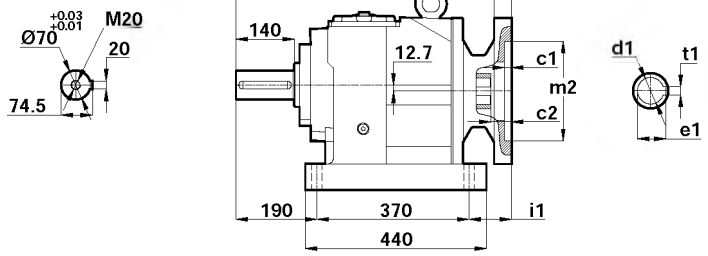
Opt. 3

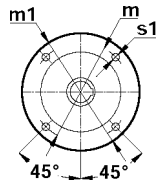


Tabelle dimensionali
Dimension Pages
Abmessungsseiten

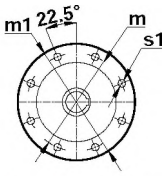
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN672-A.. / B..
MN673-A.. / B..

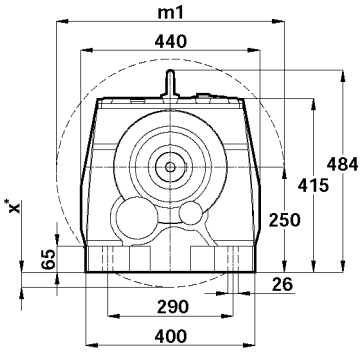




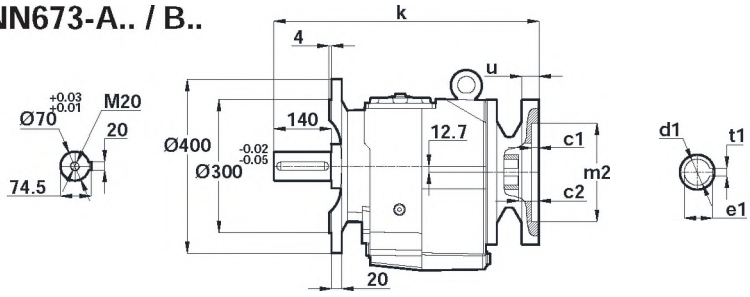
112 - 200 Tip / *Type* / Typ

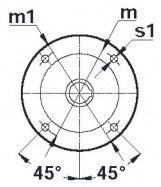


225 Tip / *Type* / Typ

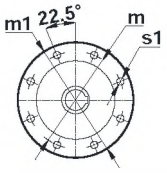


NN672-A.. / B..
NN673-A.. / B..

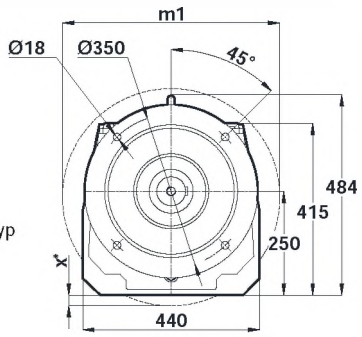




112 - 200 Tip / *Type* / Typ

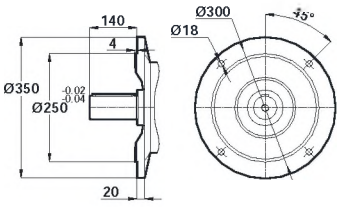


225 Tip / *Type* / Typ

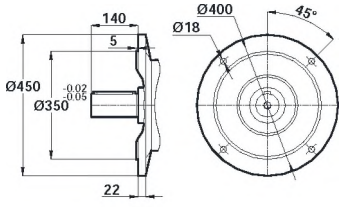


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
112/B5	4.5	14.5	15	215	250	180	7.5	15	568	28	8	31.3	-
132/B5	4.5	9	15	265	300	230	22.5	15	583	38	10	41.3	-
160/B5	5.5	10	19	300	350	250	97.5	20	658	42	12	45.3	-
180/B5	5.5	10	19	300	350	250	97.5	20	658	48	14	51.8	-
200/B5	5.5	10	19	350	400	300	118	22	678	55	16	59.3	-
225/B5	5.5	10	19	400	450	350	171	24	731	60	18	64.4	-
132/B14	4.5	9	15	165	200	130	22.5	15	583	38	10	41.3	-

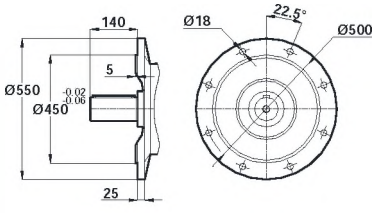
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

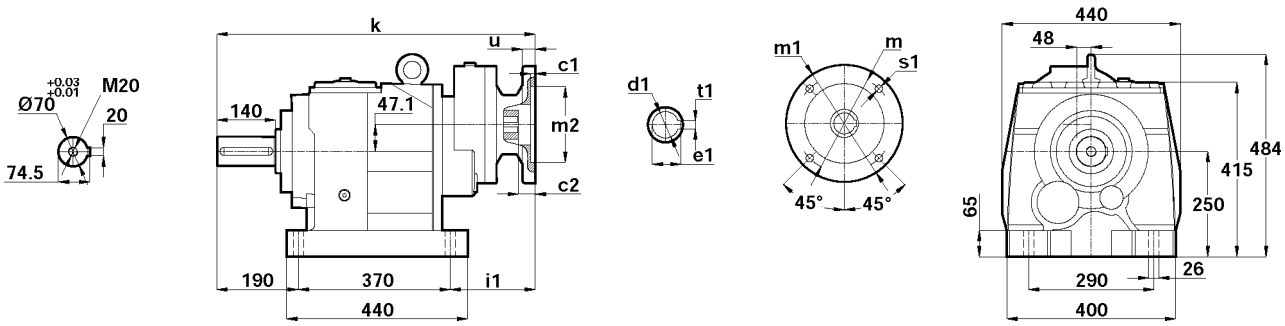


Opt. 3

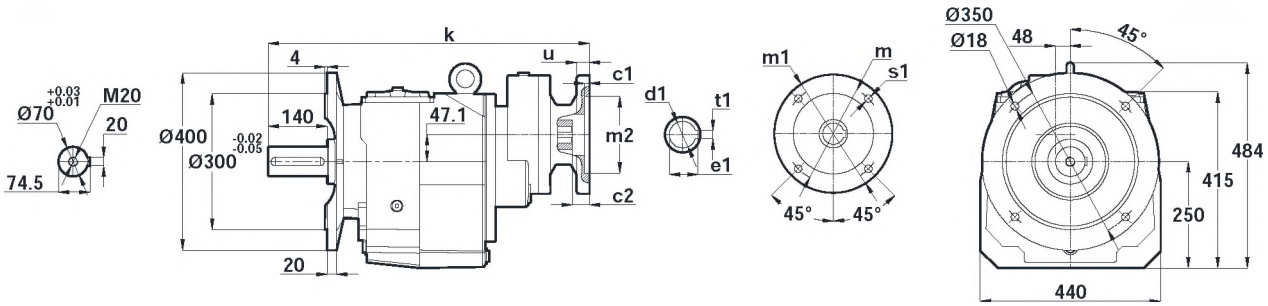
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN674-A..
MN674-B..

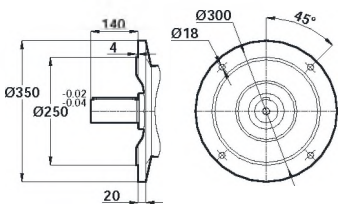


NN674-A..
NN674-B..

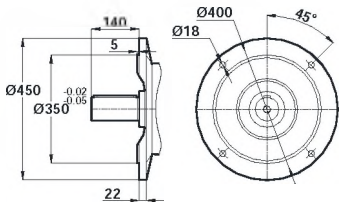


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	97.5	12	658	19	6	21.8
90/B5	4	5	12	165	200	130	97.5	12	658	24	8	27.3
90/B14	4	5	9	115	140	95	97.5	12	658	24	8	27.3

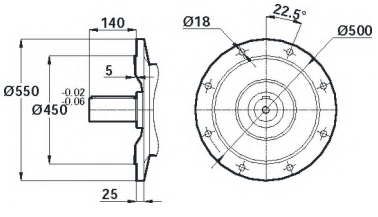
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



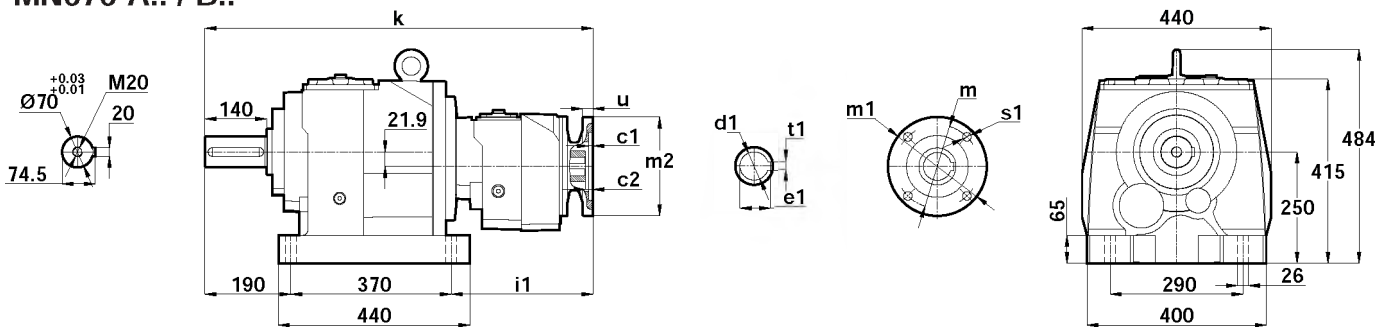
Opt. 2



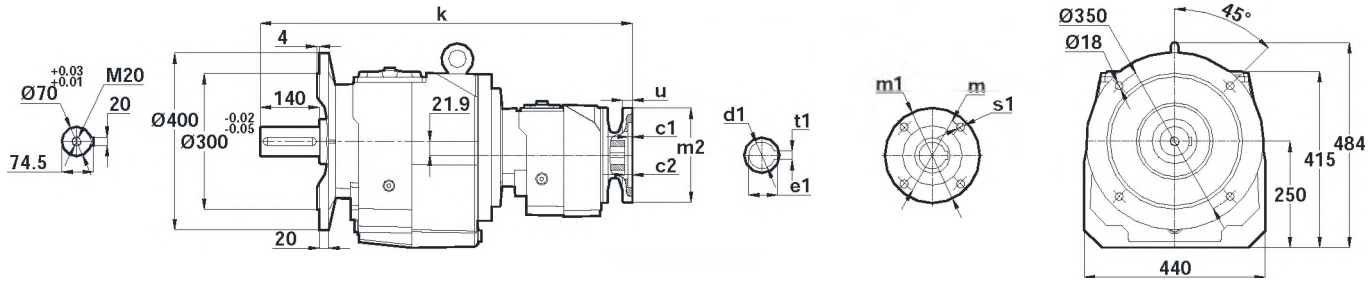
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN675-A.. / B..
MN676-A.. / B..

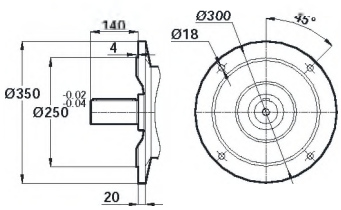


NN675-A.. / B..
NN676-A.. / B..

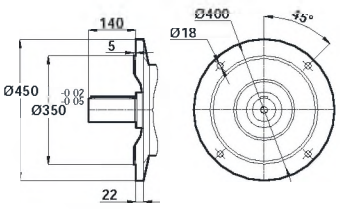


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	248	12	808	14	5	16.3
80/B5	4	9	12	165	200	130	248	12	808	19	6	21.8
80/B14	4	9	7	100	120	80	248	12	808	19	6	21.8

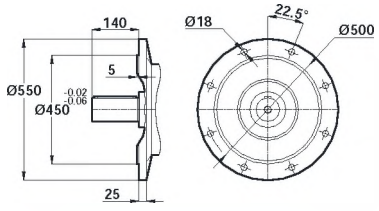
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



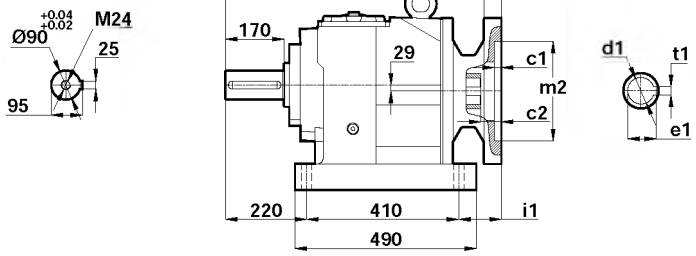
Opt. 2

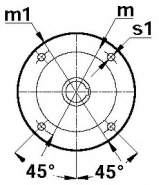


Opt. 3

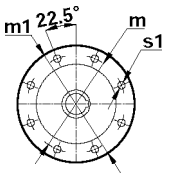
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN772-A..
MN773-A..

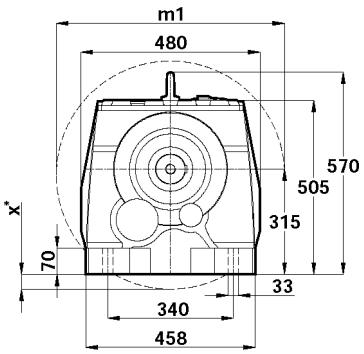




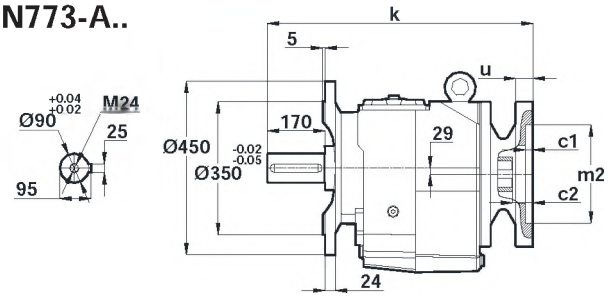
132 - 200 Tip / *Type* / Typ

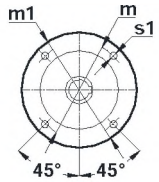


200 - 250 Tip / *Type* / Typ

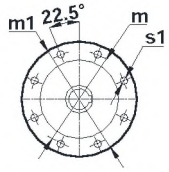


NN772-A..
NN773-A..

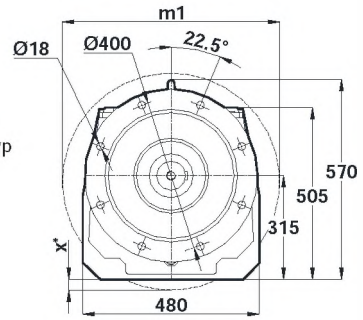




132 - 200 Tip / *Type* / Typ

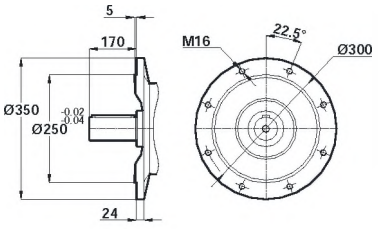


200 - 250 Tip / *Type* / Typ

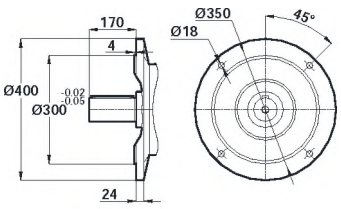


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
132/B5	4.5	15	15	265	300	230	37.5	15	668	38	10	41.3	-
160/B5	5.5	10	19	300	350	250	107	20	737	42	12	45.3	-
180/B5	5.5	10	19	300	350	250	107	20	737	43	14	51.8	-
200/B5	5.5	10	19	350	400	300	129	20	759	55	16	59.3	-
225/B5	5.5	10	19	400	450	350	182	24	812	60	18	64.4	-
250/B5	5.5	10	19	500	550	450	182	24	812	65	18	69.4	-

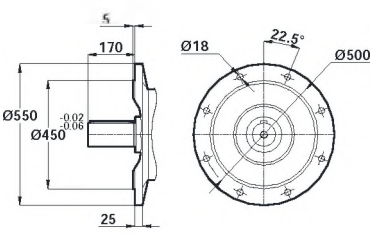
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

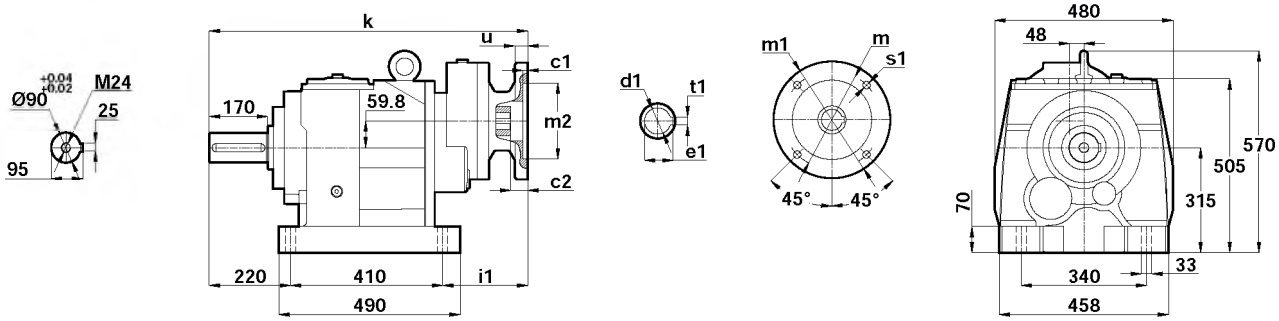


Opt. 3

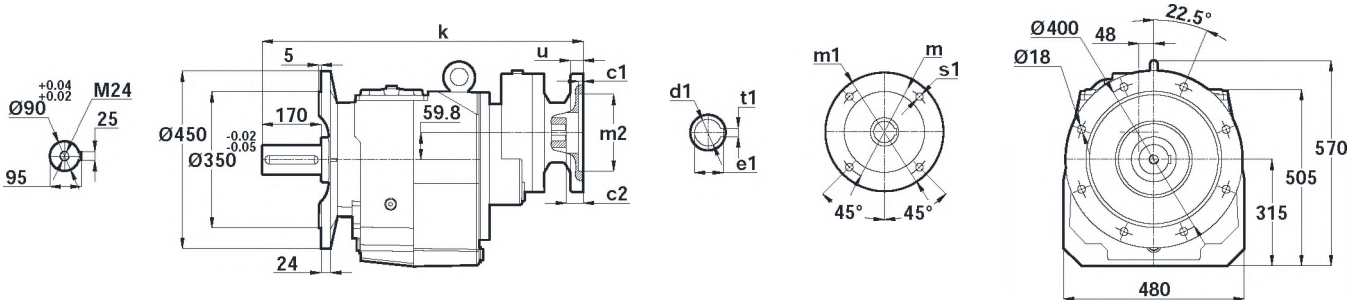
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN774-A..
MN774-B..

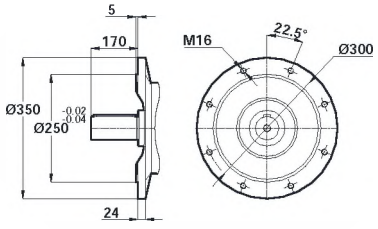


NN774-A..
NN774-B..

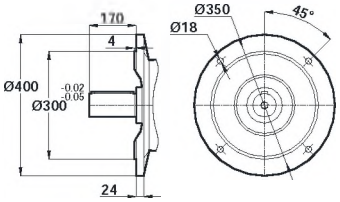


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	112.5	12	743	19	6	21.8
90/B5	4	5	12	165	200	130	112.5	12	743	24	8	27.3
100/B5	4.5	9	15	215	250	180	131	15	761	28	8	31.3
90/B14	4	5	9	115	140	95	112.5	12	743	24	8	27.3
100/B14	3.5	9	9	130	160	110	131	15	761	28	8	31.3

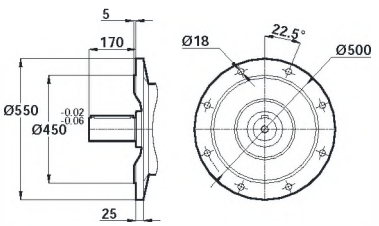
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



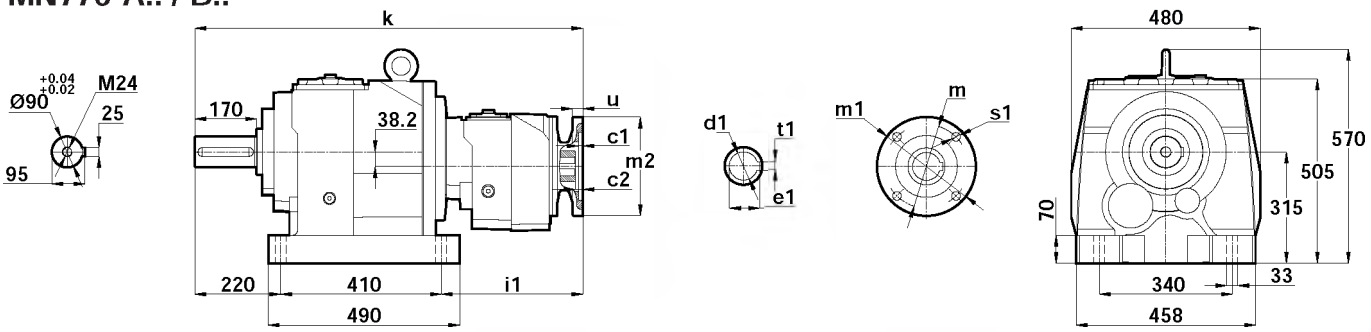
Opt. 2



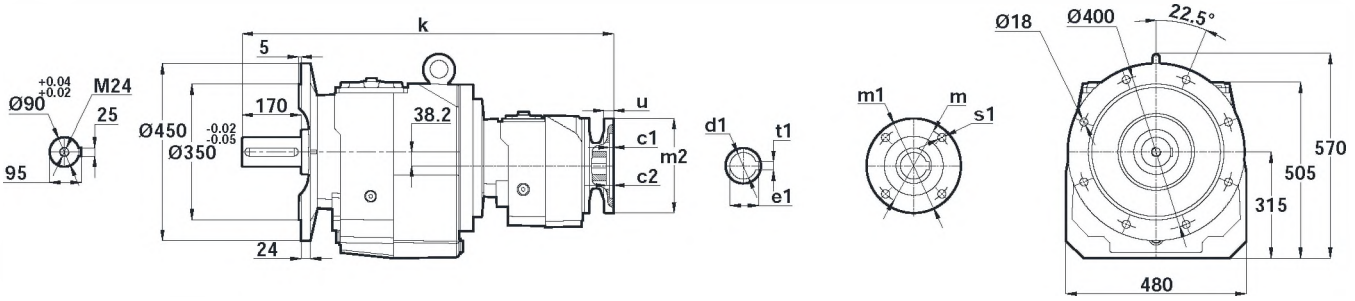
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN775-A.. / B..
MN776-A.. / B..

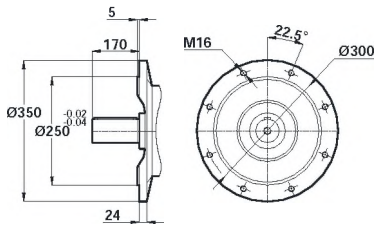


NN775-A.. / B..
NN776-A.. / B..

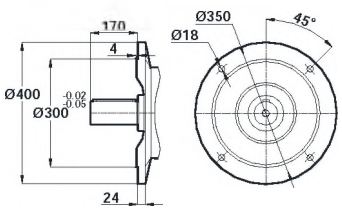


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	266	12	896	14	5	16.3
80/B5	4	9	12	165	200	130	266	12	869	19	6	21.8
90/B5	4	9	12	165	200	130	266	12	896	24	8	27.3
80/B14	4	9	7	100	120	80	266	12	896	19	6	21.8
90/B14	4	9	9	115	140	95	266	12	896	24	8	26.3

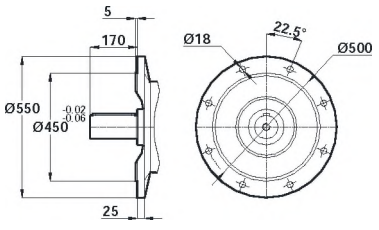
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2



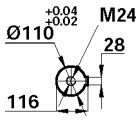
Opt. 3

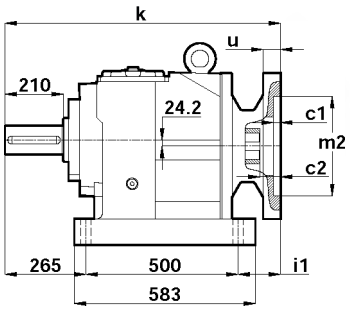


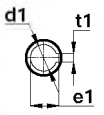
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

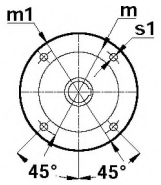
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN872-A..
MN873-A..

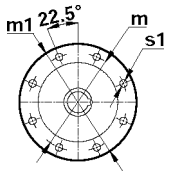




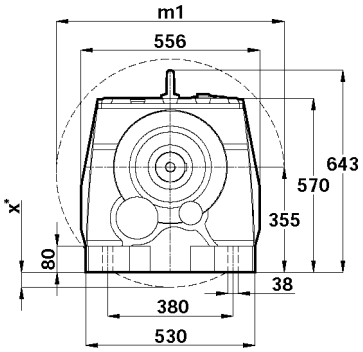




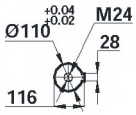
160 - 200 Tip / *Type* / Typ

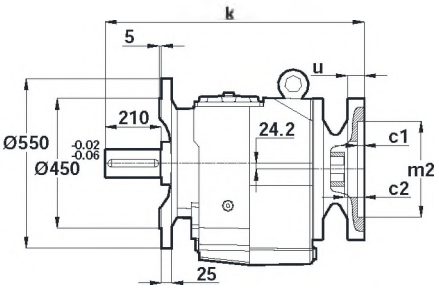


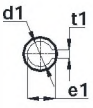
225 - 280 Tip / *Type* / Typ



NN872-A..
NN873-A..

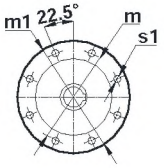




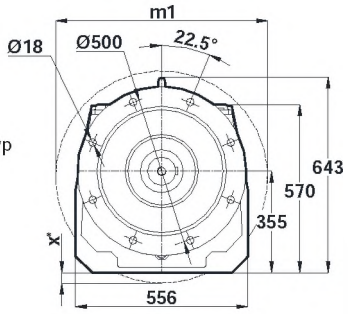




160 - 200 Tip / *Type* / Typ

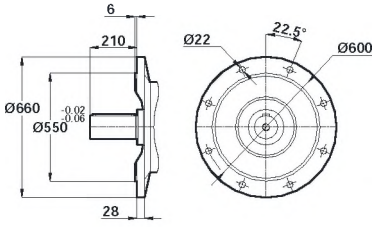


225 - 280 Tip / *Type* / Typ



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
160/B5	5.5	10	19	300	350	250	158	20	923	42	12	45.3	-
180/B5	5.5	10	19	300	350	250	158	20	923	48	14	51.8	-
200/B5	5.5	10	19	350	400	300	158	22	923	55	16	59.3	-
225/B5	5.5	10	19	400	450	350	158	24	923	60	18	64.4	-
250/B5	5.5	10	19	500	550	450	158	24	923	65	18	69.4	-
280/B5	5.5	10	19	500	550	450	158	24	923	75	20	79.9	-

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

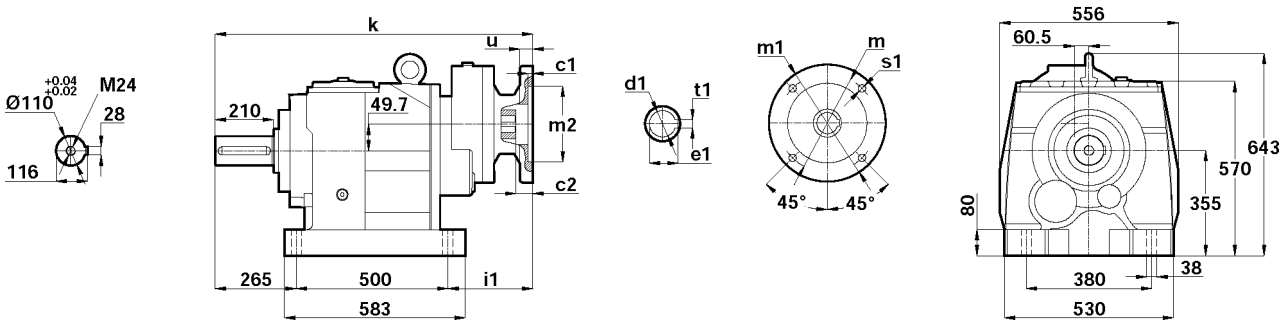


Opt. 1

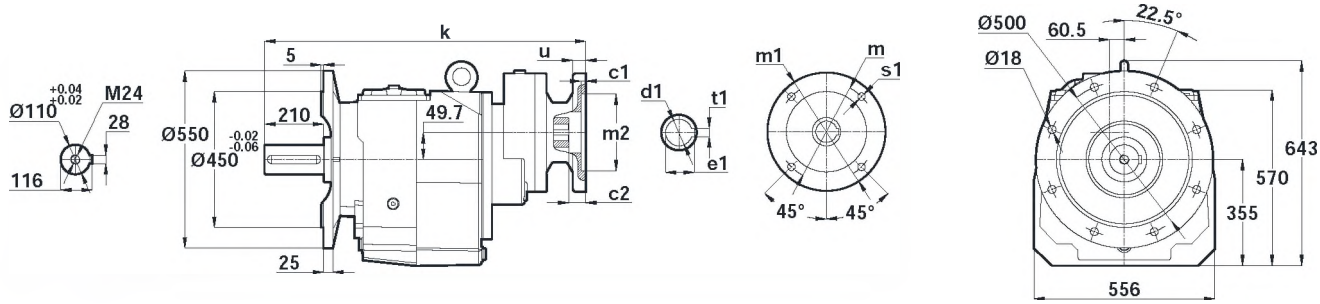
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN874-A..
MN874-B..

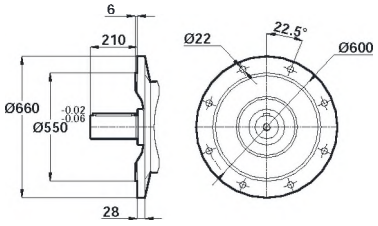


NN874-A..
NN874-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
100/B5	4.5	20	15	215	250	180	130.5	15	896	28	8	31.3
112/B5	4.5	20	15	215	250	180	130.5	15	896	28	8	31.3
132/B5	4.5	9	15	265	300	230	151.5	15	917	38	10	41.3
132/B14	4.5	9	11	165	200	130	151.5	15	917	38	10	41.3

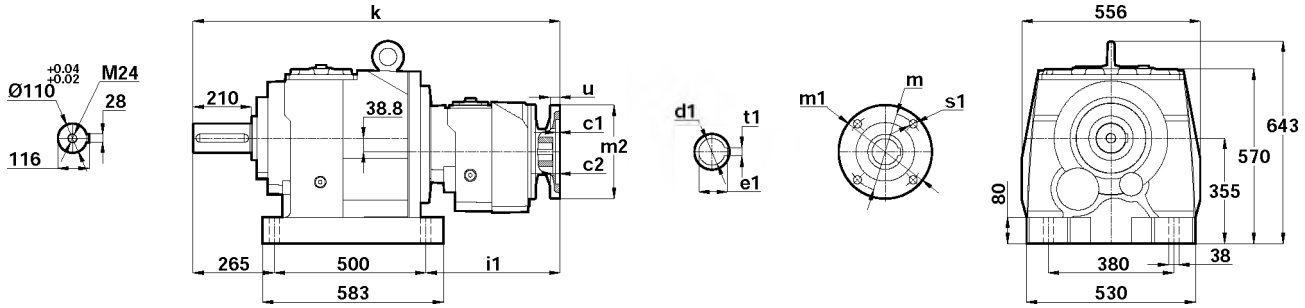
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



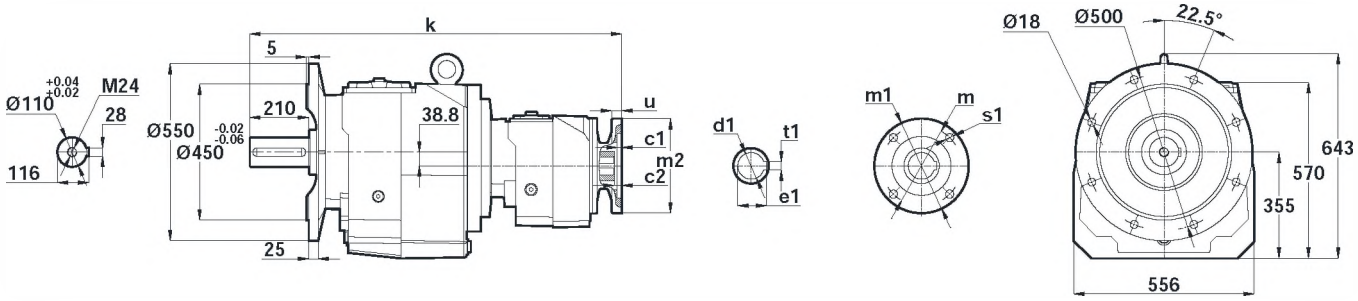
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN875-A.. / B..
MN876-A.. / B..

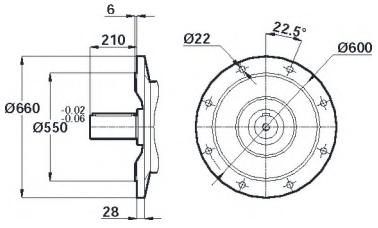


NN875-A.. / B..
NN876-A.. / B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	248	12	1013	14	5	16.3
80/B5	4	9	12	165	200	130	248	12	1013	19	6	21.8
90/B5	4	9	12	165	200	130	248	12	1013	24	8	27.3
100/B5	4.5	9	15	215	250	180	265	15	1030	28	8	31.3
80/B14	4	9	7	100	120	80	248	12	1013	19	8	21.8
90/B14	4	9	9	115	140	95	248	12	1013	24	8	26.3
100/B14	3.5	9	9	130	160	110	265	15	1030	28	8	31.3

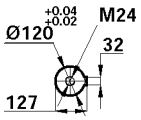
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

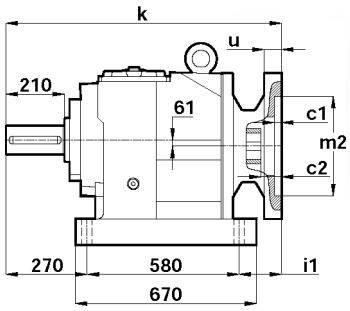


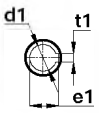
Opt. 1

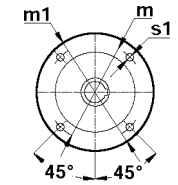
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN972-A..
MN973-A..

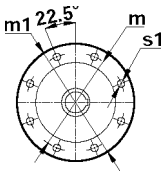




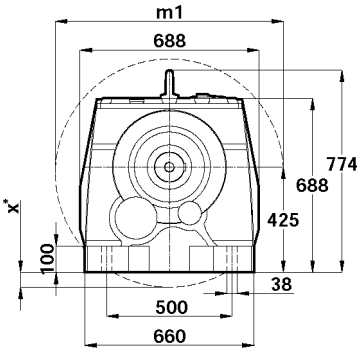




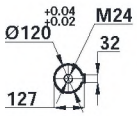
160 - 200 Tip / *Type* / Typ

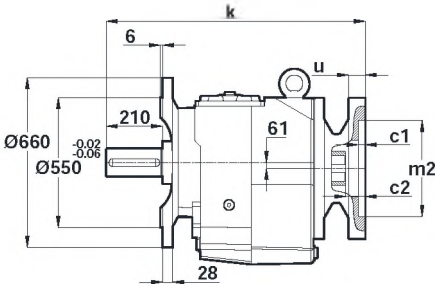


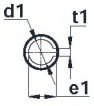
225 - 315 Tip / *Type* / Typ

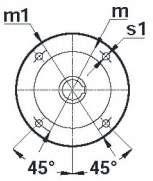


NN972-A..
NN973-A..

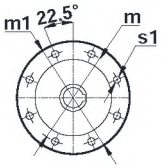




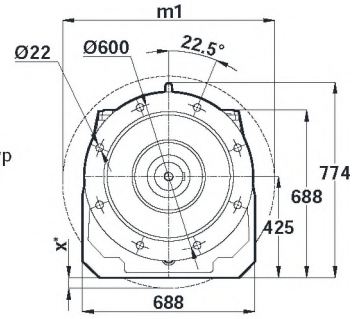




160 - 200 Tip / *Type* / Typ



225 - 315 Tip / *Type* / Typ

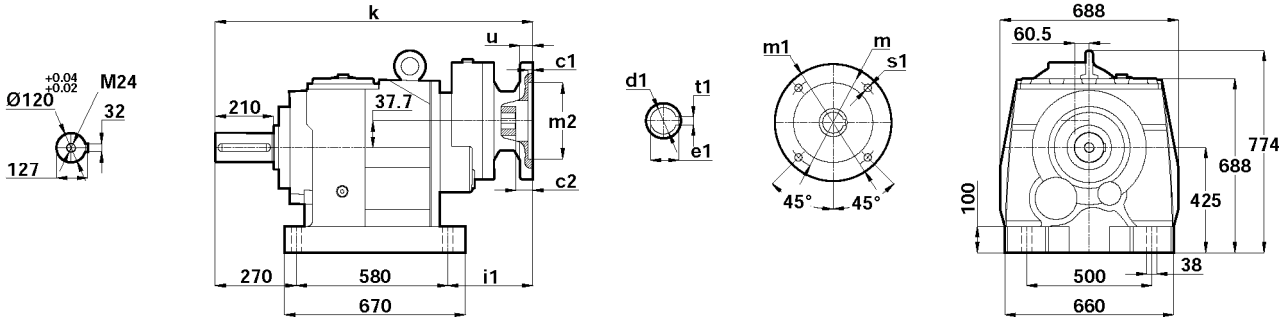


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
160/B5	5.5	10	19	300	350	250	60.5	20	911	42	12	45.3	-
180/B5	5.5	10	19	300	350	250	60.5	20	911	48	14	51.8	-
200/B5	5.5	10	19	350	400	300	84.5	22	935	55	16	59.3	-
225/B5	5.5	10	19	400	450	350	126.5	24	977	60	18	64.4	-
250/B5	5.5	10	19	500	550	450	178.5	24	1029	65	18	69.4	-
280/B5	5.5	10	19	500	550	450	178.5	24	1029	75	20	79.9	-
315/B5	6.5	15	24	660	600	550	228.5	24	1079	85	22	90.4	-

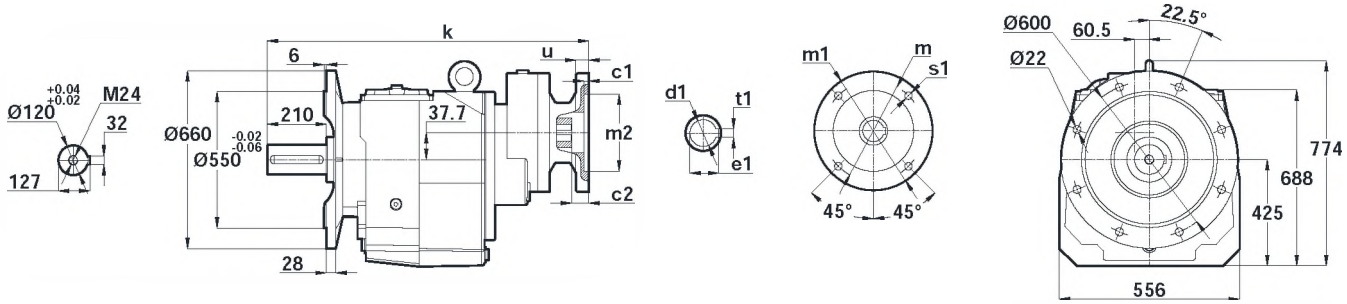
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN974-A..
MN974-B..



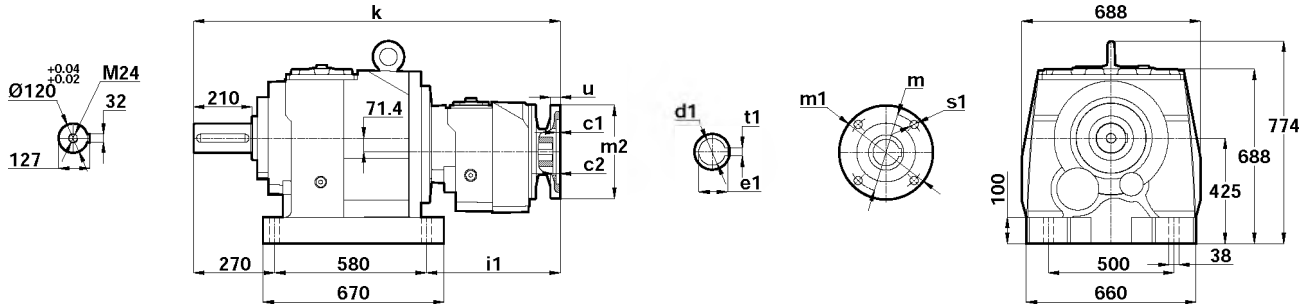
NN974-A..
NN974-B..



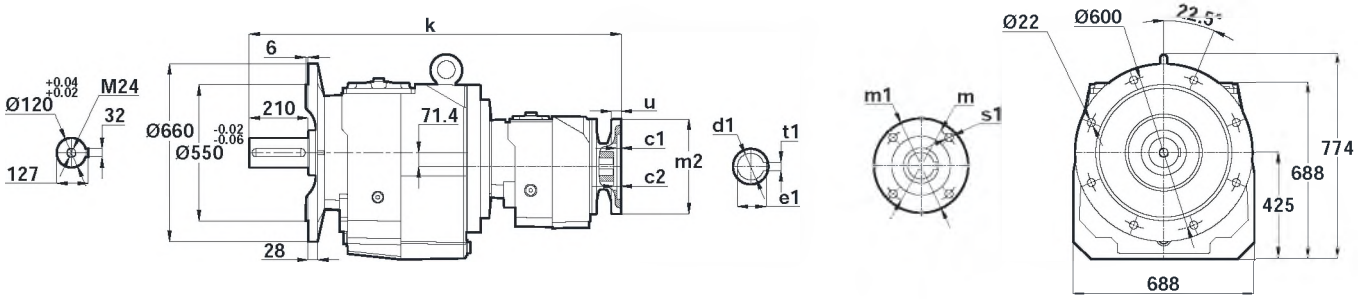
IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
100/B5	4.5	14.5	15	215	250	180	149	15	1000	28	8	31.3
112/B5	4.5	14.5	15	215	250	180	149	15	1000	28	8	31.3
132/B5	4.5	9	15	265	300	230	164	15	1015	38	10	41.3
132/B14	4.5	9	15	165	200	130	164	15	1015	38	10	41.3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MN975-A.. / B..
MN976-A.. / B..



NN975-A.. / B..
NN976-A.. / B..

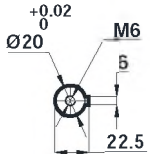


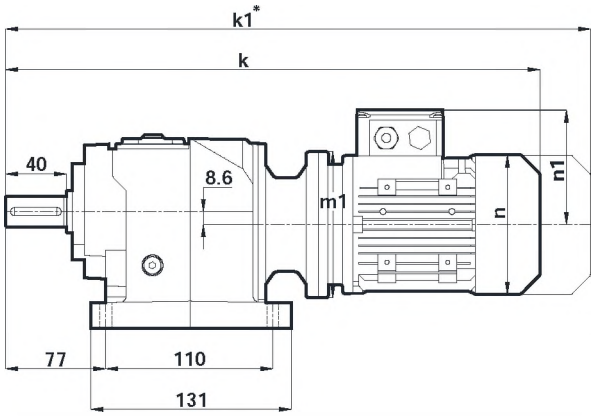
IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	285	12	1136	19	6	12.8
90/B5	4	5	12	165	200	130	285	12	1136	24	8	27.3
100/B5	4.5	9	15	215	250	180	303.5	15	1154	28	8	31.3
112/B5	4.5	9	15	215	250	180	303.5	15	1154	28	8	31.3
132/B5	4.5	6	15	265	300	230	322	15	1173	38	10	41.3
90/B14	4	5	9	115	140	95	285	12	1136	24	8	27.3
100/B14	3.5	9	9	130	160	110	303.5	15	1154	28	8	31.3
112/B14	3.5	9	9	130	160	110	303.5	15	1154	28	8	31.3
132/B14	4.5	6	11	165	200	130	322	15	1173	38	10	41.3

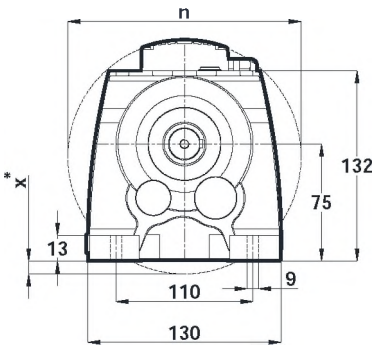
Note / *Notes* / Notizen

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

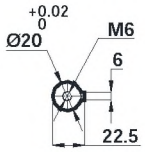
MV002
MV003

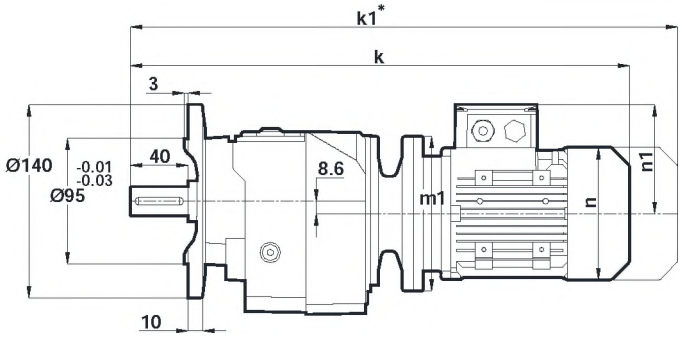


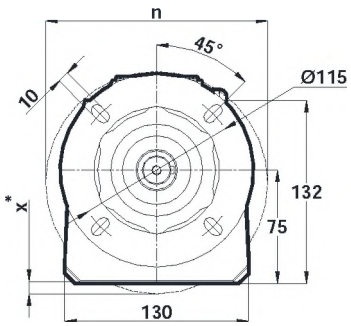




NV002
NV003

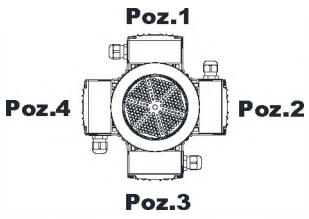






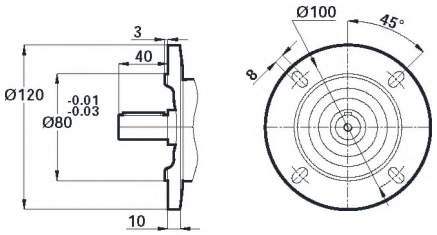
Taglia motore / *Motor Size* / Motorbaugroße					
IEC	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	407	427	465	506	506
k1	468	518	558	610.5	610.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	140	160	200	200	200
m1 (B14)	90	105	120	140	140
x (B5)	4	14	34	34	34

Morsettiera / *Terminal Box* / Klemmenkasten

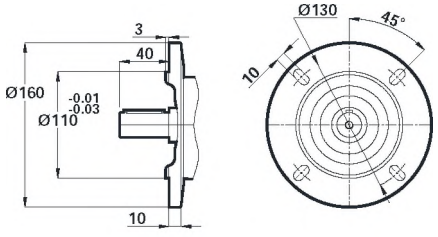


63-71-80-90

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

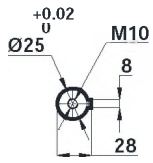
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

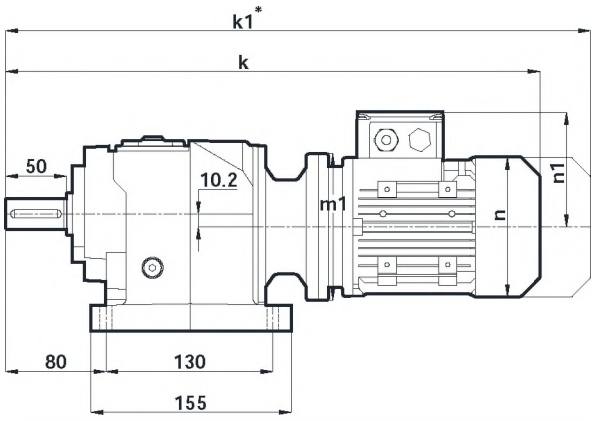


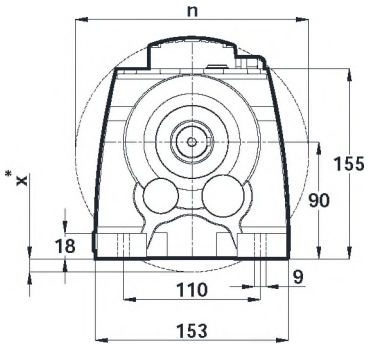
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

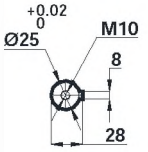
MV102
MV103

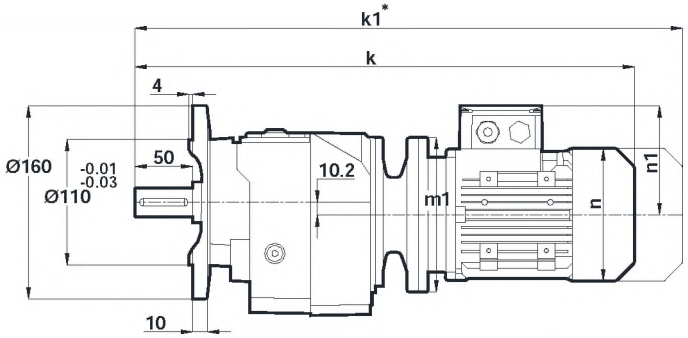


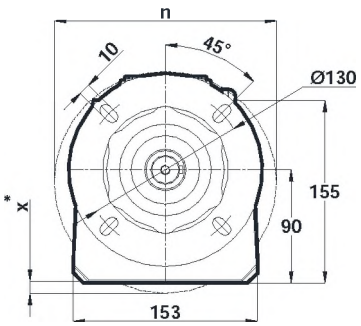




NV102
NV103

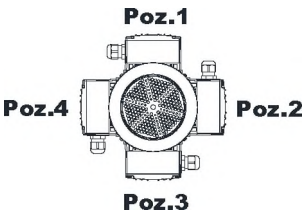






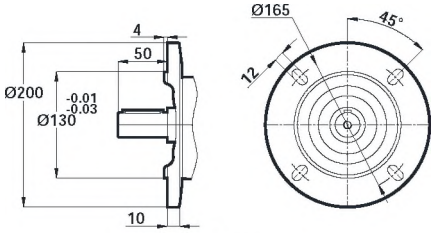
Taglia motore / *Motor Size* / Motorbaugroße					
IEC	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	433	451	489	530	530
k1	494	542	582	634.5	634.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	140	160	200	200	200
m1 (B14)	90	105	120	140	140
x (B5)	-	1	21	21	21

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80-90

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

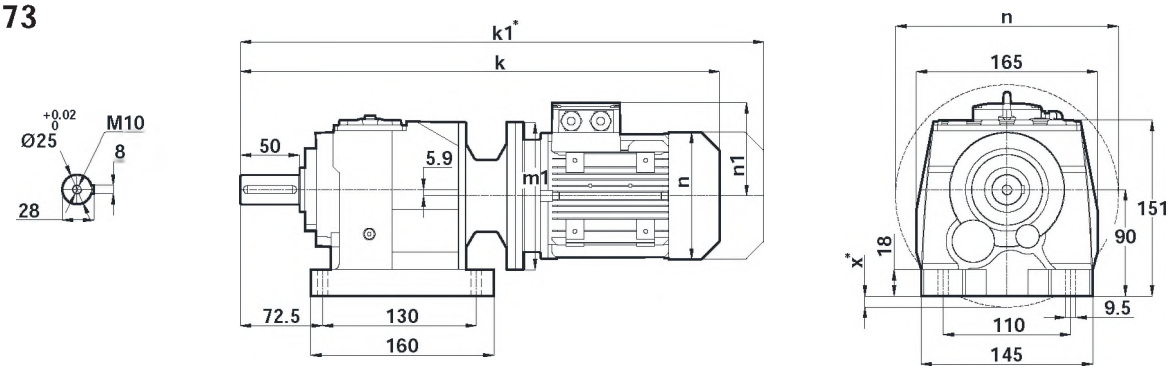


Opt. 1

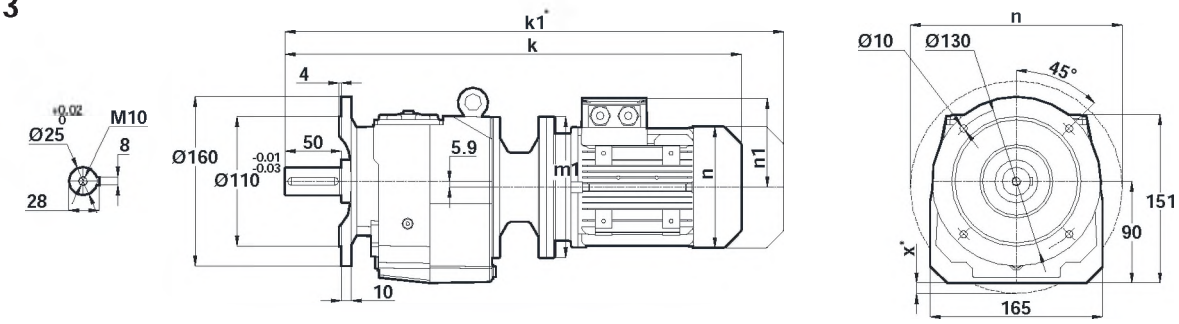
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV172
MV173

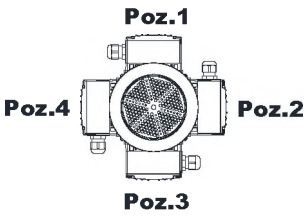


NV172
NV173



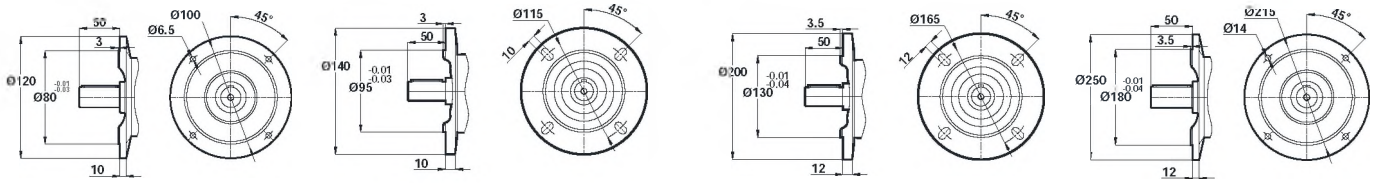
Taglia motore / *Motor Size* / Motorbaugroße							
IEC	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14
k	434	454	492	533	533	579	600
k1	495	545	585	637.5	637.5	698.5	704.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158
m1 (B5)	140	160	200	200	200	250	250
m1 (B14)	-	105	120	140	140	160	160
x (B5)	-	-	16	16	16	41	41

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80-90-100-112

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1 **Opt. 2** **Opt. 3** **Opt. 4**

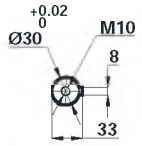
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

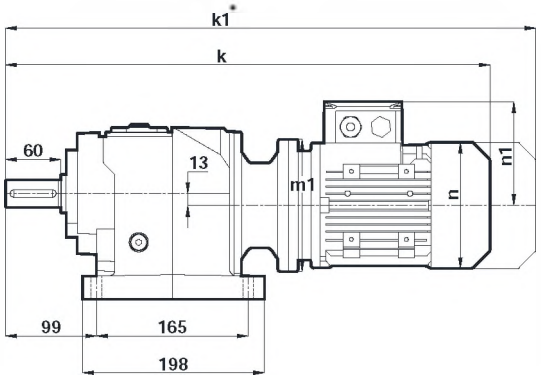


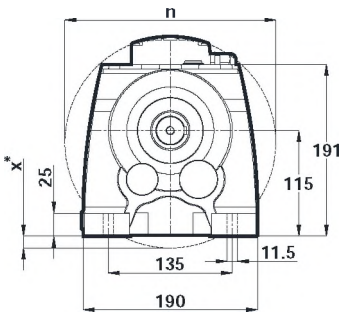
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

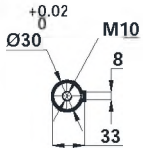
MV202
MV203

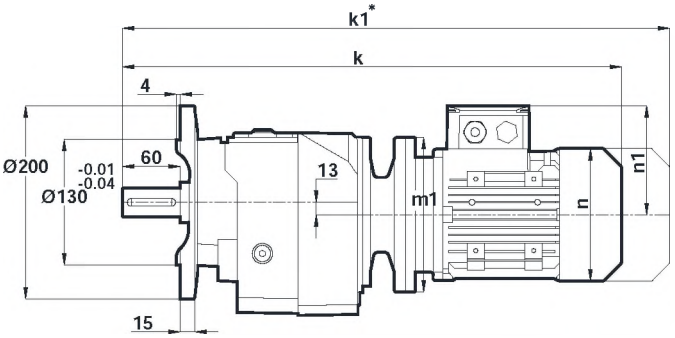


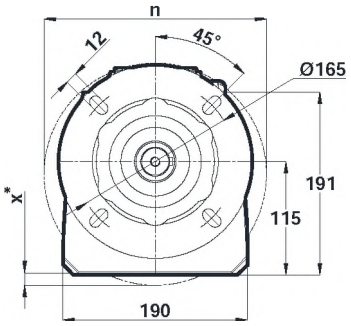




NV202
NV203

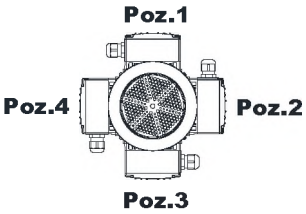






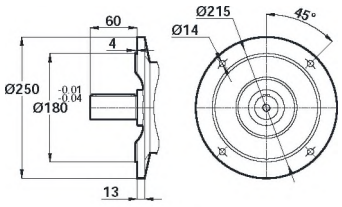
Taglia motore / *Motor Size* / Motorbaugroße							
IEC	63/B5	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14
k	516	505	557	598	598	626	647
k1	577	596	650	702.5	702.5	745.5	751.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158
m1 (B5)	140	160	200	200	200	250	250
m1 (B14)	-	105	120	140	140	160	160
x (B5)	-	-	-	-	-	23	23

Morsettiera / *Terminal Box* / Klemmenkasten

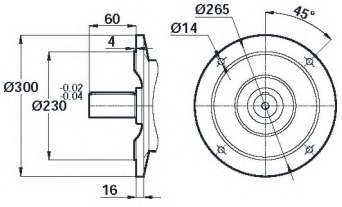


63-71-80-90-100-112

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

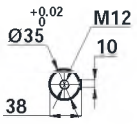


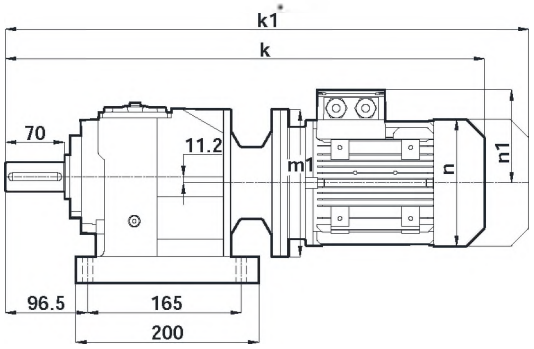
Opt. 2

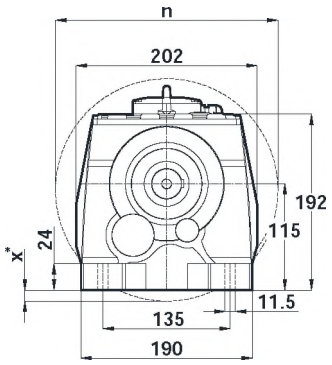
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

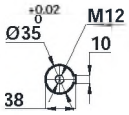
MV272
MV273

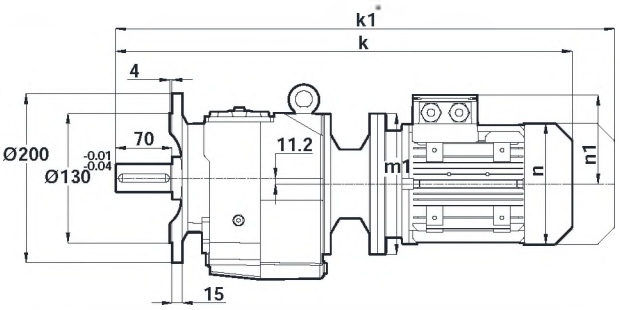


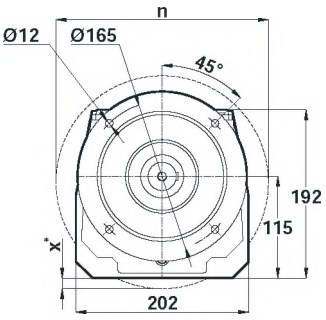




NV272
NV273

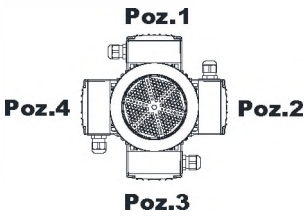






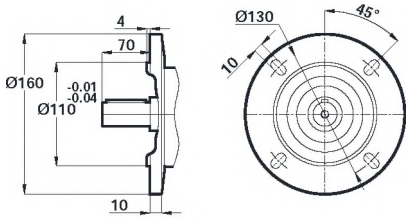
Taglia motore / *Motor Size* / Motorbaugroße									
IEC	63/B5	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	517	506	558	599	599	627	648	769	769
k1	578	597	651	703.5	703.5	746.5	752.5	899	899
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	140	160	200	200	200	250	250	300	300
m1 (B14)	-	105	120	140	140	160	160	200	200
x (B5)	-	-	-	-	-	22	22	47	47

Morsettiera / *Terminal Box* / Klemmenkasten

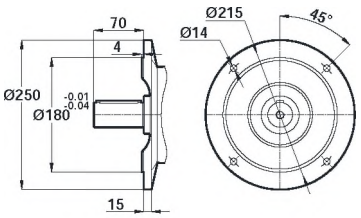


63-71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

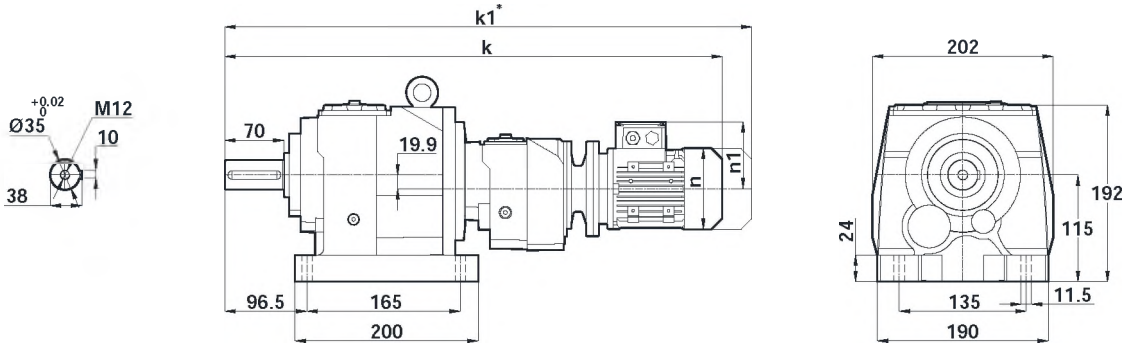
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



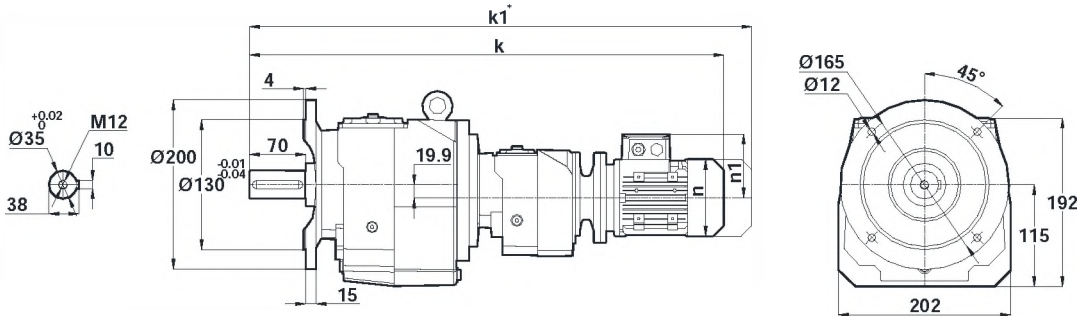
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV275
MV276

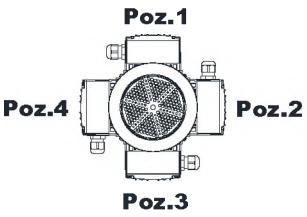


NV275
NV276



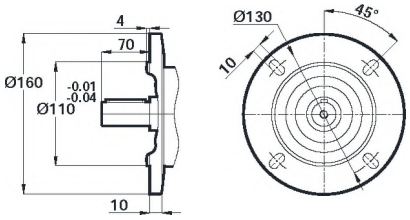
Taglia motore / *Motor Size* / Motorbaugroße		
IEC	63/B5 63/B14	71/B5 71/B14
k	632	652
k1	693	743
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105

Morsettiera / *Terminal Box* / Klemmenkasten

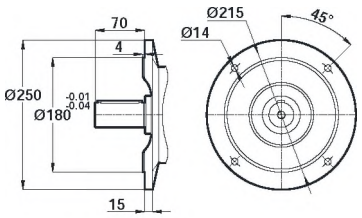


63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

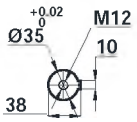


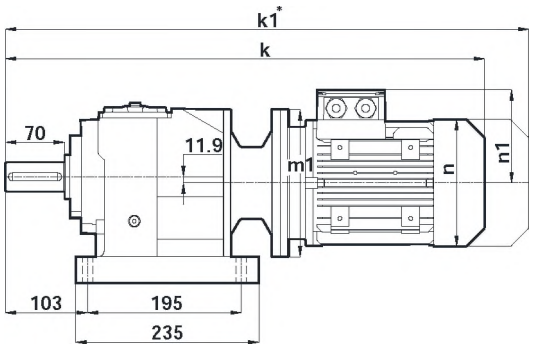
Opt. 2

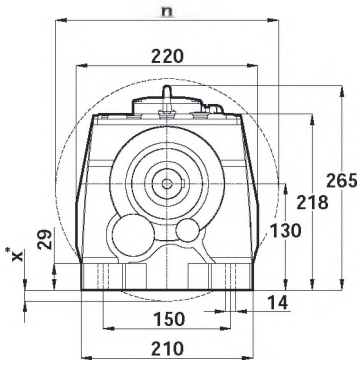
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

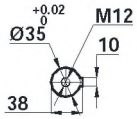
MV282
MV283

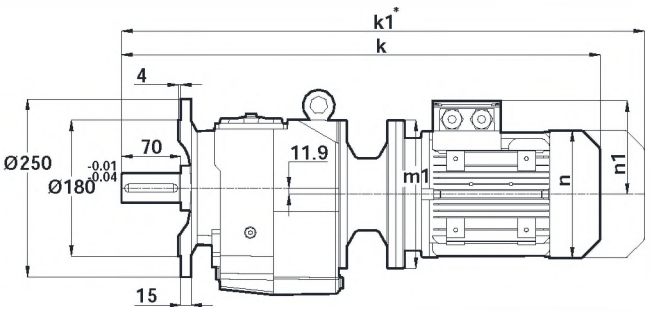


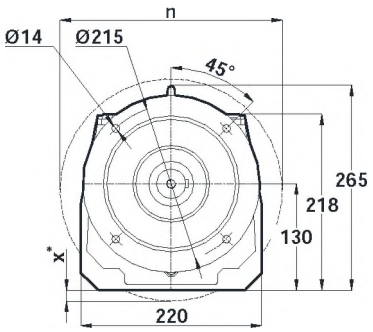




NV282
NV283

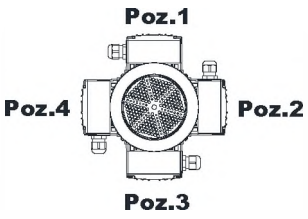






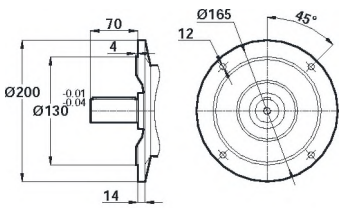
Taglia motore / *Motor Size* / Motorbaugroße								
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	554	577	618	618	661	681	795	795
k1	645	670	722.5	722.5	780.5	785.5	925	925
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	-	120	140	140	160	160	200	200
x (B5)	-	-	-	-	7	7	32	32

Morsettiera / *Terminal Box* / Klemmenkasten

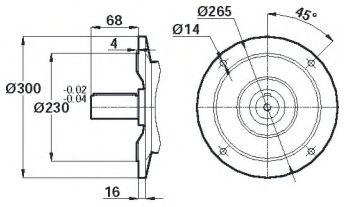


71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

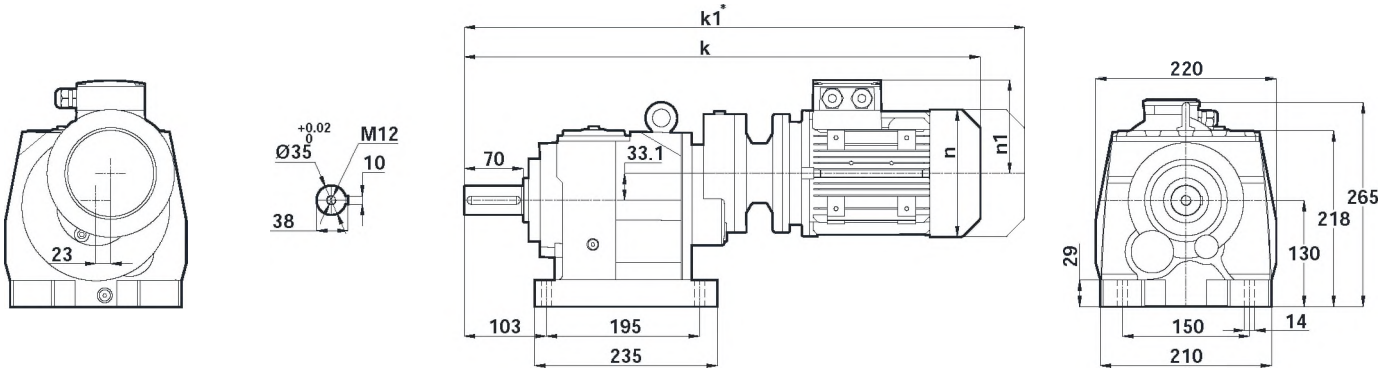
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



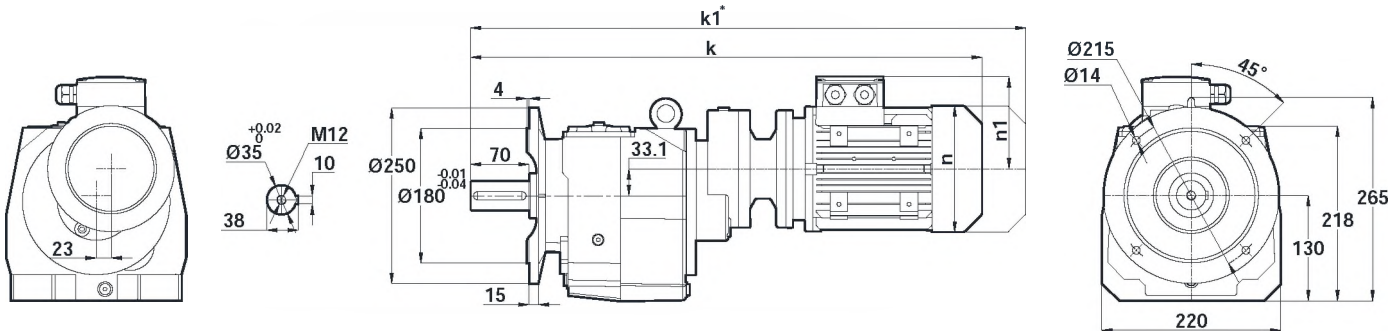
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV284

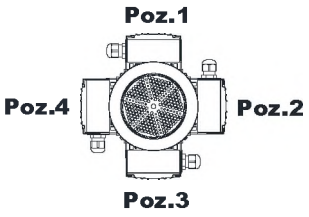


NV284



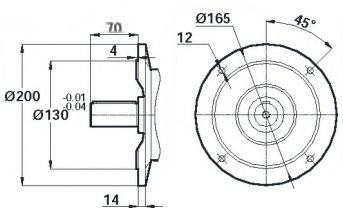
Taglia motore / *Motor Size* / Motorbaugroße		
IEC	63/B5	71/B5 71/B14
k	613	602
k1	674	693
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	-	105

Morsettiera / *Terminal Box* / Klemmenkasten

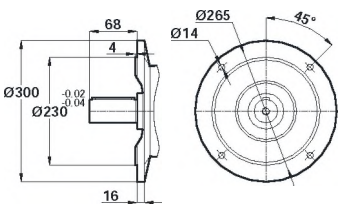


63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

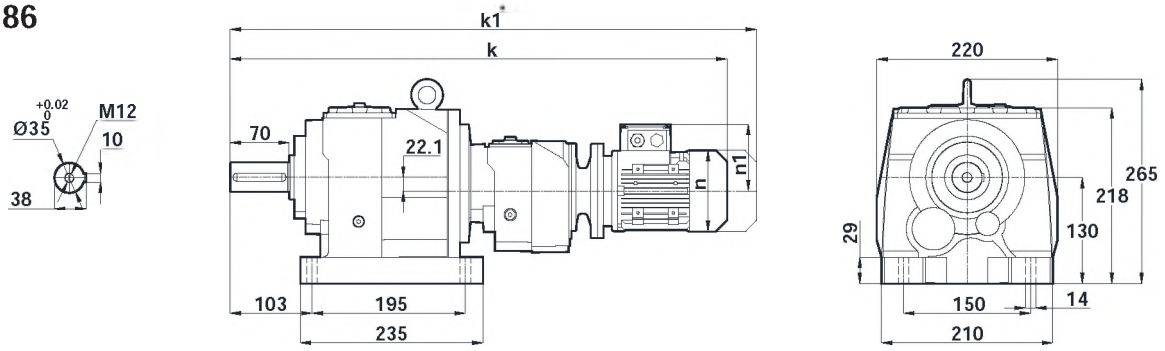


Opt. 2

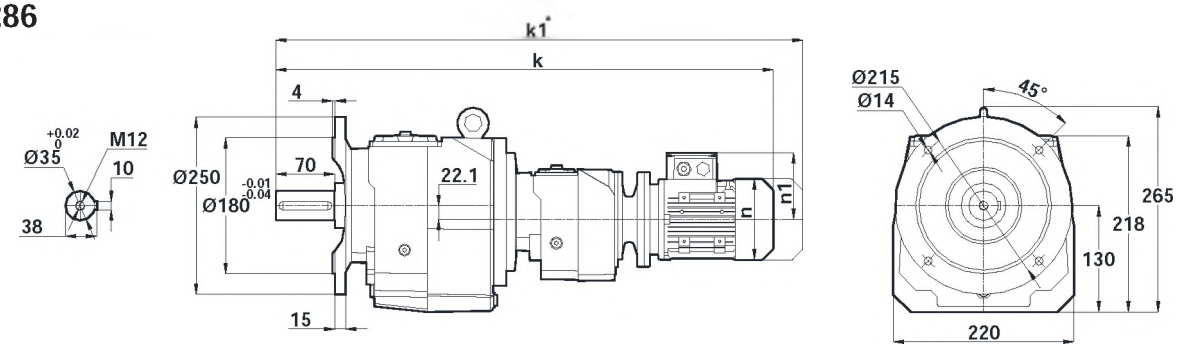
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV285
MV286

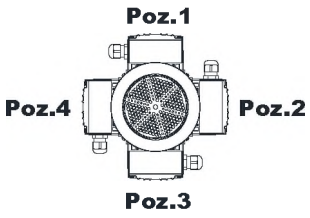


NV285
NV286



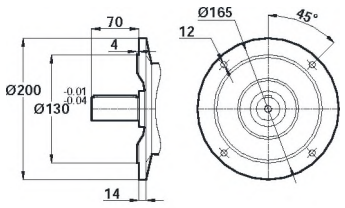
Taglia motore / *Motor Size* / Motorbaugroße	
IEC	63/B5 63/B14
k	679
k1	740
n / n1	121 / 97
m1 (B5)	140
m1 (B14)	90

Morsettiera / *Terminal Box* / Klemmenkasten

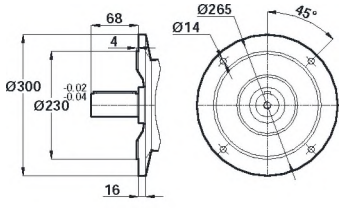


63

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

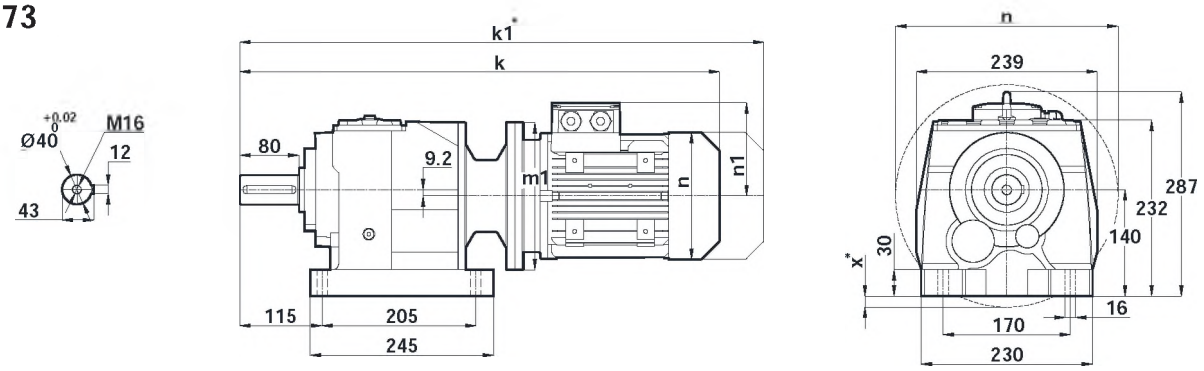
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



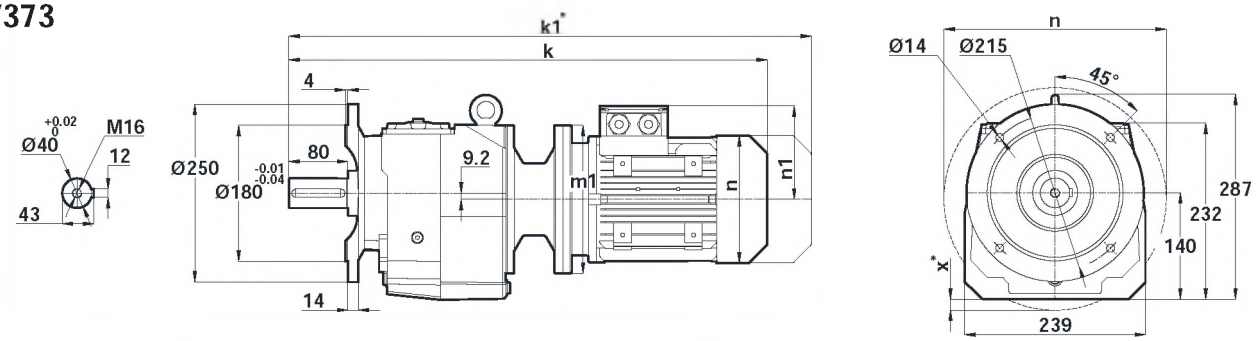
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV372
MV373

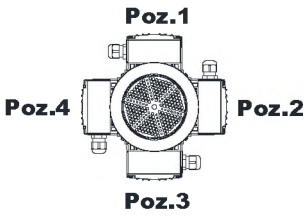


NV372
NV373



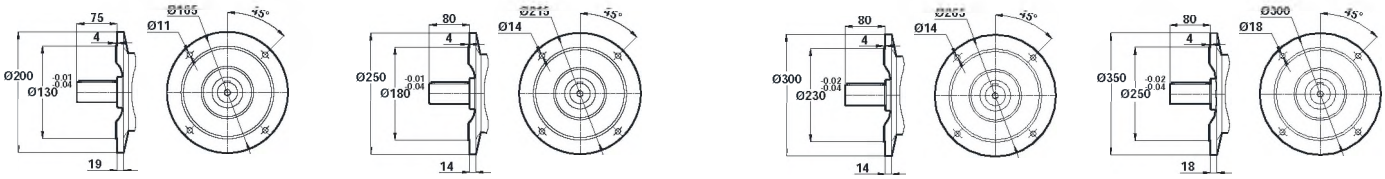
Taglia motore / *Motor Size* / Motorbaugroße								
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	575	598	639	639	692	712	816	816
k1	666	691	743.5	743.5	811.5	816.5	946	946
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	-	120	140	140	160	160	200	200
x (B5)	-	-	-	-	-	-	20	20

Morsettiera / *Terminal Box* / Klemmenkasten



71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

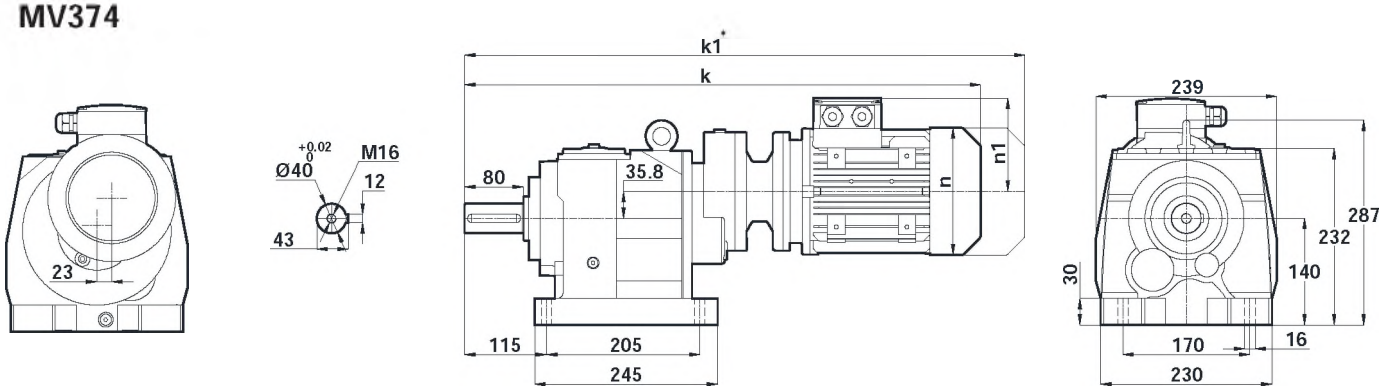


Opt. 1 **Opt. 2** **Opt. 3** **Opt. 4**

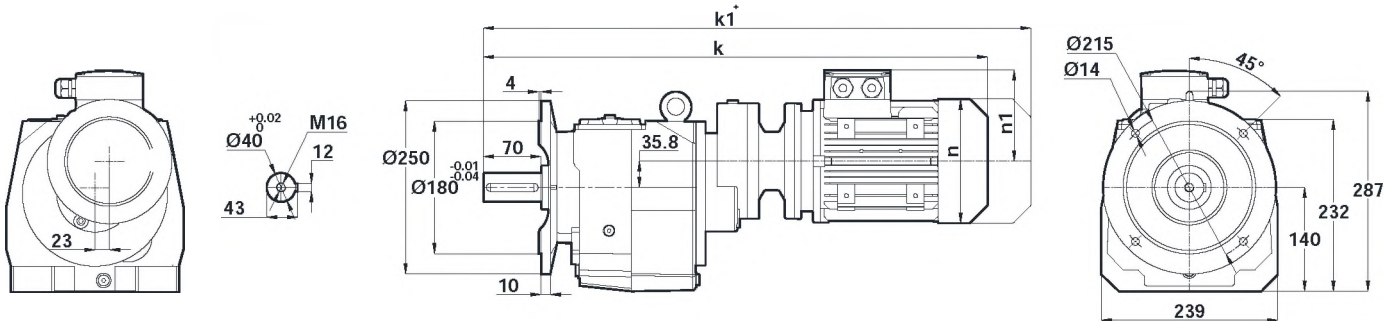
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV374

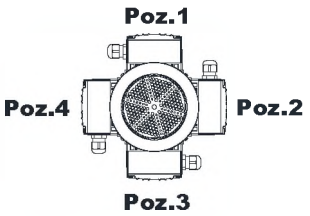


NV374



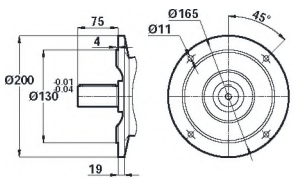
Taglia motore / *Motor Size* / Motorbaugroße			
IEC	63/B5	71/B5 71/B14	80/B5 80/B14
k	634	623	675
k1	695	714	768
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	-	105	120

Morsettiera / *Terminal Box* / Klemmenkasten

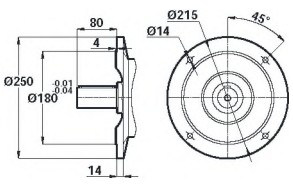


63-71-80

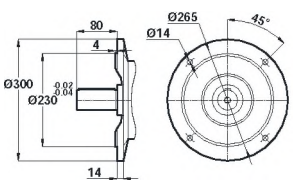
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



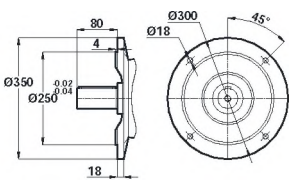
Opt. 1



Opt. 2



Opt. 3



Opt. 4

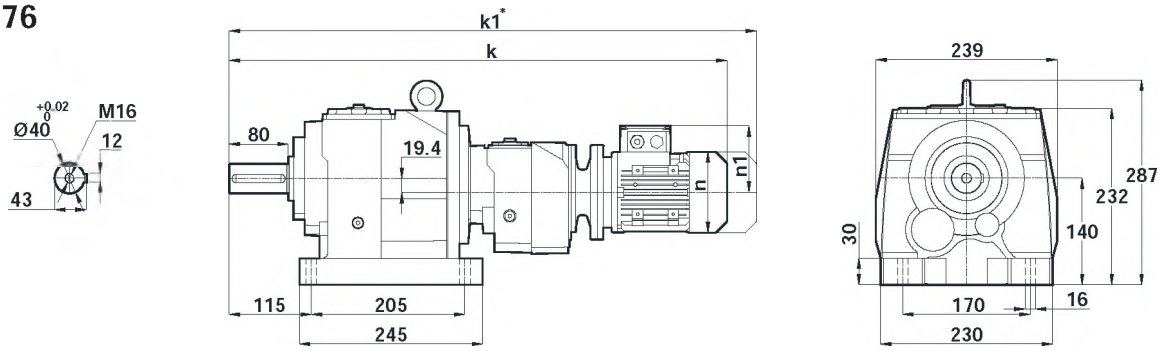
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



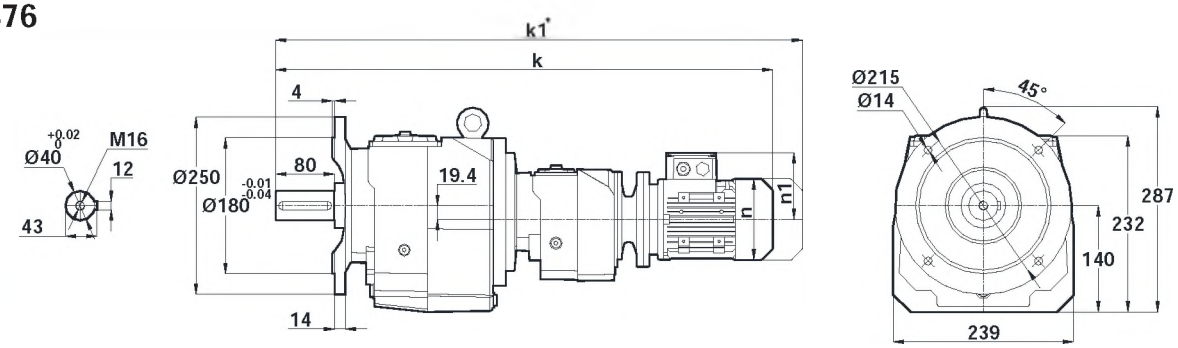
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV375
MV376

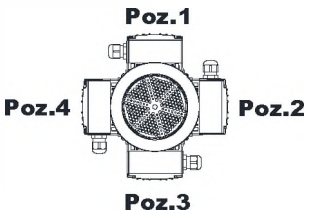


NV375
NV376



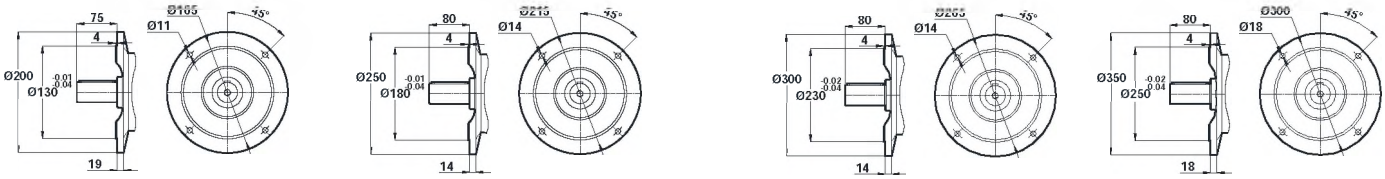
Taglia motore / *Motor Size* / Motorbaugroße	
IEC	63/B5 63/B14
k	700
k1	761
n / n1	121 / 97
m1 (B5)	140
m1 (B14)	90

Morsettiera / *Terminal Box* / Klemmenkasten



63

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*

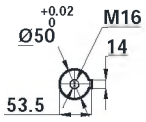


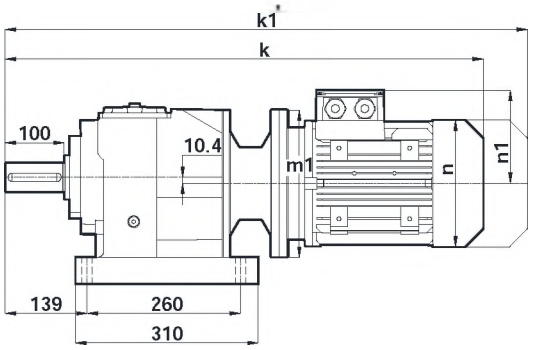
Opt. 1 **Opt. 2** **Opt. 3** **Opt. 4**

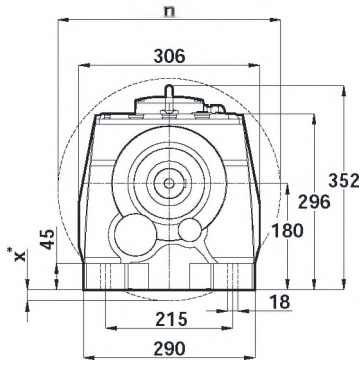
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

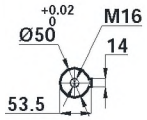
MV472
MV473

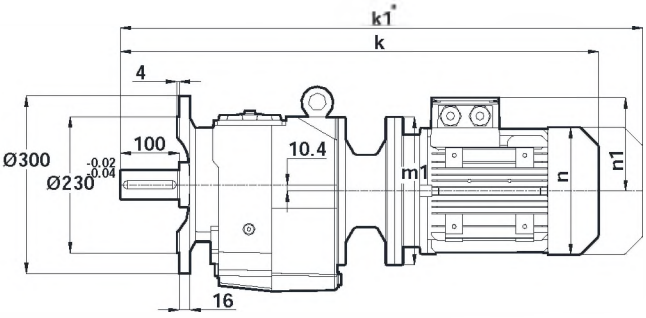


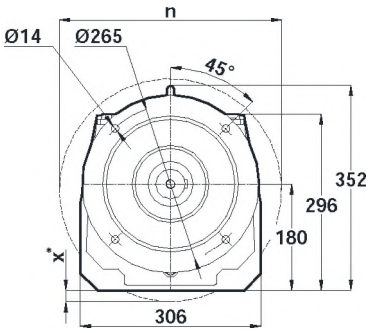




NV472
NV473

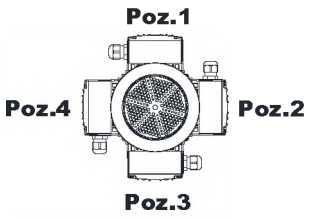






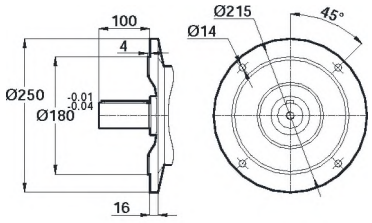
Taglia motore / *Motor Size* / Motorbaugroße											
IEC	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	661	702	702	756	776	879	879	1038	1038	1127	1127
k1	754	806.5	806.5	875.5	880.5	1009	1009	1218	1218	1297.5	1297.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
x (B5)	-	-	-	-	-	-	-	6	6	6	6

Morsettiera / *Terminal Box* / Klemmenkasten

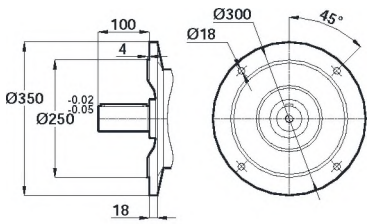


80-90-100-112-132-160-180

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

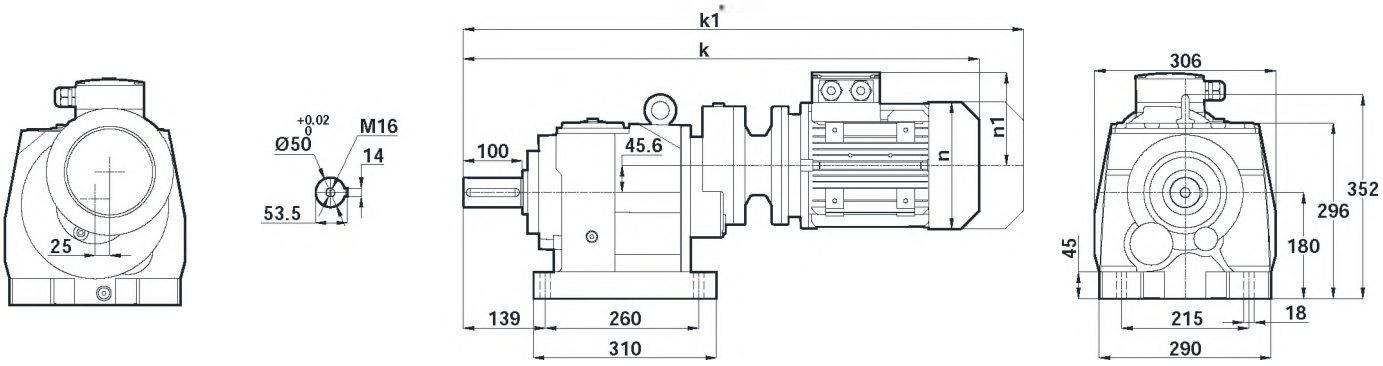
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



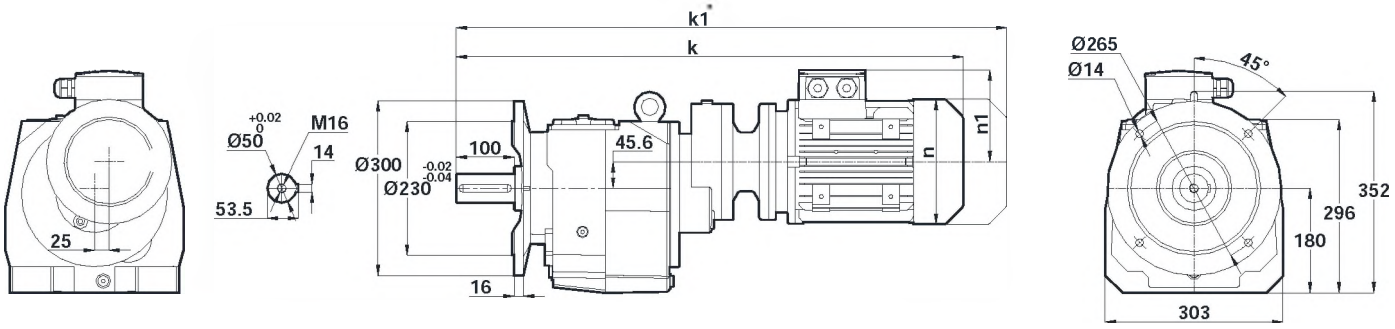
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV474

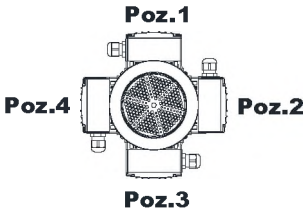


NV474



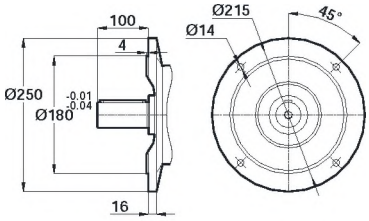
Taglia motore / *Motor Size* / Motorbaugroße		
IEC	71/B5	80/B5 80/B14
k	736	759
k1	827	852
n / n1	137 / 112	155 / 121
m1 (B5)	160	200
m1 (B14)	-	120

Morsettiera / *Terminal Box* / Klemmenkasten

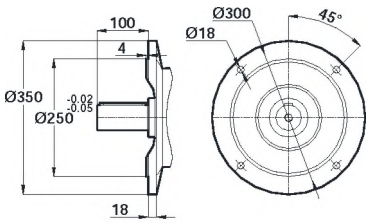


71-80

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

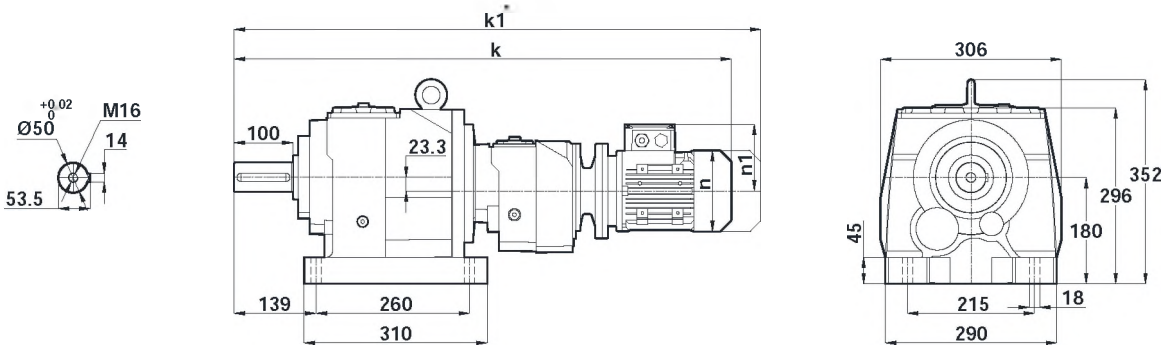


Opt. 2

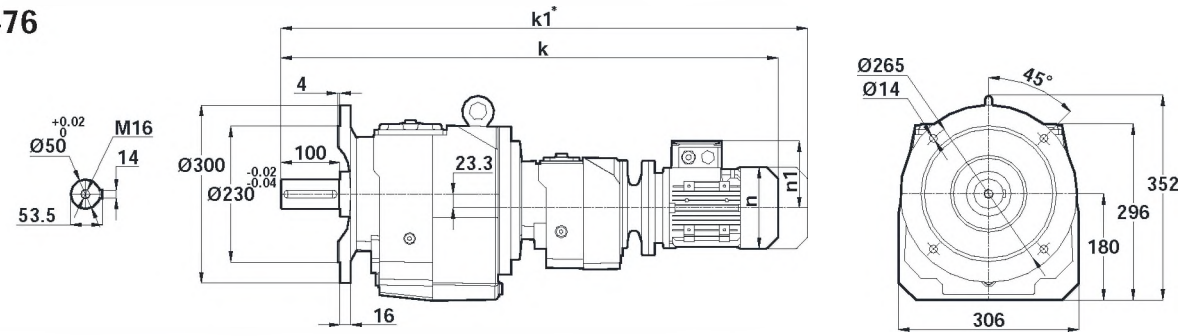
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV475
MV476

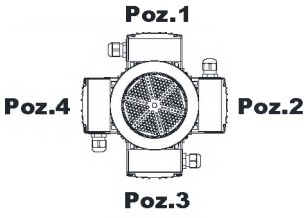


NV475
NV476



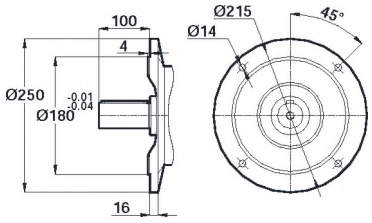
Taglia motore / *Motor Size* / Motorbaugroße		
IEC	63/B5	71/B5 71/B14
k	846	835
k1	907	926
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	-	105

Morsettiera / *Terminal Box* / Klemmenkasten

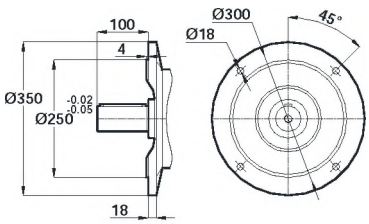


63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

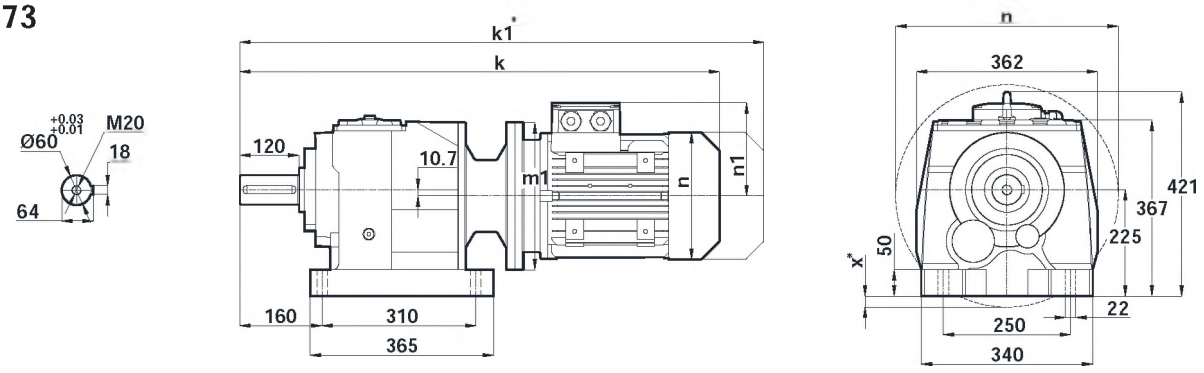
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



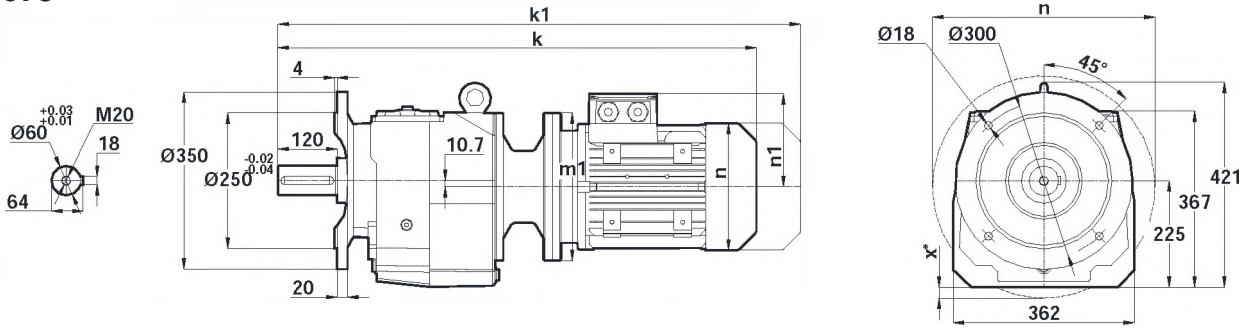
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV572
MV573

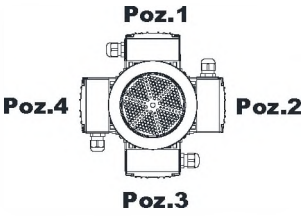


NV572
NV573



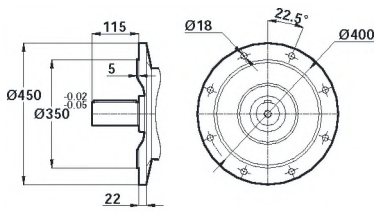
Taglia motore / *Motor Size* / Motorbaugroße									
IEC	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5
k	817	838	943	943	1098	1098	1187	1187	1260
k1	936.5	942.5	1073	1073	1278	1278	1357.5	1357.5	1446.5
n / n1	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275
m1 (B5)	250	250	300	300	350	350	350	350	400
m1 (B14)	-	-	200	200	-	-	-	-	-
x (B5)	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten

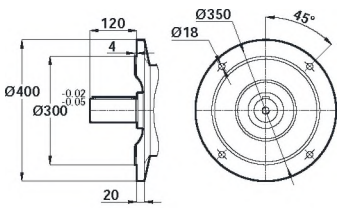


100-112-132-160-180-200

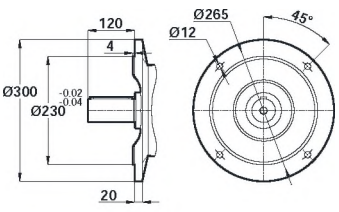
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

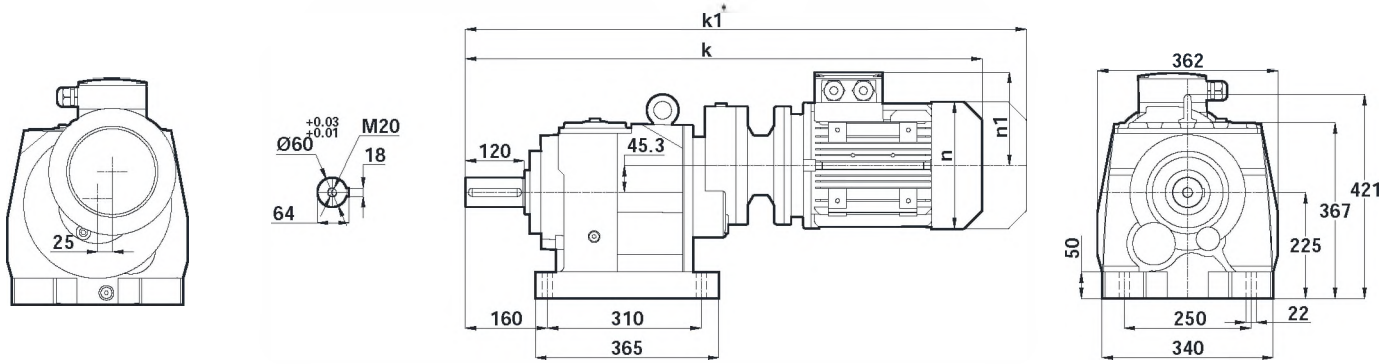


Opt. 3

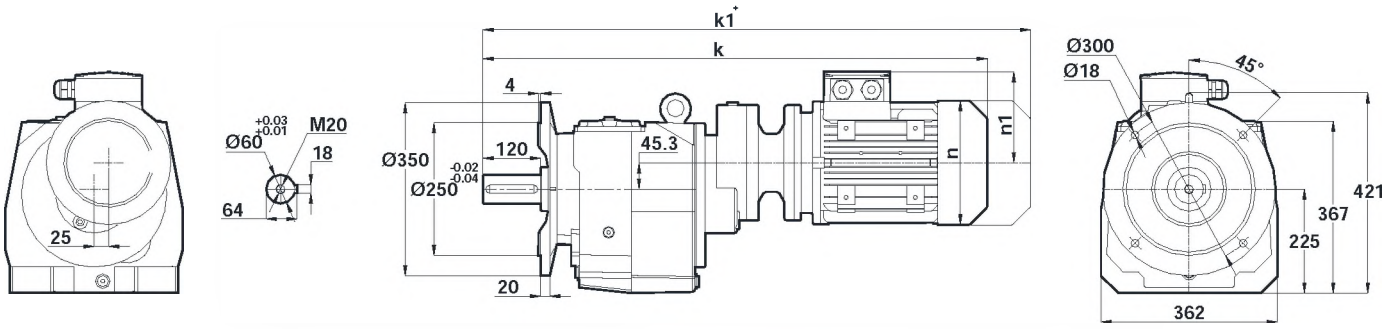
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV574

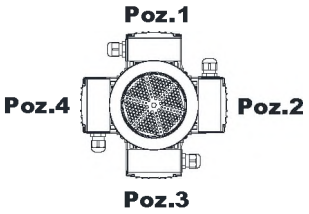


NV574



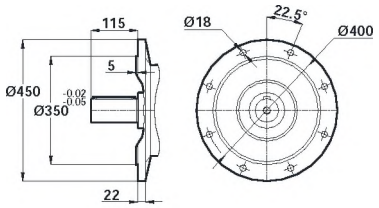
Taglia motore / *Motor Size* / Motorbaugroße				
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	798	821	862	862
k1	889	914	966.5	966.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140

Morsettiera / *Terminal Box* / Klemmenkasten

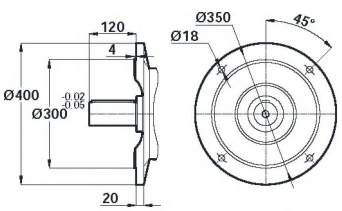


71-80-90

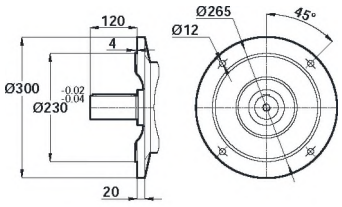
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2



Opt. 3

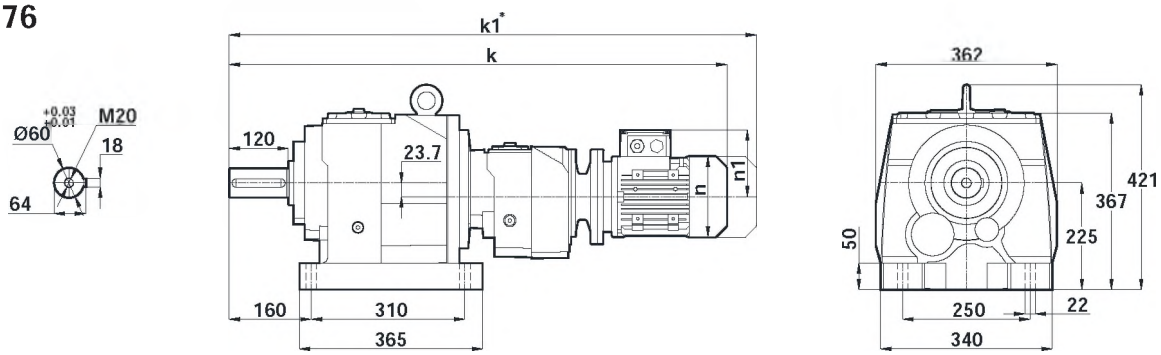
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



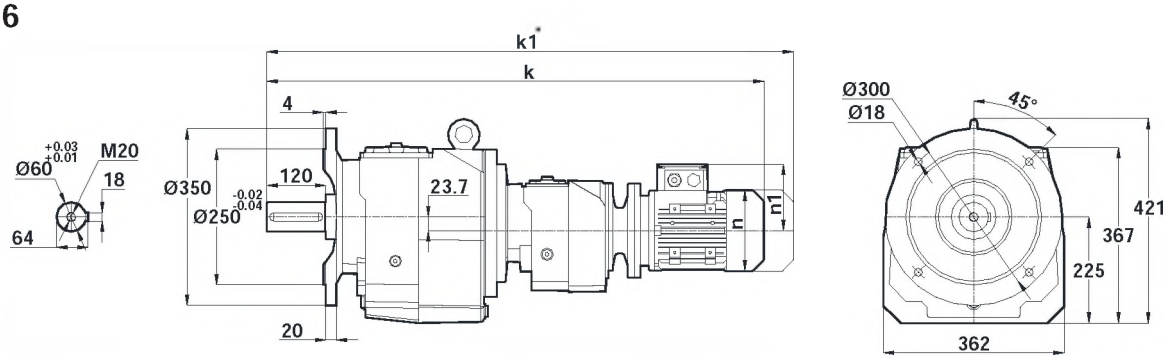
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV575
MV576

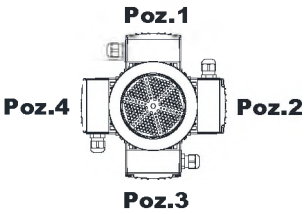


NV575
NV576



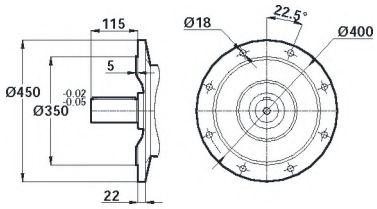
Taglia motore / *Motor Size* / Motorbaugroße		
IEC	63/B5	71/B5 71/B14
k	910	899
k1	971	990
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	-	105

Morsettiera / *Terminal Box* / Klemmenkasten

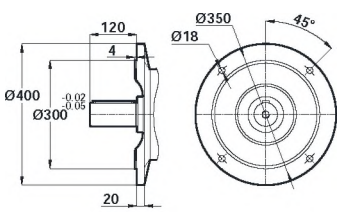


63-71

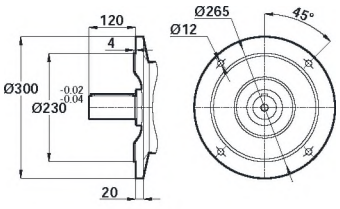
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

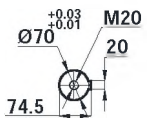


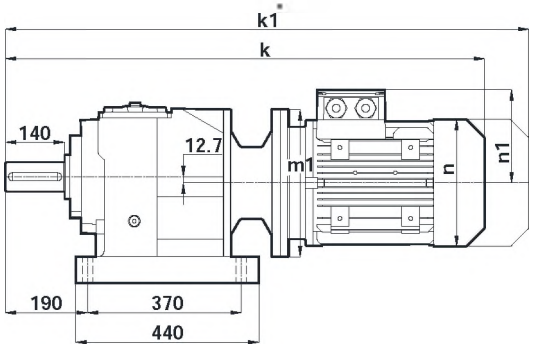
Opt. 3

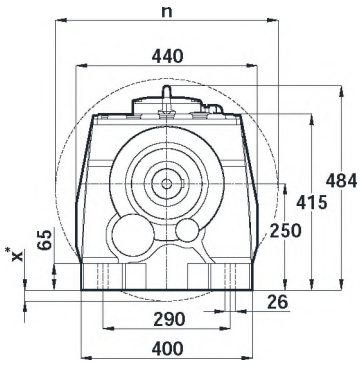
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße "k1" ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

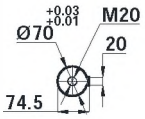
MV672
MV673

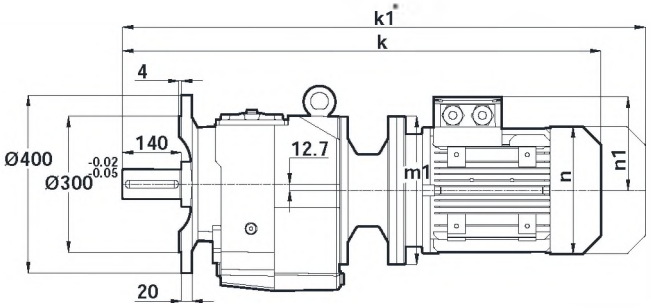


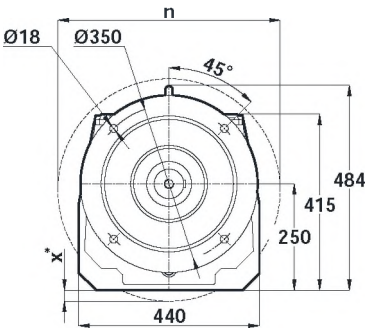




NV672
NV673

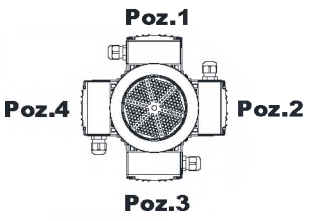






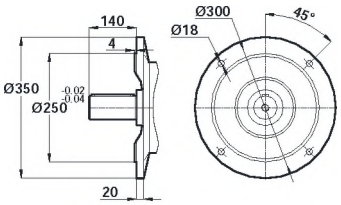
Taglia motore / *Motor Size* / Motorbaugroße										
IEC	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5
k	899	998	998	1152	1152	1242	1242	1315	1386	1411
k1	1003.5	1128	1128	1332	1332	1412.5	1412.5	1501.5	1551	1576
n / n1	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285
m1 (B5)	250	300	300	350	350	350	350	400	450	450
m1 (B14)	-	200	200	-	-	-	-	-	-	-
x (B5)	-	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten

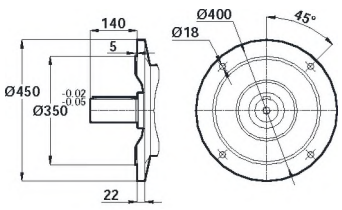


112-132-160-180-200-225

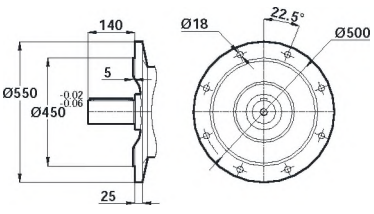
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2



Opt. 3

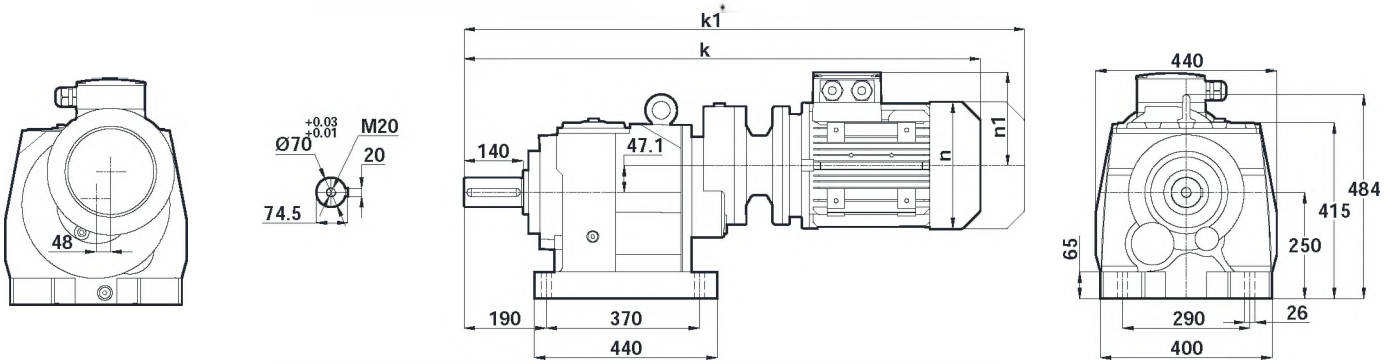
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



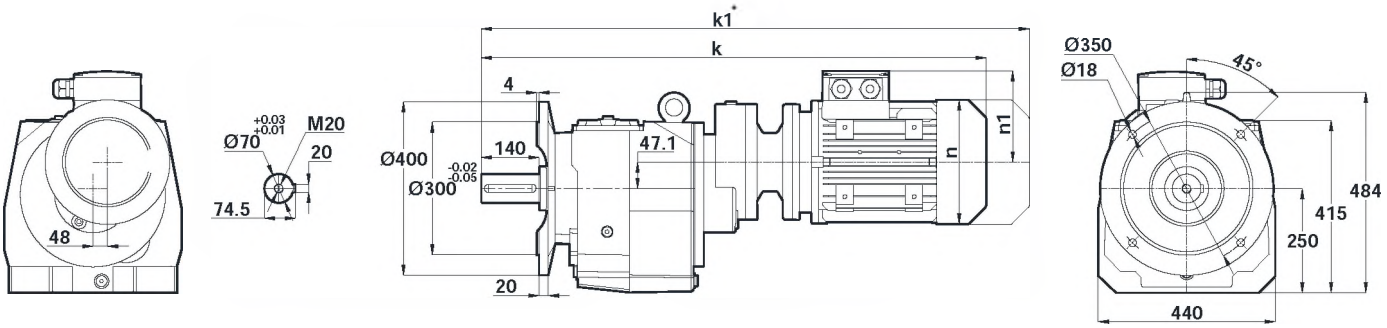
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV674

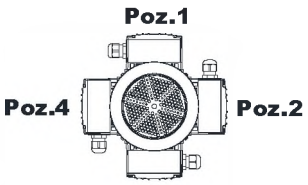


NV674



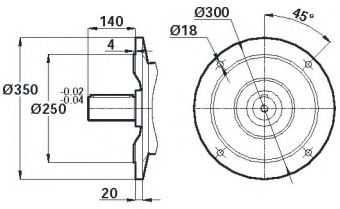
Taglia motore / *Motor Size* / Motorbaugroße			
IEC	80/B5	90S/B5 90S/B14	90L/B5 90L/B14
k	892	933	933
k1	985	1037.5	1037.5
n / n1	155 / 121	176 / 132	176 / 132
m1 (B5)	200	200	200
m1 (B14)	-	140	140

Morsettiera / *Terminal Box* / Klemmenkasten

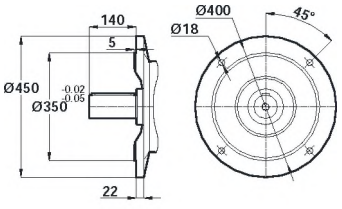


80-90

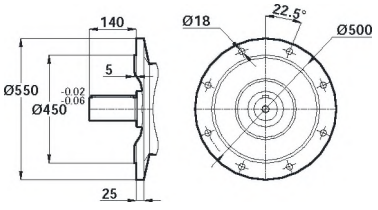
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

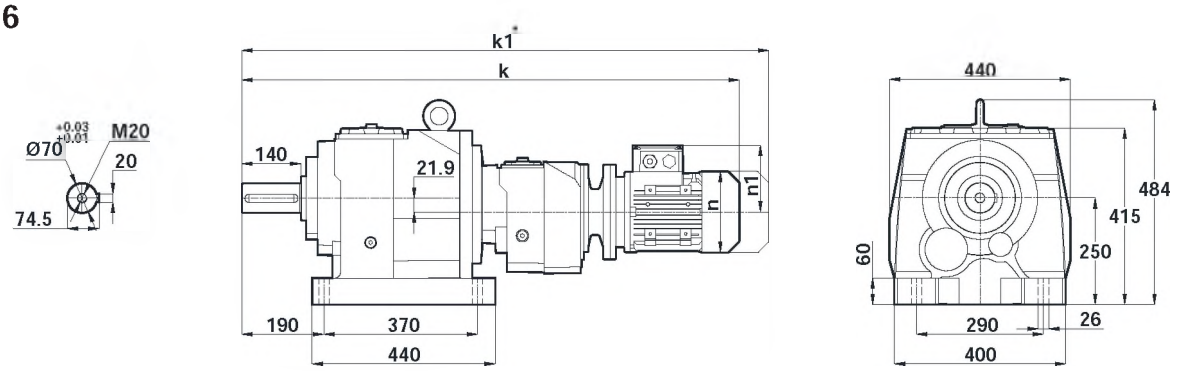


Opt. 3

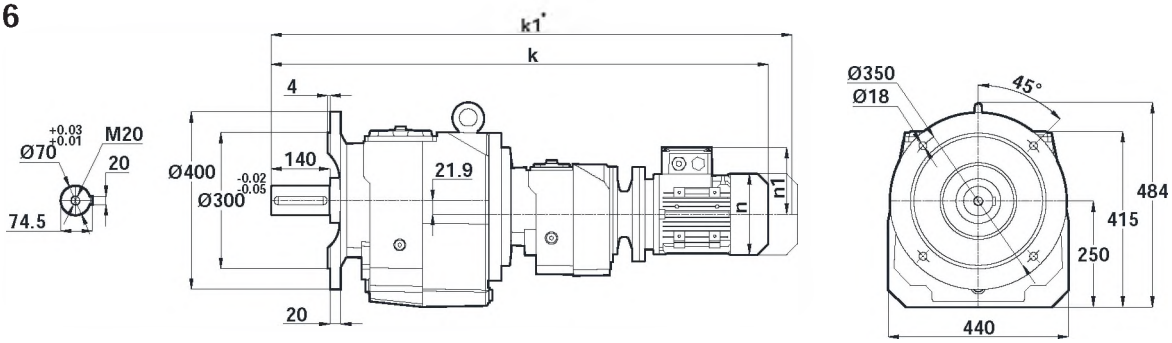
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV675
MV676

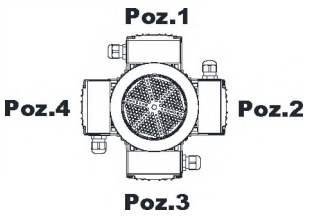


NV675
NV676



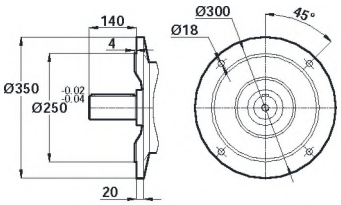
Taglia motore / *Motor Size* / Motorbaugroße		
IEC	71/B5	80/B5 80/B14
k	1019	1155
k1	1110	1248
n / n1	137 / 112	155 / 121
m1 (B5)	160	200
m1 (B14)	-	120

Morsettiera / *Terminal Box* / Klemmenkasten

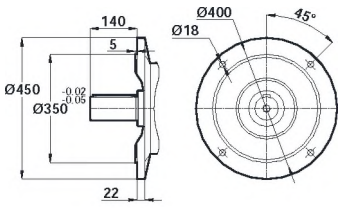


71-80

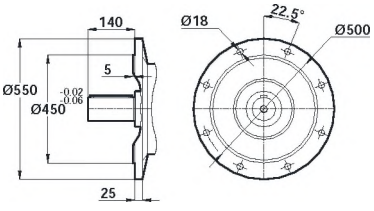
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2



Opt. 3

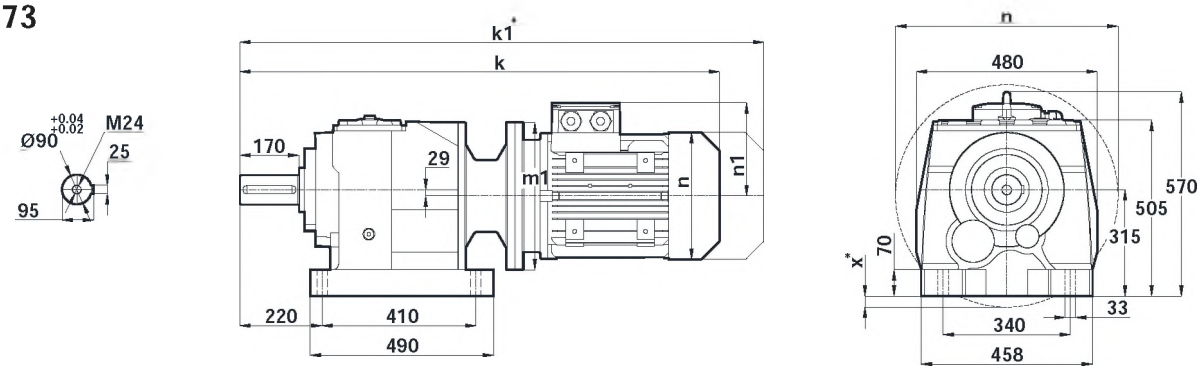
* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



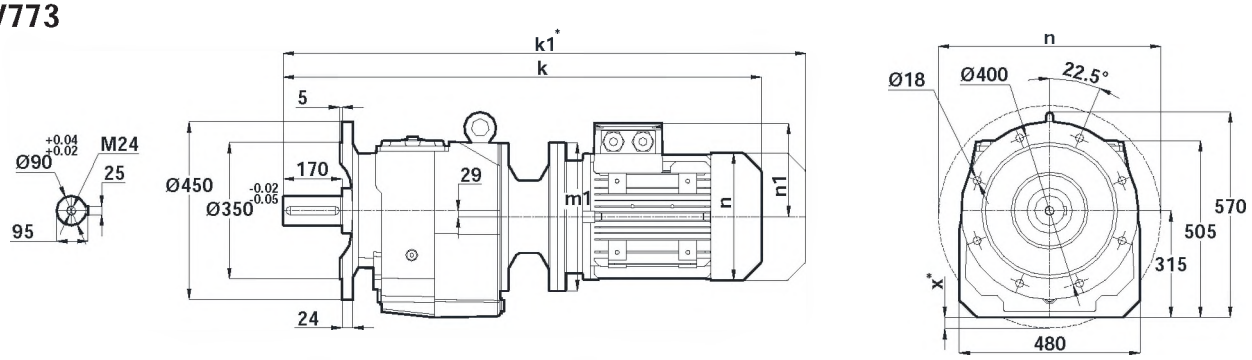
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV772
MV773

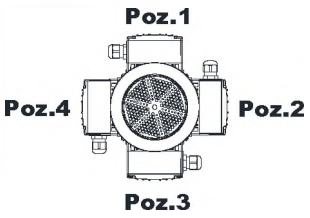


NV772
NV773



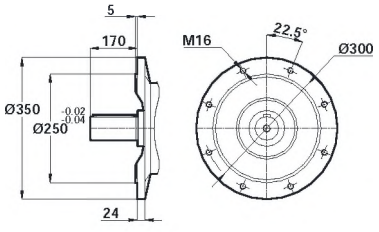
Taglia motore / *Motor Size* / Motorbaugroße										
IEC	132S/B5	132M/B5	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5
k	1083	1083	1232	1232	1321	1321	1396	1467	1492	1568
k1	1213	1213	1412	1412	1491.5	1491.5	1582.5	1632	1657	1738.5
n / n1	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322
m1 (B5)	300	300	350	350	350	350	400	450	450	550
m1 (B14)	-	-	-	-	-	-	-	-	-	-
x (B5)	-	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten

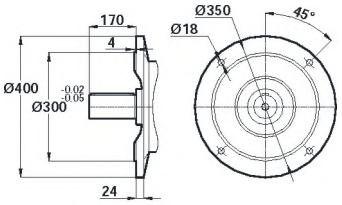


132-160-180-200-225-250

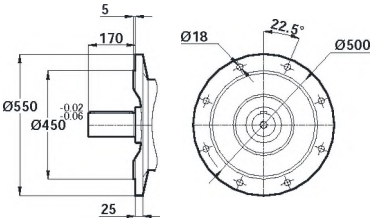
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

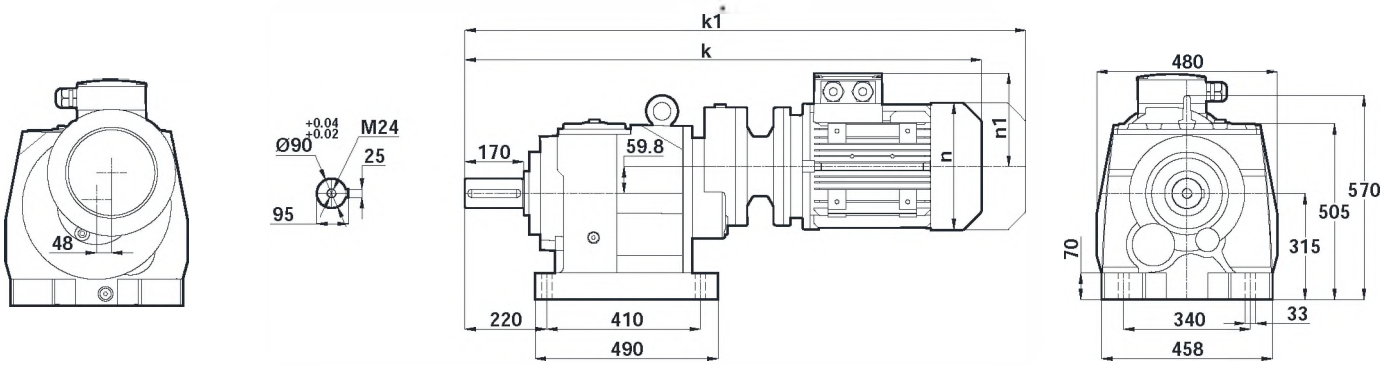


Opt. 3

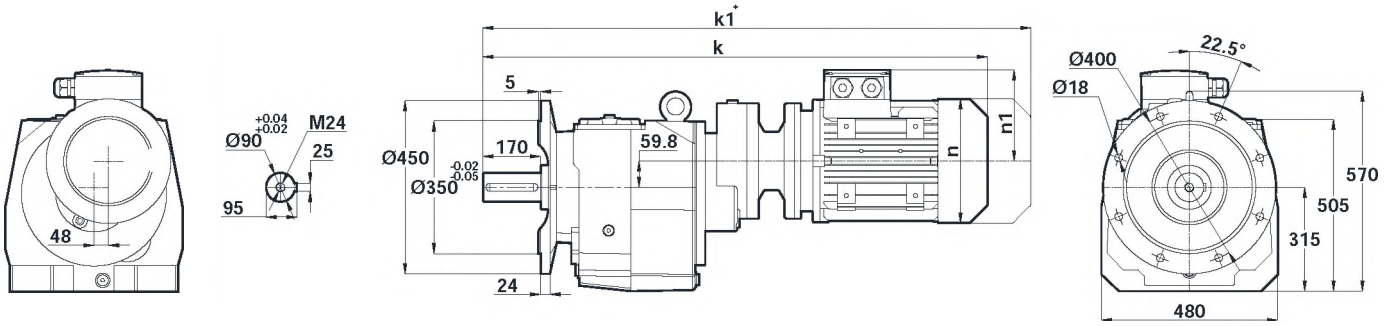
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV774

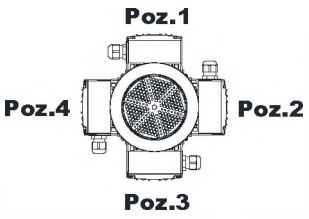


NV774



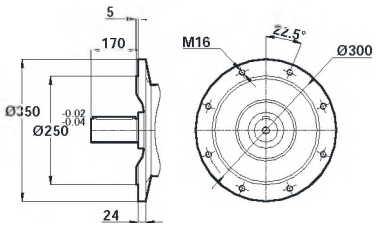
Taglia motore / *Motor Size* / Motorbaugroße				
IEC	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	977	1018	1018	1072
k1	1070	1122.5	1122.5	1191.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160

Morsettiera / *Terminal Box* / Klemmenkasten

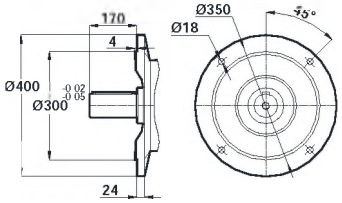


80-90-100

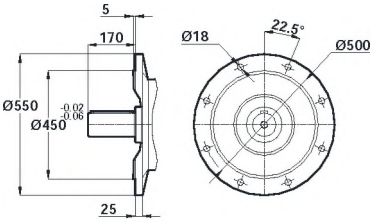
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2



Opt. 3

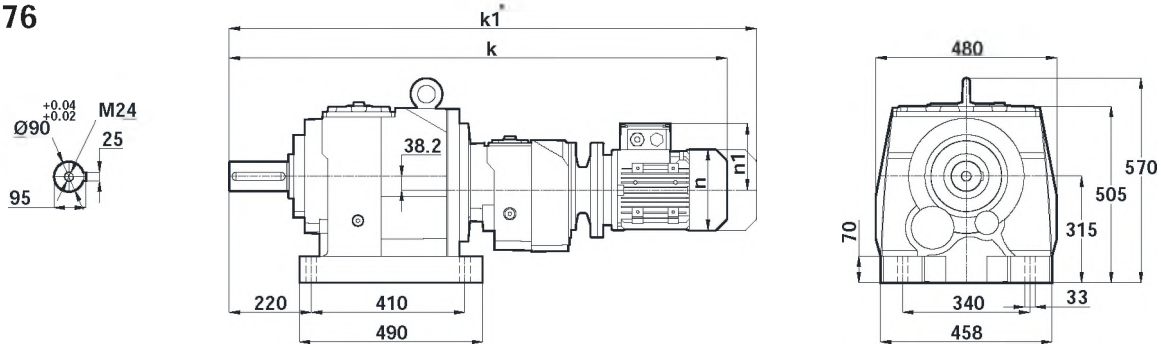
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



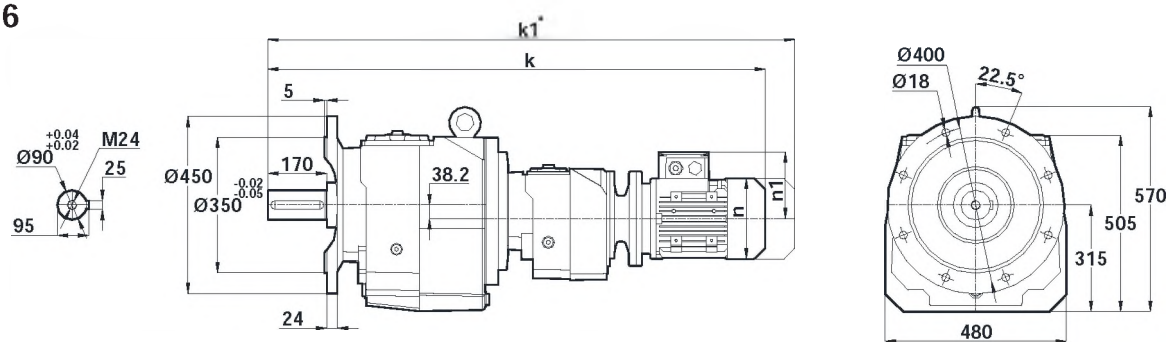
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV775
MV776

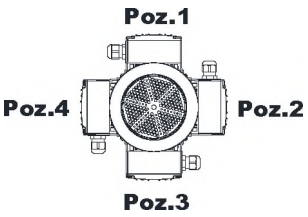


NV775
NV776



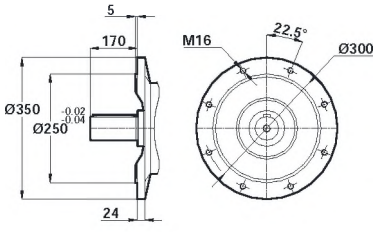
Taglia motore / *Motor Size* / Motorbaugroße				
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	1107	1130	1171	1171
k1	1198	1223	1275.5	1275.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140

Morsettiera / *Terminal Box* / Klemmenkasten

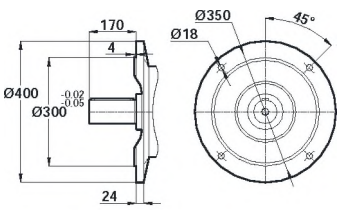


71-80-90

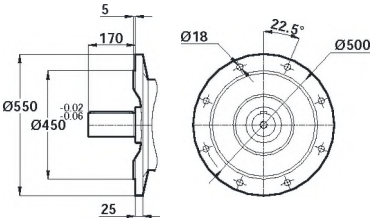
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

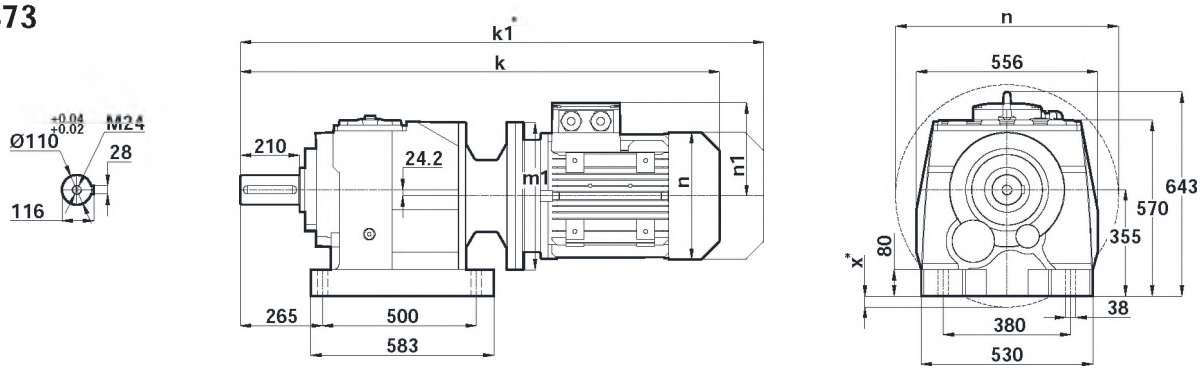


Opt. 3

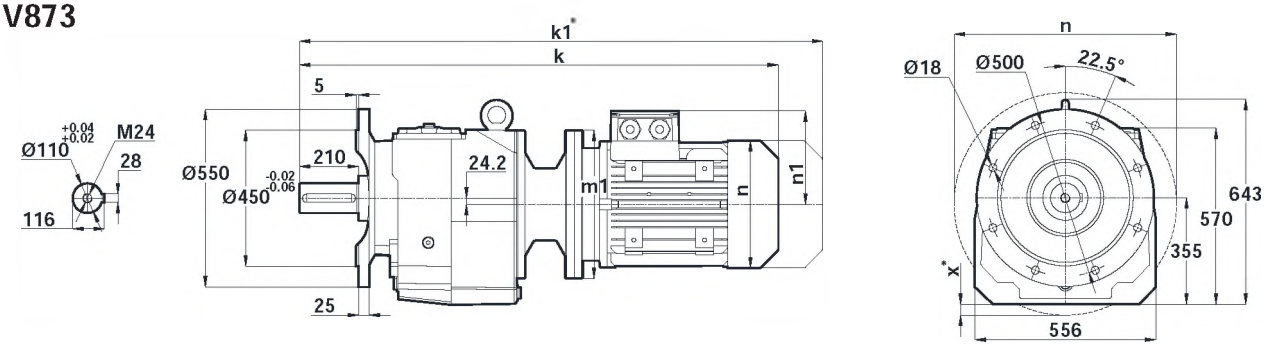
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV872
MV873

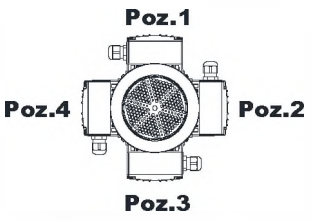


NV872
NV873



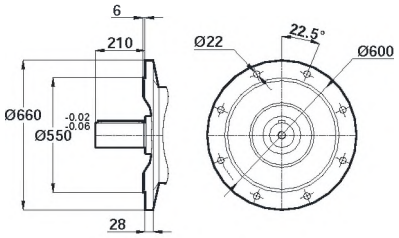
Taglia motore / *Motor Size* / Motorbaugroße										
IEC	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5
k	1418	1418	1507	1507	1560	1578	1603	1679	1741	1741
k1	1598	1598	1677.5	1677.5	1746.5	1743	1768	1849.5	1914	1920
n / n1	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350
m1 (B5)	350	350	350	350	400	450	450	550	550	550
m1 (B14)	-	-	-	-	-	-	-	-	-	-
x (B5)	-	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten



160-180-200-225-250-280

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

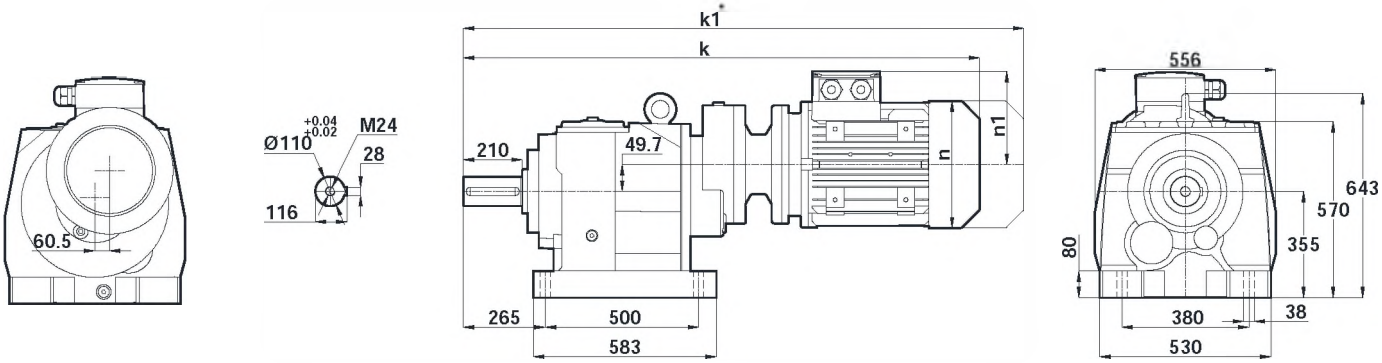
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



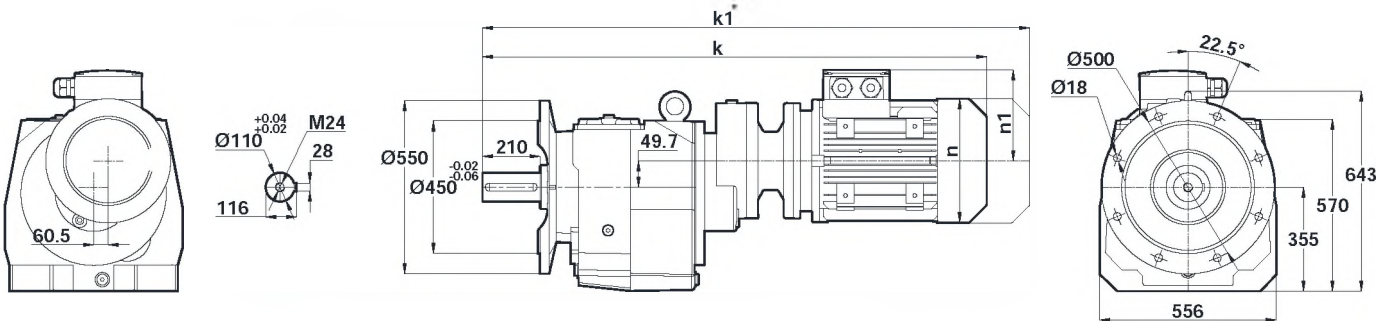
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV874

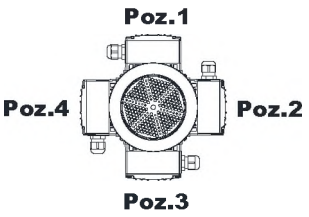


NV874



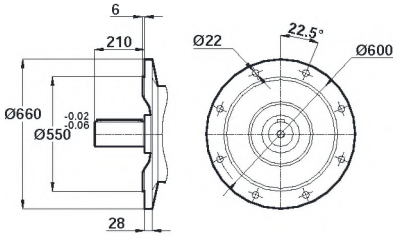
Taglia motore / *Motor Size* / Motorbaugroße				
IEC	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1206	1227	1332	1332
k1	1325.5	1331.5	1462	1462
n / n1	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200

Morsettiera / *Terminal Box* / Klemmenkasten



100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*

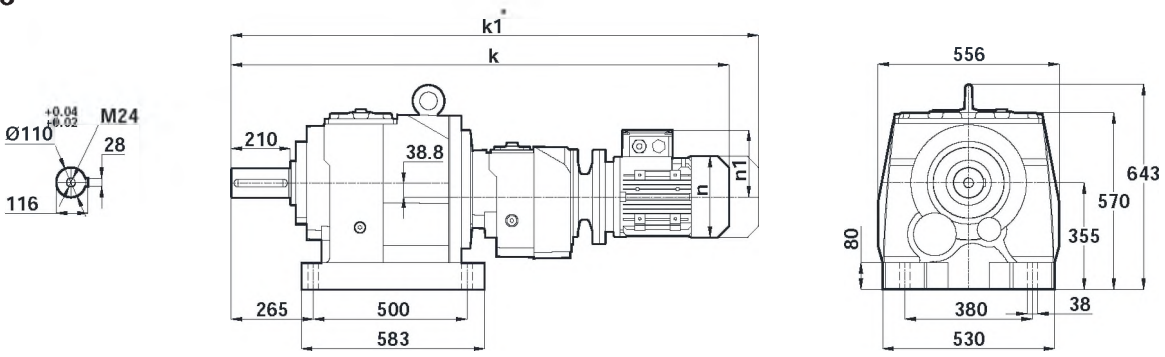


Opt. 1

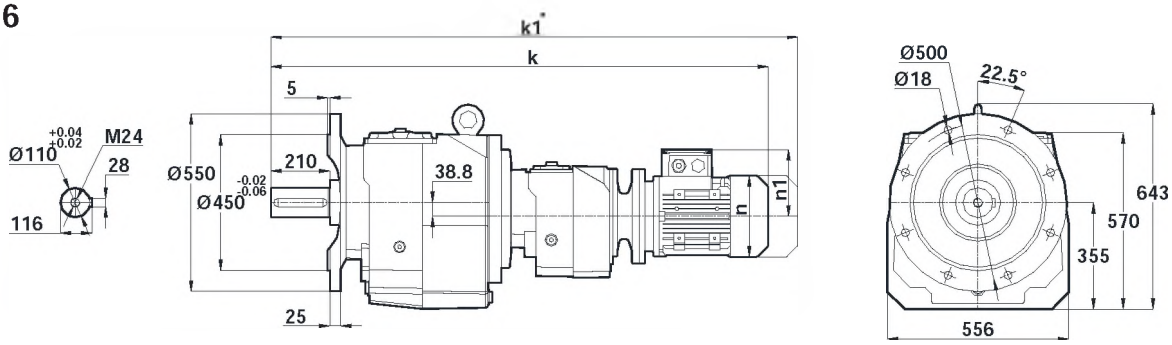
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV875
MV876

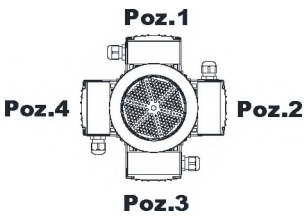


NV875
NV876



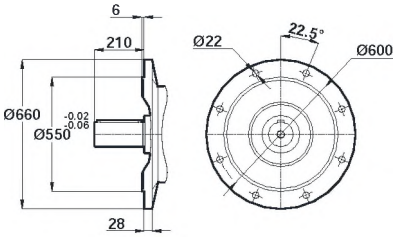
Taglia motore / *Motor Size* / Motorbaugroße					
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1224	1247	1288	1288	1341
k1	1315	1340	1392.5	1392.5	1460.5
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147
m1 (B5)	160	200	200	200	250
m1 (B14)	-	120	140	140	160

Morsettiera / *Terminal Box* / Klemmenkasten



71-80-90-100

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

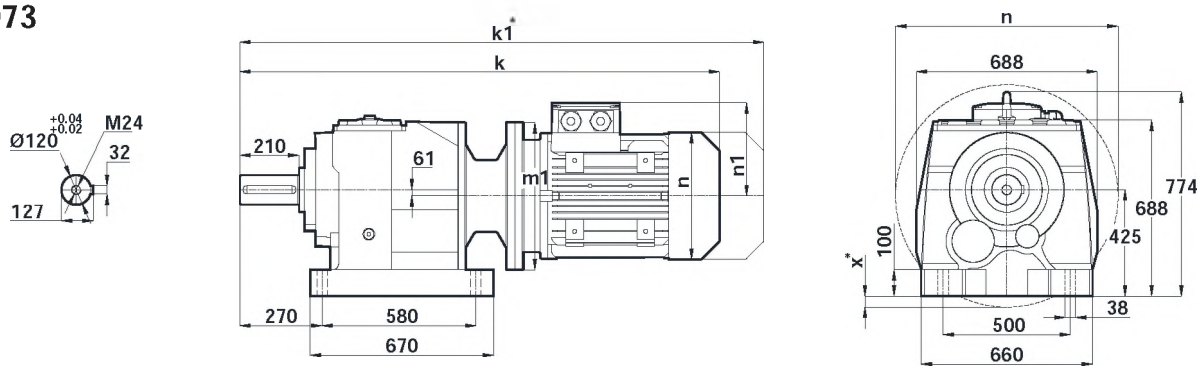
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



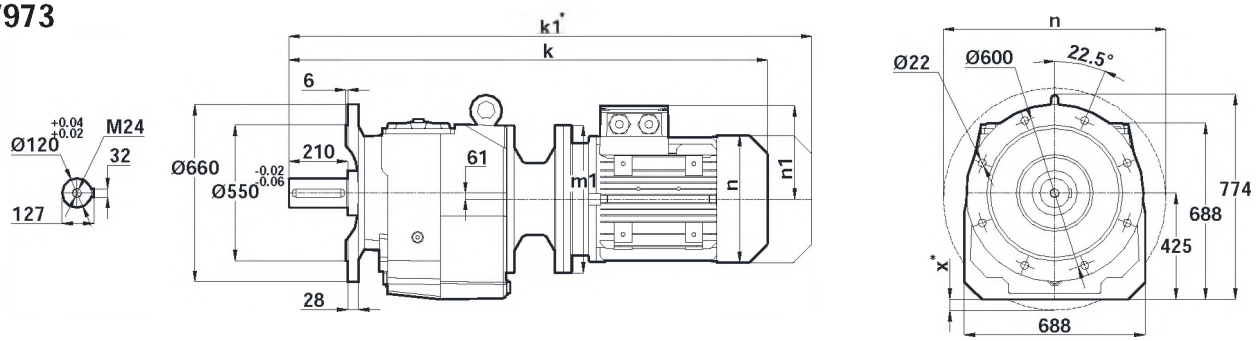
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV972
MV973

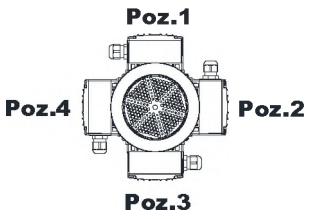


NV972
NV973



Taglia motore / *Motor Size* / Motorbaugröße												
IEC	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5	315S/4	315M/4
k	1405	1405	1495	1495	1572	1632	1657	1785	1847	1847	2059	2059
k1	1585	1585	1665.5	1665.5	1758.5	1797	1822	1955.5	2020	2026	-	-
n / n1	315 / 219	315 / 219	347 / 234	347 / 234	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350	614 / 510	614 / 510
m1 (B5)	350	350	350	350	400	450	450	550	550	550	660	660
m1 (B14)	-	-	-	-	-	-	-	-	-	-	-	-
x (B5)	-	-	-	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten

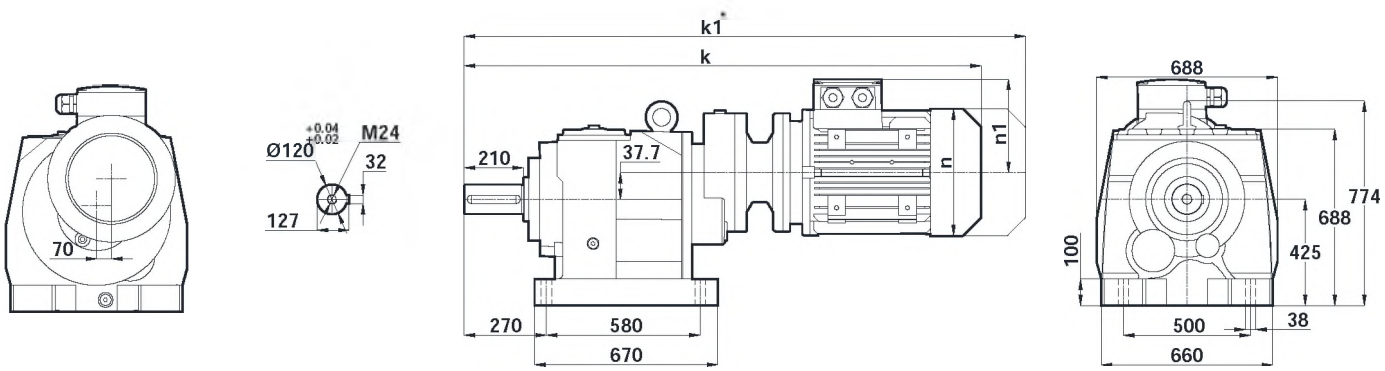


160-180-200-225-250-280-315

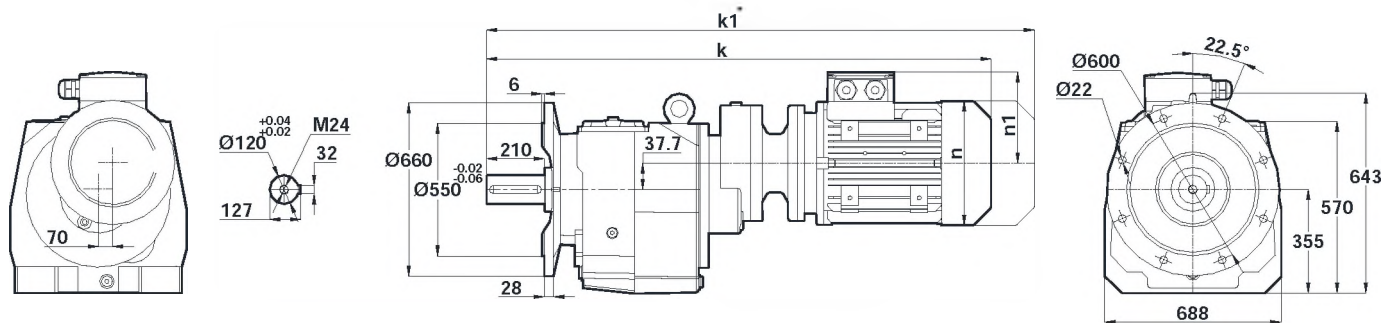
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV974

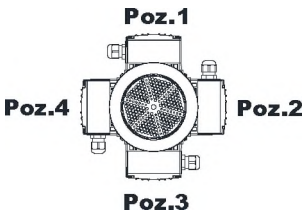


NV974



Taglia motore / *Motor Size* / Motorbaugroße				
IEC	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1310	1331	1430	1430
k1	1429.5	1435.5	1560	1560
n / n1	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200

Morsettiera / *Terminal Box* / Klemmenkasten



100-112-132

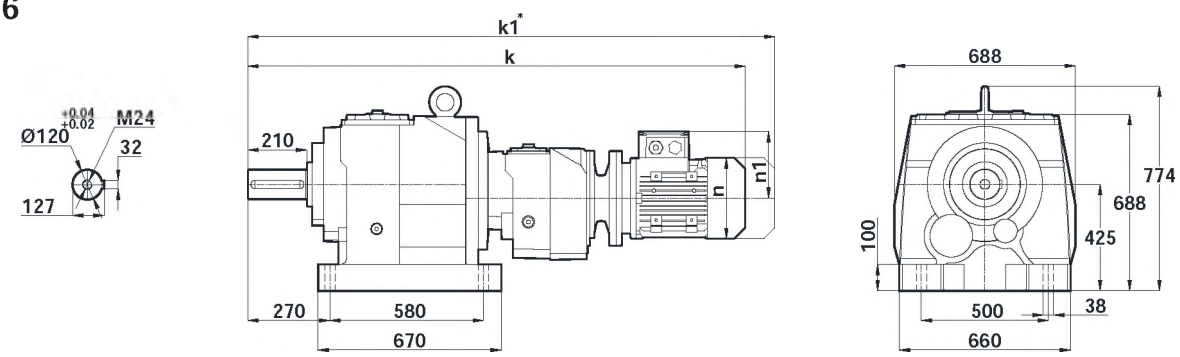
* **La misura "k1" è per motori dotati di freno.** / *Dimension "k1" is for motors with brake.* / Maße " k1 " ist für Bremsenmotoren.



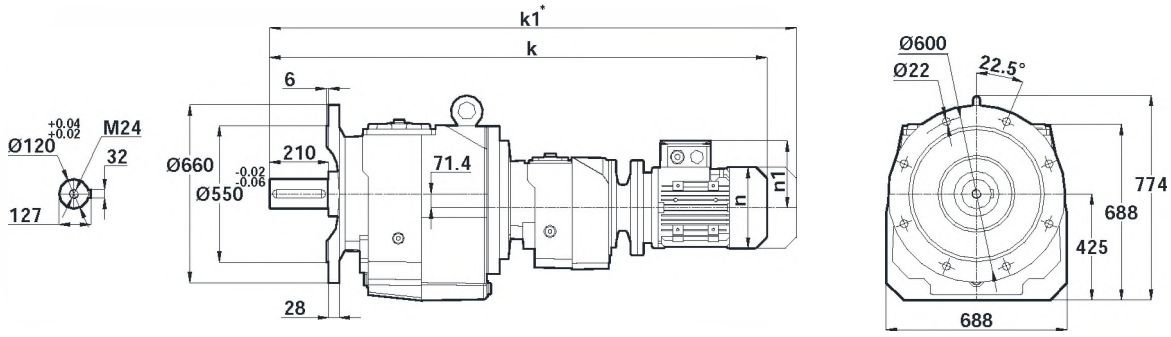
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MV975
MV976

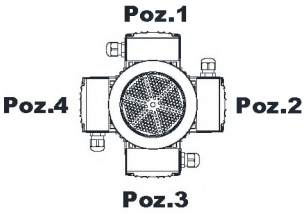


NV975
NV976



Taglia motore / *Motor Size* / Motorbaugroße						
IEC	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14
k	1370	1411	1411	1465	1485	1588
k1	1463	1515.5	1515.5	1584.5	1589.5	1718
n / n1	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179
m1 (B5)	200	200	200	250	250	300
m1 (B14)	-	140	140	160	160	200

Morsettiera / *Terminal Box* / Klemmenkasten

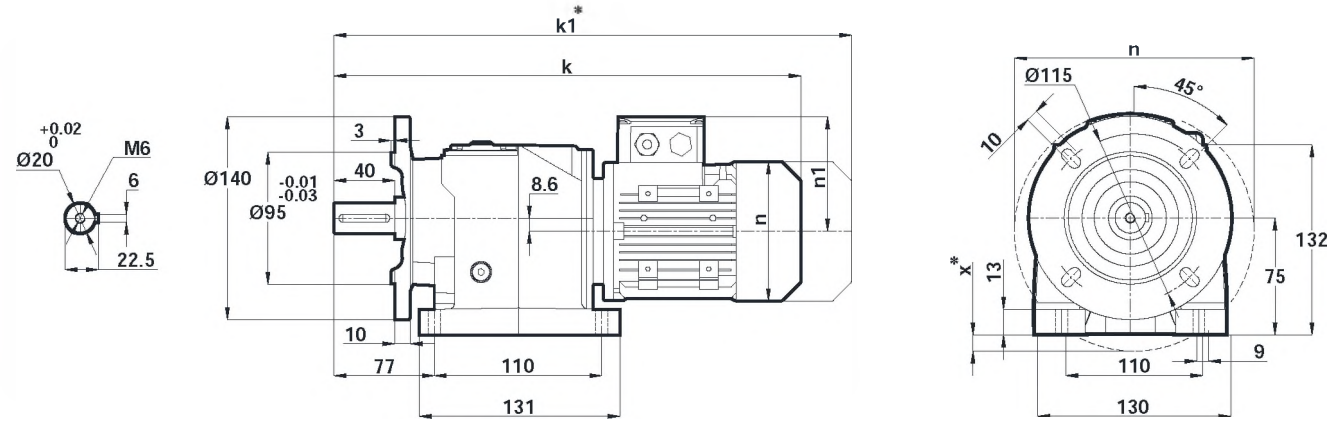


80-90-100-112-132

* **La misura "k1" è per motori dotati di freno.** / *Dimension "k1" is for motors with brake.* / Maße " k1 " ist für Bremsenmotoren.

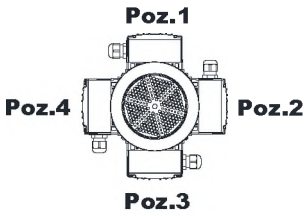
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF002
MRF003



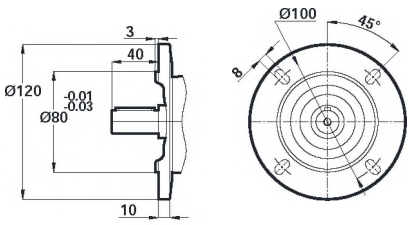
Taglia motore / *Motor Size* / Motorbaugroße					
	63	71	80	90S	90L
k	368	397	431	470	470
k1	429	488	524	574.5	574.5
n	121	137	155	176	176
n1	97	112	121	132	132
x	-	3	12	22	22

Morsettiera / *Terminal Box* / Klemmenkasten

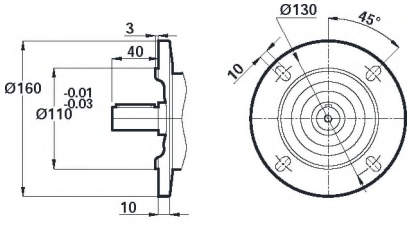


63-71-80-90

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

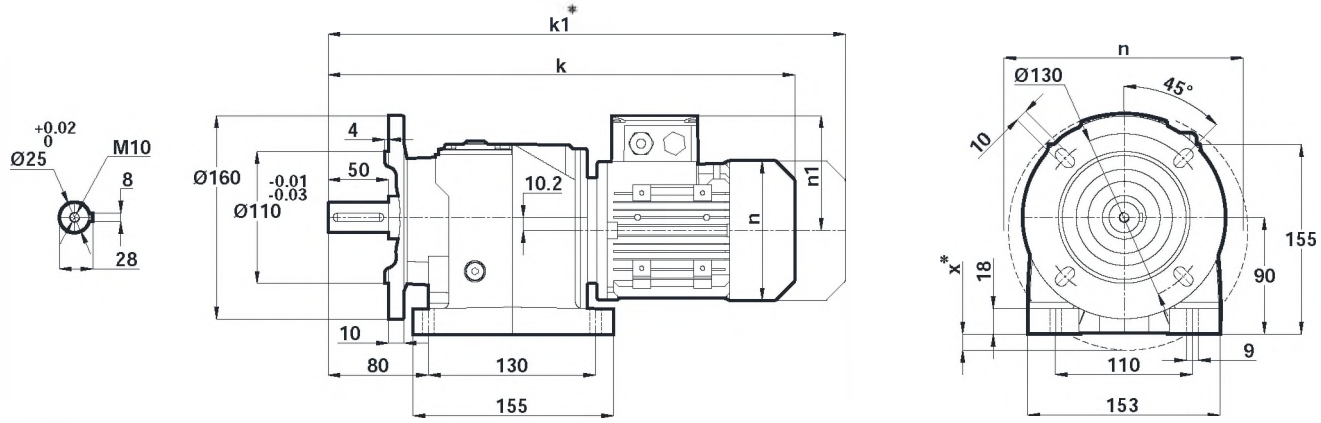


Opt. 2

* **La misura "k1" è per motori dotati di freno.** *Dimension " k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

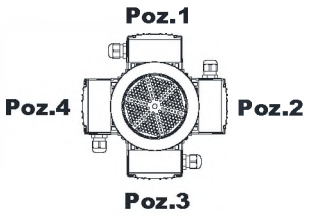
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF102
MRF103



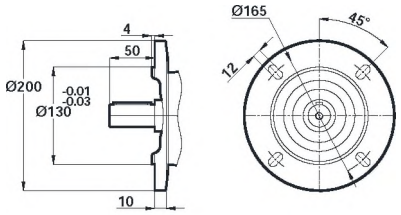
Taglia motore / *Motor Size* / Motorbaugroße					
	63	71	80	90S	90L
k	394	424	458	497	497
k1	455	515	551	601.5	601.5
n	121	137	155	176	176
n1	97	112	121	132	132
x	-	-	-	9	9

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80-90

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

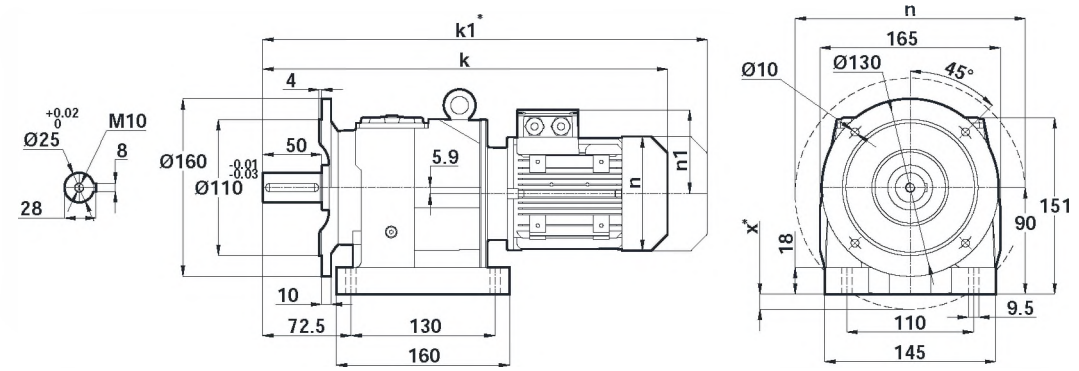


Opt. 1

* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

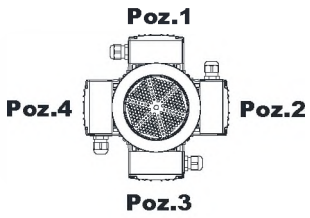
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF172
MRF173



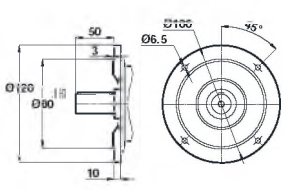
Taglia motore / *Motor Size* / Motorbaugroße							
	63	71	80	90S	90L	100L	112M
k	395	424	458	497	497	545	569
k1	456	515	551	601.5	601.5	664.5	673.5
n	121	137	155	176	176	193	215
n1	97	112	121	132	132	147	158
x	-	-	-	4	4	13	24

Morsettiera / *Terminal Box* / Klemmenkasten

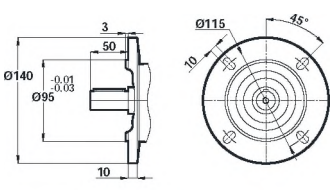


63-71-80-90-100-112

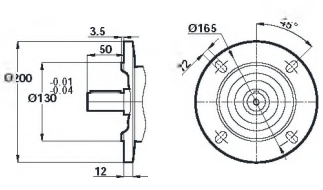
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



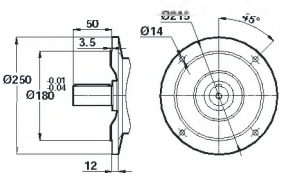
Opt. 1



Opt. 2



Opt. 3



Opt. 4

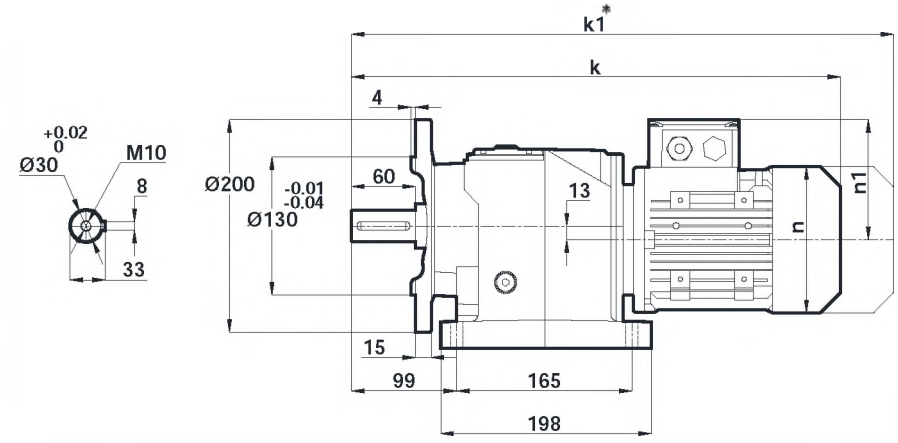
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

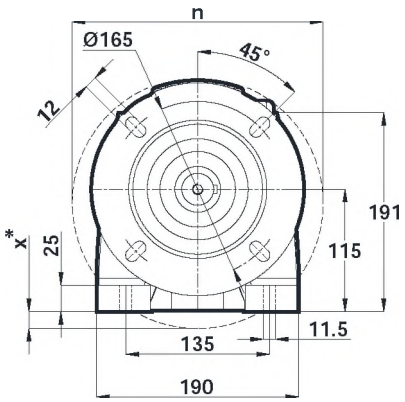


Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

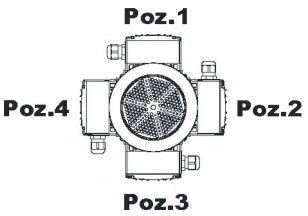
MRF202
MRF203





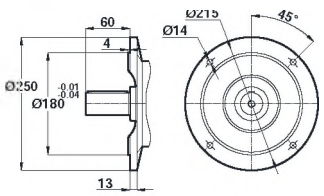
Taglia motore / *Motor Size* / Motorbaugroße							
	63	71	80	90S	90L	100L	112M
k	442	470	504	543	543	591	615
k1	503	561	597	647.5	647.5	710.5	719.5
n	121	137	155	176	176	193	215
n1	97	112	121	132	132	147	158
x	-	-	-	-	-	-	6

Morsettiera / *Terminal Box* / Klemmenkasten

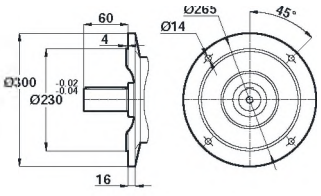


63-71-80-90-100-112

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

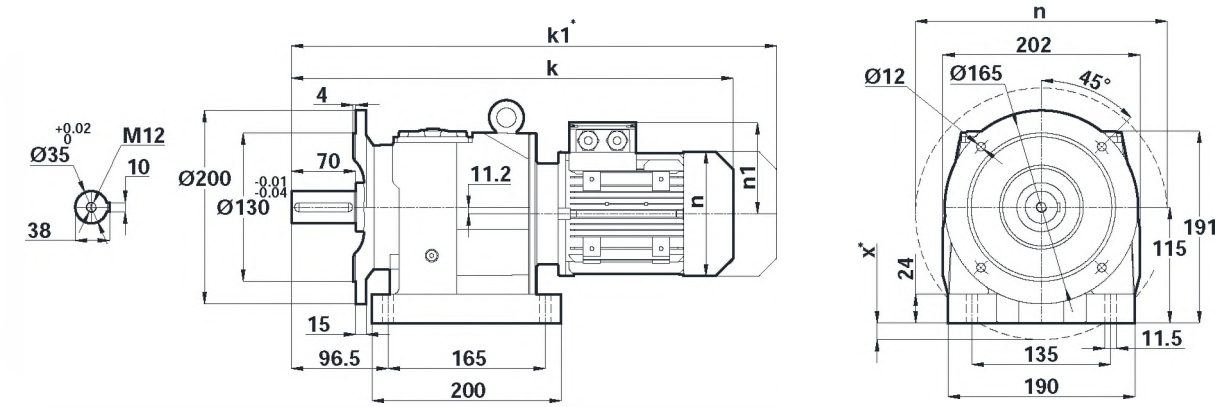


Opt. 2

* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

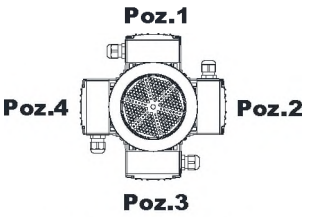
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF272
MRF273



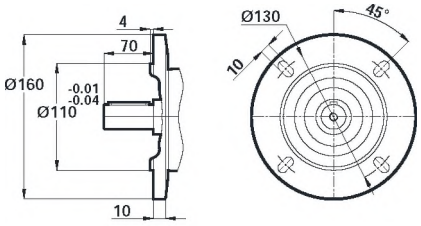
Taglia motore / *Motor Size* / Motorbaugroße									
	63	71	80	90S	90L	100L	112M	132S	132M
k	443	471	505	544	544	592	616	698	698
k1	504	562	598	648.5	648.5	711.5	720.5	828	828
n	121	137	155	176	176	193	215	257	257
n1	97	112	121	132	132	147	158	179	179
x	-	-	-	-	-	-	4	25	25

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

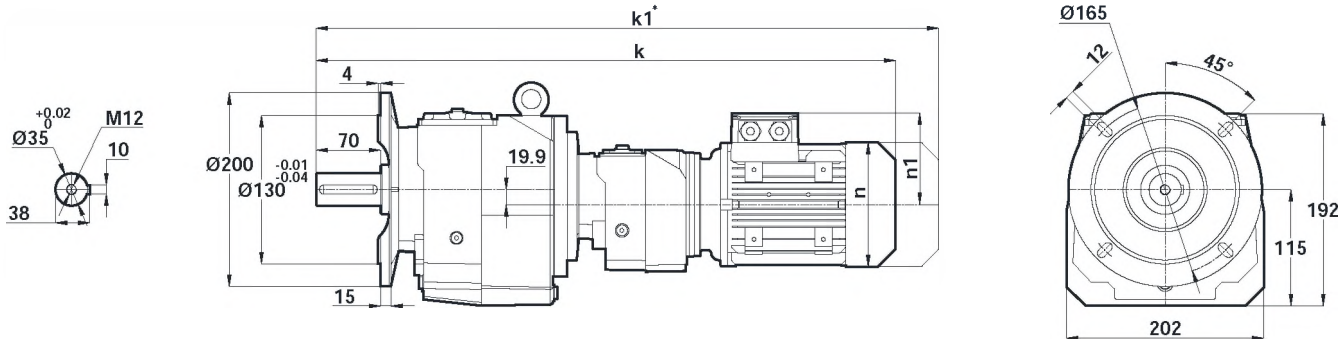
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

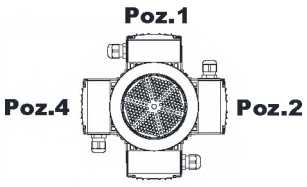
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF275
MRF276



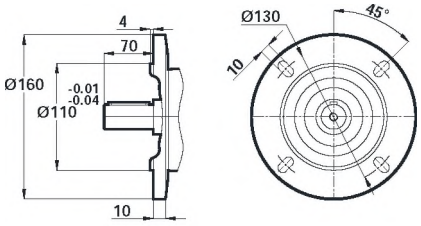
Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	593	622
k1	654	713
n	121	137
n1	97	112

Morsettiera / *Terminal Box* / Klemmenkasten



63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

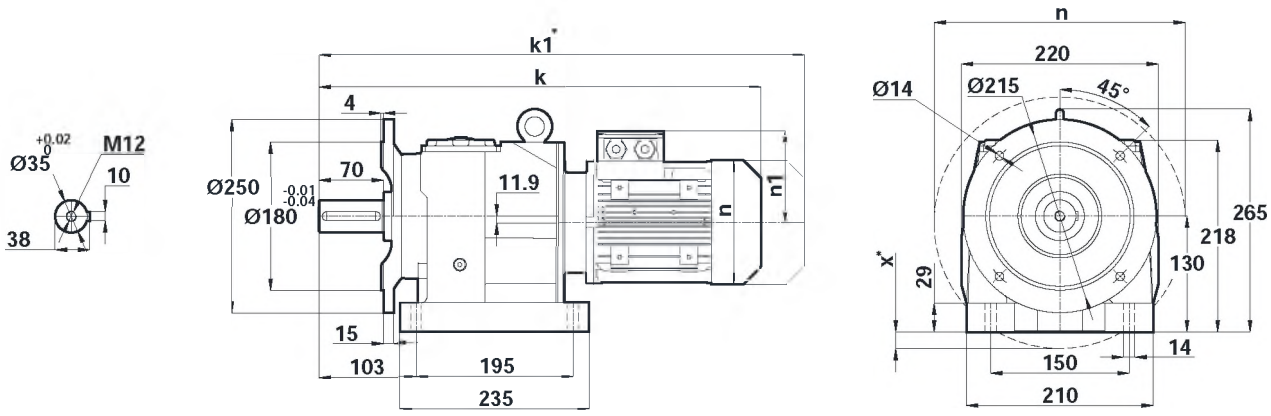


Opt. 1

* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

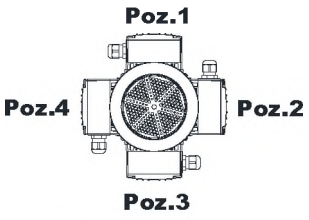
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF282
MRF283



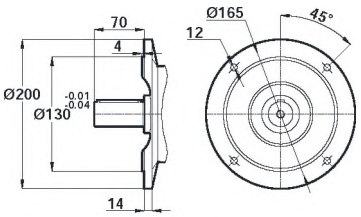
Taglia motore / *Motor Size* / Motorbaugroße								
	71	80	90S	90L	100L	112M	132S	132M
k	489	523	562	562	609	634	720	720
k1	580	616	666.5	666.5	728.5	738.5	850	850
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
x	-	-	-	-	-	-	11	11

Morsettiera / *Terminal Box* / Klemmenkasten



71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

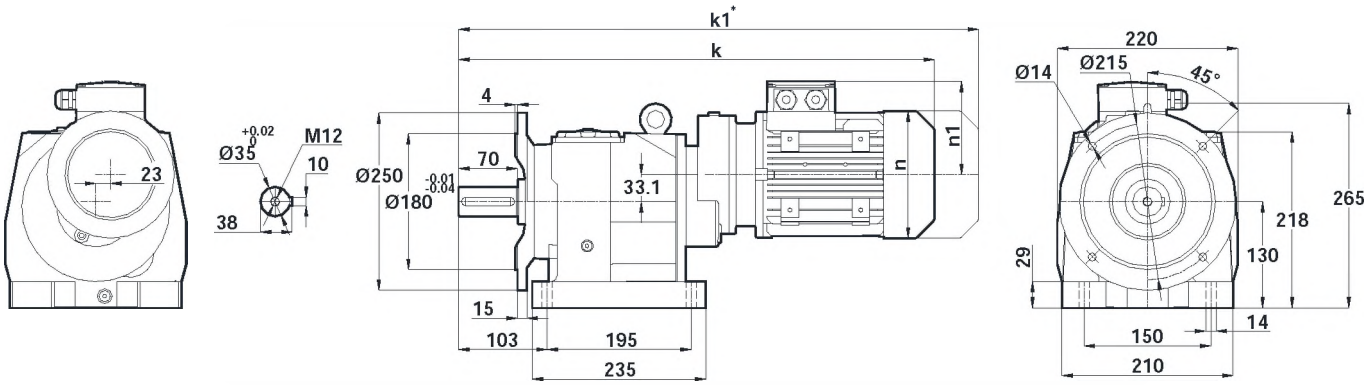


Opt. 1

* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

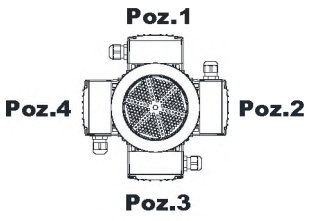
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF284



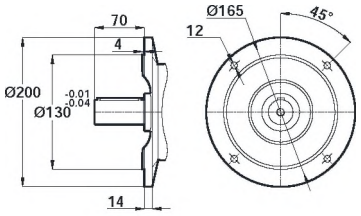
Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	540	568
k1	601	659
n	121	137
n1	97	112

Morsettiera / *Terminal Box* / Klemmenkasten



63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

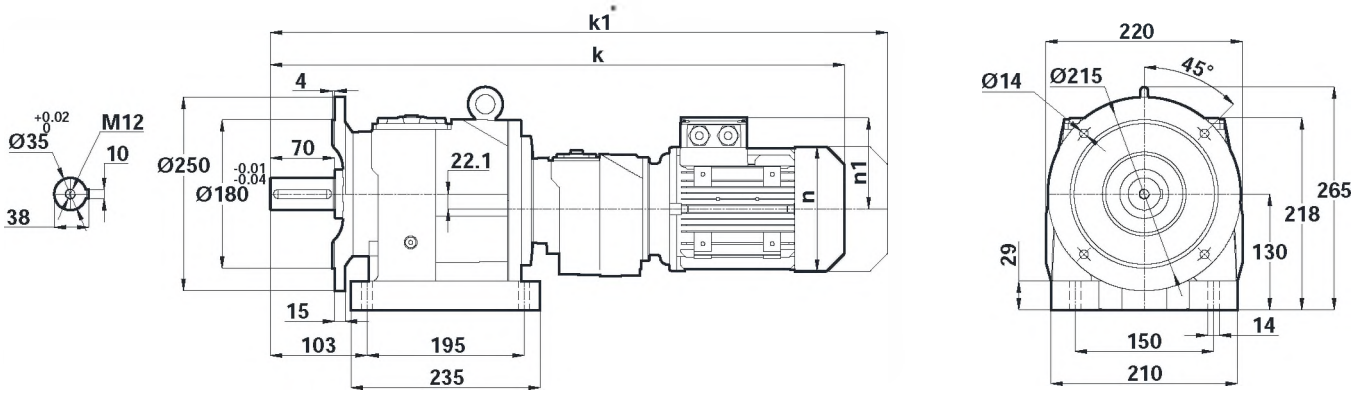


Opt. 1

* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

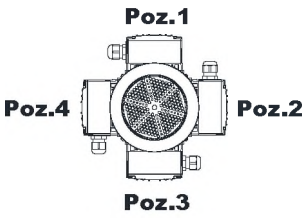
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF285
MRF286



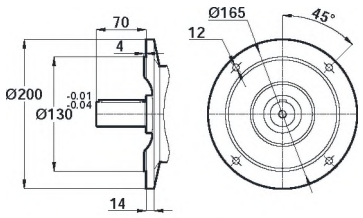
Taglia motore / *Motor Size* / Motorbaugroße	
	63
k	641
k1	702
n	121
n1	97

Morsettiera / *Terminal Box* / Klemmenkasten



63

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

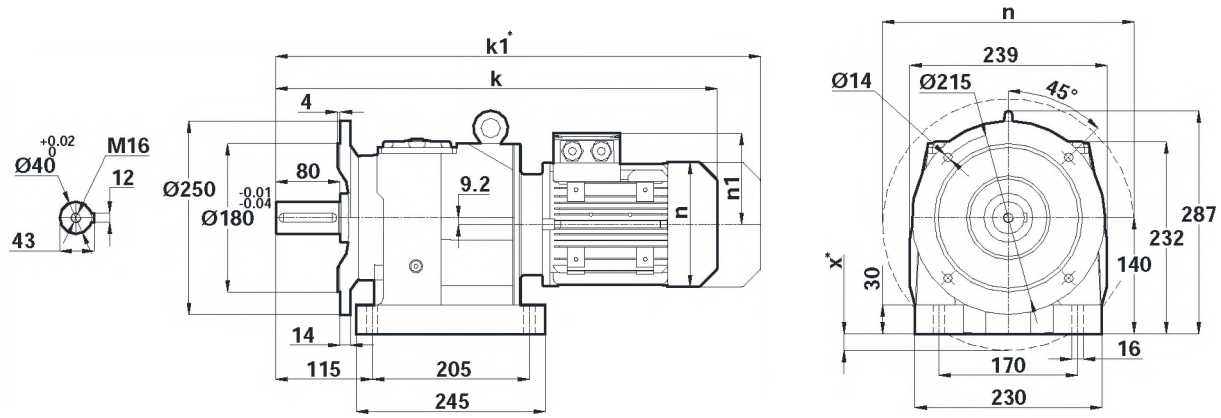
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

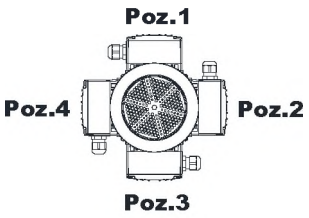
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF372
MRF373



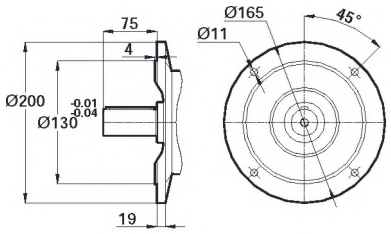
Taglia motore / *Motor Size* / Motorbaugroße								
	71	80	90S	90L	100L	112M	132S	132M
k	510	544	583	583	630	655	741	741
k1	601	637	687.5	687.5	749.5	759.5	871	871
n	137	155	176	176	193	215	257	179
n1	112	121	132	132	147	158	257	179
x	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten

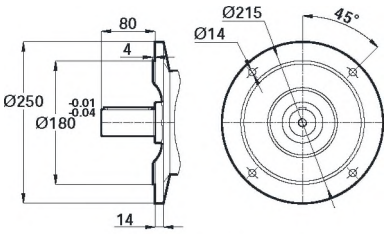


71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

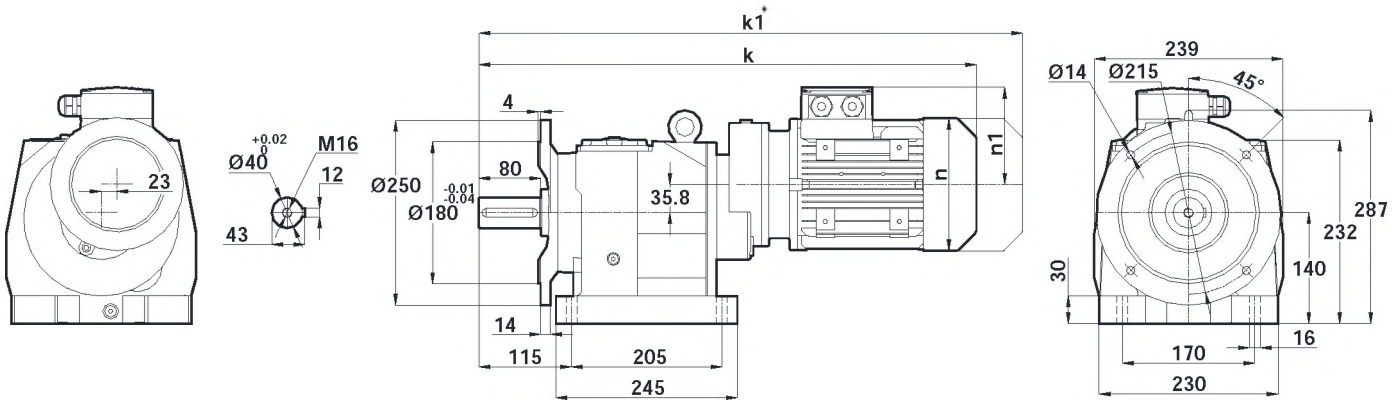


Opt. 2

* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

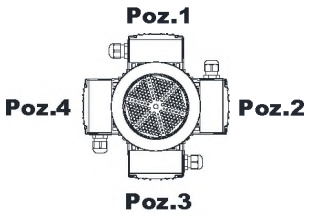
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF374



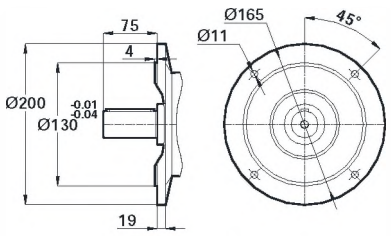
Taglia motore / *Motor Size* / Motorbaugroße			
	63	71	80
k	561	589	623
k1	622	680	716
n	121	137	155
n1	97	112	121

Morsettiera / *Terminal Box* / Klemmenkasten

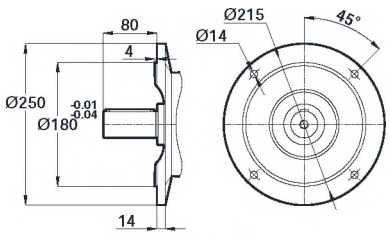


63-71-80

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

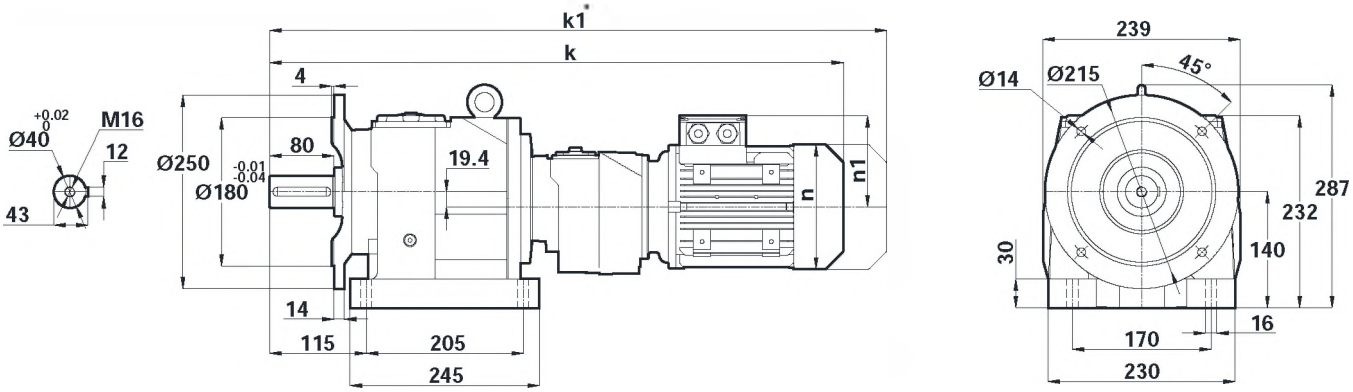
* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

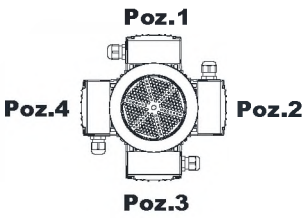
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF375
MRF376



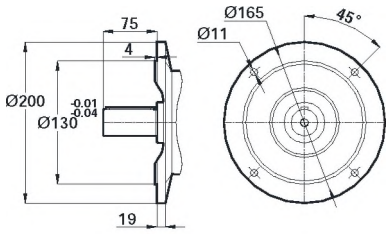
Taglia motore / *Motor Size* / Motorbaugroße	
	63
k	662
k1	723
n	121
n1	97

Morsettiera / *Terminal Box* / Klemmenkasten

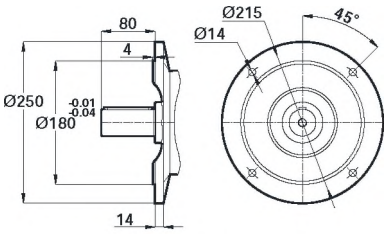


63

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

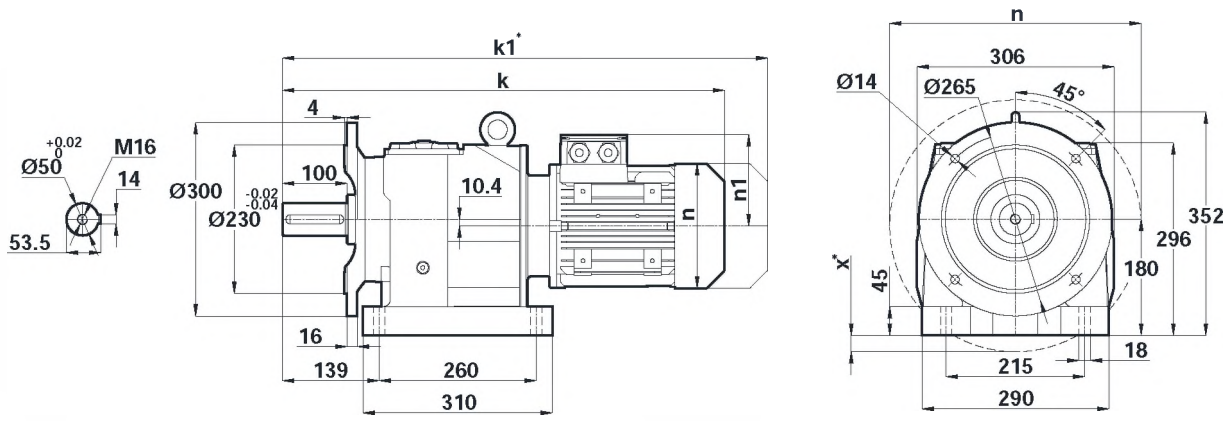


Opt. 2

* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

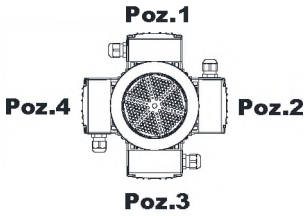
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF472
MRF473



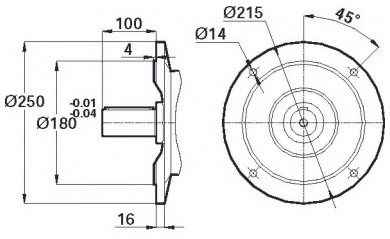
Taglia motore / *Motor Size* / Motorbaugroße											
	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	611	650	650	694	719	804	804	900	900	971	971
k1	704	754.5	754.5	813.5	823.5	934	934	1080	1080	1141.5	1141.5
n	155	176	176	193	215	257	257	315	315	347	347
n1	121	132	132	147	158	179	179	219	219	234	234
x	-	-	-	-	-	-	-	-	-	3	3

Morsettiera / *Terminal Box* / Klemmenkasten



80-90-100-112-132-160-180

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

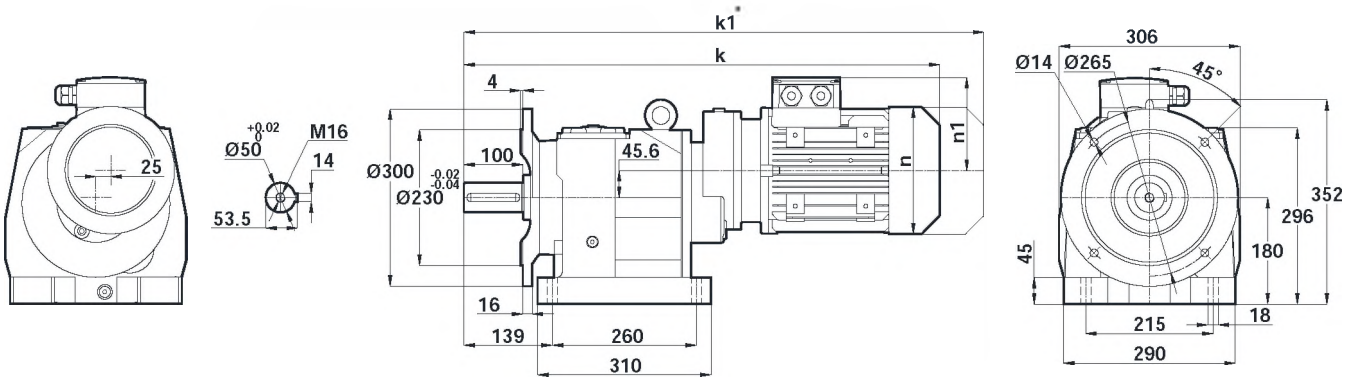


Opt. 1

* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.
x: se il motore è inferiore al piano di montaggio del piede / *x: If Motor is lower than foot mounting plane* / x: Wenn der Motor unter der Fußmontageebene ist

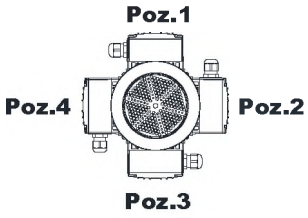
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF474



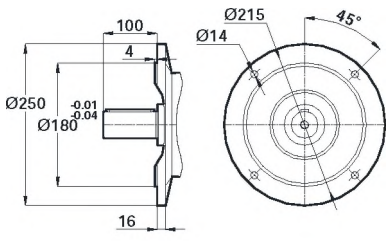
Taglia motore / *Motor Size* / Motorbaugroße		
	71	80
k	670	806
k1	761	899
n	137	155
n1	112	121

Morsettiera / *Terminal Box* / Klemmenkasten



71-80

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

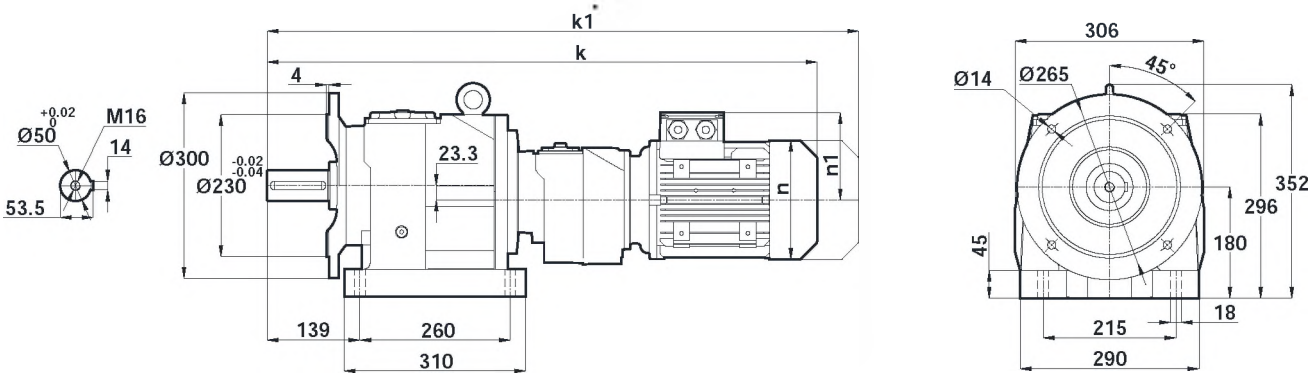


Opt. 1

* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

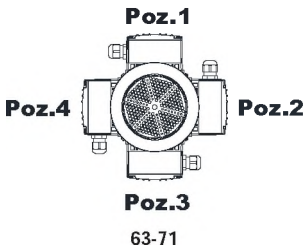
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MRF475
MRF476



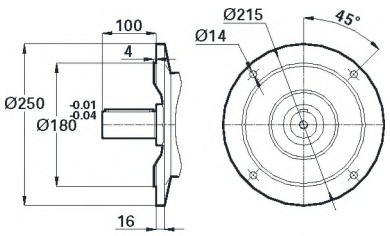
Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	722	800
k1	783	891
n	121	137
n1	97	112

Morsettiera / *Terminal Box* / Klemmenkasten



63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



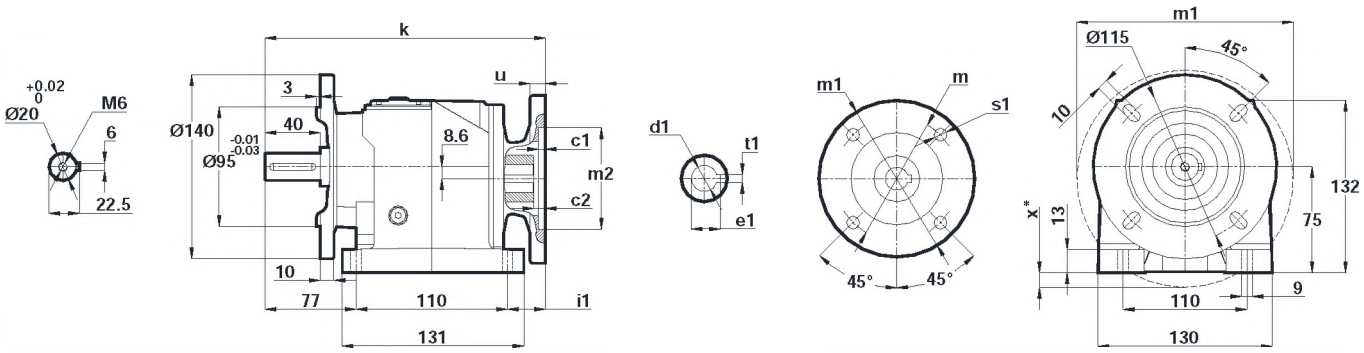
Opt. 1

* **La misura "k1" è per motori dotati di freno.** *Dimension "k1" is for motors with brake.* Maße " k1 " ist für Bremsenmotoren.

Note / *Notes* / Notizen

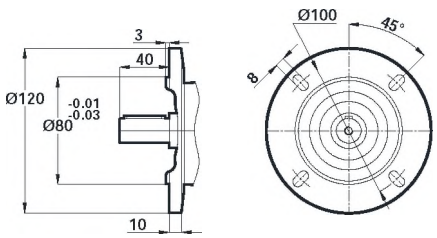
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF002-A..
MNF003-A..

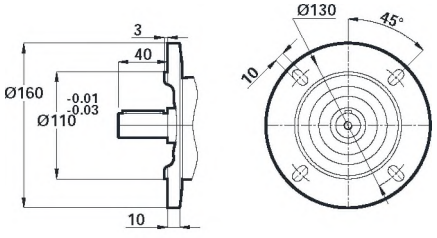


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B5	3.5	5	10	115	140	95	28	10	214	11	4	12.8	4
71/B5	4	4.5	11	130	160	110	29.5	12	216	14	5	16.3	14
80/B5	4	5	12	165	200	130	44.5	12	231	19	6	21.8	34
90/B5	4	5	12	165	200	130	44.5	12	231	24	8	27.3	34

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

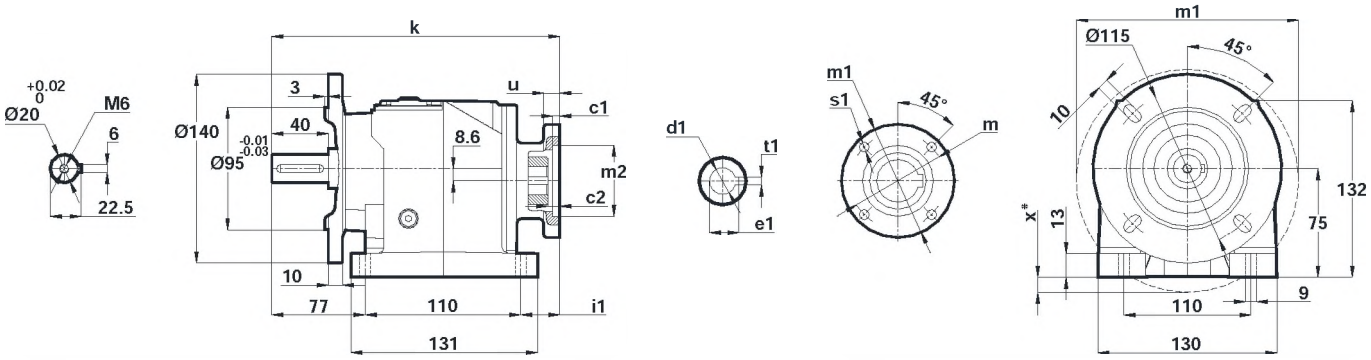


Opt. 2

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

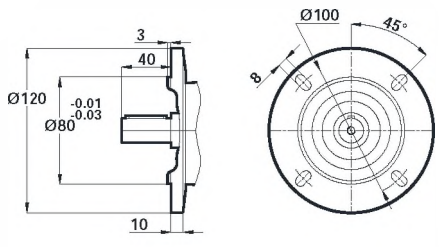
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF002-B..
MNF003-B..

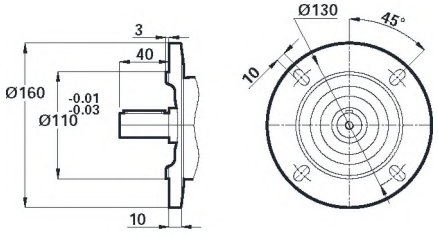


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B14	2.5	5	5.5	75	90	60	28	10	214	11	4	12.8	-
71/B14	3	4.5	7	85	105	70	29.5	10	216	14	5	16.3	-
80/B14	4	5	7	100	120	80	44.5	12	231	19	6	21.8	-
90/B14	4	5	9	115	140	95	44.5	12	231	24	8	27.3	4

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*



Opt. 1

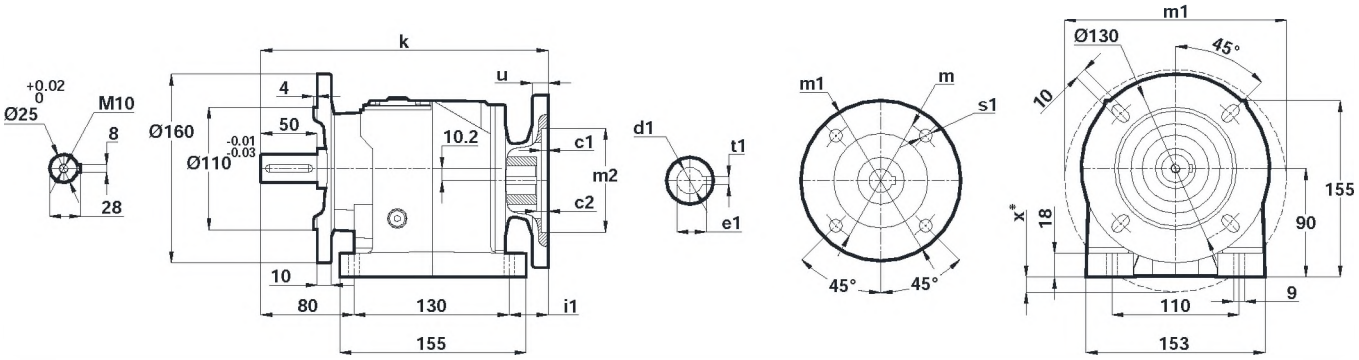


Opt. 2

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

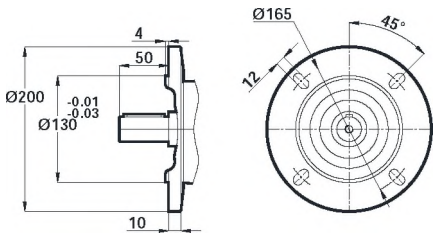
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF102-A..
MNF103-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B5	4	7	10	115	140	95	28.5	12	240	11	4	12.8	-
71/B5	4	4.5	12	130	160	110	28.5	12	240	14	5	16.3	0.5
80/B5	4	5	12	165	200	130	43.5	12	255	19	6	21.8	20
90/B5	4	5	12	165	200	130	43.5	12	255	24	8	27.3	20

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

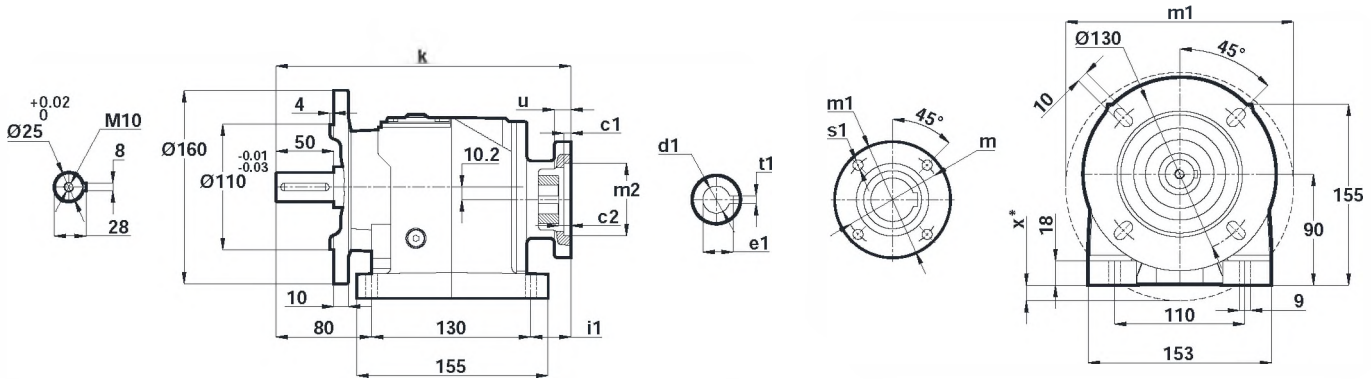


Opt. 1

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

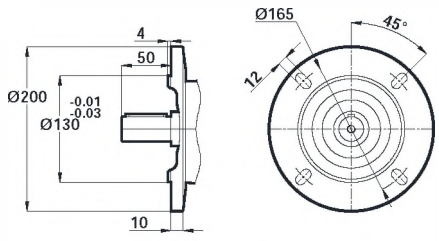
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF102-B..
MNF103-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B14	2.5	5	5.5	75	90	60	28.5	10	240	11	4	12.8	-
71/B14	3	4.5	7	85	105	70	28.5	10	240	14	5	16.3	-
80/B14	4	4.7	7	100	120	80	43.5	12	255	19	6	21.8	-
90/B14	4	4.7	9	115	140	95	43.5	12	255	24	8	27.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*

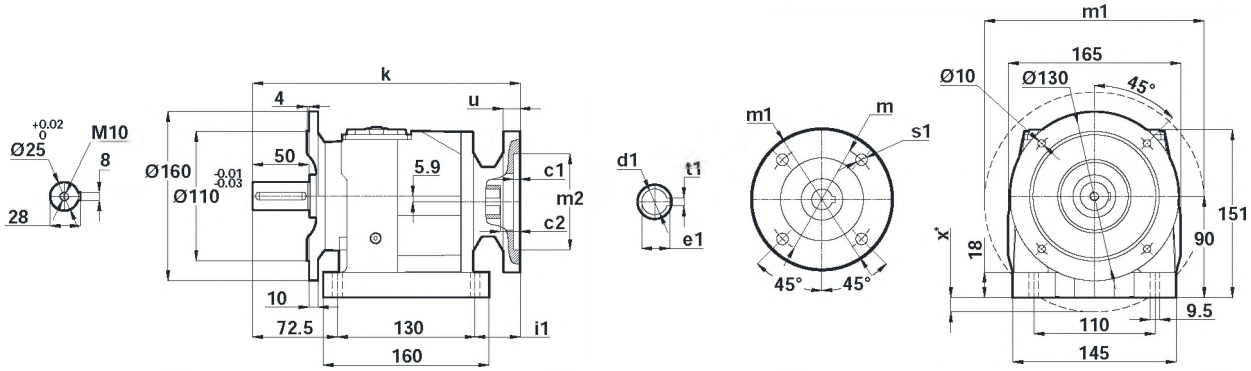


Opt. 1

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

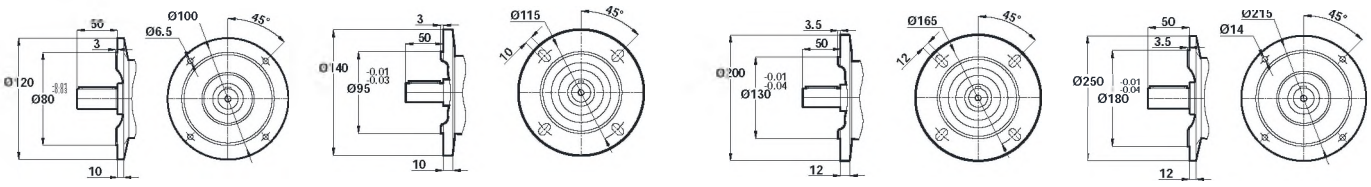
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF172-A..
MNF173-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B5	3.5	5	10	115	140	95	38.5	10	241	11	4	12.8	-
71/B5	4	4.5	11	130	160	110	40	12	243	14	5	16.3	-
80/B5	4	5	12	165	200	130	55	12	258	19	6	21.8	16
90/B5	4	5	12	165	200	130	55	12	258	24	8	27.3	16
100/B5	4	5	15	215	250	180	66	12	269	28	8	31.3	41
112/B5	4	5	15	215	250	180	66	12	269	28	8	31.3	41

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

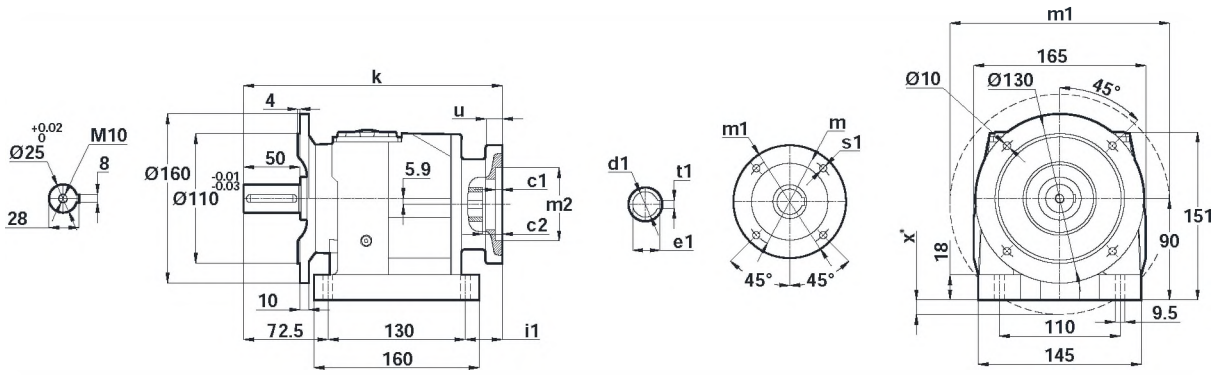


Opt. 1 Opt. 2 Opt. 3 Opt. 4

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

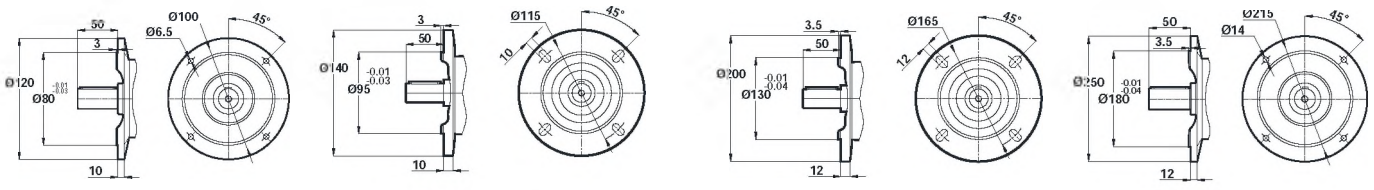
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF172-B..
MNF173-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
71/B14	3	4.5	7	85	105	70	40	10	243	14	5	16.3	-
80/B14	4	5	7	100	120	80	55	120	258	19	6	21.8	-
90/B14	4	5	9	115	140	95	55	12	258	24	8	27.3	-
100/B14	4	5.5	9	130	160	110	66	12	269	28	8	31.3	-
112/B14	4	5.5	9	130	160	110	66	12	269	28	8	31.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*

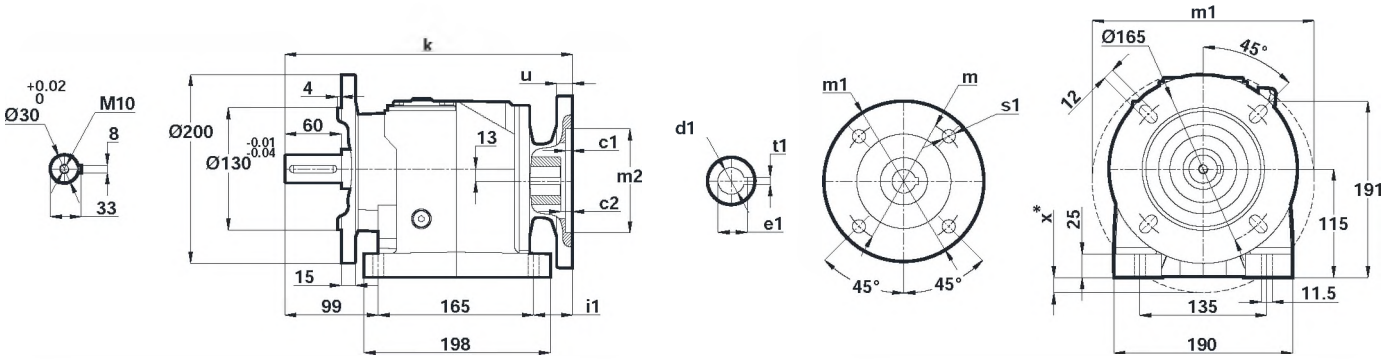


Opt. 1 Opt. 2 Opt. 3 Opt. 4

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

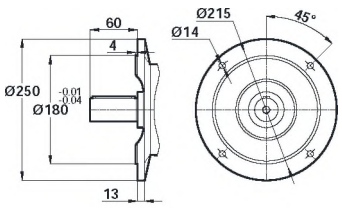
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF202-A..
MNF203-A..

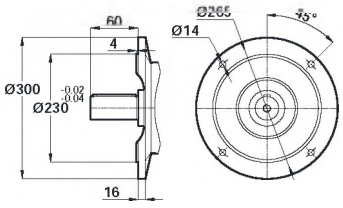


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B5	4	5	9	115	140	95	58.5	12	323	11	4	12.8	-
71/B5	4	8.5	11	130	160	110	29.5	12	294	14	5	163	-
80/B5	4	5	12	165	200	130	58.5	12	323	19	6	21.8	-
90/B5	4	5	12	165	200	130	58.5	12	323	24	8	27.3	-
100/B5	4	5.5	15	215	250	180	51.5	12	316	28	8	31.3	23
112/B5	4	5.5	15	215	250	180	51.5	12	316	28	8	31.3	23

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

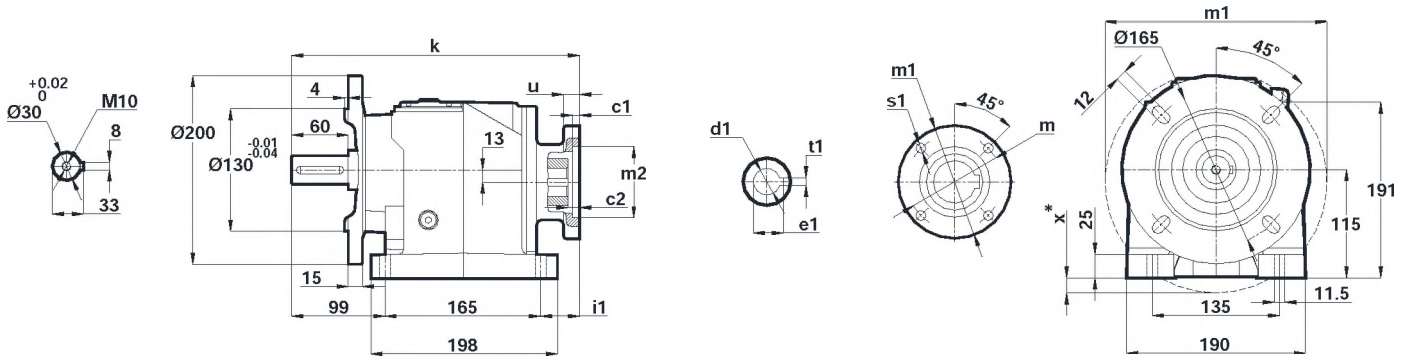


Opt. 2

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

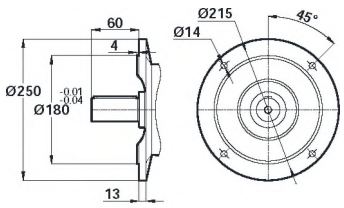
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF202-B..
MNF203-B..

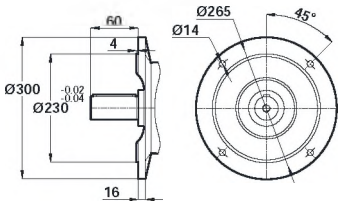


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
71/B14	3	8.5	7	85	105	70	29.5	10	294	14	5	16.3	-
80/B14	4	5	7	100	120	80	58.5	12	323	19	6	21.8	-
90/B14	4	5	9	115	140	95	58.5	12	323	24	8	27.3	-
100/B14	4	5.5	9	130	160	110	51.5	12	316	28	8	31.3	-
112/B14	4	5.5	9	130	160	110	51.5	12	316	28	8	31.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

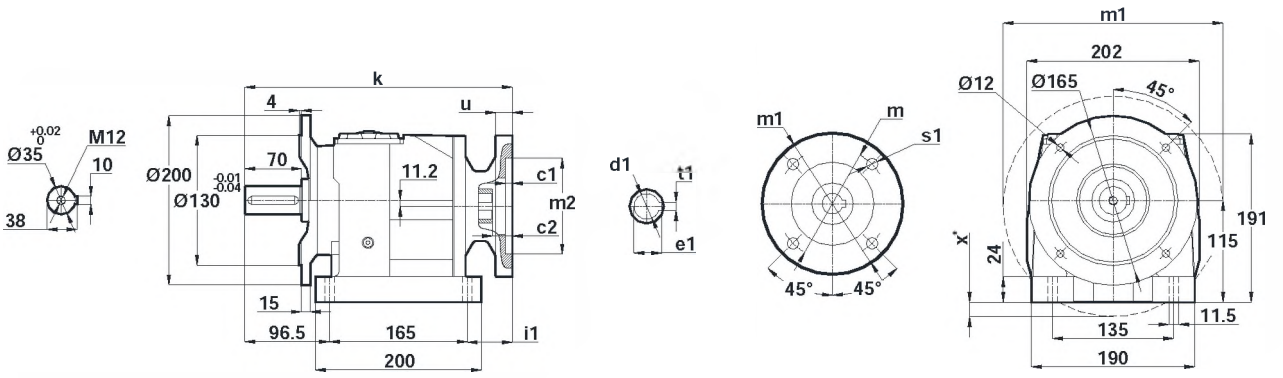


Opt. 2

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

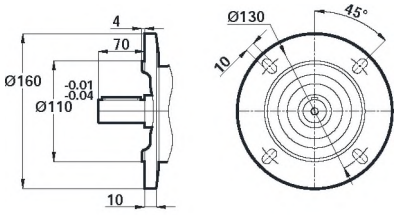
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF272-A..
MNF273-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
63/B5	3.5	5	9	115	140	95	62	12	324	11	4	12.8	-
71/B5	4	8.5	11	130	160	110	33	12	295	14	5	16.3	-
80/B5	4	5	12	165	200	130	62	12	324	19	6	21.8	-
90/B5	4	5	12	165	200	130	62	12	324	24	8	27.3	-
100/B5	4.5	5.5	15	215	250	180	55	12	317	28	8	31.3	22
112/B5	4.5	5.5	15	215	250	180	55	12	317	28	8	31.3	22
132/B5	4.5	7	15	265	300	230	92	15	354	38	10	41.3	47

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

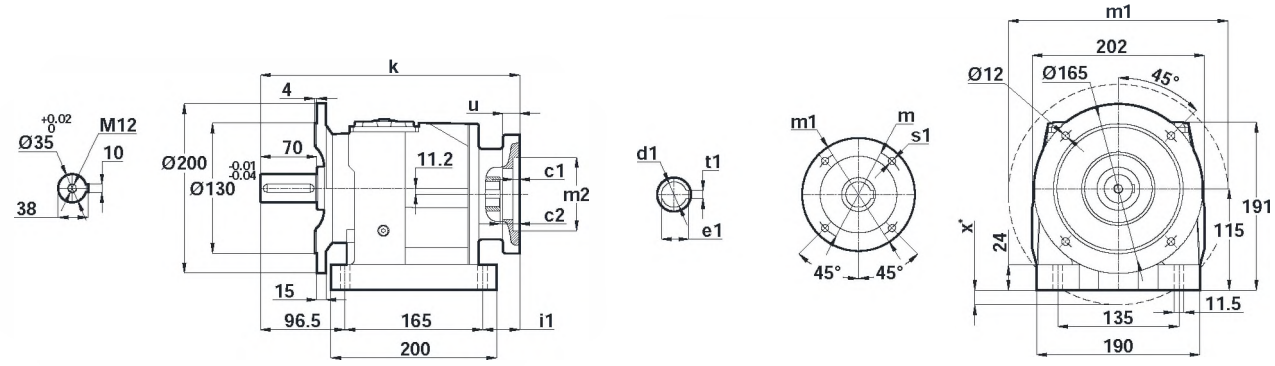


Opt. 1

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

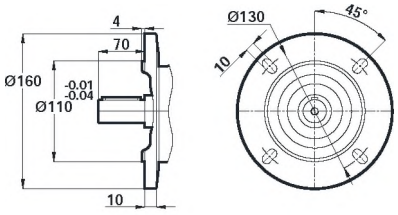
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF272-B..
MNF273-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
71/B14	3	8.5	7	85	105	70	33	10	295	14	5	16.3	-
80/B14	4	5	7	100	120	80	62	12	324	19	6	21.8	-
90/B14	4	5	9	115	140	95	62	12	324	24	8	27.3	-
100/B14	3.5	5.5	9	130	160	110	55	12	317	28	8	31.3	-
112/B14	3.5	5.5	9	130	160	110	55	12	317	28	8	31.3	-
132/B14	4.4	6	11	165	200	130	92	15	354	35	10	41.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*

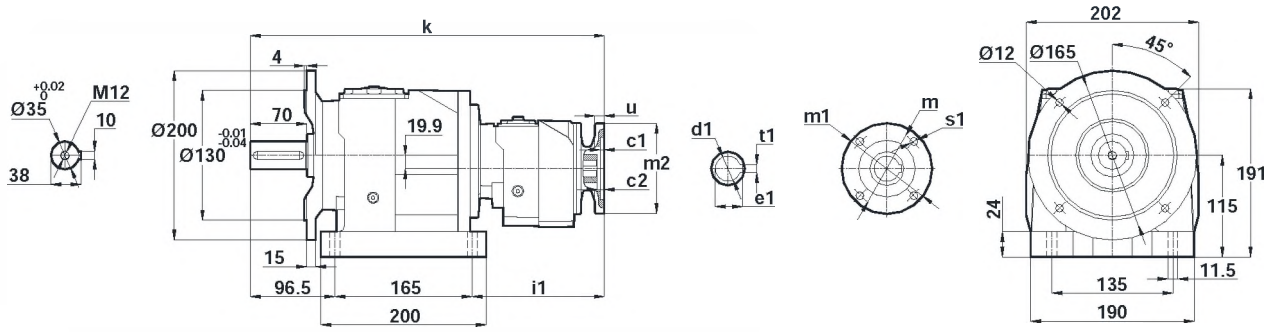


Opt. 1

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

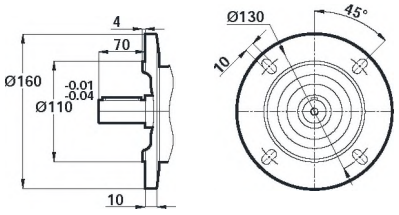
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF275-A..
MNF276-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	177.5	10	439	11	4	12.8
71/B5	4	4.5	11	130	160	110	179	12	441	14	5	16.3

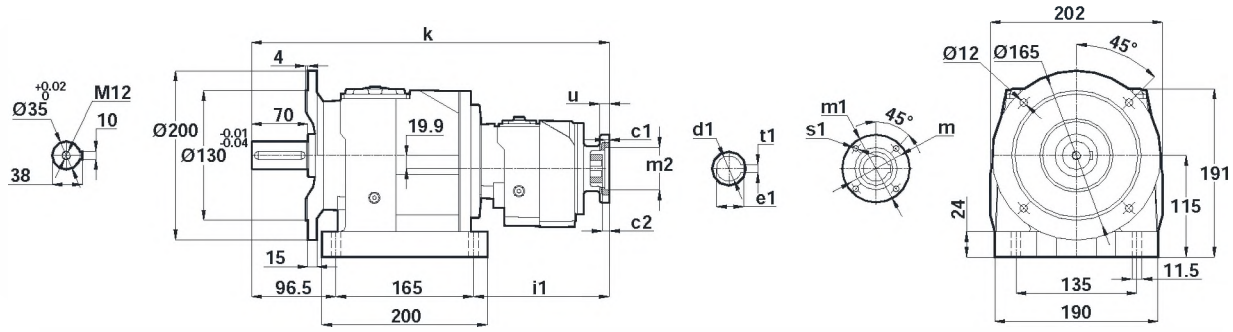
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

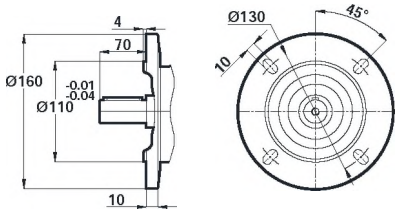
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF275-B..
MNF276-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B14	2.5	5	5.5	75	90	60	177.5	10	439	11	4	12.8
71/B14	3	4.5	7	85	105	70	179	10	441	14	5	16.3

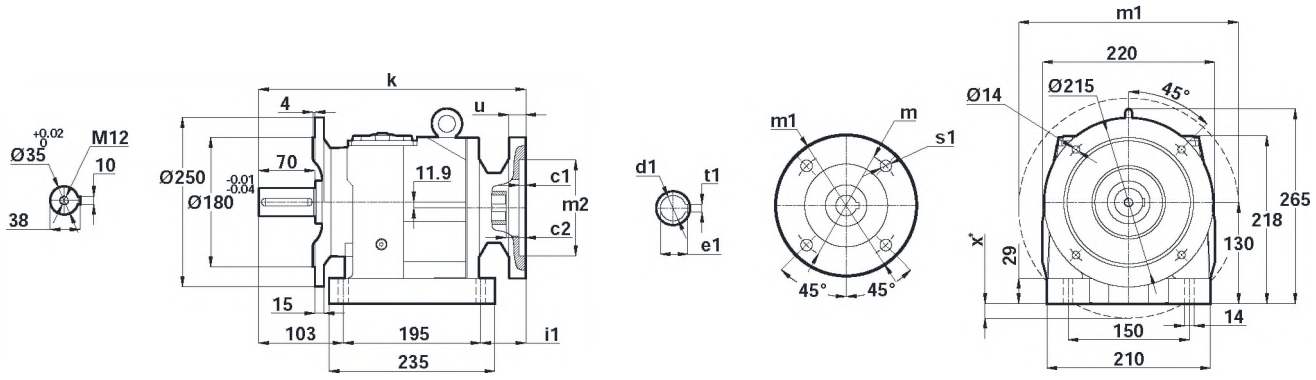
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*



Opt. 1

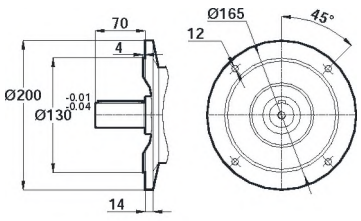
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF282-A..
MNF283-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
71/B5	4	9	11	130	160	110	45	12	343	14	5	16.3	-
80/B5	4	9	12	165	200	130	45	12	343	19	6	21.8	-
90/B5	4	9	12	165	200	130	45	12	343	24	8	27.3	-
100/B5	4.5	9	15	215	250	180	52	15	350	28	8	31.3	7
112/B5	4.5	9	15	215	250	180	52	15	350	28	8	31.3	7
132/B5	4.5	7	15	265	300	230	82	15	380	38	10	41.3	32

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

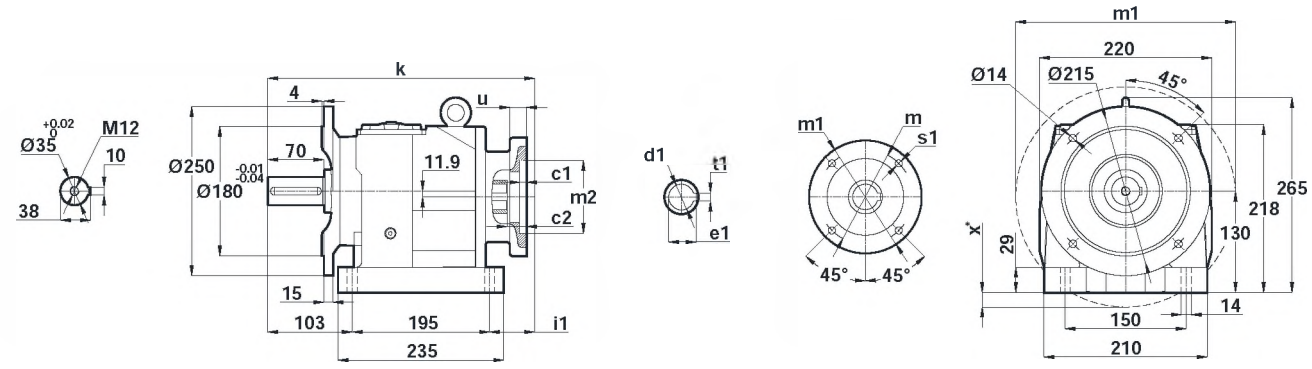


Opt. 1

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

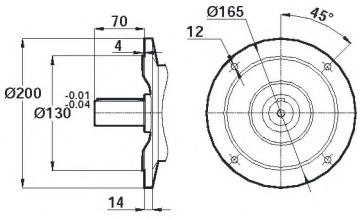
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF282-B..
MNF283-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
80/B14	4	9	7	100	120	80	45	12	343	19	6	21.8	-
90/B14	4	9	9	115	140	95	45	12	343	24	8	26.3	-
100/B14	4	9	9	130	160	110	52	15	350	28	8	31.3	-
112/B14	4	9	9	130	160	110	52	15	350	28	8	31.3	-
132/B14	4.5	7	11	165	200	130	82	15	380	38	10	41.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*

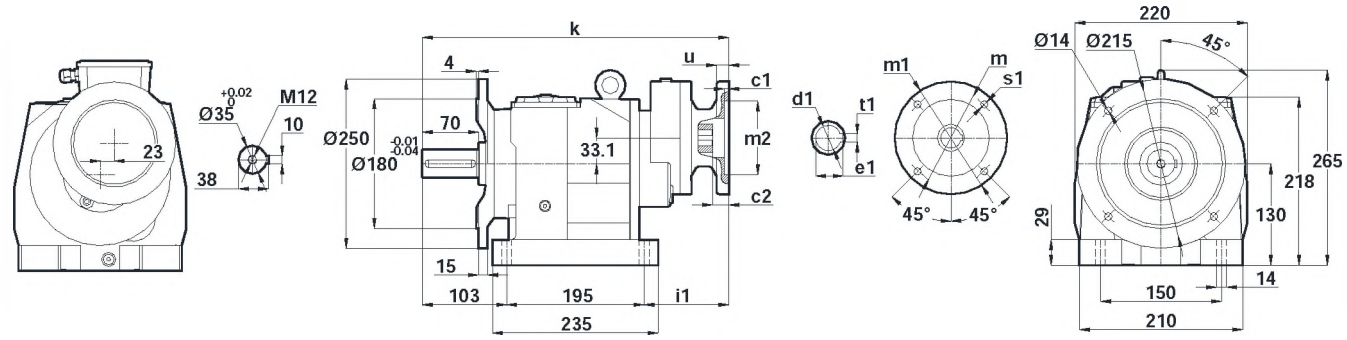


Opt. 1

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

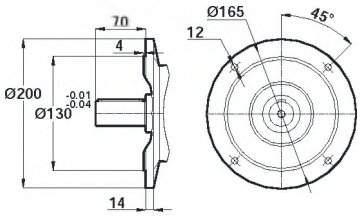
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF284-A..
MNF284-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	122	10	420	11	4	12.8
71/B5	4	4.5	11	130	160	110	93	12	391	14	5	16.3
71/B14	3	4.5	7	85	105	70	93	10	391	14	5	16.3

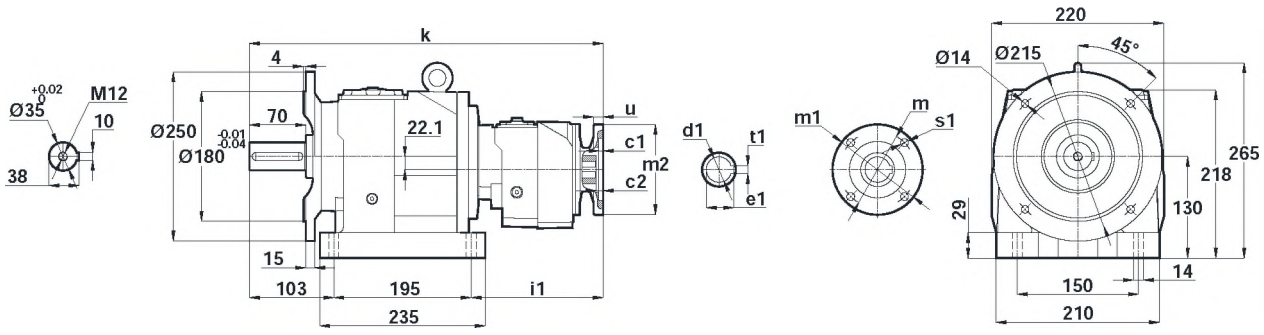
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

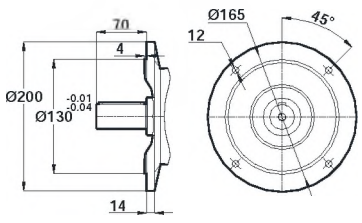
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF285-A.. / B..
MNF286-A.. / B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	4	7	10	115	140	95	188	12	486	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	188	10	486	11	4	12.8

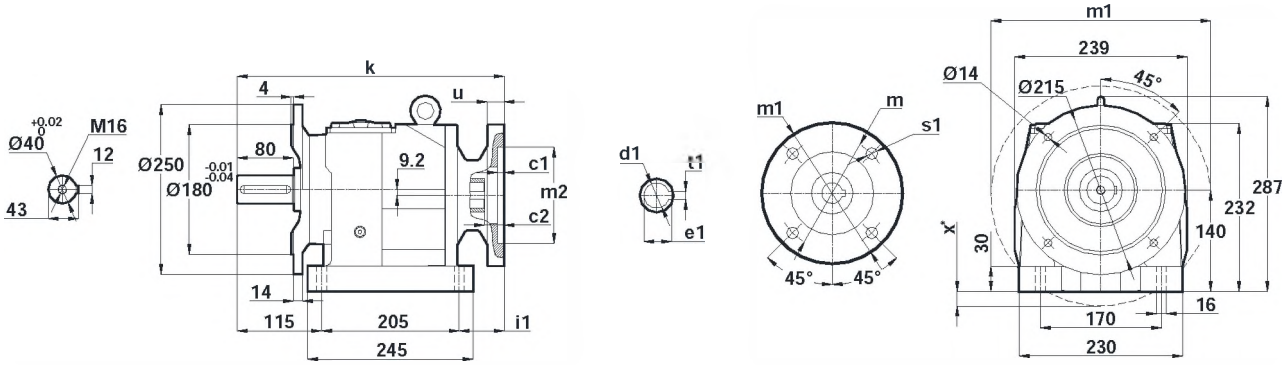
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

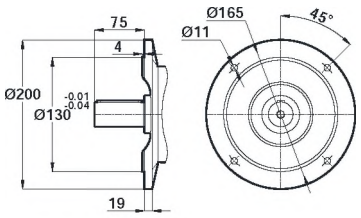
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF372-A..
MNF373-A..

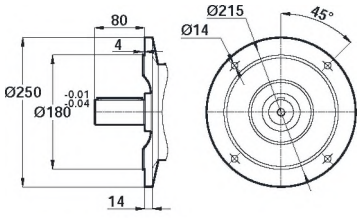


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
71/B5	4	9	11	130	160	110	43.5	12	364	14	5	16.3	-
80/B5	4	9	12	165	200	130	43.5	12	364	19	6	21.8	-
90/B5	4	9	12	165	200	130	43.5	12	364	24	8	27.3	-
100/B5	4.5	9	15	215	250	180	60.5	15	381	28	8	31.3	-
112/B5	4.5	9	15	215	250	180	60.5	15	381	28	8	31.3	-
132/B5	4.5	7	15	265	300	230	80.5	15	401	38	10	41.3	20

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

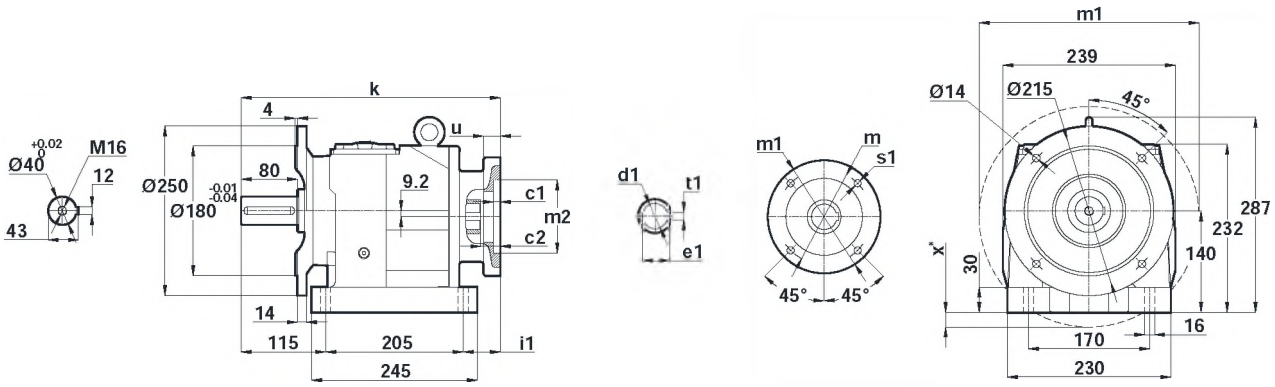


Opt. 2

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

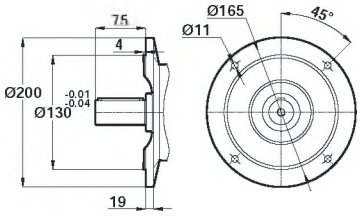
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF372-B..
MNF373-B..

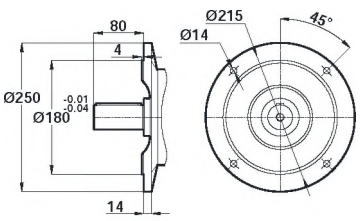


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
80/B14	4	9	7	100	120	80	43.5	12	364	19	6	21.8	-
90/B14	4	9	9	115	140	95	43.5	12	364	24	8	26.3	-
100/B14	4	9	9	130	160	110	60.5	15	381	28	8	31.3	-
112/B14	4	9	9	130	160	110	60.5	15	381	28	8	31.3	-
132/B14	4.5	9	11	165	200	130	80.5	15	401	38	10	41.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*



Opt. 1

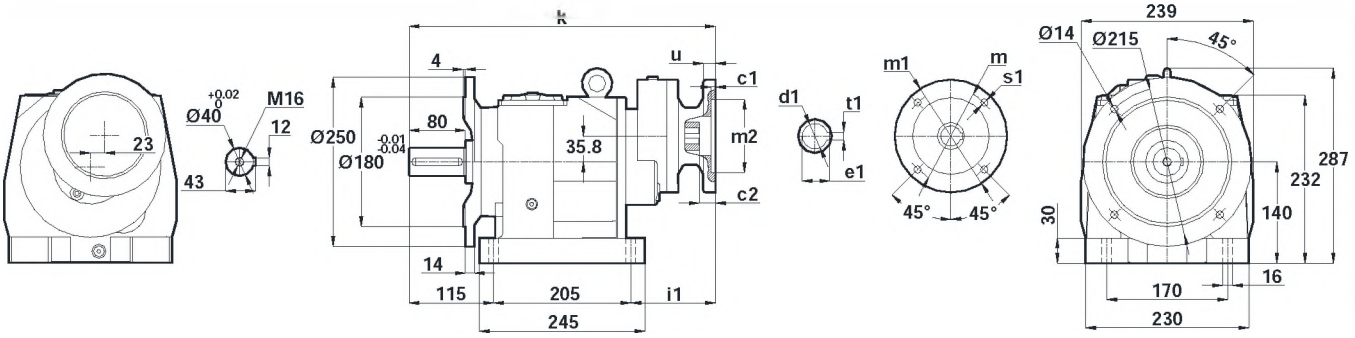


Opt. 2

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

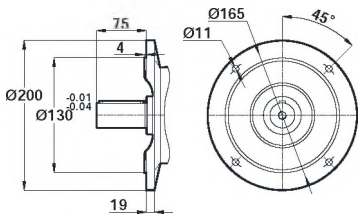
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF374-A..
MNF374-B..

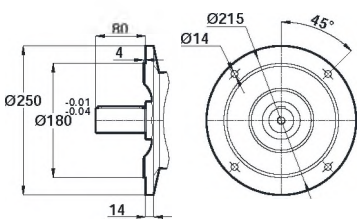


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	120.5	12	441	11	4	12.8
71/B5	4	8.5	11	130	160	110	91.5	12	412	14	5	16.3
80/B5	4	5	12	165	200	130	120.5	12	441	19	6	21.8
71/B14	3	8.5	7	85	105	70	91.5	10	412	14	5	16.3
80/B14	4	5	7	100	120	80	120.5	12	441	19	6	21.8

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



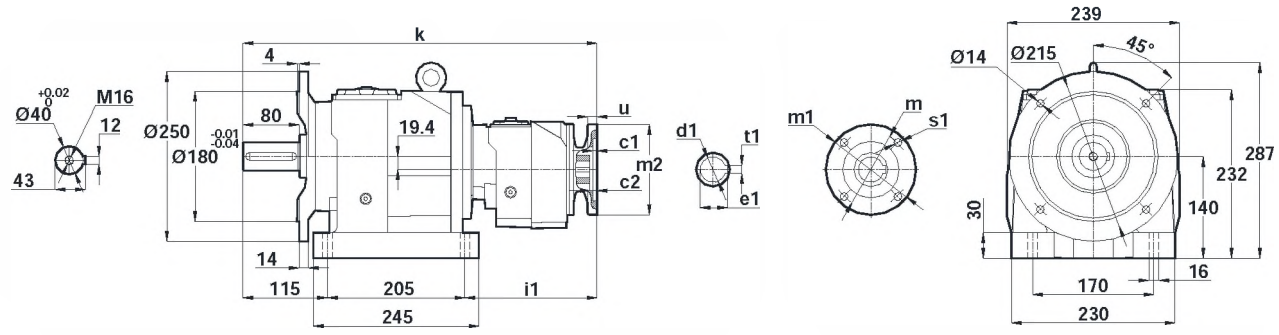
Opt. 1



Opt. 2

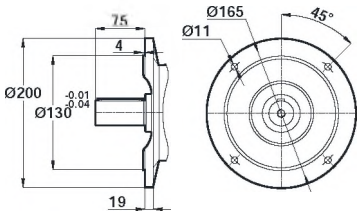
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF375-A.. / B..
MNF376-A.. / B..

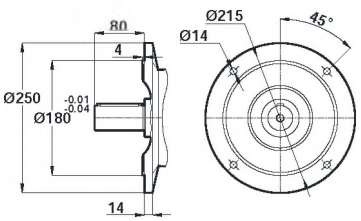


IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	186.5	10	507	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	186.5	10	507	11	4	12.8

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



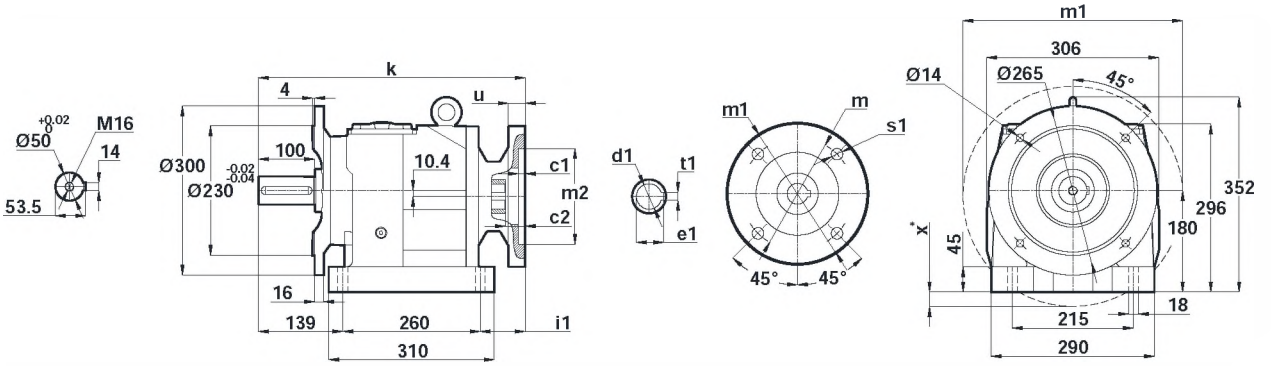
Opt. 1



Opt. 2

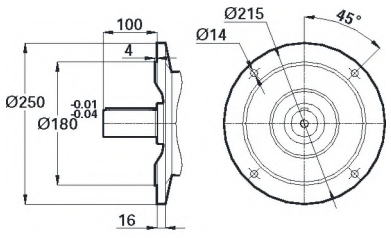
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF472-A..
MNF473-A..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
80/B5	4	5	12	165	200	130	27.5	12	427	19	6	21.8	-
90/B5	4	5	12	165	200	130	27.5	12	427	24	8	27.3	-
100/B5	4.5	9	15	215	250	180	46	15	445	28	8	31.3	-
112/B5	4.5	9	15	215	250	180	46	15	445	28	8	31.3	-
132/B5	4.5	6	15	265	300	230	64.5	15	464	38	10	41.3	-
160/B5	5.5	10	19	300	350	250	144	20	543	42	12	45.3	6
180/B5	5.5	10	19	300	350	250	144	20	543	48	14	51.8	6

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*

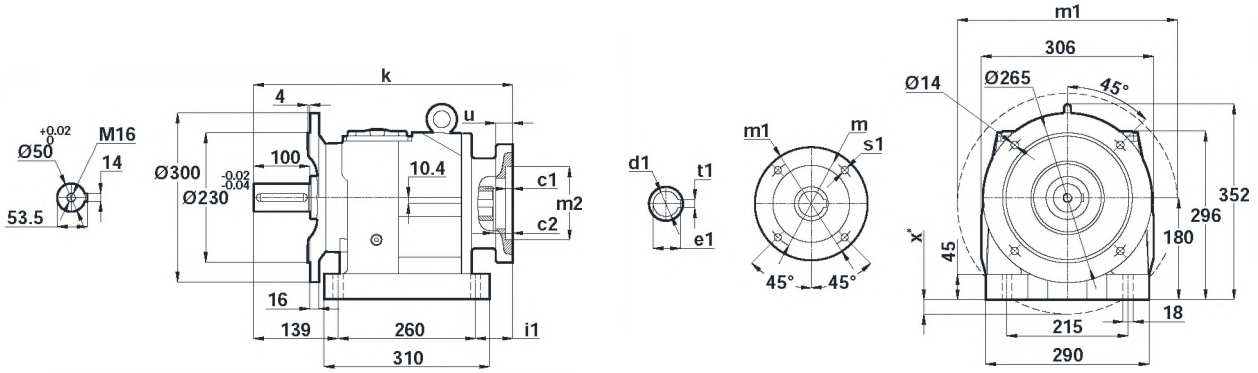


Opt. 1

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

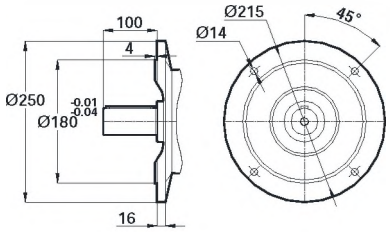
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF472-B..
MNF473-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1	x
90/B14	4	5	9	115	140	95	27.5	12	427	24	8	27.3	-
100/B14	4	9	9	130	160	110	46	15	445	28	8	31.3	-
112/B14	4	9	9	130	160	110	46	15	445	28	8	31.3	-
132/B14	4.4	6	11	165	200	130	64.5	15	464	38	10	41.3	-

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*

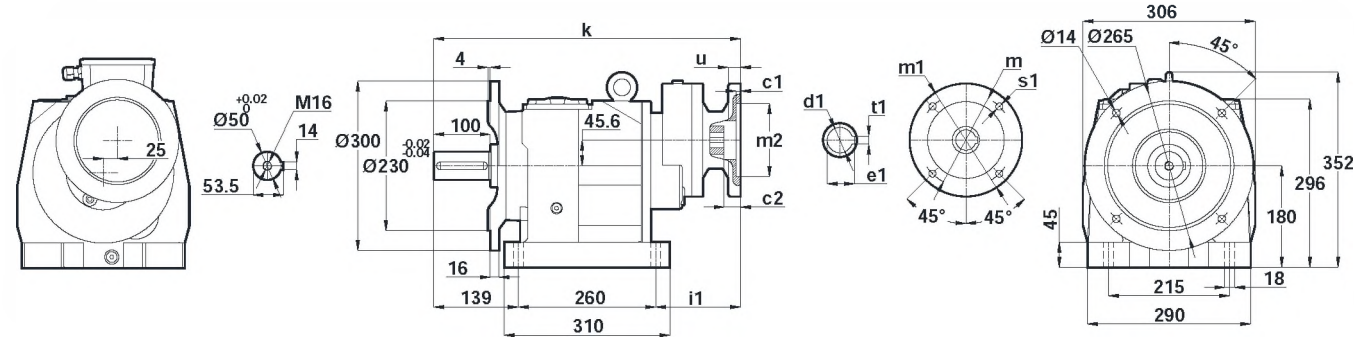


Opt. 1

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

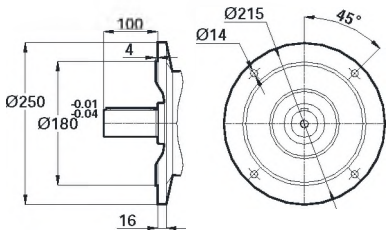
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF474-A..
MNF474-B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	125.5	12	525	14	5	16.3
80/B5	4	9	12	165	200	130	125.5	12	525	19	6	21.8
80/B14	4	9	7	100	120	80	125.5	12	525	19	6	21.8

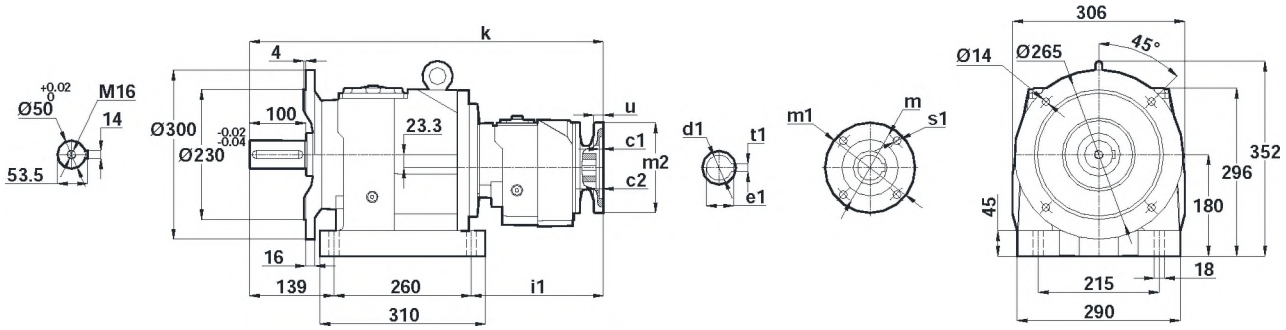
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

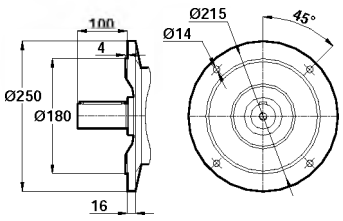
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MNF475-A.. / B..
MNF476-A.. / B..



IEC	c1	c2	s1	m	m1	m2	i1	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	253.5	12	653	11	4	12.8
71/B5	4	8.5	11	130	160	110	224.5	12	624	14	5	16.3
71/B14	3	8.5	7	85	105	70	224.5	10	624	14	5	16.3

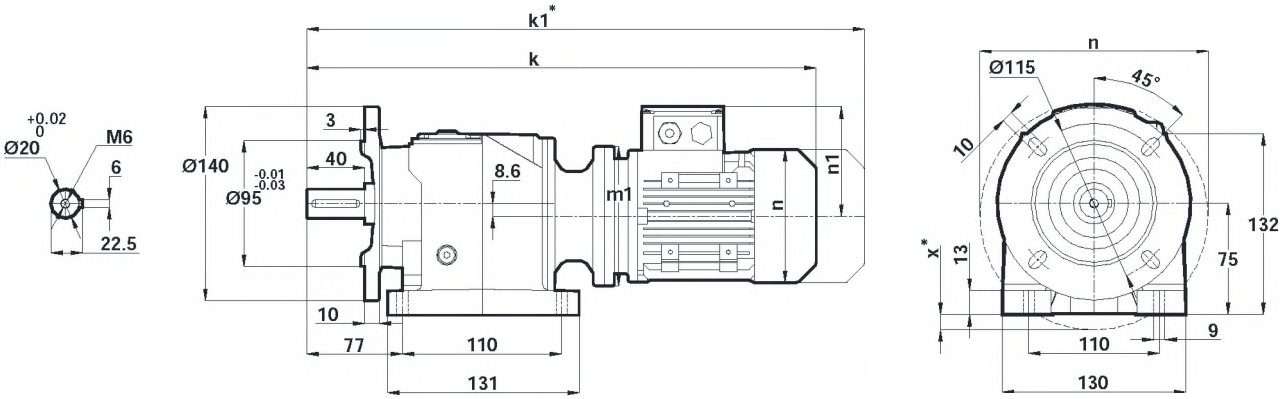
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1

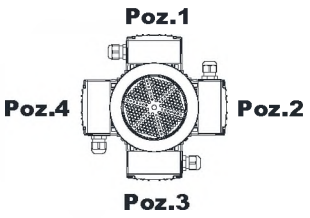
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF002
MVF003



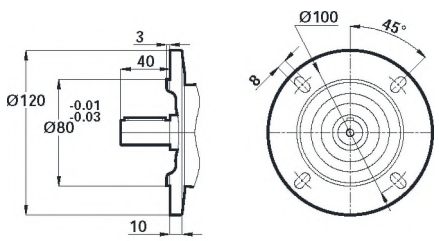
Taglia motore / *Motor Size* / Motorbaugroße					
IEC	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	407	427	465	506	506
k1	468	518	558	610.5	610.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	140	160	200	200	200
m1 (B14)	90	105	120	140	140
x (B5)	4	14	34	34	34

Morsettiera / *Terminal Box* / Klemmenkasten

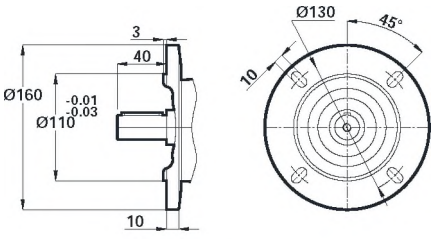


63-71-80-90

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

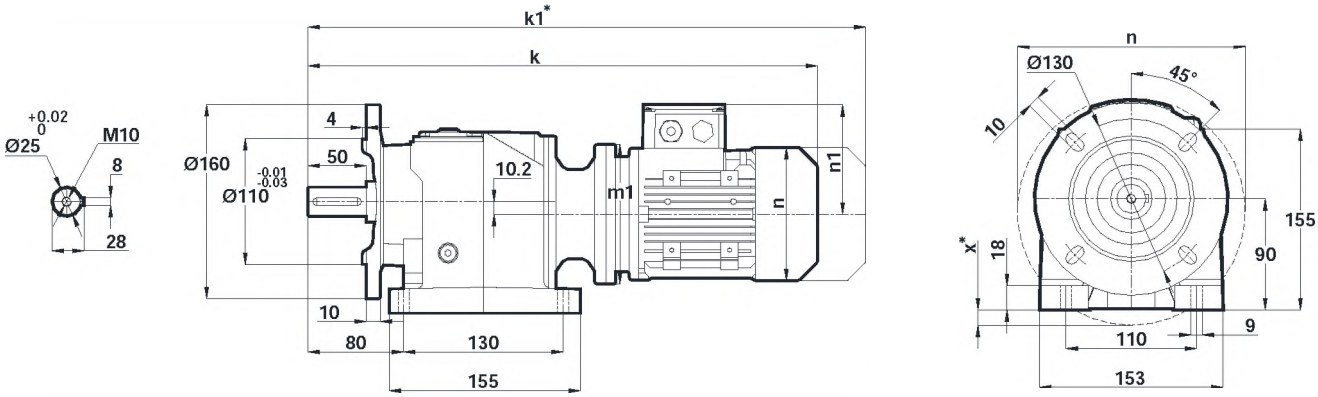
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

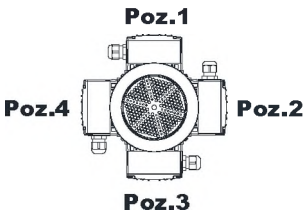
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF102
MVF103



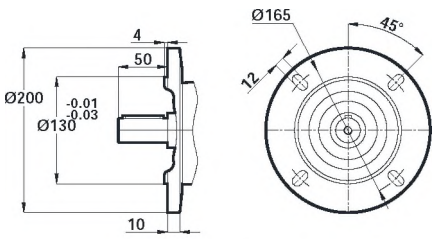
Taglia motore / *Motor Size* / Motorbaugroße					
IEC	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	433	451	489	530	530
k1	494	542	582	634.5	634.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132
m1 (B5)	140	160	200	200	200
m1 (B14)	90	105	120	140	140
x (B5)	-	1	21	21	21

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80-90

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*

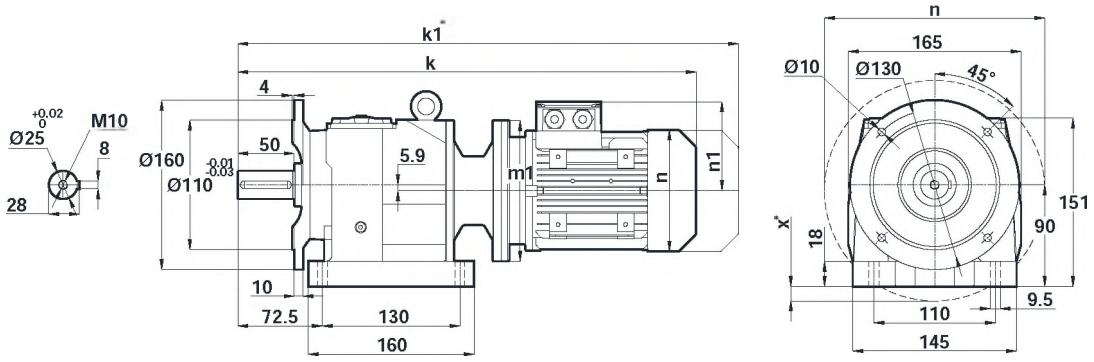


Opt. 1

*** La misura "k1" e per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore e più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

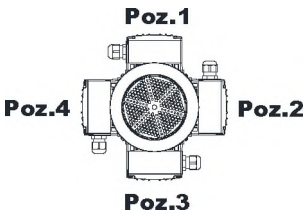
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF172
MVF173



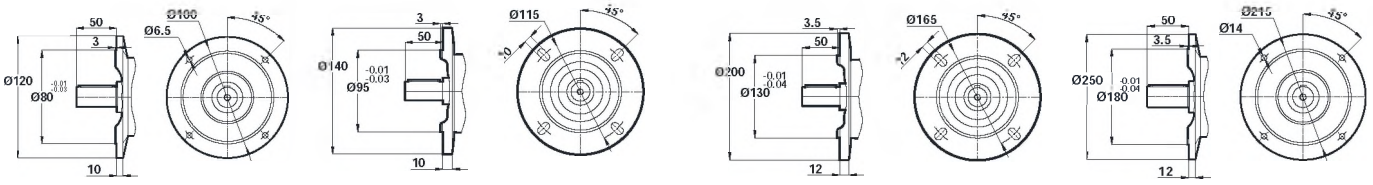
Taglia motore / *Motor Size* / Motorbaugroße							
IEC	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14
k	434	454	492	533	533	579	600
k1	495	545	585	637.5	637.5	698.5	704.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158
m1 (B5)	140	160	200	200	200	250	250
m1 (B14)	-	105	120	140	140	160	160
x (B5)	-	-	16	16	16	41	41

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80-90-100-112

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1 Opt. 2 Opt. 3 Opt. 4

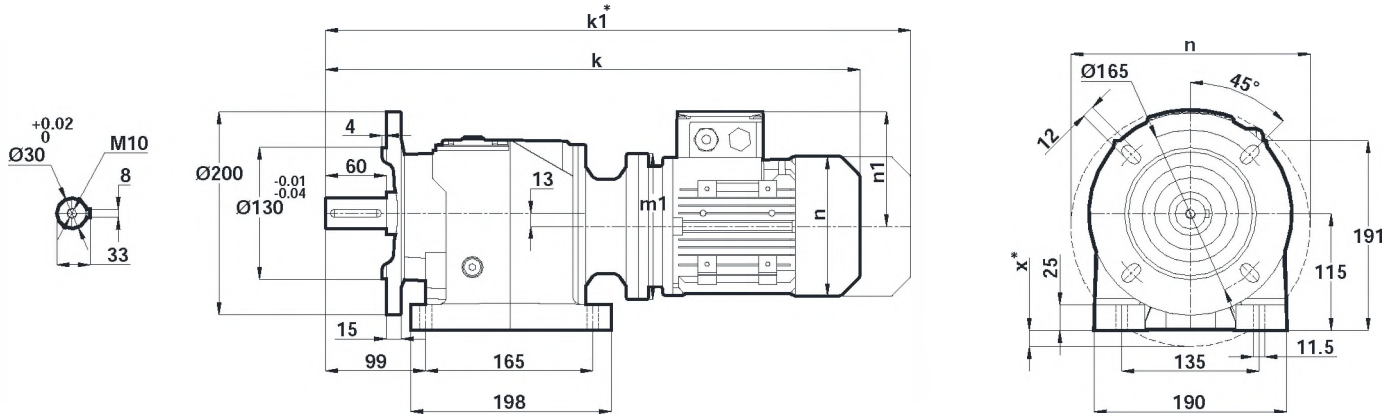
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

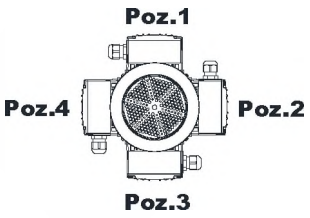
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF202
MVF203



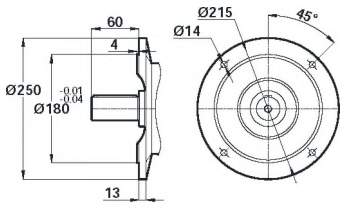
Taglia motore / *Motor Size* / Motorbaugroße							
IEC	63/B5	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14
k	516	505	557	598	598	626	647
k1	577	596	650	702.5	702.5	745.5	751.5
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158
m1 (B5)	140	160	200	200	200	250	250
m1 (B14)	-	105	120	140	140	160	160
x (B5)	-	-	-	-	-	23	23

Morsettiera / *Terminal Box* / Klemmenkasten

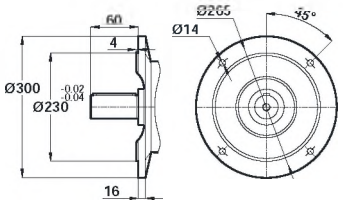


63-71-80-90-100-112

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

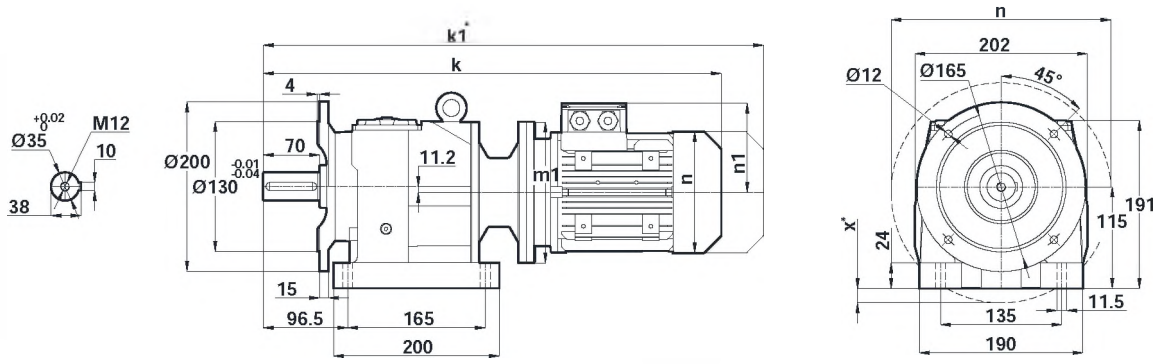


Opt. 2

*** La misura "k1" e per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore e più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

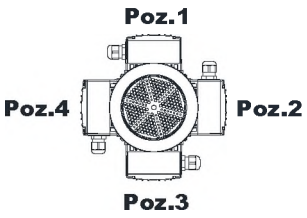
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF272
MVF273



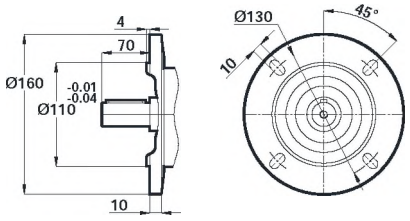
Taglia motore / *Motor Size* / Motorbaugroße									
IEC	63/B5	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	517	506	558	599	599	627	648	769	769
k1	578	597	651	703.5	703.5	746.5	752.5	899	899
n / n1	121 / 97	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	140	160	200	200	200	250	250	300	300
m1 (B14)	-	105	120	140	140	160	160	200	200
x (B5)	-	-	-	-	-	22	22	47	47

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

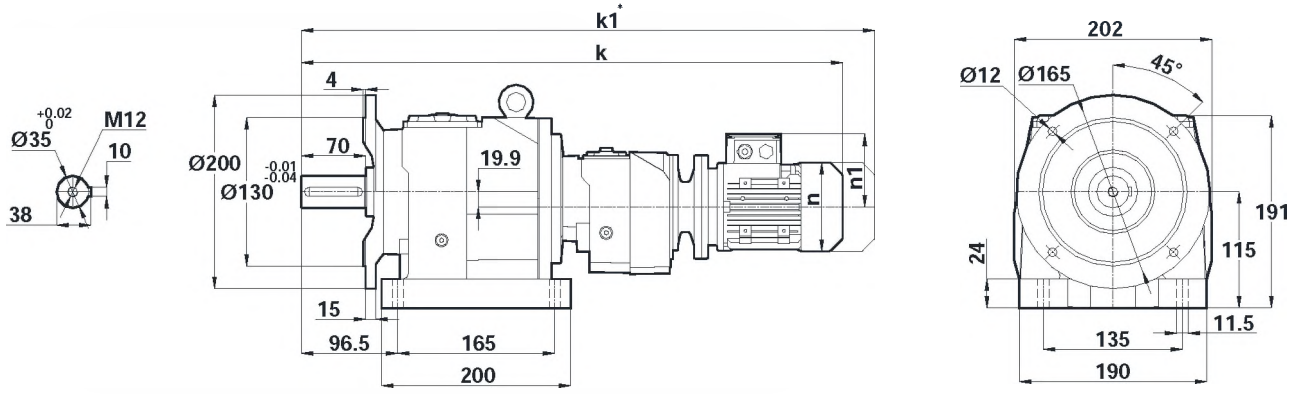
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

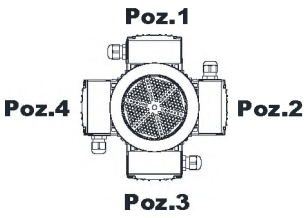
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF275
MVF276



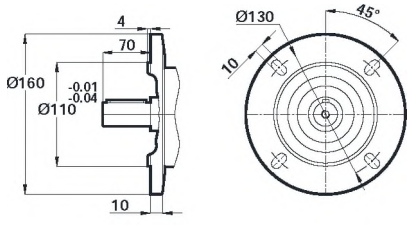
Taglia motore / *Motor Size* / Motorbaugroße		
IEC	63/B5 63/B14	71/B5 71/B14
k	632	652
k1	693	743
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	90	105

Morsettiera / *Terminal Box* / Klemmenkasten



63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*

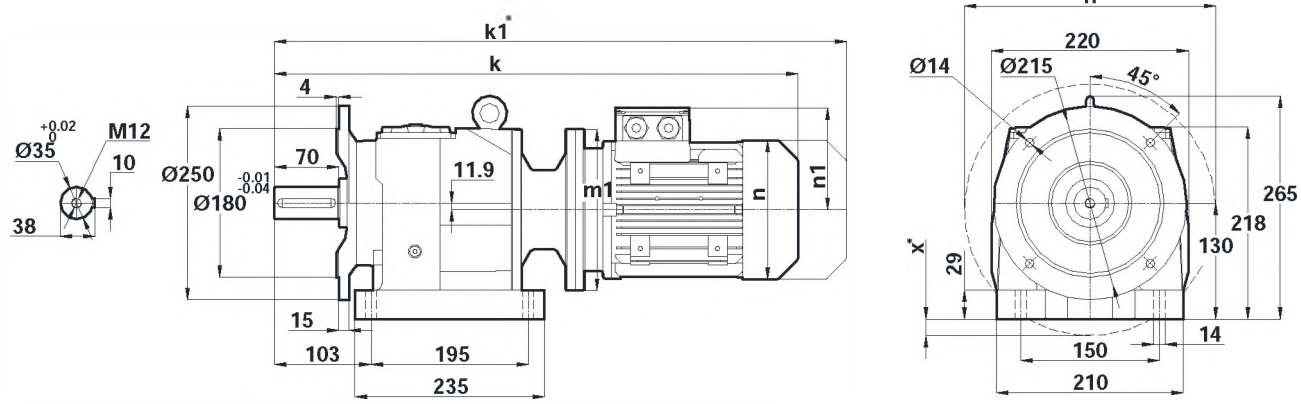


Opt. 1

* **La misura "k1" e per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

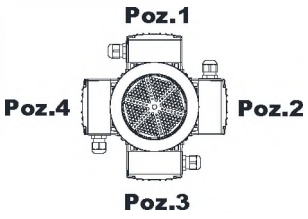
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF282
MVF283



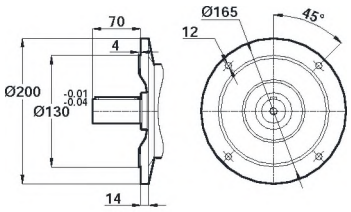
Taglia motore / *Motor Size* / Motorbaugroße								
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	554	577	618	618	661	681	795	795
k1	645	670	722.5	722.5	780.5	785.5	925	925
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	-	120	140	140	160	160	200	200
x (B5)	-	-	-	-	7	7	32	32

Morsettiera / *Terminal Box* / Klemmenkasten



71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

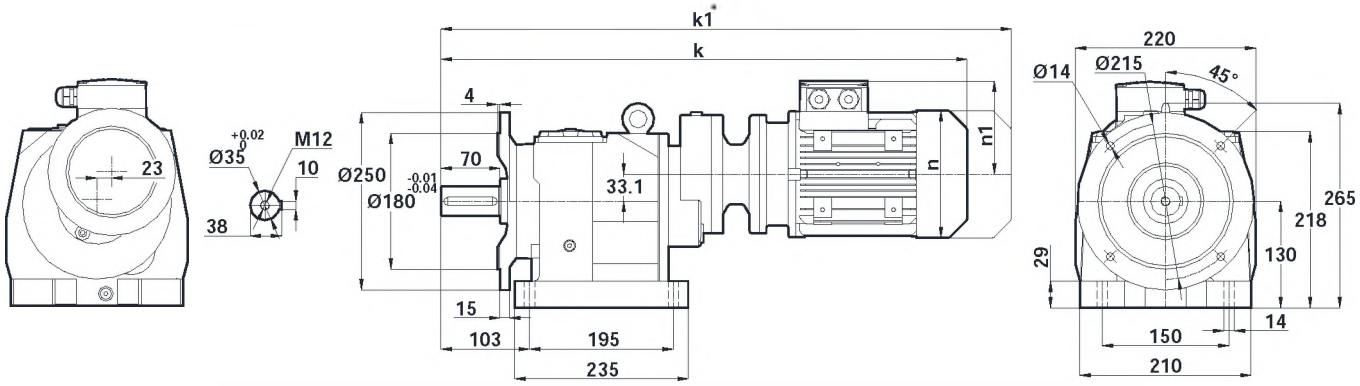


Opt. 1

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

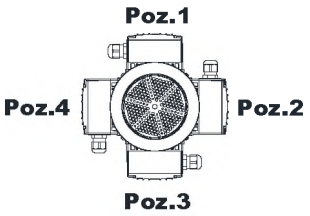
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF284



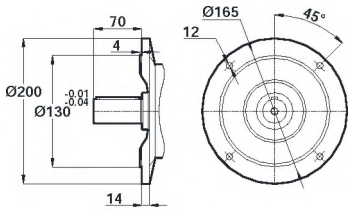
Taglia motore / *Motor Size* / Motorbaugroße		
IEC	63/B5	71/B5 71/B14
k	613	602
k1	674	693
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	-	105

Morsettiera / *Terminal Box* / Klemmenkasten



63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*

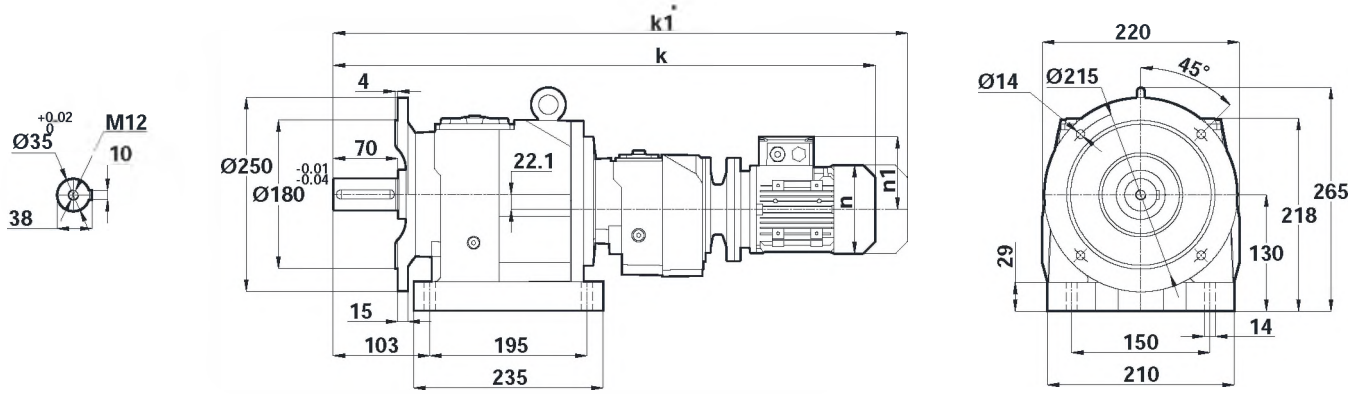


Opt. 1

* **La misura "k1" e per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

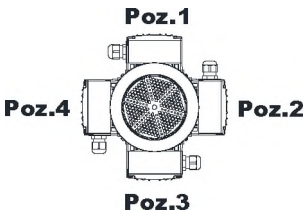
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF285
MVF286



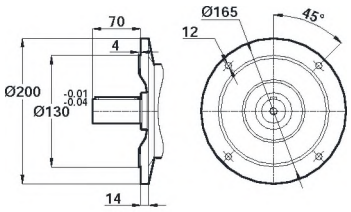
Taglia motore / *Motor Size* / Motorbaugroße	
IEC	63/B5 63/B14
k	679
k1	740
n / n1	121 / 97
m1 (B5)	140
m1 (B14)	90

Morsettiera / *Terminal Box* / Klemmenkasten



63

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1

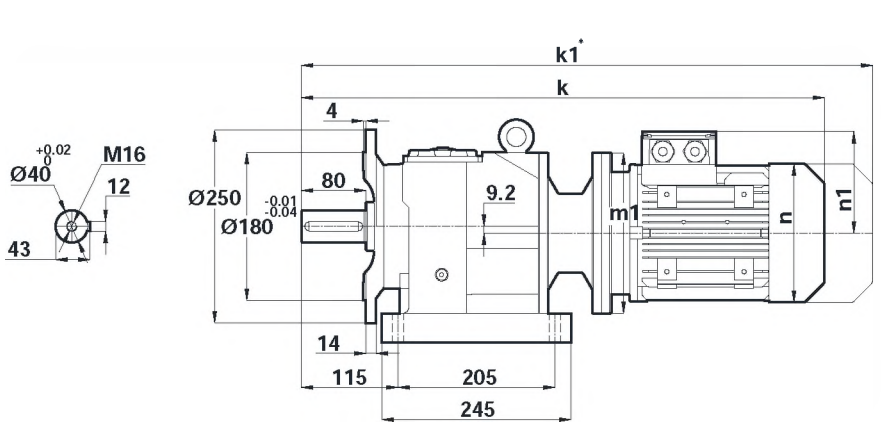
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

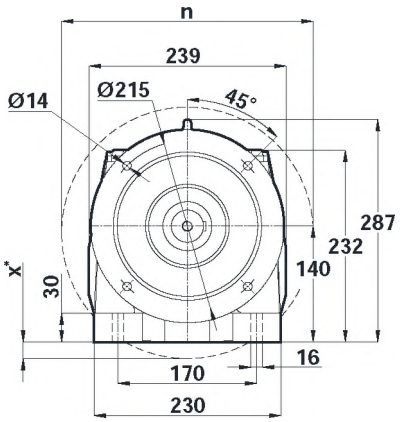


Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

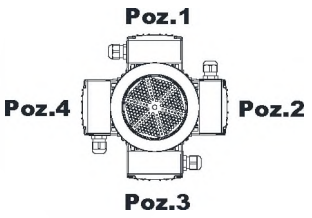
MVF372
MVF373





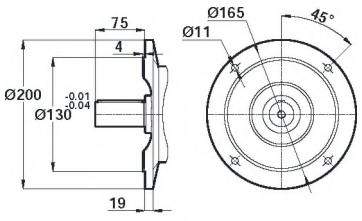
Taglia motore / *Motor Size* / Motorbaugroße								
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	575	598	639	639	692	712	816	816
k1	666	691	743.5	743.5	811.5	816.5	946	946
n / n1	137 / 112	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	-	120	140	140	160	160	200	200
x (B5)	-	-	-	-	-	-	20	20

Morsettiera / *Terminal Box* / Klemmenkasten

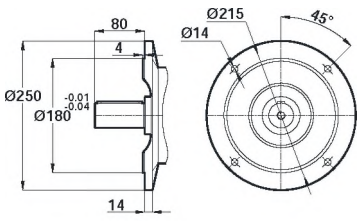


71-80-90-100-112-132

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*



Opt. 1

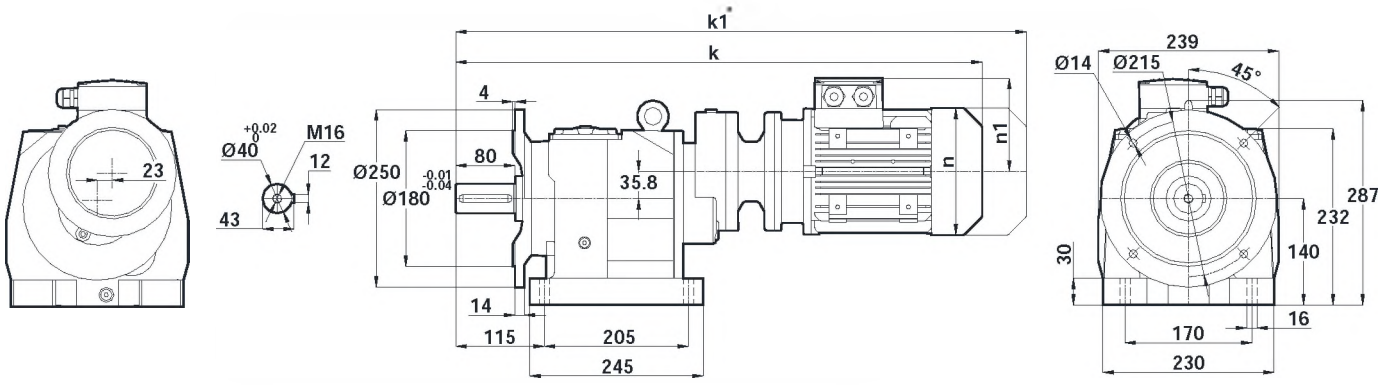


Opt. 2

*** La misura "k1" e per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore e più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

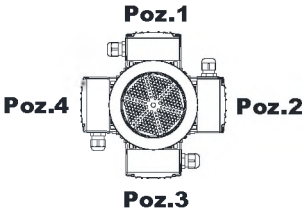
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF374



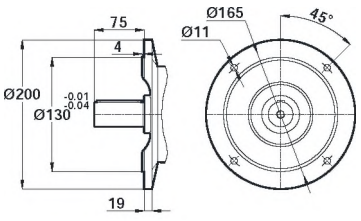
Taglia motore / *Motor Size* / Motorbaugroße			
IEC	63/B5	71/B5 71/B14	80/B5 80/B14
k	634	623	675
k1	695	714	768
n / n1	121 / 97	137 / 112	155 / 121
m1 (B5)	140	160	200
m1 (B14)	-	105	120

Morsettiera / *Terminal Box* / Klemmenkasten

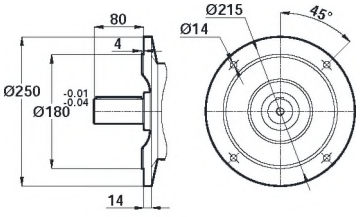


63-71-80

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



Opt. 2

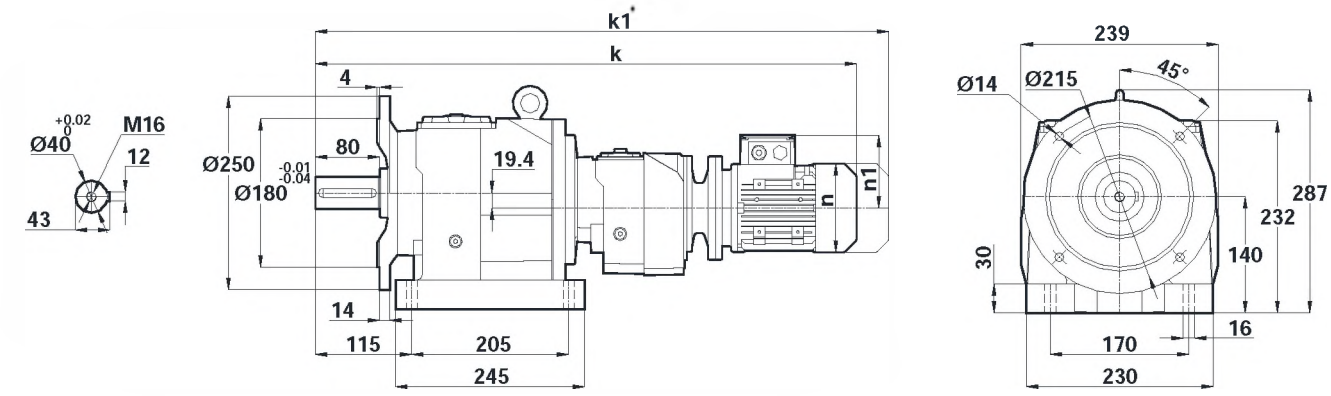
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

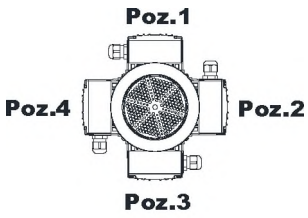
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF375
MVF376



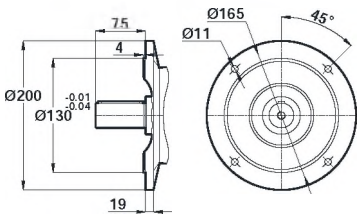
Taglia motore / *Motor Size* / Motorbaugroße	
IEC	63/B5 63/B14
k	700
k1	761
n / n1	121 / 97
m1 (B5)	140
m1 (B14)	90

Morsettiera / *Terminal Box* / Klemmenkasten

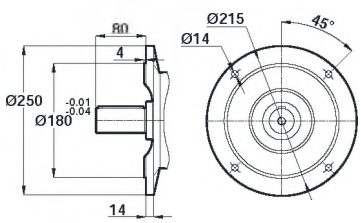


63

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*



Opt. 1



Opt. 2

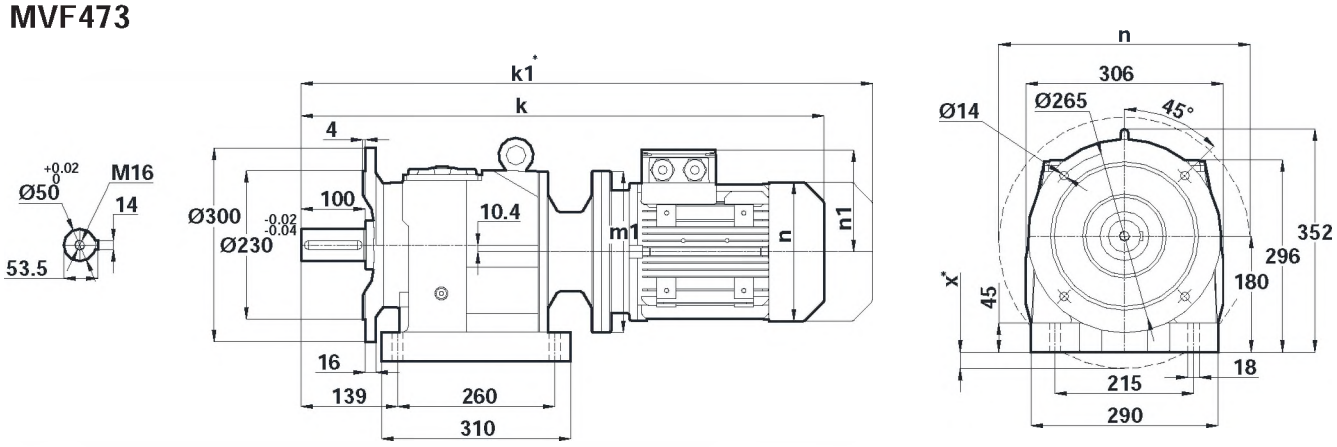
* **La misura "k1" e per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

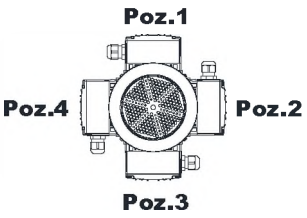
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF472
MVF473



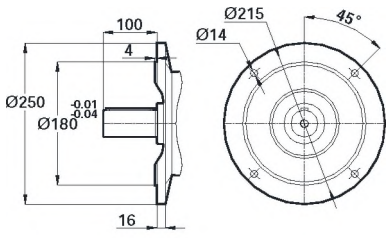
Taglia motore / *Motor Size* / Motorbaugroße											
IEC	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	661	702	702	756	776	879	879	1038	1038	1127	1127
k1	754	806.5	806.5	875.5	880.5	1009	1009	1218	1218	1297.5	1297.5
n / n1	155 / 121	176 / 132	176 / 132	193 / 147	215 / 158	257 / 179	257 / 179	315 / 219	315 / 219	347 / 234	347 / 234
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
x (B5)	-	-	-	-	-	-	-	6	6	6	6

Morsettiera / *Terminal Box* / Klemmenkasten



80-90-100-112-132-160-180

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

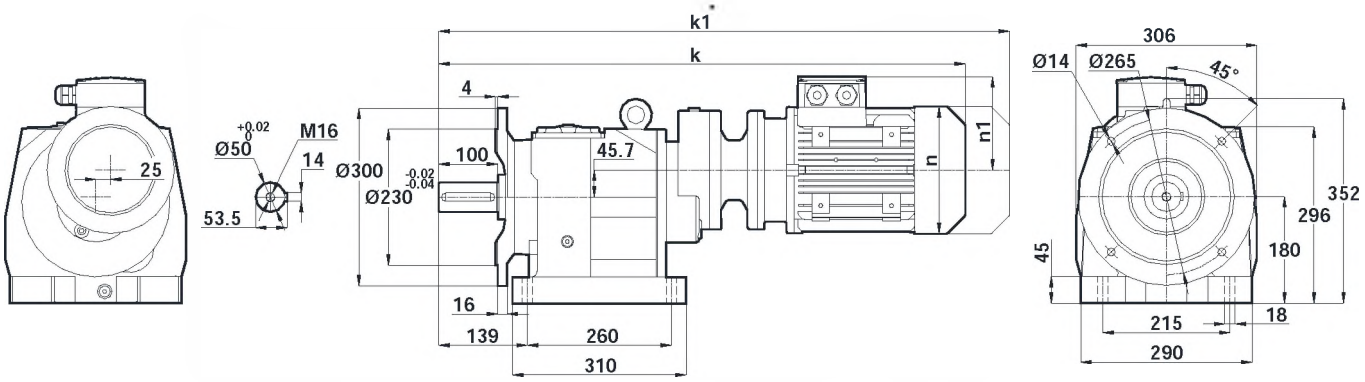


Opt. 1

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

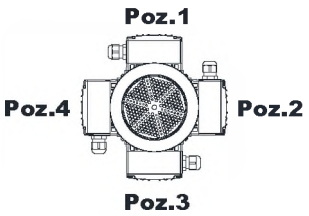
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF474



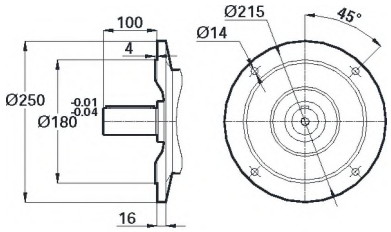
Taglia motore / *Motor Size* / Motorbaugroße		
IEC	71/B5	80/B5 80/B14
k	736	759
k1	827	852
n / n1	137 / 112	155 / 121
m1 (B5)	160	200
m1 (B14)	-	120

Morsettiera / *Terminal Box* / Klemmenkasten



71-80

Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*

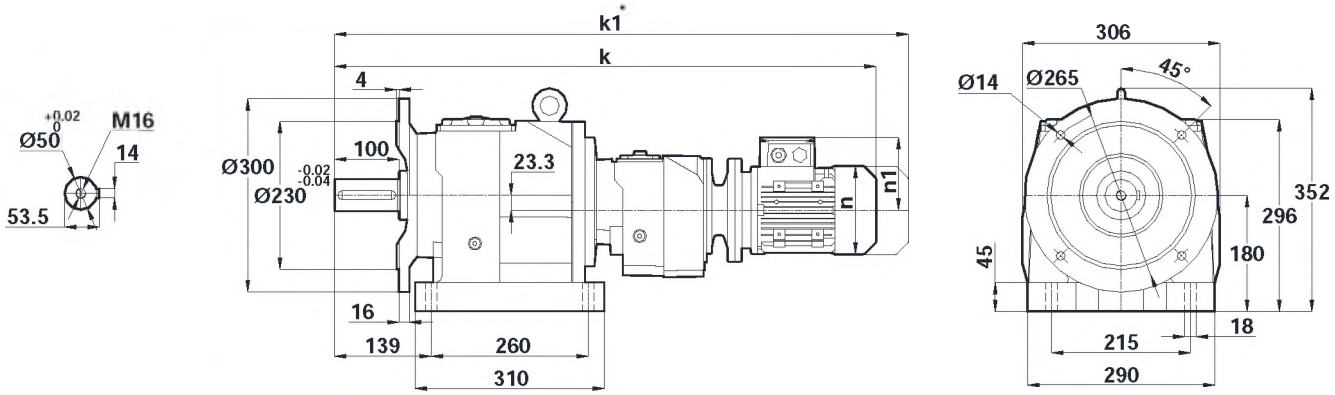


Opt. 1

* **La misura "k1" e per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

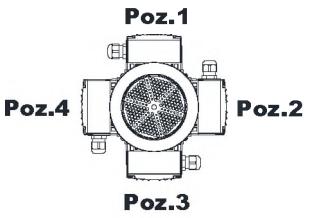
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MVF475
MVF476



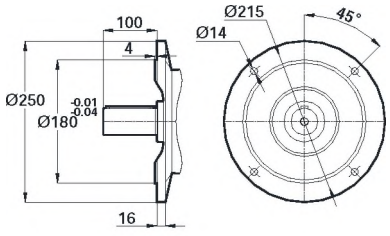
Taglia motore / *Motor Size* / Motorbaugroße		
IEC	63/B5	71/B5 71/B14
k	846	835
k1	907	926
n / n1	121 / 97	137 / 112
m1 (B5)	140	160
m1 (B14)	-	105

Morsettiera / *Terminal Box* / Klemmenkasten



63-71

Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



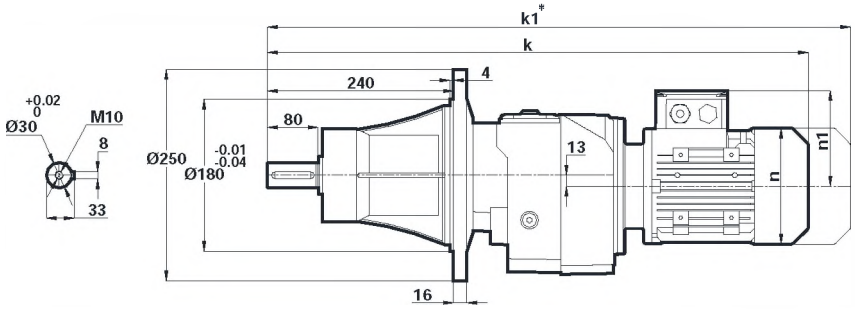
Opt. 1

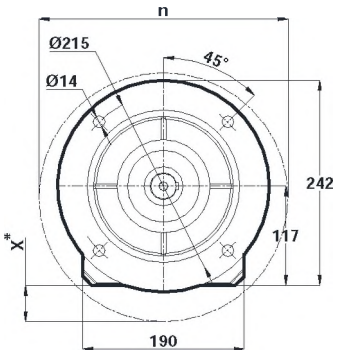
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

Note / *Notes* / Notizen

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

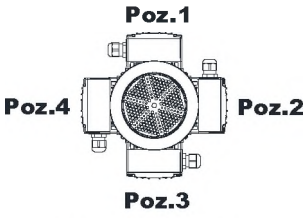
NRB202
NRB203





Taglia motore / *Motor Size* / Motorbaugroße							
	63	71	80	90S	90L	100L	112M
k	622	641	669	697	722	763	786
k1	683	732	762	801.5	826.5	882.5	890.5
n	121	137	155	176	176	193	215
n1	97	112	121	132	132	147	158
x	-	-	-	-	-	-	10

Morsettiera / *Terminal Box* / Klemmenkasten

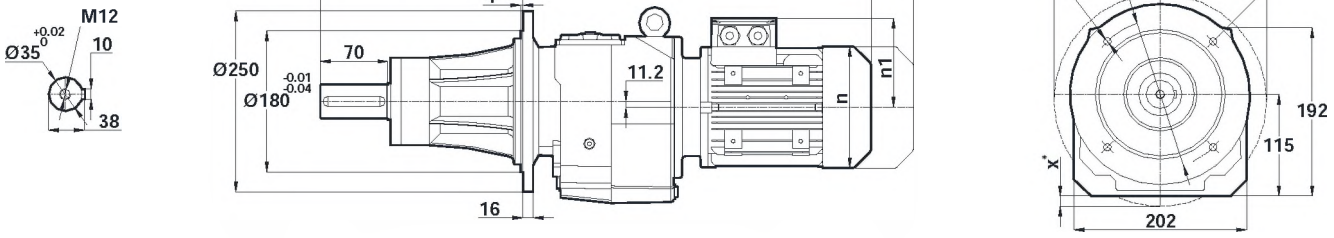


63-71-80-90-100-112

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

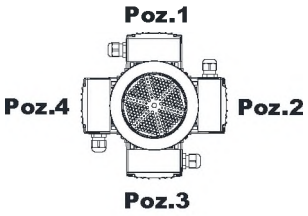
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB272
NRB273



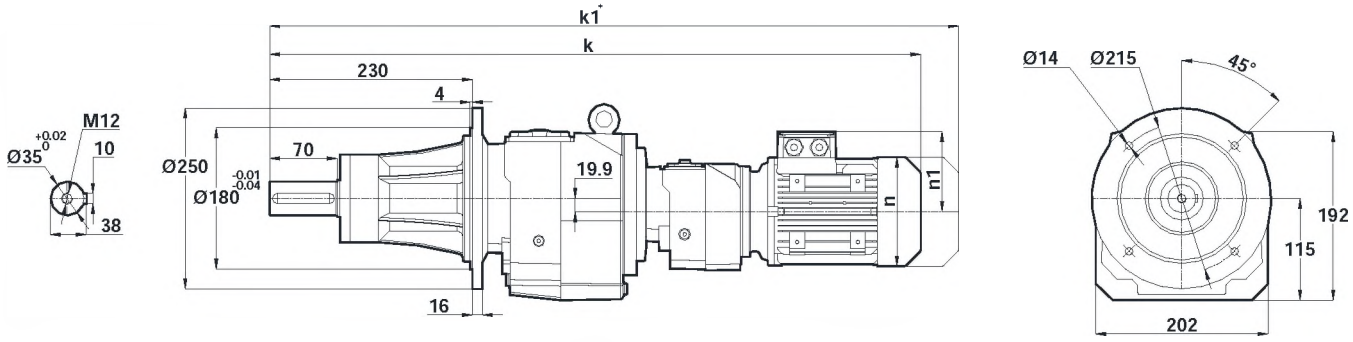
Taglia motore / *Motor Size* / Motorbaugroße									
	63	71	80	90S	90L	100L	112M	132S	132M
k	603	622	650	678	703	744	767	854	854
k1	664	713	743	782.5	807.5	863.5	871.5	984	984
n	121	137	155	176	176	193	215	257	257
n1	97	112	121	132	132	147	158	179	179
x	-	-	-	-	-	-	9	25	25

Morsettiera / *Terminal Box* / Klemmenkasten

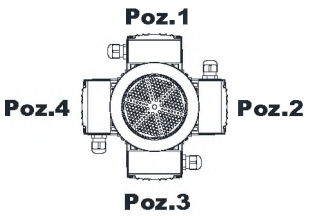


63-71-80-90-100-112-132

NRB275
NRB276



Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	753	774
k1	814	865
n	121	137
n1	97	112

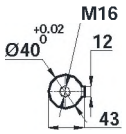


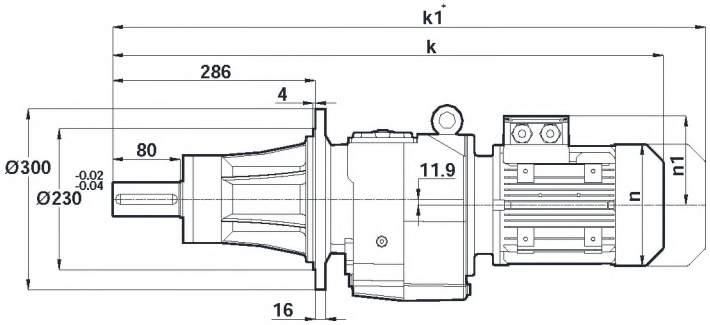
63-71

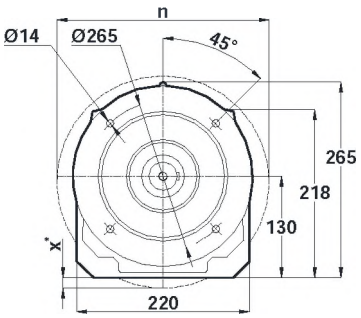
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB282
NRB283

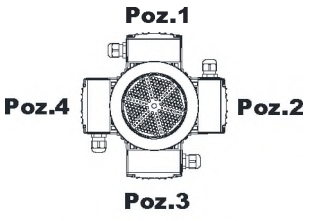






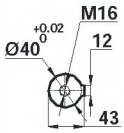
Taglia motore / *Motor Size* / Motorbaugroße								
	71	80	90S	90L	100L	112M	132S	132M
k	695	723	753	778	818	841	895	933
k1	786	816	857.5	882.5	937.5	945.5	1025	1063
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
x	-	-	-	-	-	-	-	14

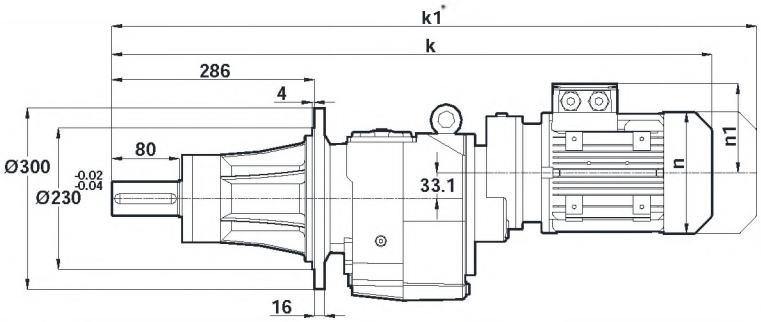
Morsettiera / *Terminal Box* / Klemmenkasten

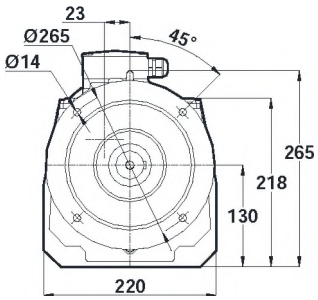


71-80-90-100-112-132

NRB284

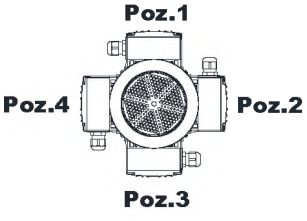






Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	756	774
k1	817	865
n	121	137
n1	97	112

Morsettiera / *Terminal Box* / Klemmenkasten

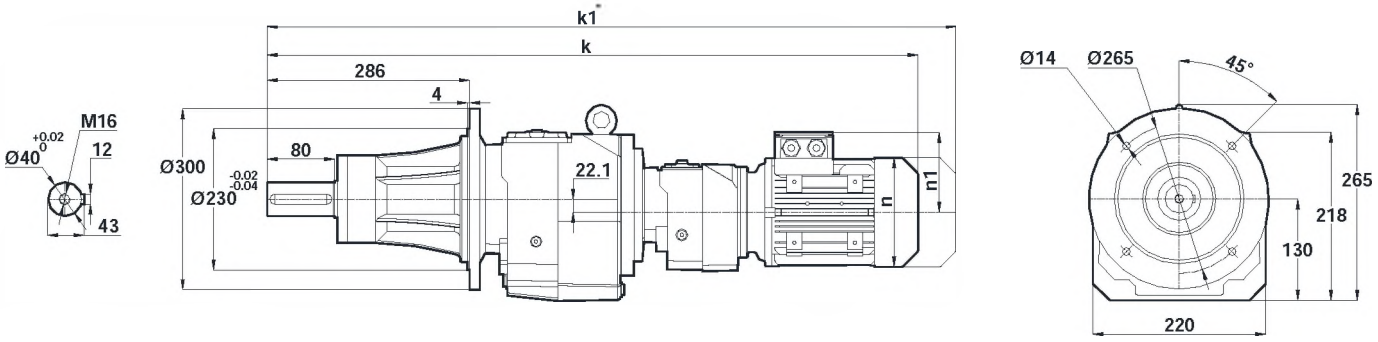


63-71

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

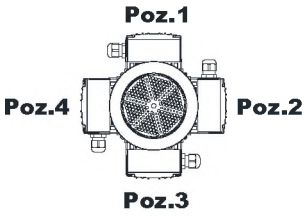
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB285
NRB286



Taglia motore / *Motor Size* / Motorbaugroße	
	63
k	857
k1	918
n	121
n1	97

Morsettiera / *Terminal Box* / Klemmenkasten

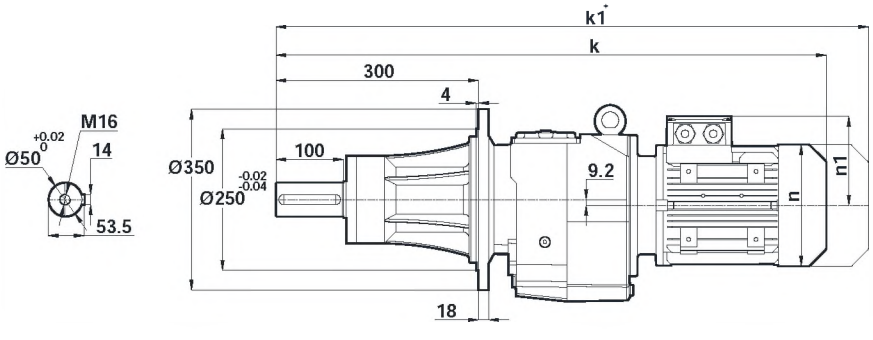


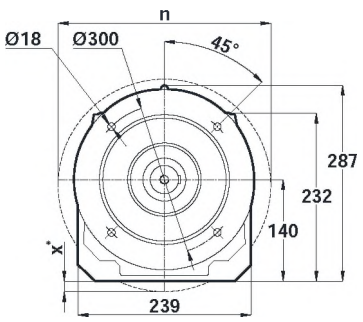
63

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

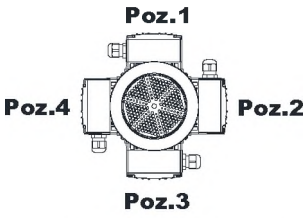
NRB372
NRB373





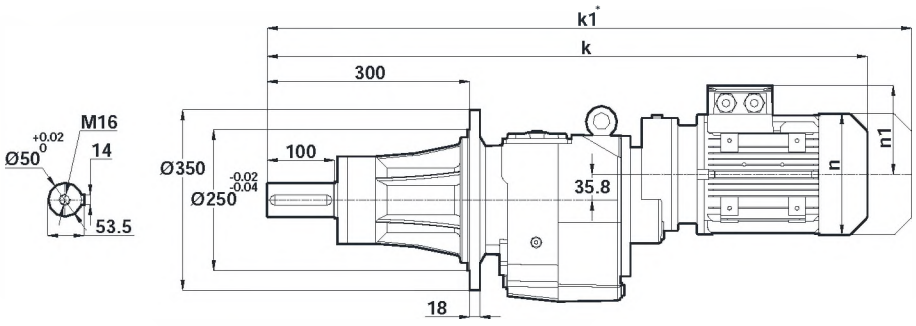
Taglia motore / *Motor Size* / Motorbaugroße								
	71	80	90S	90L	100L	112M	132S	132M
k	720	748	778	803	843	866	920	958
k1	811	841	882.5	907.5	962.5	970.5	1050	1088
n	137	155	176	176	193	215	257	257
n1	112	121	132	132	147	158	179	179
x	-	-	-	-	-	-	2	30

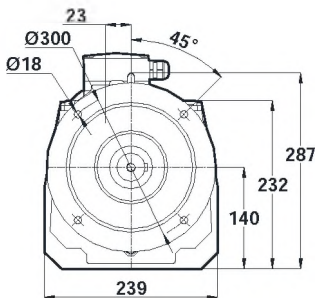
Morsettiera / *Terminal Box* / Klemmenkasten



71-80-90-100-112-132

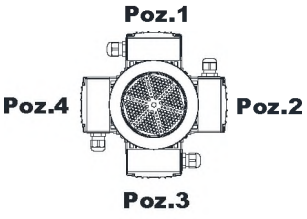
NRB374





Taglia motore / *Motor Size* / Motorbaugroße			
	63	71	80
k	781	799	828
k1	842	890	921
n	121	137	155
n1	97	112	121

Morsettiera / *Terminal Box* / Klemmenkasten

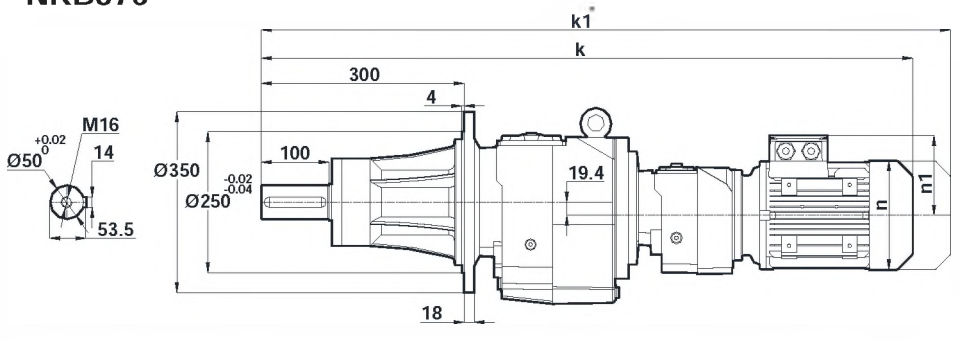


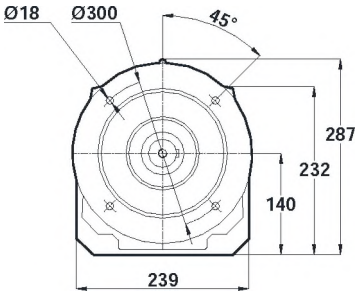
63-71-80

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

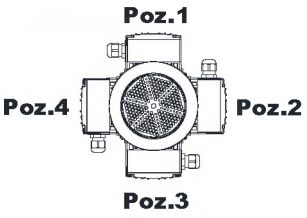
NRB375
NRB376





Taglia motore / *Motor Size* / Motorbaugroße	
	63
k	882
k1	943
n	121
n1	97

Morsettiera / *Terminal Box* / Klemmenkasten



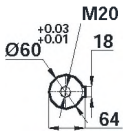
63

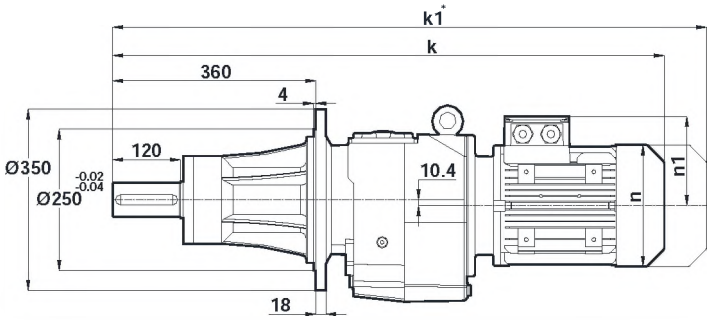
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

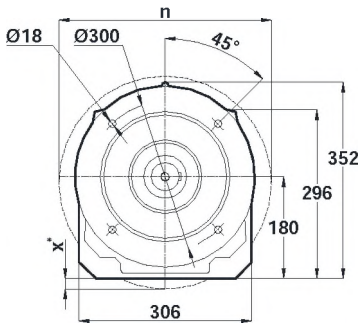


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB472
NRB473

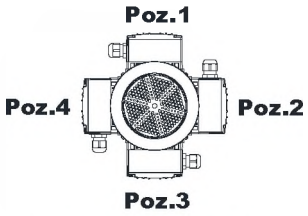






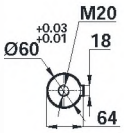
Taglia motore / *Motor Size* / Motorbaugroße											
	80	90S	90L	100L	112M	132S	132M	160M	160L	180M	180L
k	856	884	909	947	973	1022	1060	1152	1152	1219	1219
k1	949	988.5	1013.5	1066.5	1007.5	1152	1190	1332	1332	1389.5	1389.5
n	155	176	176	193	215	257	257	315	315	347	347
n1	121	132	132	147	158	179	179	219	219	234	234
x	-	-	-	-	-	-	-	-	-	11	11

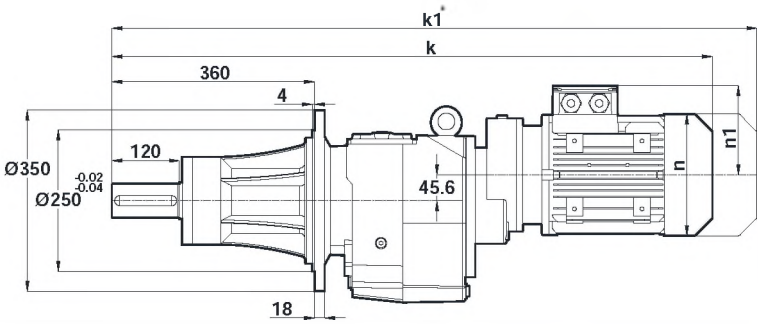
Morsettiera / *Terminal Box* / Klemmenkasten

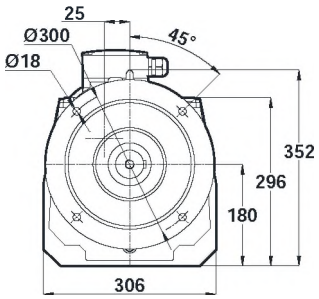


80-90-100-112-132-160-180

NRB474

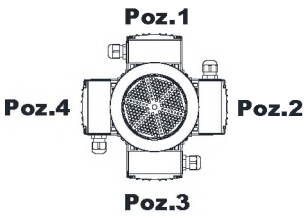






Taglia motore / *Motor Size* / Motorbaugroße		
	71	80
k	921	949
k1	1012	1042
n	137	155
n1	112	121

Morsettiera / *Terminal Box* / Klemmenkasten

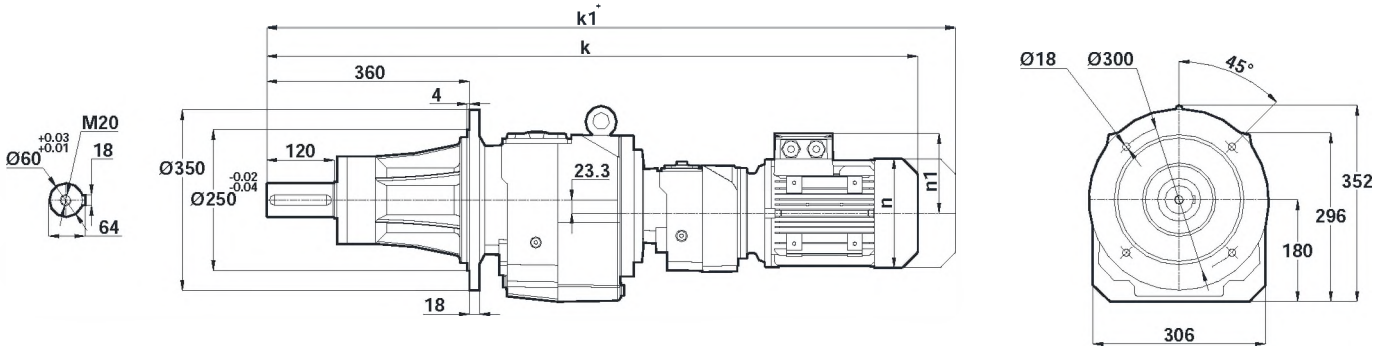


71-80

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

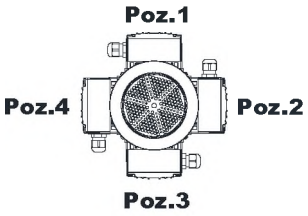
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB475
NRB476



Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	1032	1051
k1	1093	1142
n	121	137
n1	97	112

Morsettiera / *Terminal Box* / Klemmenkasten

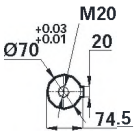


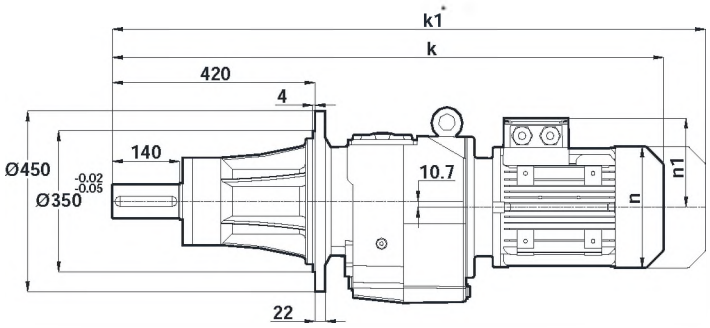
63-71

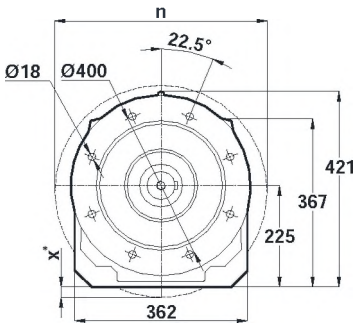
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB572
NRB573

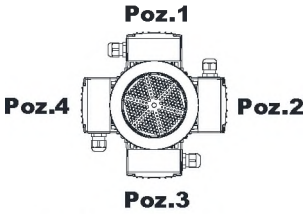






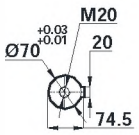
Taglia motore / *Motor Size* / Motorbaugroße									
	100L	112M	132S	132M	160M	160L	180M	180L	200L
k	1065	1088	1142	1180	1272	1272	1338	1338	1392
k1	1184.5	1192.5	1272	1310	1452	1452	1508.5	1508.5	1578.5
n	193	215	257	257	315	315	347	347	390
n1	147	158	179	179	219	219	234	234	275
x	-	-	-	-	-	-	-	-	-

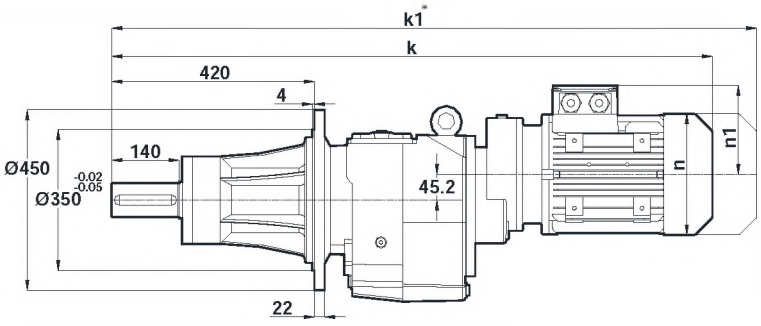
Morsettiera / *Terminal Box* / Klemmenkasten

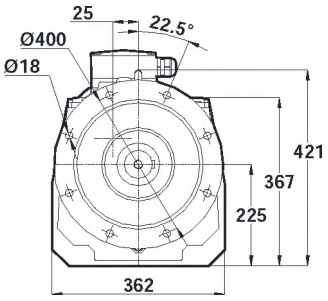


100-112-132-160-180-200

NRB574

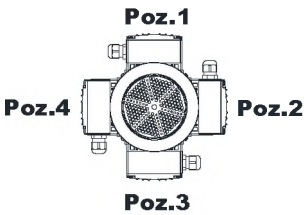






Taglia motore / *Motor Size* / Motorbaugroße				
	71	80	90S	90L
k	1043	1071	1100	1125
k1	1134	1134	1204.5	1229.5
n	137	155	176	176
n1	112	121	132	132

Morsettiera / *Terminal Box* / Klemmenkasten

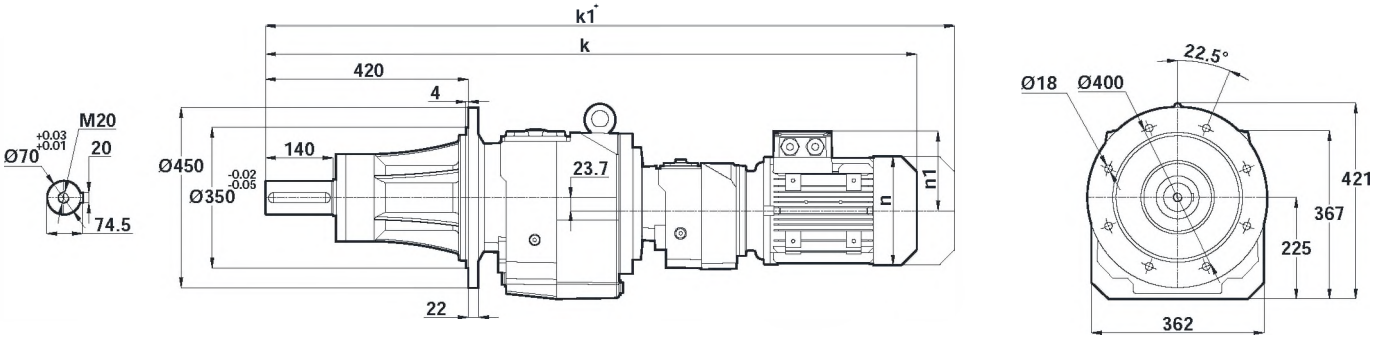


71-80-90

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

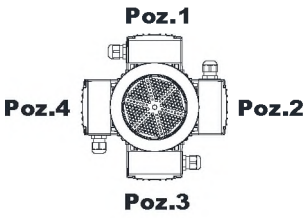
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB575
NRB576



Taglia motore / *Motor Size* / Motorbaugroße		
	63	71
k	1156	1175
k1	1217	1266
n	121	137
n1	97	112

Morsettiera / *Terminal Box* / Klemmenkasten

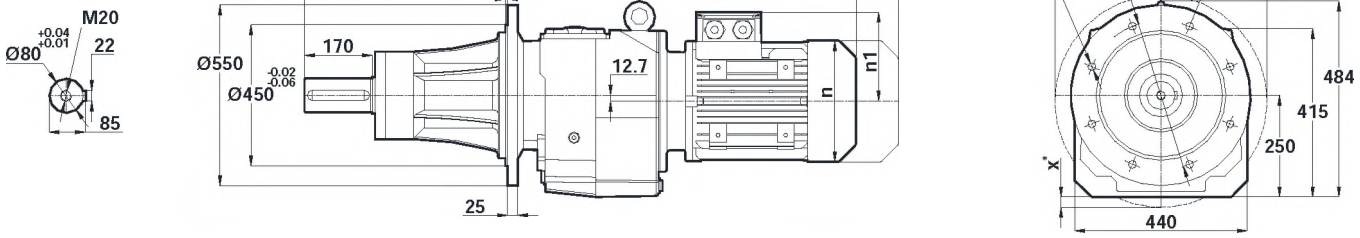


63-71

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

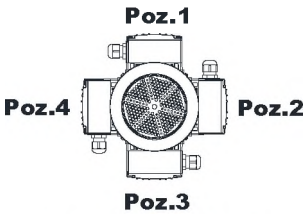
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB672
NRB673



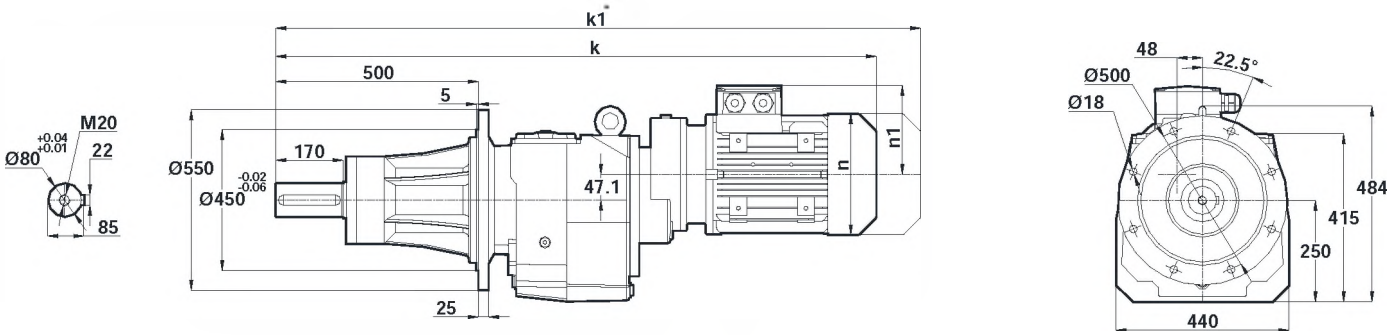
Taglia motore / *Motor Size* / Motorbaugröße										
	112M	132S	132M	160M	160L	180M	180L	200L	225S	225M
k	1185	1239	1277	1368	1368	1432	1432	1489	1515	1540
k1	1289.5	1369	1407	1548	1548	1602.5	1602.5	1675.5	1680	1705
n	215	257	257	315	315	347	347	390	434	434
n1	158	179	179	219	219	234	234	275	285	285
x	-	-	-	-	-	-	-	-	-	-

Morsettiera / *Terminal Box* / Klemmenkasten



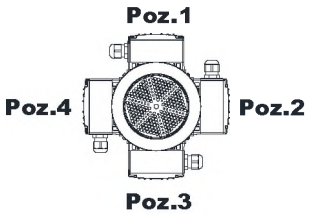
112-132-160-180-200-225

NRB674



Taglia motore / *Motor Size* / Motorbaugröße			
	80	90S	90L
k	1187	1215	1240
k1	1280	1319.5	1344.5
n	155	176	176
n1	121	132	132

Morsettiera / *Terminal Box* / Klemmenkasten

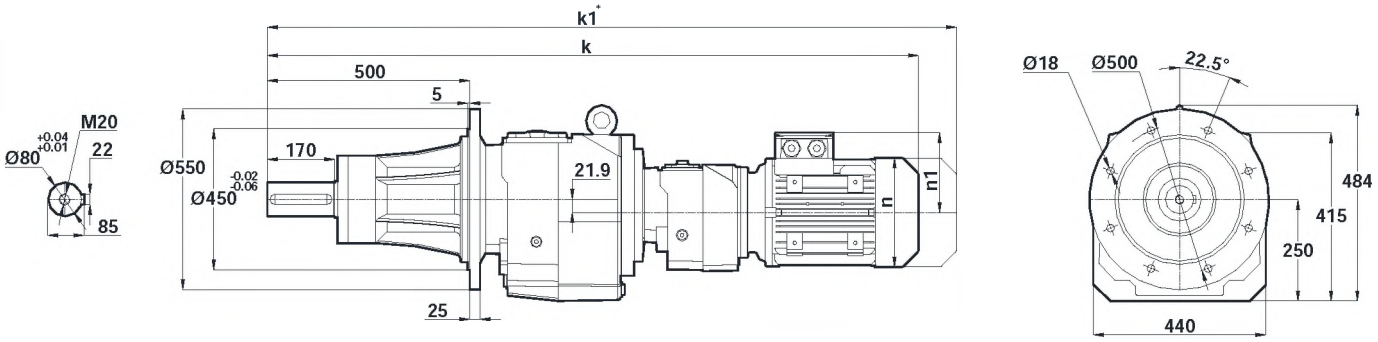


80-90

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

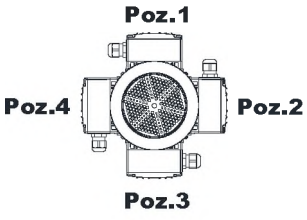
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB675
NRB676



Taglia motore / *Motor Size* / Motorbaugroße		
	71	80
k	1304	1332
k1	1395	1425
n	137	155
n1	112	121

Morsettiera / *Terminal Box* / Klemmenkasten

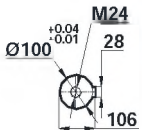


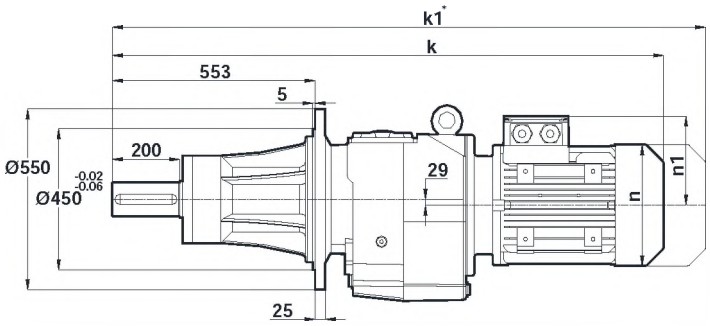
71-80

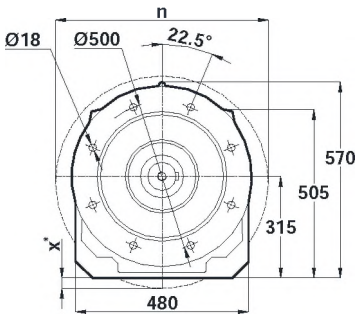
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB772
NRB773

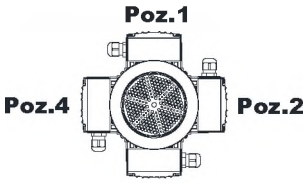






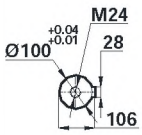
Taglia motore / *Motor Size* / Motorbaugroße										
	132S	132M	160M	160L	180M	180L	200L	225S	225M	250M
k	1341	1379	1472	1472	1539	1539	1593	1620	1645	1749
k1	1471	1509	1652	1652	1709.5	1709.5	1779.5	1785	1810	1919.5
n	257	257	315	315	347	347	390	434	434	480
n1	179	179	219	219	234	234	275	285	285	322
x	-	-	-	-	-	-	-	-	-	-

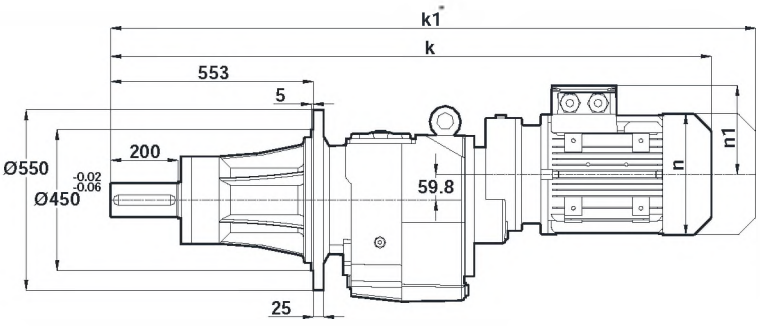
Morsettiera / *Terminal Box* / Klemmenkasten

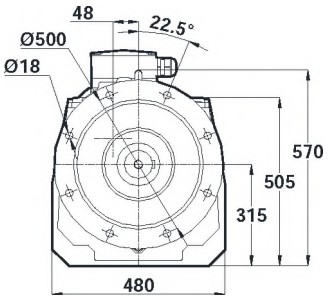


132-160-180-200-225-250

NRB774

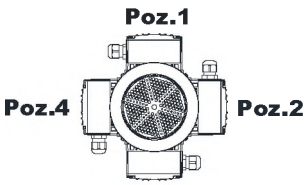






Taglia motore / *Motor Size* / Motorbaugroße				
	80	90S	90L	100L
k	1295	1323	1348	1386
k1	1388	1427.5	1452.5	1505.5
n	155	176	176	193
n1	121	132	132	147

Morsettiera / *Terminal Box* / Klemmenkasten

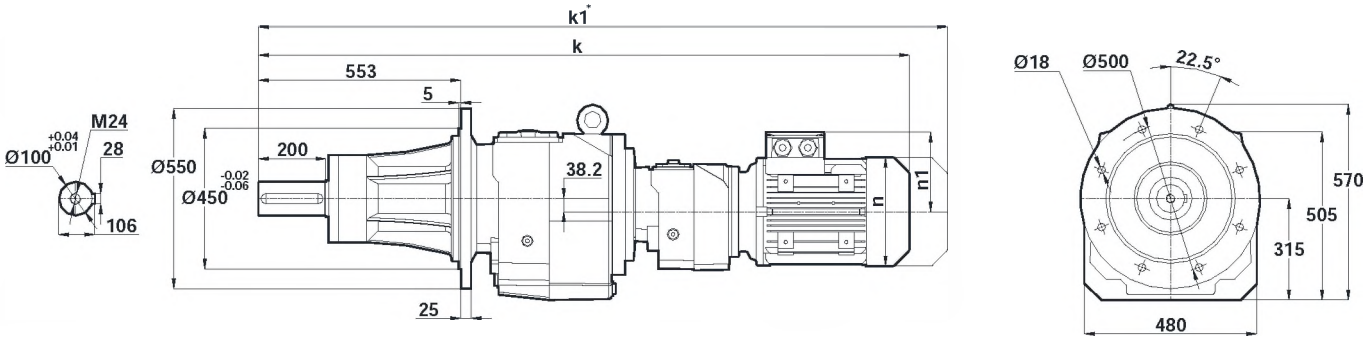


80-90-100

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

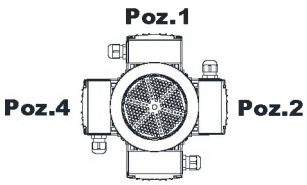
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB775
NRB776



Taglia motore / *Motor Size* / Motorbaugroße				
	71	80	90S	90L
k	1415	1443	1473	1498
k1	1506	1536	1577.5	1602.5
n	137	155	176	176
n1	112	121	132	132

Morsettiera / *Terminal Box* / Klemmenkasten

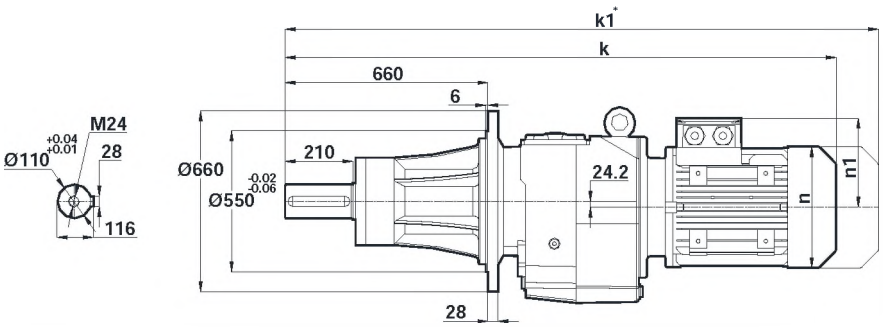


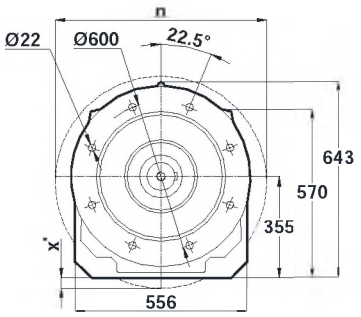
71-80-90

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

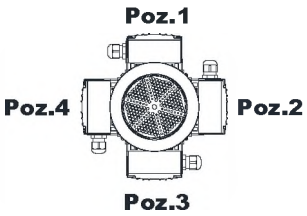
NRB872
NRB873





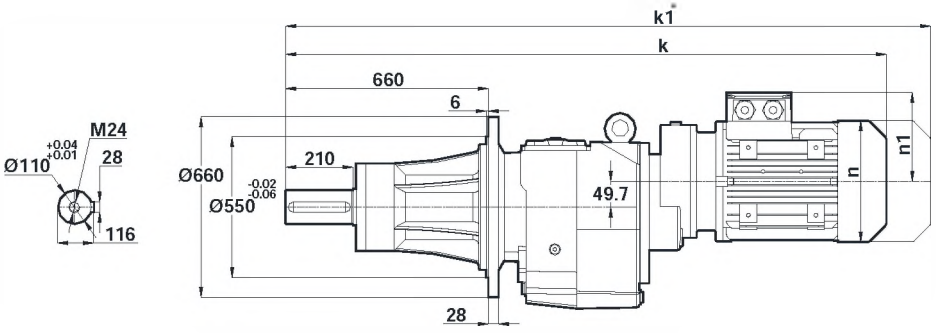
Taglia motore / *Motor Size* / Motorbaugroße											
	132M	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M
k	1556	1648	1648	1715	1715	1769	1798	1823	1926	1987	1987
k1	1686	1828	1828	1885.5	1885.5	1955.5	1963	1988	2096.5	2160	2166
n	257	315	315	347	347	390	434	434	480	544	544
n1	179	219	219	234	234	275	285	285	322	350	350
x	-	-	-	-	-	-	-	-	-	-	-

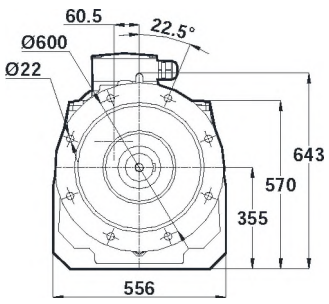
Morsettiera / *Terminal Box* / Klemmenkasten



132-160-180-200-225-250-280

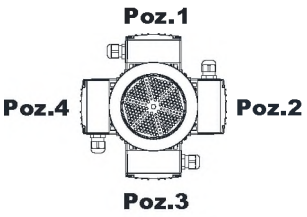
NRB874





Taglia motore / *Motor Size* / Motorbaugroße				
	100L	112M	132S	132M
k	1584	1607	1661	1699
k1	1703.5	1711.5	1791	1829
n	193	215	257	257
n1	147	158	179	179

Morsettiera / *Terminal Box* / Klemmenkasten

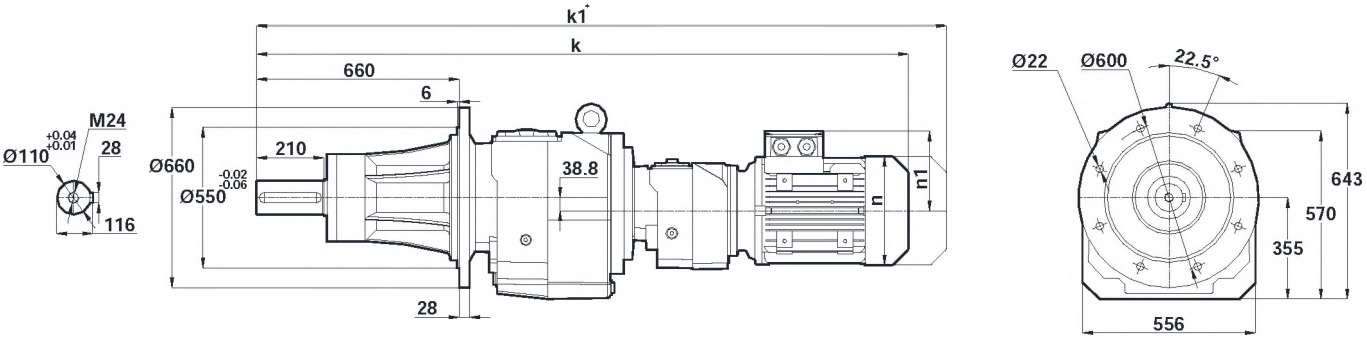


100-112-132

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

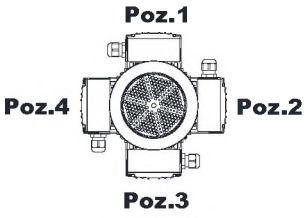
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB875
NRB876



Taglia motore / *Motor Size* / Motorbaugroße					
	71	80	90S	90L	100L
k	1599	1627	1657	1682	1722
k1	1690	1720	1761.5	1786.5	1841.5
n	137	155	176	176	193
n1	112	121	132	132	147

Morsettiera / *Terminal Box* / Klemmenkasten

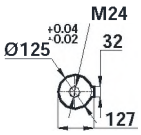


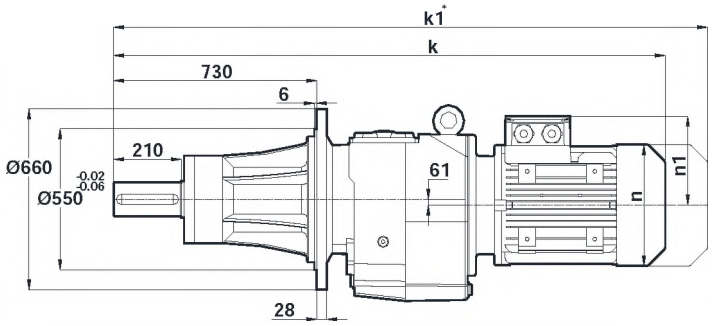
71-80-90-100

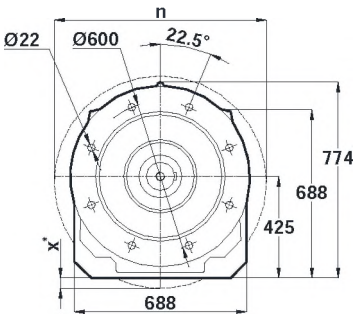
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NRB972
NRB973

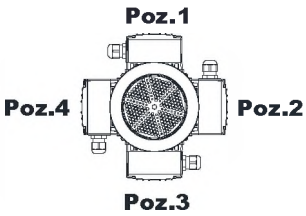






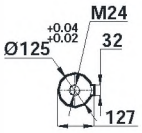
Taglia motore / *Motor Size* / Motorbaugroße												
	160M	160L	180M	180L	200L	225S	225M	250M	280S	280M	315S	315M
k	1785	1785	1850	1850	1905	1923	1946	2049	2110	2110	2222	2274
k1	1965	1965	2020.5	2020.5	2091.5	2088	2111	2219.5	2283	2289	-	-
n	315	315	347	347	390	434	434	480	544	544	614	614
n1	219	219	234	234	275	285	285	322	350	350	510	510
x	-	-	-	-	-	-	-	-	-	-	-	-

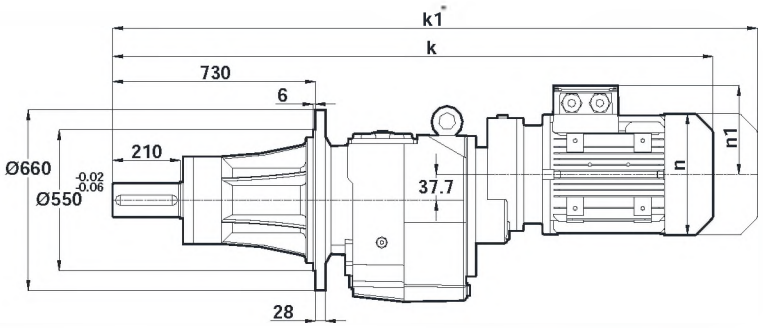
Morsettiera / *Terminal Box* / Klemmenkasten

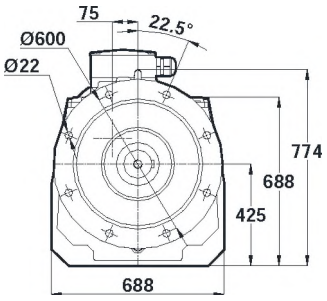


160-180-200-225-250-280-315

NRB974

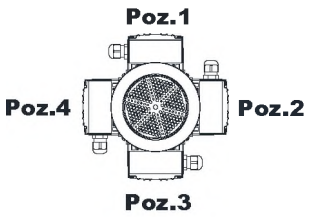






Taglia motore / *Motor Size* / Motorbaugroße				
	100L	112M	132S	132M
k	1754	1777	1831	1869
k1	1873.5	1881.5	1961	1999
n	193	215	257	257
n1	147	158	179	179

Morsettiera / *Terminal Box* / Klemmenkasten



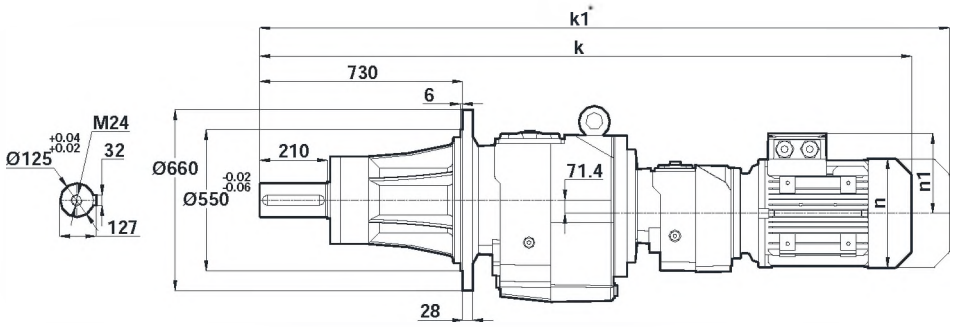
100-112-132

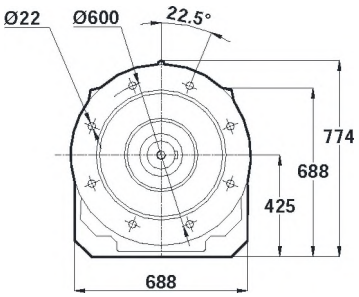
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte



Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

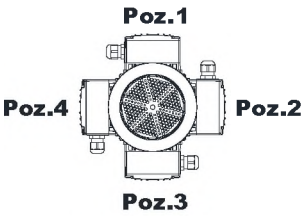
NRB975
NRB976





Taglia motore / *Motor Size* / Motorbaugroße						
	80	90S	90L	100L	112M	132S
k	1824	1852	1877	1913	1936	1990
k1	1917	1956.5	1981.5	2032.5	2040.5	2120
n	155	176	176	193	215	257
n1	121	132	132	147	158	179

Morsettiera / *Terminal Box* / Klemmenkasten

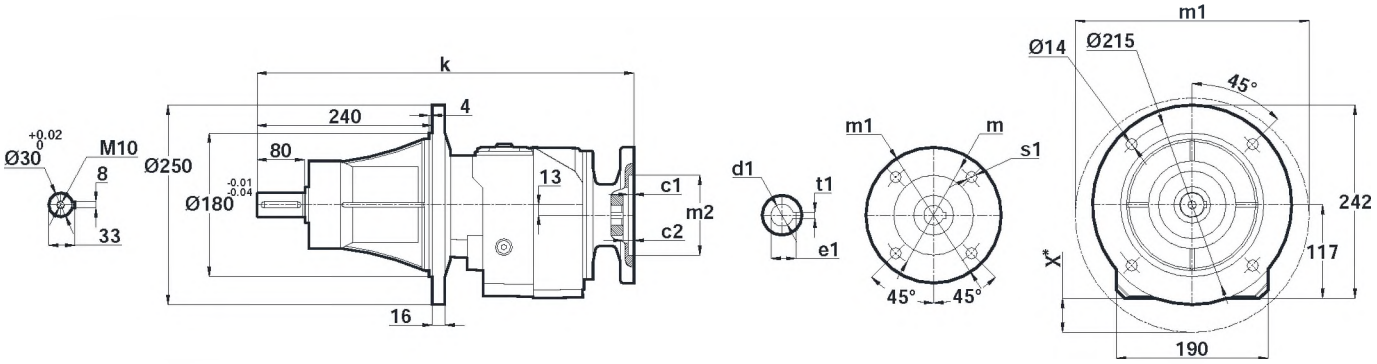


80-90-100-112-132

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

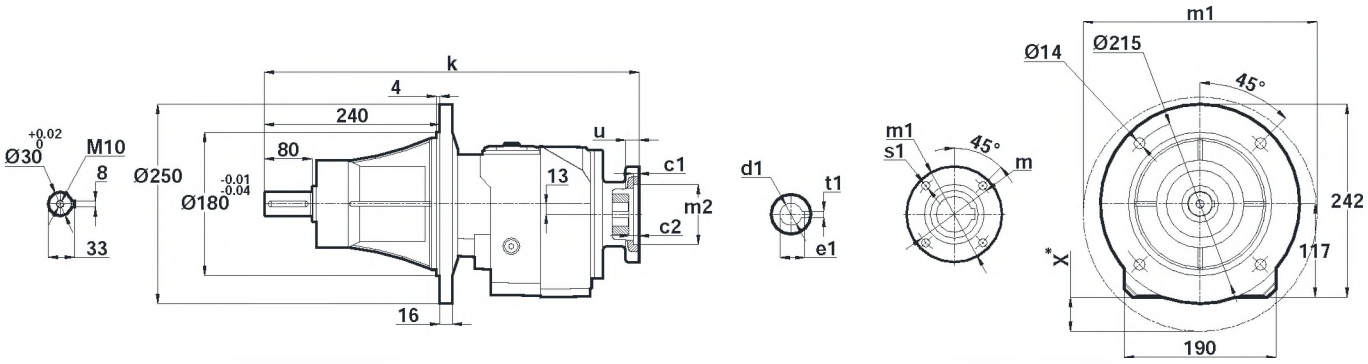
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB202-A..
NNB203-A..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
63/B5	4	5	9	115	140	95	12	503	11	4	12.8	-
71/B5	4	8.5	11	130	160	110	12	474	14	5	163	-
80/B5	4	5	12	165	200	130	12	503	19	6	21.8	-
90/B5	4	5	12	165	200	130	12	503	24	8	27.3	-
100/B5	4	5.5	15	215	250	180	12	496	28	8	31.3	23
112/B5	4	5.5	15	215	250	180	12	496	28	8	31.3	23

NNB202-B..
NNB203-B..

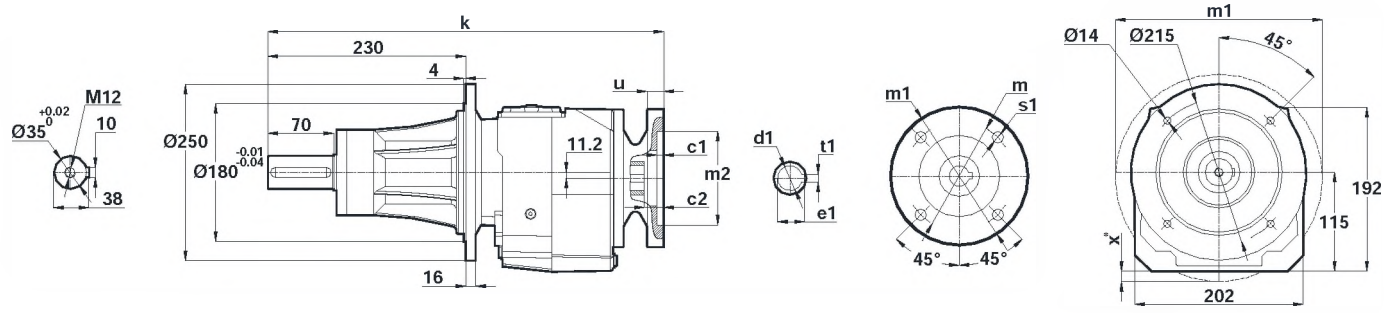


IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
71/B14	3	8.5	7	85	105	70	10	474	14	5	16.3	-
80/B14	4	5	7	100	120	80	12	503	19	6	21.8	-
90/B14	4	5	9	115	140	95	12	503	24	8	27.3	-
100/B14	4	5.5	9	130	160	110	12	496	28	8	31.3	-
112/B14	4	5.5	9	130	160	110	12	496	28	8	31.3	-

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

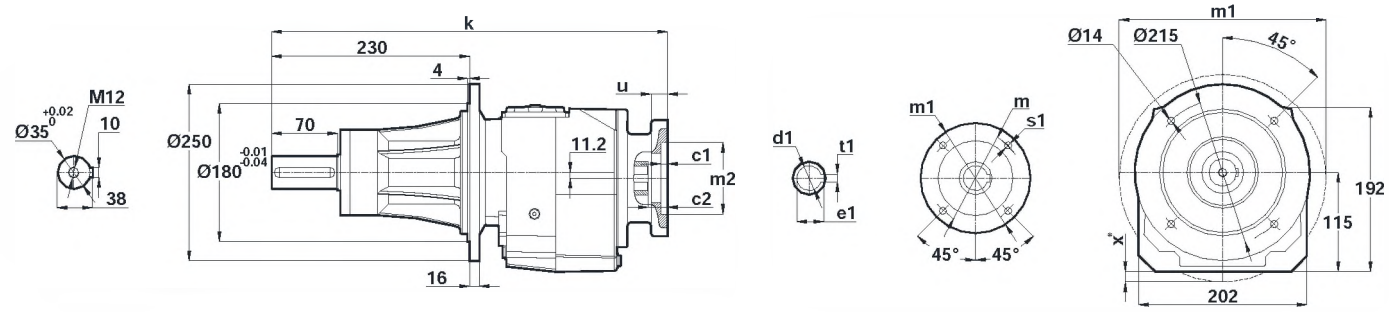
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB272-A..
NNB273-A..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
63/B5	4	5	9	115	140	95	12	484	11	4	12.8	-
71/B5	4	8.5	11	130	160	110	12	455	14	5	16.3	-
80/B5	4	5	12	165	200	130	12	484	19	6	21.8	-
90/B5	4	5	12	165	200	130	12	484	24	8	27.3	-
100/B5	4	5.5	15	215	250	180	12	477	28	8	31.3	22
112/B5	4	5.5	15	215	250	180	12	477	28	8	31.3	22
132/B5	4.5	7	15	265	300	230	15	514	38	10	41.3	47

NNB272-B..
NNB273-B..

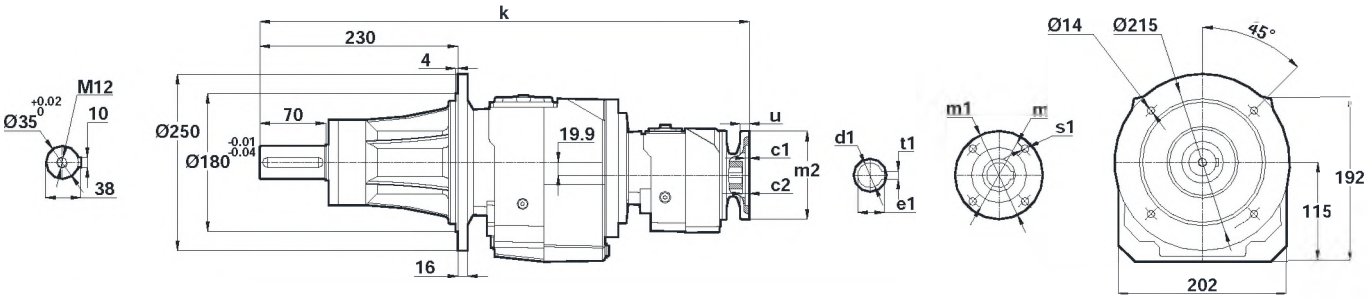


IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
71/B14	3	8.5	7	85	105	70	10	455	14	5	16.3	-
80/B14	4	5	7	100	120	80	12	484	19	6	21.8	-
90/B14	4	5	9	115	140	95	12	484	24	8	27.3	-
100/B14	4	5.5	9	130	160	110	12	477	28	8	31.3	-
112/B14	4	5.5	9	130	160	110	12	477	28	8	31.3	-
132/B14	4.4	6	11	165	200	130	15	514	38	10	41.3	47

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

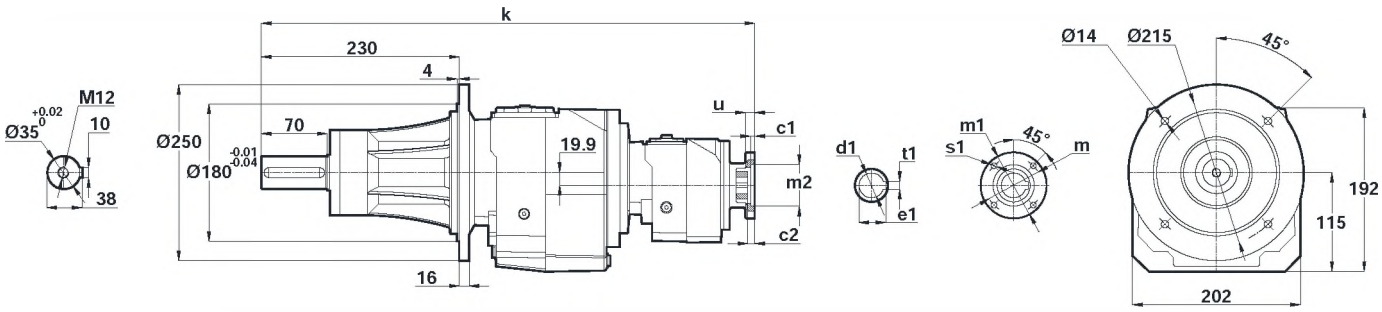
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB275-A..
NNB276-A..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	10	599	11	4	12.8
71/B5	4	4.5	11	130	160	110	12	601	14	5	16.3

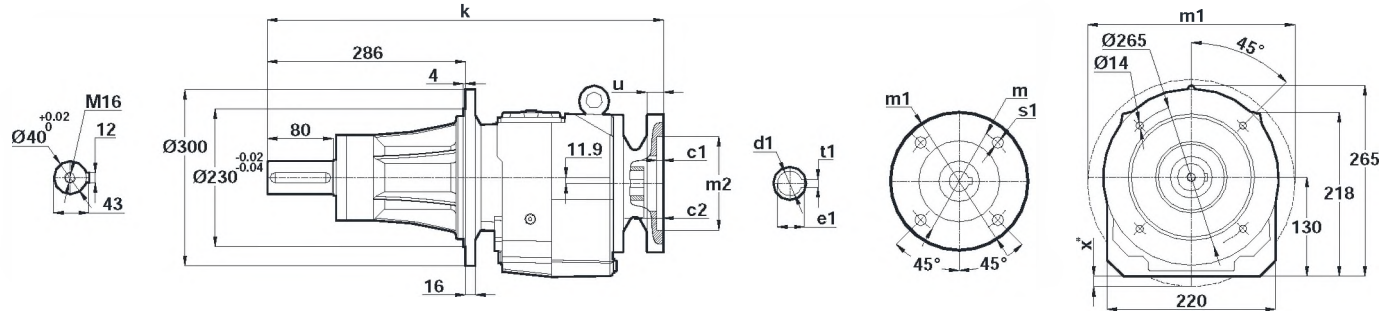
NNB275-B..
NNB276-B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
63/B14	2.5	5	5.5	75	90	60	10	599	11	4	12.8
71/B14	3	4.5	7	85	105	70	10	601	14	5	16.3

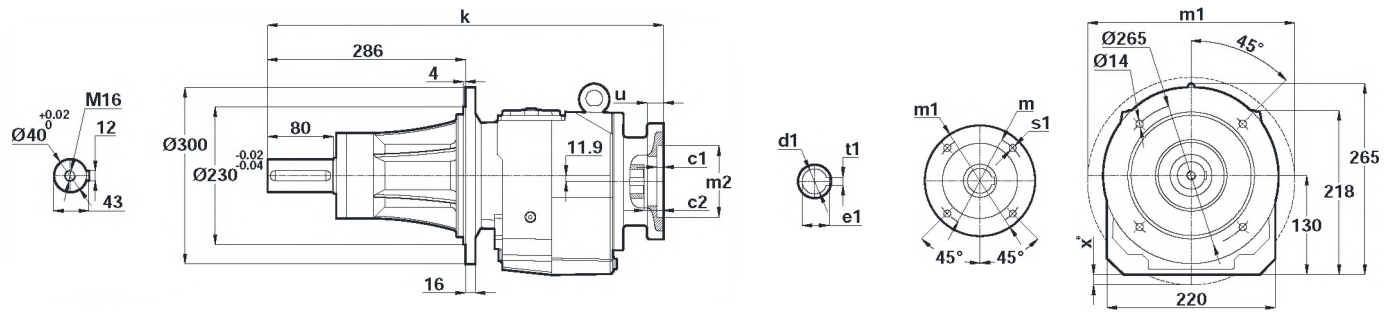
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB282-A..
NNB283-A..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
71/B5	4	9	11	130	160	110	12	559	14	5	16.3	-
80/B5	4	9	12	165	200	130	12	559	19	6	21.8	-
90/B5	4	9	12	165	200	130	12	559	24	8	27.3	-
100/B5	4.5	9	15	215	250	180	15	566	28	8	31.3	7
112/B5	4.5	9	15	215	250	180	15	566	28	8	31.3	7
132/B5	4.5	7	15	265	300	230	15	596	38	10	41.3	32

NNB282-B..
NNB283-B..

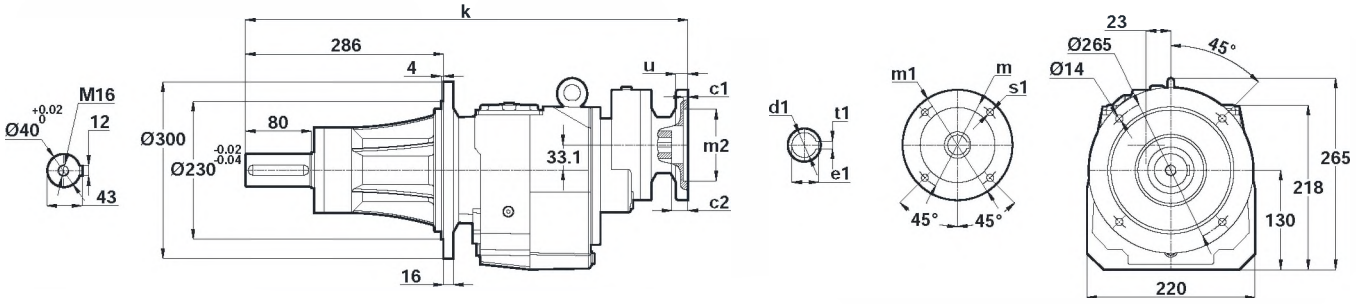


IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
80/B14	4	9	7	100	120	80	12	559	19	6	21.8	-
90/B14	4	9	9	115	140	95	12	559	24	8	26.3	-
100/B14	4	9	9	130	160	110	15	566	28	8	31.3	-
112/B14	4	9	9	130	160	110	15	566	28	8	31.3	-
132/B14	4.5	7	11	165	200	130	15	596	38	10	41.3	-

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

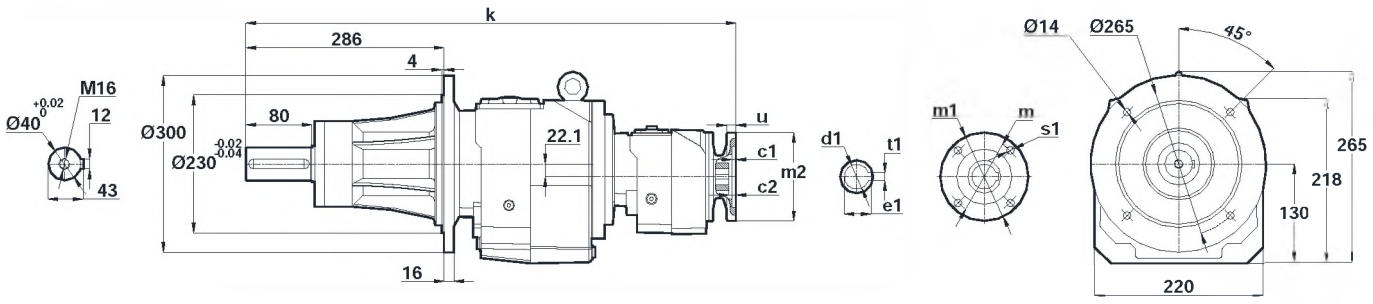
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB284-A..
NNB284-B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	10	636	11	4	12.8
71/B5	4	4.5	11	130	160	110	12	607	14	5	16.3
71/B14	3	4.5	7	85	105	70	10	607	14	5	16.3

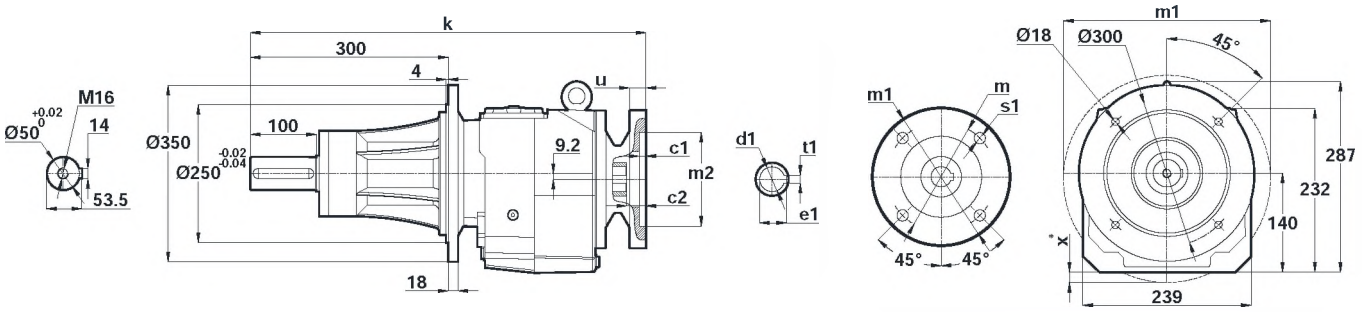
NNB285-A.. / B..
NNB286-A.. / B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
63/B5	4	7	10	115	140	95	12	702	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	10	702	11	4	12.8

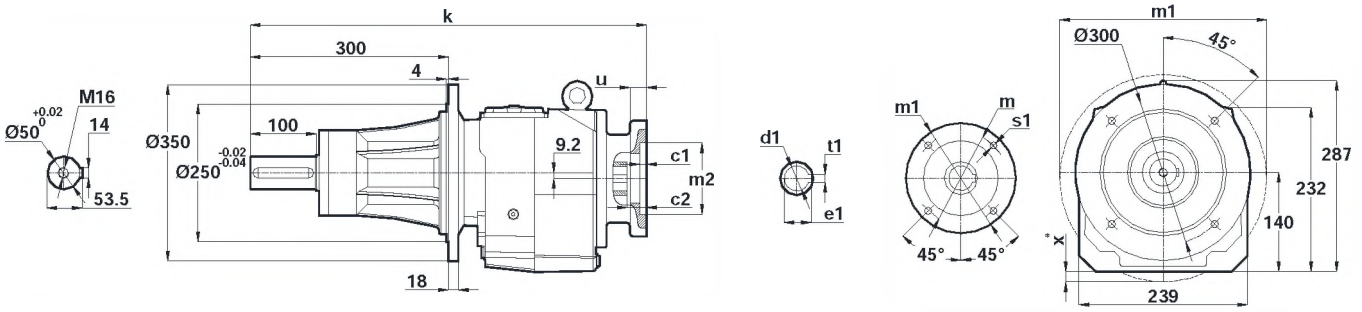
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB372-A..
NNB373-A..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
71/B5	4	9	11	130	160	110	12	584	14	5	16.3	-
80/B5	4	9	12	165	200	130	12	584	19	6	21.8	-
90/B5	4	9	12	165	200	130	12	584	24	8	27.3	-
100/B5	4.5	9	15	215	250	180	15	601	28	8	31.3	-
112/B5	4.5	9	15	215	250	180	15	601	28	8	31.3	-
132/B5	4.5	7	15	265	300	230	15	621	38	10	41.3	20

NNB372-B..
NNB373-B..

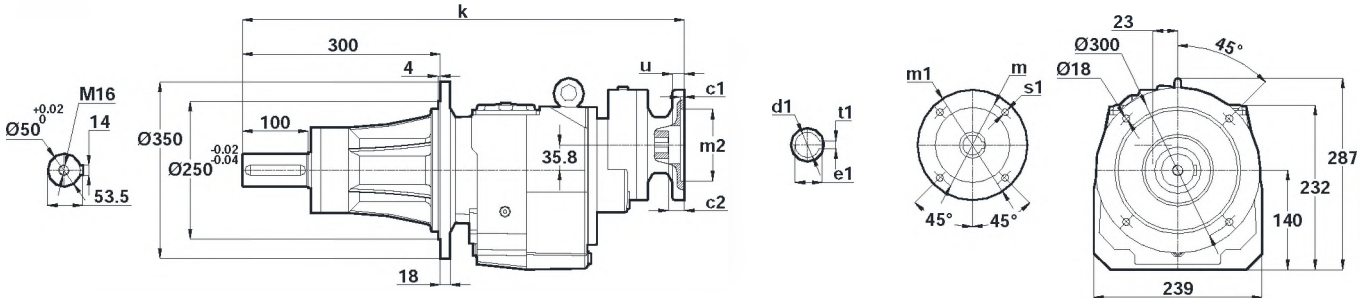


IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
80/B14	4	9	7	100	120	80	12	584	19	6	21.8	-
90/B14	4	9	9	115	140	95	12	584	24	8	26.3	-
100/B14	4	9	9	130	160	110	15	601	28	8	31.3	-
112/B14	4	9	9	130	160	110	15	601	28	8	31.3	-
132/B14	4.5	9	11	165	200	130	15	621	38	10	41.3	-

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

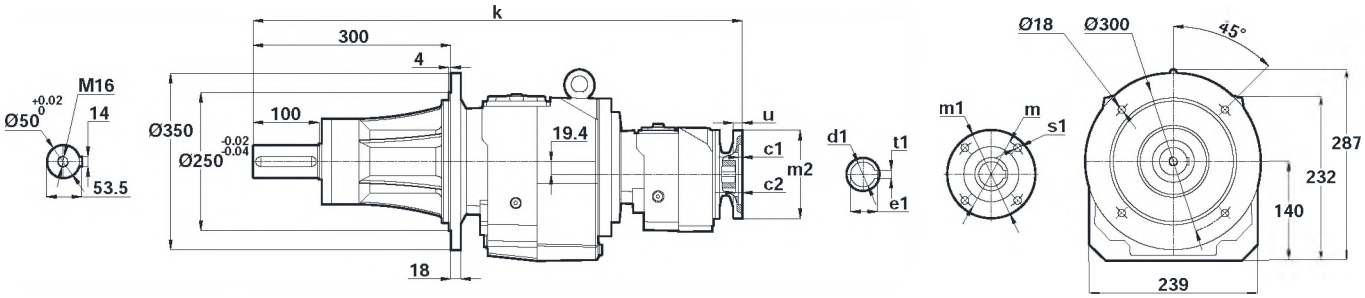
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB374-A..
NNB374-B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	12	661	11	4	12.8
71/B5	4	8.5	11	130	160	110	12	632	14	5	16.3
80/B5	4	5	12	165	200	130	12	661	19	6	21.8
71/B14	3	8.5	7	85	105	70	10	632	14	5	16.3
80/B14	4	5	7	100	120	80	12	661	19	6	21.8

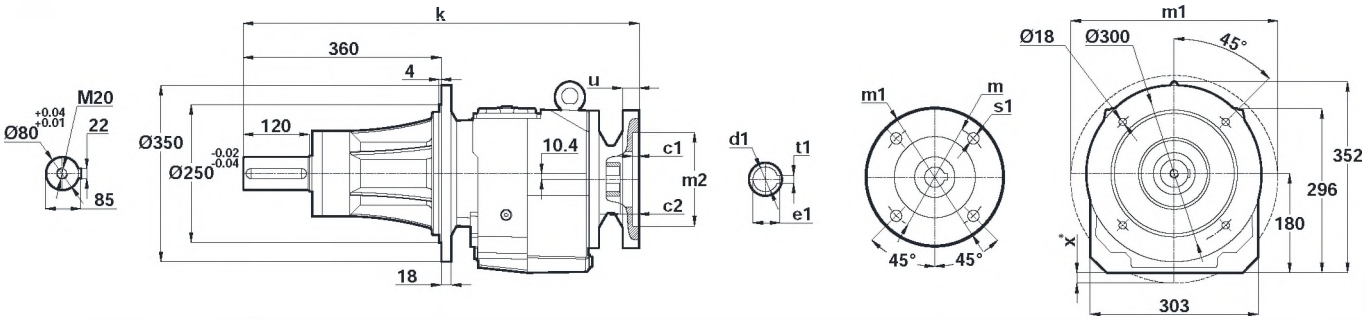
NNB375-A.. / B..
NNB376-A.. / B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
63/B5	3.5	5	10	115	140	95	10	727	11	4	12.8
63/B14	2.5	5	5.5	75	90	60	10	727	11	4	12.8

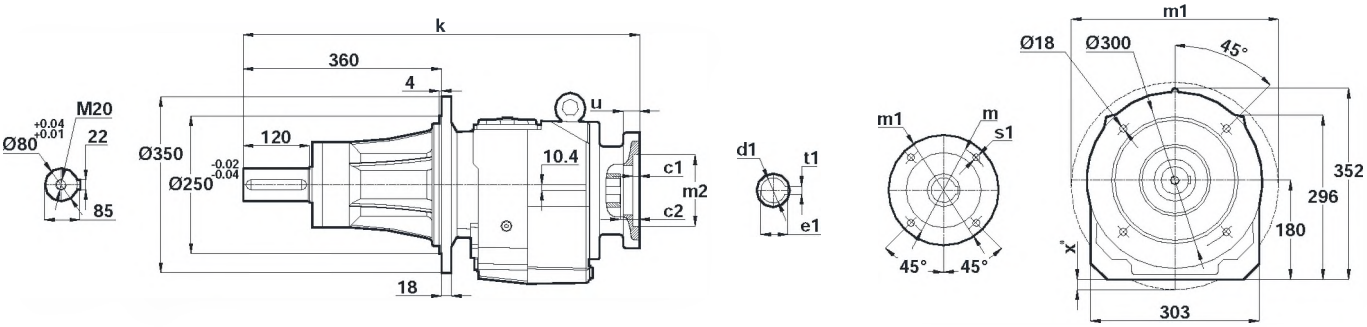
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB472-A..
NNB473-A..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
80/B5	4	5	12	165	200	130	12	687	19	6	21.8	-
90/B5	4	5	12	165	200	130	12	687	24	8	27.3	-
100/B5	4.5	9	15	215	250	180	15	705	28	8	31.3	-
112/B5	4.5	9	15	215	250	180	15	705	28	8	31.3	-
132/B5	4.5	6	15	265	300	230	15	724	38	10	41.3	-
160/B5	5.5	10	19	300	350	250	20	803	42	12	45.3	6
180/B5	5.5	10	19	300	350	250	20	803	48	14	51.8	6

NNB472-B..
NNB473-B..

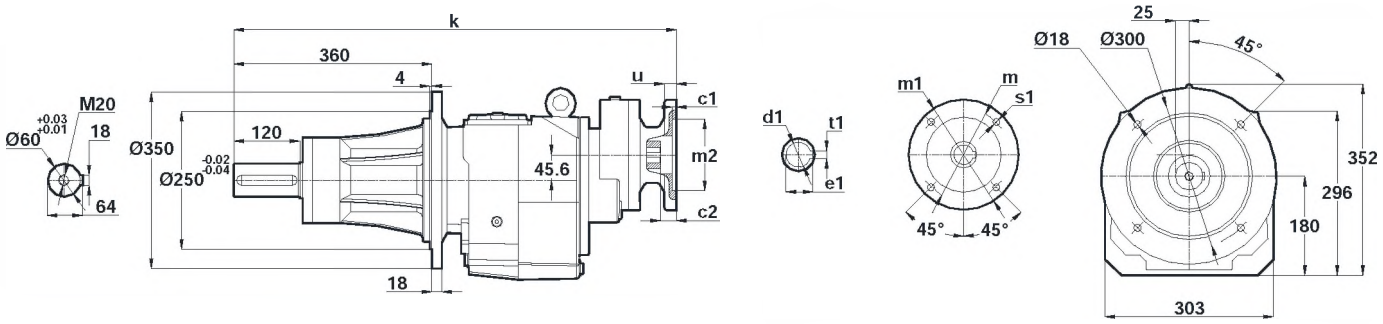


IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
90/B14	4	5	9	115	140	95	12	687	24	8	27.3	-
100/B14	4	9	9	130	160	110	15	705	28	8	31.3	-
112/B14	4	9	9	130	160	110	15	705	28	8	31.3	-
132/B14	4.4	6	11	165	200	130	15	724	38	10	41.3	-

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

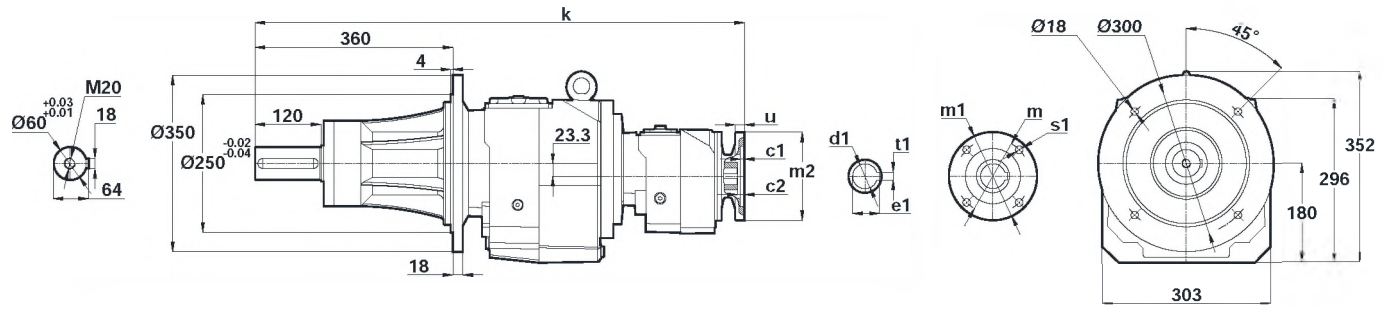
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB474-A..
NNB474-B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	12	785	14	5	16.3
80/B5	4	9	12	165	200	130	12	785	19	6	21.8
80/B14	4	9	7	100	120	80	12	785	19	6	21.8

NNB475-A.. / B..
NNB476-A.. / B..



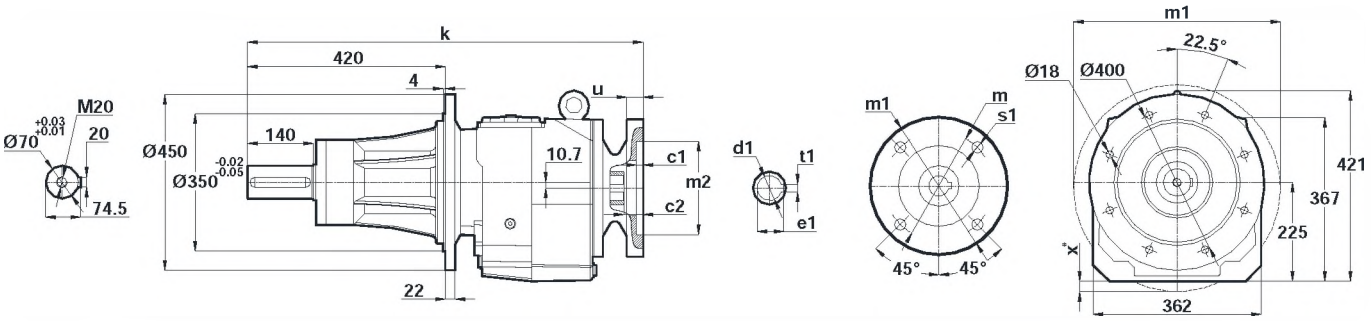
IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	12	913	11	4	12.8
71/B5	4	8.5	11	130	160	110	12	884	14	5	16.3
71/B14	3	8.5	7	85	105	70	10	884	14	5	16.3



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

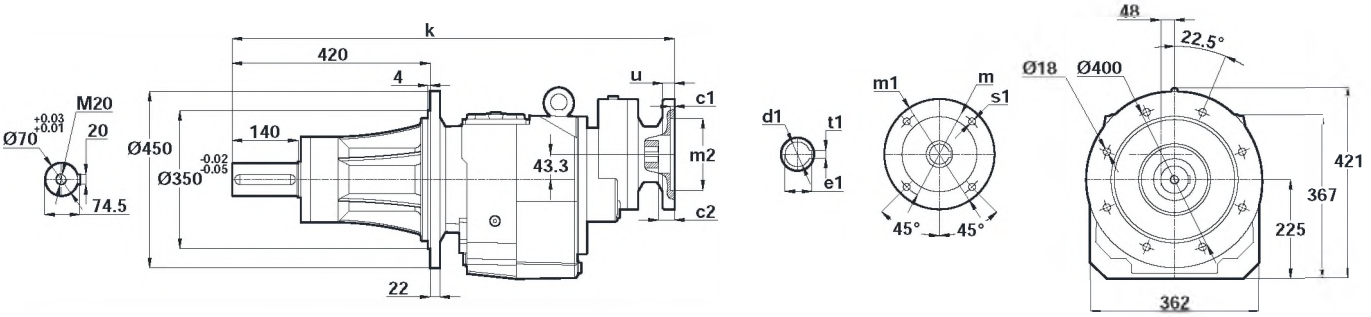
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB572-A.. / B..
NNB573-A.. / B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
100/B5	4.5	20	15	215	250	180	15	827	28	8	31.3	-
112/B5	4.5	20	15	215	250	180	15	827	28	8	31.3	-
132/B5	4.5	9	15	265	300	230	15	848	38	10	41.3	-
160/B5	5.5	10	19	300	350	250	18	923	42	12	45.3	-
180/B5	5.5	10	19	300	350	250	18	923	48	14	51.8	-
200/B5	5.5	10	19	350	400	300	22	843	55	16	59.3	-
132/B14	4.5	9	11	165	200	130	15	848	38	10	41.3	-

NNB574-A..
NNB574-B..

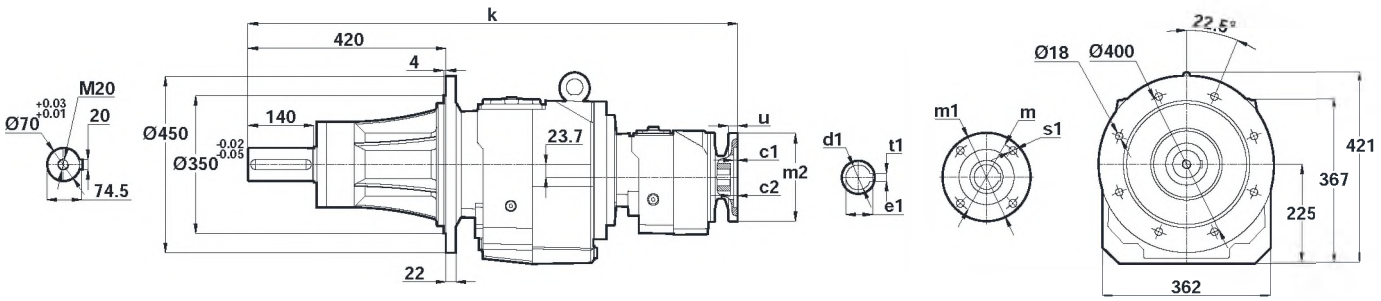


IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	12	670	14	5	16.3
80/B5	4	9	12	165	200	130	12	670	14	6	21.8
90/B5	4	9	12	165	200	130	12	670	19	8	27.3
80/B14	4	9	7	100	120	80	12	670	19	6	21.8
90/B14	4	9	9	115	140	95	12	670	24	8	26.3

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

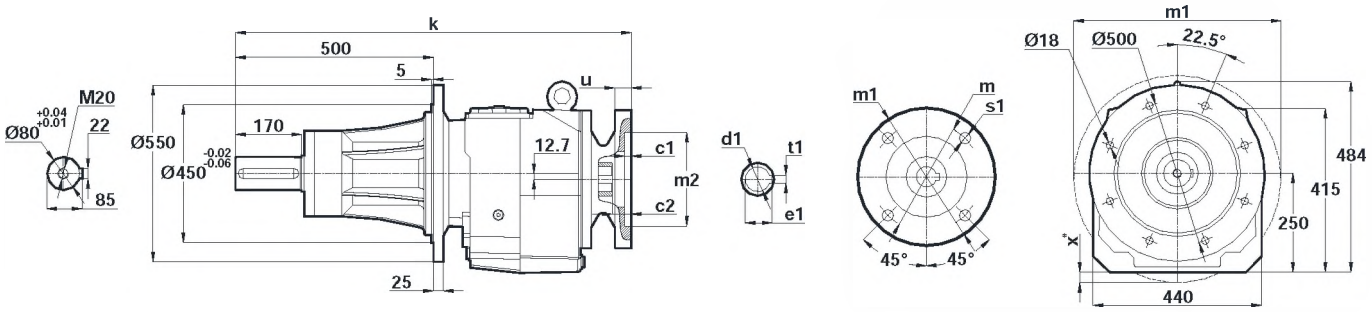
NNB575-A.. / B..
NNB576-B.. / B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
63/B5	4	5	9	115	140	95	12	800	11	4	12.8
71/B5	4	8.5	11	130	160	110	12	771	14	5	16.3
71/B14	3	8.5	7	85	105	70	10	771	14	5	16.3

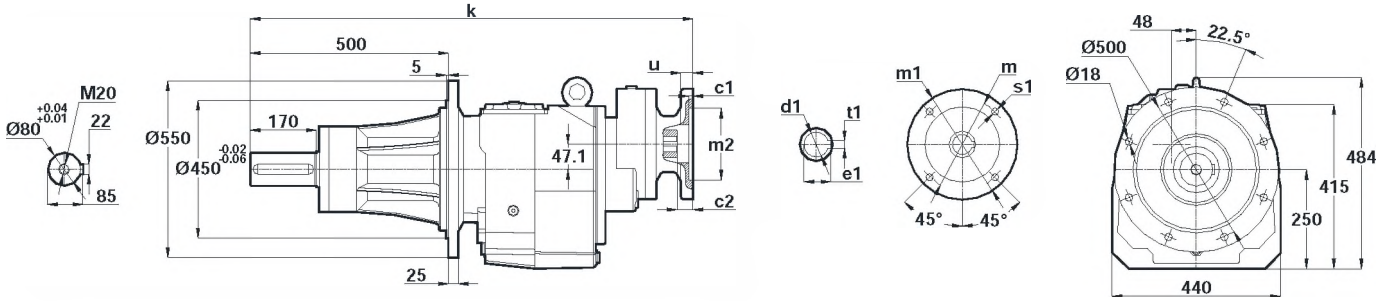
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB672-A.. / B..
NNB673-A.. / B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
112/B5	4.5	14.5	15	215	250	180	15	928	28	8	31.3	-
132/B5	4.5	9	15	265	300	230	15	943	38	10	41.3	-
160/B5	5.5	10	19	300	350	250	20	1018	42	12	45.3	-
180/B5	5.5	10	19	300	350	250	20	1018	48	14	51.8	-
200/B5	5.5	10	19	350	400	300	22	1038	55	16	59.3	-
225/B5	5.5	10	19	400	450	350	24	1091	60	18	64.4	-
132/B14	4.5	9	15	165	200	130	15	943	38	10	41.3	-

NNB674-A..
NNB674-B..

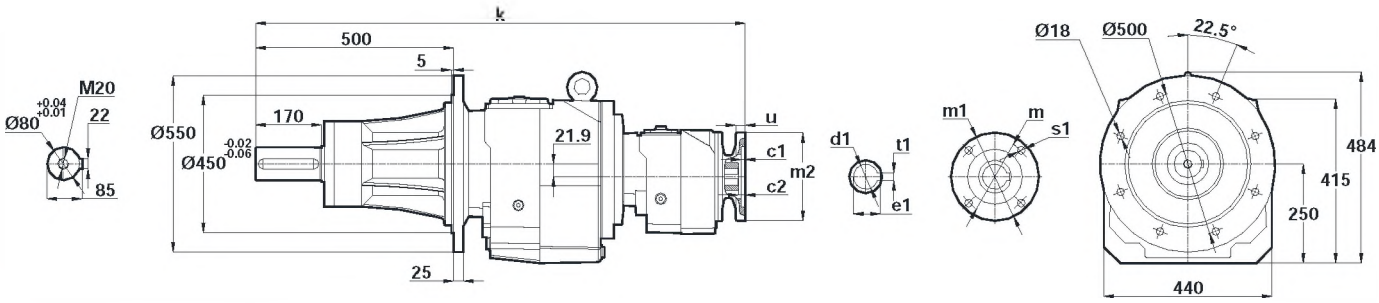


IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	12	1018	19	6	21.8
90/B5	4	5	12	165	200	130	12	1018	24	8	27.3
90/B14	4	5	9	115	140	95	12	1018	24	8	27.3

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

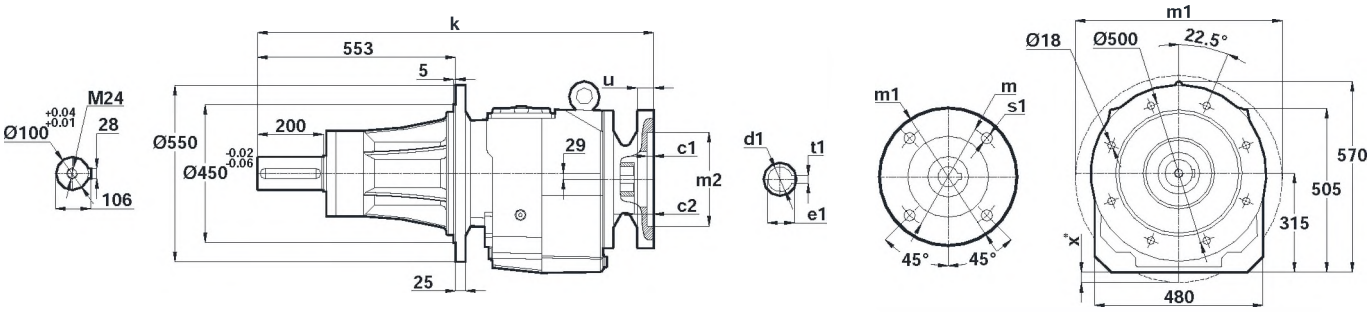
NNB675-A.. / B..
NNB676-B.. / B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	12	1168	14	5	16.3
80/B5	4	9	12	165	200	130	12	1168	19	6	21.8
80/B14	4	9	7	100	120	80	12	1168	19	6	21.8

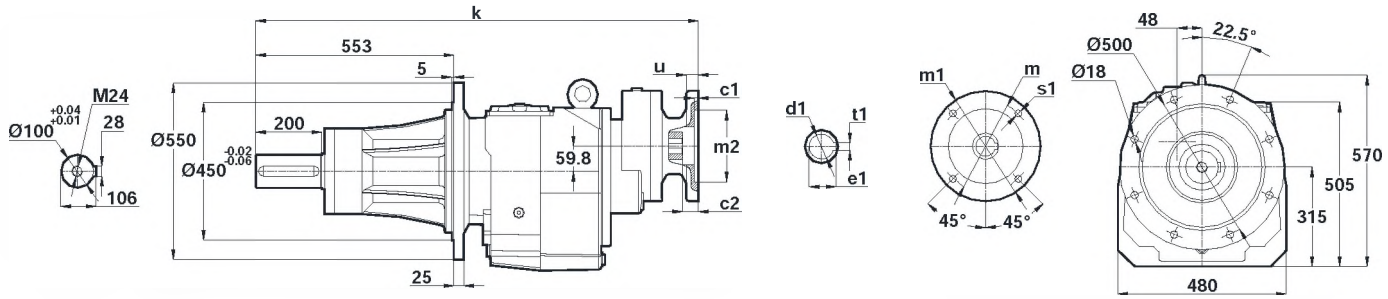
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB772-A..
NNB773-A..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
132/B5	4.5	15	15	265	300	230	15	1051	38	10	41.3	-
160/B5	5.5	10	19	300	350	250	20	1120	42	12	45.3	-
180/B5	5.5	10	19	300	350	250	20	1120	43	14	51.8	-
200/B5	5.5	10	19	350	400	300	20	1142	55	16	59.3	-
225/B5	5.5	10	19	400	450	350	24	1195	60	18	64.4	-
250/B5	5.5	10	19	500	550	450	24	1195	65	18	69.4	-

NNB774-A..
NNB774-B..

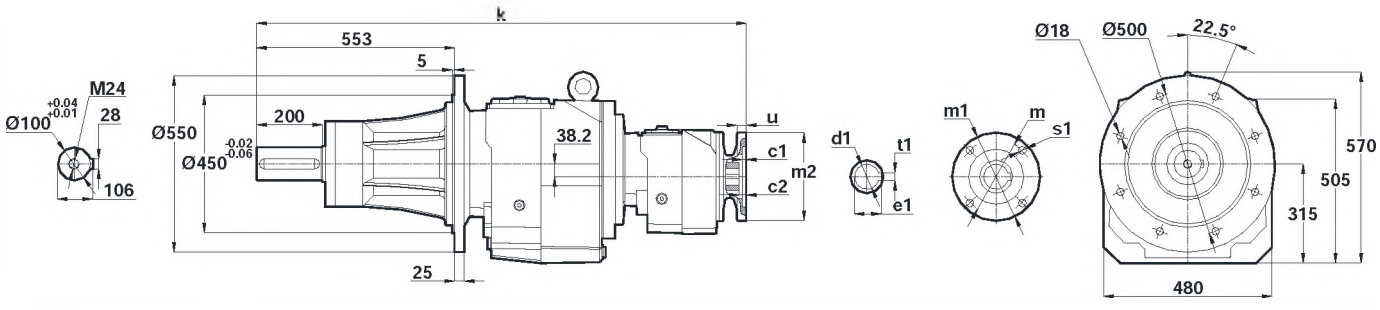


IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	12	1126	19	6	21.8
90/B5	4	5	12	165	200	130	12	1126	24	8	27.3
100/B5	4.5	9	15	215	250	180	15	1144	28	8	31.3
90/B14	4	5	9	115	140	95	12	1126	24	8	27.3
100/B14	4	9	9	130	160	110	15	1144	28	8	31.3

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

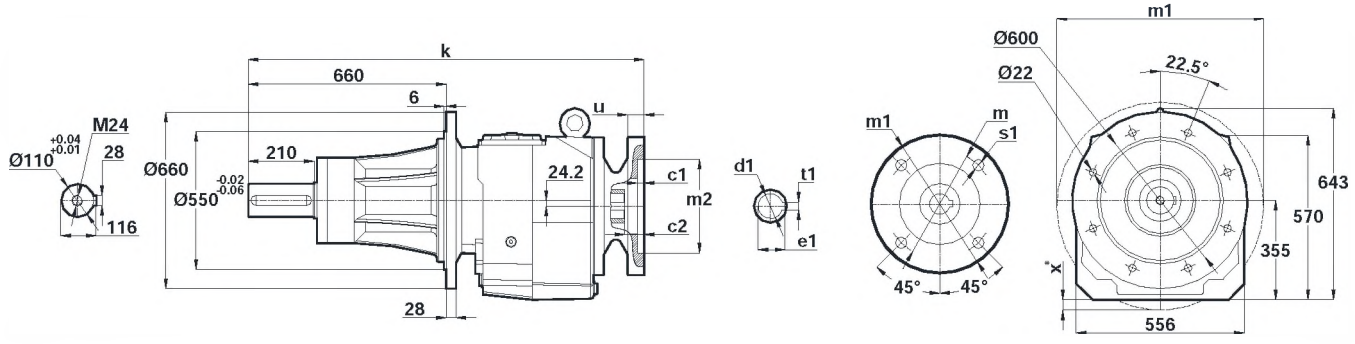
NNB775-A.. / B..
NNB776-B.. / B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	12	1279	14	5	16.3
80/B5	4	9	12	165	200	130	12	1279	19	6	21.8
90/B5	4	9	12	165	200	130	12	1279	24	8	27.3
80/B14	4	9	7	100	120	80	12	1279	19	6	21.8
90/B14	4	9	9	115	140	95	12	1279	24	8	26.3

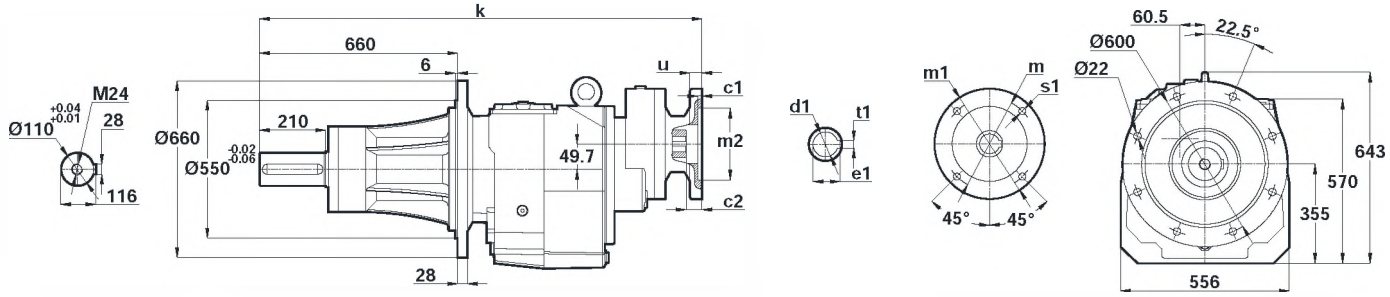
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB872-A..
NNB873-A..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
160/B5	5.5	10	19	300	350	250	20	1373	42	12	45.3	-
180/B5	5.5	10	19	300	350	250	20	1373	48	14	51.8	-
200/B5	5.5	10	19	350	400	300	22	1373	55	16	59.3	-
225/B5	5.5	10	19	400	450	350	24	1373	60	18	64.4	-
250/B5	5.5	10	19	500	550	450	24	1373	65	18	69.4	-
280/B5	5.5	10	19	500	550	450	24	1373	75	20	79.9	-

NNB874-A..
NNB874-B..

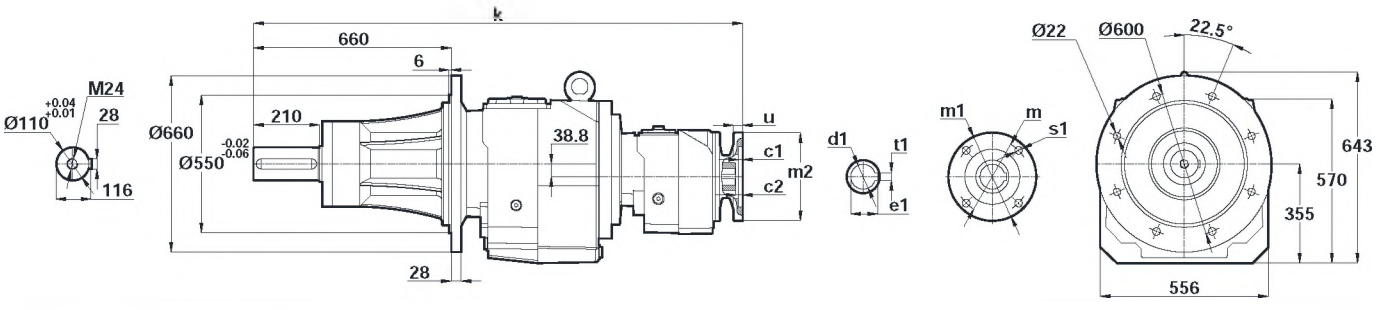


IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
100/B5	4.5	20	15	215	250	180	15	1346	28	8	31.3
112/B5	4.5	20	15	215	250	180	15	1346	28	8	31.3
132/B5	4.5	9	15	265	300	230	15	1367	38	10	41.3
132/B14	4.5	9	11	165	200	130	15	1367	38	10	41.3

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

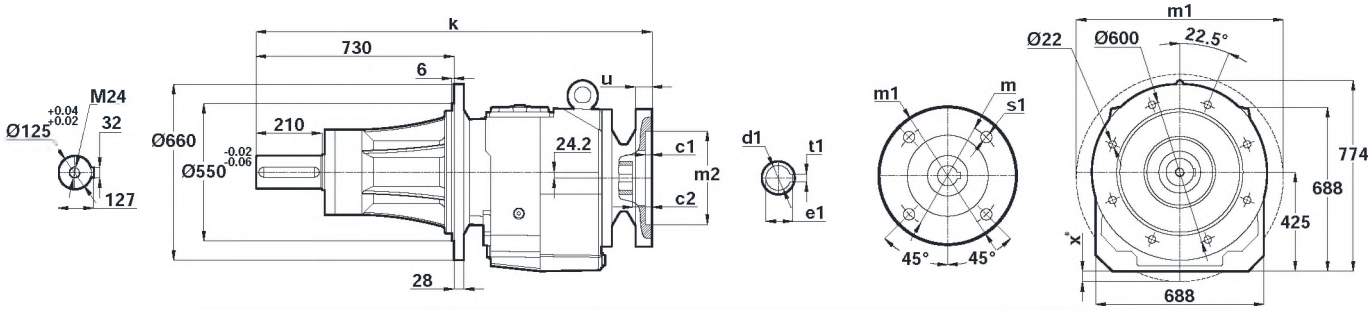
NNB875-A.. / B..
NNB876-B.. / B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
71/B5	4	9	11	130	160	110	12	1463	14	5	16.3
80/B5	4	9	12	165	200	130	12	1463	19	6	21.8
90/B5	4	9	12	165	200	130	12	1463	24	8	27.3
100/B5	4.5	9	15	215	250	180	15	1480	28	8	31.3
80/B14	4	9	7	100	120	80	12	1463	19	8	21.8
90/B14	4	9	9	115	140	95	12	1463	24	8	26.3
100/B14	4	9	9	130	160	110	15	1480	28	8	31.3

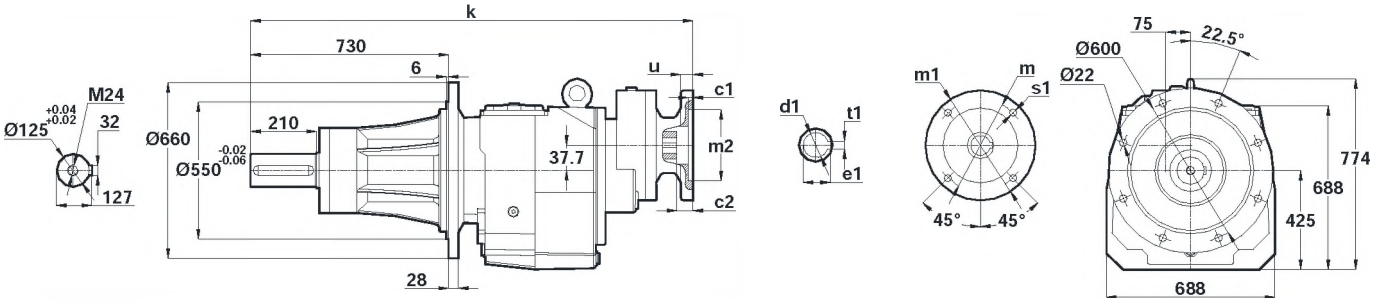
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB972-A..
NNB973-A..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1	x
160/B5	5.5	10	19	300	350	250	20	1431	42	12	45.3	-
180/B5	5.5	10	19	300	350	250	20	1431	48	14	51.8	-
200/B5	5.5	10	19	350	400	300	22	1455	55	16	59.3	-
225/B5	5.5	10	19	400	450	350	24	1497	60	18	64.4	-
250/B5	5.5	10	19	500	550	450	24	1549	65	18	69.4	-
280/B5	5.5	10	19	500	550	450	24	1549	75	20	79.9	-
315/B5	6.5	15	24	660	600	550	24	1599	85	22	90.4	-

NNB974-A..
NNB974-B..

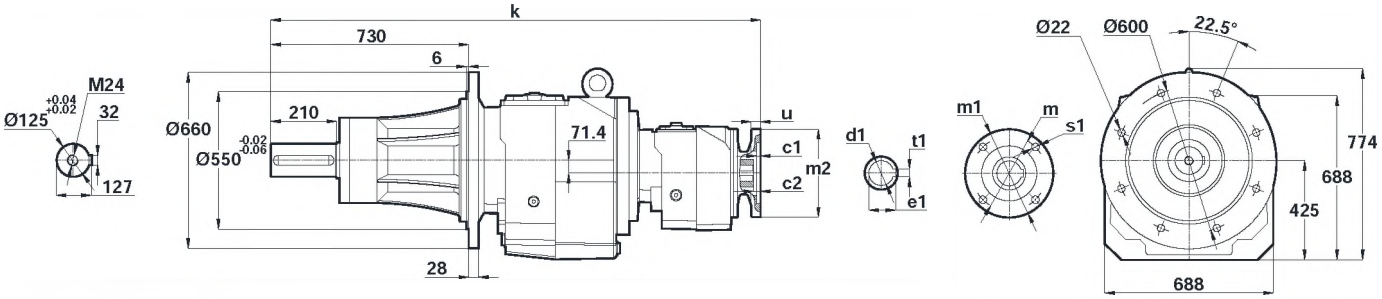


IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
100/B5	4.5	14.5	15	215	250	180	15	1519	28	8	31.3
112/B5	4.5	14.5	15	215	250	180	15	1519	28	8	31.3
132/B5	4.5	9	15	265	300	230	15	1534	38	10	41.3
132/B14	4.5	9	15	165	200	130	15	1534	38	10	41.3

x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NNB975-A.. / B..
NNB976-B.. / B..



IEC	c1	c2	s1	m	m1	m2	u	k	d1	t1	e1
80/B5	4	5	12	165	200	130	12	1655	19	6	12.8
90/B5	4	5	12	165	200	130	12	1655	24	8	27.3
100/B5	4.5	9	15	215	250	180	15	1674	28	8	31.3
112/B5	4.5	9	15	215	250	180	15	1674	28	8	31.3
132/B5	4.5	6	15	265	300	230	15	1692	38	10	41.3
90/B14	4	5	9	115	140	95	12	1655	24	8	27.3
100/B14	4	9	9	130	160	110	15	1674	28	8	31.3
112/B14	4	9	9	130	160	110	15	1674	28	8	31.3
132/B14	4.4	6	11	165	200	130	15	1692	38	10	41.3

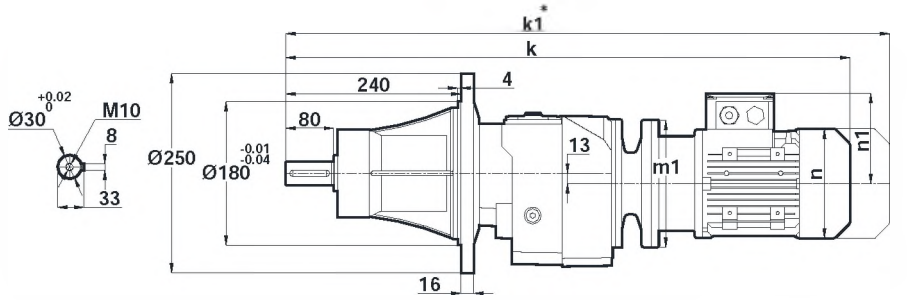
Note / *Notes* / Notizen

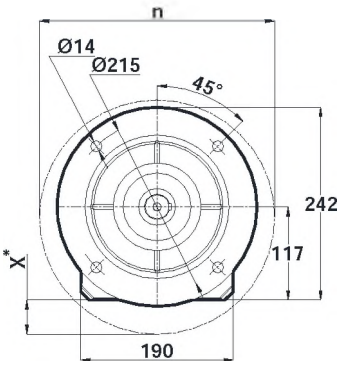


Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

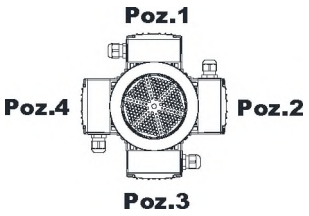
NVB202
NVB203





Taglia motore / *Motor Size* / Motorbaugroße							
IEC	63/B5	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14
k	696	685	737	778	778	806	827
k1	757	776	830	882.5	882.5	925.5	931.5
n / n1	121 / 97	138 / 111	156 / 118	176 / 126	176 / 126	194 / 135	218 / 146
m1 (B5)	140	160	200	200	200	250	250
m1 (B14)	-	105	120	140	140	160	160
x (B5)	-	-	-	-	-	23	23

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80-90-100-112

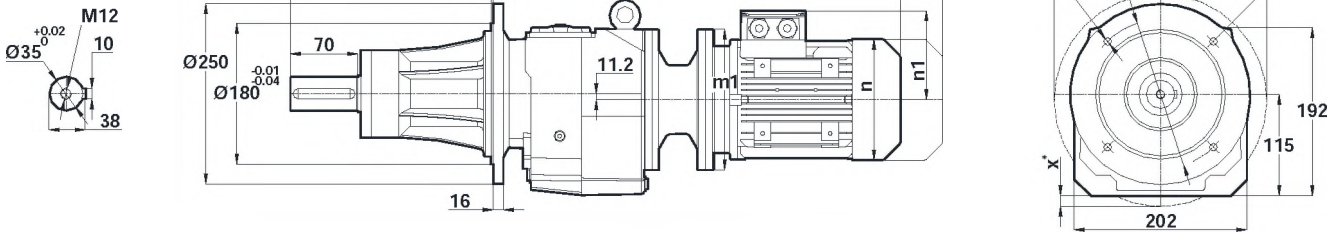
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

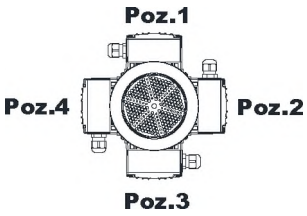
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB272
NVB273



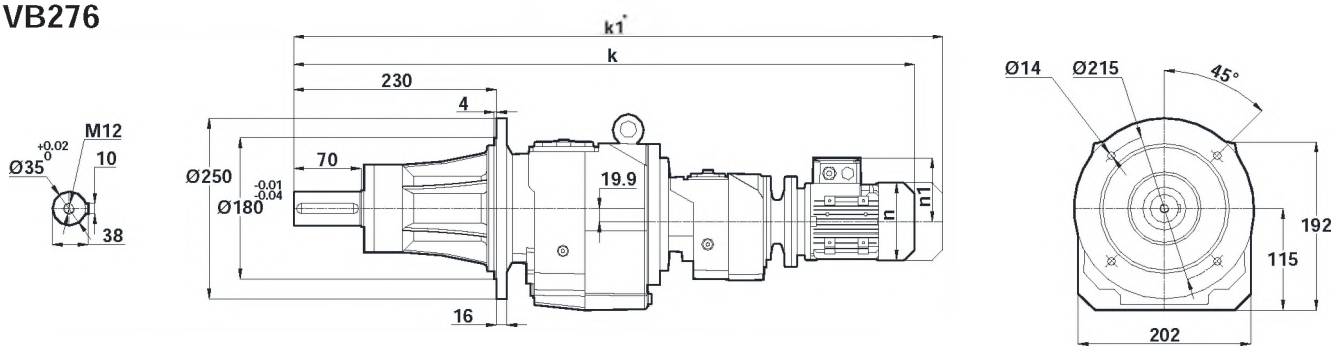
Taglia motore / *Motor Size* / Motorbaugroße					
IEC	63/B5 63/B14	71/B5 71/B14	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	677	666	718	759	759
k1	738	757	811	863.5	863.5
n / n1	121 / 97	138 / 111	156 / 118	176 / 126	176 / 126
m1 (B5)	140	160	200	200	200
m1 (B14)	90	105	120	140	140
x (B5)	-	1	21	21	21

Morsettiera / *Terminal Box* / Klemmenkasten



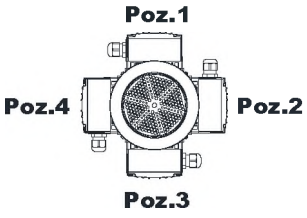
63-71-80-90

NVB275
NVB276



Taglia motore / *Motor Size* / Motorbaugroße		
IEC	63/B5 63/B14	71/B5 71/B14
k	792	812
k1	853	903
n / n1	121 / 97	138 / 111
m1 (B5)	140	160
m1 (B14)	90	105

Morsettiera / *Terminal Box* / Klemmenkasten



63-71

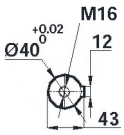
*** La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

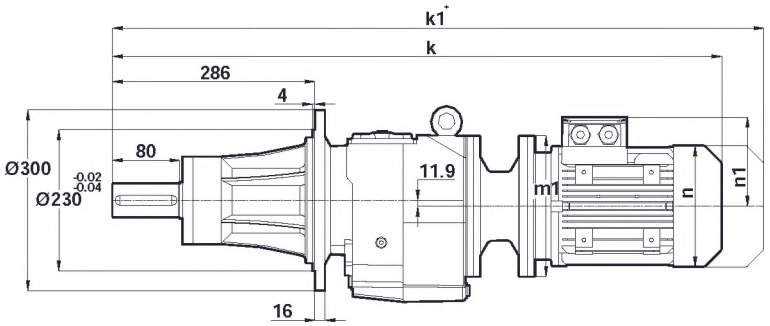


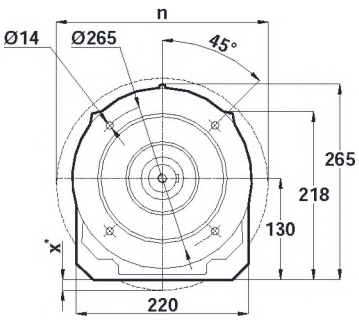
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB282
NVB283

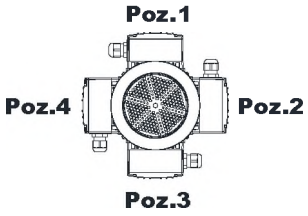






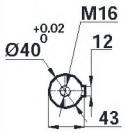
Taglia motore / *Motor Size* / Motorbaugroße								
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	770	793	834	834	877	897	1011	1011
k1	861	886	938.5	938.5	996.5	1001.5	1141	1141
n / n1	138 / 111	156 / 118	176 / 126	176 / 126	194 / 135	218 / 146	257 / 168	257 / 168
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	-	120	140	140	160	160	200	200
x (B5)	-	-	-	-	7	7	32	32

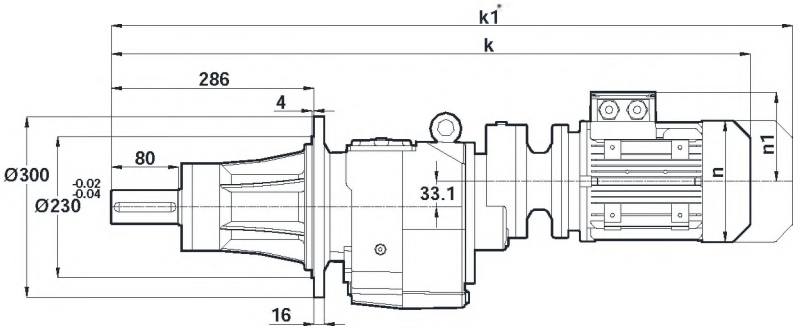
Morsettiera / *Terminal Box* / Klemmenkasten

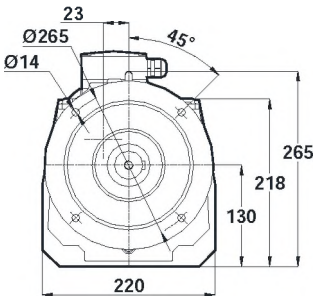


71-80-90-100-112-132

NVB284

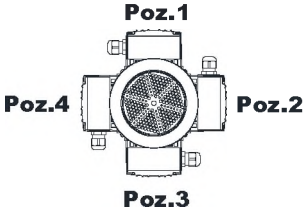






Taglia motore / *Motor Size* / Motorbaugroße		
IEC	63/B5	71/B5 71/B14
k	829	882
k1	890	973
n / n1	121 / 97	138 / 111
m1 (B5)	140	160
m1 (B14)	-	105

Morsettiera / *Terminal Box* / Klemmenkasten

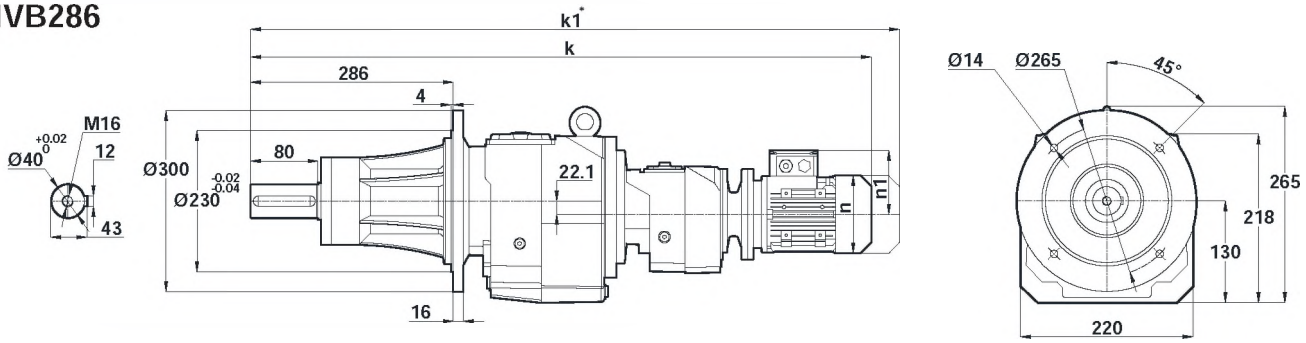


63-71

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

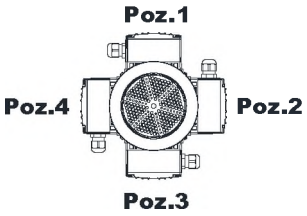
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB285
NVB286



Taglia motore / *Motor Size* / Motorbaugroße	
IEC	63/B5 63/B14
k	895
k1	956
n / n1	121 / 97
m1 (B5)	140
m1 (B14)	90

Morsettiera / *Terminal Box* / Klemmenkasten



63

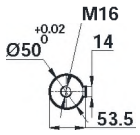
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

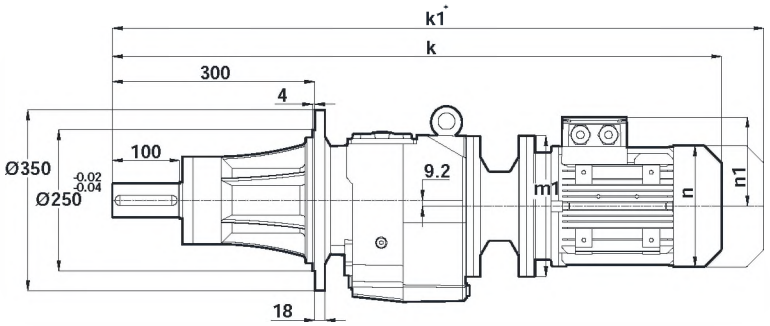


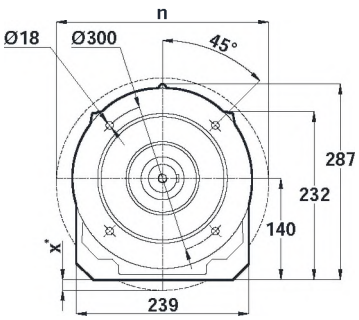
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB372
NVB373

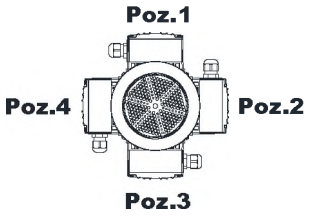






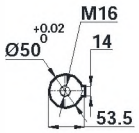
Taglia motore / *Motor Size* / Motorbaugroße								
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14
k	795	818	859	859	912	932	1036	1036
k1	886	911	963.5	963.5	1031.5	1036.5	1166	1166
n / n1	138 / 111	156 / 118	176 / 126	176 / 126	194 / 135	218 / 146	257 / 168	257 / 168
m1 (B5)	160	200	200	200	250	250	300	300
m1 (B14)	-	120	140	140	160	160	200	200
x (B5)	-	-	-	-	-	-	20	20

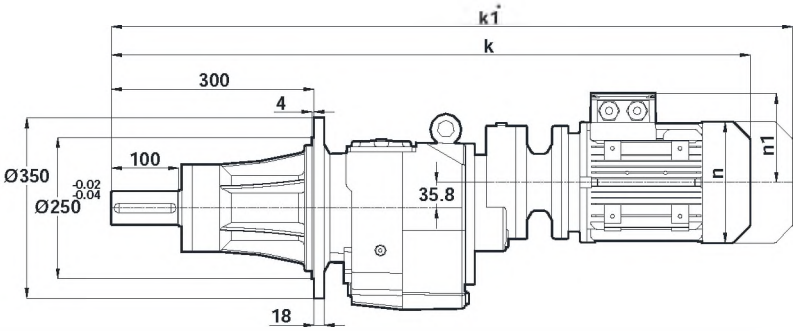
Morsettiera / *Terminal Box* / Klemmenkasten

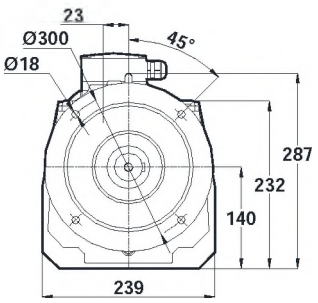


71-80-90-100-112-132

NVB374

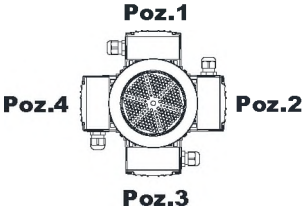






Taglia motore / *Motor Size* / Motorbaugroße			
IEC	63/B5	71/B5 71/B14	80/B5 80/B14
k	854	843	895
k1	915	934	988
n / n1	121 / 97	138 / 111	156 / 118
m1 (B5)	140	160	200
m1 (B14)	-	105	120

Morsettiera / *Terminal Box* / Klemmenkasten



63-71-80

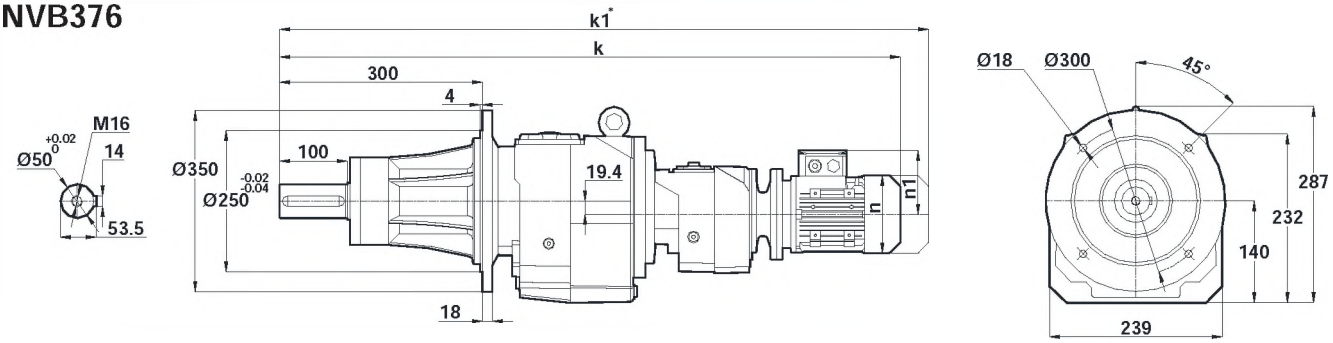
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

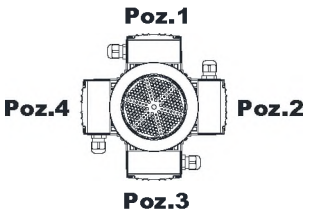
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB375
NVB376



Taglia motore / *Motor Size* / Motorbaugroße	
IEC	63/B5 63/B14
k	1033
k1	1094
n / n1	121 / 97
m1 (B5)	140
m1 (B14)	90

Morsettiera / *Terminal Box* / Klemmenkasten



63

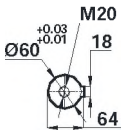
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

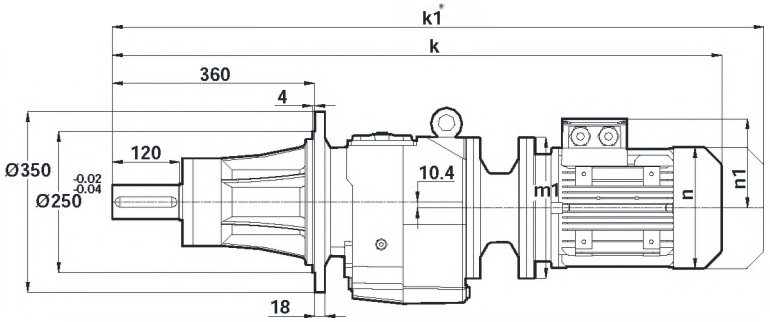


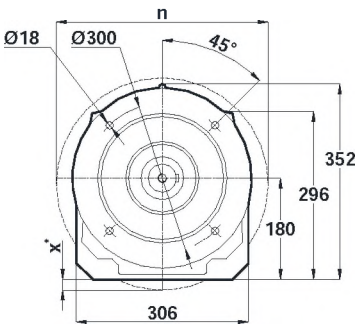
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB472
NVB473

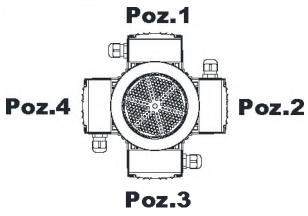






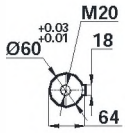
Taglia motore / *Motor Size* / Motorbaugroße											
IEC	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5
k	921	962	962	1016	1036	1139	1139	1298	1298	1387	1387
k1	1014	1066.5	1066.5	1135.5	1140.5	1269	1269	1478	1478	1557.5	1557.5
n / n1	156 / 118	176 / 126	176 / 126	194 / 135	218 / 146	257 / 168	257 / 168	310 / 225	310 / 225	348 / 241	348 / 241
m1 (B5)	200	200	200	250	250	300	300	350	350	350	350
m1 (B14)	-	140	140	160	160	200	200	-	-	-	-
x (B5)	-	-	-	-	-	-	-	6	6	6	6

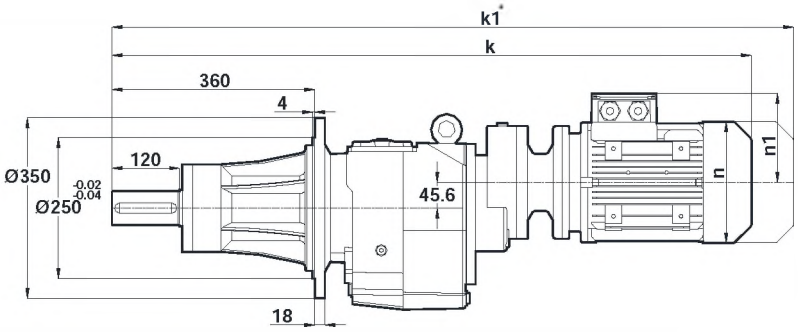
Morsettiera / *Terminal Box* / Klemmenkasten

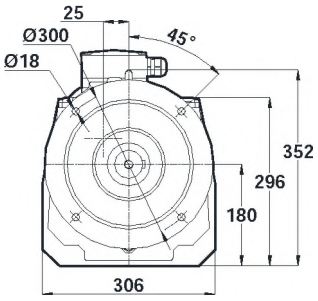


80-90-100-112-132-160-180

NVB474

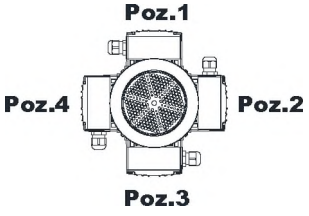






Taglia motore / *Motor Size* / Motorbaugroße		
IEC	71/B5	80/B5 80/B14
k	996	1019
k1	1087	1112
n / n1	138 / 111	156 / 118
m1 (B5)	160	200
m1 (B14)	-	120

Morsettiera / *Terminal Box* / Klemmenkasten



71-80

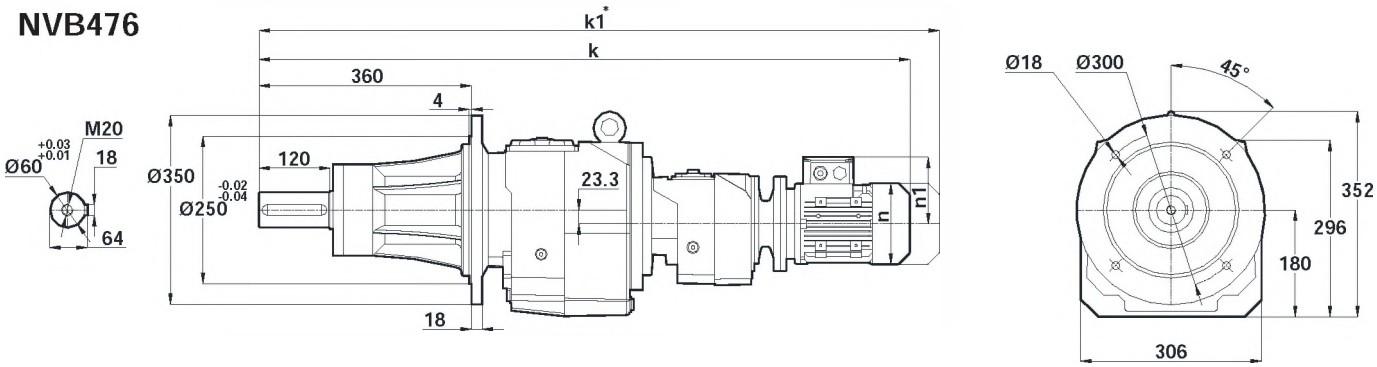
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte



Tabelle dimensionali
Dimension Pages
Abmessungsseiten

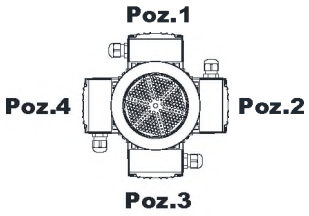
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB475
NVB476



Taglia motore / *Motor Size* / Motorbaugroße		
IEC	**63/B5**	**71/B5 71/B14**
k	1106	1095
k1	1167	1186
n / n1	121 / 97	138 / 111
m1 (B5)	140	160
m1 (B14)	-	105

Morsettiera / *Terminal Box* / Klemmenkasten



63-71

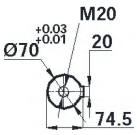
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

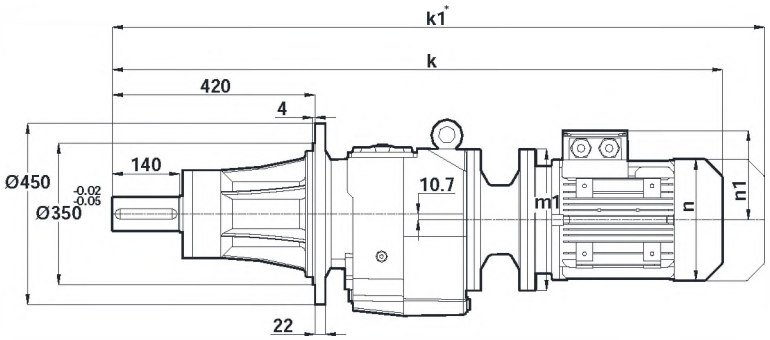


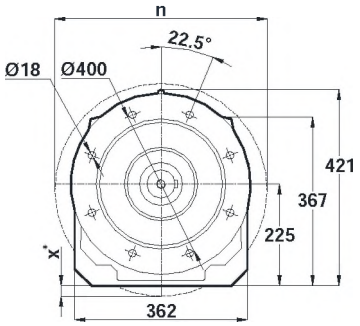
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB572
NVB573

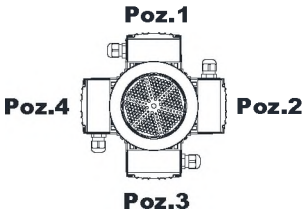






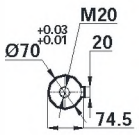
Taglia motore / *Motor Size* / Motorbaugroße									
IEC	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5
k	1137	1158	1263	1263	1418	1418	1507	1507	1580
k1	1256.5	1262.5	1393	1393	1598	1598	1677.5	1677.5	1766.5
n / n1	194 / 135	218 / 146	257 / 168	257 / 168	310 / 225	310 / 225	348 / 241	348 / 241	390 / 275
m1 (B5)	250	250	300	300	350	350	350	350	400
m1 (B14)	-	-	200	200	-	-	-	-	-
x (B5)	-	-	-	-	-	-	-	-	-

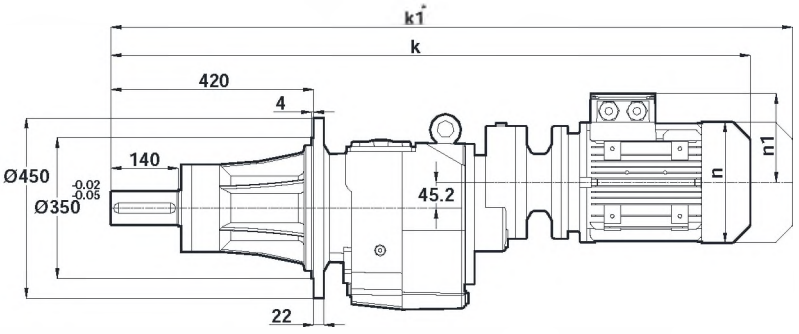
Morsettiera / *Terminal Box* / Klemmenkasten

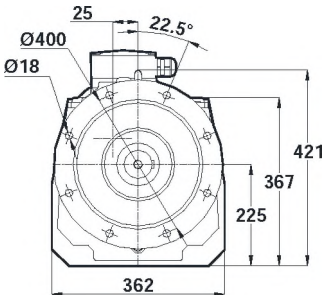


100-112-132-160-180-200

NVB574

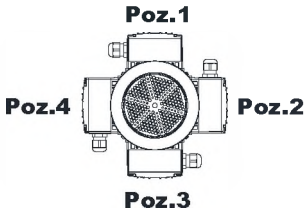






Taglia motore / *Motor Size* / Motorbaugroße				
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	1118	1141	1182	1182
k1	1209	1234	1286.5	1286.5
n / n1	138 / 111	156 / 118	176 / 126	176 / 126
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140

Morsettiera / *Terminal Box* / Klemmenkasten



71-80-90

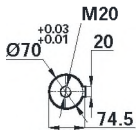
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

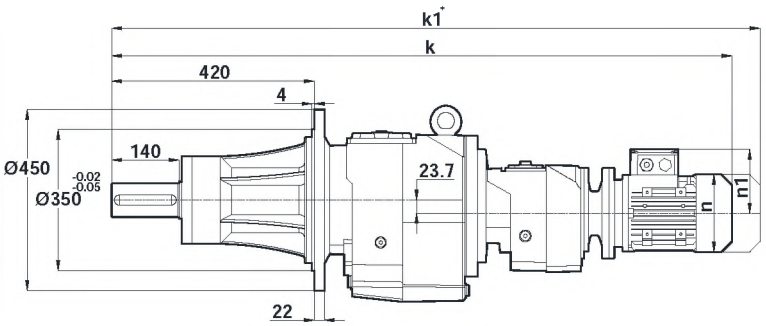


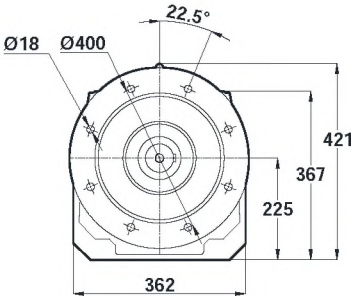
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB575
NVB576

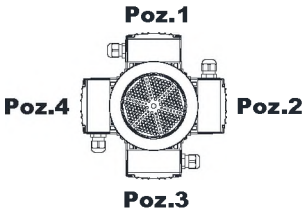






Taglia motore / *Motor Size* / Motorbaugroße		
IEC	63/B5	71/B5 71/B14
k	1230	1219
k1	1291	1310
n / n1	121 / 97	138 / 111
m1 (B5)	140	160
m1 (B14)	-	105

Morsettiera / *Terminal Box* / Klemmenkasten



63-71

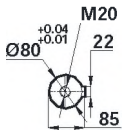
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

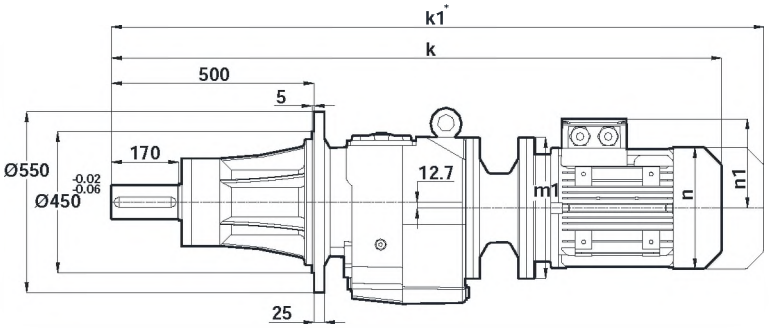


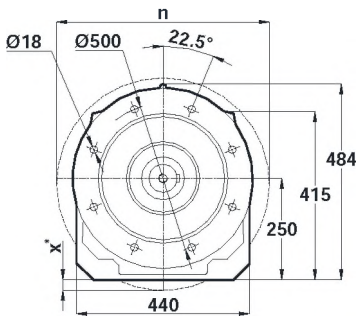
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB672
NVB673

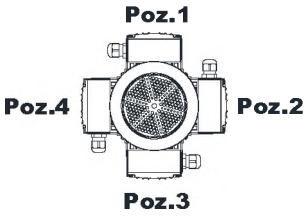






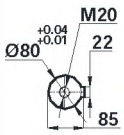
Taglia motore / *Motor Size* / Motorbaugroße										
IEC	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5
k	1259	1358	1358	1512	1512	1602	1602	1779	1746	1771
k1	1363.5	1488	1488	1692	1692	1619.5	1619.5	1965.5	1911	1936
n / n1	218 / 146	257 / 168	257 / 168	310 / 225	310 / 225	348 / 241	348 / 241	390 / 275	434 / 285	434 / 285
m1 (B5)	250	300	300	350	350	350	350	400	450	450
m1 (B14)	-	200	200	-	-	-	-	-	-	-
x (B5)	-	-	-	-	-	-	-	-	-	-

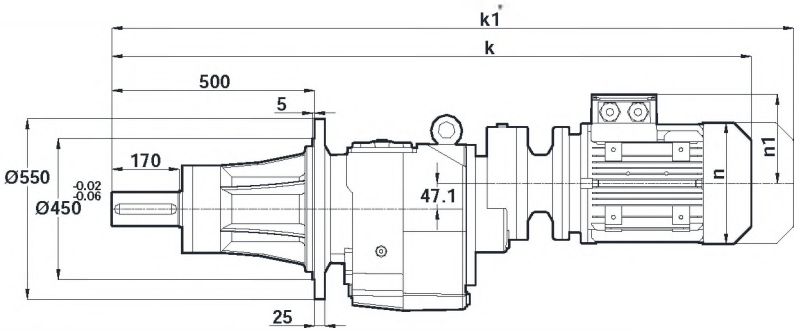
Morsettiera / *Terminal Box* / Klemmenkasten

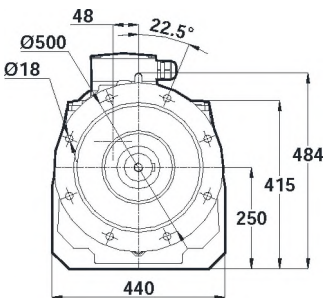


112-132-160-180-200-225

NVB674

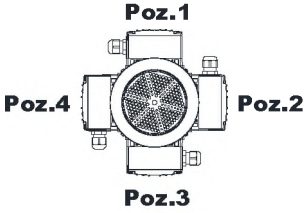






Taglia motore / *Motor Size* / Motorbaugroße			
IEC	80/B5	90S/B5 90S/B14	90L/B5 90L/B14
k	1252	1293	1293
k1	1345	1397.5	1397.5
n / n1	156 / 118	176 / 126	176 / 126
m1 (B5)	200	200	200
m1 (B14)	-	140	140

Morsettiera / *Terminal Box* / Klemmenkasten



80-90

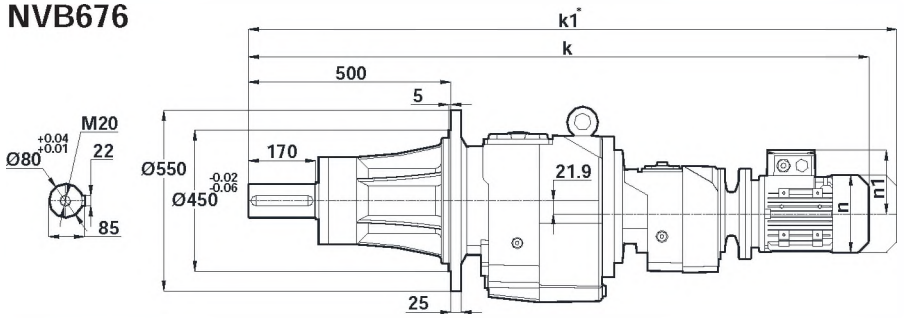
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

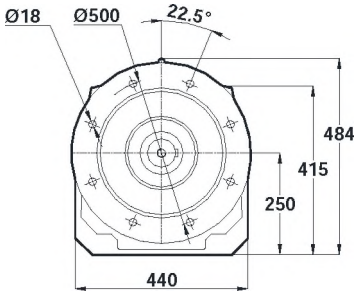


Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

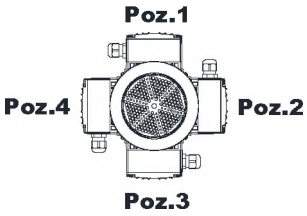
NVB675
NVB676





Taglia motore / *Motor Size* / Motorbaugroße		
IEC	**71/B5**	**80/B5 80/B14**
k	1379	1402
k1	1470	1495
n / n1	138 / 111	156 / 118
m1 (B5)	160	200
m1 (B14)	-	120

Morsettiera / *Terminal Box* / Klemmenkasten



71-80

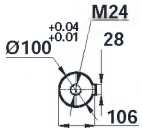
*** La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

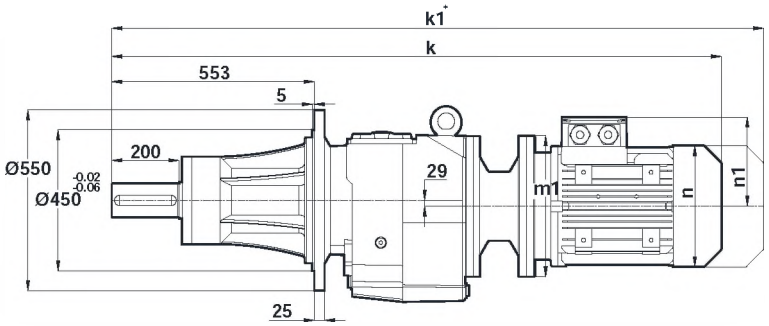


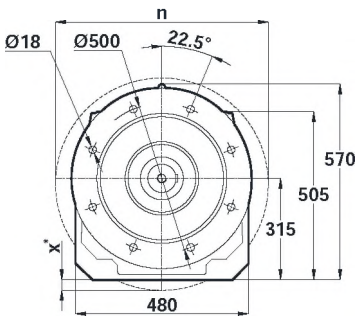
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB772
NVB773

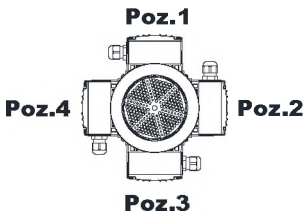






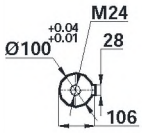
Taglia motore / *Motor Size* / Motorbaugroße										
IEC	132S/B5	132M/B5	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5
k	1466	1466	1615	1615	1704	1704	1779	1850	1875	1951
k1	1596	1596	1795	1795	1874.5	1874.5	1965.5	2015	2040	2121.5
n / n1	257 / 168	257 / 168	310 / 225	310 / 225	348 / 241	348 / 241	434 / 285	434 / 285	434 / 285	480 / 322
m1 (B5)	300	300	350	350	350	350	400	450	450	550
m1 (B14)	-	-	-	-	-	-	-	-	-	-
x (B5)	-	-	-	-	-	-	-	-	-	-

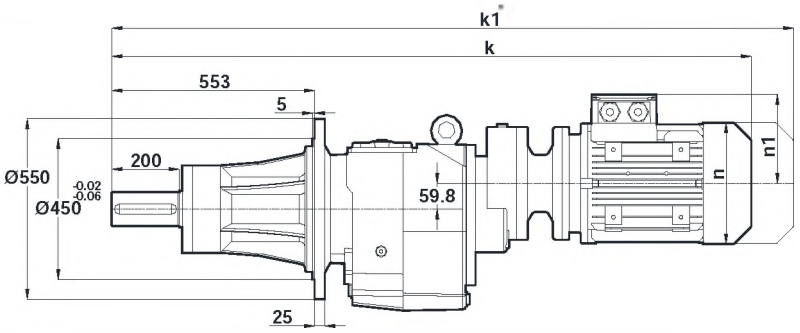
Morsettiera / *Terminal Box* / Klemmenkasten

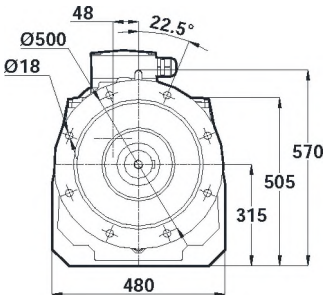


132-160-180-200-225-250

NVB774

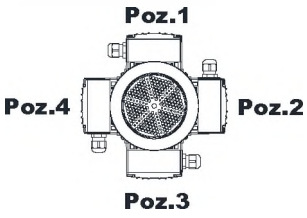






Taglia motore / *Motor Size* / Motorbaugroße				
IEC	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1360	1401	1401	1455
k1	1453	1505.5	1505.5	1574.5
n / n1	156 / 118	176 / 126	176 / 126	194 / 135
m1 (B5)	200	200	200	250
m1 (B14)	-	140	140	160

Morsettiera / *Terminal Box* / Klemmenkasten



80-90-100

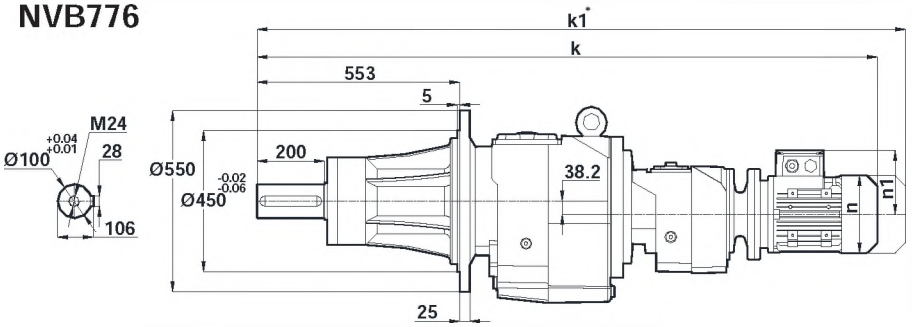
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

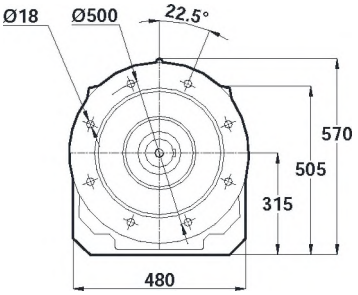


Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

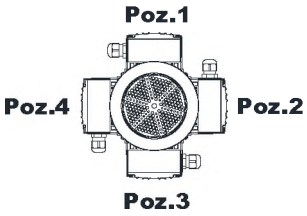
NVB775
NVB776





Taglia motore / *Motor Size* / Motorbaugroße				
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14
k	1490	1513	1554	1554
k1	1581	1606	1658.5	1658.5
n / n1	138 / 111	156 / 118	176 / 126	176 / 126
m1 (B5)	160	200	200	200
m1 (B14)	-	120	140	140

Morsettiera / *Terminal Box* / Klemmenkasten

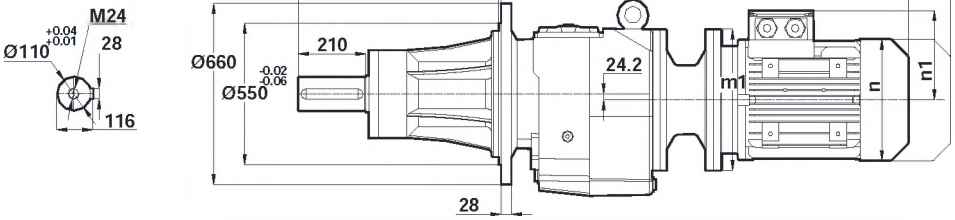


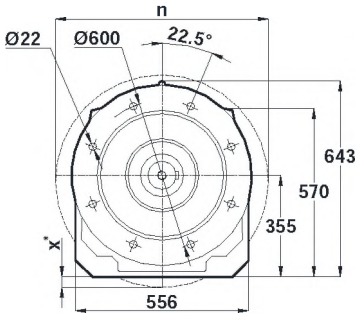
71-80-90

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

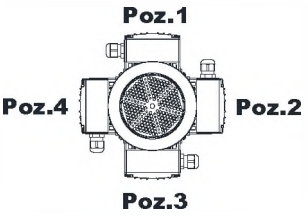
NVB872
NVB873





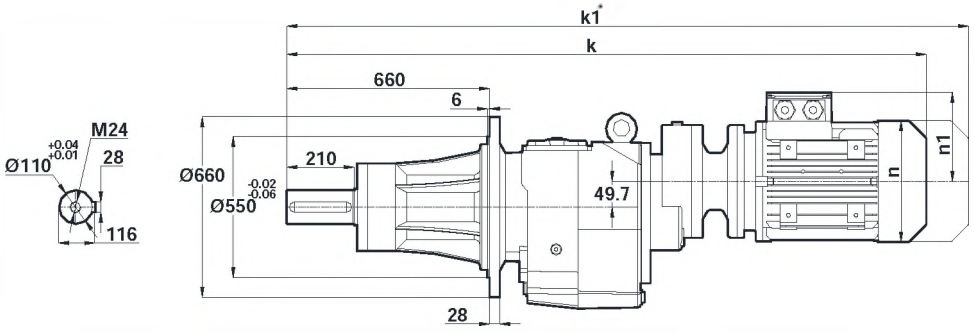
Taglia motore / *Motor Size* / Motorbaugroße										
IEC	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5
k	1868	1868	1957	1957	2010	2028	2053	2129	2191	2191
k1	2048	2048	2127.5	2127.5	2196.5	2193	2218	2299.5	2364	2370
n / n1	310 / 225	310 / 225	348 / 241	348 / 241	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350
m1 (B5)	350	350	350	350	400	450	450	550	550	550
m1 (B14)	-	-	-	-	-	-	-	-	-	-
x (B5)	-	-	-	-	-	-	-	-	-	-

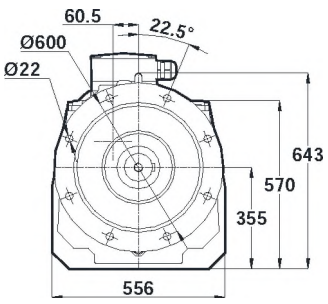
Morsettiera / *Terminal Box* / Klemmenkasten



160-180-200-225-250-280

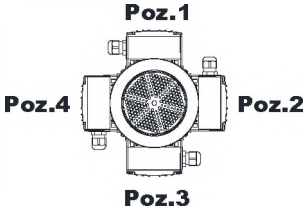
NVB874





Taglia motore / *Motor Size* / Motorbaugroße				
IEC	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1656	1677	1782	1782
k1	1775.5	1781.5	1912	1912
n / n1	194 / 135	218 / 146	257 / 168	257 / 168
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200

Morsettiera / *Terminal Box* / Klemmenkasten



100-112-132

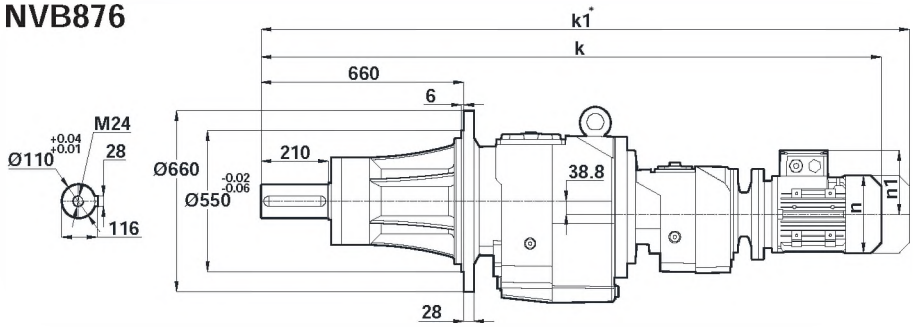
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

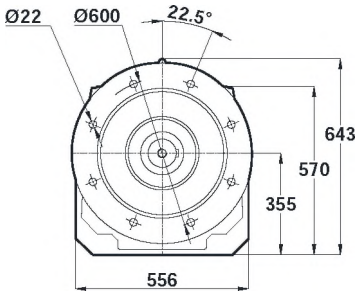


Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

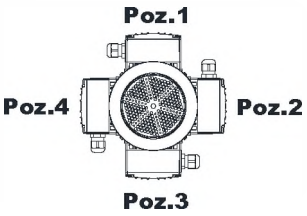
NVB875
NVB876





Taglia motore / *Motor Size* / Motorbaugroße					
IEC	71/B5	80/B5 80/B14	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14
k	1674	1697	1738	1738	1791
k1	1765	1790	1842.5	1842.5	1910.5
n / n1	138 / 111	156 / 118	176 / 126	176 / 126	194 / 135
m1 (B5)	160	200	200	200	250
m1 (B14)	-	120	140	140	160

Morsettiera / *Terminal Box* / Klemmenkasten



71-80-90-100

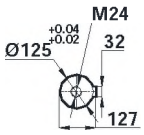
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

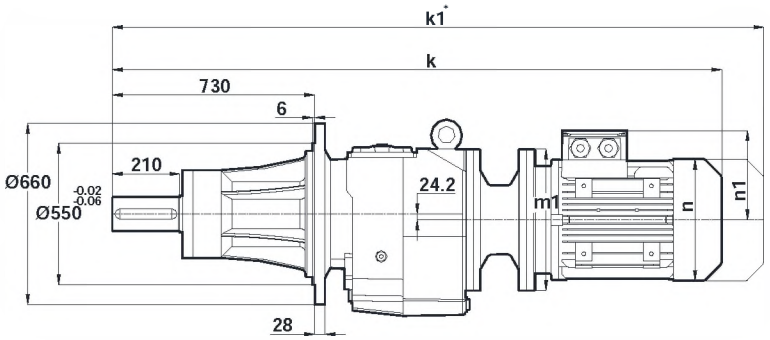


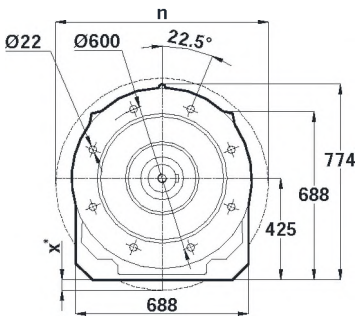
Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NVB972
NVB973

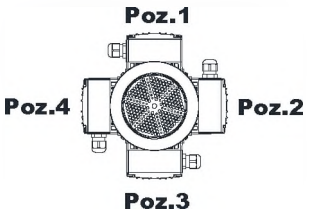






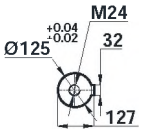
Taglia motore / *Motor Size* / Motorbaugroße												
IEC	160M/B5	160L/B5	180M/B5	180L/B5	200L/B5	225S/B5	225M/B5	250M/B5	280S/B5	280M/B5	315S/4	315M/4
k	1925	1925	2015	2015	2092	2152	2177	2305	2367	2367	2579	2579
k1	2105	2105	2185.5	2185.5	2278.5	2317	2342	2475.5	2540	2546	-	-
n / n1	310 / 225	310 / 225	348 / 241	348 / 241	390 / 275	434 / 285	434 / 285	480 / 322	544 / 350	544 / 350	614 / 510	614 / 510
m1 (B5)	350	350	350	350	400	450	450	550	550	550	660	660
m1 (B14)	-	-	-	-	-	-	-	-	-	-	-	-
x (B5)	-	-	-	-	-	-	-	-	-	-	-	-

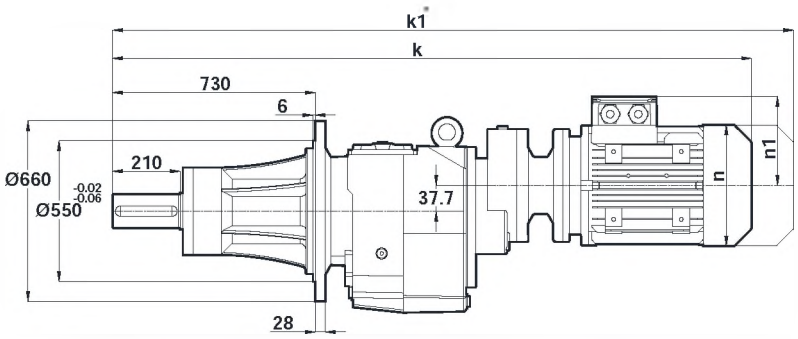
Morsettiera / *Terminal Box* / Klemmenkasten

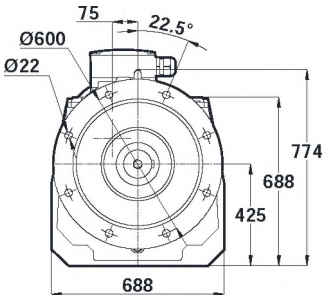


160-180-200-225-250-280-315

NVB974

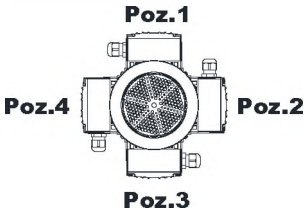






Taglia motore / *Motor Size* / Motorbaugroße				
IEC	100L/B5	112M/B5	132S/B5 132S/B14	132M/B5 132M/B14
k	1830	1850	1949	1949
k1	1949.5	1954.5	2079	2079
n / n1	194 / 135	218 / 146	257 / 168	257 / 168
m1 (B5)	250	250	300	300
m1 (B14)	-	-	200	200

Morsettiera / *Terminal Box* / Klemmenkasten



100-112-132

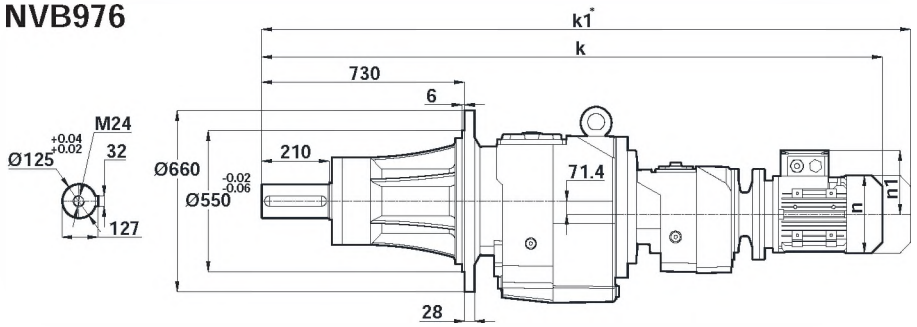
* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.
x: Se il motore è più in basso rispetto alla piastra di montaggio del piede / *x: If Motor is lower then foot mounting plane* / x: Wen motor ist nidriger den die Anschlußplatte

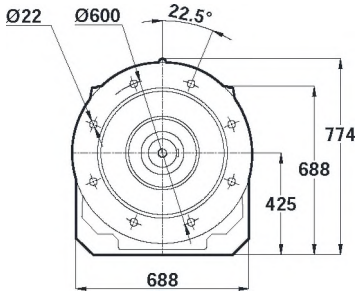


Tabelle dimensionali
Dimension Pages
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

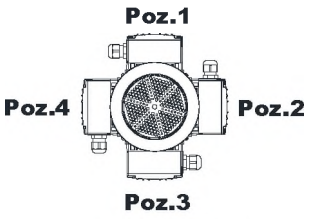
NVB975
NVB976





Taglia motore / *Motor Size* / Motorbaugroße						
IEC	80/B5	90S/B5 90S/B14	90L/B5 90L/B14	100L/B5 100L/B14	112M/B5 112M/B14	132S/B5 132S/B14
k	1889	1930	1930	1984	2005	2107
k1	1982	2034.5	2034.5	2103.5	2109.5	2237
n / n1	156 / 118	176 / 126	176 / 126	194 / 135	218 / 146	218 / 146
m1 (B5)	200	200	200	250	250	300
m1 (B14)	-	140	140	160	160	200

Morsettiera / *Terminal Box* / Klemmenkasten

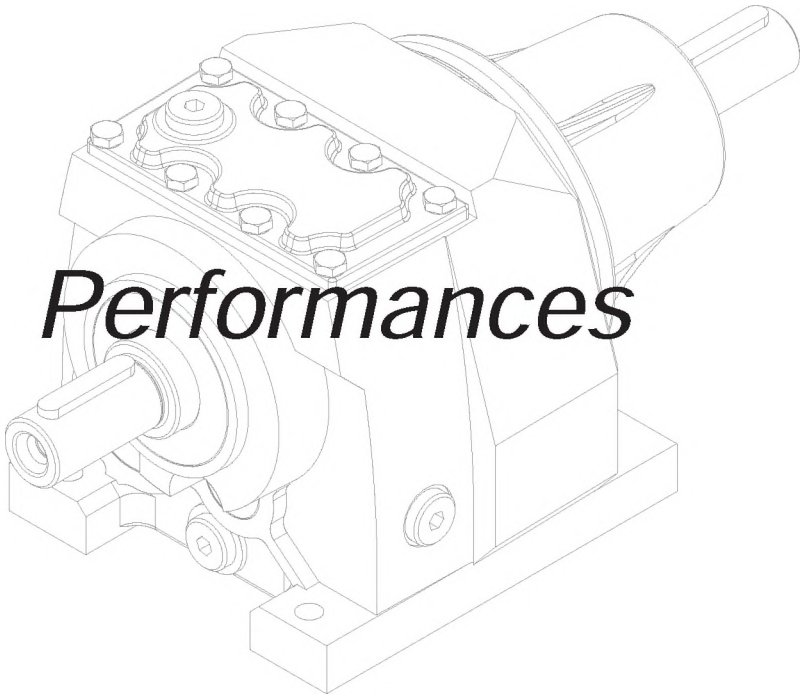


80-90-100-112-132

* **La misura "k1" è per motori dotati di freno.** / *Dimension " k1" is for motors with brake.* / Maße " k1 " ist fur Bremsenmotoren.

Note / *Notes* / Notizen

Prestazioni



Performances

Leistung und Drehzahlübersicht



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Rapporto** *Ratio* Übersetzung i	**Vel. di rot. in uscita** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipo** *Type* Typ	**Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Vel. di rot. in entrata [giri/min.]** / *Input speed[rpm]* / Antriebsdrehzahl[upm]						**Carichi radiali ammessi (uscita)** *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	**Carichi radiali ammessi (entrata)** *Per.O.Loads (Input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	**Peso** *Weight* Gewicht [kg]	**Tabella dim.** *Dim. Page* Maße Seite
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
53	3,62	401	**MT002**	3,6	**2,3**	1,8	1,4	1,1	0,89	359	-	11	334
55	3,90	372	**NT002**	3,5	**2,2**	1,7	1,4	1,1	0,83	349	-	12	
58	4,56	318		3,2	**2,0**	1,5	1,3	0,94	0,71	366	-		
64	5,57	260		2,9	**1,8**	1,4	1,1	0,77	0,58	566	-		
66	6,00	242		2,7	**1,7**	1,3	1,1	0,71	0,54	571	-		
69	6,91	210		2,5	**1,6**	1,2	0,94	0,62	0,47	685	-		
71	7,45	195		2,4	**1,5**	1,2	0,88	0,58	0,44	697	-		
72	7,84	185		2,3	**1,5**	1,1	0,83	0,55	0,41	767	-		
74	8,45	172		2,2	**1,4**	1,0	0,77	0,51	0,38	783	-		
74	8,70	167		2,1	**1,4**	0,98	0,75	0,49	0,37	752	-		
78	9,87	147		2,0	**1,3**	0,87	0,66	0,43	0,33	823	-		
65	11,14	130		1,5	**0,93**	0,73	0,59	0,39	0,29	1244	235		
80	13,61	107	**MT003**	1,4	**0,95**	0,64	0,49	0,32	0,24	567	415	12	334
82	14,67	99	**NT003**	1,4	**0,90**	0,59	0,45	0,30	0,23	582	418	13	
82	16,89	86		1,4	**0,79**	0,52	0,40	0,26	0,20	823	552		
82	18,20	80		1,4	**0,73**	0,48	0,37	0,24	0,18	900	560		
82	19,17	76		1,3	**0,69**	0,46	0,35	0,23	0,17	1016	589		
82	20,66	70		1,3	**0,64**	0,42	0,32	0,21	0,16	1097	597		
82	21,26	68		1,2	**0,63**	0,41	0,32	0,21	0,16	1068	577		
82	24,13	60		1,1	**0,55**	0,36	0,28	0,18	0,14	1272	611		
82	28,38	51		0,94	**0,47**	0,31	0,24	0,16	0,12	1465	649		
82	32,02	45		0,76	**0,42**	0,28	0,21	0,14	0,11	1645	674		
82	40,04	36		0,67	**0,34**	0,22	0,17	0,11	0,08	1911	670		
82	45,18	32		0,60	**0,30**	0,20	0,15	0,10	0,07	2108	692		
70	3,94	368	**MT102**	4,4	**2,8**	2,1	1,7	1,3	1,1	1041	-	13	335
75	4,57	317	**NT102**	4,1	**2,6**	1,9	1,7	1,3	1,0	1084	-	14	
80	5,01	289		3,8	**2,5**	1,9	1,5	1,2	0,98	1101	-		
80	5,47	265		3,7	**2,3**	1,8	1,5	1,1	0,94	1149	-		
85	6,48	224		3,4	**2,1**	1,6	1,3	1,0	0,79	1213	-		
90	6,93	209		3,2	**2,1**	1,5	1,3	0,98	0,74	1221	-		
90	8,01	181		2,8	**1,8**	1,4	1,1	0,85	0,69	1369	520		
95	9,29	156		2,6	**1,6**	1,2	1,0	0,79	0,60	1435	531		
100	10,18	142		2,3	**1,6**	1,2	0,94	0,72	0,54	1468	516		
100	11,12	130		2,3	**1,4**	1,1	0,90	0,66	0,50	1529	600		
105	13,15	110		2,0	**1,3**	0,99	0,82	0,56	0,42	1622	597		
110	14,08	103		1,91	**1,2**	0,96	0,77	0,52	0,40	1644	535		
115	15,95	91		1,79	**1,2**	0,89	0,70	0,46	0,35	1712	476		
110	17,33	84	**MT103**	1,6	**1,0**	0,80	0,66	0,43	0,33	1735	816	14	335
120	20,51	71	**NT103**	1,4	**0,95**	0,73	0,56	0,36	0,28	1812	804	15	
120	21,96	66		1,4	**0,89**	0,68	0,52	0,34	0,26	1871	811		
130	24,86	58		1,3	**0,85**	0,60	0,46	0,30	0,23	1919	791		
140	29,40	49		1,2	**0,77**	0,51	0,39	0,26	0,19	2105	924		
140	32,25	45		1,1	**0,70**	0,46	0,35	0,23	0,18	2196	934		
140	35,21	41		1,1	**0,65**	0,43	0,33	0,21	0,16	2286	942		
140	41,66	35		0,93	**0,55**	0,36	0,28	0,18	0,14	2464	953		
140	44,60	33		0,91	**0,51**	0,34	0,26	0,17	0,13	2540	957		
140	50,51	29		0,84	**0,45**	0,30	0,23	0,15	0,11	2682	961		
110	3,38	429	**MT172**	7,8	**5,1**	4,1	3,3	2,6	2,1	575	-	15	336
120	4,09	355	**NT172**	7,6	**4,6**	3,8	3,1	2,4	1,9	555	-	16	
130	4,78	303		7,2	**4,3**	3,7	3,0	2,2	1,7	734	-		
135	5,78	251		6,5	**3,7**	3,4	2,7	1,8	1,4	848	-		
145	6,60	220		5,9	**3,5**	3,1	2,4	1,6	1,2	814	-		
160	7,60	191		5,6	**3,3**	2,7	2,1	1,4	1,0	702	-		
165	8,94	162		4,9	**2,9**	2,3	1,8	1,2	0,88	814	-		
170	9,53	152		4,8	**2,8**	2,2	1,7	1,1	0,83	805	-		
180	11,08	131		4,1	**2,6**	1,9	1,4	0,94	0,71	1207	-		
190	12,66	115		3,7	**2,4**	1,6	1,3	0,82	0,62	1232	-		



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Rapporto** *Ratio* Übersetzung i	**Vel. di rot. in uscita** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipo** *Type* Typ	**Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Vel. di rot. in entrata [giri/min.]** / *Input speed[rpm]* / Antriebsdrehzahl[upm						**Carichi radiali ammessi (uscita)** *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	**Carichi radiali ammessi (entrata)** *Per.O.Loads (input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	**Peso** *Weight* Gewicht [kg]	**Tabella dim.** *Dim. Page* Maße Seite
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
195	14,57	99	**MT172**	3,4	**2,1**	1,4	1,1	0,72	0,54	1360	-	15	336
200	17,14	85	**NT172**	3,0	**1,9**	1,2	0,93	0,61	0,46	1534	-	16	
200	18,28	79		2,9	**1,7**	1,1	0,87	0,57	0,43	1639	-		
200	20,92	69		2,6	**1,5**	1,00	0,76	0,50	0,38	1869	-		
200	26,10	56	**MT173**	1,5	**1,2**	0,81	0,62	0,41	0,31	2811	813	16	336
200	30,26	48	**NT173**	1,4	**1,1**	0,70	0,54	0,35	0,27	3008	834	17	
200	36,24	40		1,3	**0,90**	0,59	0,45	0,30	0,22	3262	860		
200	42,87	34		1,2	**0,76**	0,50	0,38	0,25	0,19	3514	874		
200	45,90	32		1,2	**0,71**	0,47	0,36	0,23	0,18	3620	880		
200	49,81	29		1,1	**0,65**	0,43	0,33	0,22	0,16	3750	975		
200	57,76	25		1,0	**0,57**	0,37	0,28	0,19	0,14	3995	986		
200	69,16	21		0,94	**0,47**	0,31	0,24	0,16	0,12	4310	999		
200	81,82	18		0,80	**0,40**	0,26	0,20	0,13	0,10	4622	1007		
200	87,60	17		0,75	**0,38**	0,25	0,19	0,12	0,09	4753	1010		
200	99,21	15		0,66	**0,33**	0,22	0,17	0,11	0,08	5001	1013		
125	3,50	414	**MT202**	8,9	**5,6**	4,4	3,5	2,7	2,3	2223	-	20	337
145	4,20	345	**NT202**	8,6	**5,4**	4,1	3,3	2,6	2,2	2061	-	22	
150	4,50	322		8,3	**5,2**	4,0	3,2	2,5	2,1	2072	-		
160	5,08	286		7,7	**5,0**	3,8	3,1	2,4	2,0	2061	-		
175	5,80	250		7,3	**4,8**	3,6	2,9	2,3	1,9	1965	-		
185	7,04	206		6,5	**4,1**	3,2	2,6	2,0	1,6	2876	606		
200	8,40	173		5,8	**3,8**	2,8	2,3	1,7	1,3	2972	619		
210	10,07	144		5,2	**3,3**	2,5	2,1	1,5	1,1	3208	719		
215	10,81	134		4,9	**3,1**	2,4	1,9	1,4	1,0	3283	725		
225	12,18	119		4,7	**2,9**	2,2	1,8	1,2	0,91	3392	723		
235	13,92	104		4,2	**2,7**	2,1	1,6	1,1	0,80	3551	726		
240	14,86	98		4,0	**2,6**	2,0	1,5	0,98	0,75	3633	716		
245	16,03	90		3,8	**2,4**	1,8	1,4	0,91	0,69	3749	728		
260	18,85	77		3,4	**2,2**	1,6	1,2	0,78	0,59	3928	663		
260	20,10	72		3,3	**2,1**	1,5	1,1	0,73	0,55	4129	722		
280	23,01	63		3,0	**1,9**	1,3	0,97	0,64	0,48	4154	556		
270	23,23	62	**MT203**	2,9	**1,9**	1,3	0,98	0,64	0,49	3314	1142	21	337
275	24,77	59	**NT203**	2,8	**1,8**	1,2	0,92	0,60	0,46	3406	1141	23	
280	28,35	51		2,6	**1,6**	1,1	0,80	0,53	0,40	3751	1151		
280	36,02	40		2,0	**1,3**	0,82	0,63	0,41	0,31	5277	1482		
280	41,16	35		1,8	**1,1**	0,72	0,55	0,36	0,28	5576	1498		
280	43,94	33		1,8	**1,0**	0,68	0,52	0,34	0,26	5728	1504		
280	47,39	31		1,7	**0,96**	0,63	0,48	0,32	0,27	5907	1512		
280	55,74	26		1,5	**0,82**	0,54	0,41	0,27	0,23	6308	1525		
280	59,43	24		1,4	**0,77**	0,50	0,39	0,25	0,21	6472	1530		
280	68,03	21		1,3	**0,67**	0,44	0,34	0,25	0,19	6830	1540		
195	3,16	459	**MT272**	15	**9,6**	7,3	6,0	4,7	3,8	566	-	25	338
205	3,69	393	**NT272**	14	**8,7**	6,7	5,4	4,2	3,5	602	-	27	
230	4,53	320		12	**8,0**	5,9	4,9	3,8	3,1	863	-		
265	5,28	274		12	**7,9**	5,9	4,9	3,5	2,9	479	-		
330	6,21	233		14	**8,3**	6,2	5,2	3,8	2,9	-	-		
360	8,71	167		10	**6,5**	4,7	4,0	2,7	2,0	474	-		
375	10,16	143		9,1	**5,8**	4,4	3,5	2,3	1,7	566	-		
390	11,95	121		8,1	**5,1**	3,9	3,0	2,0	1,5	695	-		
410	14,21	102		7,2	**4,6**	3,3	2,5	1,7	1,3	788	-		
425	16,07	90		6,7	**4,2**	2,9	2,2	1,5	1,1	858	-		
445	18,33	79		6,0	**3,8**	2,6	2,0	1,3	0,97	880	-		
450	21,43	68		5,4	**3,3**	2,2	1,7	1,1	0,83	1239	-		
450	25,89	56		4,8	**2,8**	1,8	1,4	0,91	0,69	1805	-		
435	19,00	76	**MT273**	5,6	**3,7**	2,5	1,9	1,3	0,95	190	275	26	338
435	25,55	57	**NT273**	4,2	**2,7**	1,9	1,4	0,93	0,71	2013	1276	28	



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Rapporto** *Ratio* Übersetzung i	**Vel. di rot. in uscita** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipo** *Type* Typ	**Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Vel. di rot. in entrata [giri/min.]** / *Input speed[rpm]* / Antriebsdrehzahl[upm						**Carichi radiali ammessi (uscita)** *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	**Carichi radiali ammessi (entrata)** *Per.O.Loads (Input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	**Peso** *Weight* Gewicht [kg]	**Tabella dim.** *Dim. Page* Maße Seite
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
450	30,48	48	**MT273**	3,7	**2,4**	1,6	1,2	0,78	0,59	2323	1303	26	338
450	36,55	40	**NT273**	3,3	**2,0**	1,3	1,0	0,65	0,50	2933	1343	28	
450	42,41	34		3,0	**1,7**	1,1	0,86	0,56	0,43	3461	1480		
450	50,59	29		2,7	**1,4**	0,94	0,72	0,47	0,36	4123	1508		
450	60,66	24		2,4	**1,2**	0,79	0,60	0,40	0,30	4845	1532		
450	73,35	20		2,0	**0,99**	0,65	0,50	0,33	0,28	5650	1552		
450	83,83	17		1,7	**0,87**	0,57	0,44	0,29	0,24	6247	1565		
450	96,52	15		1,5	**0,76**	0,50	0,38	0,25	0,21	6700	1576		
450	113,52	13		1,3	**0,65**	0,43	0,33	0,24	0,18	6700	1586		
450	121,03	12		1,2	**0,61**	0,40	0,31	0,22	0,17	6700	1590		
450	138,55	10		1,1	**0,53**	0,35	0,27	0,20	0,15	6700	1598		
450	149,02	9,7	**MT275**	1,0	**0,51**	0,34	0,26	0,19	0,14	6700	684	39	339
450	180,21	8,0	**NT275**	0,85	**0,42**	0,28	0,24	0,15	0,12	6700	716	41	
450	205,95	7,0		0,74	**0,37**	0,27	0,21	0,14	0,10	6700	735		
450	215,91	6,7		0,71	**0,35**	0,26	0,20	0,13	0,10	6700	736		
450	252,20	5,7		0,61	**0,30**	0,22	0,17	0,11	0,08	6700	743		
450	332,52	4,4		0,51	**0,26**	0,19	0,14	0,09	0,07	6700	786		
450	358,33	4,0		0,47	**0,24**	0,17	0,13	0,09	0,07	6700	789		
450	418,57	3,5		0,41	**0,20**	0,15	0,11	0,07	0,06	6700	793		
450	499,32	2,9		0,34	**0,17**	0,12	0,09	0,06	0,05	6700	806		
450	598,70	2,4		0,29	**0,14**	0,10	0,08	0,05	0,04	6700	816		
450	724,01	2,0		0,26	**0,12**	0,09	0,07	0,04	0,03	6700	825		
450	827,44	1,8		0,23	**0,10**	0,08	0,06	0,04	0,03	6700	831		
450	952,64	1,5		0,20	**0,09**	0,07	0,05	0,03	0,02	6700	836		
450	1120,49	1,3		0,17	**0,08**	0,06	0,04	0,03	0,02	6700	841		
450	1194,61	1,2		0,16	**0,07**	0,05	0,04	0,03	0,02	6700	843		
450	1463,49	0,99	**MT276**	0,13	**0,06**	0,04	0,03	0,02	0,02	6700	848	40	339
450	1769,80	0,82	**NT276**	0,11	**0,05**	0,04	0,03	0,02	0,01	6700	851	42	
450	2022,63	0,72		0,10	**0,04**	0,03	0,02	0,02	0,01	6700	854		
450	2328,68	0,62		0,08	**0,04**	0,03	0,02	0,01	0,01	6700	856		
450	2738,97	0,53		0,07	**0,03**	0,02	0,02	0,01	0,01	6700	858		
450	2920,17	0,50		0,07	**0,03**	0,02	0,02	0,01	0,01	6700	859		
220	3,15	460	**MT282**	17	**11**	8,2	6,5	5,3	4,4	2212	-	37	340
240	3,64	398	**NT282**	16	**10**	7,9	6,5	4,8	4,1	2153	-	39	
260	4,20	345		16	**9,7**	7,8	6,2	4,8	3,9	2106	-		
280	4,62	314		16	**9,5**	7,8	6,1	4,6	3,8	1960	-		
320	5,35	271		15	**9,4**	7,7	6,1	4,6	3,8	1584	-		
360	6,25	232		15	**9,1**	6,9	5,7	4,4	3,7	1247	-		
370	7,21	201		13	**8,1**	6,2	5,0	4,0	3,2	2419	-		
390	8,33	174		11	**7,4**	5,6	4,6	3,5	2,8	2509	-		
400	9,61	151		10	**6,5**	4,9	4,0	3,1	2,5	2774	102		
410	10,57	137		9,49	**6,1**	4,6	3,7	3,0	2,2	2907	156		
420	12,24	118		8,71	**5,4**	4,1	3,4	2,6	1,9	3220	289		
440	14,31	101		7,69	**4,9**	3,8	3,1	2,2	1,7	3429	301		
470	16,91	86		6,89	**4,4**	3,3	2,7	1,9	1,4	3550	208		
480	19,06	76		6,29	**4,0**	3,1	2,5	1,6	1,3	3837	251		
500	21,66	67		5,83	**3,7**	2,8	2,2	1,5	1,1	4018	193		
530	25,23	57		5,26	**3,3**	2,5	1,9	1,2	0,94	4167	64		
560	30,37	48		4,59	**2,9**	2,1	1,6	1,0	0,78	4493	-		
270	18,33	79	**MT283**	3,6	**2,4**	1,9	1,6	1,2	1,1	6793	1822	38	340
290	20,25	72	**NT283**	3,5	**2,3**	1,8	1,5	1,2	0,99	7049	1811	40	
320	23,63	61		3,2	**2,2**	1,7	1,4	1,1	0,90	7456	1796		
340	27,80	52		2,9	**2,0**	1,5	1,3	1,0	0,83	5566	1795		
480	30,82	47		3,8	**2,5**	2,0	1,6	1,0	0,79	5446	1857		
515	35,98	40		3,5	**2,3**	1,8	1,4	0,89	0,67	5697	1860		
550	41,96	35		3,3	**2,1**	1,5	1,2	0,76	0,58	5967	1867		
570	46,37	31		3,0	**2,0**	1,4	1,1	0,69	0,52	6164	1869		



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Rapporto** *Ratio* Übersetzung i	**Vel. di rot. in uscita** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipo** *Type* Typ	**Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Vel. di rot. in entrata [giri/min.]** / *Input speed[rpm]* / Antriebsdrehzahl[upm						**Carichi radiali ammessi (uscita)** *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	**Carichi radiali ammessi (entrata)** *Per.O.Loads (Input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	**Peso** *Weight* Gewicht [kg]	**Tabella dim.** *Dim. Page* Maße Seite
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
600	54,12	27	**MT283**	2,7	**1,8**	1,2	0,90	0,59	0,45	6490	1874	38	340
600	63,65	23	**NT283**	2,5	**1,5**	1,0	0,77	0,50	0,38	6979	1894	40	
600	75,68	19		2,3	**1,3**	0,85	0,65	0,42	0,32	7530	1913		
600	85,60	17		2,1	**1,1**	0,75	0,57	0,38	0,29	7942	1924		
600	97,62	15		1,9	**1,0**	0,66	0,50	0,33	0,25	8400	1934		
600	114,14	13		1,7	**0,86**	0,56	0,43	0,28	0,24	8973	1945		
600	137,91	11		1,4	**0,71**	0,47	0,36	0,26	0,20	9150	1956		
600	158,52	9,1	**MT284**	1,3	**0,63**	0,41	0,31	0,23	0,17	9150	1581	39	341
600	175,17	8,3	**NT284**	1,1	**0,57**	0,37	0,28	0,21	0,16	9150	1603	41	
600	204,44	7,1		0,97	**0,49**	0,32	0,27	0,18	0,13	9150	1635		
600	240,47	6,0		0,83	**0,41**	0,27	0,23	0,15	0,11	9150	1663		
600	285,89	5,1		0,70	**0,35**	0,25	0,19	0,13	0,10	9150	1688		
600	323,39	4,5		0,62	**0,31**	0,22	0,17	0,11	0,09	9150	1703		
600	368,77	3,9		0,54	**0,27**	0,20	0,15	0,10	0,07	9150	1718		
600	431,18	3,4		0,51	**0,26**	0,19	0,14	0,09	0,07	9150	1778		
600	376,94	3,8	**MT285**	0,54	**0,27**	0,20	0,15	0,10	0,07	9150	1053	58	342
600	443,37	3,3	**NT285**	0,51	**0,26**	0,19	0,14	0,09	0,07	9150	1068	60	
600	491,50	3,0		0,46	**0,23**	0,17	0,13	0,08	0,06	9150	1077		
600	573,81	2,5		0,40	**0,20**	0,14	0,11	0,07	0,05	9150	1089		
600	669,25	2,2		0,34	**0,17**	0,12	0,09	0,06	0,05	9150	1098		
600	739,53	2,0		0,31	**0,15**	0,11	0,09	0,06	0,04	9150	1104		
600	863,11	1,7		0,26	**0,13**	0,10	0,07	0,05	0,04	9150	1111		
600	1015,21	1,4		0,25	**0,11**	0,08	0,06	0,04	0,03	9150	1118		
600	1206,98	1,2		0,21	**0,09**	0,07	0,05	0,03	0,03	9150	1124		
600	1365,28	1,1		0,19	**0,08**	0,06	0,05	0,03	0,02	9150	1128		
600	1817,07	0,80	**MT286**	0,14	**0,06**	0,05	0,04	0,02	0,02	9150	1135	59	342
600	2119,30	0,68	**NT286**	0,12	**0,06**	0,04	0,03	0,02	0,02	9150	1138	61	
600	2341,83	0,62		0,11	**0,05**	0,04	0,03	0,02	0,01	9150	1140		
600	2733,17	0,53		0,09	**0,04**	0,03	0,02	0,02	0,01	9150	1143		
600	3214,82	0,45		0,08	**0,04**	0,03	0,02	0,01	0,01	9150	1145		
385	3,28	443	**MT372**	29	**18**	14	11	8,8	7,3	882	-	45	343
410	3,74	388	**NT372**	27	**17**	13	11	8,4	6,9	782	-	48	
445	4,29	338		25	**16**	12	10	7,8	6,4	531	-		
475	4,96	292		24	**15**	12	9,3	7,3	6,0	411	-		
510	5,23	277		24	**15**	12	9,5	7,3	6,1	955	-		
530	5,97	243		22	**14**	11	8,7	6,8	5,4	1046	-		
560	6,84	212		20	**13**	9,8	8,0	6,2	4,7	1012	-		
560	8,25	176		17	**11**	8,1	6,6	5,2	3,9	2345	-		
590	9,41	154		15	**9,9**	7,5	6,0	4,5	3,4	2379	-		
620	10,80	134		14	**9,0**	6,8	5,6	3,9	3,0	2456	-		
650	12,48	116		13	**8,2**	6,3	5,1	3,4	2,6	2586	-		
670	13,53	107		12	**7,8**	5,9	4,8	3,2	2,4	2623	-		
710	16,20	90		11	**6,9**	5,3	4,0	2,6	2,0	2807	-		
740	18,45	79		10	**6,3**	4,6	3,5	2,3	1,8	2952	-		
770	20,62	70		9,3	**5,9**	4,1	3,2	2,1	1,6	3033	-		
805	23,33	62		8,5	**5,5**	3,7	2,8	1,8	1,4	3122	-		
650	18,68	78	**MT373**	8,6	**5,5**	4,2	3,4	2,3	1,8	4992	1054	47	343
650	20,64	70	**NT373**	7,8	**5,0**	3,9	3,2	2,1	1,6	5243	1219	50	
650	21,65	67		7,5	**4,8**	3,8	3,0	2,0	1,5	5509	1550		
710	25,27	57		6,8	**4,5**	3,4	2,6	1,7	1,3	5712	1545		
750	29,47	49		6,1	**4,1**	2,9	2,2	1,5	1,1	6004	1564		
780	35,25	41		5,4	**3,5**	2,5	1,9	1,2	0,94	6429	1730		
820	41,16	35		4,8	**3,2**	2,1	1,6	1,1	0,80	6774	1745		
820	48,00	30		4,3	**2,7**	1,8	1,4	0,91	0,69	7281	1784		
820	53,04	27		4,1	**2,5**	1,6	1,3	0,82	0,62	7623	1803		
820	61,91	23		3,5	**2,1**	1,4	1,1	0,71	0,54	8177	1830		



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Rapporto** *Ratio* Übersetzung i	**Vel. di rot. in uscita** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipo** *Type* Typ	**Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Vel. di rot. in entrata [giri/min.]** / *Input speed[rpm]* / Antriebsdrehzahl[upm						**Carichi radiali ammessi (uscita)** *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	**Carichi radiali ammessi (entrata)** *Per.O.Loads (Input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	**Peso** *Weight* Gewicht [kg]	**Tabella dim.** *Dim. Page* Maße Seite
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
820	72,81	20	**MT373**	3,2	**1,8**	1,2	0,92	0,60	0,46	8790	1854	47	343
820	86,57	17	**NT373**	2,8	**1,5**	1,0	0,77	0,51	0,39	9481	1876	50	
820	97,92	15		2,6	**1,4**	0,89	0,68	0,45	0,34	9999	1889		
820	111,67	13		2,4	**1,2**	0,79	0,60	0,40	0,30	10574	1902		
820	138,72	10		1,9	**0,97**	0,64	0,49	0,32	0,27	11581	1919		
820	157,76	9,2		1,7	**0,85**	0,56	0,43	0,28	0,24	11600	1928		
820	181,34	8,0	**MT374**	1,5	**0,75**	0,49	0,37	0,27	0,21	11600	745	57	344
820	200,38	7,2	**NT374**	1,4	**0,68**	0,44	0,34	0,25	0,19	11600	885	60	
820	233,86	6,2		1,2	**0,58**	0,38	0,29	0,21	0,16	11600	1598		
820	275,08	5,3		0,99	**0,49**	0,32	0,27	0,18	0,14	11600	1632		
820	327,04	4,4		0,83	**0,42**	0,27	0,23	0,15	0,11	11600	1662		
820	369,93	3,9		0,74	**0,37**	0,27	0,20	0,13	0,10	11600	1680		
820	421,85	3,4		0,65	**0,32**	0,24	0,18	0,12	0,09	11600	1698		
820	524,07	2,8		0,52	**0,26**	0,19	0,14	0,09	0,07	11600	1722		
820	488,82	3,0	**MT375**	0,57	**0,28**	0,21	0,16	0,10	0,08	11600	1076	63	345
820	533,70	2,7	**NT375**	0,52	**0,26**	0,19	0,15	0,10	0,07	11600	1080	66	
820	631,45	2,3		0,49	**0,25**	0,18	0,14	0,09	0,07	11600	1084		
820	676,02	2,1		0,46	**0,23**	0,17	0,13	0,08	0,06	11600	1085		
820	765,58	1,9		0,41	**0,20**	0,15	0,11	0,07	0,06	11600	1087		
820	845,97	1,7		0,37	**0,18**	0,13	0,10	0,07	0,05	11600	1094		
820	987,33	1,5		0,32	**0,16**	0,11	0,09	0,06	0,04	11600	1103		
820	1161,33	1,2		0,27	**0,13**	0,10	0,07	0,05	0,04	11600	1111		
820	1380,71	1,1		0,25	**0,11**	0,08	0,06	0,04	0,03	11600	1118		
820	1561,78	0,93		0,22	**0,10**	0,07	0,06	0,04	0,03	11600	1123		
820	1690,05	0,86	**MT376**	0,21	**0,09**	0,07	0,05	0,03	0,03	11600	1132	65	345
820	1999,59	0,73	**NT376**	0,18	**0,08**	0,06	0,04	0,03	0,02	11600	1134	68	
820	2140,73	0,68		0,17	**0,07**	0,05	0,04	0,03	0,02	11600	1134		
820	2424,34	0,60		0,15	**0,07**	0,05	0,04	0,02	0,02	11600	1135		
820	2678,89	0,54		0,13	**0,06**	0,04	0,03	0,02	0,02	11600	1137		
820	3126,56	0,46		0,11	**0,05**	0,04	0,03	0,02	0,01	11600	1140		
820	3677,53	0,39		0,10	**0,04**	0,03	0,02	0,02	0,01	11600	1142		
820	4372,24	0,33		0,08	**0,04**	0,03	0,02	0,01	0,01	11600	1145		
820	4945,64	0,29		0,07	**0,03**	0,02	0,02	0,01	0,01	11600	1146		
590	3,27	444	**MT472**	-	**28**	22	18	14	11	5155	-	76	346
650	3,83	378	**NT472**	41	**26**	20	16	13	11	5346	-	80	
710	4,54	320		38	**24**	19	15	12	9,8	5578	-		
800	4,89	297		41	**26**	19	16	12	9,8	5471	-		
925	5,66	256		-	**26**	20	16	12	9,9	5775	-		
985	6,65	218		38	**23**	17	14	11	8,8	6065	-		
1020	7,87	184		33	**20**	15	12	9,5	7,8	6482	-		
1025	8,47	171		31	**19**	14	12	8,8	7,2	6706	-		
1050	9,53	152		28	**17**	13	11	8,1	6,4	7024	-		
1100	10,79	134		26	**16**	12	9,7	7,4	5,7	7304	-		
1165	12,05	120		25	**15**	11	9,2	6,7	5,1	7668	-		
1205	13,56	107		23	**14**	10	8,5	5,9	4,5	7994	-		
1250	15,35	94		21	**13**	9,6	7,7	5,2	4,0	8350	-		
1295	17,25	84		19	**12**	8,9	7,1	4,7	3,5	8693	-		
1450	18,72	77		20	**12**	8,6	6,5	4,3	3,3	8586	-		
1455	22,15	65		18	**10**	7,3	5,5	3,6	2,8	9311	-		
1550	18,04	80	**MT473**	14	**14**	9,0	6,9	4,5	3,4	7923	-	78	346
1550	21,74	67	**NT473**	13	**11**	7,5	5,7	3,8	2,9	8734	-	82	
1550	25,67	56		14	**9,6**	6,3	4,8	3,2	2,4	9717	501		
1550	30,93	47		13	**8,0**	5,2	4,0	2,6	2,0	10629	932		
1550	37,45	39		11	**6,6**	4,3	3,3	2,2	1,7	11627	1297		
1550	42,75	34		9,7	**5,8**	3,8	2,9	1,9	1,5	12354	1511		



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Rapporto *Ratio* Übersetzung i	Vel. di rot. in uscita *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	Tipo *Type* Typ	Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0) *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) Vel. di rot. in entrata [giri/min.] / *Input speed[rpm]* / Antriebsdrehzahl[upm n1=2900	n1=1450	n1=950	n1=725	n1=475	n1=360	Carichi radiali ammessi (uscita) *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	Carichi radiali ammessi (entrata) *Per.O.Loads (input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite
1550	49,05	30	**MT473**	8,8	**5,1**	3,3	2,6	1,7	1,3	13146	1585	78	346
1550	55,82	26	**NT473**	8,0	**4,4**	2,9	2,2	1,5	1,1	13924	1819	82	
1550	63,70	23		7,3	**3,9**	2,6	2,0	1,3	0,98	14755	1857		
1550	73,09	20		6,8	**3,4**	2,2	1,7	1,1	0,86	15600	1891		
1550	84,46	17		5,9	**3,0**	2,0	1,5	0,98	0,74	15600	1922		
1550	86,52	17		5,7	**2,9**	1,9	1,5	0,95	0,72	15600	1930		
1550	91,58	16		5,4	**2,7**	1,8	1,4	0,90	0,68	15600	1941		
1550	109,64	13		4,5	**2,3**	1,5	1,2	0,76	0,57	15600	1971		
1550	124,85	12		4,0	**2,0**	1,3	1,0	0,66	0,50	15600	1989		
1550	139,54	10		3,6	**1,8**	1,2	0,91	0,60	0,45	15600	2006		
1550	157,90	9,2		3,2	**1,6**	1,1	0,80	0,53	0,40	15600	2020		
1550	194,05	7,5		2,6	**1,3**	0,86	0,66	0,43	0,33	15600	2039		
1550	219,00	6,6		2,3	**1,2**	0,76	0,58	0,38	0,29	15600	2047		
1550	229,46	6,3	**MT474**	2,2	**1,1**	0,73	0,56	0,36	0,28	15600	1470	72	347
1550	259,55	5,6	**NT474**	2,0	**0,98**	0,64	0,49	0,32	0,27	15600	1480	76	
1550	295,98	4,9		1,7	**0,86**	0,57	0,43	0,28	0,24	15600	1489		
1550	346,07	4,2		1,5	**0,74**	0,48	0,37	0,27	0,20	15600	1498		
1550	418,16	3,5		1,2	**0,61**	0,40	0,31	0,22	0,17	15600	1507		
1550	442,61	3,3		1,2	**0,58**	0,38	0,29	0,21	0,16	15600	1519		
1550	529,93	2,7		0,97	**0,49**	0,32	0,27	0,18	0,13	15600	1553		
1550	603,46	2,4		0,85	**0,43**	0,28	0,24	0,16	0,12	15600	1574		
1550	674,46	2,1		0,76	**0,38**	0,28	0,21	0,14	0,11	15600	1590		
1550	726,85	2,0	**MT475**	0,72	**0,36**	0,26	0,20	0,13	0,10	15600	1751	88	348
1550	871,52	1,7	**NT475**	0,60	**0,30**	0,22	0,17	0,11	0,08	15600	1756	92	
1550	934,94	1,6		0,56	**0,28**	0,20	0,16	0,10	0,08	15600	1758		
1550	1053,93	1,4		0,56	**0,28**	0,20	0,15	0,10	0,08	15600	1761		
1550	1204,49	1,2		0,49	**0,24**	0,18	0,14	0,09	0,07	15600	1764		
1550	1285,79	1,1		0,46	**0,23**	0,17	0,13	0,08	0,06	15600	1765		
1550	1386,75	1,0		0,42	**0,21**	0,15	0,12	0,08	0,06	15600	1767		
1550	1631,08	0,89		0,36	**0,18**	0,13	0,10	0,07	0,05	15600	1769		
1550	1738,98	0,83		0,34	**0,17**	0,12	0,09	0,06	0,05	15600	1770		
1550	1990,76	0,73		0,30	**0,15**	0,11	0,08	0,05	0,04	15600	1772		
1550	2107,15	0,69		0,28	**0,14**	0,10	0,08	0,05	0,04	15600	1775		
1550	2522,85	0,57		0,26	**0,12**	0,09	0,06	0,04	0,03	15600	1782		
1550	3115,96	0,47	**MT476**	0,21	**0,10**	0,07	0,05	0,03	0,03	15600	1801	90	348
1550	3561,10	0,41	**NT476**	0,19	**0,08**	0,06	0,05	0,03	0,02	15600	1802	94	
1550	3801,48	0,38		0,18	**0,08**	0,06	0,04	0,03	0,02	15600	1802		
1550	4099,95	0,35		0,16	**0,07**	0,05	0,04	0,03	0,02	15600	1803		
1550	4822,33	0,30		0,14	**0,06**	0,05	0,03	0,02	0,02	15600	1804		
1550	5141,34	0,28		0,13	**0,06**	0,04	0,03	0,02	0,02	15600	1804		
1550	5885,71	0,25		0,11	**0,05**	0,04	0,03	0,02	0,01	15600	1805		
1550	6229,83	0,23		0,11	**0,05**	0,04	0,03	0,02	0,01	15600	1806		
1550	7458,85	0,19		0,09	**0,04**	0,03	0,02	0,01	0,01	15600	1808		
1830	4,37	332	**MT572**	-	**65**	49	40	31	27	7606	-	109	349
1910	4,95	293	**NT572**	-	**60**	46	37	29	24	7923	-	119	
1980	5,63	258		-	**55**	42	34	26	21	8305	-		
2080	6,43	225		-	**51**	38	31	24	18	8663	-		
2180	7,41	196		-	**46**	35	28	21	16	9083	-		
2160	8,34	174		-	**41**	30	25	19	14	10086	-		
2200	9,48	153		-	**36**	27	22	16	13	10654	-		
2250	10,85	134		-	**33**	24	20	14	11	11258	-		
2320	12,50	116		-	**29**	22	18	13	9,4	11892	-		
2390	14,54	100		42	**26**	19	16	11	8,1	12621	-		
2460	17,07	85		37	**23**	17	14	9,1	6,9	13454	-		
2520	19,15	76		34	**21**	16	12	8,1	6,2	14065	-		
2650	23,02	63		29	**18**	13	10	6,8	5,1	15021	-		
2750	27,00	54		26	**16**	12	8,8	5,8	4,4	15943	-		



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Rapporto *Ratio* Übersetzung i	Vel. di rot. in uscita *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	Tipo *Type* Typ	Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0) *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) Vel. di rot. in entrata [giri/min.] / *Input speed[rpm]* / Antriebsdrehzahl[upm]						Carichi radiali ammessi (uscita) *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	Carichi radiali ammessi (entrata) *Per.O.Loads (Input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
2390	22,64	64	**MT573**	27	**17**	13	10	7,0	5,3	15500	470	111	349
2520	26,54	55	**NT573**	24	**15**	11	9,0	5,9	4,5	16343	538	121	
2650	31,38	46		21	**13**	10	7,7	5,0	3,8	17314	601		
2750	35,31	41		20	**12**	8,9	6,8	4,5	3,4	18022	595		
2860	39,98	36		18	**11**	7,9	6,0	4,0	3,0	18799	559		
3000	48,74	30		16	**10**	6,5	4,9	3,3	2,5	19500	2621		
3000	54,74	26		14	**8,8**	5,8	4,4	2,9	2,2	19500	2960		
3000	64,72	22		13	**7,4**	4,9	3,7	2,5	1,9	19500	3030		
3000	72,81	20		12	**6,6**	4,3	3,3	2,2	1,7	19500	3073		
3000	82,45	18		11	**5,8**	3,8	2,9	1,9	1,5	19500	3112		
3000	100,53	14		9,5	**4,8**	3,2	2,4	1,6	1,2	19500	3165		
3000	118,95	12		8,1	**4,1**	2,7	2,1	1,3	1,0	19500	3202		
3000	134,45	11		7,2	**3,6**	2,4	1,8	1,2	0,90	19500	3226		
3000	153,61	9,4		6,3	**3,2**	2,1	1,6	1,0	0,79	19500	3248		
3000	167,32	8,7		5,8	**2,9**	1,9	1,5	0,96	0,73	19500	3262		
3000	194,15	7,5	**MT574**	5,1	**2,5**	1,7	1,3	0,83	0,63	19500	1601	128	350
3000	221,40	6,5	**NT574**	4,5	**2,2**	1,5	1,1	0,73	0,55	19500	1623	138	
3000	258,87	5,6		3,8	**1,9**	1,3	0,96	0,63	0,47	19500	1647		
3000	291,25	5,0		3,4	**1,7**	1,1	0,85	0,56	0,42	19500	1712		
3000	301,59	4,8		3,3	**1,6**	1,1	0,82	0,54	0,41	19500	1826		
3000	343,91	4,2		2,9	**1,4**	0,94	0,72	0,47	0,36	19500	1840		
3000	402,12	3,6		2,5	**1,2**	0,81	0,62	0,40	0,31	19500	1855		
3000	485,89	3,0		2,1	**1,0**	0,67	0,51	0,34	0,25	19500	1871		
3000	574,90	2,5		1,7	**0,87**	0,57	0,43	0,28	0,24	19500	1927		
3000	620,62	2,3	**MT575**	1,7	**0,82**	0,54	0,41	0,27	0,23	19500	1514	132	351
3000	698,26	2,1	**NT575**	1,5	**0,73**	0,48	0,37	0,27	0,20	19500	1548	142	
3000	790,68	1,8		1,3	**0,65**	0,42	0,32	0,24	0,18	19500	1580		
3000	964,05	1,5		1,1	**0,53**	0,35	0,27	0,19	0,15	19500	1623		
3000	1140,65	1,3		0,90	**0,45**	0,29	0,25	0,16	0,12	19500	1564		
3000	1259,61	1,2		0,81	**0,41**	0,27	0,23	0,15	0,11	19500	1670		
3000	1489,14	0,97		0,69	**0,34**	0,25	0,19	0,13	0,10	19500	1693		
3000	1675,43	0,87		0,61	**0,31**	0,22	0,17	0,11	0,08	19500	1708		
3000	1897,20	0,76		0,54	**0,27**	0,20	0,15	0,10	0,07	19500	1721		
3000	2313,18	0,63		0,49	**0,25**	0,18	0,14	0,09	0,07	19500	1739		
3000	2736,94	0,53		0,42	**0,21**	0,15	0,12	0,08	0,06	19500	1752		
3000	2850,22	0,51	**MT576**	0,41	**0,20**	0,15	0,11	0,07	0,06	19500	1754	134	351
3000	3372,36	0,43	**NT576**	0,35	**0,17**	0,13	0,10	0,06	0,05	19500	1765	144	
3000	4402,68	0,33		0,27	**0,13**	0,10	0,07	0,05	0,04	19500	1778		
3000	4953,44	0,29		0,26	**0,12**	0,09	0,07	0,04	0,03	19500	1783		
3000	6838,96	0,21		0,19	**0,09**	0,06	0,05	0,03	0,02	19500	1794		
3000	8091,82	0,18		0,16	**0,07**	0,05	0,04	0,03	0,02	19500	1798		
2150	3,29	440	**MT672**	-	**101**	76	62	47	39	8750	-	171	352
2400	3,79	383	**NT672**	-	**99**	74	60	46	38	8825	-	181	
2670	4,37	332		-	**95**	71	58	44	36	8909	-		
2700	4,53	320		-	**93**	70	56	43	35	9023	-		
2920	5,08	285		-	**90**	67	54	42	33	9112	-		
3170	5,73	253		-	**86**	65	52	39	29	9182	-		
2870	6,88	211		-	**65**	49	40	30	24	11622	-		
2920	7,91	183		-	**58**	43	35	27	21	12348	-		
2990	9,13	159		-	**51**	39	31	24	18	13103	-		
3030	9,47	153		-	**50**	38	30	23	18	13256	-		
3090	10,62	137		-	**46**	34	28	21	16	13891	-		
3170	11,97	121		-	**42**	31	25	19	14	14551	-		
3250	13,58	107		-	**38**	28	23	16	12	15290	-		
3350	15,53	93		55	**34**	25	21	14	11	16087	-		
3470	17,93	81		49	**30**	23	18	12	9,5	16969	-		
3580	20,74	70		44	**27**	20	16	11	8,2	17939	-		



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Rapporto** *Ratio* Übersetzung i	**Vel. di rot. in uscita** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipo** *Type* Typ	**Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Vel. di rot. in entrata [giri/min.]** / *Input speed[rpm]* / Antriebsdrehzahl[upm						**Carichi radiali ammessi (uscita)** *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	**Carichi radiali ammessi (entrata)** *Per.O.Loads (input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	**Peso** *Weight* Gewicht [kg]	**Tabella dim.** *Dim. Page* Maße Seite
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
3680	23,18	63	**MT672** **NT672**	40	**25**	19	15	9,6	7,3	18689	-	171 181	352
3530	26,66	54	**MT673**	-	**20**	16	13	8,5	6,4	20248	2575	199	352
3670	30,20	48	**NT673**	-	**19**	15	11	7,5	5,7	21127	2680	209	
3820	34,36	42		-	**18**	13	10	6,6	5,0	22076	2754		
3990	39,30	37		-	**16**	11	8,8	5,8	4,4	23099	2779		
4160	45,29	32		23	**15**	10	7,6	5,0	3,8	24263	2802		
4300	52,68	28		21	**13**	8,6	6,6	4,3	3,3	25671	2882		
4300	53,99	27		20	**13**	8,4	6,4	4,2	3,2	25956	3607		
4300	61,42	24		19	**11**	7,4	5,6	3,7	2,8	26500	3673		
4300	70,26	21		17	**9,8**	6,5	4,9	3,3	2,5	26500	3733		
4300	80,96	18		16	**8,5**	5,6	4,3	2,8	2,2	26500	3788		
4300	94,17	15		14	**7,4**	4,8	3,7	2,4	1,9	26500	3838		
4300	110,55	13		12	**6,3**	4,1	3,2	2,1	1,6	26500	3903		
4300	124,07	12		11	**5,6**	3,7	2,8	1,9	1,4	26500	3931		
4300	149,11	9,7		9,3	**4,7**	3,1	2,4	1,5	1,2	26500	3966		
4300	174,89	8,3		7,9	**4,0**	2,6	2,0	1,3	1,0	26500	3994		
4300	196,61	7,4		7,1	**3,6**	2,3	1,8	1,2	0,89	26500	4011		
4300	215,97	6,7	**MT674**	6,6	**3,3**	2,2	1,6	1,1	0,81	26500	1707	205	353
4300	245,67	5,9	**NT674**	5,8	**2,9**	1,9	1,4	0,95	0,72	26500	1815	215	
4300	281,02	5,2		5,1	**2,5**	1,7	1,3	0,83	0,63	26500	1913		
4300	323,82	4,5		4,4	**2,2**	1,4	1,1	0,72	0,55	26500	2004		
4300	376,69	3,8		3,8	**1,9**	1,2	0,95	0,62	0,47	26500	2088		
4300	442,20	3,3		3,2	**1,6**	1,1	0,80	0,53	0,40	26500	2164		
4300	500,39	2,9		2,9	**1,4**	0,93	0,71	0,47	0,35	26500	2176		
4300	583,04	2,5	**MT675**	2,5	**1,3**	0,82	0,62	0,41	0,31	26500	2037	214	354
4300	673,70	2,2	**NT675**	2,2	**1,1**	0,71	0,54	0,35	0,27	26500	2047	225	
4300	730,46	2,0		2,0	**1,0**	0,65	0,50	0,33	0,28	26500	2053		
4300	874,56	1,7		1,7	**0,84**	0,55	0,42	0,27	0,23	26500	2063		
4300	995,91	1,5		1,5	**0,74**	0,48	0,37	0,27	0,20	26500	2069		
4300	1113,08	1,3		1,3	**0,66**	0,43	0,33	0,24	0,18	26500	2074		
4300	1259,54	1,2		1,2	**0,58**	0,38	0,29	0,21	0,16	26500	2079		
4300	1432,74	1,01		1,0	**0,51**	0,34	0,26	0,19	0,14	26500	2097		
4300	1638,93	0,88		0,90	**0,45**	0,29	0,25	0,16	0,12	26500	2114		
4300	1888,53	0,77		0,78	**0,39**	0,26	0,22	0,14	0,11	26500	2130		
4300	2196,86	0,66		0,67	**0,33**	0,24	0,19	0,12	0,09	26500	2144		
4300	2578,93	0,56		0,57	**0,28**	0,21	0,16	0,10	0,08	26500	2157		
4300	2863,86	0,51	**MT676**	0,52	**0,26**	0,19	0,15	0,10	0,07	26500	2191	217	354
4300	3342,43	0,43	**NT676**	0,50	**0,25**	0,18	0,14	0,09	0,07	26500	2193	229	
4300	3931,45	0,37		0,43	**0,21**	0,15	0,12	0,08	0,06	26500	2196		
4300	4674,12	0,31		0,36	**0,18**	0,13	0,10	0,07	0,05	26500	2198		
4300	5287,12	0,27		0,32	**0,16**	0,12	0,09	0,06	0,04	26500	2199		
4300	6029,17	0,24		0,28	**0,14**	0,10	0,08	0,05	0,04	26500	2200		
4300	7490,08	0,19		0,25	**0,11**	0,08	0,06	0,04	0,03	26500	2202		
4300	8518,13	0,17		0,22	**0,10**	0,07	0,05	0,04	0,03	26500	2203		
4300	9689,49	0,15		0,19	**0,09**	0,06	0,05	0,03	0,02	26500	2206		
4300	11083,95	0,13		0,17	**0,08**	0,06	0,04	0,03	0,02	26500	2210		
4300	12771,99	0,11		0,15	**0,07**	0,05	0,04	0,02	0,02	26500	2213		
4300	14857,21	0,10		0,13	**0,06**	0,04	0,03	0,02	0,02	26500	2215		
4300	17441,07	0,08		0,11	**0,05**	0,04	0,03	0,02	0,01	26500	2218		
3680	4,73	307	**MT772**	-	**121**	91	73	56	46	46915	-	296	355
3990	5,38	269	**NT772**	-	**115**	87	70	54	44	47449	-	365	
4330	6,15	236		-	**110**	82	67	51	42	48003	-		
4490	6,52	222		-	**107**	81	65	50	41	48160	-		
4770	7,26	200		-	**102**	77	62	48	39	48690	-		
6200	8,46	171		-	**114**	87	71	49	37	46092	-		



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	Rapporto *Ratio* Übersetzung i	Vel. di rot. in uscita *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	Tipo *Type* Typ	Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0) *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) Vel. di rot. in entrata [giri/min.] / *Input speed[rpm]* / Antriebsdrehzahl[upm						Carichi radiali ammessi (uscita) *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	Carichi radiali ammessi (entrata) *Per.O.Loads (Input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	Peso *Weight* Gewicht [kg]	Tabella dim. *Dim. Page* Maße Seite
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
6470	9,62	151	**MT772**	-	**105**	80	65	43	33	47757	-	296	355
6770	11,00	132	**NT772**	-	**96**	73	57	38	29	49515	-	365	
6900	11,65	124		-	**93**	70	54	35	27	50302	-		
7140	12,98	112		-	**86**	63	48	32	24	51890	-		
7420	14,54	100		-	**80**	57	43	28	22	53475	-		
7710	16,39	88		-	**74**	50	38	25	19	51626	-		
7520	17,40	83	**MT773**	-	**68**	48	37	24	18	52000	-	259	355
7810	19,52	74	**NT773**	-	**63**	43	33	21	16	50500	-	320	
8000	22,62	64		-	**56**	37	28	19	14	48500	-		
8000	25,99	56		-	**49**	32	25	16	12	48500	-		
8000	30,00	48		-	**42**	28	21	14	11	48500	-		
8000	31,11	47		-	**41**	27	21	14	10	48500	-		
8000	34,89	42		-	**36**	24	18	12	9,2	48500	-		
8000	39,33	37		-	**32**	21	16	11	8,1	48500	-		
8000	44,17	33		-	**29**	19	15	9,5	7,3	48500	4355		
8000	50,75	29		-	**25**	17	13	8,3	6,3	48500	4494		
8000	58,59	25		-	**22**	14	11	7,2	5,5	48500	4619		
8000	60,76	24		-	**21**	14	11	7,0	5,3	48500	4629		
8000	68,15	21		-	**19**	12	9,4	6,2	4,7	48500	4714		
8000	76,81	19		-	**17**	11	8,4	5,5	4,2	48500	4792		
8000	87,13	17		-	**15**	9,7	7,4	4,9	3,7	48500	4865		
8000	99,63	15		26	**13**	8,5	6,5	4,3	3,2	48500	1932		
8000	115,06	13		22	**11**	7,4	5,6	3,7	2,8	48500	1995		
8000	133,05	11		19	**9,7**	6,4	4,9	3,2	2,4	48500	5070		
8000	148,73	9,7		17	**8,7**	5,7	4,4	2,9	2,2	48500	5106		
8000	178,78	8,1		14	**7,2**	4,8	3,6	2,4	1,8	48500	5159		
8000	208,82	6,9		12	**6,2**	4,1	3,1	2,1	1,6	48500	5195		
8000	190,96	7,6	**MT774**	14	**6,9**	4,5	3,4	2,3	1,7	48500	-	269	356
8000	214,17	6,8	**NT774**	12	**6,1**	4,0	3,1	2,0	1,5	48500	-	330	
8000	241,42	6,0		11	**5,5**	3,6	2,7	1,8	1,4	48500	546		
8000	273,85	5,3		9,6	**4,8**	3,2	2,4	1,6	1,2	48500	1188		
8000	313,11	4,6		8,4	**4,2**	2,8	2,1	1,4	1,1	48500	1634		
8000	361,62	4,0		7,3	**3,7**	2,4	1,8	1,2	0,91	48500	1764		
8000	418,17	3,5		6,3	**3,2**	2,1	1,6	1,0	0,78	48500	1877		
8000	467,43	3,1		5,7	**2,8**	1,9	1,4	0,93	0,70	48500	1953		
8000	532,29	2,7		5,0	**2,5**	1,6	1,2	0,82	0,62	48500	1976		
8000	594,92	2,4		4,5	**2,2**	1,5	1,1	0,73	0,55	48500	1997		
8000	641,40	2,3	**MT775**	4,2	**2,1**	1,4	1,1	0,69	0,52	48500	1721	328	357
8000	725,80	2,0	**NT775**	3,7	**1,9**	1,2	0,94	0,61	0,46	48500	1736	400	
8000	822,02	1,8		3,3	**1,7**	1,1	0,82	0,54	0,41	48500	1935		
8000	984,18	1,5		2,8	**1,4**	0,90	0,69	0,45	0,34	48500	1952		
8000	1120,74	1,3		2,4	**1,2**	0,80	0,61	0,40	0,30	48500	1962		
8000	1252,60	1,2		2,2	**1,1**	0,71	0,54	0,36	0,27	48500	1971		
8000	1417,41	1,0		1,9	**0,96**	0,63	0,48	0,32	0,27	48500	1978		
8000	1589,68	0,91		1,7	**0,86**	0,56	0,43	0,28	0,24	48500	2006		
8000	1791,91	0,81		1,5	**0,76**	0,50	0,38	0,28	0,21	48500	2031		
8000	2032,66	0,71		1,4	**0,67**	0,44	0,34	0,24	0,19	48500	2055		
8000	2324,10	0,62		1,2	**0,59**	0,39	0,29	0,21	0,16	48500	2077		
8000	2684,10	0,54		1,0	**0,51**	0,33	0,26	0,19	0,14	48500	2098		
8000	3103,85	0,47		0,88	**0,44**	0,29	0,24	0,16	0,12	48500	2116		
8000	3814,39	0,38		0,72	**0,36**	0,26	0,20	0,13	0,10	48500	2121		
8000	4263,81	0,34		0,64	**0,32**	0,23	0,18	0,12	0,09	48500	2133		
8000	4812,09	0,30		0,57	**0,29**	0,21	0,16	0,10	0,08	48500	2135		
8000	2916,59	0,50	**MT776**	0,96	**0,48**	0,31	0,27	0,17	0,13	48500	2160	332	357
8000	3222,83	0,45	**NT776**	0,87	**0,43**	0,28	0,24	0,16	0,12	48500	2164	405	
8000	3761,39	0,39		0,74	**0,37**	0,27	0,21	0,14	0,10	48500	2168		



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Rapporto** *Ratio* Übersetzung i	**Vel. di rot. in uscita** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipo** *Type* Typ	**Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Vel. di rot. in entrata [giri/min.]** / *Input speed[rpm]* / Antriebsdrehzahl[upm n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360	**Carichi radiali ammessi (uscita)** *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	**Carichi radiali ammessi (entrata)** *Per.O.Loads (input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	**Peso** *Weight* Gewicht [kg]	**Tabella dim.** *Dim. Page* Maße Seite
8000	4424,24	0,33	**MT776**	0,63	**0,32**	0,23	0,18	0,12	0,09	48500	2172	332	357
8000	5260,00	0,28	**NT776**	0,53	**0,27**	0,19	0,15	0,10	0,07	48500	2175	405	
8000	5949,83	0,24		0,52	**0,26**	0,19	0,15	0,10	0,07	48500	2177		
8000	6784,90	0,21		0,46	**0,23**	0,17	0,13	0,08	0,06	48500	2179		
8000	8428,93	0,17		0,37	**0,19**	0,14	0,10	0,07	0,05	48500	2182		
8000	9585,84	0,15		0,33	**0,16**	0,12	0,09	0,06	0,05	48500	2184		
8000	10750,89	0,13		0,29	**0,15**	0,11	0,08	0,05	0,04	48500	2189		
8000	12118,56	0,12		0,26	**0,13**	0,09	0,07	0,05	0,04	48500	2194		
8000	13746,73	0,11		0,25	**0,11**	0,08	0,06	0,04	0,03	48500	2198		
8000	15717,68	0,09		0,22	**0,10**	0,07	0,06	0,04	0,03	48500	2203		
8000	18152,38	0,08		0,19	**0,09**	0,06	0,05	0,03	0,02	48500	2207		
8000	20991,08	0,07		0,17	**0,07**	0,05	0,04	0,03	0,02	48500	2210		
8000	23464,25	0,06		0,15	**0,07**	0,05	0,04	0,02	0,02	48500	2212		
8700	4,32	336	**MT872**	-	**319**	238	192	146	118	57369	-	550	358
9000	4,95	293	**NT872**	-	**287**	215	173	133	103	59951	-	560	
9550	5,22	278		-	**289**	216	175	129	98	42712	-		
9900	5,99	242		-	**261**	196	158	112	85	44736	-		
10200	6,64	218		-	**243**	182	146	101	77	46180	-		
10600	7,55	192		-	**222**	166	133	89	68	48005	-		
11200	8,87	163		-	**200**	149	116	76	58	75086	-		
11500	10,09	144		-	**180**	134	102	67	51	78329	-		
12700	11,59	125	**MT873**	-	**177**	119	91	59	45	74662	-	555	358
13000	13,30	109	**NT873**	-	**158**	103	79	52	39	72000	-	565	
13000	14,02	103		-	**150**	98	75	49	37	56769	-		
13000	16,09	90		-	**131**	86	65	43	32	61500	-		
13000	17,83	81		-	**118**	77	59	39	29	65164	-		
13000	20,28	72		-	**104**	68	52	34	26	69914	-		
13000	23,87	61		-	**88**	58	44	29	22	72000	-		
13000	27,39	53		-	**77**	50	38	25	19	72000	-		
13000	30,36	48		-	**69**	45	35	23	17	72000	-		
13000	34,53	42		-	**61**	40	30	20	15	72000	-		
13000	40,55	36		-	**52**	34	26	17	13	72000	570		
13000	46,12	31		-	**46**	30	23	15	11	72000	1722		
13000	52,86	27		-	**40**	26	20	13	9,9	72000	2253		
13000	56,54	26		74	**37**	24	19	12	9,2	72000	-		
13000	64,77	22		65	**32**	21	16	11	8,1	72000	-		
13000	75,51	19		56	**28**	18	14	9,1	6,9	72000	3485		
13000	86,51	17		49	**24**	16	12	8,0	6,0	72000	3895		
13000	99,81	15		42	**21**	14	11	6,9	5,2	72000	4492		
13000	110,17	13		38	**19**	12	9,5	6,2	4,7	72000	4631		
13000	107,60	13	**MT874**	39	**20**	13	9,9	6,5	4,9	72000	569	590	359
13000	125,70	12	**NT874**	34	**17**	11	8,5	5,5	4,2	72000	1172	600	
13000	147,61	9,8		29	**14**	9,5	7,2	4,7	3,6	72000	1704		
13000	174,68	8,3		24	**12**	8,0	6,1	4,0	3,0	72000	2176		
13000	188,08	7,7		23	**11**	7,4	5,7	3,7	2,8	72000	2568		
13000	211,60	6,9		20	**10**	6,6	5,0	3,3	2,5	72000	2638		
13000	239,61	6,1		18	**8,9**	5,8	4,5	2,9	2,2	72000	2697		
13000	292,15	5,0		15	**7,3**	4,8	3,7	2,4	1,8	72000	2774		
13000	345,67	4,2		12	**6,2**	4,1	3,1	2,0	1,5	72000	2831		
13000	390,74	3,7		11	**5,5**	3,6	2,8	1,8	1,4	72000	2867		
13000	446,42	3,2		9,6	**4,8**	3,2	2,4	1,6	1,2	72000	2901		
13000	495,97	2,9	**MT875**	8,9	**4,4**	2,9	2,2	1,5	1,1	72000	1470	618	360
13000	537,75	2,7	**NT875**	8,2	**4,1**	2,7	2,0	1,3	1,0	72000	1494	628	
13000	643,84	2,3		6,8	**3,4**	2,2	1,7	1,1	0,85	72000	1535		
13000	718,74	2,0		6,1	**3,1**	2,0	1,5	1,0	0,76	72000	1607		
13000	807,91	1,8		5,5	**2,7**	1,8	1,4	0,89	0,68	72000	1676		
13000	915,85	1,6		4,8	**2,4**	1,6	1,2	0,79	0,60	72000	1742		



Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Rapporto** *Ratio* Übersetzung i	**Vel. di rot. in uscita** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipo** *Type* Typ	**Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Vel. di rot. in entrata [giri/min.]** / *Input speed[rpm]* / Antriebsdrehzahl[upm]						**Carichi radiali ammessi (uscita)** *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	**Carichi radiali ammessi (entrata)** *Per.O.Loads (Input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	**Peso** *Weight* Gewicht [kg]	**Tabella dim.** *Dim. Page* Maße Seite
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
13000	1049,18	1,4	**MT875**	4,2	**2,1**	1,4	1,1	0,69	0,52	72000	1804	618	360
13000	1210,51	1,2	**NT875**	3,6	**1,8**	1,2	0,91	0,60	0,45	72000	1861	628	
13000	1336,15	1,1		3,3	**1,7**	1,1	0,83	0,54	0,41	72000	1896		
13000	1521,55	0,95		2,9	**1,5**	0,95	0,73	0,48	0,36	72000	1908		
13000	1700,56	0,85		2,6	**1,3**	0,85	0,65	0,43	0,32	72000	1919		
13000	1924,32	0,75		2,3	**1,2**	0,75	0,58	0,38	0,29	72000	1928		
13000	2108,33	0,69	**MT876**	2,1	**1,1**	0,70	0,54	0,35	0,27	72000	2061	620	360
13000	2460,65	0,59	**NT876**	1,8	**0,92**	0,60	0,46	0,30	0,25	72000	2072	630	
13000	2894,28	0,50		1,6	**0,78**	0,51	0,39	0,26	0,22	72000	2082		
13000	3441,02	0,42		1,3	**0,66**	0,43	0,33	0,24	0,18	72000	2090		
13000	3892,30	0,37		1,2	**0,58**	0,38	0,29	0,21	0,16	72000	2096		
13000	4438,59	0,33		1,0	**0,51**	0,34	0,26	0,19	0,14	72000	2101		
13000	4954,95	0,29		0,92	**0,46**	0,30	0,26	0,17	0,13	72000	2114		
13000	5569,66	0,26		0,82	**0,41**	0,27	0,23	0,15	0,11	72000	2127		
13000	6313,78	0,23		0,72	**0,36**	0,26	0,20	0,13	0,10	72000	2140		
13000	7233,00	0,20		0,63	**0,32**	0,23	0,18	0,12	0,09	72000	2152		
13000	8345,18	0,17		0,55	**0,27**	0,20	0,15	0,10	0,08	72000	2162		
13000	11443,34	0,13		0,44	**0,22**	0,16	0,12	0,08	0,06	72000	2172		
13000	13014,00	0,11		0,39	**0,20**	0,14	0,11	0,07	0,05	72000	2174		
13000	14977,32	0,10		0,34	**0,17**	0,12	0,09	0,06	0,05	72000	2176		
13000	17501,59	0,08		0,29	**0,15**	0,11	0,08	0,05	0,04	72000	2177		
9950	7,11	204	**MT972**	-	**217**	163	131	101	83	94943	23900	960	361
10700	7,92	183	**NT972**	-	**210**	157	127	97	80	97294	20793	1010	
11450	8,86	164		-	**201**	151	122	94	77	99973	15969		
12350	9,99	145		-	**192**	144	116	89	70	102771	9691		
18000	11,56	125		-	**243**	159	122	80	61	94500	11034		
18000	12,86	113		-	**218**	143	110	72	55	94500	15627		
18000	14,40	101		-	**195**	128	98	64	49	94500	19933		
18000	16,23	89		-	**173**	114	87	57	43	94500	23900		
18000	18,15	80	**MT973**	-	**156**	102	78	52	39	94500	23900	1000	361
18000	20,36	71	**NT973**	-	**139**	91	70	46	35	94500	23900	1050	
18000	22,95	63		-	**123**	81	62	41	31	94500	23900		
18000	26,03	56		-	**109**	72	55	36	27	94500	23900		
18000	29,49	49		-	**96**	63	48	32	24	94500	23900		
18000	33,08	44		-	**86**	57	43	28	22	94500	23900		
18000	37,29	39		-	**76**	50	38	25	19	94500	23900		
18000	42,30	34		-	**67**	44	34	22	17	94500	23900		
18000	48,86	30		-	**58**	38	29	19	15	94500	23900		
18000	54,80	26		-	**52**	34	26	17	13	94500	23900		
18000	61,77	23		-	**46**	30	23	15	12	94500	23900		
18000	70,07	21		-	**41**	27	21	14	10	94500	23900		
18000	82,20	18		-	**35**	23	18	12	8,8	94500	23900		
18000	91,56	16		-	**31**	21	16	10	7,9	94500	23900		
18000	102,69	14		-	**28**	18	14	9,3	7,1	94500	23900		
18000	116,17	12		-	**25**	16	13	8,2	6,2	94500	23900		
18000	132,83	11		43	**22**	14	11	7,2	5,5	94500	23900		
18000	150,02	9,7		38	**19**	13	9,7	6,4	4,8	94500	23900		
18000	166,73	8,7		35	**17**	11	8,7	5,8	4,4	94500	23900		
18000	186,95	7,8		31	**16**	10	7,8	5,1	3,9	94500	23900		
18000	172,08	8,4	**MT974**	34	**17**	11	8,5	5,6	4,2	94500	-	1050	362
18000	193,13	7,5	**NT974**	30	**15**	10	7,6	5,0	3,8	94500	333	1100	
18000	216,03	6,7		27	**14**	8,9	6,8	4,5	3,4	94500	496		
18000	272,24	5,3		22	**11**	7,1	5,4	3,6	2,7	94500	1009		
18000	305,33	4,7		19	**9,7**	6,3	4,8	3,2	2,4	94500	2129		
18000	344,17	4,2		17	**8,6**	5,6	4,3	2,8	2,1	94500	3134		
18000	390,41	3,7		15	**7,6**	5,0	3,8	2,5	1,9	94500	3339		
18000	457,99	3,2		13	**6,5**	4,2	3,2	2,1	1,6	94500	3565		

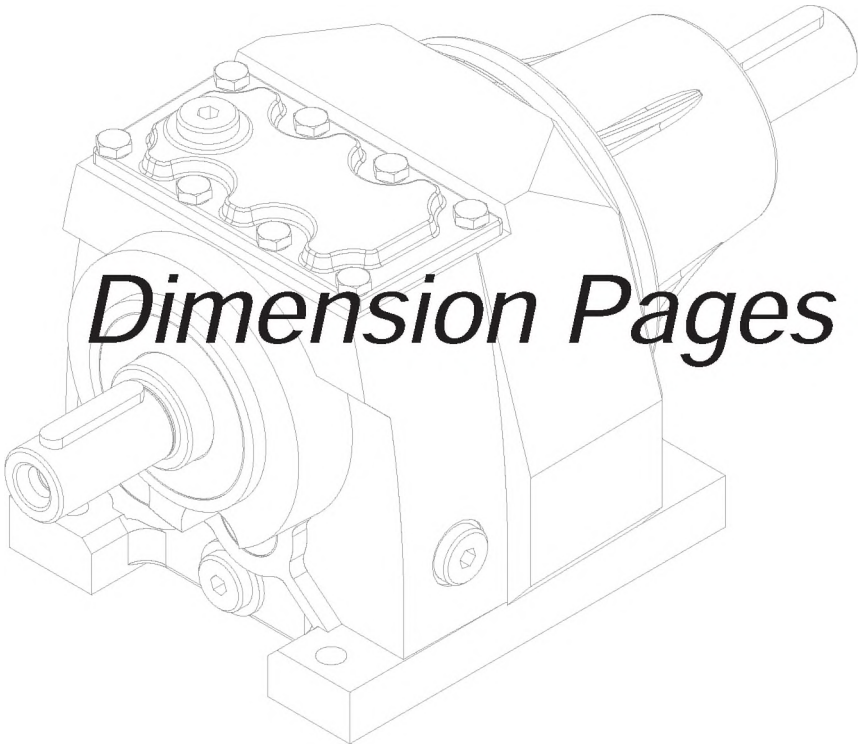


Tabelle prestazionali dei riduttori
Gear Units Performance Tables
Leistung und Drehzahlübersicht von Getriebe

Coppie nominali *Nominal Torques* Nenn-drehmomente Ma [Nm] (n1=1450rpm)	**Rapporto** *Ratio* Übersetzung i	**Vel. di rot. in uscita** *Output Speeds* Abtriebs-drehzahlen n2 [r.p.m] (n1=1450rpm)	**Tipo** *Type* Typ	**Pe = Potenza nominale [kW] (per fattore di servizio fs=1,0)** *Pe= Nominal Power [kW] (For Service Factor fs=1,0)* Pe= NennLeistung [kW] (Bei Betriebsfaktor fs=1,0) **Vel. di rot. in entrata [giri/min.]** / *Input speed[rpm]* / Antriebsdrehzahl[upm						**Carichi radiali ammessi (uscita)** *Per.O.Loads (Output)* Zul.Querkrafte (Abtrieb) Fqam [N] (n1=1450rpm)	**Carichi radiali ammessi (entrata)** *Per.O.Loads (input)* Zul.Querkrafte (Antrieb) Fqem [N] (n1=1450rpm)	**Peso** *Weight* Gewicht [kg]	**Tabella dim.** *Dim. Page* Maße Seite
				n1=2900	**n1=1450**	n1=950	n1=725	n1=475	n1=360				
18000	510,11	2,8	**MT974** **NT974**	11	**5,6**	3,6	3,0	1,8	1,4	94500	3755	1050 1100	362
18000	462,18	3,1	**MT975**	13	**6,5**	4,3	3,3	2,1	1,6	94500	1743	1100	363
18000	546,94	2,7	**NT975**	11	**5,5**	3,6	2,8	1,8	1,4	94500	1801	1150	
18000	588,87	2,5		10	**5,1**	3,4	2,6	1,7	1,3	94500	1844		
18000	662,54	2,2		9,1	**4,6**	3,0	2,3	1,5	1,1	94500	1876		
18000	750,24	1,9		8,1	**4,0**	2,7	2,0	1,3	1,0	94500	1905		
18000	842,80	1,7		7,2	**3,6**	2,4	1,8	1,2	0,90	94500	1922		
18000	914,74	1,6		6,6	**3,3**	2,2	1,7	1,1	0,82	94500	1943		
18000	1082,31	1,3		5,6	**2,8**	1,8	1,4	0,92	0,70	94500	1971		
18000	1213,85	1,2		5,0	**2,5**	1,7	1,3	0,82	0,62	94500	2040		
18000	1368,27	1,1		4,5	**2,2**	1,5	1,1	0,73	0,55	94500	2103		
18000	1552,10	0,93		3,9	**2,0**	1,3	0,98	0,64	0,49	94500	2162		
18000	1820,78	0,80		3,4	**1,7**	1,1	0,84	0,55	0,42	94500	2226		
18000	2027,97	0,71		3,0	**1,5**	0,99	0,75	0,49	0,37	94500	2265		
18000	2836,64	0,51	**MT976**	2,2	**1,1**	0,72	0,55	0,36	0,27	94500	2396	1105	363
18000	3594,81	0,40	**NT976**	1,7	**0,87**	0,57	0,43	0,28	0,24	94500	2411	1155	
18000	4227,50	0,34		1,5	**0,74**	0,48	0,37	0,27	0,20	94500	2463		
18000	4474,67	0,32		1,4	**0,70**	0,46	0,35	0,25	0,19	94500	2466		
18000	5357,43	0,27		1,2	**0,59**	0,38	0,29	0,21	0,16	94500	2473		
18000	6842,29	0,21		0,92	**0,46**	0,30	0,26	0,17	0,13	94500	2491		
18000	8620,11	0,17		0,73	**0,36**	0,27	0,20	0,13	0,10	94500	2506		
18000	11064,86	0,13		0,57	**0,28**	0,21	0,16	0,10	0,08	94500	2520		
18000	15951,72	0,09		0,44	**0,22**	0,16	0,12	0,08	0,06	94500	2535		
18000	20051,59	0,07		0,35	**0,18**	0,13	0,10	0,06	0,05	94500	2542		

Note / *Notes* / Notizen

Tabelle dimensionali

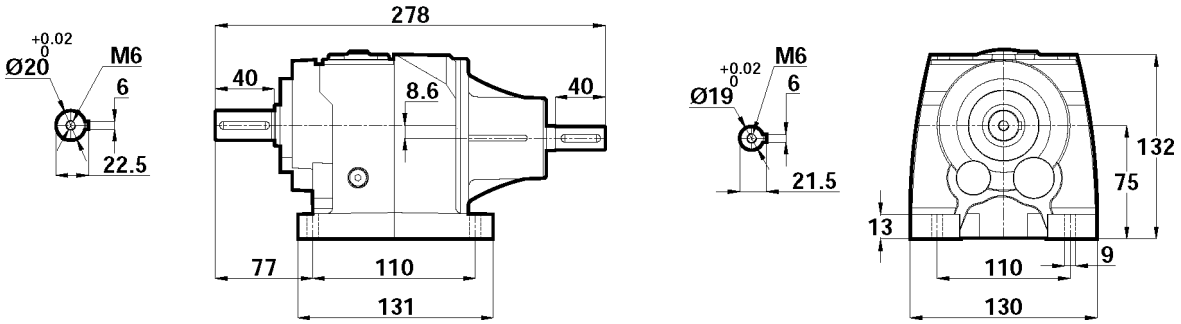


Dimension Pages

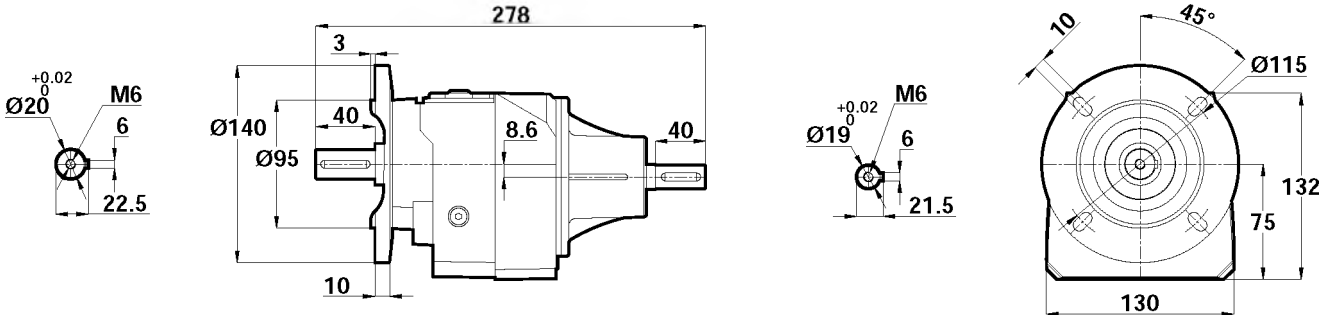
Abmessungsseiten

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

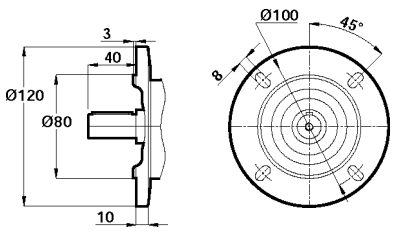
MT002
MT003



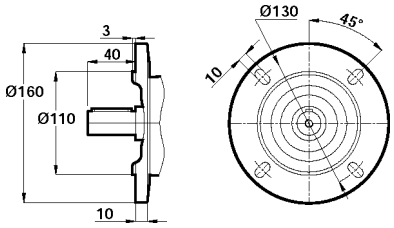
NT002
NT003



Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



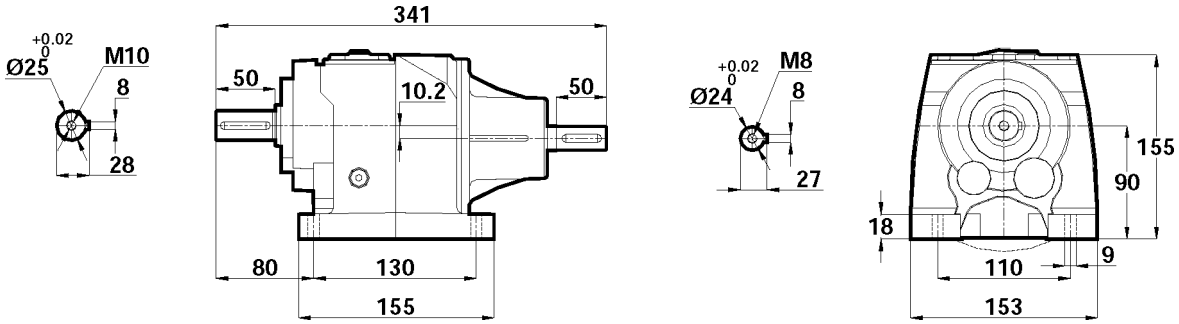
Opt. 1



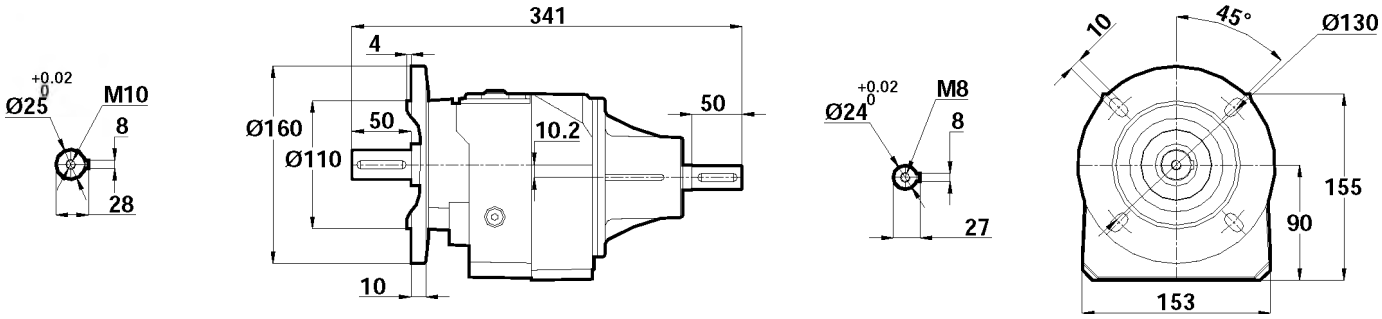
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

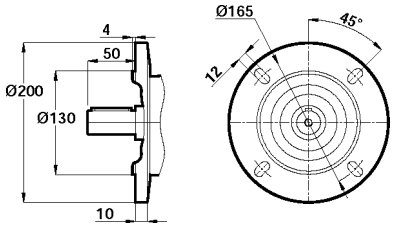
MT102
MT103



NT102
NT103



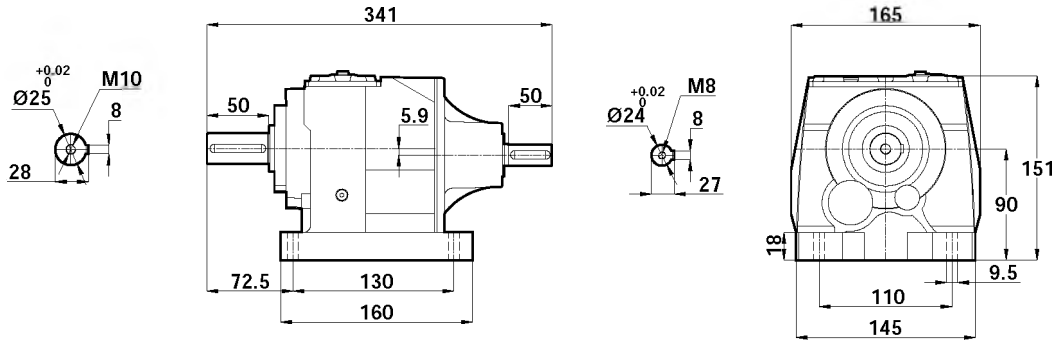
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*



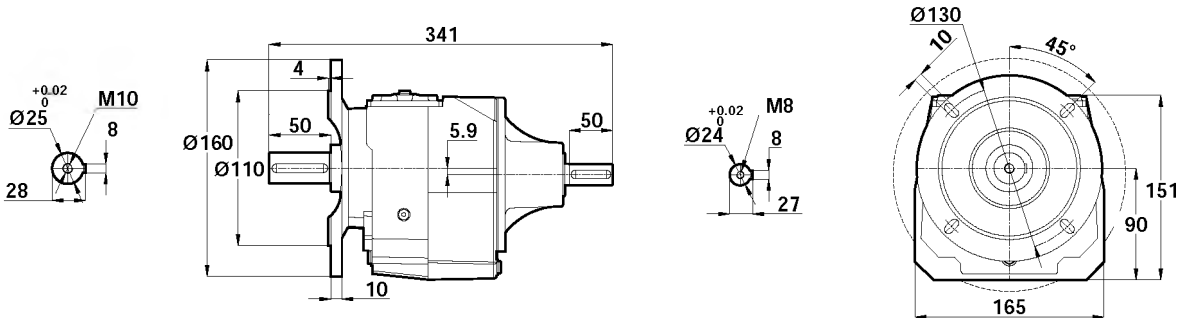
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

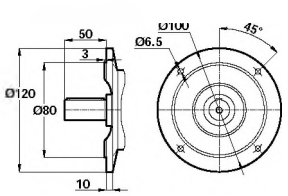
MT172
MT173



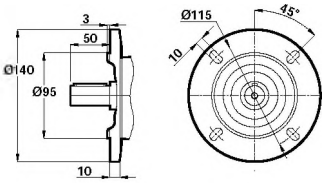
NT172
NT173



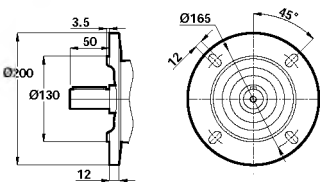
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



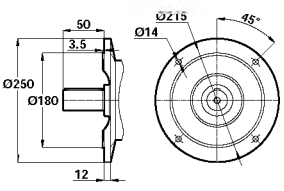
Opt. 1



Opt. 2



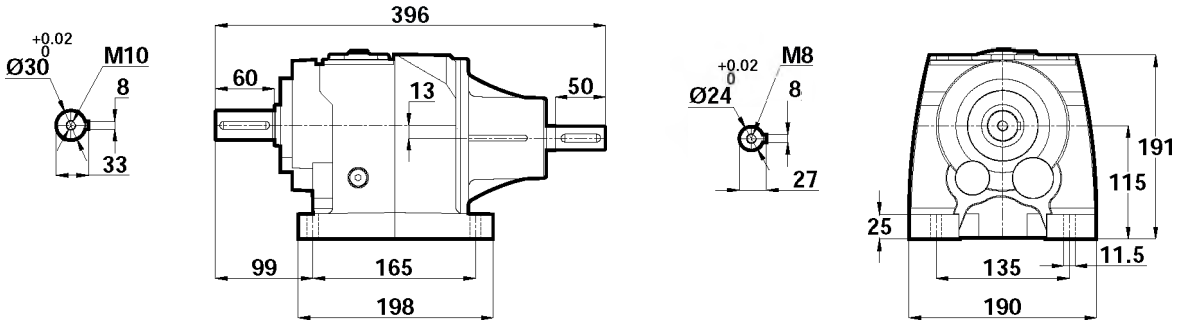
Opt. 3



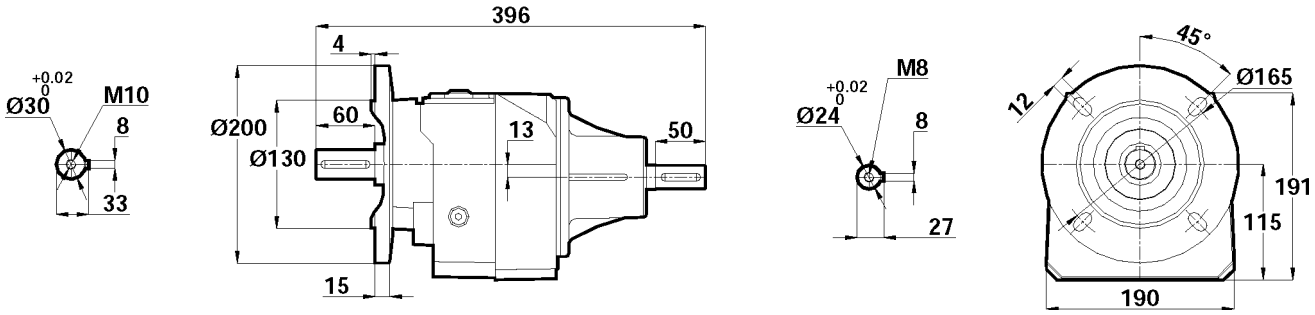
Opt. 4

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

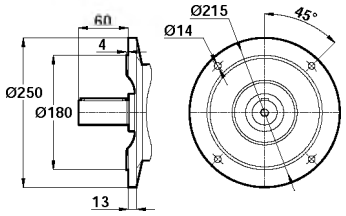
MT202
MT203



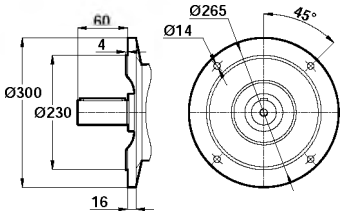
NT202
NT203



Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



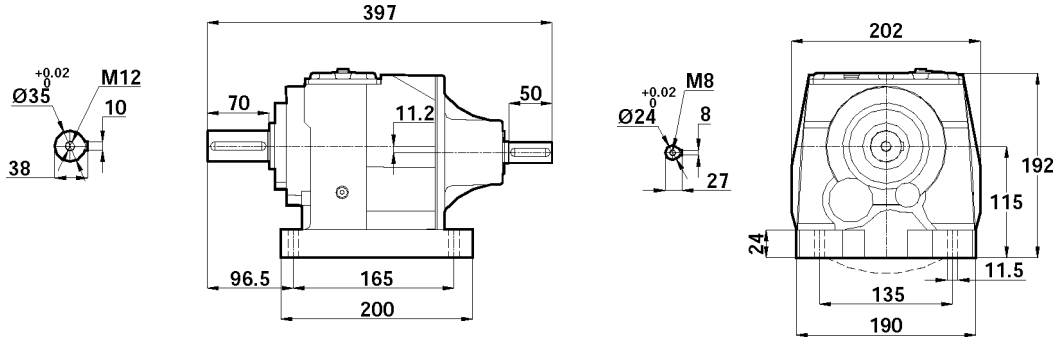
Opt. 1



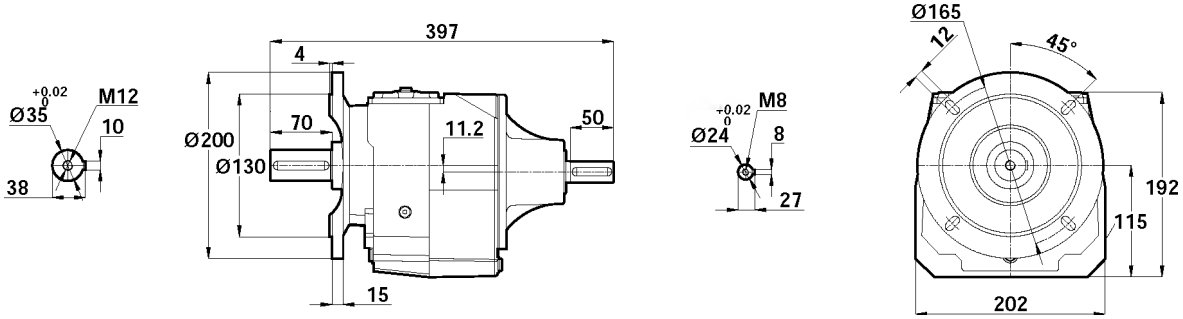
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

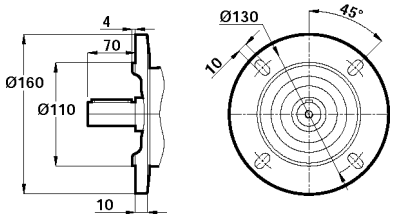
MT272
MT273



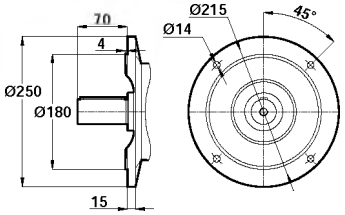
NT272
NT273



Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



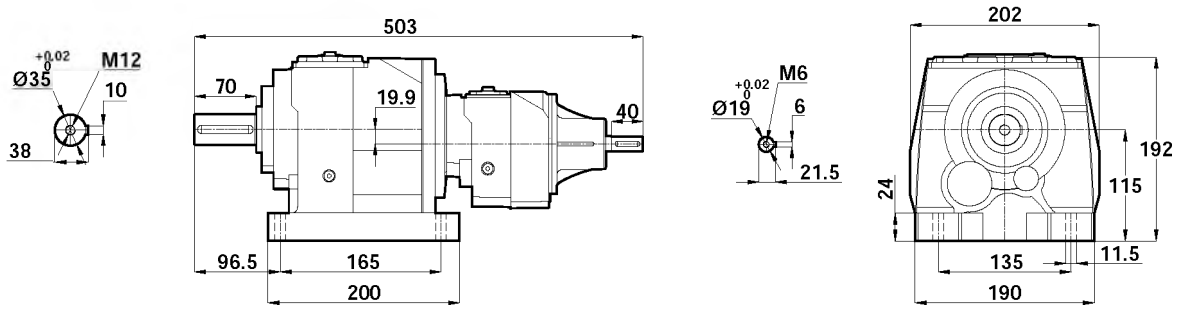
Opt. 1



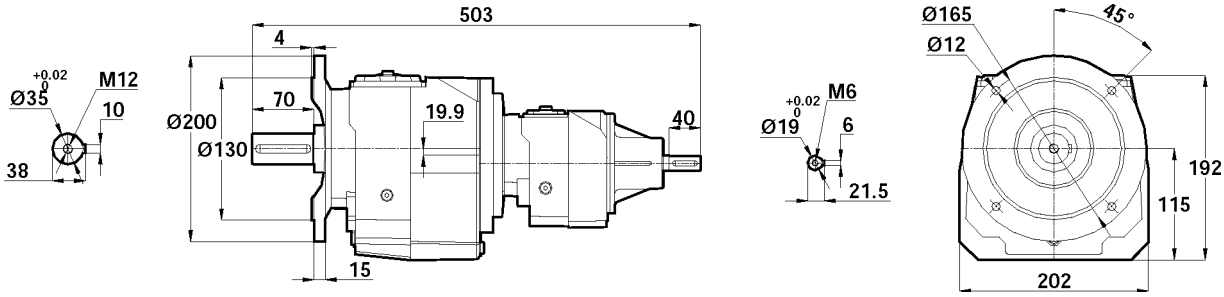
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

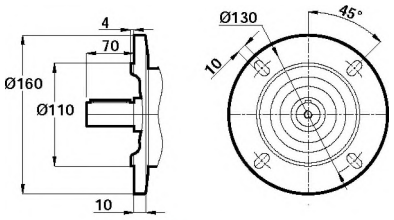
MT275
MT276



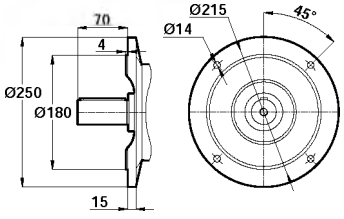
NT275
NT276



Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



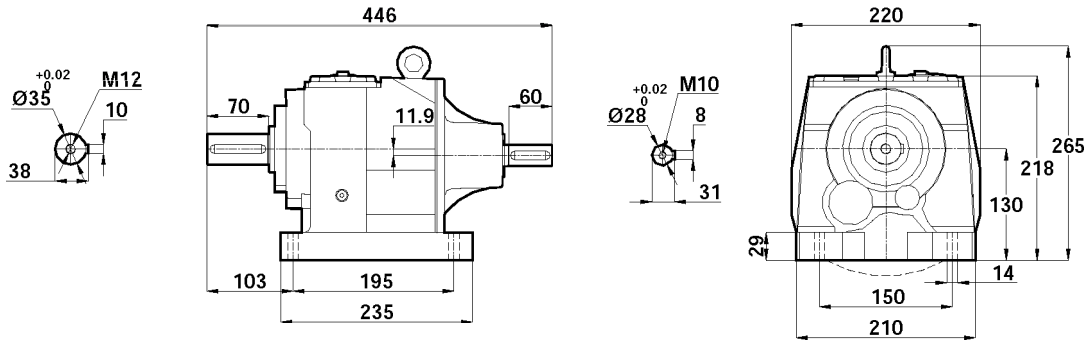
Opt. 1



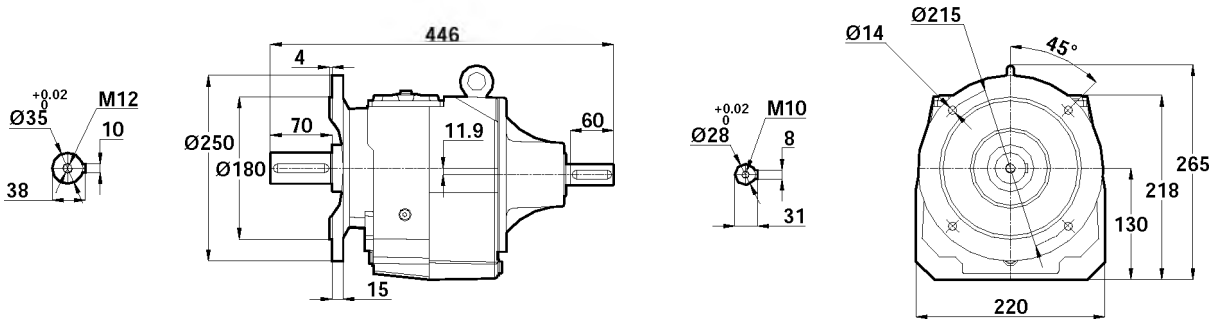
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

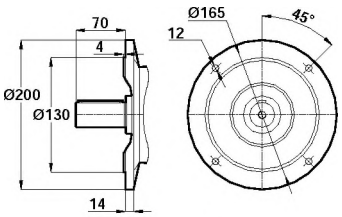
MT282
MT283



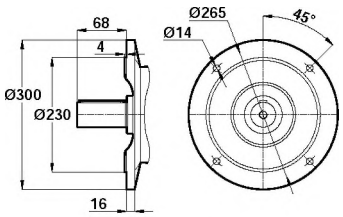
NT282
NT283



Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



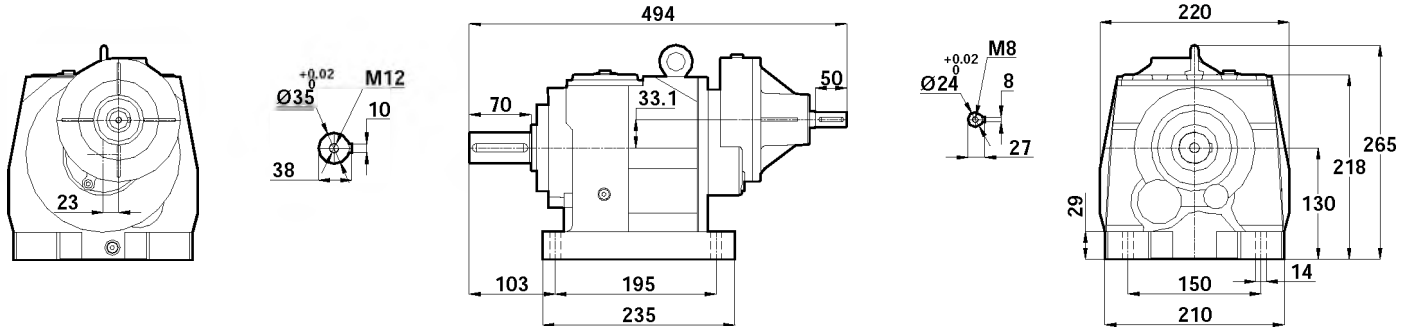
Opt. 1



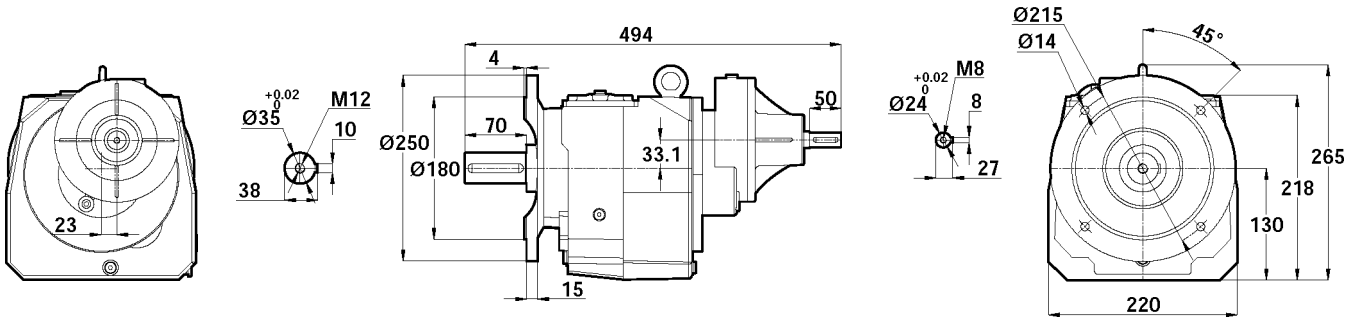
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

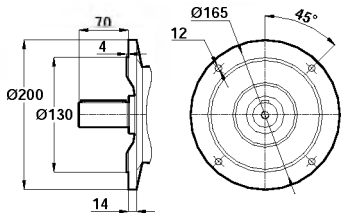
MT284



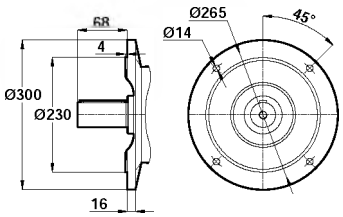
NT284



Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



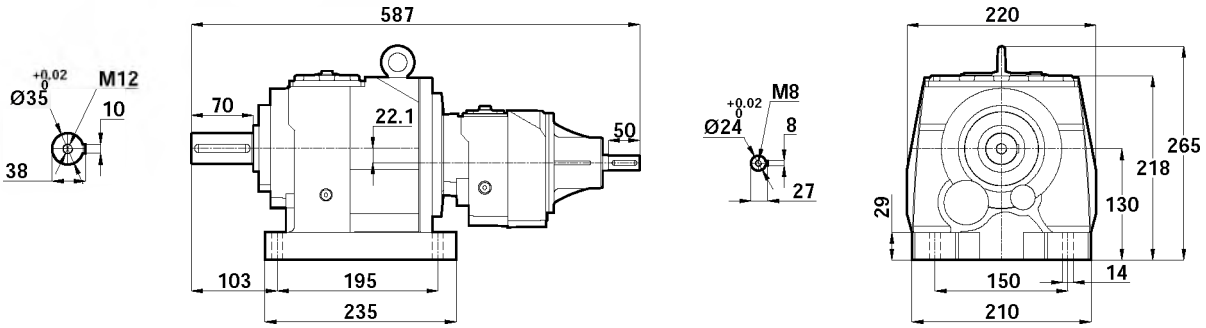
Opt. 1



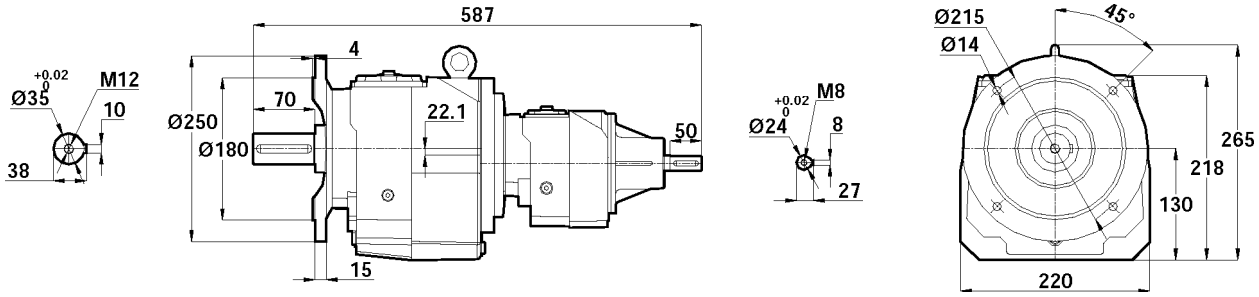
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

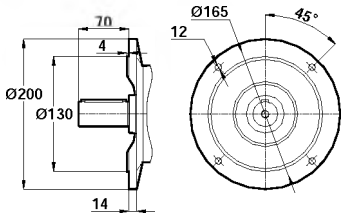
MT285
MT286



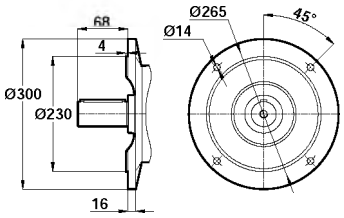
NT285
NT286



Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



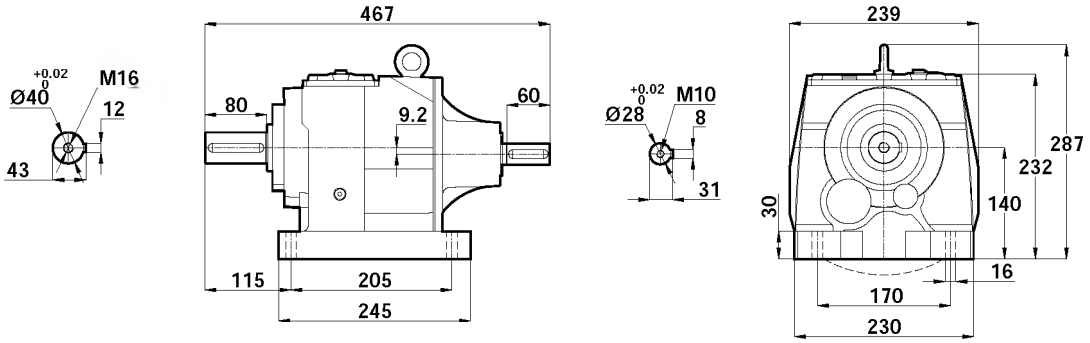
Opt. 1



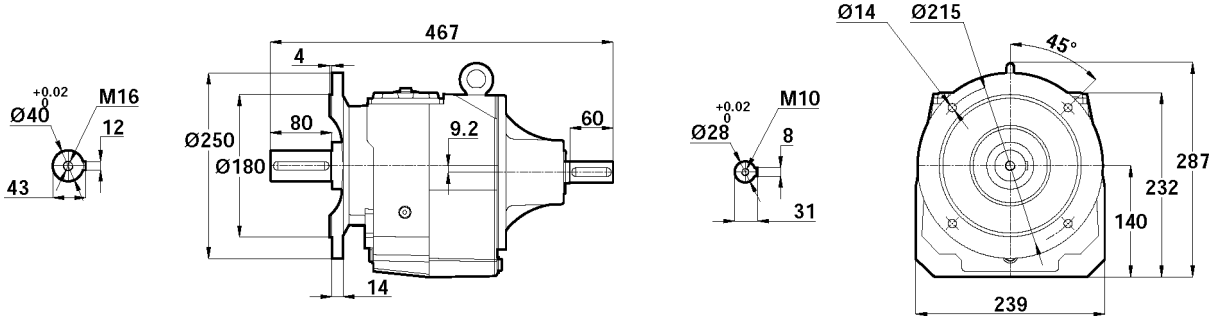
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

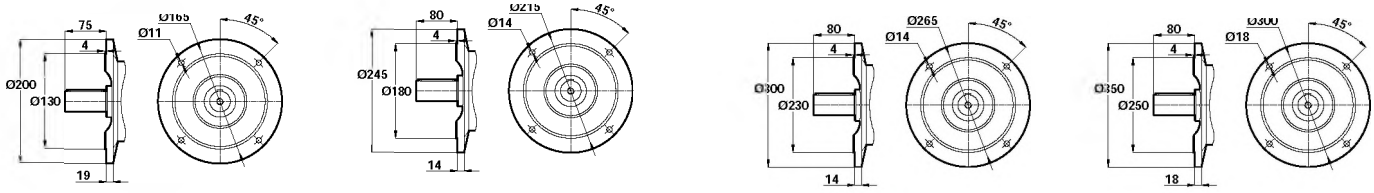
MT372
MT373



NT372
NT373



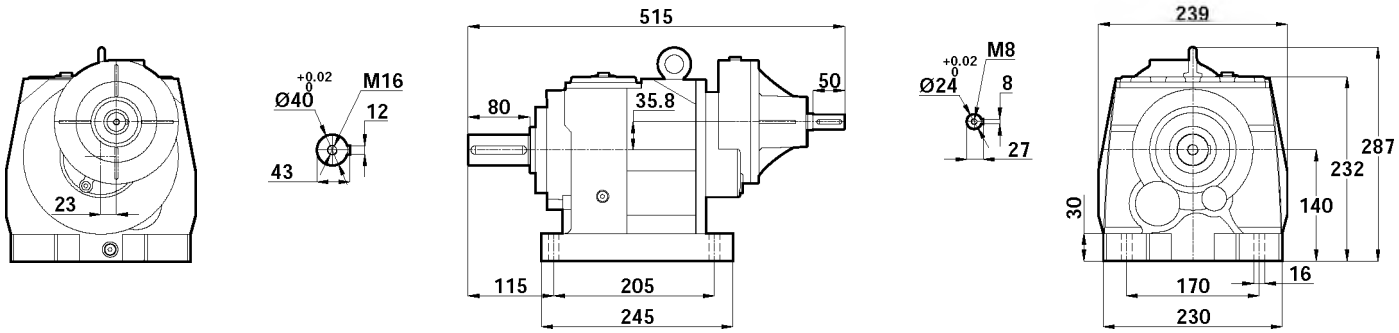
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



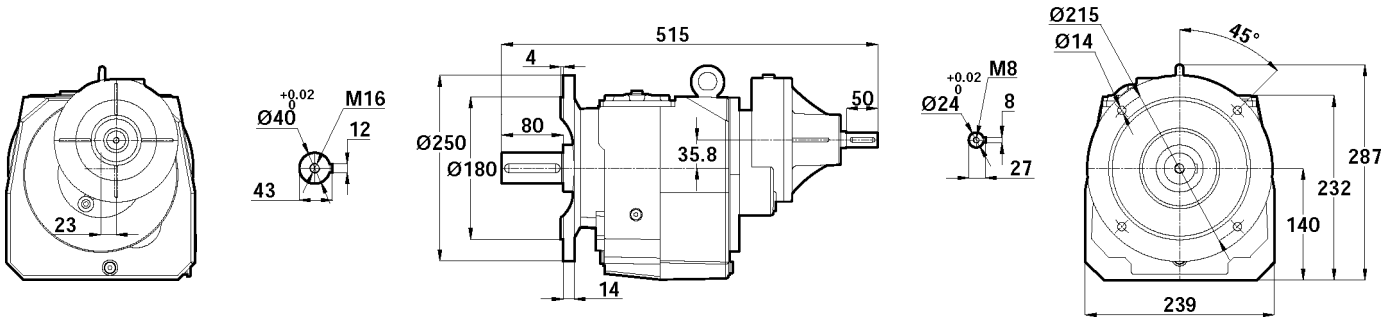
Opt. 1 Opt. 2 Opt. 3 Opt. 4

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

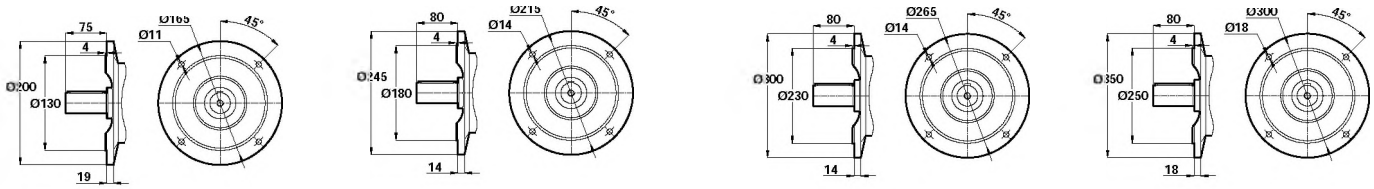
MT374



NT374



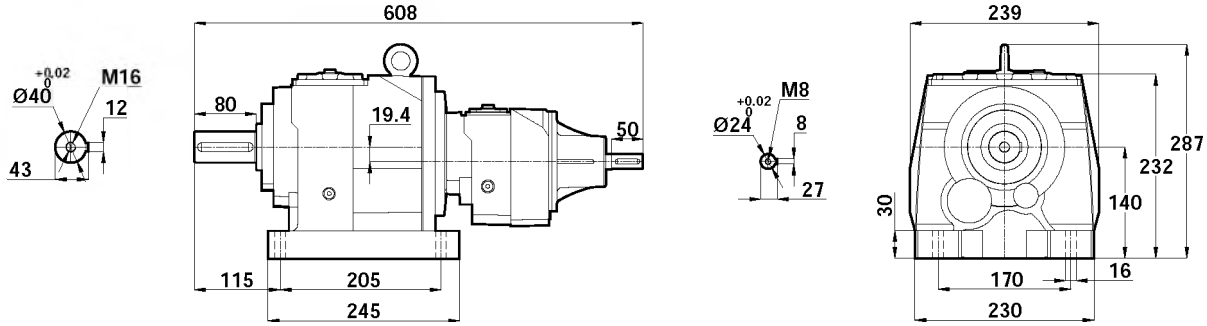
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



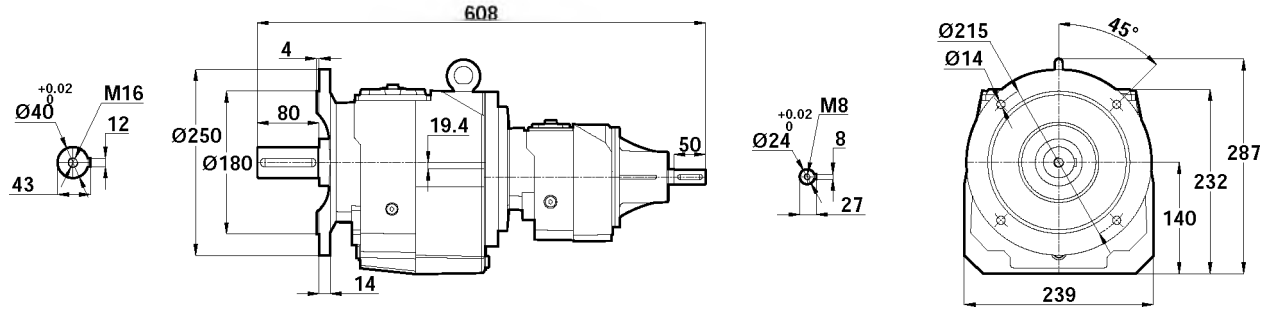
Opt. 1 | Opt. 2 | Opt. 3 | Opt. 4

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

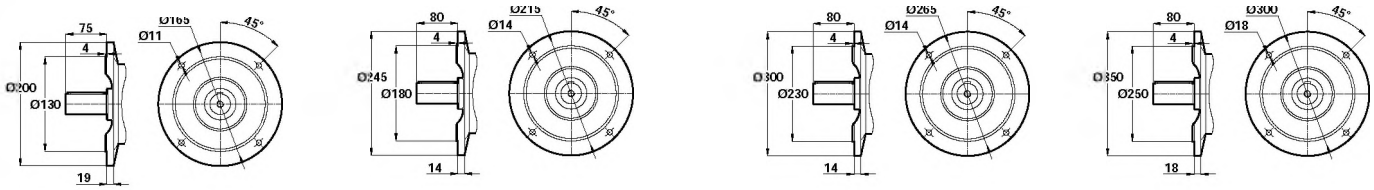
MT375
MT376



NT375
NT376



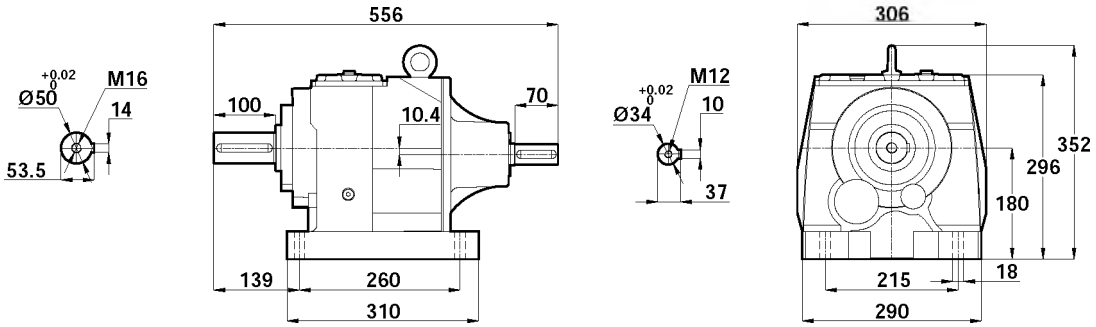
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



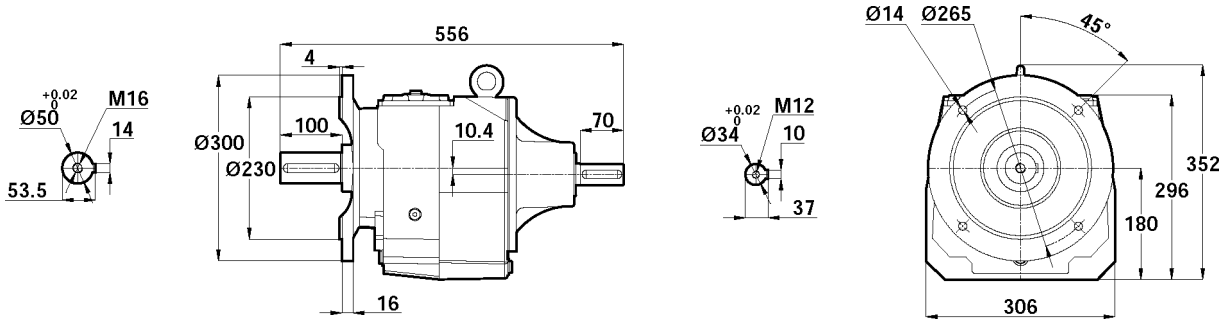
Opt. 1 **Opt. 2** **Opt. 3** **Opt. 4**

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

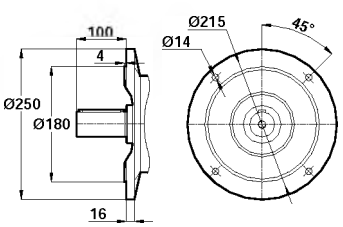
MT472
MT473



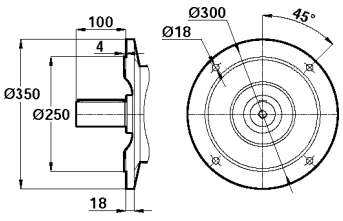
NT472
NT473



Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



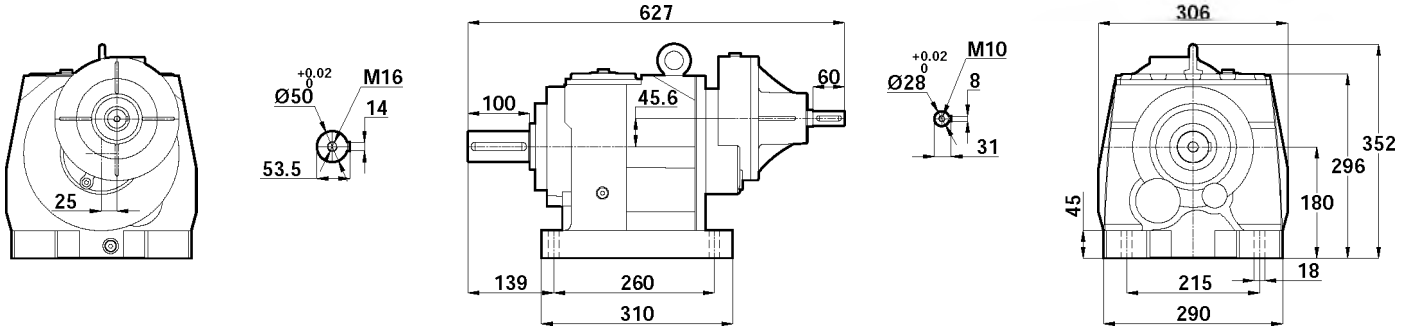
Opt. 1



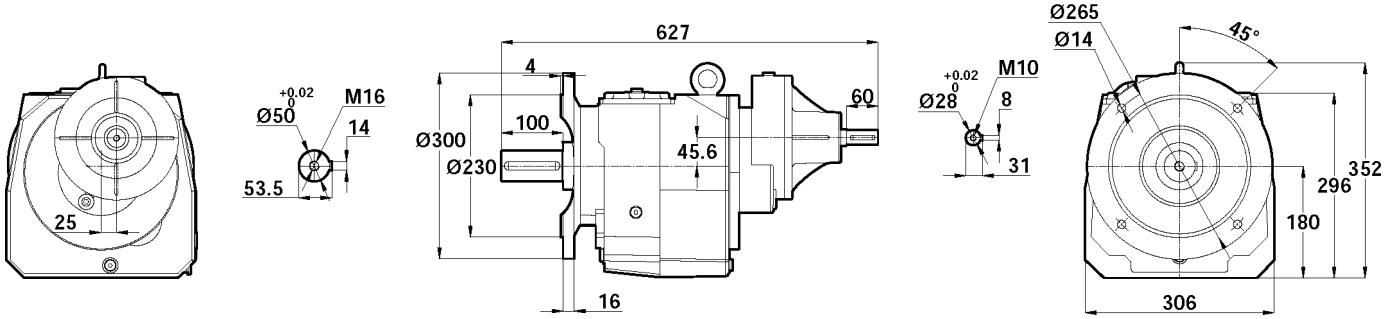
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

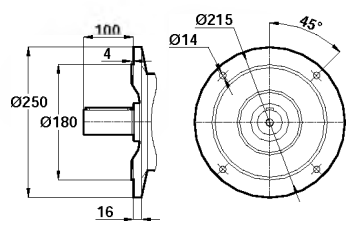
MT474



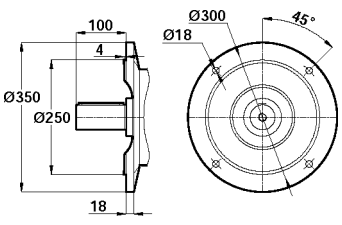
NT474



Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*



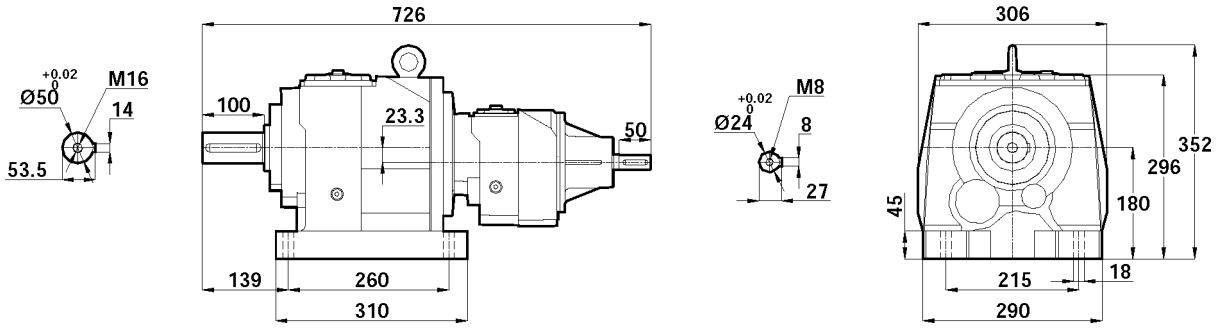
Opt. 1



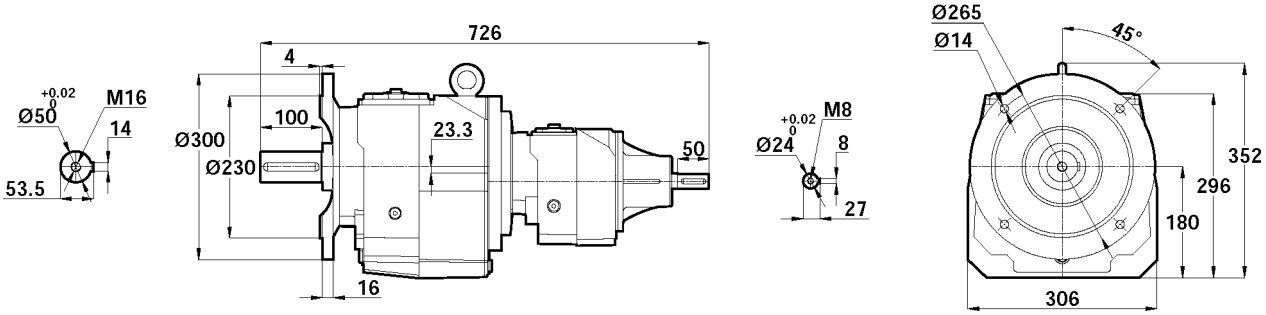
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

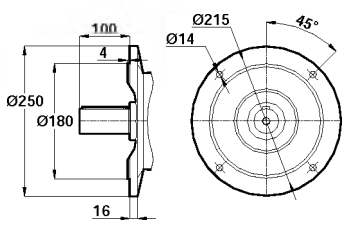
MT475
MT476



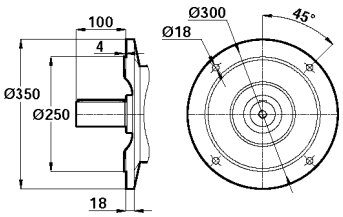
NT475
NT476



Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



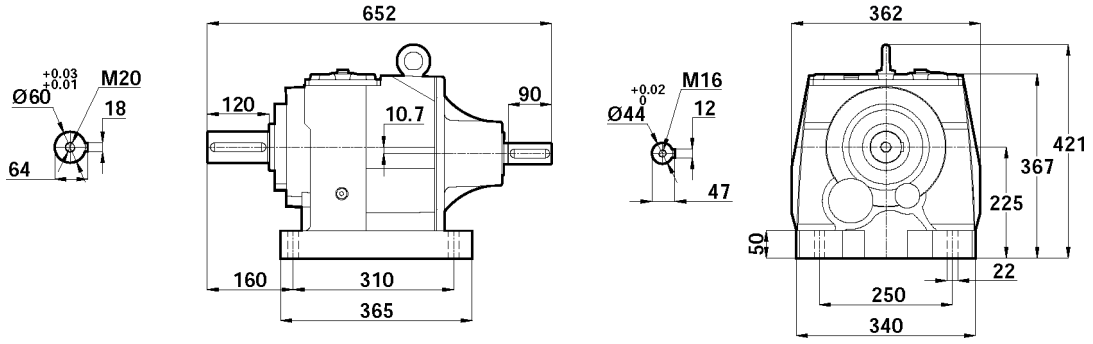
Opt. 1



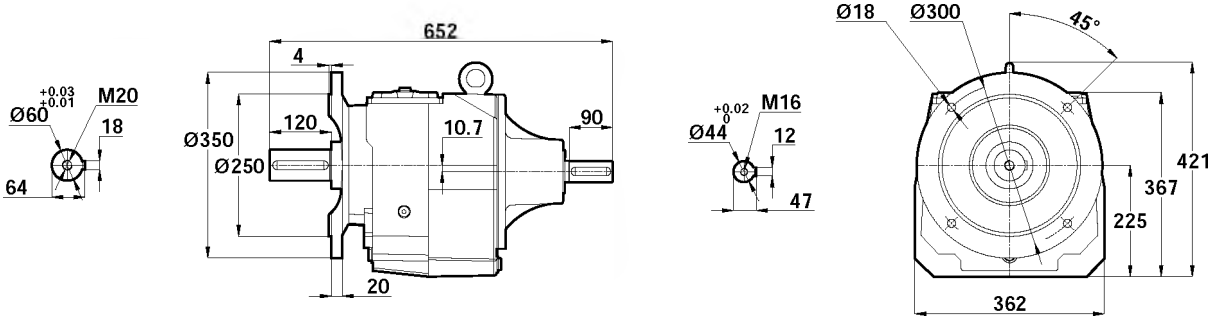
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

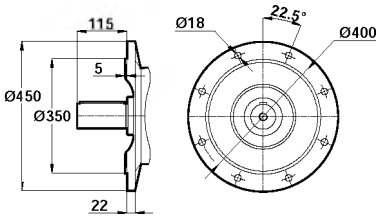
MT572
MT573



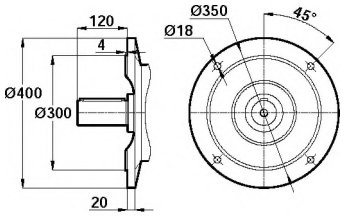
NT572
NT573



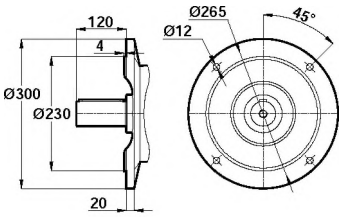
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



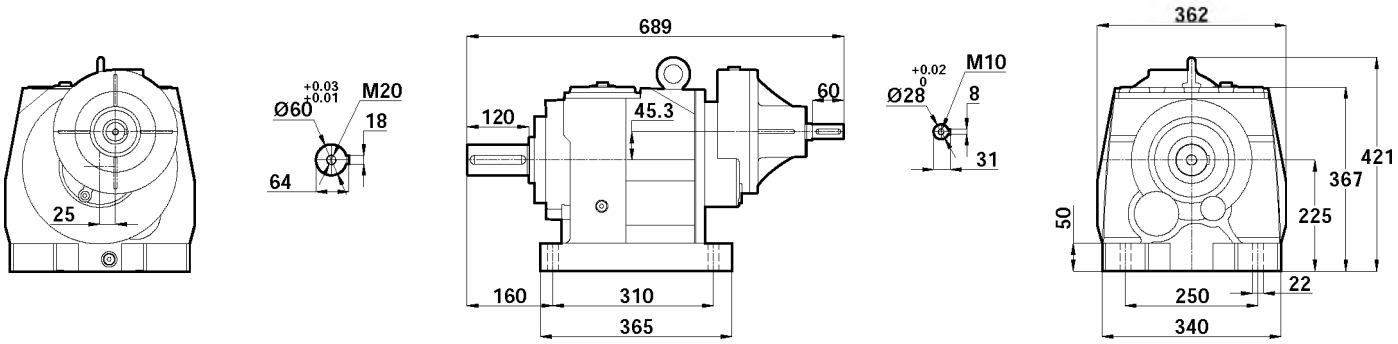
Opt. 2



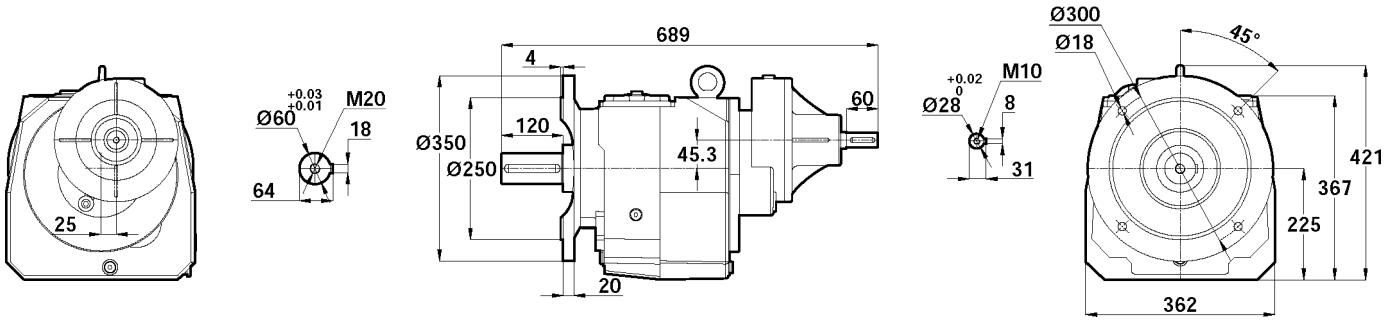
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

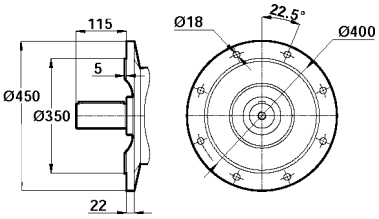
MT574



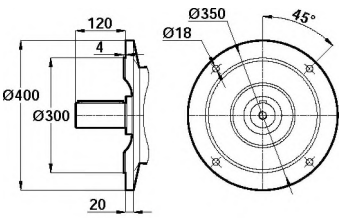
NT574



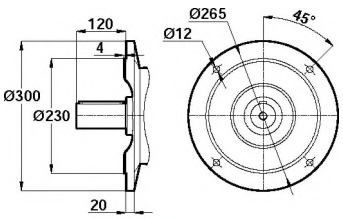
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



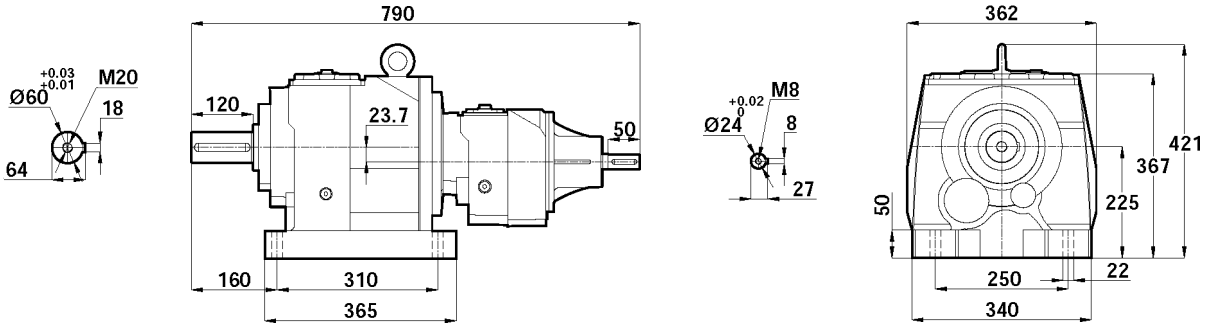
Opt. 2



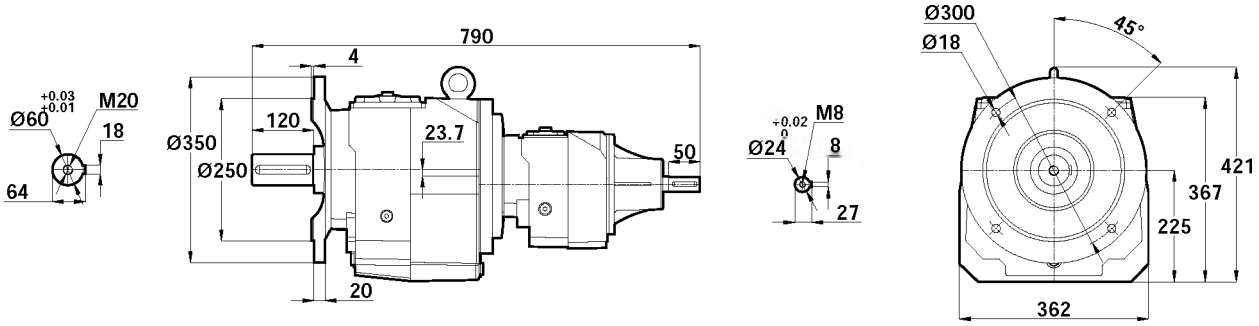
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

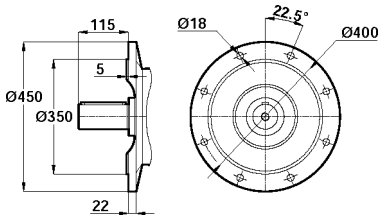
MT575
MT576



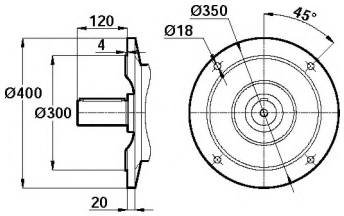
NT575
NT576



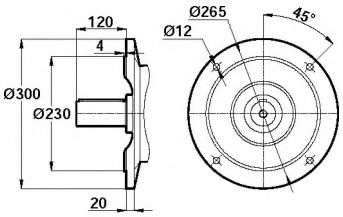
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*



Opt. 1



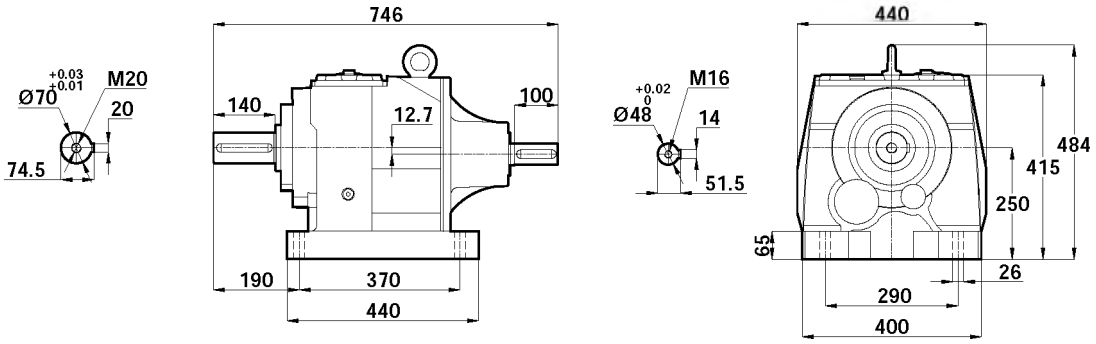
Opt. 2



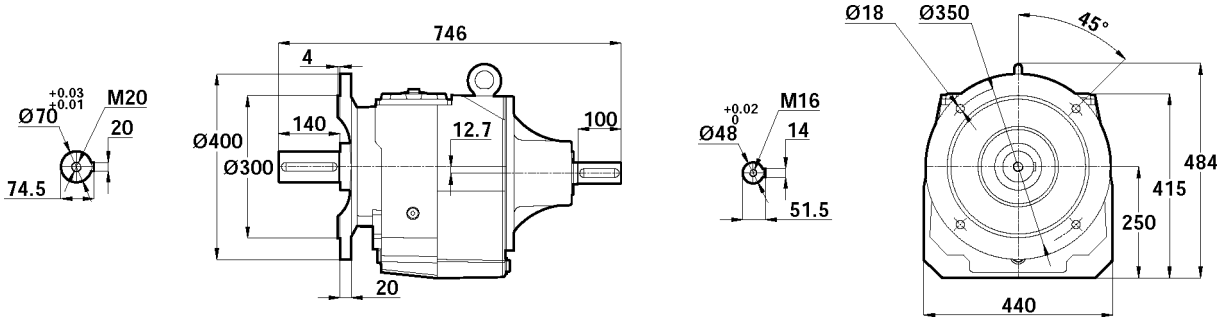
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

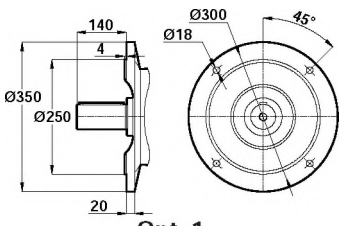
MT672
MT673



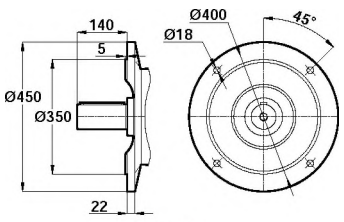
NT672
NT673



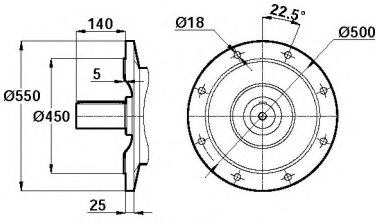
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



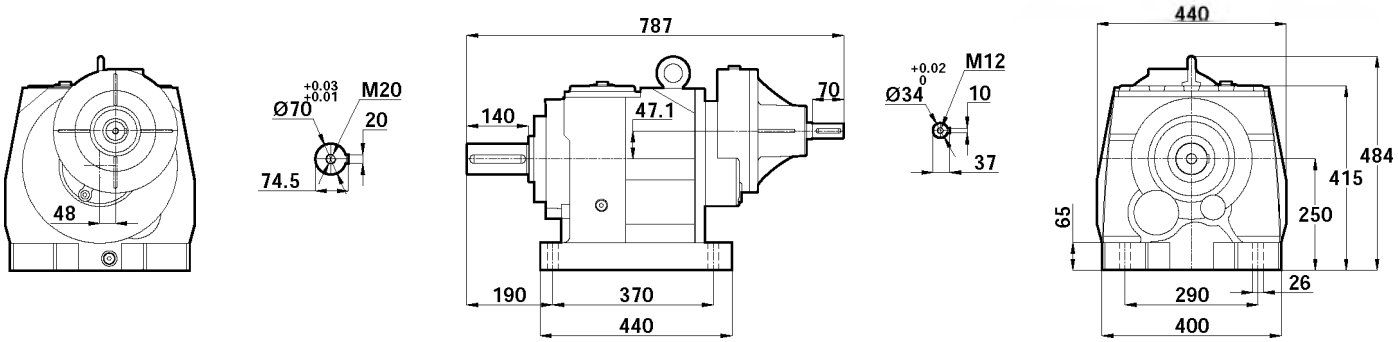
Opt. 2



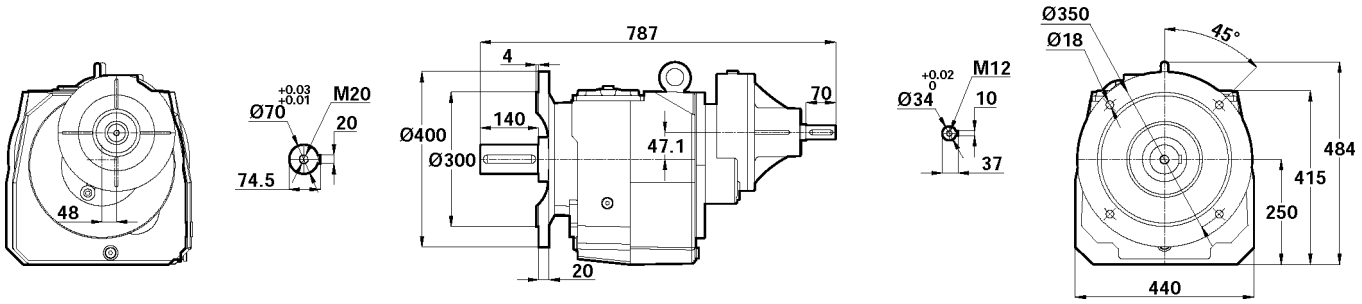
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

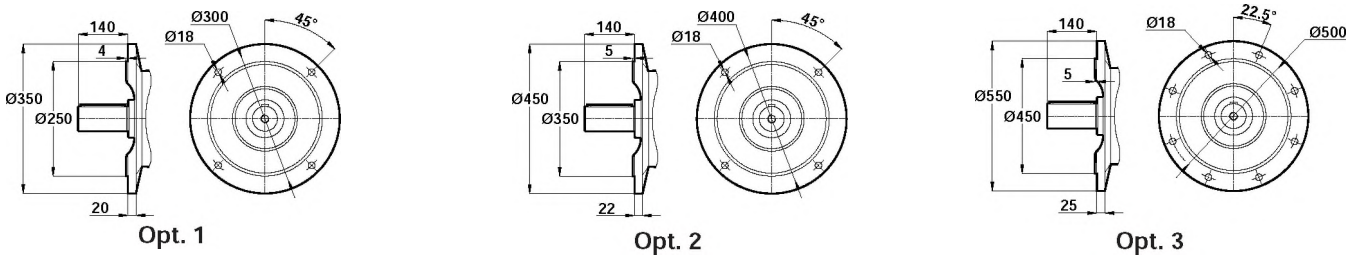
MT674



NT674

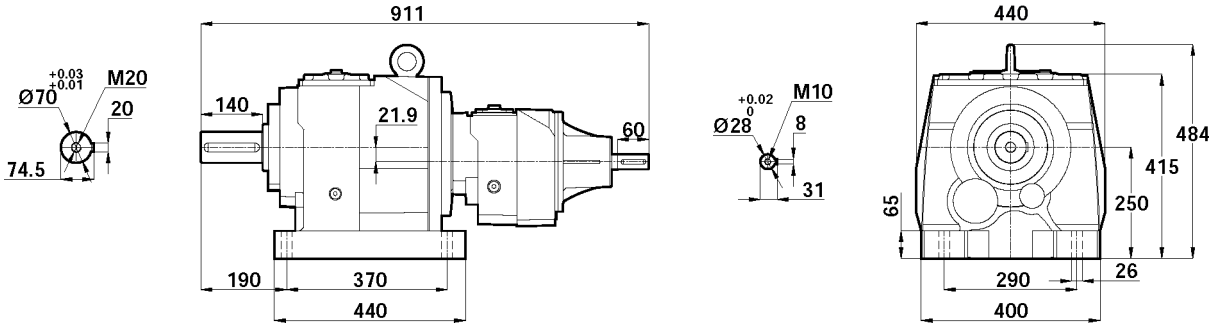


Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswahlbare Flanschabmessungen*

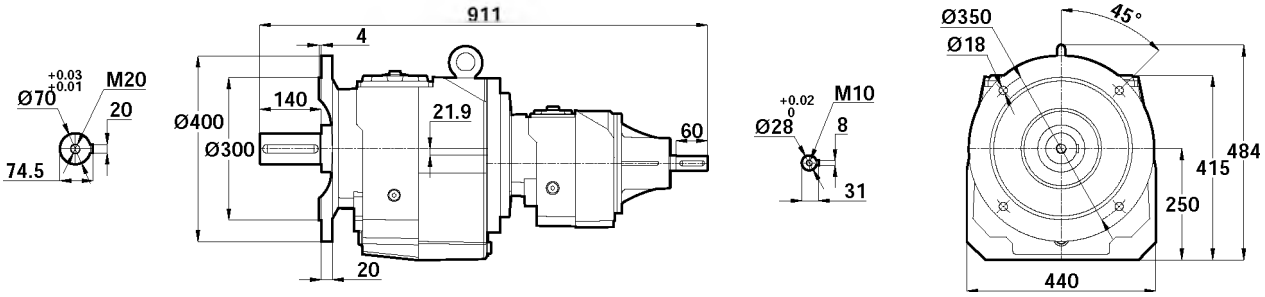


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

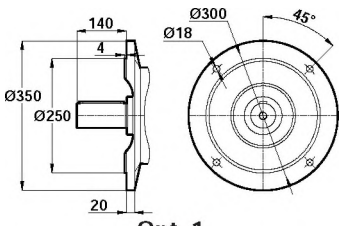
MT675
MT676



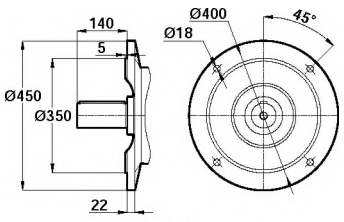
NT675
NT676



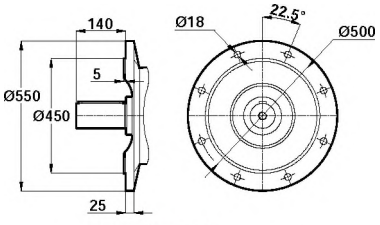
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



Opt. 1



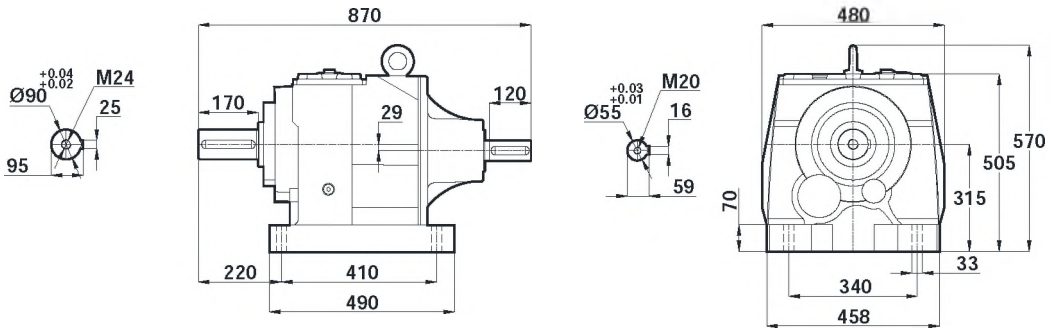
Opt. 2



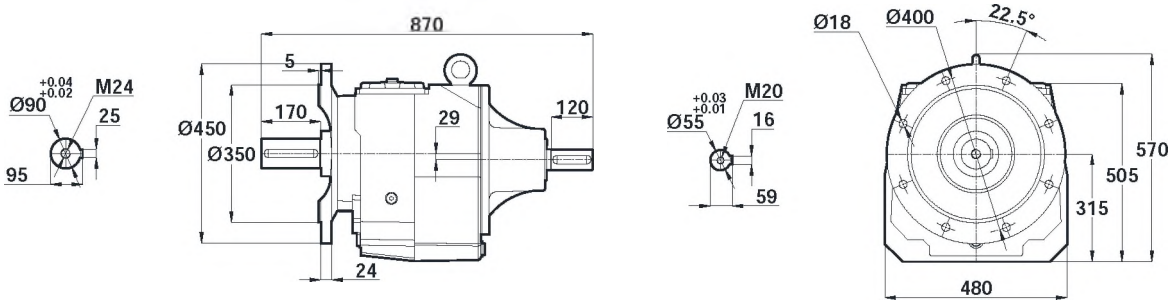
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

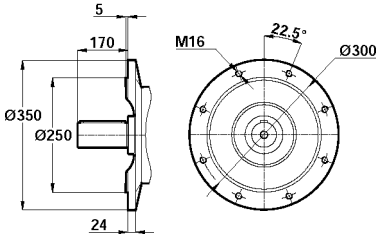
MT772
MT773



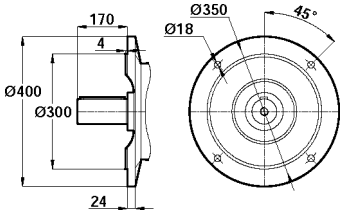
NT772
NT773



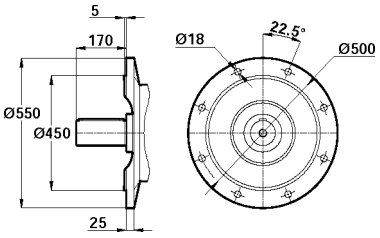
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



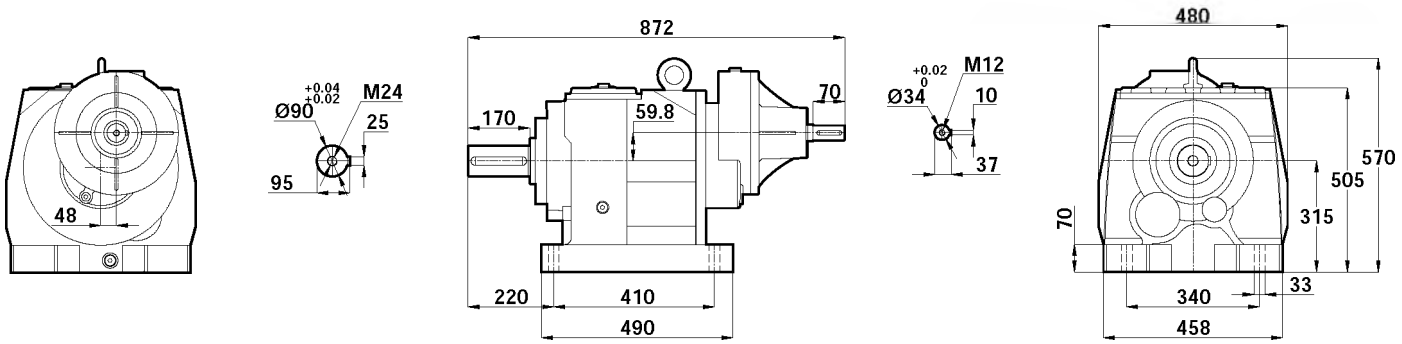
Opt. 2



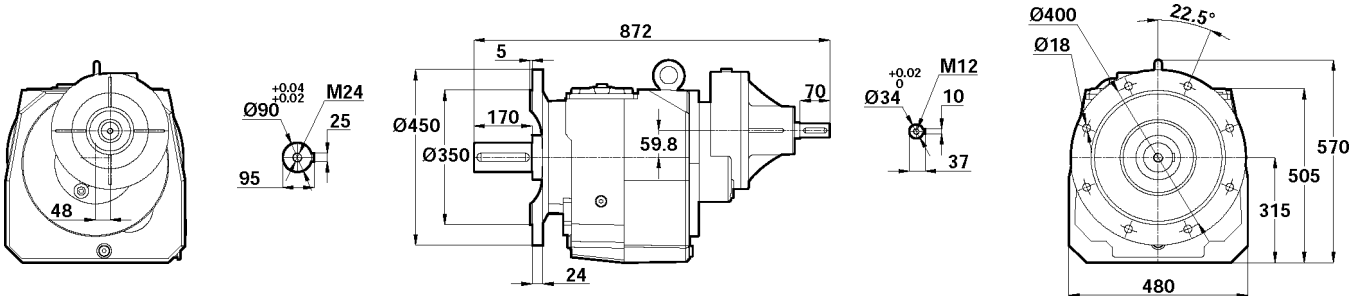
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

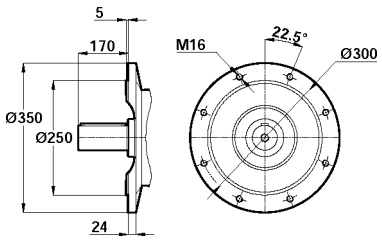
MT774



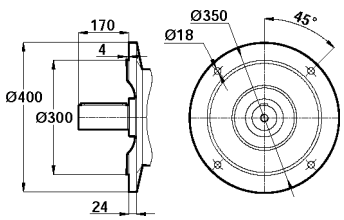
NT774



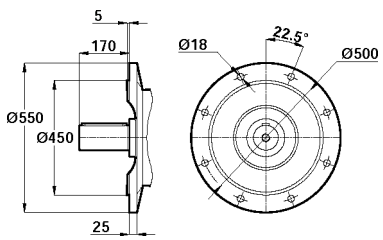
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



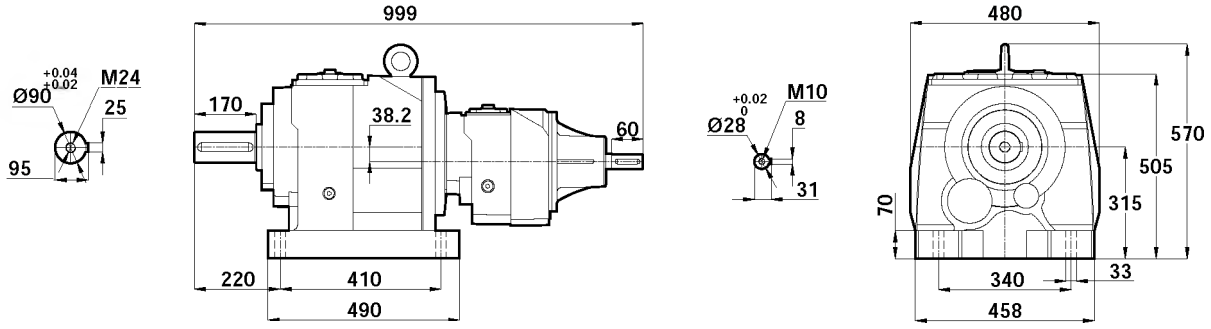
Opt. 2



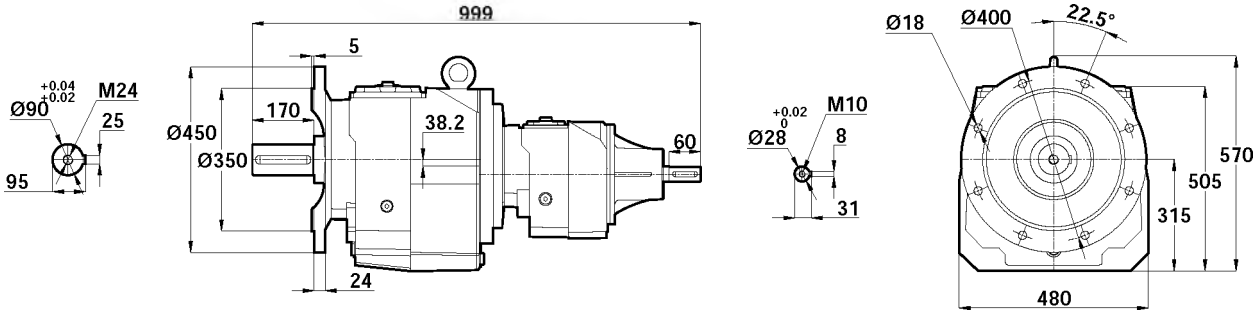
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

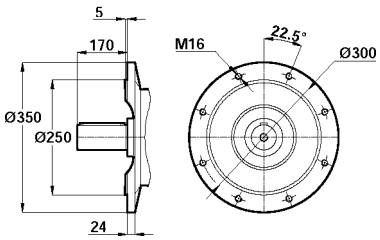
MT775
MT776



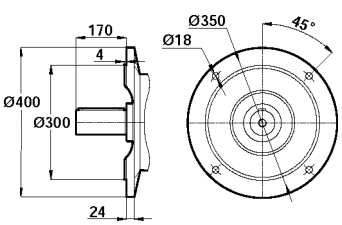
NT775
NT776



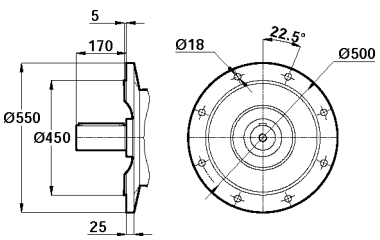
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



Opt. 1



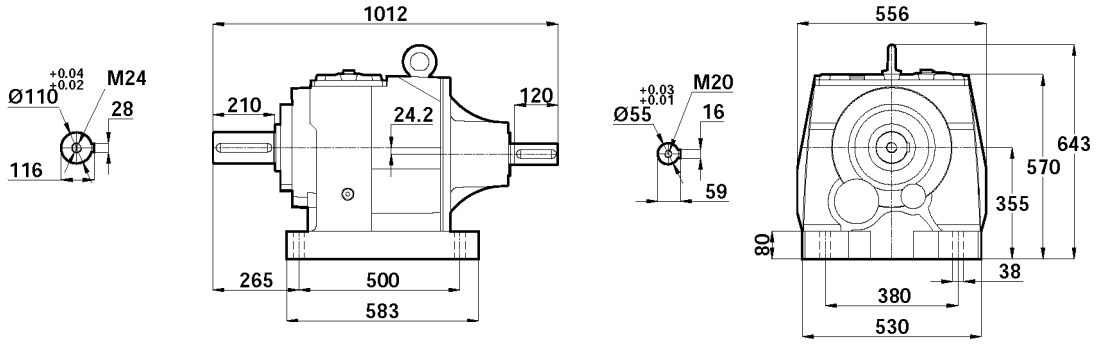
Opt. 2



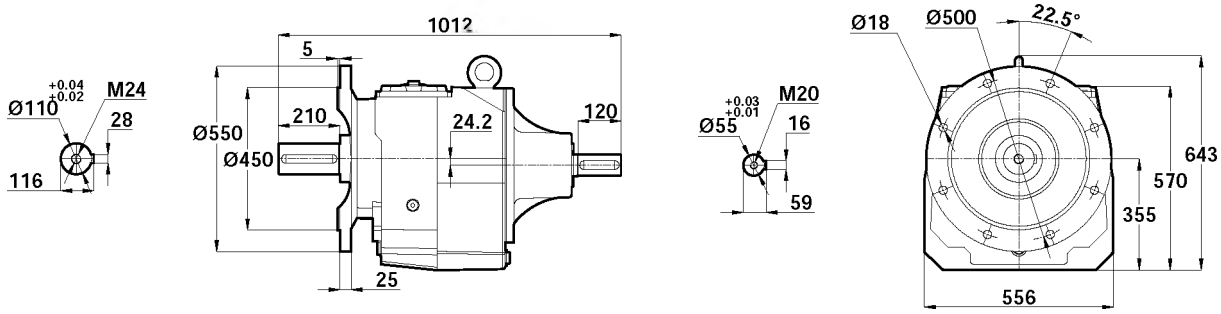
Opt. 3

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

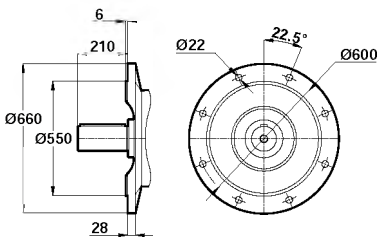
MT872
MT873



NT872
NT873



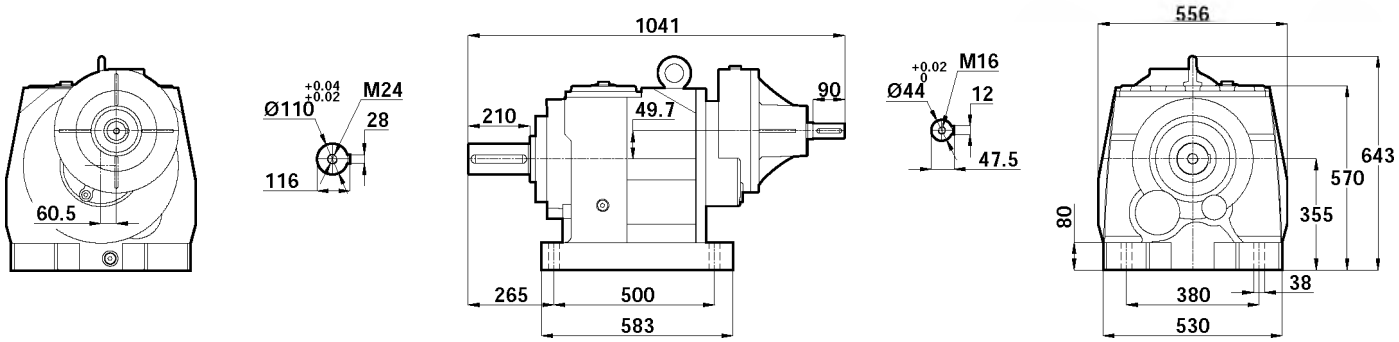
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



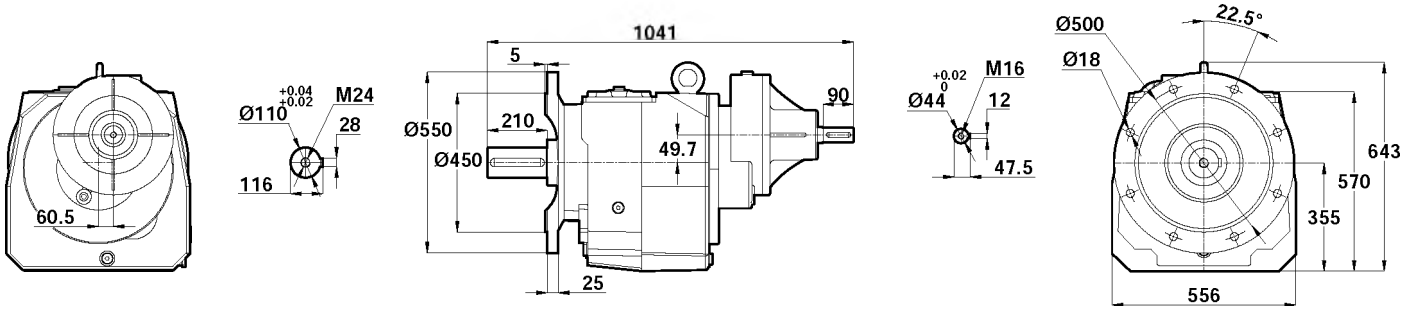
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

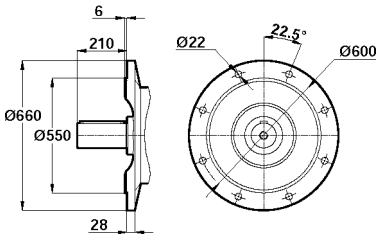
MT874



NT874



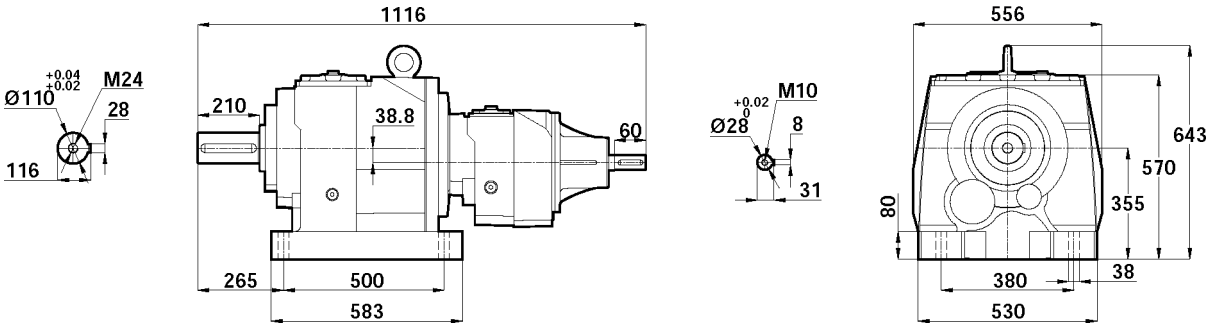
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswahlbare Flanschabmessungen*



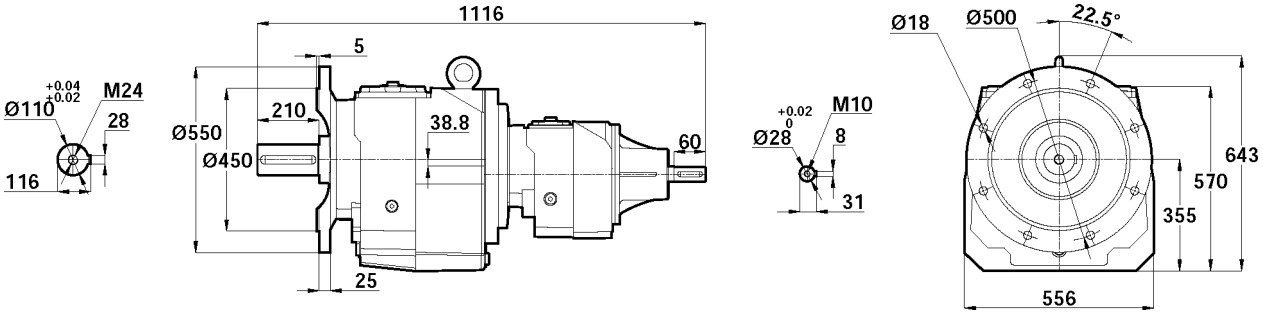
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

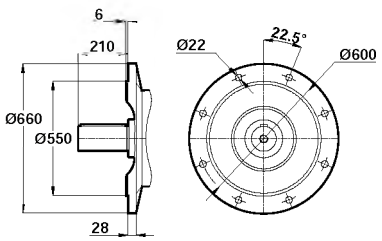
MT875
MT876



NT875
NT876



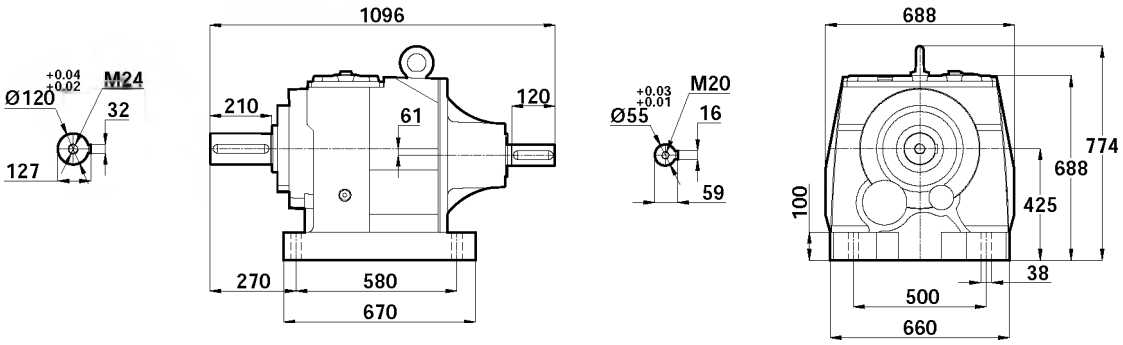
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



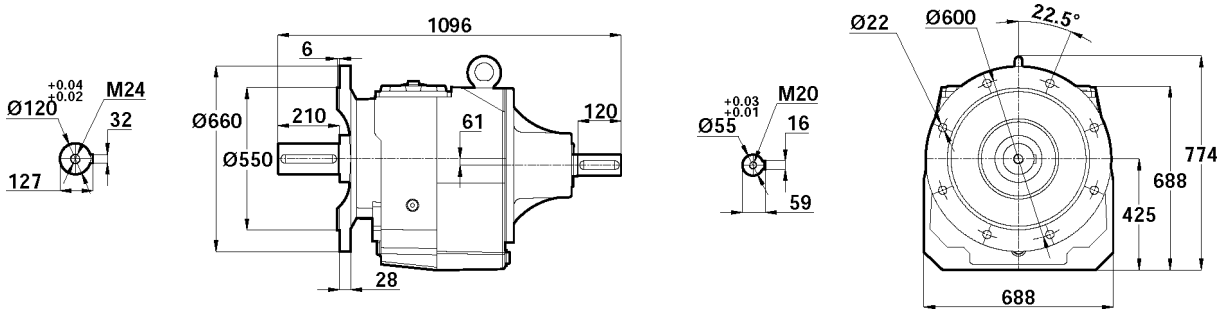
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MT972
MT973

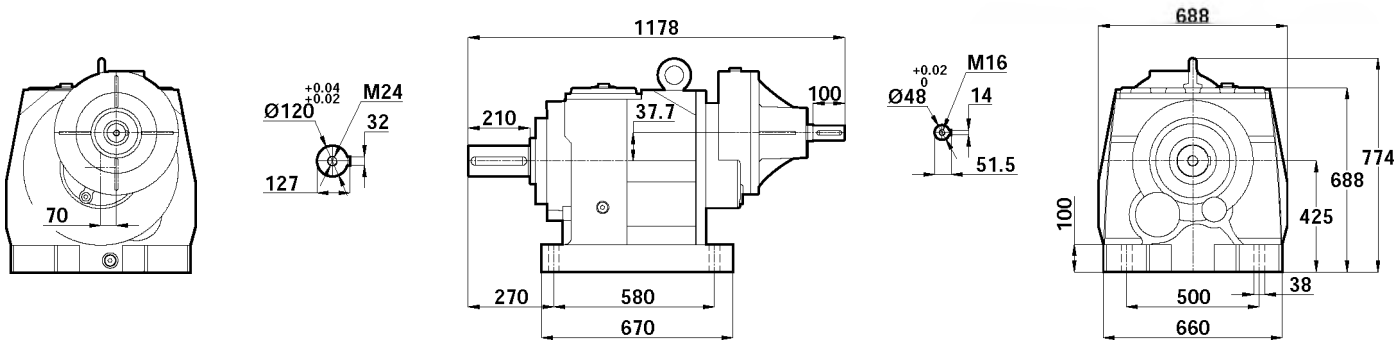


NT972
NT973

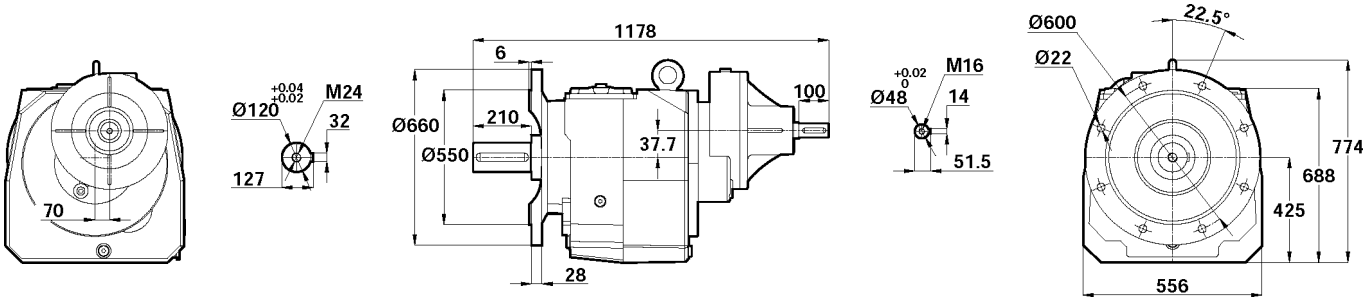


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MT974

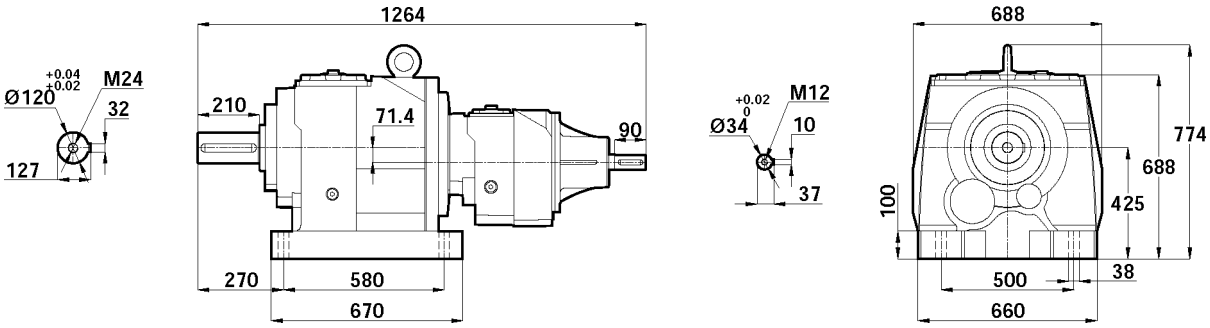


NT974

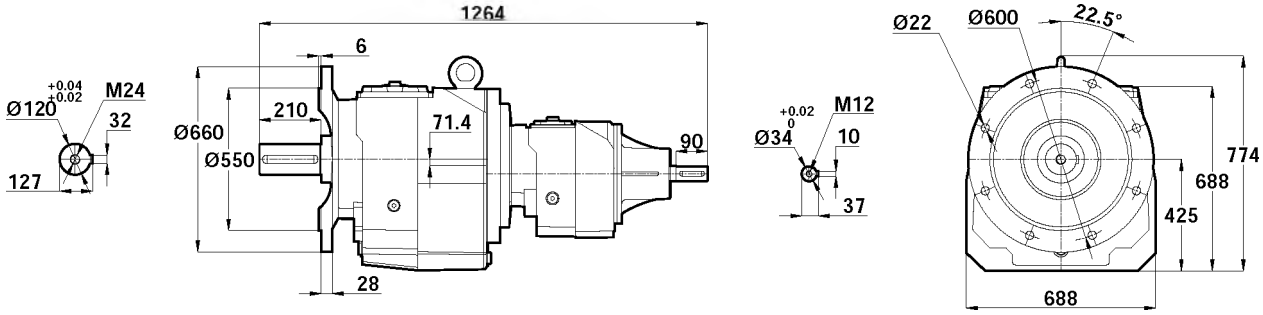


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MT975
MT976

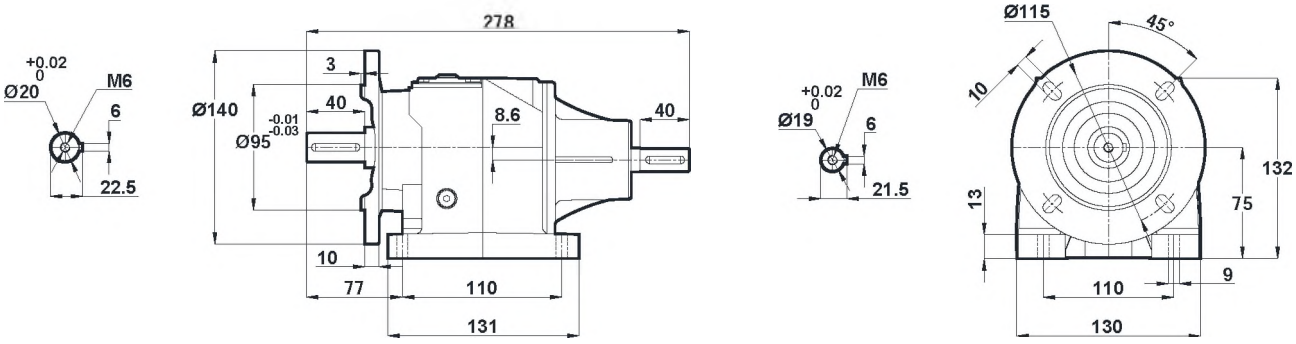


NT975
NT976

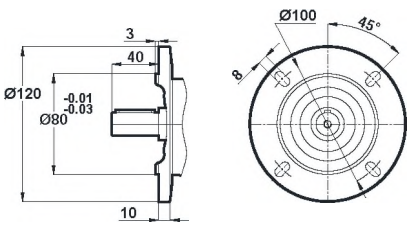


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

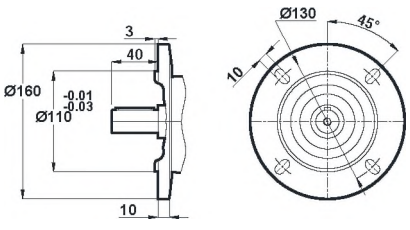
MTF002
MTF003



Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



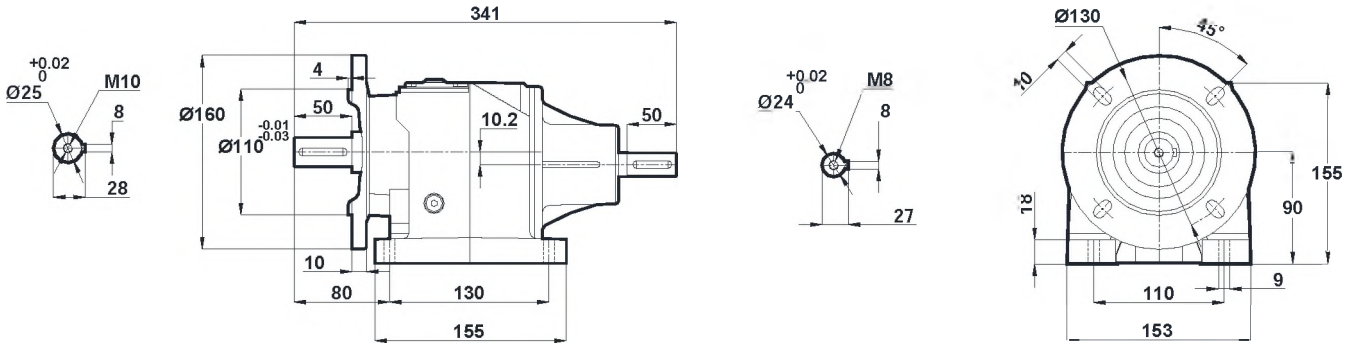
Opt. 1



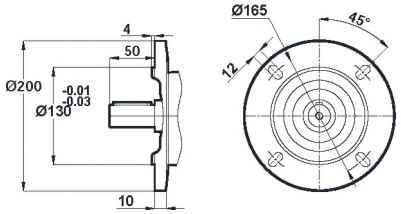
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MTF102
MTF103



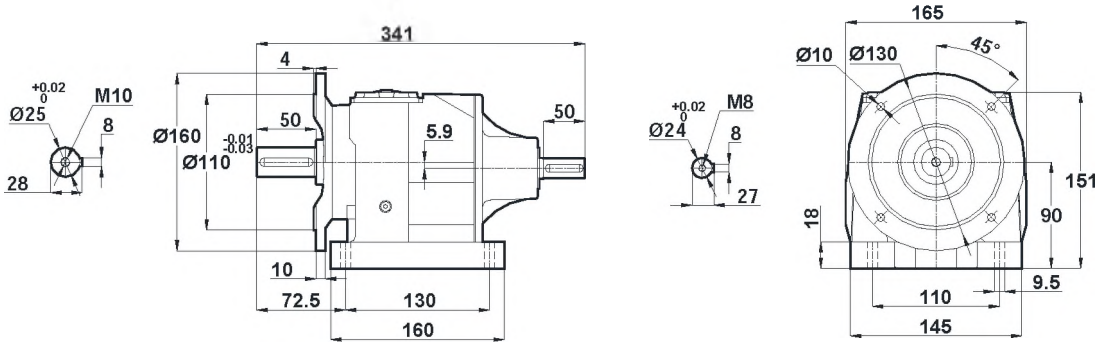
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



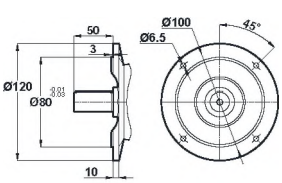
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

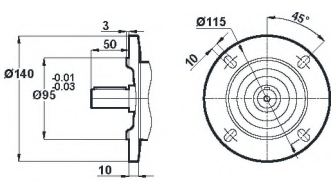
MTF172
MTF173



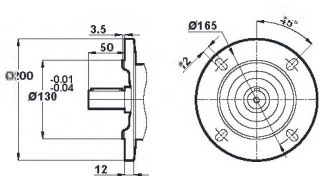
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



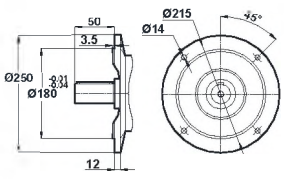
Opt. 1



Opt. 2



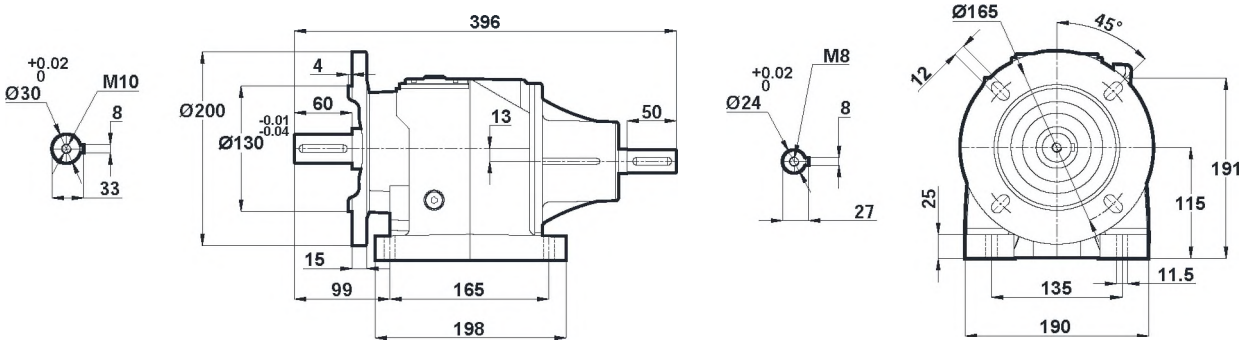
Opt. 3



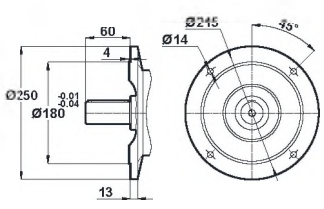
Opt. 4

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

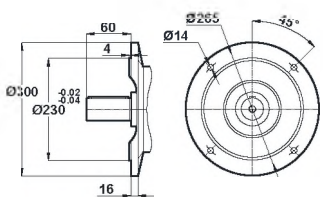
MTF202
MTF203



Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



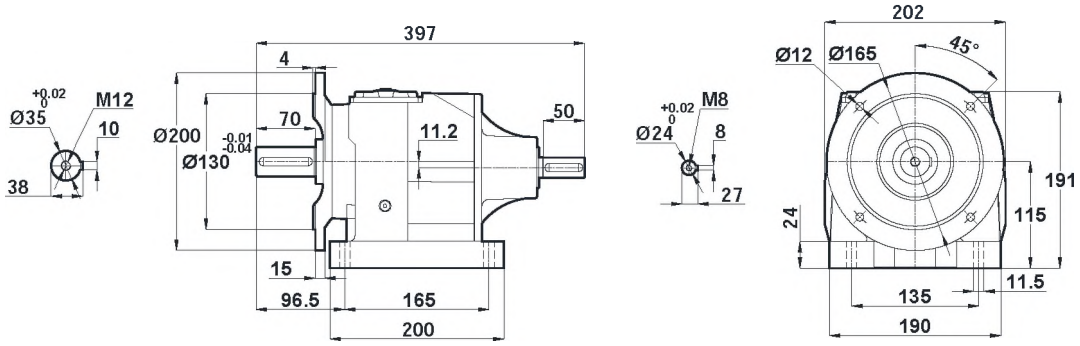
Opt. 1



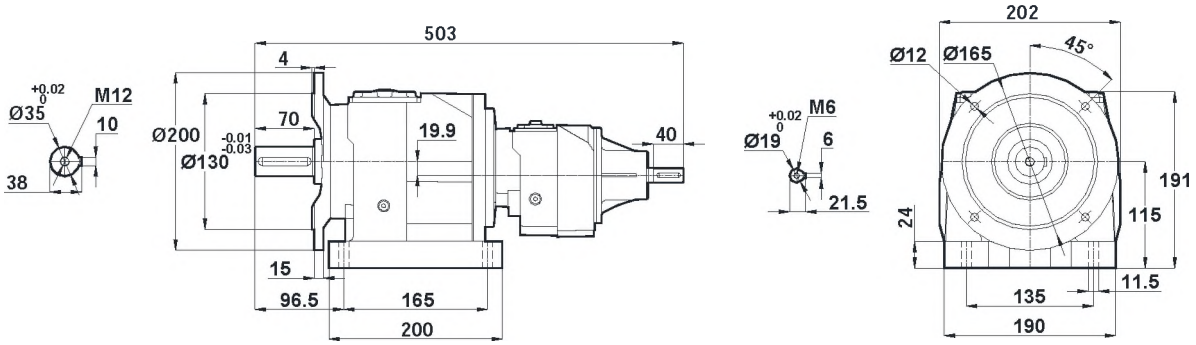
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

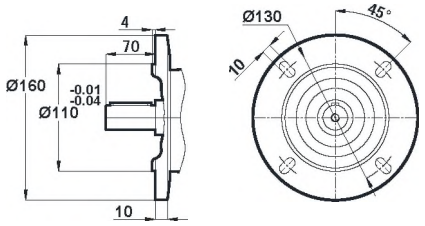
MTF272
MTF273



MTF275
MTF276



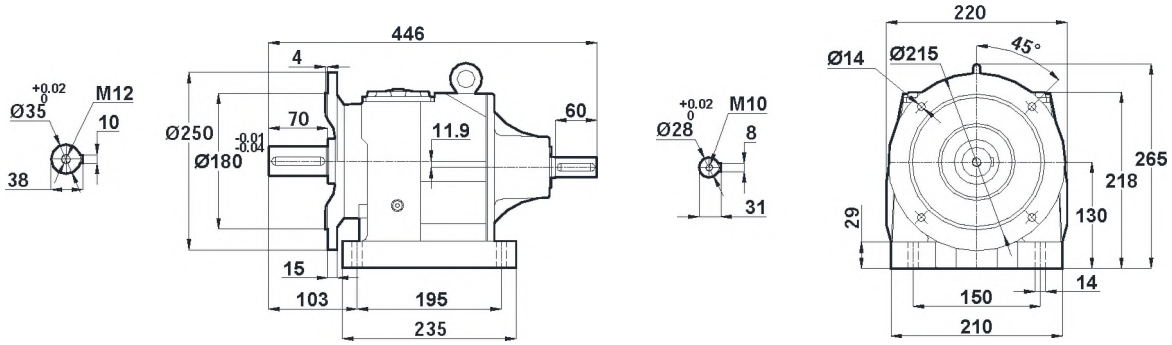
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



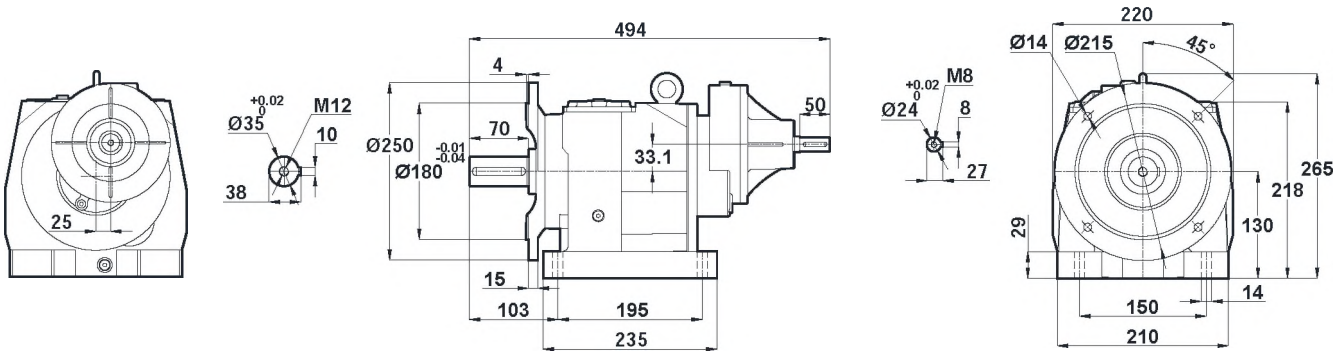
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

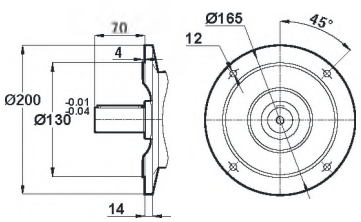
MTF282
MTF283



MTF284



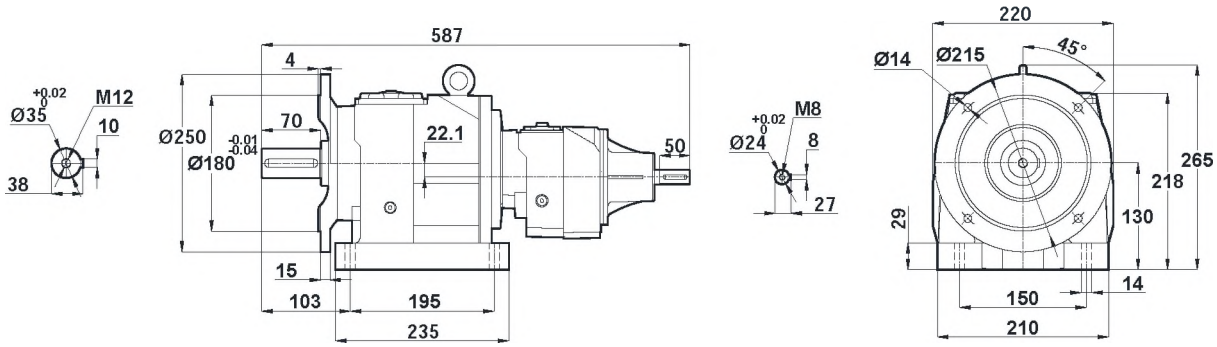
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



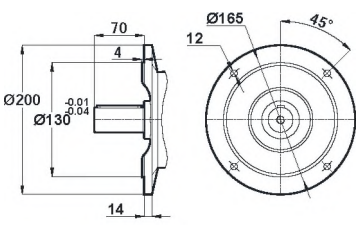
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MTF285
MTF286



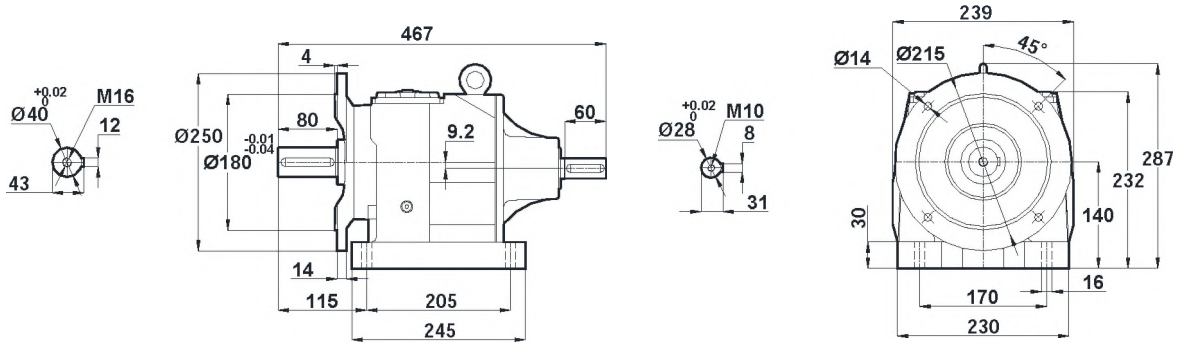
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



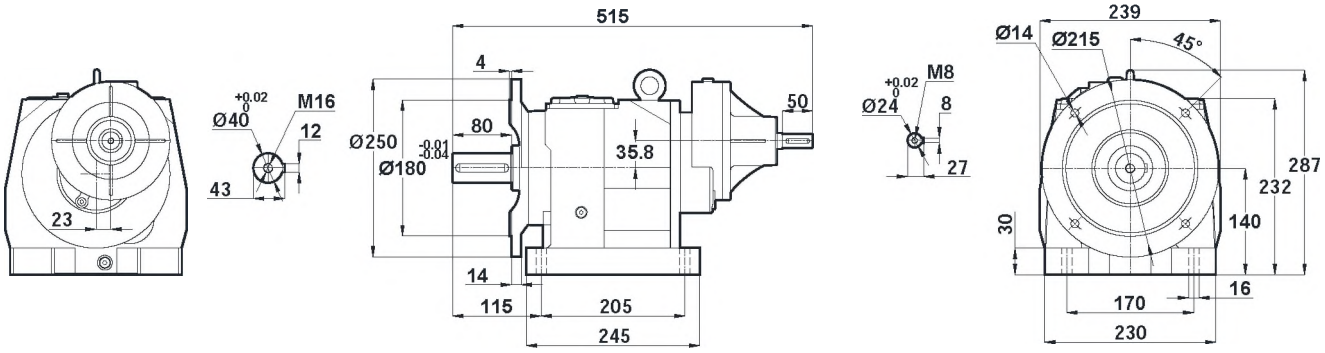
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

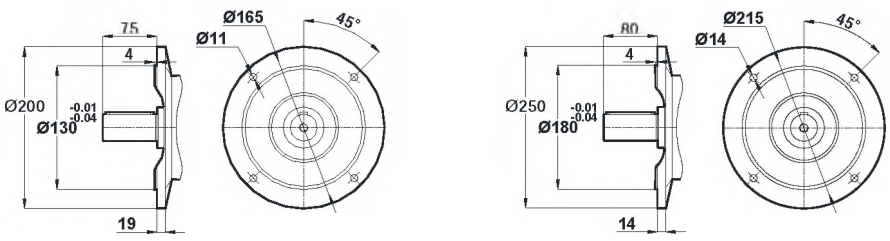
MTF372
MTF373



MTF374



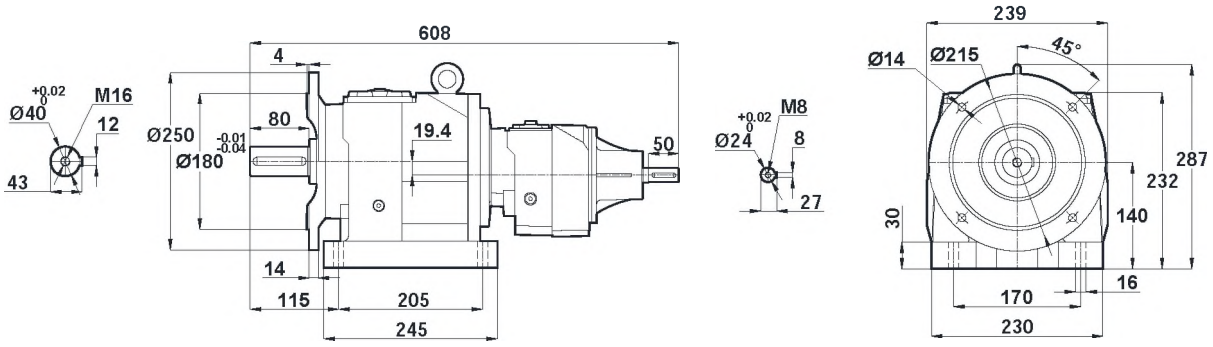
Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



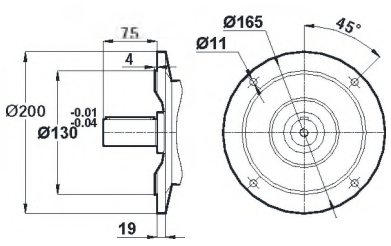
Opt. 1 **Opt. 2**

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

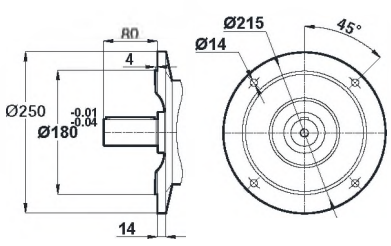
MTF375
MTF376



Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*



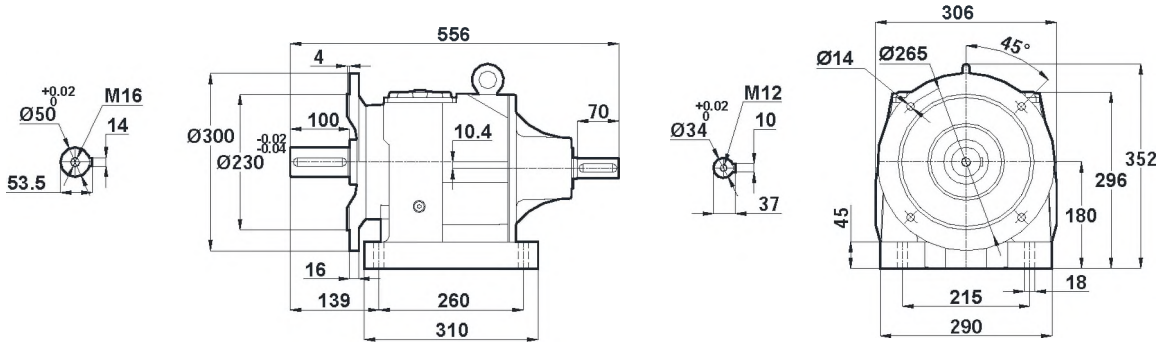
Opt. 1



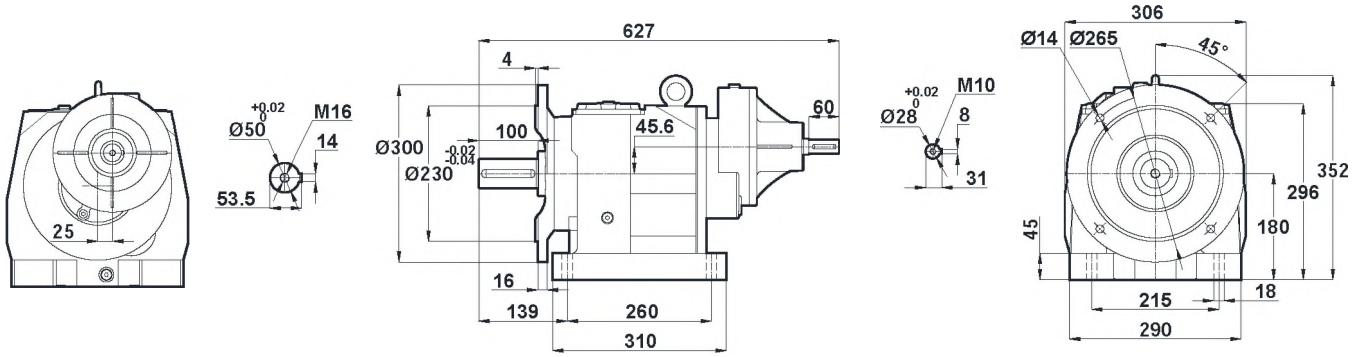
Opt. 2

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

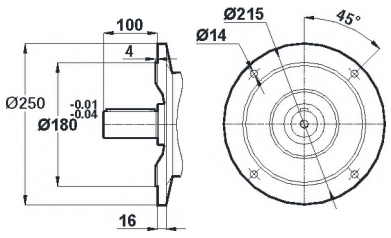
MTF472
MTF473



MTF474



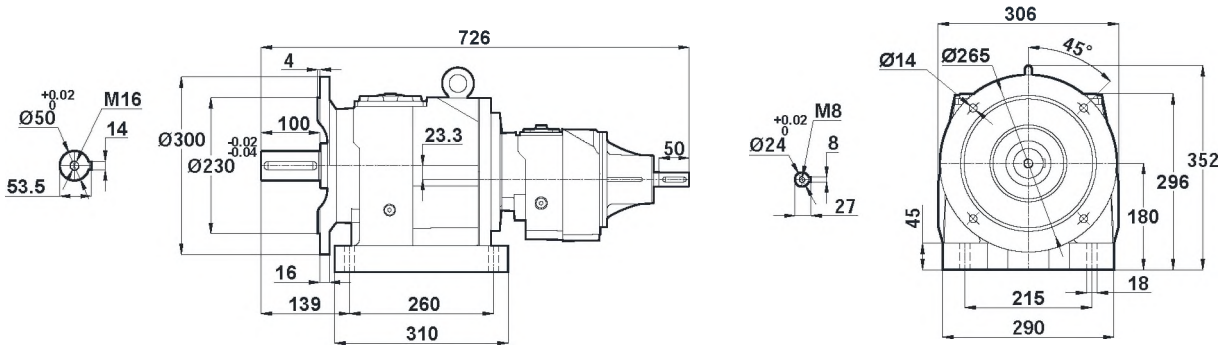
Dimensioni flangia opzionale / *Optional Flange Dimensions / Auswählbare Flanschabmessungen*



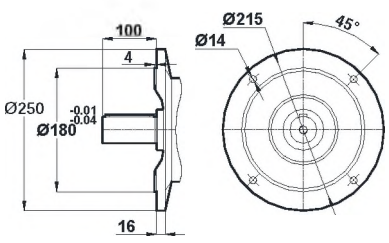
Opt. 1

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

MTF475
MTF476



Dimensioni flangia opzionale / *Optional Flange Dimensions* / *Auswählbare Flanschabmessungen*

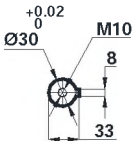


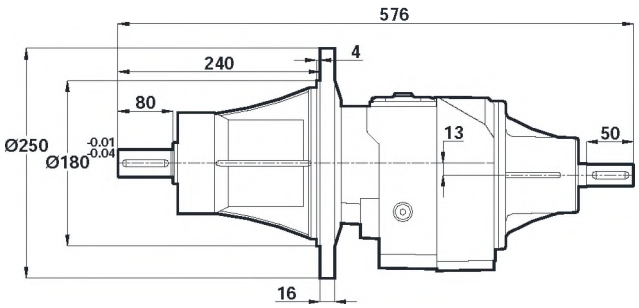
Opt. 1

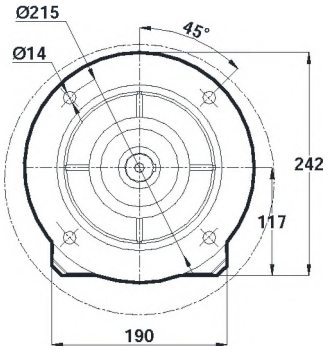
Note / *Notes* / Notizen

Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB202
NTB203

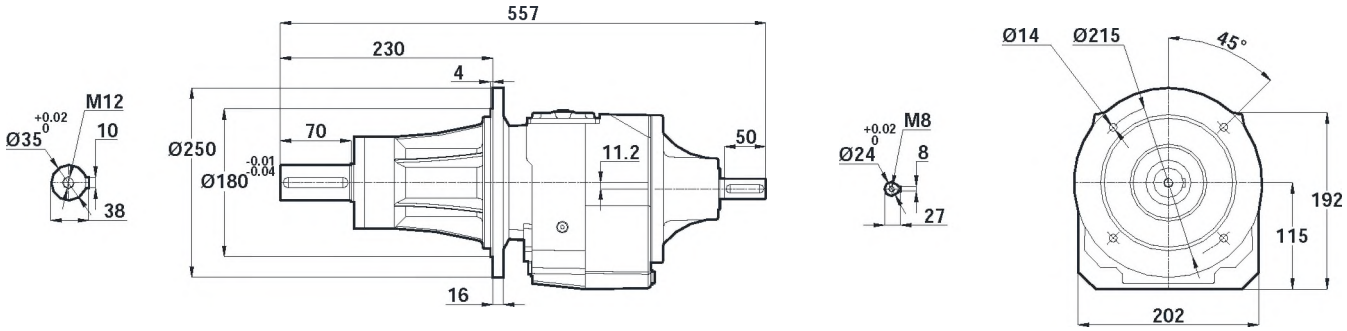




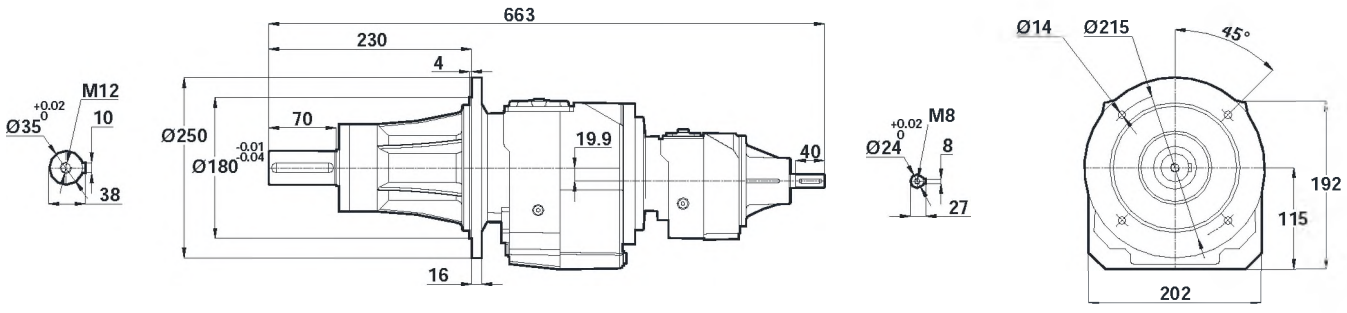


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB272
NTB273

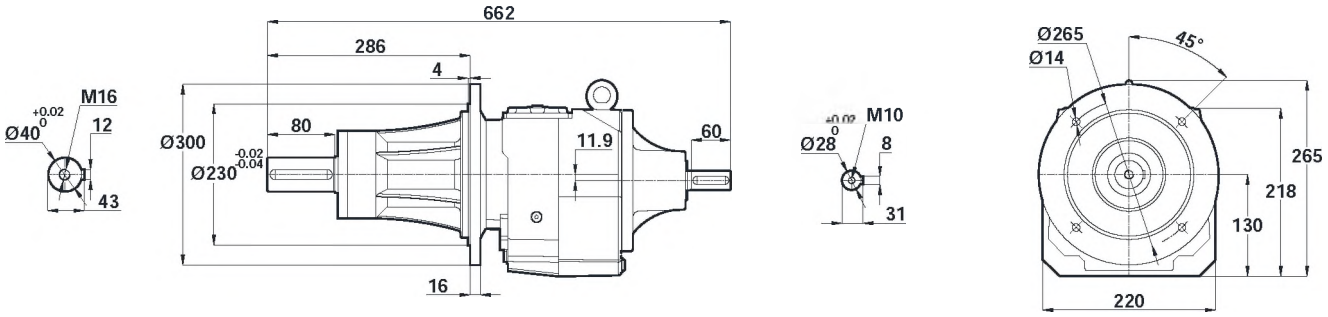


NTB275
NTB276

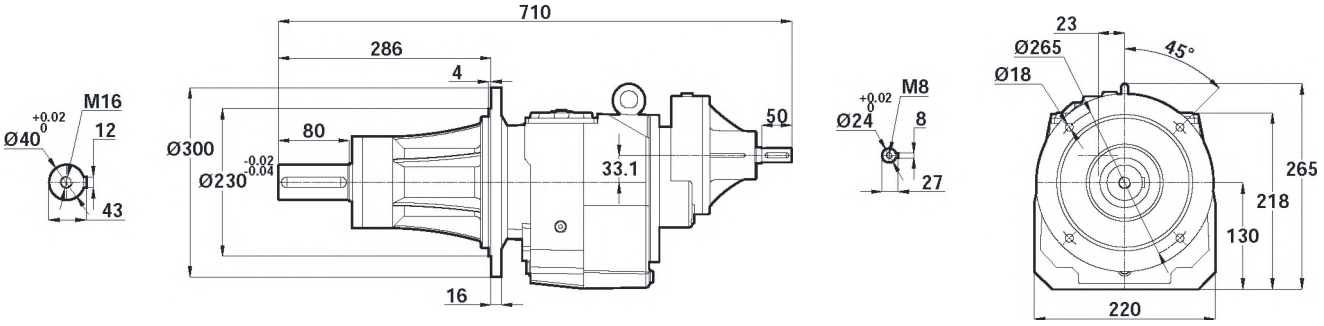


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB282
NTB283

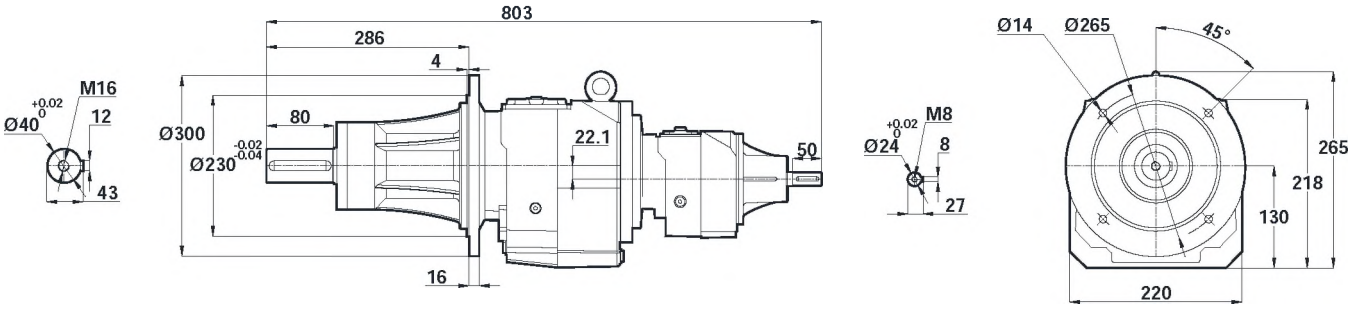


NTB284



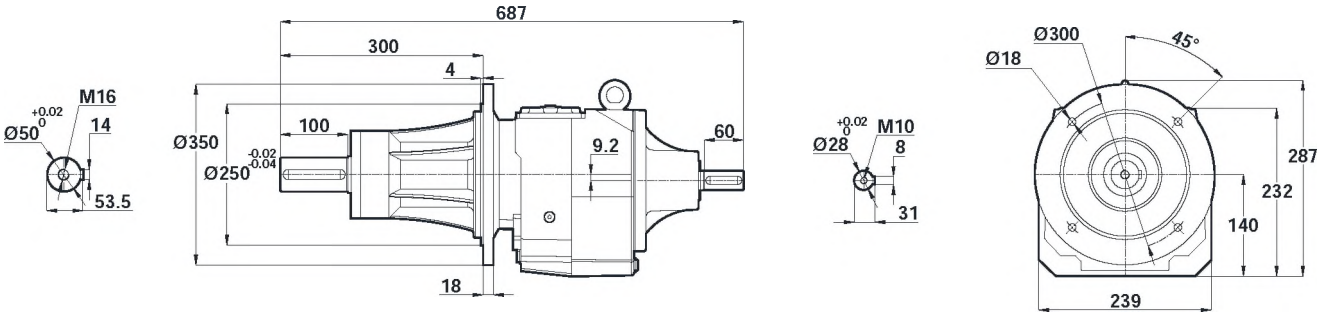
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB285
NTB286

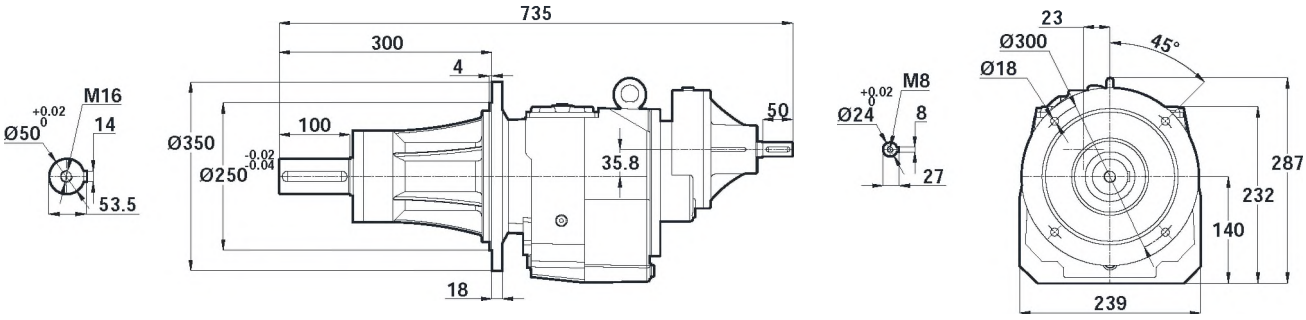


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB372
NTB373

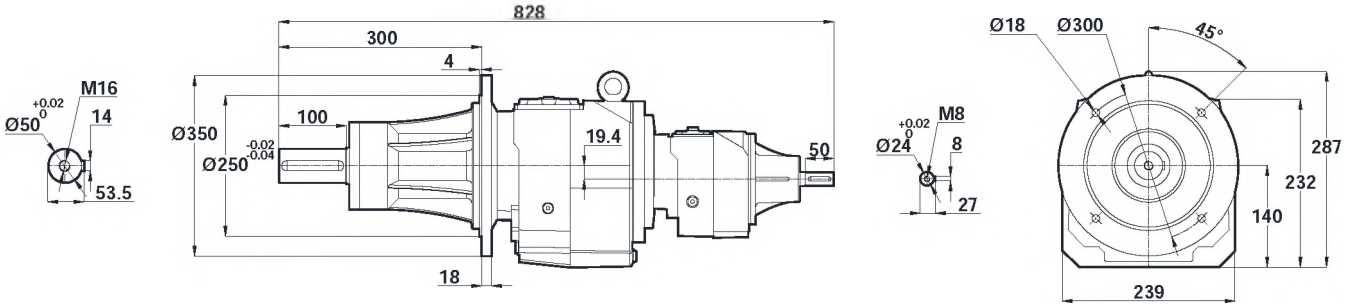


NTB374



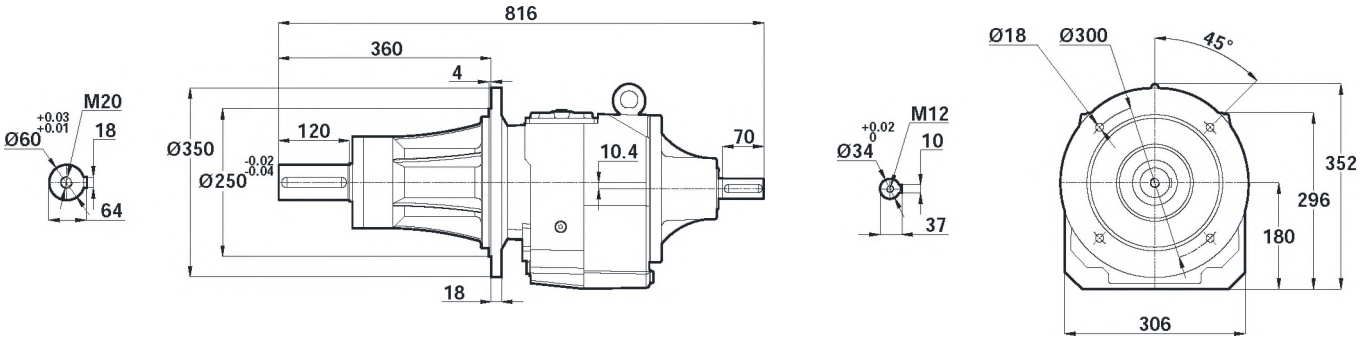
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB375
NTB376

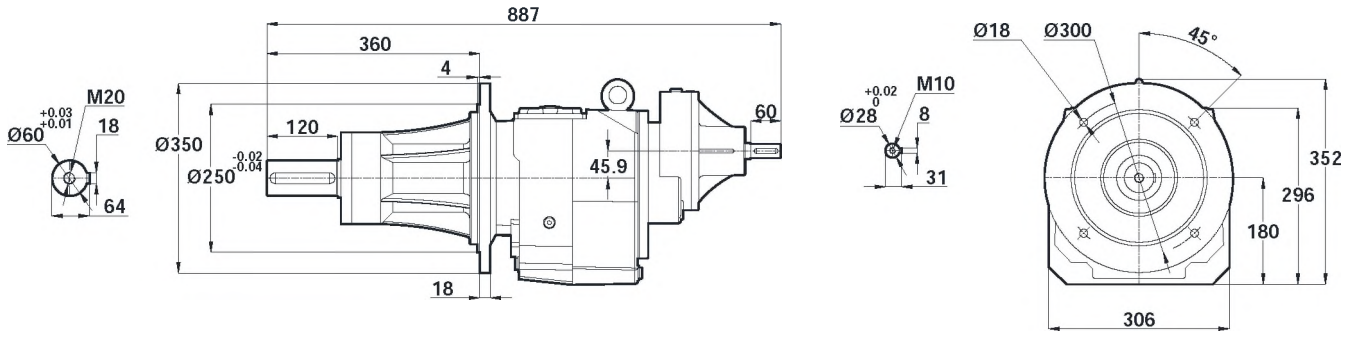


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB472
NTB473

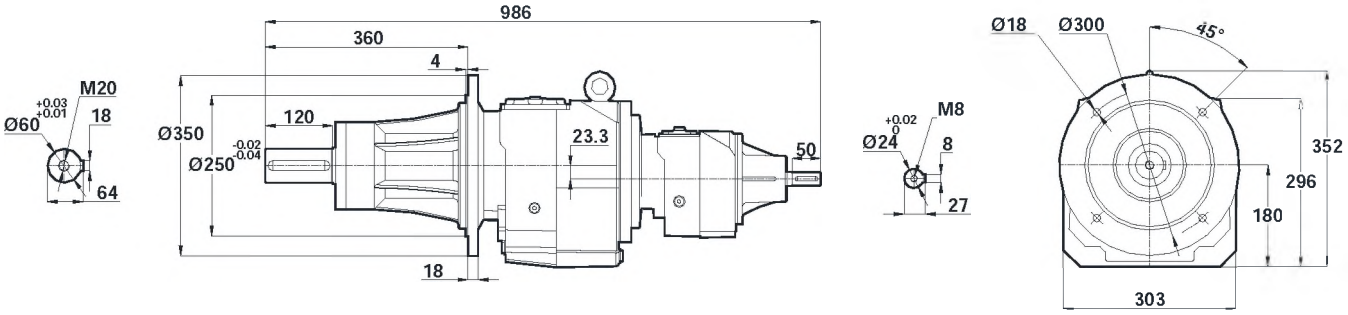


NTB474



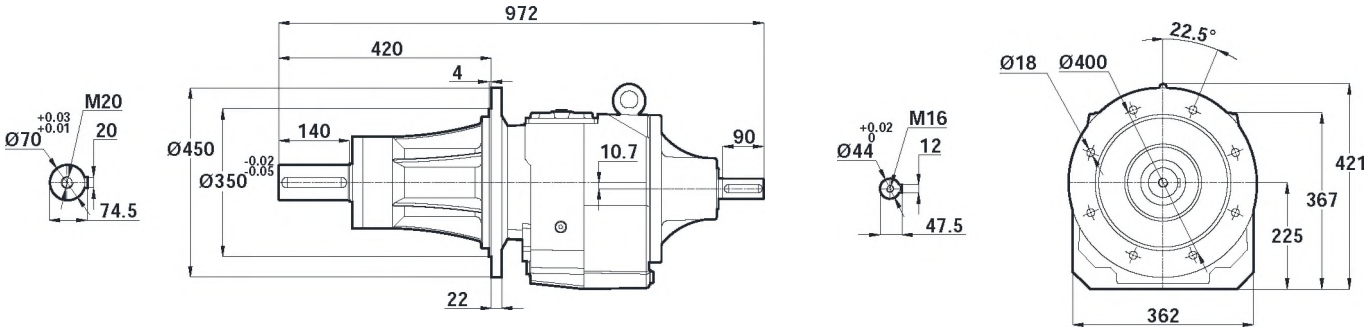
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB475
NTB476

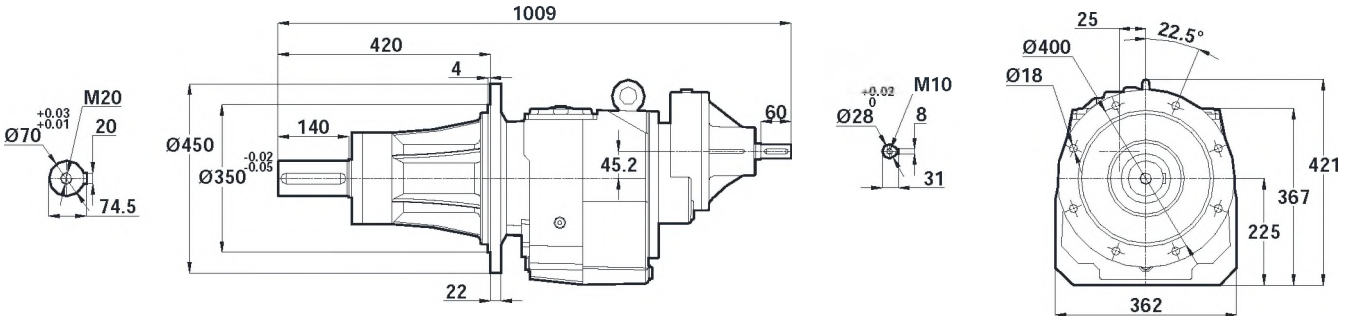


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB572
NTB573

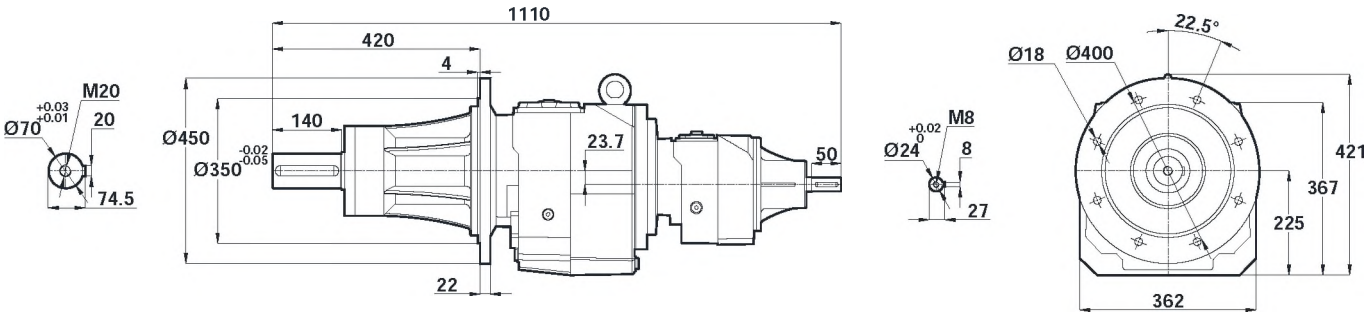


NTB574



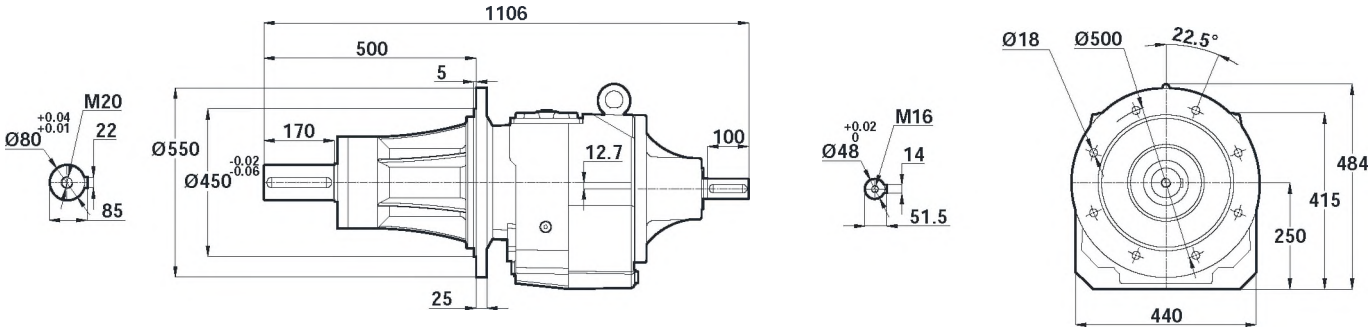
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB575
NTB576

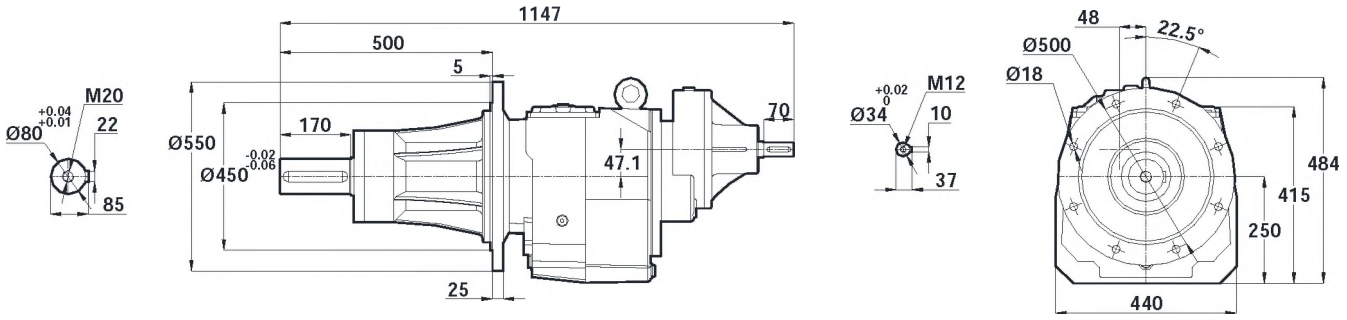


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB672
NTB673

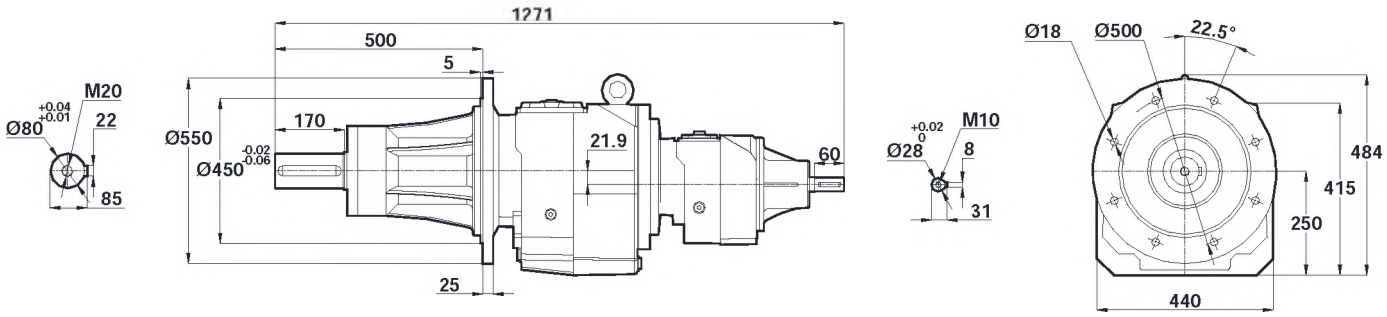


NTB674



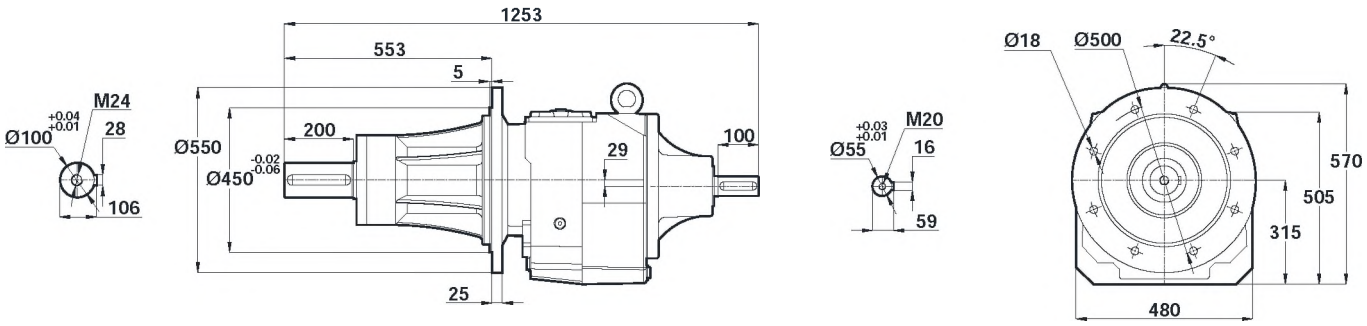
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB675
NTB676

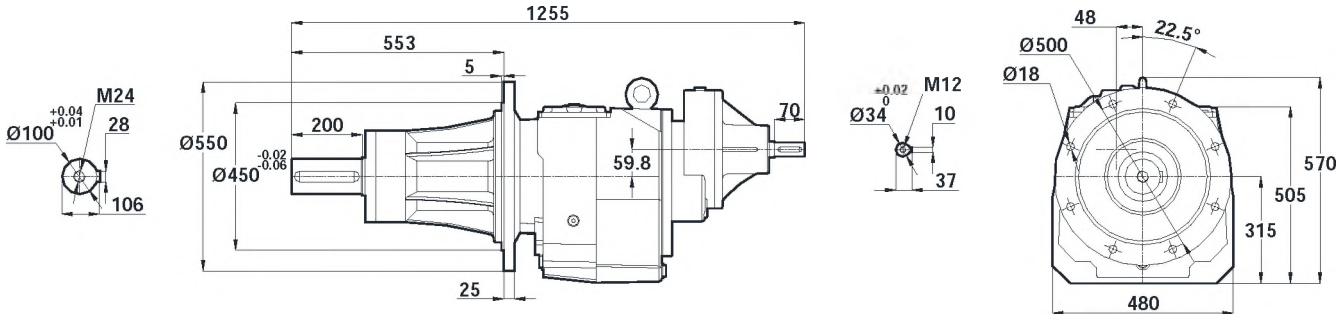


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB772
NTB773

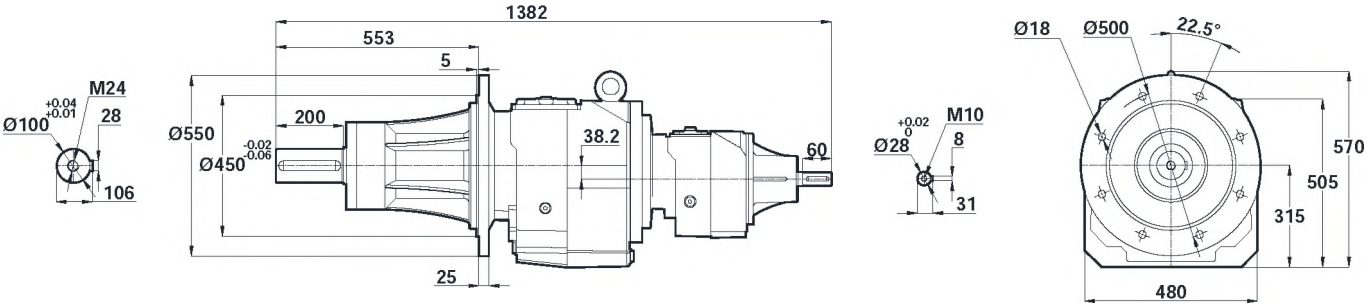


NTB774



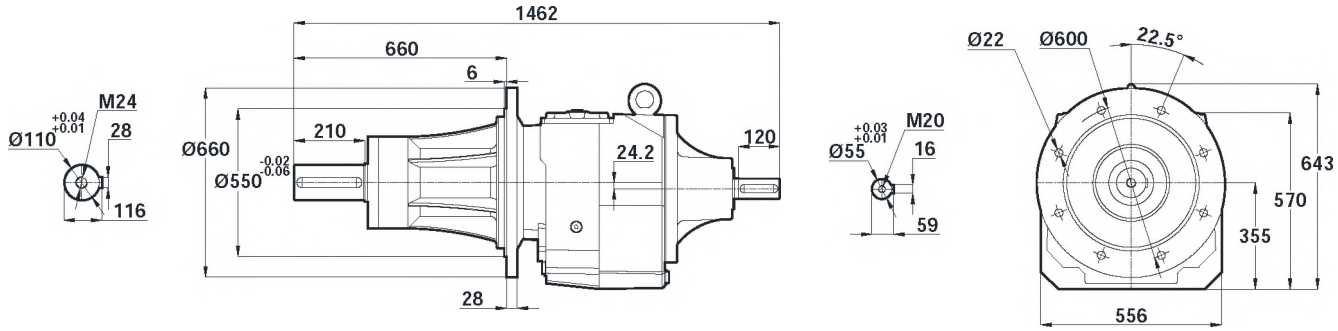
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB775
NTB776

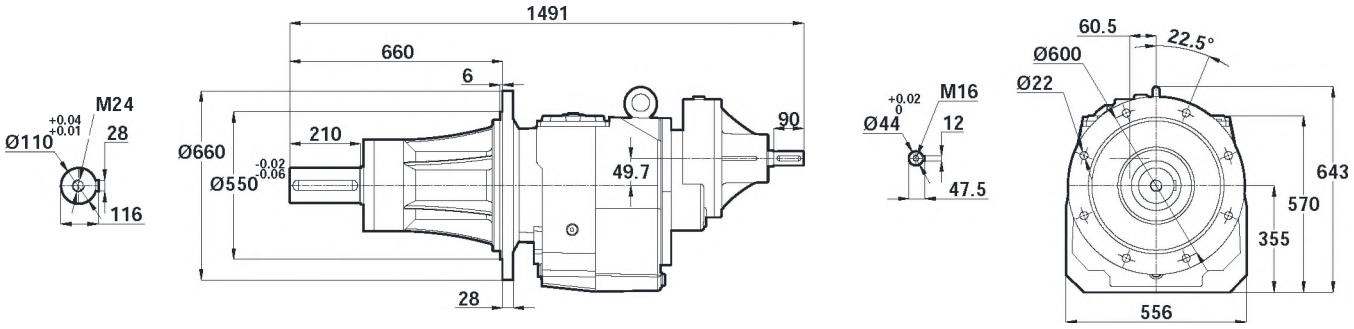


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB872
NTB873

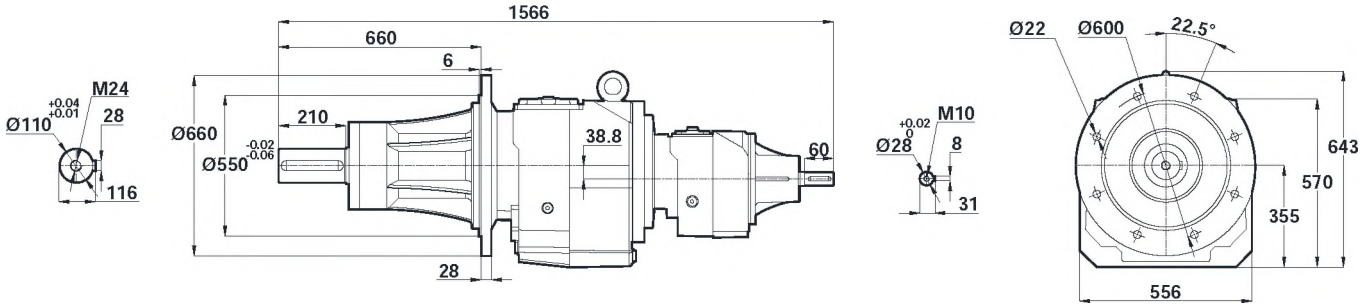


NTB874



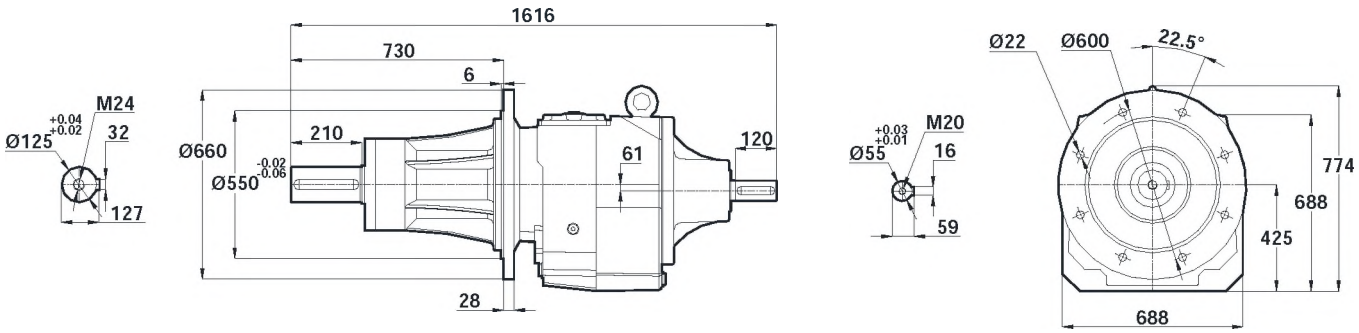
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB875
NTB876

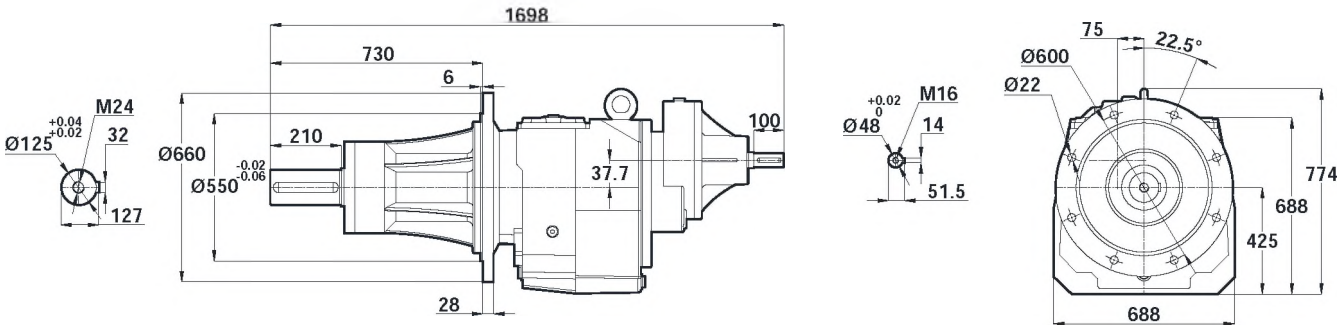


Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB972
NTB973

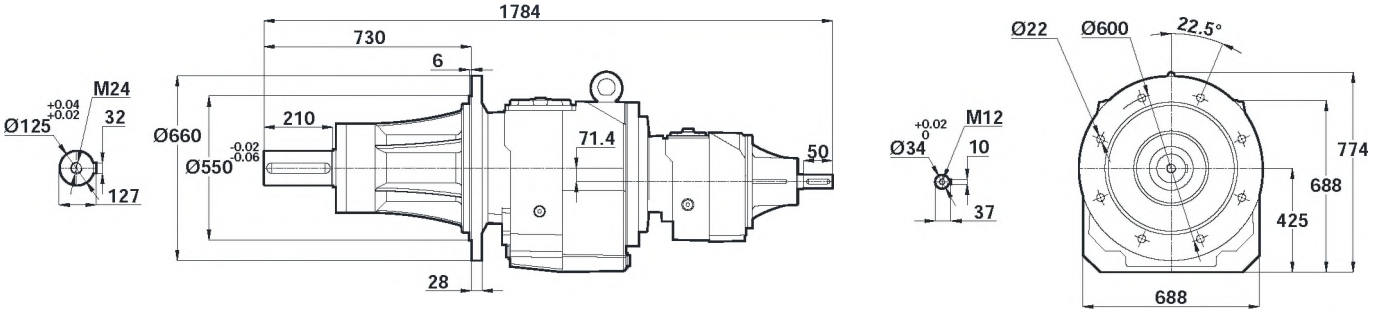


NTB974



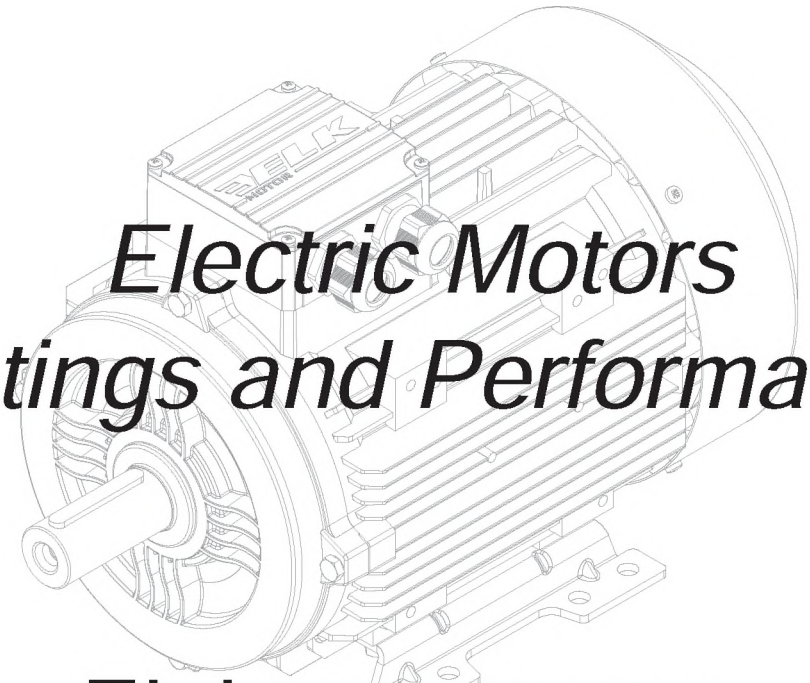
Foro di centraggio filettato secondo DIN 332 foglio 2 / *Tapped center hole to DIN 332, sheet 2* / Zentrierung mit gewinde DIN 332, Blatt 2

NTB975
NTB976



Note / *Notes* / Note

Taglie e prestazioni dei motori elettrici



Electric Motors Ratings and Performance

Elektromotoren Leistungsdaten



Taglie e prestazioni dei motori elettrici
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 3000 d/d / *400V 50Hz 3000 rpm* / 400V 50Hz 3000 UpM

IE3

Tipo *Type* Typ	Dati a pieno carico *Full-load Data* Volllastdaten								Dati all'avvio *Starting Data* Startdaten		Coppia massima *Breakdown Torque* Kippmoment	Momento di inerzia *Moment of Inertia* Trägheitsmoment	B3 Peso motore *B3 Motor Weight* B3 Motor Gewicht	Livello di rumorosita *Noise Level* Geräuschpegel
	Potenza *Power* Leistung	Velocita *Speed* Drehzahl	Corrente *Current* Nennstrom	Momento *Torque* Drehmoment	Fattore di potenza *Power Factor* Leistungsfaktor	Efficienza % η *Efficiency % η* Wirkungsgrad % η			Corrente *Current* Nennstrom	Coppia *Torque* Drehmoment				
	kW	giri/min *rpm* UpM	A	Nm	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
3E71M/2B	0,37	2830	0,86	1,25	0,81	76,6	77,0	75,0	6,0	2,8	3,0	0,00086	6,2	53
3E71M/2C	0,55	2830	1,19	1,86	0,84	79,4	80,2	78,8	6,1	2,9	3,3	0,00096	7,2	53
3E80M/2B	0,75	2880	1,59	2,49	0,84	80,7	82,0	81,5	6,7	3,0	3,6	0,00140	9,6	54
3E80M/2C	1,1	2880	2,26	3,64	0,85	82,7	83,0	82,4	6,8	3,1	3,8	0,00165	10,9	54
3E90S/2B	1,5	2900	2,97	4,94	0,86	84,8	85,4	84,2	7,6	3,1	3,9	0,00220	15,6	59
3E90L/2C	2,2	2900	4,25	7,24	0,87	85,9	86,8	86,1	7,2	3,0	3,8	0,00310	17,0	59
3E100L/2C	3	2915	5,58	9,83	0,89	87,1	87,6	86,9	7,9	3,0	4,1	0,00540	23,3	62
3E112M/2C	4	2915	7,28	13,1	0,90	88,1	88,8	88,2	7,5	2,6	3,9	0,01100	29,1	65
3E132S/2B	5,5	2945	9,9	17,83	0,90	89,2	89,0	88,6	8,9	2,9	3,9	0,02200	44,4	67
3E132S/2C	7,5	2945	13,2	24,32	0,91	90,1	90,5	89,7	8,4	2,6	4,0	0,02900	51,5	67
3E160M/2A	11	2955	19,5	35,5	0,89	91,2	91,2	90,4	8,5	3,1	4,0	0,03400	105	70
3E160M/2B	15	2955	27	48,5	0,87	91,9	91,8	91,6	7,5	2,4	3,0	0,04600	120	70
3E160L/2	18,5	2960	31,5	59,9	0,92	92,4	92,5	92,0	8,2	3,0	3,2	0,05600	145	70
3E180M/2	22	2960	38	71	0,90	92,7	92,6	92,2	7,0	2,4	3,0	0,07500	170	70
3G200L/2a	30	2980	52	96	0,89	93,3	93,3	92,8	8,5	2,8	3,5	0,15000	240	73
3G200L/2b	37	2980	63	119	0,90	93,7	93,7	93,1	8,3	2,8	3,1	0,17000	270	73
3G225M/2	45	2980	77	144	0,91	94,0	94,1	93,0	8,7	2,7	3,1	0,26000	380	73
3G250M/2	55	2985	92	176	0,92	94,3	94,5	93,3	8,7	2,9	3,0	0,47000	480	76
3G280S/2	75	2985	127	240	0,90	94,7	94,6	94,0	8,0	2,9	3,2	0,62000	585	76
3G280M/2	90	2985	148	288	0,92	95,0	95,0	93,7	8,2	2,9	3,0	0,74000	645	76
3G315S/2	110	2985	186	353	0,90	95,2	95,2	94,0	8,0	2,5	3,0	1,20000	742	76
3G315M/2a	132	2985	223	423	0,90	95,4	95,4	94,1	8,0	2,4	3,5	1,40000	812	79
3G315M/2b	160	2985	265	513	0,91	95,6	95,6	94,2	8,0	2,5	3,0	1,50000	912	79



Taglie e prestazioni dei motori elettrici
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 1500 d/d / *400V 50Hz 1500 rpm* / 400V 50Hz 1500 UpM

IE3

Tipo *Type* Typ	Dati a pieno carico *Full-load Data* Volllastdaten								Dati all'avvio *Starting Data* Startdaten		Coppia massima *Breakdown Torque* Kippmoment	Momento di inerzia *Moment of Inertia* Trägheitsmoment	B3 Peso motore *B3 Motor Weight* B3 Motor Gewicht	Livello di rumorosita *Noise Level* Geräuschpegel
	Potenza *Power* Leistung	Velocita *Speed* Drehzahl	Corrente *Current* Nennstrom	Momento *Torque* Drehmoment	Fattore di potenza *Power Factor* Leistungsfaktor	Efficienza % η *Efficiency % η* Wirkungsgrad % η			Corrente *Current* Nennstrom	Coppia *Torque* Drehmoment				
	kW	giri/min *rpm* UpM	A	Nm	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
3E71M/4C	0,25	1435	0,67	1,66	0,71	76,0	75,4	71,5	5,4	2,2	3,0	0,00096	6,8	45
3E71M/4D	0,37	1435	0,97	2,46	0,70	78,5	78,2	75,0	5,5	2,2	3,1	0,00120	7,5	45
3E80M/4C	0,55	1450	1,34	3,62	0,73	80,8	80,4	77,0	5,9	2,1	3,1	0,00220	10,5	50
3E80M/4D	0,75	1450	1,77	4,94	0,74	82,5	82,3	80,0	6,2	2,5	3,4	0,00360	11,6	50
3E90S/4C	1,1	1450	2,46	7,25	0,76	84,5	84,3	82,0	7,0	2,6	3,6	0,00420	16,3	51
3E90L/4D	1,5	1450	3,3	9,88	0,77	85,3	85,2	83,0	7,2	2,8	3,8	0,00480	18,0	51
3E100L/4C	2,2	1450	4,65	14,49	0,79	86,7	87,2	86,0	7,2	2,8	3,6	0,01100	24,4	53
3E100L/4D	3	1450	6,26	19,76	0,79	87,7	88,0	87,0	7,2	2,8	3,6	0,01300	26,7	53
3E112M/4D	4	1460	8,05	26,16	0,81	88,6	88,4	87,5	7,4	2,8	3,8	0,01500	33,9	58
3E132S/4C	5,5	1460	10,65	36	0,83	89,6	90,2	90,0	7,4	2,8	3,4	0,03500	53,4	61
3E132M/4D	7,5	1465	14,4	48,9	0,83	90,4	90,4	89,4	7,9	3,0	3,8	0,04200	59,5	61
3E160M/4C	11	1470	21	71,5	0,83	91,4	91,3	91,0	6,9	2,4	3,1	0,07200	120	63
3E160L/4D	15	1470	29	97,4	0,81	92,1	92,0	91,8	6,9	2,5	3,2	0,09200	144	63
3E180M/4	18,5	1475	34,5	120	0,84	92,6	92,6	91,6	7,8	3,2	3,8	0,15000	180	64
3E180L/4	22	1475	42,5	142	0,80	93,0	92,8	92,0	8,3	3,5	4,0	0,17000	190	64
3G200L/4	30	1475	55	194	0,84	93,6	93,5	93,3	7,9	2,8	3,7	0,25000	240	64
3G225S/4	37	1475	67	240	0,85	93,9	93,9	93,5	7,5	3,1	3,3	0,36000	330	64
3G225M/4	45	1475	80	291	0,86	94,2	94,2	93,4	7,4	3,0	3,1	0,44000	360	64
3G250M/4	55	1480	96	355	0,87	94,6	94,7	94,0	7,7	3,2	3,0	0,78000	445	67
3G280S/4	75	1485	133	482	0,86	95,0	94,9	94,4	7,6	2,9	3,0	1,11000	605	67
3G280M/4	90	1485	158	579	0,86	95,2	95,2	94,8	7,4	2,9	3,0	1,32000	665	67
3G315S/4	110	1487	194	707	0,86	95,4	95,2	95,0	7,4	2,4	3,0	2,5000	861	74
3G315M/4a	132	1487	230	848	0,87	95,6	95,4	95,3	7,4	2,4	3,0	2,8000	882	74
3G315M/4b	160	1488	275	1027	0,88	95,8	95,6	95,6	6,9	2,2	2,9	3,0000	930	74



Taglie e prestazioni dei motori elettrici
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 1000 d/d / *400V 50Hz 1000 rpm* / 400V 50Hz 1000 UpM

IE3

Tipo *Type* Typ	Dati a pieno carico *Full-load Data* Volllastdaten								Dati all'avvio *Starting Data* Startdaten		Coppia massima *Breakdown Torque* Kippmoment	Momento di inerzia *Moment of Inertia* Trägheitsmoment	B3 Peso motore *B3 Motor Weight* B3 Motor Gewicht	Livello di rumorosita *Noise Level* Geräuschpegel
	Potenza *Power* Leistung	Velocita *Speed* Drehzahl	Corrente *Current* Nennstrom	Momento *Torque* Drehmoment	Fattore di potenza *Power Factor* Leistungsfaktor	Efficienza % η *Efficiency % η* Wirkungsgrad % η			Corrente *Current* Nennstrom	Coppia *Torque* Drehmoment				
	kW	giri/min *rpm* UpM	A	Nm	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
3E71M/6C	0,18	930	0,55	1,85	0,69	68,0	67,4	62,6	3,6	2,0	2,4	0,00092	6,7	41
3E71M/6D	0,25	930	0,77	2,57	0,67	70,0	69,7	66,0	3,6	2,2	2,5	0,00105	7,5	41
3E80M/6B	0,37	930	1,03	3,8	0,70	74,0	73,8	70,0	4,4	2,1	2,6	0,00240	9,8	43
3E80M/6C	0,55	935	1,47	5,62	0,70	77,2	77,3	74,4	4,3	2,2	2,7	0,00270	10,6	43
3E90S/6B	0,75	945	1,96	7,58	0,70	78,9	79,5	77,6	4,7	2,2	2,7	0,00400	14,6	46
3E90L/6C	1,1	940	2,75	11,2	0,71	81,0	80,8	79,4	5,0	2,2	2,7	0,00480	17,0	46
3E100L/6B	1,5	955	3,5	15	0,75	82,5	82,7	81,4	5,3	2,1	2,8	0,01400	22,5	50
3E112M/6B	2,2	965	4,95	21,7	0,76	84,3	84,5	83,5	5,5	2,2	3,0	0,01900	27,2	56
3E132S/6B	3	970	6,55	29,4	0,77	85,6	85,5	84,5	6,2	2,1	3,0	0,03400	46,5	58
3E132M/6C	4	970	8,52	39,4	0,78	86,8	87,0	85,5	6,2	2,2	3,0	0,03900	51,0	58
3E132M/6D	5,5	970	11,55	54,15	0,78	88,0	88,9	88,5	6,2	2,2	3,0	0,04200	56,0	58
3E160M/6	7,5	970	15	73,8	0,81	89,1	89,0	88,1	6,3	2,2	2,8	0,11000	126	62
3E160L/6	11	970	21,5	108,3	0,82	90,3	90,3	89,0	7,0	2,5	3,2	0,14000	146	62
3E180L/6	15	975	29	147	0,82	91,2	91,2	90,8	6,9	2,6	3,2	0,24000	209	62
3G200L/6a	18,5	975	36,5	181	0,80	91,7	91,6	91,3	7,0	2,6	3,2	0,26000	222	61
3G200L/6b	22	975	43	215	0,80	92,2	92,0	91,7	7,0	2,6	3,2	0,32000	245	61
3G225M/6	30	985	58	291	0,80	92,9	92,9	92,1	7,0	3,3	2,7	0,69000	325	62
3G250M/6	37	987	69	358	0,83	93,3	93,2	92,9	7,0	2,8	2,6	0,99000	440	64
3G280S/6	45	990	92	434	0,75	93,7	93,7	92,9	6,9	3,0	2,8	1,5000	553	65
3G280M/6	55	990	107	531	0,79	94,1	94,1	92,8	7,3	3,3	3,2	1,7000	578	65
3G315S/6	75	992	140	722	0,82	94,6	94,6	94,4	7,2	2,7	3,0	2,9000	805	72
3G315M/6a	90	992	166	866	0,83	94,9	94,9	94,5	7,2	2,7	3,0	3,5000	860	72
3G315M/6b	110	992	198	1058	0,84	95,1	95,1	94,9	7,2	2,7	3,0	4,2000	980	72
3G315L/6	132	992	235	1270	0,85	95,4	95,4	95,2	7,2	2,7	3,0	4,3000	1150	72
3G355M/6a	160	993	290	1538	0,83	95,6	95,6	95,0	7,0	2,4	3,2	6,8000	1185	72



Taglie e prestazioni dei motori elettrici
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 3000 d/d / *400V 50Hz 3000 rpm* / 400V 50Hz 3000 UpM

IE2

Tipo *Type* Typ	Dati a pieno carico *Full-load Data* Volllastdaten								Dati all'avvio *Starting Data* Startdaten		Coppia massima *Breakdown Torque* Kippmoment	Momento di inerzia *Moment of Inertia* Tragheitsmoment	B3 Peso motore *B3 Motor Weight* B3 Motor Gewicht	Livello di rumorosita *Noise Level* Geräuschpegel
	Potenza *Power* Leistung	Velocita *Speed* Drehzahl	Corrente *Current* Nennstrom	Momento *Torque* Drehmoment	Fattore di potenza *Power Factor* Leistungsfaktor	Efficienza % η *Efficiency % η* Wirkungsgrad % η			Corrente *Current* Nennstrom	Coppia *Torque* Drehmoment				
	kW	giri/min *rpm* UpM	A	Nm	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
G56/2b *	0,12	2800	0,35	0,41	0,74	64,5	64,1	56,9	4,2	2,5	2,8	0,00012	2,8	42
G63/2a *	0,18	2820	0,5	0,61	0,73	64,4	64,2	57,7	4,6	2,9	2,9	0,00011	3,6	52
G63/2b	0,25	2840	0,67	0,84	0,63	67,3	67,1	60,9	4,5	2,5	2,9	0,00013	4,0	52
2E71M/2A	0,37	2805	0,9	1,26	0,80	74,2	74,5	72,5	5,0	2,5	2,8	0,00067	5,5	54
2E71M/2B	0,55	2800	1,25	1,87	0,84	75,8	77,0	76,0	5,0	2,4	2,7	0,00086	6,3	54
2E80M/2A	0,75	2850	1,67	2,51	0,83	78,0	79,0	77,5	5,7	2,5	3,0	0,00120	8,7	56
2E80M/2B	1,1	2850	2,36	3,69	0,84	80,1	81,3	80,7	5,8	2,7	3,1	0,00140	9,7	56
2E90S/2A	1,5	2880	3,19	4,98	0,83	81,8	82,6	82,0	6,0	2,4	3,1	0,00200	14,1	60
2E90L/2B	2,2	2860	4,48	7,35	0,85	83,2	85,0	85,0	6,0	2,6	3,1	0,00260	15,5	60
2E100L/2B	3	2900	5,8	9,88	0,88	84,8	85,2	84,7	7,0	2,6	3,4	0,00460	20,8	63
2E112M/2A	4	2910	7,5	13,13	0,89	86,5	87,1	86,8	7,0	2,4	3,6	0,00850	25,7	66
2E132S/2A	5,5	2930	10,2	17,93	0,89	87,4	87,8	87,0	7,5	2,4	3,7	0,01900	41	68
2E132S/2B	7,5	2925	13,6	24,5	0,90	88,5	88,8	88,6	7,6	2,6	3,7	0,02200	45,2	68
2E160M/2A	11	2945	19,5	35,7	0,91	89,5	89,5	88,6	8,5	3,4	3,6	0,03400	105	70
2E160M/2B	15	2945	28,3	48,6	0,85	90,4	90,4	89,7	7,5	3,0	3,5	0,04100	113	70
2E160L/2	18,5	2950	32,3	59,9	0,91	90,9	90,8	90,1	8,2	3,0	3,2	0,05100	135	70
2E180M/2	22	2960	38,3	71	0,91	91,3	91,3	90,8	8,2	3,0	3,5	0,07500	170	70
2G200L/2a	30	2970	52	96	0,91	92,0	92,0	91,2	8,3	2,7	3,0	0,13000	210	73
2G200L/2b	37	2970	65	119	0,89	92,6	92,6	91,7	8,3	2,7	3,0	0,15000	240	73
2G225M/2	45	2975	77	144	0,91	92,9	93,0	91,8	8,7	2,7	3,1	0,23000	343	73
2G250M/2	55	2980	94	176	0,91	93,2	93,7	92,2	8,7	2,9	3,0	0,41000	445	76
2G280S/2	75	2980	127	240	0,91	93,9	94,1	92,5	8,0	2,9	3,2	0,62000	585	76
2G280M/2	90	2980	151	288	0,91	94,2	94,2	92,7	8,5	2,7	3,0	0,74000	645	76
2G315S/2	110	2980	186	353	0,91	94,3	94,3	92,8	8,0	2,5	3,0	1,20000	742	79
2G315M/2a	132	2980	223	423	0,90	94,6	94,5	92,9	8,0	2,5	3,0	1,40000	812	79
2G315M/2b	160	2980	266	513	0,92	94,8	94,8	93,4	8,0	2,5	3,0	1,50000	912	79

* : **IE1 Dati** / *IE1 Data* / IE1 Daten



Taglie e prestazioni dei motori elettrici
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 1500 d/d / *400V 50Hz 1500 rpm* / 400V 50Hz 1500 UpM

IE2

Tipo *Type* Typ	Dati a pieno carico *Full-load Data* Volllastdaten								Dati all'avvio *Starting Data* Startdaten		Coppia massima *Breakdown Torque* Kippmoment	Momento di inerzia *Moment of Inertia* Trägheitsmoment	B3 Peso motore *B3 Motor Weight* B3 Motor Gewicht	Livello di rumorosita *Noise Level* Geräuschpegel
	Potenza *Power* Leistung	Velocita *Speed* Drehzahl	Corrente *Current* Nennstrom	Momento *Torque* Drehmoment	Fattore di potenza *Power Factor* Leistungsfaktor	Efficienza % η *Efficiency % η* Wirkungsgrad % η			Corrente *Current* Nennstrom	Coppia *Torque* Drehmoment				
*	kW	giri/min *rpm* UpM	A	Nm	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
G63/4a *	0,12	1365	0,41	0,84	0,74	57,1	57,1	53,3	3,1	2,0	2,2	0,00017	3,4	43
G63/4b	0,18	1340	0,6	1,28	0,73	59,7	59,7	55,8	2,9	2,0	2,0	0,00021	3,9	43
2E71M/4B	0,25	1425	0,71	1,68	0,69	74,0	73,5	70,5	4,4	2,0	3,0	0,00080	5,9	46
2E71M/4C	0,37	1425	1,0	2,47	0,70	76,1	75,5	71,5	4,6	2,0	3,0	0,00096	6,7	46
2E80M/4B	0,55	1440	1,45	3,65	0,71	77,1	76,7	75,0	5,2	2,0	3,0	0,00180	9,7	50
2E80M/4C	0,75	1440	1,89	4,97	0,72	79,6	79,2	77,0	5,2	2,0	3,0	0,00220	10,5	50
2E90S/4B	1,1	1440	2,6	7,3	0,75	81,4	81,4	80,5	5,6	2,2	3,1	0,00290	14,4	52
2E90L/4C	1,5	1440	3,4	9,95	0,77	82,8	83,0	82,0	6,0	2,3	3,2	0,00360	17,2	52
2E100L/4B	2,2	1445	4,85	14,6	0,78	84,3	85,3	84,2	6,0	2,1	3,2	0,00800	22,7	54
2E100L/4C	3	1440	6,42	19,89	0,79	85,5	85,7	84,6	6,3	2,3	3,1	0,01100	24,2	54
2E112M/4C	4	1450	8,2	26,35	0,81	86,8	87,4	86,5	6,6	2,5	3,4	0,01300	32	58
2E132S/4B	5,5	1455	11,05	36,1	0,82	87,7	88,6	88,0	6,7	2,6	3,2	0,03000	47,8	62
2E132M/4C	7,5	1460	15	49	0,81	88,7	89,0	89,0	7,0	2,7	3,3	0,03500	54,8	62
2E160M/4B	11	1470	21	71,5	0,84	90,0	90,1	89,3	6,9	2,8	3,1	0,07200	130	63
2E160L/4C	15	1470	29,3	97,4	0,82	90,6	90,7	89,7	7,5	2,6	3,5	0,09200	141	63
2E180M/4	18,5	1475	34,5	120	0,85	91,3	91,4	90,4	7,7	3,2	3,4	0,15000	180	64
2E180L/4	22	1475	42,5	142	0,82	91,7	91,7	90,6	8,3	3,7	3,8	0,17000	190	64
2G200L/4	30	1475	55	194	0,85	92,5	92,6	92,1	8,0	3,1	3,6	0,23000	227	64
2G225S/4	37	1475	67	240	0,86	92,7	92,7	92,2	7,2	3,0	3,0	0,35000	314	64
2G225M/4	45	1475	80	291	0,87	93,3	93,3	92,4	7,3	3,0	3,0	0,44000	360	64
2G250M/4	55	1480	96	355	0,88	93,7	93,8	93,2	7,6	3,1	2,9	0,78000	445	67
2G280S/4	75	1485	133	482	0,87	94,0	94,1	93,4	7,9	2,6	2,8	1,11000	605	67
2G280M/4	90	1485	158	579	0,87	94,3	94,5	93,8	7,4	2,9	3,0	1,32000	665	67
2G315S/4	110	1485	195	707	0,86	94,5	94,5	93,8	7,0	2,3	2,6	2,10000	784	74
2G315M/4a	132	1485	235	849	0,86	94,7	94,5	93,8	7,0	2,3	2,6	2,50000	861	74
2G315M/4b	160	1485	280	1029	0,87	95,0	94,9	94,0	7,0	2,3	2,6	2,70000	882	74

* : **IE1 Dati** / *IE1 Data* / IE1 Daten



Taglie e prestazioni dei motori elettrici
Electric Motors Ratings and Performance
Elektromotoren Leistungsdaten

400V 50Hz 1000 d/d / *400V 50Hz 1000 rpm* / 400V 50Hz 1000 UpM

IE2

Tipo *Type* Typ	Dati a pieno carico *Full-load Data* Volllastdaten								Dati all'avvio *Starting Data* Startdaten		Coppia massima *Breakdown Torque* Kippmoment	Momento di inerzia *Moment of Inertia* Tragheitsmoment	B3 Peso motore *B3 Motor Weight* B3 Motor Gewicht	Livello di rumorosita *Noise Level* Geräuschpegel
	Potenza *Power* Leistung	Velocita *Speed* Drehzahl	Corrente *Current* Nennstrom	Momento *Torque* Drehmoment	Fattore di potenza *Power Factor* Leistungsfaktor	Efficienza % η *Efficiency % η* Wirkungsgrad % η			Corrente *Current* Nennstrom	Coppia *Torque* Drehmoment				
	kW	giri/min *rpm* UpM	A	Nm	Cosφ	4 / 4	3 / 4	1 / 2	I_A/I_N	M_A/M_N	M_K/M_N	kgm^2	kg	dB(A)
2E71M/6B	0,18	920	0,6	1,87	0,67	64,5	63,0	57,0	3,2	1,9	2,3	0,00075	5,9	42
2E71M/6C	0,25	920	0,78	2,59	0,69	66,5	66,0	61,0	3,3	1,9	2,3	0,00092	6,6	42
2E80M/6A	0,37	925	1,08	3,82	0,69	71,4	71,5	70,0	4,0	2,0	2,6	0,00190	9,1	45
2E80M/6B	0,55	932	1,5	5,64	0,72	73,5	74,0	71,0	4,2	2,1	2,6	0,00240	9,9	45
2E90S/6A	0,75	940	2,0	7,62	0,71	75,9	76,1	73,1	4,1	2,0	2,6	0,00360	13,3	48
2E90L/6B	1,1	940	2,9	11,18	0,70	78,1	78,3	75,0	4,3	2,1	2,6	0,00400	14,8	48
2E100L/6A	1,5	950	3,72	15	0,73	79,8	80,2	79,5	4,5	2,1	2,6	0,01000	20,2	52
2E112M/6A	2,2	960	5,32	21,9	0,73	81,8	82,0	81,5	5,3	2,1	2,7	0,01400	25	56
2E132S/6A	3	970	6,85	29,6	0,76	83,3	84,0	83,0	5,6	2,0	2,8	0,02800	42	60
2E132M/6B	4	970	8,8	39,38	0,77	85,2	85,7	85,3	5,2	2,1	2,6	0,03400	46	60
2E132M/6C	5,5	965	12	54,4	0,77	86,0	87,2	87,0	5,7	2,1	2,7	0,03900	51	60
2E160M/6	7,5	960	15	74,6	0,83	87,2	87,2	84,5	6,5	2,5	3,0	0,11000	126	62
2E160L/6	11	965	22	108,9	0,81	88,7	88,7	85,7	6,5	2,5	3,0	0,14000	146	62
2E180L/6	15	965	29	148	0,83	89,7	89,7	86,8	6,5	2,4	3,0	0,20000	189	62
2G200L/6a	18,5	975	36,5	181	0,81	90,4	90,4	87,7	7,0	2,5	3,0	0,26000	222	61
2G200L/6b	22	975	43	215	0,81	91,1	91,1	88,4	7,0	2,5	3,0	0,32000	245	61
2G225M/6	30	980	58	292	0,81	91,7	91,7	89,6	7,0	3,0	2,6	0,69000	325	62
2G250M/6	37	985	69	359	0,84	92,2	92,2	90,1	7,0	3,0	2,6	0,99000	440	64
2G280S/6	45	990	92	434	0,76	92,7	92,7	90,9	7,0	3,3	2,6	1,50000	553	65
2G280M/6	55	990	107	531	0,80	93,1	93,1	91,5	7,0	3,3	2,6	1,60000	578	65
2G315S/6	75	990	140	723	0,82	93,7	93,7	92,4	7,0	2,5	3,0	2,50000	727	72
2G315M/6a	90	990	166	868	0,83	94,0	94,0	92,6	7,0	2,5	3,0	3,10000	805	72
2G315M/6b	110	990	198	1061	0,85	94,3	94,3	92,7	7,0	2,5	3,0	3,20000	860	72
2G315L/6a	132	990	235	1273	0,86	94,6	94,6	93,0	7,0	2,5	3,0	3,50000	1020	72
2G315L/6b	160	990	290	1543	0,84	94,8	94,8	93,2	7,0	2,5	3,0	3,80000	1120	72

m SERIES

Foot and Flange Mounted Inline Helical Gearboxes

Архангельск (8182)63-90-72
Астана (7172)727-132
Астрахань (8512)99-46-04
Барнаул (3852)73-04-60
Белгород (4722)40-23-64
Брянск (4832)59-03-52
Владивосток (423)249-28-31
Волгоград (844)278-03-48
Вологда (8172)26-41-59
Воронеж (473)204-51-73
Екатеринбург (343)384-55-89
Иваново (4932)77-34-06
Ижевск (3412)26-03-58
Иркутск (395)279-98-46
Казань (843)206-01-48
Калининград (4012)72-03-81
Калуга (4842)92-23-67
Кемерово (3842)65-04-62
Киров (8332)68-02-04
Краснодар (861)203-40-90
Красноярск (391)204-63-61
Курск (4712)77-13-04
Липецк (4742)52-20-81
Киргизия (996)312-96-26-47
Магнитогорск (3519)55-03-13
Москва (495)268-04-70
Мурманск (8152)59-64-93
Набережные Челны (8552)20-53-41
Нижний Новгород (831)429-08-12
Новокузнецк (3843)20-46-81
Новосибирск (383)227-86-73
Омск (3812)21-46-40
Орел (4862)44-53-42
Оренбург (3532)37-68-04
Пенза (8412)22-31-16
Казахстан (772)734-952-31
Пермь (342)205-81-47
Ростов-на-Дону (863)308-18-15
Рязань (4912)46-61-64
Самара (846)206-03-16
Санкт-Петербург (812)309-46-40
Саратов (845)249-38-78
Севастополь (8692)22-31-93
Симферополь (3652)67-13-56
Смоленск (4812)29-41-54
Сочи (862)225-72-31
Ставрополь (8652)20-65-13
Таджикистан (992)427-82-92-69
Сургут (3462)77-98-35
Тверь (4822)63-31-35
Томск (3822)98-41-53
Тула (4872)74-02-29
Тюмень (3452)66-21-18
Ульяновск (8422)24-23-59
Уфа (347)229-48-12
Хабаровск (4212)92-98-04
Челябинск (351)202-03-61
Череповец (8202)49-02-64
Ярославль (4852)69-52-93

https://danabrevini.nt-rt.ru || dnp@nt-rt.ru