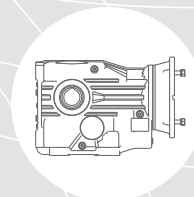
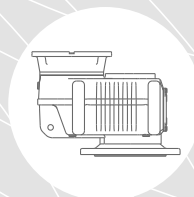
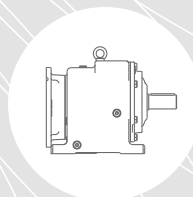













# HIGH TECH Motion



**INDICE**  
**INDEX**  
**INHALTSVERZEICHNIS**

		<b>A</b>
<b>A</b>	Generalità <i>General information</i> Allgemeines	<b>i</b>
<b>B</b>	 Riduttori coassiali A <i>In-line gearboxes A</i> Stirnradgetriebe A	
<b>C</b>	 Riduttori - motoriduttori ortogonali O <i>Helical bevelgearboxes and geared motors O</i> Kegelaradgetriebe - Kegelaradtriebemotoren O	
<b>D</b>	 Riduttori - motoriduttori ortogonali ad assi sghembi S <i>The skew bevel helical gearboxes with skew axis S</i> Diese getriebemotore sind mit zwei spiralstirnradstufen mit schraege achsen hergestellt S	
<b>E</b>	 Riduttori - motoriduttori paralleli - pendolari P <i>Shaft gearboxes - shaft mounted gearboxes and geared motors P</i> Flach-und Aufsteckgetriebe und-Getriebemotoren P	
<b>F</b>	 Riduttori - motoriduttori paralleli - pendolari Lunghi PL <i>Shaft gearboxes - shaft mounted gearboxes Long version PL</i> Flach-und Aufsteckgetriebe und-Getriebemotoren PL	
<b>G</b>	 Riduttori paralleli - pendolari PT <i>Shaft gearboxes - shaft mounted gearboxes PT</i> Flach-und Aufsteckgetriebe PT	
<b>Z</b>	Posizioni di montaggio <i>Mounting position</i> Montagepositionen	<b>Z1</b>
	Gestione Revisioni Cataloghi STM <i>Managing STM Catalog Revisions</i> Management Wiederholt Kataloge STM	<b>Z5</b>



1.0 GENERALITA'

1.0 GENERAL INFORMATION

1.0 ALLGEMEINES

1.1 Unità di misura

1.1 Measurement units

1.1 Maßeinheiten

Tab. 1.1

SIMBOLO SYMBOL SYMBOL	DEFINIZIONE	DEFINITION	DEFINITION	UNITA' DI MISURA MEASUREMENT UNIT MAßEINHEIT	
<b>Fr</b> 1-2	Carico Radiale	<i>Radial load</i>	Radialbelastung	<b>N</b>	1N=0.1daN $\approx$ 0.1kg
<b>Fa</b> 1-2	Carico assiale	<i>Axial load</i>	Axialbelastung	<b>N</b>	
	Dimensioni	<i>Dimensions</i>	Abmessungen	<b>mm</b>	
<b>FS</b>	Fattore di servizio	<i>Service factor</i>	Betriebsfaktor		
<b>FS'</b>	Fattore di servizio riduttore	<i>Gearbox service factor</i>	Betriebsfaktor Getriebe		
<b>kg</b>	Massa	<i>Mass</i>	Masse	<b>kg</b>	
<b>T<sub>2M</sub></b>	Momento torcente nominale riduttore	<i>Output nominal torque</i>	Drehmoment Getriebe	<b>Nm</b>	1Nm=0.1daNm $\approx$ 0.1kgm
<b>T<sub>2</sub></b>	Momento torcente motorid.	<i>Gear motor torque</i>	Drehmoment Getriebemotor	<b>Nm</b>	
<b>P</b>	Potenza motore	<i>Gear unit power</i>	Leistung Getriebe	<b>kW</b>	
<b>P<sub>tN</sub></b>	Potenza limite termico	<i>Limit thermal capacity</i>	Thermische Leistungsgrenze	<b>kW</b>	
<b>P<sub>c</sub></b>	Potenza corretta	<i>Correct power</i>	Tatsächliche Leistung	<b>kW</b>	1kW = 1.36 HP (PS)
<b>P<sub>1</sub></b>	Potenza motoriduttore	<i>Gear motor power</i>	Leistung Getriebemotor	<b>kW</b>	
<b>P'</b>	Potenza richiesta in uscita	<i>Output power</i>	Erforderliche Abtriebsleistung	<b>kW</b>	
<b>RD</b>	Rendimento dinamico	<i>Dynamic efficiency</i>	Dinamischer Wirkungsgrad		
<b>RS</b>	Rendimento statico	<i>Static efficiency</i>	Statischer Wirkungsgrad		
<b>ir</b>	Rapporto di trasmissione	<i>Ratio</i>	Übersetzungsverhältnis		
<b>n<sub>1</sub></b>	Velocità albero entrata	<i>Input speed</i>	Antriebsdrehzahl	<b>min<sup>-1</sup></b>	1 min <sup>-1</sup> = 6.283 rad.
<b>n<sub>2</sub></b>	Velocità albero in uscita	<i>Output speed</i>	Abtriebsdrehzahl		
<b>T<sub>c</sub></b>	Temperatura ambiente	<i>Ambient temperature</i>	Umgebungstemperatur	<b>°C</b>	
<b>IEC</b>	Motori accoppiabili	<i>Motor options</i>	Passende Motoren		

1.2 Velocità in entrata

1.2 Input speed

1.2 Antriebsdrehzahl

Tutte le prestazioni dei riduttori sono calcolate in base alle seguenti velocità in entrata:

All performances of gearboxes are calculated according to the following input speeds:

Alle Wirkungsgrade der Getriebe werden auf der Grundlage folgender Antriebsdrehzahlen berechnet:

	<b>A</b>	<b>O</b>	<b>S</b>	<b>P</b>	<b>PL</b>	<b>PT</b>
<b>n<sub>1</sub>(rpm)</b>	2800	2800	2800	2800	2800	2800
	1400	1400	1400	1400	1400	1400
	900	900	900	900	900	900
	500	500	500	500	500	500

Velocità inferiori a 1400 min<sup>-1</sup> ottenute con l'ausilio di riduzioni esterne o di azionamenti, sono sicuramente favorevoli al buon funzionamento del riduttore il quale può operare con temperature di funzionamento inferiori a vantaggio di tutto il cinematisimo.

E' necessario però considerare che velocità molto basse non consentono un'efficace lubrificazione di tutto il gruppo, per cui tale eventualità dovrà essere segnalata per poter effettuare schermature dei cuscinetti.

Speeds lower than 1400 rpm obtained by means of external reductions or drives, surely contribute to the good working of the gearbox which can operate at lower working temperatures to the advantage of the whole kinematic movement.

However, please note that very low speeds do not allow an efficacious lubrication of the whole unit. Therefore this case shall be indicated to screen the upper bearings.

Drehzahlen unter 1400 min<sup>-1</sup>, die mit Hilfe äußerer Untersetzungen oder Antriebe erhalten werden, sind für den optimalen Betrieb des Getriebes vorteilhaft, denn so kann dieses mit niedrigen Betriebstemperaturen arbeiten, was sich zum Vorteil der gesamten Getriebegruppe auswirkt.

Es muß jedoch berücksichtigt werden, daß sehr niedrige Drehzahlen keine wirksame Schmierung der gesamten Gruppe zulassen. Wird mit solch niedrigen Drehzahlen gearbeitet, muß dies angegeben werden, damit wir die oberen Lager abschirmen können.

## 1.3 Fattore di servizio

Il fattore di servizio FS permette di qualificare, in prima approssimazione, la tipologia dell'applicazione tenendo conto della natura del carico (A, B, C), della durata di funzionamento h/d (ore giornaliere) e del numero di avviamenti/ora. Il coefficiente così trovato dovrà essere uguale o inferiore al fattore di servizio del motoriduttore FS' dato dal rapporto fra la coppia nominale del riduttore  $T_{2M}$  indicata a catalogo e la coppia  $M'$  richiesta dall'applicazione.

I valori di FS indicati nella tab. 1.3, sono relativi all'azionamento con motore elettrico, se utilizzato un motore a scoppio, si dovrà tenere conto di un fattore di moltiplicazione 1.3 se a più cilindri e 1.5 se monocilindro.

Se il motore elettrico applicato è autofrenante, considerare un numero di avviamenti doppio di quello effettivamente richiesto.

## 1.3 Service factor

*The service factor FS permits approximate qualification of the type of application, taking into account the type of load (A,B,C), length of operation h/d (hours/day) and the number of start-up/hour. The coefficient thus calculated must be equal or less than the motorgear unit service factor FS' given by the rated torque of gear unit  $T_{2M}$  as indicated in the catalogue and the torque  $M'$  required by the application.*

*The FS values reported in Table 1.3 refer to a drive unit with an electric motor. If a combustion engine is used, a multiplication factor of 1.3 must be applied for a several-cylinder engine, 1.5 for a single-cylinder engine.*

*If the electric motor applied is self-braking, consider twice the number of start-up than those actually required.*

## 1.3 Betriebsfaktor

Mit Hilfe des Betriebsfaktors FS kann in einer ersten Annäherung das richtige Untersetzungsgetriebe für die gewünschte Anwendungsart ermittelt werden. Dabei sind folgende Werte zu beachten: Art der Last (A, B, C), Betriebsstunden pro Tag (h/d), Anzahl der Starts pro Stunde. Der so ermittelte Koeffizient sollte dem Betriebsfaktor FS', der sich aus dem Verhältnis zwischen dem Nenn Drehmoment des Getriebes  $T_{2M}$  (s. Katalog) und dem für die Anwendung erforderlichen Drehmoment  $M'$  ergibt, entweder entsprechen oder niedriger liegen.

Die FS-Werte, die in Tabelle 1.3 angegeben werden, beziehen sich auf den Antrieb mit Elektromotor. Wird ein Verbrennungsmotor verwendet, so ist bei mehreren Zylindern ein Multiplikationsfaktor von 1,3 und bei einem Einzylindermotor ein Faktor von 1,5 zu berücksichtigen.

Ist der verwendete Elektromotor ein Bremsmotor, so ist die Zahl der tatsächlichen Startvorgänge zu verdoppeln.

Tab. 1.3

FATTORE DI SERVIZIO / SERVICE FACTOR / BETRIEBSFAKTOR											
FS											
Classe di carico Load class Lastklasse	h/d	N. AVVIAMENTI/ORA / N. START-UP/HOUR / ANZAHL DER STARTVORGÄNGE PRO STUNDE									
		2	4	8	16	32	63	125	250	500	
<b>A</b>	4	0.85	0.9	0.9	0.93	0.98	1.03	1.06	1.1	1.2	
	8	1.0	1.0	1.1	1.1	1.15	1.2	1.24	1.3	1.3	
	16	1.2	1.2	1.25	1.3	1.35	1.45	1.5	1.5	1.55	
	24	1.4	1.4	1.45	1.5	1.55	1.6	1.65	1.7	1.75	
APPLICAZIONI / APPLICATIONS / ANWENDUNGEN											
<b>Carico uniforme Uniform load Gleichmäßig verteilte Last</b>	Agitatori per liquidi puri Alimentatori per fornaci	<i>Pure liquid agitators Furnace feeders</i>					Rührwerke für reine Flüssigkeiten Beschickungsvorrichtungen für Brennöfen				
	Alimentatori a disco Filtri di lavaggio con aria Generatori Pompe centrifughe Trasportatori con carico uniforme	<i>Disc feeders Air laundry filters Generators Centrifugal pumps Uniform load conveyors</i>					Teller aufgeber Spülluftfilter Generatoren Kreiselumpen Förderer mit gleichmäßig verteilter Last				
<b>B</b>	4	1.11	1.12	1.15	1.19	1.23	1.28	1.32	1.36	1.40	
	8	1.29	1.31	1.34	1.40	1.45	1.51	1.56	1.60	1.64	
	16	1.54	1.56	1.59	1.65	1.71	1.78	1.84	1.90	1.96	
	24	1.73	1.75	1.80	1.90	1.97	2.05	2.10	2.16	2.22	
APPLICAZIONI / APPLICATIONS / ANWENDUNGEN											
<b>Carico con urti moderati Moderate shock load Last mit mäßigen Stößen</b>	Agitatori per liquidi e solidi Alimentatori a nastro Argani con medio servizio Filtri con pietre e ghiaia Viti per espulsione acqua Flocculatori Filtri a vuoto Elevatori a tazze Gru	<i>Liquid and solid agitators Belt conveyors Medium service winches Stone and gravel filters Dewatering screws Flocculator Vacuum filters Bucket elevators Cranes</i>					Rührwerke für Flüssigkeiten und Feststoffe Bandförderer Mittlere Winden Stein- und Kiesfilter Abwasserschnecken Flockvorrichtungen Vakuumfilter Becherwerke Krane				
<b>C</b>	4	1.46	1.46	1.48	1.51	1.57	1.61	1.62	1.64	1.66	
	8	1.71	1.71	1.73	1.76	1.82	1.86	1.87	1.89	1.89	
	16	2.04	2.05	2.07	2.10	2.15	2.20	2.21	2.23	2.23	
	24	2.31	2.31	2.33	2.36	2.42	2.48	2.52	2.54	2.56	
APPLICAZIONI / APPLICATIONS / ANWENDUNGEN											
<b>Carico con forti urti Heavy shock load Last mit starken Stößen</b>	Argani per servizio pesante Estrusori Calandre per gomma Pressa per mattoni Piattatrici Mulini a sfera	<i>Heavy duty hoists Extruders Crusher rubber calendars Brick presses Planing machine Ball mills</i>					Winden für schwere Lasten <a href="http://www.reduktor-stm.ru/">http://www.reduktor-stm.ru/</a> Gummikalander Ziegelpressen Hobelmaschinen Kugelmühlen				

**1.4 Rendimento****1.4 Efficiency****1.4 Wirkungsgrad**

stadi / stages / stufig	RD (%)								
	AR	OR			SM	PR	PLR		PT
		63-71 90-112	80-100 125-140 160-180	132-150 170-190			25-45 65-85-95	105 115-125-13 5	
1	97	-	-	-	-	-	-	-	98
2	95	-	95	-	90	95	-	-	96
3	93	90	-	93	-	93	93	94	-
4	-	-	-	-	-	-	91	-	-

**1.5 Gioco angolare****1.5 Backlash****1.4 Wirkungsgrad**

Nei riduttori a ingranaggi cilindrici e/o ipoidi il gioco angolare è indicativamente contenuto nell'intervallo di  $5' \div 30'$ .

On cylindrical or ipoid gearboxes, output shaft backlash is inside this range:  $5' \div 30'$ .

Bei den Stirnrad-, Kegelrad, und Winkelgetrieben liegt das Flankenspiel etwa im Bereich zwischen  $5'$  und  $30'$ .

## 1.6 Lubrificazione

La lubrificazione dei riduttori è consentita mediante un sistema misto bagno olio e sbattimento, che garantisce normalmente la lubrificazione di tutti i componenti interni al riduttore.

Per quelle posizioni di montaggio caratterizzate da assi di rotazione verticali, vengono adottate particolari soluzioni al fine di garantire una buona lubrificazione anche degli organi presenti nelle posizioni più sfavorevoli.

Gli oli disponibili appartengono generalmente a tre grandi famiglie:

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

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

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

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

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

## 1.6 Lubrication

*Gearboxes lubrication is provided through a combination of oil immersion and oil-splash patterns, which normally guarantees the lubrication of all internal components.*

*For some mounting positions, typically those featuring a vertical shaft, provisions are made to guarantee lubrication of even the least favourably located drive components.*

*Available oils are typically grouped into three major classes:*

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

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

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

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

*In addition to the oils mentioned above, there are food-grade oils. These are special oils harmless to human health for use in the food industry. Oils with similar characteristics are available from a number of manufacturers.*

## 1.6 Schmierung

Die Schmierung der Getriebe erfolgt über ein Mischverfahren mit Ölbad- und Ölspritzschmierung. Dadurch kann in der Regel die Schmierung aller internen Bestandteile des Getriebes gewährleistet werden. Bei Montagepositionen mit vertikalen Drehachsen werden spezielle Lösungen angewandt, um auch die Bestandteile in schwer erreichbaren Positionen ausreichend zu schmieren.

Die verfügbaren Öle gehören im Allgemeinen drei großen Familien an:

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

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

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

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

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



## 1.6 Lubrificazione

## 1.6 Lubrication

La Tab. è utile per la selezione dei lubrificanti per riduttori da utilizzare in base alla loro stabilità alle varie temperature.

The Table is useful for gearbox lubricant selection.

Tabelle ist bei der Wahl des Schmiermittels nützlich.

Produttore Manufacturer Hersteller	Oli Minerali Mineral oils Mineralöle			Oli Sintetici Polialfaolefine (PAO) Poly-Alpha-Olefin synthetic oils (PAO) Polyalphaolefine- Synthetiköle (PAO)			Oli Sintetici Poliglicoli (PG) Polyglycol synthetic oils (PG) Polyglykol-Synthetiköle (PG)			
	220	ISO VG 320	460	150	ISO VG 220	320	150	220	320	460
Temp. ambiente Amb. temp. Umgebungstemperatur Tc [°C]	-5° + 25°	0° + 35°	10° + 45°	-10° + 25°	-5° + 35°	0° + 50°	-10° + 25°	-5° + 35°	0° + 50°	10° + 60°
<b>AGIP</b>	Blasia 220	Blasia 320	Blasia 460	-	Blasia SX 220	Blasia SX 320	Blasia S 150	Blasia S 220	Blasia S 320	Blasia S 460
<b>ARAL</b>	Degol BG 220 Plus	Degol BG 320 Plus	Degol BG 460 Plus	Degol PAS 150	Degol PAS 220	Degol PAS 320	Degol GS 150	Degol GS 220	Degol GS 320	Degol GS 460
<b>BP</b>	Energol GR-XP 220	Energol GR-XP 320	Energol GR-XP 460	Enersyn EPX 150	Enersyn EPX 220	Enersyn EPX 320	Enersyn SG 150	Enersyn SG-XP 220	Enersyn SG-XP 320	Enersyn SG-XP 460
<b>CASTROL</b>	Alpha SP 220	AlphaSP 320	AlphaSP 460	Alphasyn EP 150	Alphasyn EP 220	Alphasyn EP 320	Alphasyn PG 150	Alphasyn PG 220	Alphasyn PG 320	Alphasyn PG 460
<b>CHEVRON</b>	Ultra Gear 220	Ultra Gear 320	Ultra Gear 460	Tegra Synthetic Gear 150	Tegra Synthetic Gear 220	Tegra Synthetic Gear 320	HiPerSYN 150	HiPerSYN 220	HiPerSYN 320	HiPerSYN 460
<b>ESSO</b>	Spartan EP 220	Spartan EP 320	Spartan EP 460	Spartan S EP 150	Spartan S EP 220	Spartan S EP 320	Glycolube 150	Glycolube 220	Glycolube 320	Glycolube 460
<b>KLÜBER</b>	Klüberoil GEM 1-220	Klüberoil GEM 1-320	Klüberoil GEM 1-460	Klübersynth EG 4-150	Klübersynth EG 4-220	Klübersynth EG 4-320	Klübersynth GH 6-150	Klübersynth GH 6-220	Klübersynth GH 6-320	Klübersynth GH 6-460
<b>MOBIL</b>	Mobilgear XMP 220	Mobilgear XMP 320	Mobilgear XMP 460	Mobilgear SHC XMP150	Mobilgear SHC XMP220	Mobilgear SHC XMP320	Glygoyle 22	Glygoyle 30	Glygoyle HE320	Glygoyle HE460
<b>MOLIKOTE</b>	L-0122	L-0132		L-1115	L-1122	L-1132	-	-	-	-
<b>OPTIMOL</b>	Optigear BM 220	Optigear BM 320	Optigear BM 460	Optigear Synthetic A 150	Optigear Synthetic A 220	Optigear Synthetic A 320	Optiflex A 150	Optiflex A 220	Optiflex A 320	Optiflex A 460
<b>Q8</b>	Goya 220	Goya 320	Goya 460	EI Greco 150	EI Greco 220	EI Greco 320	Gade 150	Gade 220	Gade 320	Gade 460
<b>SHELL</b>	OMALA S2 G 220	OMALA S2 G 320	OMALA S2 G 460	Omala S4 GX 150	Omala S4 GX 220	Omala S4 GX 320	OMALA S4 WE 150	OMALA S4 WE 220	OMALA S4 WE 320	OMALA S4 WE 460
<b>TEXACO</b>	Meropa 220	Meropa 320	Meropa 460	Pinnacle EP 150	Pinnacle EP 220	Pinnacle EP 320	-	Synlube CLP 220	Synlube CLP 320	Synlube CLP 460
<b>TOTAL</b>	Carter EP 220	Carter EP 320	Carter EP 460	Carter SH 150	Carter SH 220	Carter SH 320	Carter SY 150	Carter SY 220	Carter SY 320	Carter SY 460
<b>TRIBOL</b>	1100/220	1100/320	1100/460	1510/150	1510/220	1510/320	800/150	800/220	800/320	800/460

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

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



### 1.7 Limite termico

In determinate condizioni applicative è necessario verificare che la potenza assorbita dal riduttore non superi la potenza limite termico sotto descritta. Il rendimento di un riduttore è dato dal rapporto fra potenza resa in uscita e quella resa in ingresso. La quota mancante, convertita in calore, deve essere ceduta o scambiata all'esterno per non compromettere il riduttore dal punto di vista termico. Si deve verificare che la potenza applicata al riduttore sia minore o uguale alla potenza del limite termico  $P_{tN}$ . Non si deve tenere conto di  $P_{tN}$  se il funzionamento è con pause di durata sufficiente a ristabilire nel riduttore e/o rinvio angolare la temperatura ambiente.

In Tab. 1.5 sono riportati i valori  $P_{tN}$  della potenza massima applicabile ai riduttori in servizio continuo in aria libera a 30 °C.

I valori di  $P_{tN}$  devono essere corretti tramite i seguenti fattori:

### 1.5 Thermal capacity

*In specific applications check that the absorbed gearbox power does not exceed the below described limit thermal capacity. Gearbox efficiency is given by the relation between output and input power. The missing quota, converted or exchanged in heat, has to be lost externally in order to avoid excessive temperatures inside the gearbox. It is advisable to verify that power applied to the gearbox is less than or equal to thermal limit power  $P_{tN}$ .  $P_{tN}$  must not be taken into consideration if duty is followed by an interval sufficient to restore the ambient temperature inside the gearbox.*

*In Table 1.5 is indicated maximum power  $P_{tN}$  to be applied to gearboxes in continuous duty operating in an external ambient at 30°C.*

*$P_{tN}$  values must be corrected through the following factors:*

### 1.5 Thermische Belastbarkeit

Bei besonderen Anwendungen ist darauf zu achten, daß die Leistungsaufnahme der Getriebe eine thermische Grenze nicht überschreitet. Der Getriebe ergibt sich aus dem Verhältnis zwischen Ausgangsleistung und Eingangs-. Der Leistungsverlust entsteht durch die vorhandene Reibung im Getriebe, welche in Wärme umgewandelt wird. Diese so entstandene Wärme wird, um eine Überhitzung des Getriebes zu vermeiden, über das Gehäuse nach außen abgegeben. Ist zu prüfen, ob die für das Getriebe vorgeschriebene thermische Leistungsgrenze  $P_{tN}$  nicht überschritten wird. Der  $P_{tN}$ -Wert kann vernachlässigt werden, der kontinuierliche Betrieb mit ausreichend Pausen erfolgen, die ein Abkühlen des Getriebes auf normale Raumtemperatur ermöglichen.

In Tabelle 1.5 sind die  $P_{tN}$ -Werte der maximalen Leistung aller Getriebe für kontinuierlichen Betrieb bei freier Luftzufuhr und einer Raumtemperatur von 30°C angegeben.

Die  $P_{tN}$ -Werte müssen mit folgenden Faktoren korrigiert werden:

Potenza limite termico corretta / Corrected limit thermal capacity / Korrigierte thermische Leistungsgrenze												
P tc = $P_{tN} \times ft \times fa \times fu \times fl$												
<b>ft</b>	Fattore di temperatura ambiente <i>Ambient temperature factor</i> Raumtemperaturfaktor	ta	10°	15°	20°	25°	30°	35°	40°	45°	50°	ta: Temperatura ambiente <i>Ambient temperature</i> Raumtemperatur
		ft	1.30	1.23	1.15	1.08	1	0.92	0.84	0.76	0.68	
<b>fa</b>	Fattore di aerazione <i>Aeration factor</i> Belüftungsfaktor	1	Riduttore senza ventilazione forzata / <i>Non ventilated gearbox</i> / Nicht belüftetes Getriebe									
		1.4	Riduttore con ventilazione forzata / <i>Gearbox with forced ventilation</i> / Getriebe mit Belüftung									
<b>fu</b>	Fattore di utilizzo <i>Duty factor</i> Benutzungsfaktor	Dt	10	20	30	40	50	60	Dt: Minuti di funzionamento in un'ora <i>Minutes of operation in one hour</i> Einsatzdauer pro Std. (in Min.)			
		fu	1.7	1.4	1.25	1.15	1.08	1				
<b>fl</b>	Fattore di lubrificazione <i>Lubrication factor</i> Schmierfaktorfaktor	0.9	Olio minerale / <i>Mineral oil</i> / Mineralöl									
		1.0	Olio sintetico / <i>Synthetic oil</i> / Synthetisches Öl									

Tab. 1.5

$P_{tN}$ [kW]		$P_{tN}$ [kW]		$P_{tN}$ [kW]		$P_{tN}$ [kW]		$P_{tN}$ [kW]		$P_{tN}$ [kW]		$P_{tN}$ [kW]	
AR - AM - AC		OR - OM		SM		PR - PM		PLR - PLM		PT/1		PT/2	
32/1	3.0	63	2.8	25	1.6	63	5.6	25	4.0	80	15.0	80	7.5
40/1	5.5	71	4.0	35	1.9	71	7.5	45	6.5	100	22.0	100	11.0
50/1	6.5	80	9.5	45	2.5	90	10.5	65	8.0	125	36.0	125	18.0
60/1	9.0	90	6.2			112	16.5	85	11.0	132	50.0	132	25.0
80/1	14.0	100	14.5			125	21.0	95	16.0	140	54.0	140	27.0
100/1	21.0	112	9.5					105	22.0	150	60.0	150	30.0
25/2	3.0	125	20.0					115	26.0	170	74.0	170	37.0
35/2	4.5	132	23.0					125	33.0	190	100.0	190	50.0
41/2	4.5	140	32.0					135	40.0				
45/2	5.0	150	28.0										
50/2	6.3	160	51.0										
55/2	7.0	170	34.0										
60/2	9.6	180	65.0										
70/2	12.0	190	43.0										
80/2	15.0												
90/2	18.0												
100/2	23.0												
110/2	25.5												
120/2	33.0												
140/2	45.0												



**1.8 Scelta**

Per la scelta del motoriduttore, detta  $T_2'$  (Nm) la coppia nominale dell'utilizzatore, si calcola la potenza in ingresso al riduttore con la formula:

$$P' = (\text{kW}) = \frac{T_2' \times n_2}{9550 \times \text{RD}}$$

dove  $T_2'$  (Nm) rappresenta la coppia nominale richiesta dall'applicazione.

Noti  $P'$  e  $n_2$  scegliere, utilizzando le tabelle delle prestazioni dei motoriduttori, il motoriduttore per il quale  $P_1 \geq P'$ . Verificare che il fattore di servizio  $FS'$  del motoriduttore sia maggiore o uguale di quello dell'applicazione ( $FS$ ) altrimenti scegliere un motoriduttore della grandezza superiore possibilmente mantenendo invariata la  $P_1$ . Segue la verifica di carichi radiali, assiali e del limite termico (dove previsto).

Per la scelta del riduttore si parte dalla coppia  $T_2'$  richiesta dall'utilizzatore e dalla velocità richiesta in uscita  $n_2$  per un dato valore di  $n_1$  ( $\text{min}^{-1}$ ). Dalle tabelle delle prestazioni dei riduttori e/o dei rinvii angolari, si adotterà quel riduttore o rinvio angolare per il quale il prodotto  $T_2' \times FS$  sarà minore o uguale a  $T_{2M}$ , dove  $FS$  è il fattore di servizio dell'applicazione.

Segue la verifica di carichi radiali, assiali e del limite termico (dove previsto).

**Attenzione: si ricorda che i prodotti STM non sono dispositivi di sicurezza.**

**1.8 Selection**

*In order to make the appropriate selection of the gear motor, input power has to be calculated according to the following formula:*

*where  $T_2'$  (Nm) represents the nominal torque requested by the application.*

*Once  $P'$  and  $n_2$  are known, the gear motor must be selected referring the performance tables where  $P_1 \geq P'$ . It is also important to make sure that the service factor  $FS'$  of the gear motor is equal or higher than the one of the application ( $FS$ ) otherwise a bigger size of the gear motor has to be selected keeping  $P_1$  unchanged. Then the check of radial, axial loads and the thermal capacity (where applicable) follows.*

*In order to select the right gearbox, the torque  $T_2'$  required by the user and the output speed  $n_2$  for a certain value of  $n_1$  ( $\text{min}^{-1}$ ) must be taken into consideration. Given the above values, select the corresponding gearbox referring to the tables of the gearbox performance where  $T_2' \times FS$  is lower or equal to  $T_{2M}$  where  $FS$  is the application service factor.*

*Then check the axial and radial loads and the thermal capacity (where applicable).*

**Attention: STM products are not safety devices.**

**1.8 Wahl**

Bei der Wahl des Getriebemotors wird die erforderliche Leistung am Getriebeeingang mit folgender Formel berechnet:

wobei  $T_2'$  (Nm) das für die Anwendung erforderliche Nenndrehmoment ist.

Nachdem  $P'$  und  $n_2$  nun bekannt sind, wählt man (mit Hilfe der Leistungstabellen der Getriebemotoren) den Getriebemotor, bei dem  $P_1 \geq P'$  ist. Hierbei muß sichergestellt sein, daß der Betriebsfaktor  $FS'$  des Getriebemotors höher ist als der Anwendungsfaktor ( $FS$ ), da sonst ein größerer Getriebemotor gewählt werden muß, wobei  $P_1$  nach Möglichkeit gleich bleiben soll. Anschließend sind die Radial- und Axialbelastungen sowie die thermische Grenze (wenn notwendig) zu prüfen.

Bei der Wahl eines Getriebes geht man von folgenden Werten aus, die vom Anwender vorgegeben werden: Drehmoment  $T_2'$  und Abtriebsdrehzahl  $n_2$  für einen bestimmten Wert von  $n_1$  ( $\text{min}^{-1}$ ). Aus den Getriebe-Leistungstabellen wird dann das Getriebe ausgewählt, für das das Produkt  $T_2' \times FS$  kleiner oder gleich  $T_{2M}$  ist, wobei  $FS$  der Betriebsfaktor der Anwendung ist.

Danach sind die Radial- und Axialbelastungen sowie die thermische Grenze (wenn notwendig) zu prüfen.

**Achtung: STM-Produkte sind nicht für sicherheitstechnische Anwendungen konzipiert.**

**1.9 Prestazioni riduttori**

**1.9 Gearboxes performances**

**1.9 Leistungen der Getriebe**

Nelle tabelle delle prestazioni dei riduttori sono riportati i seguenti fattori:

- ir rapporto di riduzione
- n<sub>1</sub> velocità di rotazione dell'albero in entrata (min<sup>-1</sup>)
- n<sub>2</sub> velocità di rotazione in uscita (min<sup>-1</sup>)
- T<sub>2M</sub> coppia massima ottenibile con FS = 1 (Nm)
- RD% rendimento dinamico
- P potenza nominale in entrata (kW)
- IEC Motori accoppiabili

In the performance tables the following factors are listed:

- ir Reduction ratio
- n<sub>1</sub> Input speed (min<sup>-1</sup>)
- n<sub>2</sub> Output speed (min<sup>-1</sup>)
- T<sub>2M</sub> Maximum torque obtainable with FS = 1 (Nm)
- RD% Dynamic efficiency
- P Nominal input power (kW)
- IEC Motor options

In den Leistungstabellen sind folgende Faktoren angegeben:

- ir Untersetzungsverhältnis
- n<sub>1</sub> Drehzahl der Antriebswelle (min<sup>-1</sup>)
- n<sub>2</sub> Drehzahl der Abtriebswelle (min<sup>-1</sup>)
- T<sub>2M</sub> Maximales Drehmoment bei FS = 1 (Nm)
- RD% Dynamischer Wirkungsgrad
- P Nennleistungen (kW)
- IEC Kompatible Motoren

Esempio / Example / Beispiel

Tipo  
Type  
Typ

Peso  
Weight  
Mass

**AM 25/2**

1.4

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
3.4	819	12	1.10	95	409	12	0.55	95	263	13	0.38	95	146	16	0.26	95	56 (B5 - B14)
3.9	716	12.2	0.96	95	358	12.2	0.48	95	230	13	0.33	95	128	16	0.23	95	
4.8	579	12.2	0.78	95	289	12.2	0.39	95	186	13	0.27	95	103	16	0.18	95	63 (B5 - B14)
5.6	498	12.2	0.67	95	249	12.2	0.33	95	160	13	0.23	95	89	16	0.16	95	
7.2	389	12.2	0.52	95	194	12.2	0.26	95	125	13	0.18	95	69	16	0.12	95	

**1.10 Prestazioni motoriduttori**

**1.10 Performances of gear motors**

**1.10 Leistungen der Getriebemotoren**

Nelle Tabelle delle prestazioni dei motoriduttori sono riportati i seguenti fattori:

- ir rapporto di riduzione
- P<sub>1</sub> potenza del motore trifase (kW)
- T<sub>2</sub> coppia erogata dal motoriduttore ottenuta tenendo conto del rendimento RD (Nm)
- n<sub>1</sub> velocità di rotazione dell'albero in entrata (min<sup>-1</sup>)
- n<sub>2</sub> velocità di rotazione in uscita (min<sup>-1</sup>)
- FS' fattore di servizio del motoriduttore

In tables of gearmotors performances the following factors are listed:


- ir reduction ratio
- P<sub>1</sub> power of threephase motor (kW)
- T<sub>2</sub> output torque (Nm) of motorized gearbox taking the efficiency RD into consideration
- n<sub>1</sub> Input speed (min<sup>-1</sup>)
- n<sub>2</sub> output speed (min<sup>-1</sup>)
- FS' service factor of gearmotors

In den Leistungstabellen sind folgende Faktoren aufgeführt:

- ir Untersetzungsverhältnis
- P<sub>1</sub> Leistung des Drehstrommotors (kW)
- T<sub>2</sub> Drehmoment am Getriebeausgang, unter Berücksichtigung des Wirkungsgrades RD (Nm)
- n<sub>1</sub> Drehzahl der Antriebswelle (min<sup>-1</sup>)
- n<sub>2</sub> Drehzahl der Abtriebswelle (min<sup>-1</sup>)
- FS' Betriebsfaktor des Getriebemotors

Esempio motoriduttore / Example gearmotor / Beispiel Getriebemotors

Esempio motovariatore / Example motovariator / Beispiel verstellgetriebemotoren

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	AM AC	
-------------------------------------	----	----------------------	-----	----------	---

Tipo/Type/Typ

<b>0.09 kW</b>	n <sub>1</sub> = 2740 min <sup>-1</sup>	56A 2
	n <sub>1</sub> = 1360 min <sup>-1</sup>	56B 4
	n <sub>1</sub> = 860 min <sup>-1</sup>	63B 6

P<sub>1</sub>

806	3.4	1.0	11.8	<b>25/2</b>	56A 2
703	3.9	1.2	10.5	<b>25/2</b>	56A 2
571	4.8	1.4	8.5	<b>25/2</b>	56A 2

**1.11 Verifiche**

- 01** 1) Geometria - Dimensioni  
Compatibilità dimensionale con ingombri disponibili (es diametro del tamburo) e delle estremità d'albero con giunti, dischi o pulegge.
- 02** 2) Numero massimo giri in entrata  $n_{1 \max}$   
Rappresenta il valore massimo accettabile per ogni grandezza di riduttore vedere paragrafo 1.2.
- 03** 3) Carichi Radiali e assiali  
Per il calcolo dei carichi radiale ed assiali applicati al riduttore si rimanda al paragrafo specifico all'interno della Sezione di prodotto.
- 04** 4) Verifica Posizione di montaggio
- 05** 5) Lubrificazione  
Verificare che la quantità di olio sia conforme alla:  
- taglia ;  
- versione;

- 06** 6) Potenza termica del riduttore:  
Vedere paragrafo 1.5.

- 07** 7) Condizioni di impiego:  
7.1 -  $t_a > 0 \text{ }^\circ\text{C}$ : vedere i punti 1.4;  
7.2 -  $t_a < -10 \text{ }^\circ\text{C}$ : contattare il nostro servizio tecnico-commerciale.

I riduttori, variatori e rinvii angolari STM forniti completi di lubrificante e non, possono essere utilizzati, salvo diverse indicazioni, in ambienti con temperature comprese fra  $0 \text{ }^\circ\text{C}$  e  $+50 \text{ }^\circ\text{C}$ . Per condizioni ambientali diverse consultare il ns. servizio tecnico.

- 08** 8) Coppia di slittamento del calettatore

E' necessario che sia soddisfatta la seguente relazione:

$$T_{FU} > T_{2\max}$$

$T_{FU}$  - Coppia di slittamento calettatore

Il valore è indicato nelle schede tecniche di prodotto.

$T_{2\max}$  - Coppia Uscita Sovraccarico Applicazione

**1.11 Verification**

- 1) *Geometry - Dimensions*  
*Ensure that dimensions are compatible with space constraints (for instance, drum diameter) and shaft ends are compatible with any couplings, discs or pulleys to be used.*
- 2) *Input max rpm  $n_{1 \max}$*   
*It's the max acceptable value for each gearbox size look at 1.2.*
- 3) *Axial and overhung loads*  
*Please refer to the paragraph about radial and axial load calculation applied to the gearbox in the Product Section*
- 4) *Check mounting position*
- 5) *Lubrication*  
*Verify if the oil quantity is corresponding to:*  
-size  
-version

- 6) *Gearbox thermal power:*  
*Look at 1.5.*

- 7) *Using conditions:*  
7.1 -  $t_a > 0 \text{ }^\circ\text{C}$ : look at points 1.4;  
7.2 -  $t_a < -10 \text{ }^\circ\text{C}$ : contact our technical sales dept.

*STM gearboxes and variators, supplied oil filled or empty, can be used in rooms with a temperature from  $0 \text{ }^\circ\text{C}$  and  $+50 \text{ }^\circ\text{C}$ , if not otherwise indicated. In case of different ambient conditions, please contact our technical department.*

- 8) *Shrink disk slipping torque (FU output version).*

*The following formula must be satisfied:*

$T_{FU}$  - *Shrink disc slipping torque.*

*The value can be found on the product technical sheets.*

$T_{2\max}$  - *Application overloaded output torque*

**1.11 Überprüfungen**

- 1) Geometrie-Abmessungen  
Kompatibilität der Abmessungen mit verfügbaren Maßen (z.B. Trommeldurchmesser) und der Wellenenden mit den Kupplungen, Scheiben oder Riemenscheiben.
- 3) Maximale Antriebsdrehzahl in  $n_{1 \max}$   
Das ist der maximal zulässige Wert der Getriebegröße siehe Abschnitt 1.2.
- 3) Radiale und Axiale Belastung  
Bezüglich der Berechnung der radialen und axialen, am Getriebe applizierten Belastungskräfte verweisen wir auf den spezifischen Paragraph im Produktabschnitt.
- 4) Prüfen der Einbaulage
- 5) Schmierung  
Überprüfen sie Ölmenge in Verbindung mit  
- Getriebegröße  
- Type

- 6) Thermische Belastung des Getriebes  
Siehe Abschnitt 1.5.

- 7) Anwendungsbedingungen:  
7.1 -  $t_a > 0 \text{ }^\circ\text{C}$ : siehe Punkt 1.4;  
7.2 -  $t_a < -10 \text{ }^\circ\text{C}$ : bitte kontaktieren sie unsere technische Verkaufsabteilung.

STM getriebe, Verstellgetriebe und Kegelgetriebe, mit oder ohne Schmiermittelführung geliefert, sind geeignet für benützung - wenn nicht anders angegeben mit Umgebungstemperatur zwischen  $0 \text{ }^\circ\text{C}$  und  $+50 \text{ }^\circ\text{C}$ . Bei anderen Raumtemperaturen wenden Sie sich bitte an unseren technischen Kundendienst.

- 8) Schrumpfscheiben-Schlupfmoment (FU-Abtriebs-Version)

Folgende Bedingung muss erfüllt sein:

$T_{FU}$  - Schrumpfscheiben-Schlupfmoment  
Diesen Wert finden sie in den technischen Produkt-Datenblättern.

$T_{2\max}$  - Maximalmoment bei Überlast

## 1.11 Verifiche

## 1.11 Verification

## 1.11 Überprüfungen

		<b>O</b>		<b>63</b>	<b>71</b>	<b>80</b>	<b>90</b>	<b>100</b>	<b>112</b>	<b>125</b>
	Coppia serraggio / Tightening torque / Anzugsmoment <b>Ms</b> [Nm]	DIN 931 <b>10.9</b>		12	12	12	12	12	12	12
		DIN 931 <b>12.9</b>		-	-	-	-	-	-	-
	Viti di serraggio <i>Retaining screws</i> Anzugsschrauben	N° x M	5 x M6	7 x M6	7 x M6	8 x M6	8 x M6	10xM6	10xM6	
Coppia Slittamento Slipping torques Rutsch- momente <b>T<sub>FU</sub></b> [Nm]				570	780	780	1160	1520	2200	2500

		<b>O</b>		<b>132</b>		<b>140</b>	<b>150</b>		<b>160</b> <b>170</b>	<b>180</b> <b>190</b>
	Coppia serraggio / Tightening torque / Anzugsmoment <b>Ms</b> [Nm]	DIN 931 <b>10.9</b>		-	-	-	-	-	-	-
		DIN 931 <b>12.9</b>		35	35	35	35	35	71	71
	Viti di serraggio <i>Retaining screws</i> Anzugsschrauben	N° x M	7x M8	10x M8	10x M8	10x M8	12x M8	12x M8	12x M10	12x M10
Coppia Slittamento Slipping torques Rutsch- momente <b>T<sub>FU</sub></b> [Nm]				ø 60 4600	ø 70 8300	8300	ø 70 8300	ø 80 12000	20200	23000

		<b>S</b>		<b>25</b>		<b>35</b>		<b>45</b>	
	Coppia serraggio / Tightening torque / Anzugsmoment <b>Ms</b> [Nm]	DIN 931 <b>10.9</b>		4	4	4	4	12	12
		DIN 931 <b>12.9</b>		-	-	-	-	-	-
	Viti di serraggio <i>Retaining screws</i> Anzugsschrauben	N° x M	6 x M5	7 x M5	7 x M5	7 x M5	7 x M6	7 x M6	
Coppia Slittamento Slipping torques Rutsch- momente <b>T<sub>FU</sub></b> [Nm]				170	170	340	340	780	780

		<b>P</b>		<b>63</b>	<b>71</b>	<b>90</b>	<b>112</b>	<b>125</b>
	Coppia serraggio / Tightening torque / Anzugsmoment <b>Ms</b> [Nm]	DIN 931 <b>10.9</b>		12	12	12	12	12
		DIN 931 <b>12.9</b>		-	-	-	-	-
	Viti di serraggio <i>Retaining screws</i> Anzugsschrauben	N° x M	5 x M6	7 x M6	8 x M6	10xM6	10 x M6	
Coppia Slittamento Slipping torques Rutsch- momente <b>T<sub>FU</sub></b> [Nm]				570	780	1160	2200	2500

		<b>PL</b>		<b>25</b>	<b>45</b>	<b>65</b>	<b>85</b>	<b>95</b>
	Coppia serraggio / Tightening torque / Anzugsmoment <b>Ms</b> [Nm]	DIN 931 <b>10.9</b>		4	12	12	12	12
		DIN 931 <b>12.9</b>		-	-	-	-	-
	Viti di serraggio <i>Retaining screws</i> Anzugsschrauben	N° x M	6 x M5	5 x M6	7 x M6	8 x M6	10 x M6	
Coppia Slittamento Slipping torques Rutsch- momente <b>T<sub>FU</sub></b> [Nm]				210	570	780	1520	2500

		<b>PL</b>		<b>105</b>		<b>115</b>		<b>125</b>	<b>135</b>
	Coppia serraggio / Tightening torque / Anzugsmoment <b>Ms</b> [Nm]	DIN 931 <b>10.9</b>		-	-	-	-	-	-
		DIN 931 <b>12.9</b>		35	35	35	35	71	71
	Viti di serraggio <i>Retaining screws</i> Anzugsschrauben	N° x M	7 x M8	10 x M8	10 x M8	12 x M8	12 x M10	12 x M10	
Coppia Slittamento Slipping torques Rutsch- momente <b>T<sub>FU</sub></b> [Nm]				ø 60 4600	ø 70 8300	ø 70 8300	ø 80 12000	20200	23000

		<b>PT</b>		<b>80</b>		<b>100</b>		<b>125</b>	
	Coppia serraggio / Tightening torque / Anzugsmoment <b>Ms</b> [Nm]	DIN 931 <b>10.9</b>		12	12	12	12	12	12
		DIN 931 <b>12.9</b>		-	-	-	-	-	-
	Viti di serraggio <i>Retaining screws</i> Anzugsschrauben	N° x M	7 x M6	8 x M6	8 x M6	8 x M6	10xM6	10xM6	
Coppia Slittamento Slipping torques Rutsch- momente <b>T<sub>FU</sub></b> [Nm]				780	780	1520	1520	2500	

		<b>PT</b>		<b>132</b>		<b>140</b>	<b>150</b>		<b>170</b>	<b>190</b>
	Coppia serraggio / Tightening torque / Anzugsmoment <b>Ms</b> [Nm]	DIN 931 <b>10.9</b>		-	-	-	-	-	-	-
		DIN 931 <b>12.9</b>		35	35	35	35	35	71	71
	Viti di serraggio <i>Retaining screws</i> Anzugsschrauben	N° x M	7 x M8	10 x M8	10x M8	10 x M8	12 x M8	12 x M10	12 x M10	
Coppia Slittamento Slipping torques Rutsch- momente <b>T<sub>FU</sub></b> [Nm]				ø 60 4600	ø 70 8300	8300	ø 70 8300	ø 80 12000	20200	23000



1.11 Verifiche

1.11 Verification

1.11 Überprüfungen

09 9) Coppie antiretro

9) Back-stop device torque

9) Rücklauf-Drehmomente

Table with 2 columns: PT/1, T1a. Values: 80/75, 100/201, 125/378, 140/550.

Table with 2 columns: PT/2, T1a. Values: 80/48, 100/75, 125/201, 140/378, 132/463, 150/1079, 170/\*, 190/\*.

Table with 3 columns: P, IR, T1a. Values: 63/10, 71/Tutti/10, 90/33, 112/80.

Table with 3 columns: O, IR, T1a. Values: 63/10, 71/Tutti/10, 90/33, 112/80.

Table with 3 columns: O, IR, T1a. Values for 80: 5.2/26.1, 7.1/26.1, 10.0/26.1, 11.9/26.1, 14.6/26.1, 16.7/26.1, 21.2/18.0, 24.2/18.0, 31.0/18.0, 39.8/10.9, 51.0/10.9, 57.0/7.6, 73.2/7.6.

Table with 3 columns: O, IR, T1a. Values for 100: 5.2/70.0, 7.4/70.0, 10.0/70.0, 12.2/70.0, 14.6/70.0, 17.0/70.0, 21.2/48.3, 24.6/48.3, 31.0/48.3, 40.5/29.4, 51.0/29.4, 58.0/20.5, 73.2/20.5.

Table with 3 columns: O, IR, T1a. Values for 125: 5.2/131.5, 7.4/131.5, 10.2/131.5, 12.2/131.5, 14.6/131.5, 17.0/131.5, 21.2/90.7, 24.6/90.7, 31.9/90.7, 40.5/55.1, 52.6/55.1, 58.0/38.4, 75.4/38.4.

\* Richiedere ad Ufficio Tecnico Request to our Technical Dept. Bei der Technischen Abteilung anfordern

Table with 3 columns: O, IR, T1a. Values for 132: 16.0/161.0, 17.9/161.0, 20.3/161.0, 21.7/161.0, 24.3/161.0, 27.5/161.0, 31.2/161.0, 36.3/161.0, 41.7/161.0, 44.9/161.0, 52.6/161.0, 57.3/161.0, 65.1/111.1, 76.3/111.1, 83.0/111.1, 90.8/111.1, 99.4/111.1, 109.4/111.1, 125.5/67.5, 136.7/67.5, 149.5/67.5, 164.6/67.5, 180.0/67.5.

Table with 3 columns: O, IR, T1a. Values for 140: 5.2/217.8, 7.6/217.8, 10.3/217.8, 12.3/217.8, 14.9/217.8, 20.2/132.2, 24.6/132.2, 33.4/80.0, 40.7/80.0, 51.3/80.0, 57.4/56.7, 72.3/56.7.

Table with 3 columns: O, IR, T1a. Values for 150: 15.7/375.3, 18.6/375.3, 21.6/375.3, 22.9/375.3, 25.9/375.3, 30.3/375.3, 34.5/375.3, 36.9/375.3, 42.6/375.3, 46.0/375.3, 54.3/375.3, 59.4/375.3, 66.7/258.9, 78.7/258.9, 86.0/258.9, 94.6/258.9, 101.7/157.3, 109.8/157.3, 129.5/157.3, 141.6/157.3, 155.7/157.3, 185.5/157.3, 204.2/157.3.

Table with 3 columns: O, IR, T1a. Values for 160: 5.2/803.1, 7.6/803.1, 10.3/803.1, 11.2/803.1, 12.3/656.0, 13.5/656.0, 16.9/487.5, 18.5/487.5, 20.2/398.2, 22.2/398.2, 24.6/398.2, 28.0/240.9, 30.5/240.9, 33.4/240.9, 36.7/240.9, 40.7/240.9.

Table with 3 columns: O, IR, T1a. Values for 170: 15.5/426.5, 17.5/426.5, 18.6/426.5, 23.7/426.5, 25.2/426.5, 28.8/426.5, 30.9/426.5, 35.7/426.5, 41.8/426.5, 45.6/426.5, 49.8/426.5, 54.3/426.5, 64.0/258.9, 68.9/258.9, 75.0/258.9, 81.7/258.9, 89.4/258.9, 98.4/258.9, 113.9/156.6, 124.1/156.6, 135.8/156.6, 149.4/156.6, 162.7/156.6, 178.1/156.6, 196.0/156.6.

Table with 3 columns: O, IR, T1a. Values for 180: 5.2/1527, 7.6/1527, 10.3/1247, 11.2/1247, 12.3/1247, 13.5/779.6, 16.9/757.2, 18.5/757.2, 20.2/757.2, 22.2/473.3, 24.6/473.3, 30.5/286.3, 33.4/286.3, 36.7/286.3, 40.7/286.3.

Table with 3 columns: O, IR, T1a. Values for 190: 15.5/481.8, 17.5/481.8, 18.6/481.8, 23.7/481.8, 25.2/481.8, 28.8/481.8, 30.9/481.8, 35.7/481.8, 41.8/481.8, 45.6/481.8, 49.8/481.8, 54.3/481.8, 64.0/292.5, 68.9/292.5, 75.0/292.5, 81.7/292.5, 89.4/292.5, 97.9/292.5, 113.9/176.9, 124.1/176.9, 135.8/176.9, 147.8/176.9, 162.7/176.9, 178.1/176.9, 196.0/176.9.

T1a = Coppia limite in ingresso del dispositivo antiretro - [Nm].

T1a = income limit torque for back-stop device - [Nm].

T1a = Grenzantriebsmoment der Rücklaufsperr - [Nm].

E' necessario che sia soddisfatta la seguente relazione:

The following ratio must be met:

Folgendes Verhältnis muss gegeben sein

T1a > (T2r \* 100) / (RD \* ir)

T2r = Coppia uscita moto retrogado; RD= Rendimento dinamico riduttore; ir=rapporto riduzione

T2r = output torque retrogade motion; RD= gearbox dinamic performance; ir= reduction ratio

T2r = Rückläufiges Abtriebsdrehmoment RD= Dynamischer Getriebewirkungsgrad ir= Untersetzungsverhältnis

10) Verifica peso motore elettrico: Qualora il peso del motore elettrico installato sia maggiore dei valori riportati in tabella è necessario contattare il nostro servizio tecnico per verificare se l'installazione è idonea, considerando il peso del motore installato e il fattore di servizio dell'applicazione.

10) Verify of the electric motor weight: If the input weight electric motor is bigger than value in table, it will be necessary to contact our technical sales department to check the electric motor weight and the service factor of the installation.

10)Überprüfung des Elektromotorgewichtes: Wenn der Gewicht von elektrische Antriebsmotor größer als die Werte in der Tabelle ist also, kontaktieren sie bitte unsere technische Verkaufsabteilung wegen Überprüfung von Gewicht und Servicefaktor.

Table with 17 columns: IEC, PKG - max, 50, 56, 63, 71, 80, 90, 100, 112, 132, 160, 180, 200, 225, 250, 280, 315. Values: 3.9, 5, 8, 11, 15.6, 24, 33, 47, 83, 150, 214, 263, 344, 450, 682, 1162.

### 1.11 Verifiche

#### 11) Massimo sovraccarico

Nel caso di avviamenti  $T_{2max}$  può essere considerata come quella parte della coppia accelerante ( $T_{2acc}$ ) che passa attraverso l'asse lento del riduttore:

Avviamento

### 1.11 Verification

#### 11) Determine maximum overload

For starting,  $T_{2max}$  may be considered as that portion of acceleration ( $T_{2acc}$ ) passing through the gear unit output (low speed) shaft:

Starting

### 1.11 Überprüfungen

#### 11) Maximale Überlast

Bei Anläufen kann  $T_{2max}$  als der Teil des Beschleunigungsmoments ( $T_{2acc}$ ), der durch die Abtriebsachse des Getriebes läuft, angesehen werden:

Anlauf

$$T_{2max} = T_{2acc} = \left( (0.45 \cdot (T_{1s} + T_{1max}) \cdot ir \cdot \eta) - T_{2n} \right) \cdot \left( \frac{J}{J + J_0 \cdot \eta} \right) + T_{2n} \quad [\text{Nm}]$$

dove:

J: momento d'inerzia della macchina e del riduttore ridotto all'asse motore ( $\text{kgm}^2$ )  
 $J_0$ : momento d'inerzia delle masse rotanti sull'asse motore ( $\text{kgm}^2$ )  
 $T_{1s}$ : coppia motrice di spunto (Nm)  
 $T_{1max}$ : coppia motrice max (Nm)

Where:

J: machine and gear unit inertial load reflected to motor shaft ( $\text{kgm}^2$ )  
 $J_0$ : inertial load of rotating parts at motor shaft ( $\text{kgm}^2$ )  
 $T_{1s}$ : starting torque (Nm)  
 $T_{1max}$ : max drive torque (Nm)

Hier ist:

J: An der Motorachse reduziertes Trägheitsmoment der Maschine und des Getriebes ( $\text{kgm}^2$ )  
 $J_0$ : Trägheitsmoment der an der Motorachse drehenden Massen ( $\text{kgm}^2$ )  
 $T_{1s}$ : Anlaufantriebsdrehmoment (Nm)  
 $T_{1max}$ : Max. Antriebsmoment (Nm)

E' necessario che sia soddisfatta la seguente relazione:

The following formula must be satisfied:

Folgende Bedingung muss erfüllt sein:

$$T_{2max} < 2 \times T_{2M}$$

#### 12) Coppia frenatura-Motore Autofrenante

Nel caso di frenature  $T_{2max}$  può essere considerata come quella parte della coppia decelerante ( $T_{2dec}$ ) che passa attraverso l'asse lento del riduttore:

#### 12) Braking torque - Brake motor

For braking  $T_{2max}$  may be considered as that portion of deceleration torque ( $T_{2dec}$ ) passing through the gear unit output (low speed) shaft:

#### 12) Bremsmoment – Bremsmotor

Bei Bremsungen kann  $T_{2max}$  als der Teil des Beschleunigungsmoments Abbremsmoment ( $T_{2dec}$ ), der durch die Abtriebsachse des Getriebes läuft, angesehen werden:

$$T_{2max} = T_{2dec} = \left( \left( \frac{T_{1f} \cdot ir}{\eta} \right) - T_{2n} \right) \cdot \left( \frac{J}{J + \frac{J_0}{\eta}} \right) + T_{2n} \quad [\text{Nm}]$$

dove:

J: momento d'inerzia della macchina e del riduttore ridotto all'asse motore ( $\text{kgm}^2$ )  
 $J_0$ : momento d'inerzia delle masse rotanti sull'asse motore ( $\text{kgm}^2$ )  
 $T_{1f}$ : coppia frenante dinamica (Nm)

Where:

J: machine and gear unit inertial load reflected to motor shaft ( $\text{kgm}^2$ )  
 $J_0$ : inertial load of rotating parts at motor shaft ( $\text{kgm}^2$ )  
 $T_{1f}$ : dynamic braking torque (Nm)

Hier ist:

J: An der Motorachse reduziertes Trägheitsmoment der Maschine und des Getriebes ( $\text{kgm}^2$ )  
 $J_0$ : Trägheitsmoment der an der Motorachse drehenden Massen ( $\text{kgm}^2$ )  
 $T_{1f}$ : dynamisches Bremsmoment (Nm)

Prima della messa in servizio del riduttore è necessario verificare la seguente relazione:

Before using the gearbox, it's necessary to verify the following formula:

Vor Verwendung des Motors ist nach unten stehender Formel sicherzustellen:

$$T_{2max} < 2 \times T_{2M}$$

Qualora la condizione non sia rispettata è necessario provvedere alla regolazione della coppia di frenatura.

If the condition is not respected, it will be necessary to adjust the braking torque.

Wenn diese Bedingung nicht erreicht wird, ist es notwendig das Bremsmoment entsprechend einzustellen.

$T_{2M}$  = Momento torcente nominale riduttore

$T_{2M}$  = Output nominal torque

$T_{2M}$  = Drehmoment Getriebe

**1.12 Stato di fornitura****1.12.0 VERNICIATURA E PROTEZIONE**

I riduttori sono verniciati esternamente con fondo epossidico e smalto sintetico blu RAL 5010, salvo disposizioni contrattuali diverse.

La protezione è idonea a resistere a normali ambienti industriali anche esterni, e a consentire finiture ulteriori con vernici sintetiche.

Per maggiori informazioni relative allo stato di fornitura vedere la tabella seguente

**Caratteristiche della Vernice**

Le caratteristiche della vernice utilizzata sono le seguenti: polvere termoidurente a base di resine poliesteri, modificate con resine epossidiche.

A richiesta è possibile fornire:

- 1-Ciclo di verniciatura;
- 2-Le caratteristiche di spessore, durezza, resistenza alla corrosione;
- 3-Scheda tecnica della Polvere utilizzata.

Nel caso si prevedano condizioni ambientali particolarmente aggressive occorre adottare verniciature speciali **TYP0-TYP1-TYP2-TYP3-TYP4**.

**ATTENZIONE**

In caso di verniciatura dei prodotti, si devono preservare da tale trattamento i piani lavorati e le tenute, al fine di evitare che la vernice ne alteri le caratteristiche chimico-fisiche e pregiudichi l'efficienza dei paraolio. Occorre analogamente preservare la targa di identificazione, e proteggere contro l'occlusione il tappo di livello dell'olio e il foro del tappo di sfiato (ove esistenti).

**1.12 Scope of the supply****1.12.0 PAINTING AND PROTECTION**

*The gear units are externally painted with an epoxy primer and RAL 5010 blue epoxy enamel, unless different contractual instructions are given.*

*The protection is suitable to stand normal industrial environments, also outdoors, and allows additional synthetic paint finishes.*

*For further details about the supply conditions, please refer to the following table*

**Paint features**

*The features of the paint used are the following: thermosetting powder-coating based on polyester resins, modified with epoxy resins.*

*On request, we can supply:*

- 1-Painting cycle specs;*
- 2-Specifications for thickness, hardness, resistance to corrosion;*
- 3-Technical data sheet of the Powder coating used.*

*In case particularly aggressive environment conditions are expected, special paints will be needed **TYP0-TYP1-TYP2-TYP3-TYP4**.*

**ATTENTION**

*If the product must be painted, protect the machined surfaces and oil seals/gaskets in order to prevent any damage.*

*It is also necessary to protect the identification plate, the oil level plug (if fitted) and the hole in the breather plug (if fitted) against obstruction.*

**1.12 Lieferzustand****1.12.0 LACKIERUNG UND SCHUTZ**

Abgesehen von anderweitig lautenden vertraglichen Vereinbarungen werden die Getriebe extern mit einer Epoxyd-Grundierung und einem blauen Synthetik-Emailack RAL 5010 lackiert.

Dieser Schutz ist für einen Einsatz in normalen industriellen, auch im Freien liegenden Umfeldern geeignet und erlaubt Überlackierungen mit Synthetiklack.

Weitere Informationen zum Lieferzustand können der folgenden Tabelle entnommen werden.

**Eigenschaften der Lackierung**

Der verwendete Lack weist folgende Eigenschaften auf: wärmehärtender Pulverlack auf Polyesterharzbasis mit Epoxidharzen modifiziert.

Auf Anfrage erhältlich:

- 1-Lackierungszyklus;
- 2-Stärke, Härte, Korrosionsfestigkeit;
- 3-Technisches Datenblatt des verwendeten Pulverlacks.

Sollten besonders aggressive Umgebungsbedingungen vorliegen, müssen Spezialackierungen verwendet werden **TYP0-TYP1-TYP2-TYP3-TYP4**.

**ACHTUNG**

Sollten die Produkte lackiert werden, muss darauf geachtet werden, dass die bearbeiteten und Dichtflächen dabei geschützt werden, so dass verhindert werden kann, dass die Lackierung die chemisch-physischen Eigenschaften verändert und die Wirkung der Ölabdichtungen einschränkt. In der gleichen Weise und aus gleichem Grund müssen das Typenschild und die Öleinfüllschraube sowie die Bohrung der Entlüftungsschraube (wo vorhanden) geschützt werden.

OPT2 Opzioni - Verniciatura Options - Painting and surface protection Optionen - Lackierung und Oberflächenschutz						
Serie Series Baureihe	Grandezza Size Baugröße	Verniciatura Interna Inner painting Innenlackierung	Verniciatura Esterna Outer painting Außenlackierung		Piani lavorati Machined surfaces Bearbeitete Flächen	Alberi Shafts Wellen
			Tipo e Caratteristiche vernice Paint type and features Lacktyp und -eigenschaften	Verniciabile Can be painted Kann lackiert werden		
<b>TypSTM</b>						
<b>A/1</b>	32-40-50-60-80-100	Uguale a verniciatura esterna Same as outer painting Wie Außenlackierung	Verniciatura a Polvere RAL 5010 Powder coating RAL 5010 Pulverlackierung RAL 5010	Sì Dopo Sgrassatura e Carteggiatura e/o applicazione di un PRIMER	Quando il materiale è la ghisa sono protetti con olio antiruggine.  When material is cast iron, they are protected with rustproof oil.  Falls aus Gusseisen mit Rostschutzöl geschützt.	.Protetti con olio antiruggine.  Protected with rustproof oil.  Mit Rostschutzöl geschützt
<b>A</b>	50-55-60-70-80-90-100-110-120-140					
<b>O</b>	63-71-80-90-100-112-125-132-140-150-160-170-180-190					
<b>S</b>	35-45					
<b>P</b>	63-71-90-112-125					
<b>PL</b>	85-95-105-115-125-135			Ja Nach Fettentfernung und Abschleif und/oder Auftrag eines PRIMER		
<b>PT</b>	80-100-125-132-140-150-170-190					
<b>Without Paint</b>						
<b>A</b>	25-35-41-45	Nessuna None Keine	Nessuna None Keine	Sì Prodotti monocomponente e bicomponente	Nessuna / None / Keine	Protetti con olio antiruggine.  Protected with rustproof oil.  Mit Rostschutzöl geschützt
<b>S</b>	25					
<b>PL</b>	25-45-65			Yes Monocomponent and bicomponent products		
				Ja Ein- und Zweikomponenten-Produkte		

**1.12 Stato di fornitura**

**1.12 Scope of the supply**

**1.12 Lieferzustand**

**1.12.1 MATERIALI COSTRUTTIVI**

**1.12.1 MATERIAL**

**1.12.1 KOSTRUKTIONSMATERIAL**

**1.12.1.1 Casse - Flange - Coperchi**

**1.12.1.1 Housings - Flanges - Covers**

**1.12.1.1 Gehäuse - Flanschen – Deckel**

Serie Series Baureihe	Casse/-Housings/Gehäuse		Flange - Coperchi/Flanges - Covers/Flanschen – Deckel	
	Alluminio/Aluminium/Aluminium	Ghisa/Grey/Guss	Alluminio/Aluminium/Aluminium	Ghisa/Grey/Guss
<b>A / 1</b>	32 - 40 - 50	60 - 80 - 100	32 - 40 - 50	60 - 80 - 100
<b>A</b>	25 - 35 - 41 - 45	50 -55-60-70-80 90-100-110-120-140	25 - 35 - 41 - 45	50 -55-60-70-80 90-100-110-120-140
<b>O</b>	63 - 71	80 - 90 - 100 - 112 - 125 - 132 -140-150-160-170-180-190	63 - 71	80 - 90 - 100 - 112 - 125 - 132 -140-150-160-170-180-190
<b>S</b>	25 - 35 - 45	—	25 - 35 - 45	—
<b>P</b>	63 - 71	90 - 112-125	63 - 71	90 - 112 - 125
<b>PL</b>	25 - 45 - 65	85-95-105-115-125-135	25 - 45 - 65	85-95-105-115-125-135
<b>PT</b>	—	80-100-125-132-140 150-170-190	—	80-100-125-132-140 150-170-190

**1.12.1.2 Materiale degli anelli di tenuta**

**1.12.1.2 Materials of Seals**

**1.12.1.2 Dichtungstoffe**

Serie Series Baureihe	OPT Opzioni - Materiale degli anelli di tenuta Options - Materials of Seals Optionen - Dichtungstoffe	
	(Tenute STANDARD Oil Seals Standard Ölabdichtungen Standard)	Opzioni - Disponibile Options Available Optionen - verfügbar
<b>A / 1</b>	—	....
<b>A</b>	<b>(VT1 - NBR2)</b>	<b>VT2 SL1 SL2 SL</b>
<b>O</b>		
<b>S</b>		
<b>P</b>		
<b>PL</b>		
<b>PT</b>		

A richiesta  
On request  
Auf Anfrage

<b>NBR1</b>	Paraoli in NBR in entrata	NBR oil seals at input end	Ölabdichtungen aus NBR im Antrieb
<b>NBR2</b>	Paraoli in NBR in uscita	NBR oil seals at output end	Ölabdichtungen aus NBR im Abtrieb
<b>NBR</b>	Paraoli in NBR in entrata ed in uscita	NBR oil seals at input and output end	Ölabdichtungen aus NBR im An- und Abtrieb
<b>VT1</b>	Paraoli in viton in entrata	Viton oil seals at input end	Ölabdichtungen aus Viton im Antrieb
<b>VT2</b>	Paraoli in viton in uscita	Viton oil seals at output end	Ölabdichtungen aus Viton im Abtrieb
<b>VT</b>	Paraoli in viton in entrata ed in uscita	Viton oil seals at input and output end	Ölabdichtungen aus Viton im An- und Abtrieb
<b>SL1</b>	Paraoli in silicone in entrata	Input Silicon oil seals	Eingehender Silikon-Dichtungsring
<b>SL2</b>	Paraoli in silicone in uscita	Output Silicon oil seals	Ausgehender Silikon-Dichtungsring
<b>SL</b>	Paraoli in silicone in entrata ed in uscita	Input and output oil seals	Ein-und ausgehende Silikon-Dichtungsringe





1.12 Stato di fornitura

1.12 Scope of the supply

1.12 Lieferzustand

1.12.2 Lubrificazione

1.12.2 Lubrication

1.12.2 Schmierung

OPT1 - Opzioni - Stato fornitura olio Options - Scope of the supply - Options - OIL Optionen - Lieferzustand - Optionen - Öl		
AR AM		Sigla ordine Designation order Bezeichnung Bestellung
	32	INOIL_STD
	40	
	50	
	60	
	80	OUTOIL
	100	

OPT1 - Opzioni - Stato fornitura olio Options - Scope of the supply - Options - OIL Optionen - Lieferzustand - Optionen - Öl		
PR PM		Sigla ordine Designation order Bezeichnung Bestellung
	63	INOIL_STD
	71	
	90	OUTOIL
	112	
	125	

OPT1 - Opzioni - Stato fornitura olio Options - Scope of the supply - Options - OIL Optionen - Lieferzustand - Optionen - Öl		
AR AM		Sigla ordine Designation order Bezeichnung Bestellung
	25	INOIL_STD
	35	
	41	
	45	
	50	
	55	OUTOIL
	60	
	70	
	80	
	90	
	100	
	110	
	120	
140		

OPT1 - Opzioni - Stato fornitura olio Options - Scope of the supply - Options - OIL Optionen - Lieferzustand - Optionen - Öl		
PLR PLM		Sigla ordine Designation order Bezeichnung Bestellung
	25	INOIL_STD
	45	
	65	
	85	OUTOIL
	95	
	105	
	115	
	125	
	135	

OPT1 - Opzioni - Stato fornitura olio Options - Scope of the supply - Options - OIL Optionen - Lieferzustand - Optionen - Öl		
OR OM		Sigla ordine Designation order Bezeichnung Bestellung
	63	INOIL_STD
	71	
	80	OUTOIL
	90	
	100	
	112	
	125	
	132	
	140	
	150	
	160	
	170	
180		
190		

OPT1 - Opzioni - Stato fornitura olio Options - Scope of the supply - Options - OIL Optionen - Lieferzustand - Optionen - Öl		
PT		Sigla ordine Designation order Bezeichnung Bestellung
	80	OUTOIL
	100	
	125	
	132	
	140	
	150	
	170	
	190	

OPT1 - Opzioni - Stato fornitura olio Options - Scope of the supply - Options - OIL Optionen - Lieferzustand - Optionen - Öl		
SM		Sigla ordine Designation order Bezeichnung Bestellung
	25	INOIL_STD
	35	
45		

**1.12 Stato di fornitura**

**1.12 Scope of the supply**

**1.12 Lieferzustand**

**1.12.2 Lubrificazione**

**1.12.2 Lubrication**

**1.12.2 Schmierung**

**ATTENZIONE:**

Lo stato di fornitura è messo in evidenza con una targhetta adesiva posta sul riduttore.

Verificare la corrispondenza tra stato di fornitura e targhetta adesiva.

**CAUTION:**

*Gearbox state of supply is indicated on a nameplate applied on gearbox.*

*Ensure that nameplate data and state of supply correspond.*

**ACHTUNG:**

Der entsprechende Lieferzustand wird auf einem Aufkleber am Getriebe angegeben. Überprüfen Sie die Übereinstimmung zwischen effektivem Lieferzustand und Auf-

OPT1 - Opzioni - Stato fornitura olio- Options - Scope of the supply - Options - OIL Optionen - Lieferzustand - Optionen - Öl				
Stato fornitura Scope of the supply Lieferzustand	Riduttore - Lubrificazione Gearbox - Lubrication Getriebe - Schmierung	Tipo Type Typ	NOTE Note Hinweis	Targhetta Nameplate Aufkleber
<b>OUTOIL</b>  Riduttore Privo di Lubrificante <i>Gearbox with no lubricant</i> Getriebe ohne Schmiermittel	Si consiglia l'uso di oli a base sintetica. Vedere a tale proposito le indicazioni riportate paragrafo 1.2 e 1.6.  The use of synthetic oil is recommended. see details in paragraph 1.2 and 1.6.  Der Einsatz von synthetischem Öl wird empfohlen. Siehe diesbezüglich die Hinweise im Abschnitt 1.2 und 1.6.		Se richiesti completi di lubrificante, verranno forniti con olio standard - "INOIL_STD"  If customer requests supply of gearbox with lubricant, we shall supply - "INOIL_STD"  Falls diese Getriebe mit Schmiermittelfüllung angefordert werden - "INOIL_STD"	
<b>INOIL_STD</b>  Riduttore Completo di Lubrificante Standard STM <i>Gearbox with lubricant STM standard</i> Getriebe mit Standard Schmiermittel STM	AR-OR-PR-PLR-PT <b>OMALA S4 WE 320</b>	OilGear_TYPE CLP PG Synthetic PG	—	
	SM <b>OPTIGEAR SYNTHETIC X 320</b>	OilGear_TYPE CLP HC Synthetic PAO	SM - Warning 	
<b>INOIL_Food</b>  Riduttore Completo di Lubrificante "ALIMENTARE" <i>Gearbox with lubricant "FOOD-TYPE"</i> Getriebe mit Schmiermittel "LEBENSMITTEL"	AR-OR-PR-PLR-PT SM <b>CASSIDA GL 320</b>	OilGear_TYPE CLP HCE Synthetic HCE NSF H1	—	
<b>ASOIL</b>  Riduttore Completo di Lubrificante Speciale - a richiesta <i>Gearbox with Special lubricant - On request</i> Getriebe mit Sondern-Schmiermittel - Auf Anfrage	A richiesta On request Auf Anfrage	OilGear_TYPE CLP PG Synthetic PG	—	
		OilGear_TYPE CLP HC Synthetic PAO		
		OilGear_TYPE CLP Mineral		
		OilGear_TYPE CLP HCE Synthetic HCE NSF H1		
		Grease		

Nota campo- ASOIL  
Nella targhetta sono riportate le seguenti informazioni:  
- Code\_Plate;  
- Sigla Lubrificante;  
- ISO VG;  
- Type DIN;  
- NSF;  
- Altre prescrizioni.

Note range-ASOIL  
The type plate contains the following information:  
- Code\_Plate  
- Lubricant type  
- ISO VG  
- Type DIN  
- NSF  
- other details

Hinweis Bereich-ASOIL  
Auf dem Typenschild finden Sie folgende Informationen:  
- Code\_Plate  
- Schmiermitteltyp  
- ISO VG  
- Type DIN  
- NSF  
- andere Hinweise



## 1.12 Stato di fornitura

### 1.12.2 Lubrificazione

#### Riduttori forniti con il cuscinetto schermato

Se ne consiglia il ringrasaggio indipendentemente dalle ore di esercizio effettuate, dopo almeno 2-3 anni.

Pertanto è stato predisposto un ingrassatore per provvedere all'opportuno ringrassaggio.

#### **Le Caratteristiche tecniche generali del grasso utilizzato sono:**

- Inspessente: base di Litio;
- NGLI: 2;
- Olio: minerale con aditivazione EP di viscosità minima ISO VG 160;
- Additivi: l'olio presente nel grasso deve avere caratteristiche di aditivazione EP;

#### SPECIFICHE E APPROVAZIONI

ISO:**L-X-BCHB 2**  
DIN 51 825: **KP2K -20**

### 1.12.3 Antiretro

Qualora sia presente un dispositivo antiretro una freccia ne evidenzia il senso di rotazione consentito.

## 1.12 Scope of the supply

### 1.12.2 Lubrication

#### **Worm gearboxes with a shielded bearing**

It is recommended to grease it at least every 2-3 years regardless of the operating hours.

To this end it is provided with a greaser.

#### **Following are the general technical features of the lubrication grease:**

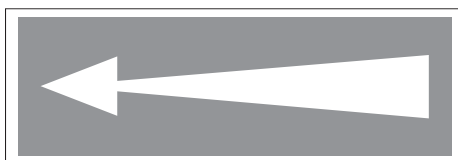
- Thickener: Lithium-based;
- NGLI: 2;
- Oil: mineral with EP additives with minimum viscosity as per ISO VG 160;
- Additives: the oil in the grease must feature EP additive;

#### SPECIFICATIONS AND APPROVALS

ISO:**L-X-BCHB 2**  
DIN 51 825: **KP2K -20**

### 1.12.3 Back-stop device

*In the event a back-stop device is provided, an arrow indicates its permitted direction of rotation.*



## 1.12 Lieferzustand

### 1.12.2 Schmierung

#### **Getrieben mit abgeschirmtem Lager geliefert werden**

Wir empfehlen, unabhängig von den erfolgten Betriebsstunden, mindestens alle 2-3 Jahre ein entsprechendes Nachschmieren.

Daher wurde ein angemessener Schmiernippel für das Nachschmieren vorgesehen.

#### **Allgemeine technische Eigenschaften des verwendeten Fetts:**

- Verdickungsmittel: auf Lithiumbasis;
- NGLI: 2;
- Öl: Mineralöl mit Zusatz von EP mit Mindestviskosität gemäß ISO VG 160;
- Additive: das im Fett enthaltene Öl muss die Eigenschaften der EP Additivierung aufweisen;

SPEZIFIKATIONEN  
ISO:**L-X-BCHB 2**  
DIN 51 825: **KP2K -20**

### 1.12.3 Rücklaufsperr

Sollte eine Rücklaufsperr vorhanden sein, wird die zulässige Drehrichtung durch einen Pfeil angegeben.



**1.12 Stato di fornitura**

**1.12 Scope of the supply**

**1.12 Lieferzustand**

**1.12.4 Connessione motore/riduttore con giunto STM/ROTEX**

**1.12.4 Connecting the motor and gearbox with STM/ROTEX joint**

**1.12.4 Verbindung zwischen motor und getriebe über kupplung STM/ROTEX**

Qualora la connessione tra riduttore e macchina motrice sia effettuata con un giunto è necessario verificare se è necessario montare un linguetta di dimensioni a disegno STM.

*If gearbox and driving machine are connected by means of a joint, check whether it is necessary to install a key sized as specified on STM drawing.*

Bei Verbindung zwischen Getriebe und Antriebseinheit über eine Kupplung muss überprüft werden, ob ein Federkeil gemäß STM-Maßzeichnung erforderlich ist.

La linguetta e la targhetta nella quale sono riportate le istruzioni di montaggio sono allegate ad ogni fornitura.

*Key and nameplate indicating assembly instructions come with any supply.*

Der Federkeil und das Schild, auf dem die Montageanleitung wiedergegeben wird, sind im Lieferumfang enthalten.

Qualora non fornite segnalare il problema al Nostro Ufficio Commerciale ed attenersi alla presenti istruzioni per l'installazione del motore sul riduttore.

*Should they be missing, report this problem to our Sales Dept. and follow these instructions for installing the motor to gearbox.*

Sollten sie nicht mitgeliefert worden sein, muss dies unserer Verkaufsabteilung mitgeteilt werden. Für die Installation des Motors am Getriebe muss man sich an die entsprechenden Anleitungen halten.

Di seguito sono allegate targhette con le relative istruzioni di montaggio.

*Follow are showed some of the nameplates bearing the installation instructions*

Auf den folgenden Seiten werden die Blätter mit den entsprechenden Montageanleitungen angefügt.

**Giunto a disegno "STM"  
Joint to "STM" drawing  
Kupplung gemäss "STM"-zeichnung**

**Giunto tipo "ROTEX"  
"ROTEX" type of joint  
Kupplung - typ "ROTEX"**

**CODICE TARGHETTA - CODE PLATE**  
1080031931

**1.12.4 Installazione**  
Procedura di installazione del motore sul riduttore.

**1.12.4 Installation**  
Anleitung für Montage motor an Getriebe.

**1.12.4 Montage**  
Installation des Motors mit dem Gehäuse.

EC	EF	EV	HEE	AV	LF
1080031931	1080031931	1080031931	1080031931	1080031931	1080031931

**STEP INSTALLATION**  
1. Check the motor and gearbox specifications.  
2. Check the joint specifications.  
3. Check the shaft dimensions.  
4. Check the key dimensions.  
5. Check the mounting plate dimensions.

**CODICE TARGHETTA - CODE PLATE**  
1080031931

**1.12.4 Installazione**  
Procedura di installazione del motore sul riduttore.

**1.12.4 Installation**  
Anleitung für Montage motor an Getriebe.

**1.12.4 Montage**  
Installation des Motors mit dem Gehäuse.

EC	EF	EV	HEE	AV	LF
1080031931	1080031931	1080031931	1080031931	1080031931	1080031931

**STEP INSTALLATION**  
1. Check the motor and gearbox specifications.  
2. Check the joint specifications.  
3. Check the shaft dimensions.  
4. Check the key dimensions.  
5. Check the mounting plate dimensions.

Per quanto non qui specificato, fare riferimento al manuale d'uso e manutenzione reperibile sul ns. sito Web: [www.stmspa.com](http://www.stmspa.com)

For additional information please refer to STM maintenance booklet available on our internet site: [www.stmspa.com](http://www.stmspa.com)

Fuer weitere Auskünfte bitte STM Wartungshandbuch nachsehen. Es ist in internet : [www.stmspa.com](http://www.stmspa.com)

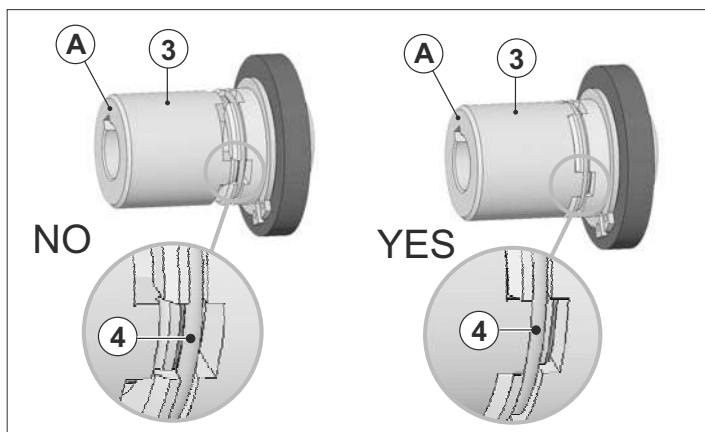
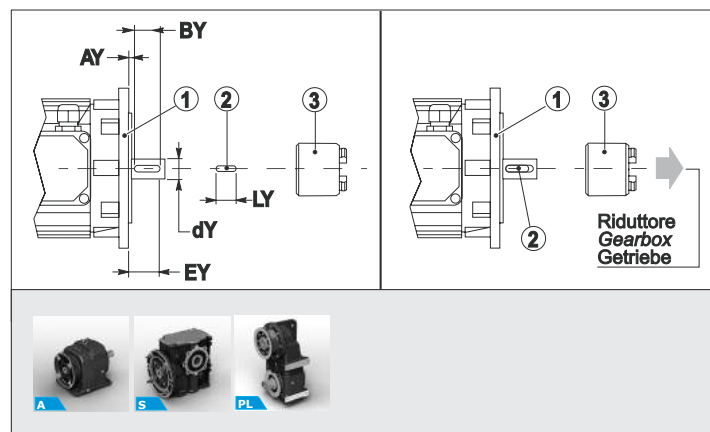
**1.12.4 Installazione****1.12.4 Installation****1.12.4 Montage**

Prescrizioni di installazione del Motore con Riduttore.

Instructions for installing motor on gearbox.

Installation des Motors mit dem Getriebe.

Giunto a disegno STM / Coupling made to STM drawing / Kupplung gemäß STM-Zeichnung



A	PL	S	IEC	dY	EY	Key	BY	AY	LY
-	-	-	<b>71</b>	14	30	5 x 5	20	< 6	<b>16</b>
-	-	25	<b>80</b>	19	40	6 x 6	30	< 6	<b>20</b>
41	-	35-45	<b>90</b>	24	50	8 x 7	40	< 6	<b>20</b>
45	45	-	<b>100-112</b>	28	60	8 x 7	50	< 6	<b>25</b>
-	-	-	<b>132</b>	38	80	10 x 8	70	< 6	<b>30</b>

Linguetta con dimensione LY a disegno STM.  
I riduttori nei PAM riportati in tabella sono forniti con allegato il KIT boccola + linguetta.

Tab with size LY to STM drawing.  
The gearboxes in the PAMs shown on the table are supplied with the bushing + tab kit.

Lamelletta mit Maß LY nach Zeichnung von STM. Die in der Tabelle angegebenen Getriebe in den PAM werden mit dem KIT Buchse + Lamelle geliefert.

- 1) Se la quota misurata AY è minore o uguale a quella riportata in tabella si può procedere al montaggio utilizzando una linguetta di dimensioni LY;
- 2) Se la quota misurata AY è maggiore a quella riportata in tabella è necessario montare una linguetta di dimensione LY ridotta della differenza della quota AY misurata rispetto a quella indicata in tabella.

- 1) If the measured value AY is less or equal than the value in the table, the installation will be continued by using a key with dimension LY;
- 2) If the resulting value AY is bigger than indicated in the table, it is necessary to use a key with dimension LY, which is reduced according to the value AY in the table.

- 1) Wenn der ermittelte Messwert AY kleiner oder gleich dem Wert in der Tabelle ist, kann mit der Montage, durch Verwendung einer Passfeder der Größe LY, fortgefahren werden;
- 2) Ist der ermittelte Wert AY größer als in der Tabelle angegeben, ist es notwendig, eine Passfeder der Größe LY zu verwenden, welche entsprechend der Maßzahl AY in der Tabelle reduziert ist.

**FASI DI INSTALLAZIONE:**

- A) Montare il componente 2 (linguetta) sul componente 1 (motore elettrico);
- B) Montare il componente 3 (giunto) sul riduttore;

**STEP INSTALLATION**

- A) Assemble part 2 (key) on component 1 (electric motor);
- B) Assemble component 3 (coupling) on the gearbox;
- C) Verify coupling to be correctly aligned and relevant spring (4) to be inserted in the coupling seat (3). Consequently, it is probably needed to slightly hammer the component 3 (coupling) on surface "A".

**MONTAGE**

- A) Montieren sie Teil 2 (Paßfeder auf Teil 1 (Elektromotor);
- B) Montieren sie Teil 3 (Kupplung) am Getriebe;
- C) Überprüfen sie die korrekte Ausrichtung und ob die wichtige Feder (4) im Kupplungssitz (3) eingelegt ist. Möglicherweise ist es erforderlich den Teil 3 (Kupplung) mit leichten Hammerschlägen auf die Oberfläche "A" aufzubringen.

- C) Verificare che il giunto sia correttamente montato controllando che la molla (4) sia incastrata nella sede del giunto (3). Pertanto si richiede di dare un paio di colpi con un martello di plastica sulla superficie "A" del componente 3 (giunto);

- D) Apporre un film di grasso sull'albero del motore elettrico;
- E) Montare il componente 1 (motore elettrico) sul riduttore e serrare le viti.

- D) Apply grease on the electric motor shaft;

- E) Assemble component 1 (electric motor) into the gearbox and tighten screws.

- D) Fetten sie die Motorwelle des Elektromotors ein;

- E) Montieren sie Teil 1 (Elektromotor) am Getriebe und sichern sie die Schrauben..

**FASI DI SMONTAGGIO**

Prima di procedere allo smontaggio del motore assicurarsi che il motore sia assicurato ad un sistema di sollevamento tramite cinghia onde prevenire danni a persone o cose. Questo per evitare che durante lo smontaggio delle viti di serraggio tra motore e riduttore il motore possa cadere a terra.

**DE-INSTALLATION**

Before starting de-installation, please assure that the engine is secured with a suitable hoist to prevent injury or damage. This action is necessary because, with release of the locking screws between the gearbox and engine, the engine could fall to the ground.

**DEMONTAGE**

Bevor Sie mit der Demontage beginnen, stellen Sie bitte sicher, dass der Motor mit einem geeigneten Hebezeug vor Absturz gesichert ist, um Personen- und Sachschäden zu verhindern. Diese Maßnahme ist notwendig, da bei Lösen der Spanschrauben zwischen Getriebe und Motor der Motor zu Boden fallen könnte.

Per ulteriori informazioni contattare il Nostro Ufficio Tecnico.

Contact our Technical Dept. for more information

Für weitere Informationen wenden Sie sich bitte an unsere Konstruktionsabteilung.

### 1.12.4 Installazione

### 1.12.4 Installation

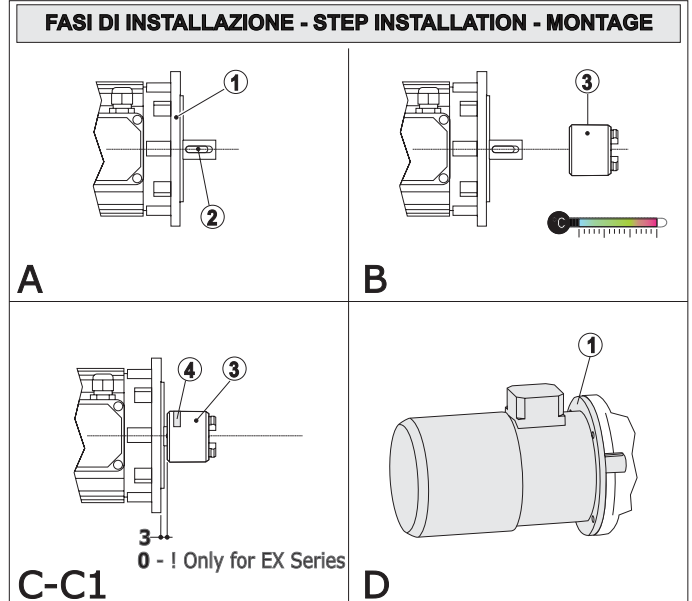
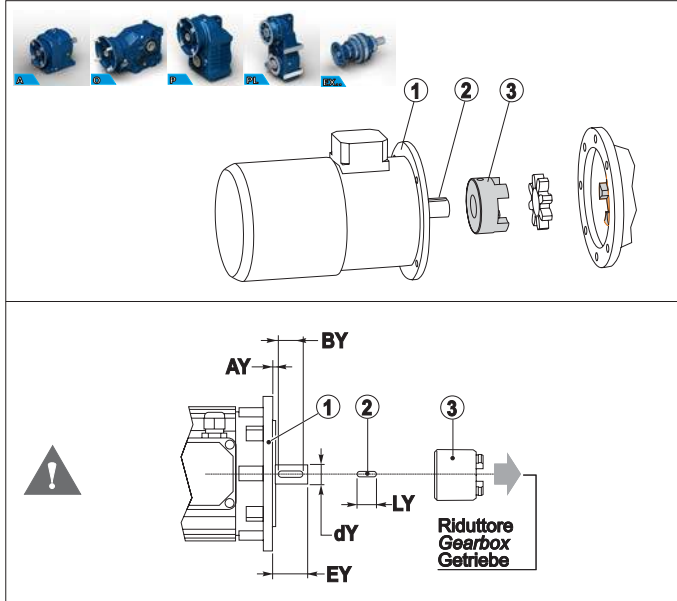
### 1.12.4 Montage

Prescrizioni di installazione del Motore con Riduttore.

Instructions for installing motor on gearbox.

Installation des Motors mit dem Getriebe.

Giunto a disegno Rotex / Coupling made to Rotex drawing / Kupplung gemäß Rotex-Zeichnung



IEC	dY	EY	KEY	BY	⚠ AY	LY
200	55	110	16 x 10	100	< 6	45
225	60	140	18 x 11	130	< 6	55
250	65	140	18 x 11	130	< 6	63
280	75	140	20 x 12	110	< 16	60

Linguetta con dimensione LY a disegno STM. I riduttori nei PAM riportati in tabella sono forniti con allegato il KIT boccia + linguetta.

Tab with size LY to STM drawing. The gearboxes in the PAMs shown on the table are supplied with the bushing + tab kit.

Lamelle mit Maß LY nach Zeichnung von STM. Die in der Tabelle angegebenen Getriebe in den PAM werden mit dem KIT Buchse + Lamelle geliefert.

1) Se la quota misurata AY è minore o uguale a quella riportata in tabella si può procedere al montaggio utilizzando una linguetta di dimensioni LY;  
2) Se la quota misurata AY è maggiore a quella riportata in tabella è necessario montare una linguetta di dimensione LY ridotta della differenza della quota AY misurata rispetto a quella indicata in tabella.

1) If the measured value AY is less or equal than the value in the table, the installation will be continued by using a key with dimension LY;  
2) If the resulting value AY is bigger than indicated in the table, it is necessary to use a key with dimension LY, which is reduced according to the value AY in the table.

1) Wenn der ermittelte Messwert AY kleiner oder gleich dem Wert in der Tabelle ist, kann mit der Montage, durch Verwendung einer Passfeder der Größe LY, fortgefahren werden;  
2) Ist der ermittelte Wert AY größer als in der Tabelle angegeben, ist es notwendig, eine Passfeder der Größe LY zu verwenden, welche entsprechend der Maßzahl AY in der Tabelle reduziert ist.

#### FASI DI INSTALLAZIONE:

A) Montare il componente 2 sul componente 1;

B) Preriscaldamento componente 3 - Vista l'eventualità pratica di una possibile interferenza è necessario montare i semigiunti preriscaldandoli (max. 90°), il foro filettato in testa all'albero aiuterà il montaggio e lo smontaggio; in ogni caso evitare di battere i semigiunti onde evitare danni al motore.

C) Montare il componente 3 sul motore rispettando la quota a disegno (3mm);

**! - Solo EX - la quota è (0 mm).**

C1) Bloccaggio componente 3 - è comunque sempre necessario bloccare assialmente i semigiunti tramite il grano radiale presente - componente 4.

D) Montare il componente 1 sul riduttore e serrare le viti di fissaggio.

#### FASI DI SMONTAGGIO

Prima di procedere allo smontaggio del motore assicurarsi che il motore sia assicurato ad un sistema di sollevamento tramite cinghia onde prevenire danni a persone o cose. Questo per evitare che durante lo smontaggio delle viti di serraggio tra motore e riduttore il motore possa cadere a terra.

Per ulteriori informazioni contattare il Nostro Ufficio Tecnico.

#### STEP INSTALLATION

A) Assemble part 2 on part 1.

B) Preheated part 3 - Coupling halves should be preheated before assembly (max. 90°), considering that a possible interference fit is likely; the threaded hole on shaft end will help installation and removal. At any rate, do not tap on the couplings or damage could result for motor.

C) Assemble part 3 on the electric motor regarding quote in the drawing (3mm);

**! - Only for EX - the quote is (0 mm).**

C1) Tighten - Part 3 - it is always necessary to tighten coupling halves axially by means of the provided radial grub screw - part 4.

D) Assemble part 1 on the gearbox and tighten the fixing screws.

#### DE-INSTALLATION

Before starting de-installation, please assure that the engine is secured with a suitable hoist to prevent injury or damage. This action is necessary because, with release of the locking screws between the gearbox and engine, the engine could fall to the ground.

#### MONTAGE

A) Bauteil 2 an Bauteil 1 montieren;

B) Erwärmen Bauteil 3 - Unter Berücksichtigung einer möglichen Interferenz müssen die Kupplungshälften im erwärmten Zustand (max. 90°) montiert werden. Die vordere Gewindebohrung an der Welle wird sich bei der Montage und dem Ausbau als hilfreich erweisen. Auf jeden Fall ist im Hinblick auf Schäden am Motor zu vermeiden, auf die Kupplungshälften zu schlagen.

C) Bauteil 3 am Motoren montieren - sehen Sie bitte die Abmessung in der Zeichnung (3mm);  
**! nur für EX - Abmessung ist (0 mm)**

C1) Anziehen Bauteil 3 - es ist jedoch immer erforderlich, die Kupplungshälften axial mit Hilfe des vorhandenen radialen Stifts zu blockieren - Bauteil 4.

D) Bauteil 1 am Getriebe anbauen und Befestigungsschrauben anziehen.

#### DEMONTAGE

Bevor Sie mit der Demontage beginnen, stellen Sie bitte sicher, dass der Motor mit einem geeigneten Hebezeug vor Absturz gesichert ist, um Personen- und Sachschäden zu verhindern. Diese Maßnahme ist notwendig, da bei Lösen der Spanschrauben zwischen Getriebe und Motor der Motor zu Boden fallen könnte.

Für weitere Informationen wenden Sie sich bitte an unsere Konstruktionsabteilung.



## 1.13 Normative applicate

### 1.13.1 Specifiche prodotti non "ATEX"

I riduttori della STM SpA sono organi meccanici destinati all'uso industriale e all'incorporazione in apparecchiature meccaniche più complesse. Dunque non vanno considerati macchine indipendenti per una predeterminata applicazione ai sensi 2006/42/CE, né tantomeno dispositivi di sicurezza.

### 1.11.2 Specifiche prodotti "ATEX"

#### Campo applicabilità

La direttiva ATEX (2014/34/UE) si applica a prodotti elettrici e non elettrici destinati a essere introdotti e svolgere la loro funzione in atmosfera potenzialmente esplosiva. Le atmosfere potenzialmente esplosive vengono suddivise in gruppi e zone a seconda della probabilità di formazione. I prodotti STM sono Conformi alla seguente classificazione:

- 1- Gruppo: II  
2- Categoria: **Gas 2G polveri 2D**  
3- Zona: **Gas 1 ; 2 – Polveri 21 ; 22**

## 1.13 Standards applied

### 1.11.1 Specifications of non - "ATEX" products

STM SpA gearboxes are mechanical devices for industrial use and incorporation in more complex machines. Consequently, they should not be considered neither self-standing machines for a pre-determined application according to 2006/42/CE nor safety devices.

### 1.11.2 Specifications of "ATEX" products

#### Application field

*ATEX set of provisions (2014/34/UE) is referred to electric and non-electric products which are used and run in a potentially explosive environment. The potentially explosive environments are divided into different groups and zones according to the probability of their formation. STM products are in conformity with following classification:*

- 1- Group : II  
2- Type : **Gas 2G dust 2D**  
3-Zone : **Gas 1 ; 2 – Dust 21 ; 22**

## 1.13 Angewendete Normen

### 1.11.1 Spezifikationen für produkte, die nicht der "ATEX"-norm entsprechen

Bei den Getrieben der STM SpA handelt es sich um Mechanikorgane, die für den industriellen Einsatz und einen Einbau in komplexere Einrichtungen bestimmt sind. Sie werden deshalb weder unter dem Aspekt unabhängiger, für eine bestimmte Anwendung vorgesehener Maschinen im Sinne der 2006/42/CE, noch als Sicherheitsvorrichtungen berück-sichtigt.

### 1.11.2 Spezifikationen für "ATEX"-produkte

#### Anwendungsbereich

Die ATEX-Richtlinie (2014/34/UE) wird bei elektrischen und nicht elektrischen Produkten angewendet, die dazu bestimmt sind, in potentiell explosionsfähigen Atmosphären eingesetzt und betrieben zu werden. Die potentiell explosionsfähigen Atmosphären werden in Abhängigkeit der Wahrscheinlichkeit in Gruppen und Zonen unterteilt. Die STM-Produkte entsprechen der folgenden Klassifizierung:

- 1- Gruppe: II  
2- Kategorie: **Gas 2G Staub 2D**  
3- Zone: **Gas 1 ; 2 - Staub 21 ; 22**

#### Massime temperature di superficiali / Max surface temperature allowed / Maximale Oberflächentemperaturen

Classe di temperatura / Temperature class / Temperaturklasse	T1	T2	T3	T4	T5 <sup>(1)</sup>
Massima temp.di superficie / Max surface temperature / Max. Oberflächentemperaturen (°C)	450	300	200	135	100 <sup>(1)</sup>
Classi di temperatura ATEX dei prodotti STM / ATEX temperature class of STM products / ATEX Temperaturklassen der STM-Produkte					
<sup>(1)</sup> Classe di temperatura ATEX ottenibile a richiesta / ATEX temperature class on request / Auf Anfrage erhältliche ATEX-Temperaturklasse					

I prodotti STM sono marcati classe di temperatura **T4** per IIG (atmosfera gassosa) e **135° C** per IID (atmosfera polverosa).

*STM products are branded temperature class **T4** for IIG (gas environment) and **135°C** for IID (dust environment).*

Die STM-Produkte sind mit der Temperaturklasse **T4** für IIG (Atmosphäre mit gasförmiger Belastung) und **135° C** für IID (Atmosphäre mit staubförmiger Belastung) gekennzeichnet.

**Bei der Temperaturklasse T5 muss die deklassierte thermische Grenzleistung überprüft werden (Bezug auf firmeninterne NORM\_0198, abrufbar aus der Website: [www.stmspa.com](http://www.stmspa.com)).**

**Nel caso di classe di temperatura T5 occorre verificare la potenza limite termico declassata (rif. normativa interna NORM\_0198, visionabile sul sito web: [www.stmspa.com](http://www.stmspa.com)).**

*In case of T5 temperature class it will be necessary to verify the declassified thermal limit power (refer to internal standard NORM\_0198, available on the web site: [www.stmspa.com](http://www.stmspa.com)).*

I prodotti del gruppo IID (atmosfera polverosa) vengono definiti dalla massima temperatura di superficie effettiva.

*The products of the family IID (dust environment) are defined by the max effective surface temperature.*

Die der Gruppe IID (Atmosphäre mit staubförmiger Belastung) angehörigen Produkte werden ihrer effektiven maximalen Oberflächentemperatur gemäß definiert.

Die maximale Oberflächentemperatur wird in normalen Einbau- und Umgebungsbedingungen (-20°C und +40°C) und ohne auf den Vorrichtungen vorhandenen Staubablagerungen bestimmt.

Jegliche Abweichung von diesen Bezugsbedingungen kann sich erheblich auf die Wärmeableitung bzw. auf die Betriebstemperatur auswirken.

La massima temperatura di superficie è determinata in normali condizioni di installazione e ambientali (-20°C e +40°C) e senza depositi di polvere sugli apparecchi. Qualunque scostamento da queste condizioni di riferimento può influenzare notevolmente lo smaltimento del calore e quindi la temperatura.

*Max surface temperature is determined in standard installation and environmental conditions ( -20°C and +40°C ) and in absence of dust on product surface.*

*Any other condition will modify the heat dissipation and consequently the temperature.*

### 1.11.3 Prodotti disponibili

I prodotti disponibili in esecuzione "ATEX" sono:  
- AR, AM /1/2/3;- OR, OM;- PR,PM;- SM.

### 1.11.3 Products available

Products available in "ATEX" execution:  
- AR, AM /1/2/3;- OR, OM;- PR,PM;- SM.

#### N.B

**Sono escluse dalla certificazione tutte le versioni con limitatore di coppia e con motore compatto.**

#### N.B.

**All versions with torque limiter and compact motor are excluded from certification.**

### 1.11.3 Verfügbare Produkte

In der "ATEX"-Version verfügbare Produkte:  
- AR, AM /1/2/3;- OR, OM;- PR,PM;- SM.

#### HINWEIS

**Ausgenommen von dieser Zertifizierung sind alle Versionen mit Rutschkupplung und Kompaktmotoren.**

## 1.11 Normative applicate

### 1.11.4. COME SI APPLICA

Al momento di una richiesta di offerta per prodotto conforme a normativa ATEX 2014/34/UE occorre compilare la **scheda acquisizione dati** ([www.stmspa.com](http://www.stmspa.com)).

Effettuare le verifiche come prima descritto.

I riduttori certificati verranno consegnati con:

- una seconda targhetta contenente i dati ATEX;
- ove previsto un tappo sfiato, tappo sfiato con molla interna;
- se rispondente alla classe di temperatura T4 e T5 verrà allegato un indicatore di temperatura (132 °C nel caso di T4 e 99°C rispettivamente per la T5)
- Indicatore di temperatura : termometro a singolo rilevamento, una volta raggiunta la temperatura indicata si annerisce segnalando il raggiungimento di tale limite.

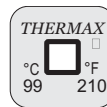
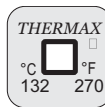
## 1.11 Standards applied

### 1.11.4. HOW IS IT APPLIED

*In case of request of offer relating to any product in conformity with the provisions ATEX/2014/34/UE, the specifications paper should be filled in ([www.stmspa.com](http://www.stmspa.com)).*

Perform the inspections as described above. Certified reducers will be delivered with:

- a second nameplate containing ATEX data;
- a breather valve with internal spring, where a breather is needed;
- if in accordance with classes of temperature T4 and T5, a temperature gauge will be included (132 °C in case of T4 and 99 °C in case of T5).
- Temperature gauge: single-reading thermometer, it blackens once temperature is reached, pointing out the achievement of that limit.



### 1.11.5 UE Direttive- marcatura CE- ISO9001

#### Direttiva Bassa Tensione 2014/35/UE

I motoriduttori, motorinvii angolari, motovariatori e i motori elettrici STM sono conformi alle prescrizioni della direttiva Bassa Tensione .

#### 2014/30/UE Compatibilità elettromagnetica

I motoriduttori, motoriviiangolari, motovariatori e i motori elettrici STM sono conformi alle specifiche della direttiva di Compatibilità Elettromagnetica.

#### Direttiva Macchine 2006/42/CE

I motoriduttori, motoriviiangolari, motovariatori e i motori elettrici STM non sono macchine ma organi da installare o assemblare nelle macchine.

#### Marchio CE, dichiarazione del fabbricante e dichiarazione di conformità.

I motoriduttori, motovariatori e i motori elettrici hanno il marchio CE.

Questo marchio indica la loro conformità alla direttiva Bassa Tensione e alla direttiva Compatibilità Elettromagnetica.

Su richiesta, STM può fornire la dichiarazione di conformità dei prodotti e la dichiarazione del fabbricante secondo la direttiva macchine.

#### ISO 9001

I prodotti STM sono realizzati all'interno di un sistema di qualità conforme allo standard ISO 9001. A tal fine su richiesta è possibile rilasciare copia del certificato.

### 1.11.5 UE Directives-CE mark-ISO 9001

#### Directive 2014/35/UE Low VoltageSTM

geared motors, right angle drives with motor, motovariators and electric motors meet the specification of the low voltage directive.

#### 2014/30/UE Electromagnetic Compatibility

*STM geared motors, right angle drives with motor, motovariators and electric motors correspond to the specifications of the EMC directive.*

#### Machinery Directive 2006/42/CE

*STM geared motors, right angle drives with motor, motovariators and electric motors are not standalone machines, they are exclusively for installation into a machine or for assembly on a machine.*

#### CE Mark, Conformity Declarations and Manufacturer's Declaration.

*STM geared motors, right angle drives with motor, motovariators and electric motors carry the CE Mark.*

*It indicates conformity to the low voltage directive and to electromagnetic compatibility directive.*

*On request STM supplies both the conformity declarations and the manufacturer's declaration according to the machine directive.*

#### ISO 9001

*STM products have been designed and manufactured according to ISO 9001 quality system standard.*

*On request a copy of the certification can be issued.*

## 1.11 Angewendete Normen

### 1.11.4. ANWENDUNGSWEISE

Bei einer Angebotsanfrage für der Richtlinie ATEX 2014/34/UE entsprechende Produkte muss das Datenerfassungsformular ([www.stmspa.com](http://www.stmspa.com)) ausgefüllt werden.

Dazu die zuvor beschriebenen Kontrollen vornehmen. Die zertifizierten Getriebe werden wie folgt ausgestattet geliefert:

- mit einem zweiten Typenschild mit ATEX- Daten;
- wo vorgesehen, mit einem Entlüftungs- verschluss, Entlüftungsverschluss mit interner Feder;
- falls der Temperaturklasse T4 und T5 entsprechend, wird eine Temperaturanzeige vorgesehen (132 °C bei T4 und 99°C bei T5)
- Temperaturanzeige: einzelnes Erfassungsthermometer - bei Erreichen der angegebenen Temperatur wechselt die Farbe zur Anzeige der erreichten Temperatur in Schwarz.

### 1.11.5 UE-Richtlinien - CE-Zeichen - ISO9001

#### Niederspannungsrichtlinie. 2014/35/UE

Die Getriebemotoren, Winkelgetriebe, Verstellgetriebe und Elektromotoren der STM entsprechen den Vorschriften der Niederspannungsrichtlinie.

#### 2014/30/UE Elektromagnetische Verträglichkeit

Die Getriebemotoren, Winkelgetriebe, Verstellgetriebe und Elektromotoren der STM entsprechen den Vorschriften der Richtlinie zur Elektromagnetischen Verträglichkeit.

#### Maschinenrichtlinie 2006/42/CE

Die Getriebemotoren, Winkelgetriebe, Verstellgetriebe und Elektromotoren der STM sind keine Maschinen sondern Organe, die in Maschinen eingebaut oder an diesen montiert werden.

#### CE-Zeichen, Hersteller- und Konformitätserklärung

Die Getriebemotoren, Verstellgetriebe und Elektromotoren tragen das CE-Zeichen.

Dieses Zeichen weist auf ihre Konformität mit der Niederspannungsrichtlinie und der Richtlinie zur Elektromagnetischen Verträglichkeit hin. Auf Anfrage kann die STM die Konformitätserklärung und die Hersteller- erklärung gemäß Maschinenrichtlinie zu den Produkten liefern.

#### ISO 9001

Die STM-Produkte werden in einem Qualitätssystem gemäß dem Standard ISO 9001 realisiert. Auf Anfrage kann daher eine Kopie der Zertifizierung geliefert werden.



**1.11 Normative applicate****1.11.6 Normative riferimento  
Progettazione e Fabbricazione**

Tutti i prodotti della STM sono progettati nel rispetto delle seguenti normative:

**Calcolo degli ingranaggi e cuscinetti**

ISO 6336

Calcolo della capacità di carico degli ingranaggi cilindrici.

BS 721

Calcolo della capacità di carico delle viti e delle corone elicoidali.

ISO 281

Calcolo della durata a fatica dei cuscinetti volventi.

**Alberi**

DIN 743

Calcolo della durata a fatica degli alberi

**Materiali**

EN 10084

Acciaio da cementazione per ingranaggi e viti senza fine.

EN 10083

Acciaio da bonifica per alberi.

UNI EN 1982

Bronzo per corone elicoidali.

UNI EN 1706

Alluminio e leghe di Alluminio

UNI EN 1561

Fusioni in ghisa grigia.

UNI EN 1563 2004

Getti di ghisa a grafite sferoidale

UNI 3097

Acciaio per cuscinetti per piste rotolamento.

**1.11 Standards applied****1.11.6 Standards applied**

*All STM products are designed following these standards:*

**Calculation of gearboxes and bearings**

ISO 6336:

*Calculation of load capacity of spur and helical gears*

BS 721:

*Calculation of load capacity for worm gearing.*

ISO 281:

*Rolling bearings — Dynamic load ratings and rating life*

**Shafts**

DIN743

*Shafts — Dynamic load ratings and rating life*

**Materials**

EN 10084

*Case hardening steels for gears and worms*

EN 10083

*Quenched and Tempered Steels for shafts*

UNI EN 1982

*Copper for helical worm-gears*

UNI EN 1706

*Aluminium alloy*

UNI EN 1561

*Grey iron casting*

UNI EN 1563 2004

*Spheroidal cast iron*

UNI 3097

*Ball and roller bearing steel*

**1.11 Angewendete Normen****1.11.6 Bezugsnormen Entwicklung und Produktion**

Alle Produkte der STM werden unter Einhaltung folgender Normen entwickelt:

**Berechnung der Zahnräder und Lager**

ISO 6336

Berechnung der Belastungsfähigkeit der zylindrischen Zahnräder.

BS 721

Berechnung der Belastungsfähigkeit der Schnecken und Schrägzahnräder.

ISO 281

Berechnung der Belastungsdauer der Wälzlager.

**Wellen**

DIN743

Berechnung der Belastungsdauer der Wellen.

**Material**

EN 10084

Einsatzstahl für Zahnräder und Schnecken.

EN 10083

Vergütungsstahl für Wellen.

UNI EN 1982

Bronze für Schrägzahnräder

UNI EN 1706

Aluminium und Aluminiumlegierungen

UNI EN 1561

Grauguss-Legierungen

UNI EN 1563 2004

Sphäroguss

UNI 3097

Stahl für Lagergleitbahnen



**1.0 RIDUTTORI COASSIALI A**  
**1.0 IN-LINE GEARBOXES A**  
**1.0 STIRNRADGETRIEBE A**

**A**

- 1.1 Caratteristiche tecniche
- 1.2 Designazione
- 1.3 Versioni
- 1.4 Lubrificazione
- 1.5 Carichi radiali e assiali
- 1.6 Prestazioni riduttori
- 1.7 Prestazioni motoriduttori
- 1.8 Dimensioni
- 1.9 Linguette

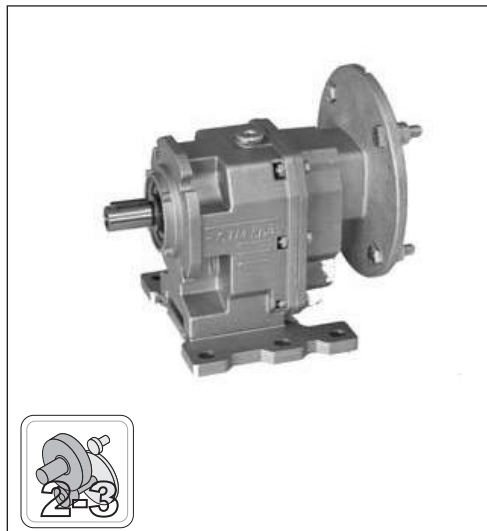
- Technical characteristics*
- Designation*
- Versions*
- Lubrication*
- Axial and overhung loads*
- Gearboxes performances*
- Gearmotors performances*
- Dimensions*
- Keys*

- Technische Eigenschaften
- Bezeichnungen
- Ausführungen
- Schmierung
- Radiale und Axiale Belastungen
- Leistungen der Getriebe
- Leistungen der Getriebemotoren
- Abmessungen
- Paßfedern

- B1
- B2
- B3
- B7
- B9
- B11
- B25
- B38
- B56



**40-50-60-80-100**



**25-35-41-45**



**50-55-60-70-80-90**  
**100-110-120-140**

**1.1 Caratteristiche tecniche**

La progettazione di questa serie di riduttori è stata impostata su una struttura monolitica di straordinaria rigidità: questo permette l'applicazione di carichi elevati senza rischi di deformazione, che ne comprometterebbero le prestazioni. Inoltre la particolare forma interna della carcassa, consente un orientamento del flusso del lubrificante atto a raggiungere tutte le parti in movimento, ad evitare la rumorosità e a favorire la tenuta. Un'altra novità è rappresentata dalla flangia uscita riportata che consente una grande versatilità di applicazione. Grazie alla ormai consolidata esperienza nel campo dei riduttori ad ingranaggi coassiali a 2 e 3 stadi, abbiamo realizzato il monostadio: il giusto rapporto coppia/costo per le applicazioni industriali dove è richiesto un alto numero di giri all'albero uscita.

**1.1 Technical characteristics**

*The design of this range of gear units is based on one body piece casting giving increased rigidity. This allows to apply high loads without risks of deformation which might negatively affect technical performances.*  
*The particular internal shape of the body directs the oil flow in a way to reach all moving parts while reducing noise levels and improving sealing tightness.*  
*Another piece of news is the modular attachable output flange to provide excellent versatility even in multiple applications.*  
*Thanks to the almost reinforced experience in the field of the in-line gearboxes at 2 and 3 stage, we realised the single stage: the right relation between pair/price for the industrial application where it is required an high number of output speed shaft.*

**1.1 Technische Eigenschaften**

Die Planung dieser Getriebeserie ist auf einer monolithischen Struktur mit ungewöhnlicher Steifigkeit aufgebaut: dies ermöglicht die Anwendung bei hohen Belastungen ohne Verformungsgefahr, die die Leistung beeinträchtigen würde. Außerdem erlaubt die spezielle Innenform des Gehäuses eine gleichmäßige Verteilung des Schmierstoffes, der somit alle beweglichen Teile erreicht und außerdem Geräusche vermeidet und die Dichtung fördert. Ein weiteres neues Feature ist der Ausgangsflansch, der eine große Anwendungsvielseitigkeit ermöglicht. Aufgrund der fundierten Erfahrung im Bereich der zwei- und dreistufigen koaxialen Reduktionsgetriebe wurde der Einstufige konzipiert: das richtige Verhältnis Drehmoment / Kosten für industrielle Anwendungen, die eine hohe Drehzahl am Zapfwellenende benötigen





1.2 Designazione

02 OV - Versione Uscita

1.2 Designation

OV - Output Version

1.2 Bezeichnung

OV - Abtriebausführung



Versioni riduttori  
Gearboxes versions  
Ausführung Getriebes

# AM/1 - AR/1 - AC/1

32 - 40 - 50 - 60 - 80 - 100

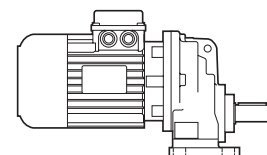
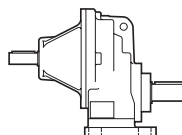
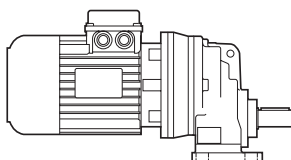
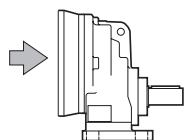
AM... (IEC)

AM...

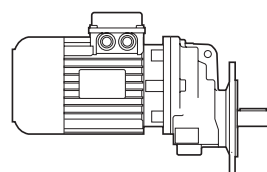
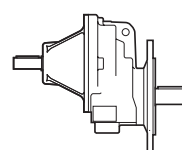
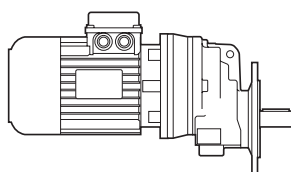
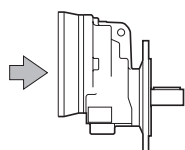
AR...

AC...

P



F.



Versioni riduttori  
Gearboxes versions  
Ausführung Getriebes

# AM/2-3 - AC/2-3

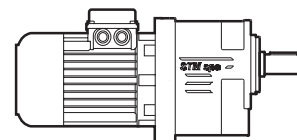
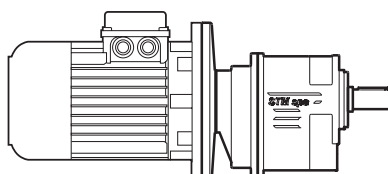
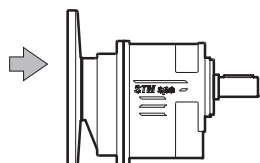
25 - 35 - 41 - 45

AM... (IEC)

AM...

AC...

-



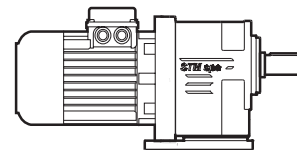
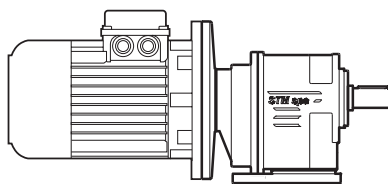
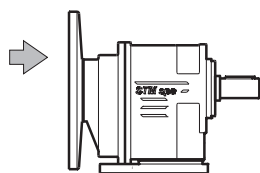
P

25-35-45

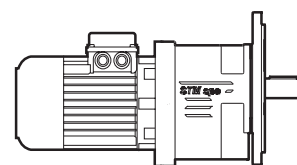
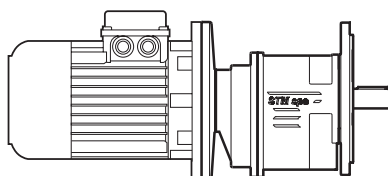
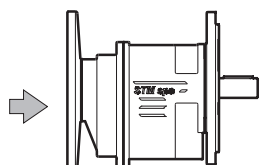
P1

41

P2



F.



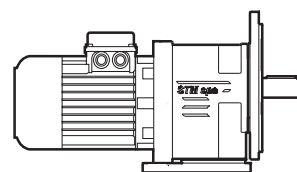
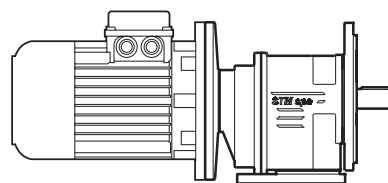
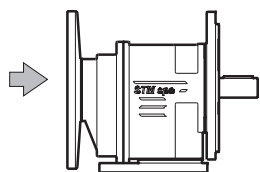
P/F.

25-35-45

P1/F.

41

P2/F.





1.2 Designazione

02 OV - Versione Uscita

1.2 Designation

OV - Output Version

1.2 Bezeichnung

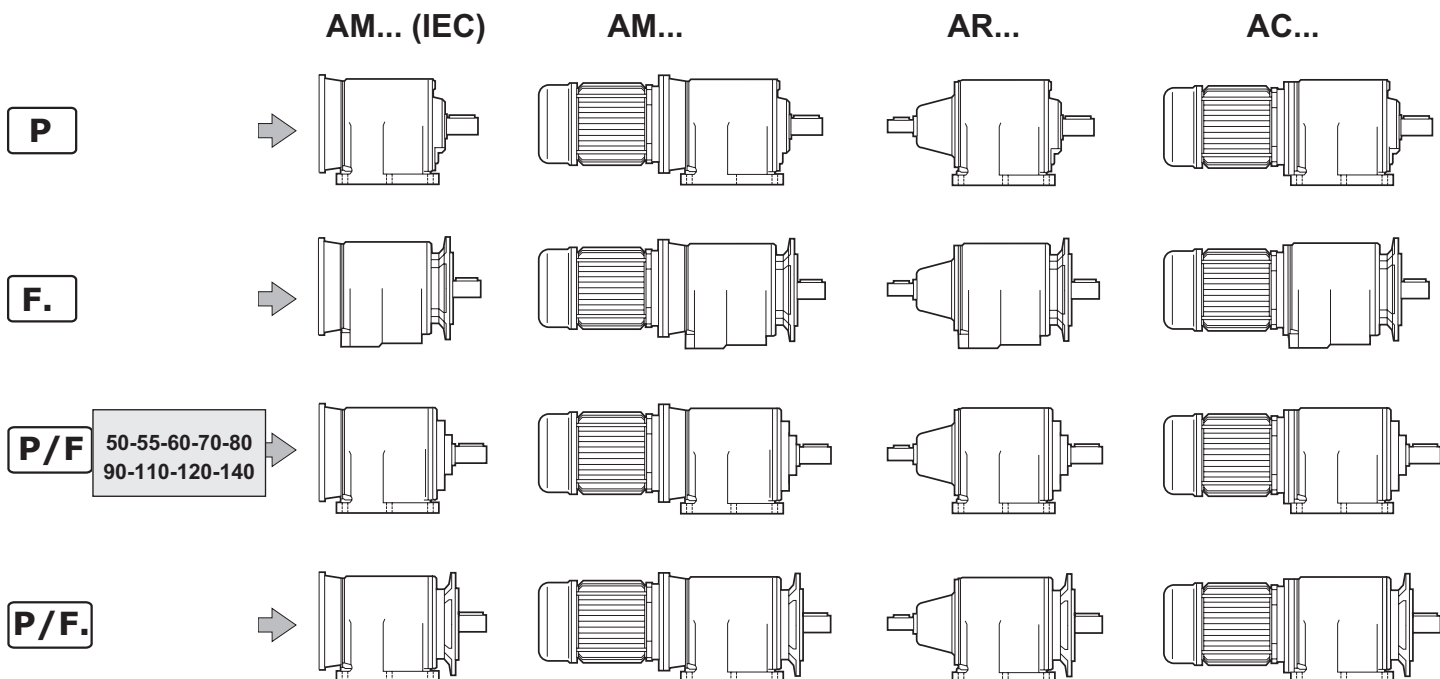
OV - Abtriebausführung



Versioni riduttori  
Gearboxes versions  
Ausführung Getriebes

# AM/2-3 - AR/2-3 - AC/2-3

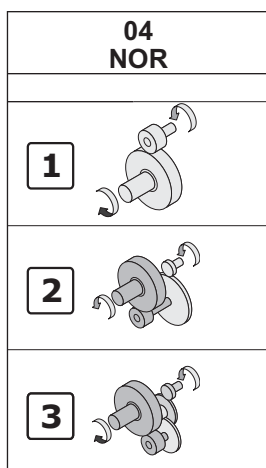
50 - 55 - 60 - 70 - 80 - 90 - 100 - 110 - 120 - 140



04 NOR - N° Stadi

NOR - N° of reductions

NOR - N° Anzahl der stufen



25	32	35	40	41	45	50	55	60	70	80	90	100	120	110	140
Applicabilità / Application / Applikationsmöglichkeiten															
-		-		-	-		-		-		-		-		-
	-		-												
	-		-												

Disponibile / available / verfügbar  
 Non disponibile / not available / nicht verfügbar

05 IR- Rapporto di riduzione

IR - Reduction ratio

IR - Übersetzungsverhältnis

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

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

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



## 1.2 Designazione

### 07 IS - Albero Entrata

Nella tab. sono riportate le grandezze motore accoppiabili (IEC) unitamente alle dimensioni albero/flangia motore standard

Legenda:

11/140 (B5): combinazioni albero/flangia standard

11/120 : combinazioni albero/flangia a richiesta

**Possibili accoppiamenti con motori IEC - Possible couplings with IEC motors - Mögliche Verbindungen mit IEC-Motoren**

	IEC	ir (Tutti / All / Alle )
AM 25/2	56	9/120 (B5) - 9/80 • (B14) 9/140 - 9/90
AM 25/3	63	11/140 (B5) - 11/90 (B14) 11/120 - 11/80 •
AM 32/1	80 <sup>1</sup>	19/200 (B5) - 19/120 (B14) 19/160 - 19/140 - 19/105 •
	71	14/160 (B5) - 14/105 (B14) 14/140 - 14/120 - 14/90 •
	63	11/140 (B5) - 11/90 • (B14) 11/160 - 11/120 - 11/105
AM 35/2	56	9/120 (B5) 9/160 - 9/140 - 9/90 •
	80	19/200 (B5) - 19/120 (B14) 19/160 - 19/140 - 19/105 • - 19/90 •
	71	14/160 (B5) - 14/105 (B14) 14/140 - 14/120 - 14/90 •
AM 35/3	63	11/140 (B5) - 11/90 • (B14) 11/160 - 11/120 - 11/105
	63	11/140 (B5) - 11/90 (B14) 11/120 - 11/80 •
AM 40/1	56	9/120 (B5) - 9/80 • (B14) 9/140 - 9/90
	100-112	28/250 (B5) - 28/160 (B14)
	90	24/200 (B5) - 24/140 (B14) 24/160 - 24/120
	80	19/200 (B5) - 19/120 (B14) 19/160 - 19/140
	71	14/160 (B5)
AM 41/2	63	11/140 (B5)
	90 <sup>(1)</sup>	24/200 (B5) - 24/140 (B14) - 24/160 - 24/120 - 24/105 •
	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140 - 19/105 •
	71	14/160 (B5) - 14/105 • (B14) - 14/200 - 14/140 - 14/120 - 14/90 •
AM 41/3	63	11/140 (B5) - 11/90 • (B14) - 11/200 - 11/160 - 11/120 - 11/105 •
	71	14/160 (B5) - 14/105 (B14) - 14/140 - 14/120 - 14/90 •
	63	11/140 (B5) - 11/90 • (B14) - 11/160 - 11/120 - 11/105
AM 45/2	100-112 <sup>(1)</sup>	28/250 (B5) - 28/160 (B14) 28/140
	90	24/200 (B5) - 24/140 (B14) - 24/250 - 24/160 - 24/120
	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140 - 19/105 •
	71	14/160 (B5) - 14/105 • (B14) - 14/200 - 14/140 - 14/120
AM 45/3	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140 - 19/105 • - 19/90 •
	71	14/160 (B5) - 14/105 • (B14) - 14/200 - 14/140 - 14/120 - 14/90 •
	112	28/250 (B5) - 28/160 (B14)
AM 50/1 AM 50/2	100	28/250 (B5) - 28/160 (B14)
	90	24/200 (B5) - 24/140 (B14) 24/160 - 24/120
	80	19/200 (B5) - 19/120 (B14) 19/160 - 19/140
	71	14/160 (B5) 14/200 - 14/140 - 14/120
	63	11/140 (B5)
AM 55/2	112	28/250 (B5) - 28/160 (B14)
	100	28/250 (B5) - 28/160 (B14)
	90	24/200 (B5) - 24/140 (B14) 24/160 - 24/120
	80	19/200 (B5) - 19/120 (B14) 19/160 - 19/140
	71	14/160 (B5) 14/200 - 14/140 - 14/120
AM 50/3 AM 55/3	90	24/200 (B5) - 24/140 (B14) 24/160 - 24/120
	80	19/200 (B5) - 19/120 (B14) 19/160 - 19/140
	71	14/160 (B5)
AM 60/1 AM 60/2	63	11/140 (B5)
	132	38/300 (B5) - 38/200 (B14) - 38/250
	112	28/250 (B5) - 28/160 (B14) - 28/200 - 28/300
	100	28/250 (B5) - 28/160 (B14) - 28/200 - 28/300
	90	24/200 (B5) - 24/140 (B14) - 24/300 - 24/250 - 24/160 24/120
	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140

## 1.2 Designation

### IS - Input Shaft

In table the possible shaft/flange dimensions IEC standard are listed.

Key:

11/140 : standard shaft/flange combination

11/120 : shaft/flange combinations upon request

## 1.2 Bezeichnung

### IS - Antriebswelle

In Tabelle sind die möglichen Welle/Flansch-Abmessungen IEC-Standard aufgelistet.

Legende:

11/140 : Standardkombinationen Welle/Flansch

11/120 : Sonderkombinationen Welle/Flansch

	IEC	ir (Tutti / All / Alle )
AM 70/2	132	38/300 (B5) - 38/200 (B14) - 38/250
	112	28/250 (B5) - 28/160 (B14) - 28/200 - 28/300
	100	28/250 (B5) - 28/160 (B14) - 28/200 - 28/300
	90	24/200 (B5) - 24/300 - 24/250
	80	19/200 (B5)
AM 60/3 AM 70/3	112	28/250 (B5) - 28/160 (B14)
	100	28/250 (B5) - 28/160 (B14)
	90	24/200 (B5) - 24/140 (B14) - 24/160 - 24/120
	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140
AM 80/1 AM 80/2	71	14/160 (B5) - 14/200 - 14/140 - 14/120
	160	42/350 (B5) - 42/300 - 42/250
	132	38/300 (B5) - 38/350 - 38/250
	112	28/250 (B5) - 28/350 - 28/300
	100	28/250 (B5) - 28/350 - 28/300
AM 90/2	90	24/200 (B5)
	80	19/200 (B5)
	180	48/350 (B5)
	160	42/350 (B5) - 42/300 - 42/250
AM 80/3 AM 90/3	132	38/300 (B5) - 38/350 - 38/250
	112	28/250 (B5) - 28/350 - 28/300
	100	28/250 (B5)
	90	24/200 (B5)
AM 100/1 AM 100/2 AM 110/2	80	19/200 (B5)
	200 <sup>*</sup>	55/400 (B5)
	180 <sup>*</sup>	48/350 (B5)
	160 <sup>*</sup>	42/350 (B5)
	132	38/300 (B5) - 38/200 (B14) - 38/250
AM 100/3 AM 110/3	112	28/250 (B5) - 28/200 - 28/300
	100	28/250 (B5) - 28/200 - 28/300
	132	38/300 (B5) - 28/300
	112	28/250 (B5) - 38/250
	100	28/250 (B5) - 38/250
AM 120/2 AM 140/3	90	24/200 (B5)
	225 <sup>*</sup>	60/450 (B5)
	200 <sup>*</sup>	55/400 (B5) - 55/450
	180 <sup>*</sup>	48/350 (B5) - 48/450 - 48/400
	160 <sup>*</sup>	42/350 (B5) - 42/450 - 42/400
	132	38/300 (B5) - 38/200 (B14) - 38/250
	112	28/250 (B5) - 28/200 - 28/300
AM 120/3	100	28/250 (B5) - 28/200 - 28/300
	132	38/300 (B5)
	112	28/250 (B5)
	100	28/250 (B5)
AM 140/2	90	24/200 (B5)
	250 <sup>*</sup>	65/550 (B5)
	225 <sup>*</sup>	60/450 (B5)
	200 <sup>*</sup>	55/400 (B5)
	180 <sup>*</sup>	48/350 (B5)
	160 <sup>*</sup>	42/350 (B5)
AM 140/3	132 <sup>*</sup>	38/300 (B5)
	all	vedere AM 120/2 / look AM 120/2 / Siehe AM 120/2

<sup>(1)</sup> **ATTENZIONE!-WARNING!-ACHTUNG!** (Vedere paragrafo 1.12-Sezione A)/(Look at chapter 1.12-Section A)/(s. S. 1.12-Abschnitt A)

<sup>1</sup> Il PAM 80 B5 nel AM 32/1 è disponibile solo con corpo flangiato

<sup>1</sup> PAM 80 B5 on AM 32/1 only available in flanged configuration

<sup>1</sup> Das PAM 80 B5 im AM 32/1 ist nur mit Flanschgehäuse lieferbar.

\* Tutti i PAM sono forniti con giunto ROTEX. Per i PAM segnati da asterisco vedere le prescrizioni (per prescrizioni di montaggio vedere sezione A paragrafo "Installazione" - 1.12)

\* All PAM configurations supplied with ROTEX coupling. Where PAM configuration is marked with an asterisk, see directions (for mounting directions, see section A, paragraph "Installation" - 1.12)

\* Alle PAM werden sie mit Kupplung Typ ROTEX geliefert. Bei den mit einem Sternchen gekennzeichneten PAM siehe Vorgaben (hinsichtlich Montagegenauigkeit siehe Abschnitt A im Paragraph "Einbau" - 1.12).



**Posizione morsetteria - Vedere - 12 - PMT - Pagina B6**  
**Terminal board position - Look - 12 - PMT - Page B6**  
**Lage des Klemmenkastens - Siehe - 12 - PMT - Auf Seite B6**

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

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

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



## 1.2 Designazione

## 1.2 Designation

## 1.2 Bezeichnung

### 07 IS - Albero Entrata

### IS - Input Shaft

### IS - Antriebswelle

— Nessuna indicazione = diametro standard;

— No indications = standard diameter;

— Keine Angabe = Standard-durchmesser

AR / 1		32	40	50	60	80	100				
		(Ø 16)	(Ø 16)	(Ø 16)	(Ø 19)	(Ø 24)	(Ø 28)				
AR / 2		50	55	60	70	80	90	100	110	120	140
		(Ø 16)	(Ø 16)	(Ø 19)	(Ø 19)	(Ø 24)	(Ø 24)	(Ø 28)	(Ø 28)	(Ø 38)	(Ø 48)
AR / 3		50	55	60	70	80	90	100	110	120	140
		(Ø 16)	(Ø 16)	(Ø 19)	(Ø 19)	(Ø 24)	(Ø 24)	(Ø 28)	(Ø 28)	(Ø 38)	(Ø 38)

### 09 SD - Diametro albero

### SD - Shaft diameter

### SD - Durchmesser Abtriebswelle

— Nessuna indicazione = diametro standard;

— No indications = standard diameter;  
**optional diameter** = see table.

— Keine Angabe = Standard-durchmesser  
**Optionaler durchmesser** = siehe Tabelle.

A... / 1		32	40	50	60	80	100								
		Standard	—	—	—	—	—	—							
		(Ø 19)	(Ø 19)	(Ø 24)	(Ø 28)	(Ø 38)	(Ø 48)								
		Optional	Ø 14	Ø 20	Ø 25	Ø 30	Ø 40	Ø 50							
A... / 2 A... / 3		25	35	41	45	50	55	60	70	80	90	100	110	120	140
		Standard	—	—	—	—	—	—	—	—	—	—	—	—	—
		(Ø11)	(Ø16)	(Ø20)	(Ø25)	(Ø25)	(Ø30)	(Ø30)	(Ø35)	(Ø40)	(Ø50)	(Ø50)	(Ø60)	(Ø60)	(Ø70)
		Optional	Ø14	Ø19 Ø20	Ø19 Ø25	Ø24 Ø30	Ø24 Ø30	Ø 32	Ø 28 Ø 35	not available	Ø38	(Ø48)	Ø48	not available	Ø 80

### 10 MP - Posizioni di montaggio

### MP - Mounting positions

### MP - Einbaulagen

[M2, M3, M4, M5, M6] Posizioni di montaggio con indicazione dei tappi di livello, carico e scarico; se non specificato si considera standard la posizione M1 (vedi par. 1.4)

[M2, M3, M4, M5, M6] Mounting position with indication of breather level and drain plugs; if not specified, standard position is M1 (see par. 1.4).

Montageposition [M2, M3, M4, M5, M6] mit Angabe von . Entlüftung, Schaugläsern und Ablassschraube. Wenn nicht näher spezifiziert, wird die Standard - position M1 zugrunde gelegt (s. Abschnitt 1.4).

### 11 OPT-ACC. - Opzioni

### OPT-ACC. - Options

### OPT-ACC. - Optionen

vedi Sezione A-1.12 see Section A-1.12 s. Abschnitt A-1.12	OPT.	OPT	Materiale degli anelli di tenuta	Materials of Seals	Dichtungsstoffe
		OPT1	Stato fornitura olio	Scope of the supply - Options - OIL	Optionen - Lieferzustand - Optionen - Öl
		OPT2	Verniciatura	Painting and surface protection	Lackierung und Oberflächenschutz

### 12 PMT - Posizioni della Morsettiera

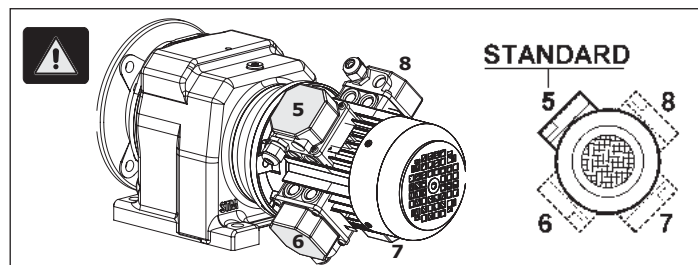
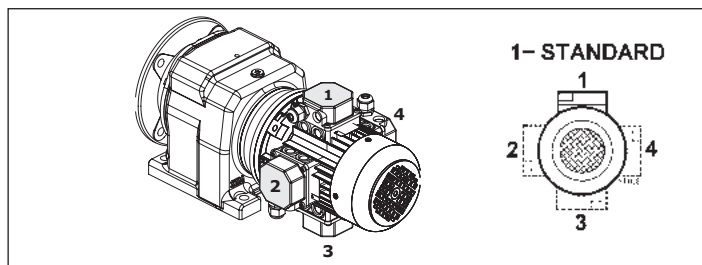
### PMT - Position Terminal Box

### PMT - Montagposition Klemmenkasten

[2, 3, 4] Posizione della morsettiera del motore se diversa da quella standard (1).

[2, 3, 4] Position of the motor terminal box if different from the standard one (1).

Montageposition Klemmenkasten [2, 3, 4], wenn abweichend von Standardposition [1] (für Motorgetriebe).



**N.B.**  
La configurazione standard della flangia attacco motore prevede 4 fori a 45°.

**Note.**  
The standard configuration for the 4 holes is 45° to the axles (like an x: see par 2.3).

**HINWEIS.**  
In der Standardkonfiguration sind die 4 Flanschbohrungen im 45°-Winkel zu den Achsen angeordnet

Per le flange contrassegnate con il simbolo (\*) (vedi pagina B5) i fori per il fissaggio al motore sono disposti in croce (esempio +). Pertanto è opportuno valutare l'ingombro della morsettiera del motore che verrà installato in quanto essa verrà a trovarsi orientata a 45° rispetto agli assi. Per la scelta della posizione della morsettiera rispetto agli assi fare riferimento allo schema seguente (in cui la posizione 5 è quella standard):

For the flanges marked with (\*) (see page B5) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please choose the terminal board position referring to the following sketch (in which n° 5 is the standard position):

Bei Flanschen, die mit (\*) (Siehe auf Seite B5) gekennzeichnet sind, sind die Bohrungen auf den Achsen angeordnet (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird. Die Lage des Klemmenkastens des Motors wählen Sie bitte anhand der folgenden Skizze (Pos. 5 ist Standardposition):



1.4 Lubrificazione

1.4 Lubrication

1.4 Schmierung



Posizioni di montaggio  
Mounting positions  
Montagepositionen



▽ Carico / Breather plug / Nachfüllen - Entlüftung  
● Livello / Level plug / Pegel  
▼ Scarico / Drain plug / Auslauf

▽ Carico / Breather plug / Nachfüllen - Entlüftung  
● Livello / Level plug / Pegel  
▼ Scarico / Drain plug / Auslauf

Posizioni di montaggio - Mounting positions - Montagepositionen			
AR AM AC		Posizioni Positions Positionen	Prescrizioni da indicare in fase d'ordine Ordering requirements Anforderungen bei der Bestellung
	32	M1-M2 M3-M4 M5-M6	Non necessaria Not necessary Nicht erforderlich
	40		Necessaria Necessary Erforderlich
	50		
	60		
	80		
100			

Posizioni di montaggio - Mounting positions - Montagepositionen			
AR AM AC		Posizioni Positions Positionen	Prescrizioni da indicare in fase d'ordine Ordering requirements Anforderungen bei der Bestellung
	25	M1-M2 M3-M4 M5-M6	Non necessaria Not necessary Nicht erforderlich
	35 41 45 50 55 60 70 75 85 90 90 100 110 120 140		Necessaria Necessary Erforderlich

TARGHETTA - RIDUTTORE

NON NECESSARIA

Indicata sempre nella targhetta del riduttore la posizione di montaggio "M1".

NECESSARIA

La posizione richiesta è indicata nella targhetta del riduttore

Identification Plate - Gearbox

NOT NECESSARY

The mounting position is always indicated on the nameplate "M1".

NECESSARY

The indication it on the label of the gearbox

Typeschild - Getriebe

NICHT ERFORDERLICH

Die Einbaulage ist immer auf dem Typenschild angegeben "M1".

ERFORDERLICH

Findet man die angefragte Position auf dem Typenschild des Getriebe





## 1.4 Lubrificazione

## 1.4 Lubrication

## 1.4 Schmierung

Lub	Quantità di lubrificante - Lubricant Quantity - Schmiermittelmenge - [Kg]								OPT1	Tappi-Plug-Stopfen		
			M1	M2	M3	M4	M5	M6		N°	Diameter	Type
AR AM AC	32	/1	0.100	0.100	0.100	0.100	0.100	0.100	INOIL_STD	1	1/8"	
	40	/1	0.160	0.270	0.180	0.270	0.160	0.160		1	1/4"	
	50	/1	0.300	0.300	0.200	0.300	0.200	0.200		1	1/4"	
	60	/1	0.470	0.640	0.570	0.750	0.570	0.570		1	3/8"	
	80	/1	1.050	1.050	1.350	1.650	1.400	1.400	OUTOIL	4	3/8"	
100	/1	2.500	3.000	3.000	3.300	3.000	3.000	4		3/8"		

Lub	Quantità di lubrificante - Lubricant Quantity - Schmiermittelmenge - [Kg]								OPT1	Tappi-Plug-Stopfen			
			M1	M2	M3	M4	M5	M6		N°	Diameter	Type	
AR AM AC	25	/2 /3	0.120							INOIL_STD	1	1/8"	
	35	/2	0.150	0.200	0.200	0.200	0.150	0.150	1		12.1		
	35	/3	0.250	0.250	0.325	0.250	0.200	0.200	1		12.1		
	41	/2	0.290	0.290	0.240	0.300	0.200	0.200	1		12.1		
	41	/3	0.300	0.300	0.350	0.350	0.260	0.260	1		12.1		
	45	/2	0.350	0.350	0.400	0.400	0.350	0.350	1		12.1		
	45	/3	0.400	0.400	0.630	0.600	0.400	0.400	1		12.1		
	50	/2 /3	0.950	0.950	1.350	1.350	0.950	0.950	1		1/4"		
	55	/2	1.600	2.000	2.500	2.700	1.600	1.600	1		1/4"		
	55	/3	1.600	2.000	2.700	2.700	1.600	1.600	1		1/4"		
	60	/2 /3	1.550	1.550	2.610	2.150	1.550	1.550	OUTOIL	4	3/8"		
	70	/2	2.200	3.300	3.600	3.900	2.600	2.800		5	1/4"		
	70	/3	2.200	3.300	4.100	3.900	2.600	2.800		5	1/4"		
	80	/2 /3	2.600	2.600	4.850	4.440	2.600	2.600		4	1/2"		
	90	/2 /3	5.000	5.900	7.800	6.700	5.900	5.900		4	3/8"		
	100	/2 /3	5.550	5.550	9.600	9.600	5.550	5.550		4	1/2"		
	110	/2 /3	8.700	11.20	12.10	11.90	8.600	9.600		4	1/2"		
120	/2 /3	10.00	10.00	16.50	16.50	10.00	10.00	4	1/2"				
140	/2	16.00	19.00	21.00	25.50	16.00	19.00	7	1/2"				
140	/3	16.00	19.00	26.00	25.50	16.00	19.00	7	1/2"				



Quantità indicative; riempimento attenersi al livello.

durante il riempimento attenersi alla spia di livello.

Indicative quantities, check the oil sight glass during filling.

Richtungsweisende Mengen, bei der Auffüllung auf das Füllstand-Kontrollfenster Bezug nehmen.

**Attensione !:**

Il tappo di sfiato è allegato solo nei riduttori che hanno più di un tappo olio

**Warning!:**

A breather plug is supplied only with worm gearboxes that have more than one oil plug

**Achtung!:**

Der Entlüftungsstopfen ist lediglich bei den Getrieben vorhanden, die über mehr als einen Öfüllstopfen verfügen

**Nota:** Se in fase d'ordine la posizione di montaggio è omessa, il riduttore verrà fornito con i tappi predisposti per la posizione M1.

**Note:** If the mounting position is not specified in the order, the worm gearbox supplied will have plugs pre-arranged for position M1.

**Anmerkung:** Sollte in der Auftragsphase die Einbaulage nicht angegeben werden, wird das Getriebe mit Stopfen für die Einbaulage M1.

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

*The supply of gearboxes with different plug pre-arrangements has to be agreed with the manufacturer.*

Lieferungen, die eine Auslegung hinsichtlich der Stopfen aufweisen, die von den Angaben in der Tabelle abweichen, müssen vorab vereinbart werden..



**1.5 Carichi radiali e assiali**

Quando la trasmissione del moto avviene tramite meccanismi che generano carichi radiali sull'estremità dell'albero, è necessario verificare che i valori risultanti non eccedono quelli indicati nelle tabelle.

Nella Tab. 2.3 sono riportati i valori dei carichi radiali ammissibili per l'albero veloce ( $Fr_1$ ). Come carico assiale ammissibile contemporaneo si ha:

$$Fa_1 = 0.2 \times Fr_1$$

**1.5 Axial and overhung loads**

*Should transmission movement determine radial loads on the angular shaft end, it is necessary to make sure that resulting values do not exceed the ones indicated in the tables.*

*In Table 2.3 permissible radial load for input shaft are listed ( $Fr_1$ ). Contemporary permissible axial load is given by the following formula:*

$$Fa_1 = 0.2 \times Fr_1$$

**1.5 Radiale und Axiale Belastungen**

Wird das Wellenende auch durch Radialkräfte belastet, so muß sichergestellt werden, daß die resultierenden Werte die in der Tabelle angegebenen nicht überschreiten.

In Tabelle 2.3 sind die Werte der zulässigen Radialbelastungen für die Antriebswelle ( $Fr_1$ ) angegeben. Die Axialbelastung beträgt dann:

$$Fa_1 = 0.2 \times Fr_1$$



**AR/1**

Tab. 2.3

$n_1$ min <sup>-1</sup>	$Fr_1$ (N)					
	AR../1					
	32	40	50	60	80	100
2800	170	320	430	520	600	1000
1400	220	400	550	700	800	1200
900	250	450	600	800	920	1300
500	300	500	850	1100	1300	1500



**AR/2  
AR/3**

$n_1$ min <sup>-1</sup>	$Fr_1$ (N)																	
	AR																	
	25	35	41	45	40	50	55/2	55/3	60	70/2	70/3	80	90	100	110	120	140/2	140/3
2800	—	—	—	—	320	430	700	430	520	800	520	600	600	1000	1000	1250	2800	1250
1400	—	—	—	—	400	550	900	550	700	1000	700	800	800	1200	1200	1500	3000	1500
900	—	—	—	—	450	600	1100	600	800	1200	800	920	920	1300	1300	1600	3500	1600
500	—	—	—	—	500	850	1200	850	1100	1400	1100	1300	1300	1500	1500	1800	3800	1800

\* Richiedere ad Ufficio Tecnico/ Request to our Technical Dept. / Bei der Technischen Abteilung anfordern

In Tab. 2.4 sono riportati i valori dei carichi radiali ammissibili per l'albero lento ( $Fr_2$ ). Come carico assiale ammissibile contemporaneo si ha:

$$Fa_2 = 0.2 \times Fr_2$$

*In Table 2.4 permissible radial loads for output shaft are listed ( $Fr_2$ ). Permissible axial load is given by the following formula:*

$$Fa_2 = 0.2 \times Fr_2$$

In Tabelle 2.4 sind die Werte der zulässigen Radialbelastungen für die Abtriebswelle ( $Fr_2$ ) angegeben. Als zulässige Axialbelastung gilt:

$$Fa_2 = 0.2 \times Fr_2$$

Tab. 2.4



**AR/1**

$n_2$ min <sup>-1</sup>	$Fr_2$ (N)					
	AR - AM - AC					
	32	40	50	60	80	100
2400	-	600	1250	1350	1900	2500
1850	-	650	1250	1450	2100	2800
1250	530	700	1500	1650	2450	3000
1100	570	720	1500	2000	2450	3500
830	630	750	1500	2300	2600	3600
630	700	850	1800	2400	2900	3700
500	700	950	2000	2600	3400	3800
400	740	1000	2200	2900	3800	3900
300	880	1150	2300	3000	4200	4200
250	970	1250	2500	3400	4500	4500
200	1020	1370	2500	3800	5000	5500
160	1070	1500	2500	3800	5500	6500
130	1200	1500	2500	3800	6000	7500
100	1260	1500	2500	3800	6000	8500
80	1320	1500	2500	3800	6000	8500
> 70	1420	1500	2500	3800	6000	8500



Tab. 2.5



**AR/2**  
**AR/3**  
**AM/2**  
**AM/3**  
**AC/2**  
**AC/3**

$n_2$ $\text{min}^{-1}$	$Fr_2$ (N)													
	AR - AM - AC													
	25	35	41	45	50	55	60	70	80	90	100	110	120	140
1000	420	450	580	665	750	—	1100	—	2000	—	3800	4000	4500	—
700	540	580	750	875	1000	1100	1500	1800	2500	4000	5000	5400	5800	—
500	650	700	900	1050	1200	1300	1800	2300	3000	5000	6000	6800	7000	—
350	650	740	1100	1250	1400	1500	2300	3500	3700	6000	7000	8000	8200	15000
250	650	800	1300	1550	1800	2000	2600	4000	4500	7000	8200	9000	9500	16000
200	650	850	1500	1850	2200	2400	3300	5000	6000	8000	9000	10000	10000	16000
150	650	930	1600	2300	3000	3200	4000	5500	7500	9000	10000	11500	11500	20000
100	650	1000	1700	2550	3400	3500	4500	6000	8300	10000	11500	13000	12500	20000
80	650	1050	1850	2775	3700	3800	5000	6500	9000	11000	12000	13000	13500	24000
60	650	1100	1900	2900	3900	4500	5400	7000	9600	12000	13000	14000	15000	26000
30	650	1400	2300	3200	4100	5500	6000	8000	10000	13000	14000	16000	21000	30000
< 15	650	1800	2700	3500	4300	6000	6500	9000	11000	14000	15000	18000	25000	32000

I carichi radiali indicati nelle tabelle si intendono applicati a metà della sporgenza dell'albero standard e sono riferiti ai riduttori operanti con fattore di servizio 1. Per le sporgenze fornite in alternativa, fare riferimento alla sporgenza standard. Valori intermedi relativi a velocità non riportate possono essere ottenuti per interpolazione considerando però che  $Fr_1$  a  $500 \text{ min}^{-1}$  e  $Fr_2$  a  $15 \text{ min}^{-1}$  rappresentano i carichi massimi consentiti. Per i carichi non agenti sulla mezzeria dell'albero lento o veloce si ha:

a 0.3 della sporgenza:  
 $Fr_x = 1.25 \times Fr_{1-2}$   
a 0.8 dalla sporgenza:  
 $Fr_x = 0.8 \times Fr_{1-2}$

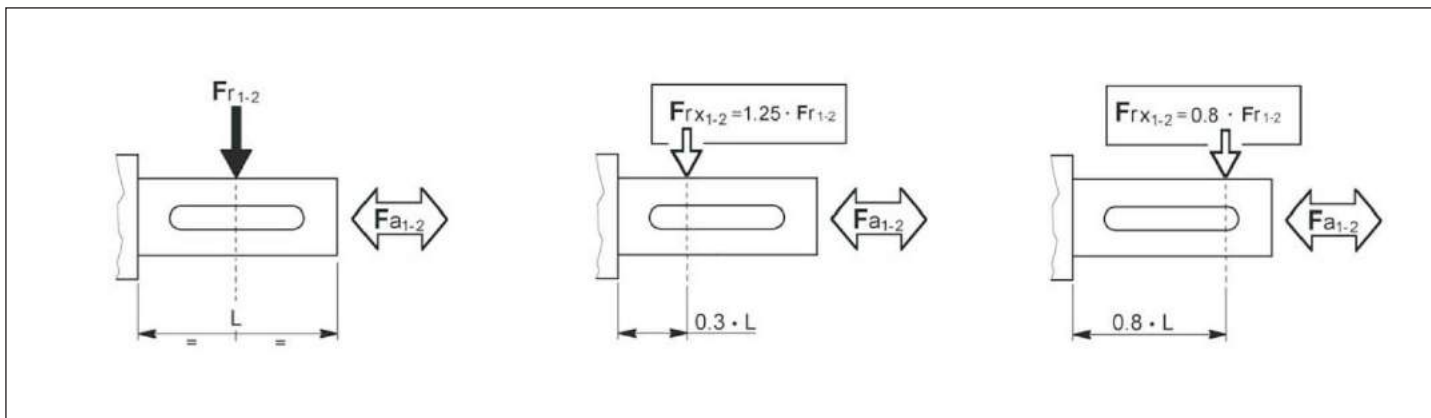
*The radial loads shown in the tables are applied on the centre line of the standard shaft extension and are related to gearboxes working with service factor 1. With reference to alternative values of shaft extension, refer to standard shaft extension. Intermediate values of speeds that are not listed can be obtained through interpolation but it must be considered that  $Fr_1$  at  $500 \text{ min}^{-1}$  and  $Fr_2$  at  $15 \text{ min}^{-1}$  represent the maximum allowable loads. For loads which are not applied on the centre line of the output or input shaft, following values will be obtained:*

*at 0.3 from extension:  
 $Fr_x = 1.25 \times Fr_{1-2}$   
at 0.8 from extension:  
 $Fr_x = 0.8 \times Fr_{1-2}$*

Bei den in der Tabelle angegebenen Radialbelastungen wird eine Krafterwirkung auf die Mitte des Wellenendes zugrunde gelegt; außerdem arbeiten die Getriebe mit Betriebsfaktor 1. Bei Einsatz von Sonderabtriebswellen beziehen Sie sich bitte auf die oben aufgeführten Abstände der Standardabtriebswellen. Zwischenwerte für nicht aufgeführte Drehzahlen können durch Interpolation ermittelt werden. Hierbei ist jedoch zu berücksichtigen, daß der maximale Wert für  $Fr_1$  bei  $500 \text{ min}^{-1}$  und für  $Fr_{2\text{max}}$  bei  $15 \text{ min}^{-1}$  gilt. Bei Lasten, die nicht auf die Mitte der Ab- und Antriebswellen wirken, legt man folgende Werte zugrunde:

0.3 vom Wellenabsatz entfernt:  
 $Fr_x = 1.25 \times Fr_{1-2}$   
0.8 vom Wellenabsatz entfernt:  
 $Fr_x = 0.8 \times Fr_{1-2}$

Tab. 2.6





1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 25/2



1.8

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
3.4	819	12	1.1	95	409	12	0.55	95	263	13	0.38	95	146	16	0.26	95	56 (B5 - B14)  63 (B5 - B14)
3.9	716	12	0.96	95	358	12	0.48	95	230	13	0.33	95	128	16	0.23	95	
4.8	579	12	0.78	95	289	12	0.39	95	186	13	0.27	95	103	16	0.18	95	
5.6	498	12	0.67	95	249	12	0.33	95	160	13	0.23	95	89	16	0.16	95	
7.2	389	12	0.52	95	194	12	0.26	95	125	13	0.18	95	69	16	0.12	95	
8.7	324	12	0.44	95	162	12	0.22	95	104	13	0.15	95	58	16	0.10	95	
9.0	310	12	0.42	95	155	14	0.24	95	100	14	0.15	95	55	14	0.09	95	
10.5	267	13	0.38	95	133	14	0.21	95	86	14	0.13	95	48	14	0.07	95	
13.4	208	13	0.30	95	104	15	0.17	95	67	15	0.11	95	37	15	0.06	95	
16.2	173	13	0.25	95	87	15	0.14	95	56	15	0.09	95	31	15	0.05	95	
17.9	157	14	0.24	95	78	15	0.13	95	50	15	0.08	95	28	15	0.05	95	

AR 25/3



1.8

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
18.9	148	15	0.25	93	74	19	0.16	93	48	22	0.12	93	26	22	0.07	93	56 (B5 - B14)  63 (B5 - B14)
23.4	120	15	0.20	93	60	19	0.13	93	38	22	0.10	93	21	22	0.05	93	
27.2	103	15	0.17	93	51	20	0.12	93	33	22	0.08	93	18	22	0.05	93	
31.9	88	18	0.18	93	44	17	0.08	93	28	17	0.05	93	16	17	0.03	93	
35.3	79	15	0.13	93	40	17	0.08	93	25	17	0.05	93	14	17	0.03	93	
41.8	67	18	0.14	93	33	22	0.08	93	22	22	0.05	93	12	22	0.03	93	
50.7	55	16	0.10	93	28	18	0.06	93	18	18	0.04	93	10	18	0.02	93	
59.6	47	17	0.09	93	23	19	0.05	93	15	19	0.03	93	8	19	0.02	93	
64.9	43	17	0.08	93	22	19	0.05	93	14	19	0.03	93	8	19	0.02	93	
78.0	36	17	0.07	93	18	20	0.04	93	12	20	0.03	93	6	20	0.01	93	
86.2	32	18	0.07	93	16	20	0.04	93	10	20	0.02	93	6	20	0.01	93	

Pt <sub>N</sub> [kW]	tutti i rapporti / all ratios / alle Untersetzungen	
	25/2	3.0
	25/3	2.3

N.B. Il riduttore grandezza 25 viene fornito esclusivamente nella configurazione motoriduttore o riduttore predisposto IEC.

NOTE. The gearbox size 25 is supplied only in the configuration gearmotor or gearbox arranged for the IEC motor connection.

HINWEIS. Das Getriebe der Größe 25 wird ausschließlich in der Konfiguration Getriebe-motor oder Getriebe mit IEC-Motoranschluß geliefert.



## 1.6 Prestazioni riduttori AR

## 1.6 AR gearboxes performances

## 1.6 Leistungen der AR-Getriebe

## AR 32/1



2.1

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC	
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD		
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%		
1.8	1585	14.5	2.5	97	792	21.7	1.9	97	509	21.8	1.2	97	283	21.8	0.7	97	80 * (B5 - B14)	
2.1	1350	14.9	2.2	97	675	22.6	1.7	97	434	22.7	1.1	97	241	22.8	0.6	97		
2.5	1139	16.1	2.0	97	569	23.7	1.5	97	366	23.8	0.9	97	203	23.8	0.5	97		
3.0	948	17.4	1.8	97	474	25.0	1.3	97	305	25.1	0.8	97	169	25.1	0.5	97		71 (B5 - B14)
3.4	831	17.6	1.6	97	416	25.9	1.2	97	267	25.9	0.7	97	148	25.9	0.4	97		
3.9	721	17.8	1.4	97	361	25.8	1.0	97	232	26.0	0.7	97	129	26.0	0.4	97		63 (B5 - B14)
4.5	618	17.8	1.2	97	309	26.5	0.9	97	199	26.5	0.6	97	110	26.5	0.3	97		
5.3	528	19.1	1.1	97	264	26.8	0.8	97	170	26.8	0.5	97	94	26.9	0.3	97		56 (B5)
6.5	434	16.9	0.8	97	217	20.9	0.5	97	139	22.3	0.3	97	77	24.3	0.2	97		

\* Il PAM 80 B5 è disponibile solo con corpo flangiato

\*The PAM 80 B5 is only available on housings with output flanges

\*Der PAM 80 B5 ist nur auf Gehäuse mit Abtriebsflansch verfügbar

## AR 35/2



2.6

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC	
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD		
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%		
3.4	822	32	2.85	95	411	35	1.58	95	264	39	1.12	95	147	42	0.68	95	80 (B5 - B14)	
4.0	696	34	2.62	95	348	38	1.45	95	224	42	1.03	95	124	46	0.63	95		
4.7	596	36	2.36	95	298	40	1.31	95	192	44	0.93	95	106	48	0.57	95		
5.4	517	36	2.05	95	259	40	1.14	95	166	44	0.80	95	92	48	0.49	95		71 (B5 - B14)
6.3	443	36	1.75	95	221	40	0.97	95	142	44	0.69	95	79	48	0.42	95		
7.3	381	41	1.70	95	191	45	0.94	95	123	50	0.67	95	68	54	0.41	95		63 (B5 - B14)
8.7	323	45	1.60	95	162	50	0.89	95	104	52	0.59	95	58	60	0.38	95		
10.1	277	45	1.37	95	138	50	0.76	95	89	53	0.52	95	49	60	0.33	95		
11.7	240	45	1.19	95	120	50	0.66	95	77	54	0.46	95	43	60	0.28	95		
13.6	205	45	1.02	95	103	50	0.56	95	66	55	0.40	95	37	60	0.24	95		
15.7	178	50	0.97	95	89	55	0.54	95	57	55	0.35	95	32	60	0.21	95		
18.1	154	50	0.84	95	77	55	0.47	95	50	55	0.30	95	28	60	0.18	95		
21.3	131	50	0.71	95	66	55	0.40	95	42	60	0.28	95	23	60	0.15	95		
25.2	111	51	0.63	95	56	57	0.35	95	36	60	0.24	95	20	60	0.13	95		
28.7	98	54	0.58	95	49	60	0.32	95	31	60	0.21	95	17	60	0.11	95		
33.4	84	45	0.42	95	42	50	0.23	95	27	50	0.15	95	15	50	0.08	95		
38.0	74	45	0.36	95	37	50	0.20	95	24	50	0.13	95	13	50	0.07	95		
45.1	62	45	0.31	95	31	50	0.17	95	20	50	0.11	95	11	50	0.06	95		

## AR 35/3



3.3

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC	
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD		
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%		
43.9	64	54	0.39	93	31.9	60	0.22	93	20.5	60	0.14	93	11.4	60	0.08	93	63 (B5 - B14)	
50.6	55	54	0.34	93	27.7	60	0.19	93	17.8	60	0.12	93	9.9	60	0.07	93		
59.1	47	54	0.29	93	23.7	60	0.16	93	15.2	60	0.10	93	8.5	60	0.06	93		
68.1	41	54	0.25	93	20.5	60	0.14	93	13.2	60	0.09	93	7.3	60	0.05	93		56 (B5 - B14)
78.6	36	60	0.24	93	17.8	60	0.12	93	11.4	60	0.08	93	6.4	60	0.04	93		
92.4	30	60	0.20	93	15.1	60	0.10	93	9.7	60	0.07	93	5.4	60	0.04	93		
109.1	26	60	0.17	93	12.8	60	0.09	93	8.2	60	0.06	93	4.6	60	0.03	93		
124.3	23	60	0.15	93	11.3	60	0.08	93	7.2	60	0.05	93	4.0	60	0.03	93		
147.7	19	60	0.13	93	9.5	60	0.06	93	6.1	60	0.04	93	3.4	60	0.02	93		
164.7	17	50	0.10	93	8.5	50	0.05	93	5.5	50	0.03	93	3.0	50	0.02	93		
195.6	14	50	0.08	93	7.2	50	0.04	93	4.6	50	0.03	93	2.6	50	0.01	93		

tutti i rapporti / all ratios / alle Untersetzungen

Pt<sub>N</sub> [kW]

32/1

3.0

35/2

4.5

35/3

3.5



1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 40/1



3.1

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
1.2	2400	30	7.8	97	1200	30	3.9	97	771	30	2.5	97	429	30	1.4	97	100-112 (B5 - B14)
1.5	1847	35	7.0	97	923	35	3.5	97	594	35	2.2	97	330	35	1.2	97	
1.7	1655	40	7.1	97	827	40	3.6	97	532	40	2.3	97	295	40	1.3	97	
2.0	1430	45	6.9	97	715	45	3.5	97	460	45	2.2	97	255	45	1.2	97	
2.2	1257	50	6.8	97	629	50	3.4	97	404	50	2.2	97	224	50	1.2	97	
2.6	1098	50	5.9	97	549	50	3.0	97	353	50	1.9	97	196	50	1.1	97	
3.2	881	50	4.8	97	441	50	2.4	97	283	50	1.5	97	157	50	0.8	97	
3.7	750	50	4.0	97	375	50	2.0	97	241	50	1.3	97	134	50	0.7	97	
4.9	569	45	2.8	97	285	45	1.4	97	183	45	0.9	97	102	50	0.5	97	
5.7	494	40	2.1	97	247	40	1.1	97	159	42	0.7	97	88	45	0.4	97	
7.0	400	38	1.6	97	200	38	0.8	97	129	39	0.5	97	71	43	0.3	97	

AR 41/2



3.1

7.5	372	72	3.0	95	186	80	1.6	95	120	87	1.1	95	66	87	0.64	95	90 (B5 - B14)
8.5	328	77	2.8	95	164	85	1.5	95	105	93	1.1	95	59	93	0.60	95	
10.5	268	81	2.4	95	134	90	1.3	95	86	98	0.93	95	48	98	0.52	95	
12.1	232	86	2.2	95	116	95	1.2	95	74	103	0.85	95	41	103	0.47	95	
13.0	215	92	2.2	95	107	102	1.2	95	69	111	0.85	95	38	111	0.47	95	
15.3	183	95	1.9	95	91	105	1.1	95	59	114	0.74	95	33	114	0.41	95	
18.3	153	95	1.6	95	76	105	0.88	95	49	114	0.62	95	27	114	0.34	95	
20.2	139	95	1.4	95	69	105	0.80	95	45	114	0.56	95	25	114	0.31	95	
23.9	117	95	1.2	95	59	105	0.68	95	38	114	0.47	95	21	114	0.26	95	
28.6	98	95	1.0	95	49	105	0.57	95	31	114	0.40	95	17	114	0.22	95	
37.2	75	95	0.78	95	38	105	0.44	95	24	114	0.30	95	13	114	0.17	95	
49.6	56	95	0.59	95	28	105	0.33	95	18	114	0.23	95	10	114	0.13	95	

AR 41/3



3.5

54.4	52	99	0.57	93	26	110	0.32	93	17	120	0.22	93	9,2	120	0.12	93	71 (B5-B14) 63 (B5-B14)
61.3	46	99	0.51	93	23	110	0.28	93	15	120	0.20	93	8,2	120	0.11	93	
70.8	40	99	0.44	93	20	110	0.24	93	13	120	0.17	93	7,1	120	0.10	93	
82.5	34	99	0.38	93	17	110	0.21	93	11	120	0.15	93	6,1	120	0.08	93	
91.0	31	99	0.34	93	15	110	0.19	93	10	120	0.13	93	5,5	120	0.07	93	
107.4	26	99	0.29	93	13	110	0.16	93	8,4	120	0.11	93	4,7	120	0.06	93	
118.4	24	99	0.26	93	12	110	0.15	93	7,6	120	0.10	93	4,2	120	0.06	93	
128.6	22	99	0.24	93	11	110	0.13	93	7,0	120	0.09	93	3,9	120	0.05	93	
140.0	20	99	0.22	93	10	110	0.12	93	6,4	120	0.09	93	3,6	120	0.05	93	
167.4	17	99	0.19	93	8,4	110	0.10	93	5,4	120	0.07	93	3,0	120	0.04	93	
223.2	13	99	0.14	93	6,3	110	0.08	93	4,0	120	0.05	93	2,2	120	0.03	93	

$P_{tN}$ [kW]	tutti i rapporti / all ratios / alle Untersetzungen	
	40/1	5.5
	41/2	4.5
	41/3	3.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (A-1.5). Per maggiori informazioni contattare il nostro uff. tecnico.

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (A-1.5). For details please contact our technical office.

HINWEIS. Für den Fall, daß die in den Tabellen angegebenen Nennleistungen eingerahmt sind, ist die thermische Leistungsgrenze der Getriebe zu beachten. (A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.



1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 45/2



4.1

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n2	T2M	P	RD	n2	T2M	P	RD	n2	T2M	P	RD	n2	T2M	P	RD	
	min-1	Nm	kW	%	min-1	Nm	kW	%	min-1	Nm	kW	%	min-1	Nm	kW	%	
5.8	486	104	5.5	95	243	115	3.1	95	156	125	2.2	95	87	125	1.2	95	100 (B5 - B14)
6.4	435	108	5.2	95	218	120	2.9	95	140	131	2.0	95	78	131	1.1	95	
7.4	376	117	4.9	95	188	130	2.7	95	121	142	1.9	95	67	142	1.0	95	
8.5	331	126	4.6	95	165	140	2.6	95	106	152	1.8	95	59	152	0.99	95	
9.7	289	135	4.3	95	144	150	2.4	95	93	163	1.7	95	52	163	0.93	95	
12.1	232	144	3.7	95	116	160	2.0	95	75	174	1.4	95	41	174	0.80	95	
14.2	197	153	3.3	95	99	170	1.8	95	63	185	1.3	95	35	185	0.72	95	
16.9	165	144	2.6	95	83	160	1.5	95	53	174	1.0	95	30	174	0.57	95	
18.7	150	158	2.6	95	75	175	1.4	95	48	191	1.0	95	27	191	0.56	95	
21.5	130	162	2.3	95	65	180	1.3	95	42	196	0.90	95	23	196	0.50	95	
26.6	105	144	1.7	95	53	160	0.90	95	34	174	0.65	95	19	174	0.36	95	
30.2	93	144	1.5	95	46	160	0.82	95	30	174	0.57	95	17	174	0.32	95	
37.3	75	153	1.3	95	38	170	0.70	95	24	185	0.49	95	13	185	0.27	95	
45.9	61	153	1.0	95	31	170	0.57	95	20	185	0.40	95	11	185	0.22	95	

AR 45/3



4.6

ir	n2	T2M	P	RD	n2	T2M	P	RD	n2	T2M	P	RD	n2	T2M	P	RD	IEC
41.4	68	180	1.4	93	34	200	0.76	93	22	218	0.53	93	12	218	0.30	93	80 (B5-B14) 71 (B5-B14)
44.6	63	162	1.1	93	31	180	0.64	93	20	196	0.45	93	11	196	0.25	93	
51.6	54	180	1.1	93	27	200	0.61	93	17	218	0.43	93	10	218	0.24	93	
60.6	46	180	0.9	93	23	200	0.52	93	15	218	0.36	93	8.2	218	0.20	93	
72.4	39	162	0.71	93	19	180	0.39	93	12	196	0.27	93	6.9	196	0.15	93	
79.8	35	180	0.71	93	18	200	0.39	93	11	218	0.28	93	6.3	218	0.15	93	
92.0	30	180	0.62	93	15	200	0.34	93	10	218	0.24	93	5.4	218	0.13	93	
113.7	25	162	0.45	93	12	180	0.25	93	7.9	196	0.17	93	4.4	196	0.10	93	
129.1	22	162	0.40	93	11	180	0.22	93	7.0	196	0.15	93	3.9	196	0.09	93	
159.5	18	162	0.32	93	8.8	180	0.18	93	5.6	196	0.12	93	3.1	196	0.07	93	
196.0	14	162	0.26	93	7.1	180	0.14	93	4.6	196	0.10	93	2.6	196	0.06	93	

Pt <sub>N</sub> [kW]	tutti i rapporti / all ratios / alle Untersetzungen	
	45/2	5.0
	45/3	4.1

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (A-1.5). Per maggiori informazioni contattare il nostro uff. tecnico.

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (A-1.5). For details please contact our technical office.

HINWEIS. Für den Fall, daß die in den Tabellen angegebenen Nennleistungen eingerahmt sind, ist die thermische Leistungsgrenze der Getriebe zu beachten. (A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.



1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 50/1

**Kg** 5.2

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
1.3	2240	55	13.3	97	1120	55	6.6	97	720	55	4.3	97	400	55	2.4	97	112 (B5 - B14)
1.5	1830	63	12.4	97	915	63	6.2	97	588	63	4.0	97	327	63	2.2	97	
1.8	1547	80	13.4	97	773	80	6.7	97	497	80	4.3	97	276	80	2.4	97	100 (B5 - B14)
2.0	1373	80	11.8	97	686	80	5.9	97	441	80	3.8	97	245	80	2.1	97	
2.5	1129	80	9.8	97	565	80	4.9	97	363	80	3.1	97	202	80	1.7	97	90 (B5 - B14)
2.8	986	85	9.0	97	493	85	4.5	97	317	85	2.9	97	176	85	1.6	97	
3.1	915	90	8.9	97	458	90	4.5	97	294	90	2.9	97	163	90	1.6	97	80 (B5 - B14)
3.3	851	90	8.3	97	426	90	4.1	97	274	90	2.7	97	152	90	1.5	97	
3.6	787	90	7.6	97	393	90	3.8	97	253	90	2.5	97	140	90	1.4	97	71 (B5)
3.9	724	90	7.0	97	362	90	3.5	97	233	90	2.3	97	129	90	1.3	97	
5.1	551	72	4.3	97	276	75	2.2	97	177	75	1.4	97	98	80	0.8	97	63 (B5)
5.8	480	63	3.3	97	240	65	1.7	97	154	65	1.1	97	86	73	0.7	97	
6.6	426	60	2.8	97	213	60	1.4	97	137	60	0.9	97	76	70	0.6	97	

AR 50/2

**Kg** 13

2.6	1077	99	11.8	95	538	118	7.0	95	346	132	5.0	95	192	182	3.9	95	112 (B5 - B14)
2.9	952	104	10.9	95	476	124	6.5	95	306	138	4.7	95	170	190	3.6	95	
4.4	636	112	7.9	95	318	133	4.7	95	205	148	3.3	95	114	200	2.5	95	100 (B5 - B14)
5.1	546	118	7.1	95	273	140	4.2	95	175	157	3.0	95	97	200	2.1	95	
6.3	448	124	6.1	95	224	147	3.6	95	144	164	2.6	95	80	200	1.8	95	90 (B5 - B14)
7.4	379	128	5.4	95	190	153	3.2	95	122	171	2.3	95	68	200	1.5	95	
8.3	336	133	4.9	95	168	158	2.9	95	108	176	2.1	95	60	20	1.3	95	71 (B5)
9.2	304	137	4.6	95	152	163	2.7	95	98	182	2.0	95	54	200	1.2	95	
10.4	269	144	4.3	95	134	171	2.5	95	86	191	1.8	95	48	200	1.1	95	63 (B5)
12.5	224	147	3.6	95	112	175	2.2	95	72	195	1.6	95	40	210	0.93	95	
14.6	192	153	3.2	95	96	182	1.9	95	62	203	1.4	95	34	210	0.80	95	
16.8	167	158	2.9	95	83	188	1.7	95	54	210	1.2	95	30	210	0.69	95	
18.2	154	156	2.6	95	77	184	1.6	95	50	200	1.1	95	28	200	0.61	95	
20.8	135	159	2.4	95	67	189	1.4	95	43	200	0.96	95	24	200	0.63	95	
23.8	118	171	2.2	95	59	203	1.3	95	38	210	0.87	95	21	210	0.49	95	
25.9	108	168	2.0	95	54	200	1.2	95	35	200	0.77	95	19	200	0.43	95	
29.8	94	168	1.7	95	47	200	1.0	95	30	200	0.67	95	17	200	0.37	95	

AR 50/3

**Kg** 13

28.5	98	182	2.0	93	49	216	1.2	93	32	216	0.77	93	18	216	0.43	93	90 (B5 - B14)
32.4	86	188	1.8	93	43	216	1.1	93	28	216	0.68	93	15	216	0.38	93	
35.6	79	186	1.6	93	39	208	0.92	93	25	208	0.59	93	14	208	0.33	93	80 (B5 - B14)
40.5	69	191	1.5	93	35	208	0.81	93	22	208	0.52	93	12	208	0.29	93	
46.2	61	205	1.4	93	30	216	0.74	93	19	216	0.47	93	11	216	0.26	93	71 (B5)
50.8	55	210	1.3	93	28	216	0.67	93	18	216	0.43	93	9.8	216	0.24	93	
54.3	52	216	1.3	93	26	216	0.63	93	17	216	0.40	93	9.2	216	0.22	93	63 (B5)
65.9	42	208	1.0	93	21	208	0.50	93	14	208	0.32	93	7.6	208	0.18	93	
71.5	39	216	0.95	93	20	216	0.48	93	13	216	0.31	93	7.0	216	0.17	93	
77.5	36	216	0.88	93	18	216	0.44	93	12	216	0.28	93	6.5	216	0.16	93	
89.3	31	216	0.76	93	16	216	0.38	93	10	216	0.25	93	5.6	216	0.14	93	
102.1	27	208	0.64	93	14	208	0.32	93	8.8	208	0.21	93	4.9	208	0.11	93	
117.6	24	216	0.58	93	12	216	0.29	93	7.7	216	0.19	93	4.3	216	0.10	93	
127.5	22	216	0.53	93	11	216	0.27	93	7.1	216	0.17	93	3.9	216	0.10	93	
146.9	19	208	0.45	93	9.5	208	0.22	93	6.1	208	0.14	93	3.4	208	0.08	93	
181.5	15	205	0.35	93	7.7	205	0.18	93	4.9	205	0.11	93	2.7	205	0.06	93	

Pt <sub>N</sub> [kW]	tutti i rapporti / all ratios / alle Untersetzungen	
	50/1	6.5
	50/2	6.3
	50/3	4.5

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (A-1.5). Per maggiori informazioni contattare il nostro uff. tecnico.

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (A-1.5). For details please contact our technical office.

HINWEIS. Für den Fall, daß die in den Tabellen angegebenen Nennleistungen eingerahmt sind, ist die thermische Leistungsgrenze der Getriebe zu beachten. (A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.





1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 55/2



17

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
4.3	651.6	180.0	12.9	95.0	325.8	200.0	7.2	95.0	209.5	217.8	5.0	95.0	116.4	217.8	2.8	95.0	112 (B5 - B14)
5.3	531.9	189.0	11.1	95.0	266.0	210.0	6.2	95.0	171.0	228.7	4.3	95.0	95.0	228.7	2.4	95.0	
6.2	450.6	207.0	10.3	95.0	225.3	230.0	5.7	95.0	144.8	250.4	4.0	95.0	80.5	250.4	2.2	95.0	
6.8	410.7	198.0	9.0	95.0	205.3	220.0	5.0	95.0	132.0	239.6	3.5	95.0	73.3	239.6	1.9	95.0	
7.0	399.0	216.0	9.5	95.0	199.5	240.0	5.3	95.0	128.2	261.3	3.7	95.0	71.2	261.3	2.1	95.0	
8.4	335.2	207.0	7.6	95.0	167.6	230.0	4.2	95.0	107.8	250.4	3.0	95.0	59.9	250.4	1.7	95.0	
9.9	284.0	234.0	7.3	95.0	142.0	260.0	4.1	95.0	91.3	283.1	2.8	95.0	50.7	283.1	1.6	95.0	
11.1	251.4	234.0	6.5	95.0	125.7	260.0	3.6	95.0	80.8	283.1	2.5	95.0	44.9	283.1	1.4	95.0	
12.2	228.6	252.0	6.4	95.0	114.3	280.0	3.5	95.0	73.5	304.9	2.5	95.0	40.8	304.9	1.4	95.0	
13.5	207.3	261.0	6.0	95.0	103.7	290.0	3.3	95.0	66.6	315.8	2.3	95.0	37.0	315.8	1.3	95.0	
15.5	180.6	252.0	5.0	95.0	90.3	280.0	2.8	95.0	58.1	304.9	2.0	95.0	32.3	304.9	1.1	95.0	
16.7	168.0	261.0	4.8	95.0	84.0	290.0	2.7	95.0	54.0	315.8	1.9	95.0	30.0	315.8	1.0	95.0	
18.0	155.8	261.0	4.5	95.0	77.9	290.0	2.5	95.0	50.1	315.8	1.7	95.0	27.8	315.8	1.0	95.0	
19.4	144.1	270.0	4.3	95.0	72.0	300.0	2.4	95.0	46.3	326.7	1.7	95.0	25.7	326.7	0.93	95.0	
21.1	132.8	270.0	4.0	95.0	66.4	300.0	2.2	95.0	42.7	326.7	1.5	95.0	23.7	326.7	0.85	95.0	
22.6	123.7	207.0	2.8	95.0	61.9	230.0	1.6	95.0	39.8	250.4	1.1	95.0	22.1	250.4	0.61	95.0	
27.7	101.0	270.0	3.0	95.0	50.5	300.0	1.7	95.0	32.5	326.7	1.2	95.0	18.0	326.7	0.65	95.0	
31.8	88.0	270.0	2.6	95.0	44.0	300.0	1.5	95.0	28.3	326.7	1.0	95.0	15.7	326.7	0.57	95.0	
35.9	78.0	270.0	2.3	95.0	39.0	300.0	1.3	95.0	25.1	326.7	0.90	95.0	13.9	326.7	0.50	95.0	
40.2	69.7	252.0	1.9	95.0	34.8	280.0	1.1	95.0	22.4	304.9	0.75	95.0	12.4	304.9	0.42	95.0	
45.4	61.7	252.0	1.7	95.0	30.9	280.0	1.0	95.0	19.8	304.9	0.67	95.0	11.0	304.9	0.37	95.0	

AR 55/3



17

32.3	86.6	270.0	2.6	93.0	43.3	300.0	1.5	93.0	27.8	326.7	1.0	93.0	15.5	326.7	0.57	93.0	90 (B5 - B14)
38.1	73.6	270.0	2.2	93.0	36.8	300.0	1.2	93.0	23.7	326.7	0.87	93.0	13.1	326.7	0.48	93.0	
42.0	66.6	270.0	2.0	93.0	33.3	300.0	1.1	93.0	21.4	326.7	0.79	93.0	11.9	326.7	0.44	93.0	
46.9	59.7	270.0	1.8	93.0	29.8	300.0	1.0	93.0	19.2	326.7	0.71	93.0	10.7	326.7	0.39	93.0	
49.6	56.5	270.0	1.7	93.0	28.3	300.0	0.95	93.0	18.2	326.7	0.67	93.0	10.1	326.7	0.37	93.0	
54.3	51.6	270.0	1.6	93.0	25.8	300.0	0.87	93.0	16.6	326.7	0.61	93.0	9.2	326.7	0.34	93.0	
61.8	45.3	270.0	1.4	93.0	22.7	300.0	0.77	93.0	14.6	326.7	0.54	93.0	8.1	326.7	0.30	93.0	
65.2	42.9	270.0	1.3	93.0	21.5	300.0	0.72	93.0	13.8	326.7	0.51	93.0	7.7	326.7	0.28	93.0	
72.5	38.6	270.0	1.2	93.0	19.3	300.0	0.65	93.0	12.4	326.7	0.46	93.0	6.9	326.7	0.25	93.0	
78.0	35.9	252.0	1.0	93.0	17.9	280.0	0.57	93.0	11.5	304.9	0.40	93.0	6.4	304.9	0.24	93.0	
88.1	31.8	270.0	0.97	93.0	15.9	300.0	0.54	93.0	10.2	326.7	0.38	93.0	5.7	326.7	0.21	93.0	
95.5	29.3	270.0	0.89	93.0	14.7	300.0	0.49	93.0	9.4	326.7	0.35	93.0	5.2	326.7	0.19	93.0	
103.5	27.0	270.0	0.82	93.0	13.5	300.0	0.46	93.0	8.7	326.7	0.32	93.0	4.8	326.7	0.18	93.0	
110.1	25.4	270.0	0.77	93.0	12.7	300.0	0.43	93.0	8.2	326.7	0.30	93.0	4.5	326.7	0.17	93.0	
122.3	22.9	270.0	0.70	93.0	11.4	300.0	0.39	93.0	7.4	326.7	0.27	93.0	4.1	326.7	0.15	93.0	
136.3	20.5	270.0	0.62	93.0	10.3	300.0	0.35	93.0	6.6	326.7	0.24	93.0	3.7	326.7	0.13	93.0	
157.1	17.8	270.0	0.54	93.0	8.9	300.0	0.30	93.0	5.7	326.7	0.21	93.0	3.2	326.7	0.12	93.0	
167.1	16.8	270.0	0.51	93.0	8.4	300.0	0.28	93.0	5.4	326.7	0.20	93.0	3.0	326.7	0.11	93.0	
194.1	14.4	270.0	0.44	93.0	7.2	300.0	0.24	93.0	4.6	326.7	0.17	93.0	2.6	326.7	0.09	93.0	
211.1	13.3	252.0	0.38	93.0	6.6	280.0	0.21	93.0	4.3	304.9	0.15	93.0	2.4	304.9	0.09	93.0	
238.5	11.7	270.0	0.36	93.0	5.9	300.0	0.20	93.0	3.8	326.7	0.14	93.0	2.1	326.7	0.08	93.0	
301.2	9.3	252.0	0.26	93.0	4.6	280.0	0.15	93.0	3.0	304.9	0.10	93.0	1.7	304.9	0.06	93.0	

Pt <sub>N</sub> [kW]	tutti i rapporti / all ratios / alle Untersetzungen	
	55/2	7.0
	55/3	5.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (A-1.5). Per maggiori informazioni contattare il nostro uff. tecnico.

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (A-1.5). For details please contact our technical office.

HINWEIS. Für den Fall, daß die in den Tabellen angegebenen Nennleistungen eingerahmt sind, ist die thermische Leistungsgrenze der Getriebe zu beachten. (A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.



1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 60/1

**Kg** 16

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
1.3	2133	130	29.9	97	1067	130	15.0	97	686	130	9.6	97	381	130	5.3	97	132 (B5 - B14)
1.6	1704	140	25.8	97	852	140	12.9	97	548	140	8.3	97	304	140	4.6	97	
1.8	1517	145	23.7	97	758	145	11.9	97	488	145	7.6	97	271	145	4.2	97	112 (B5 - B14)
2.1	1344	160	23.2	97	672	160	11.6	97	432	160	7.5	97	240	160	4.1	97	
2.4	1185	170	21.7	97	592	170	10.9	97	381	170	7.0	97	212	170	3.9	97	100 (B5 - B14)
2.7	1037	170	19.0	97	519	170	9.5	97	333	170	6.1	97	185	170	3.4	97	
2.9	967	170	17.8	97	484	170	8.9	97	311	170	5.7	97	173	170	3.2	97	90(B5 - B14)
3.4	835	170	15.3	97	418	170	7.7	97	268	170	4.9	97	149	170	2.7	97	
3.6	772	170	14.2	97	386	170	7.1	97	248	170	4.6	97	138	170	2.5	97	80 (B5 - B14)
4.7	597	170	11.0	97	298	170	5.5	97	192	170	3.5	97	107	170	2.0	97	
5.2	542	158	9.2	97	271	164	4.8	97	174	164	3.1	97	97	164	1.7	97	71 (B5)
5.9	473	142	7.2	97	236	146	3.7	97	152	155	2.5	97	84	160	1.5	97	
6.8	410	125	5.5	97	205	125	2.8	97	132	132	1.9	97	73	142	1.1	97	

AR 60/2

**Kg** 20

2.6	1061	213	25	95	530	253	14.8	95	341	283	10.6	95	189	389	8.1	95	132 (B5 - B14)
3.7	763	223	18.8	95	381	265	11.1	95	245	296	8.0	95	136	407	6.1	95	
4.3	657	239	17.3	95	329	285	10.3	95	211	318	7.4	95	117	410	5.3	95	112 (B5 - B14)
4.6	609	253	17.0	95	304	301	10.1	95	196	336	7.2	95	109	410	4.9	95	
6.6	427	265	12.5	95	213	315	7.4	95	137	352	5.3	95	76	410	3.4	95	100 (B5 - B14)
7.5	372	275	11.3	95	186	327	6.7	95	120	366	4.8	95	66	410	3.0	95	
7.9	355	285	11.1	95	177	338	6.6	95	114	378	4.8	95	63	410	2.9	95	90 (B5)
8.9	315	293	10.2	95	157	349	6.1	95	101	389	4.3	95	56	410	2.5	95	
10.1	279	301	9.2	95	139	359	5.5	95	90	400	3.9	95	50	410	2.2	95	80 (B5)
11.3	247	308	8.4	95	123	367	5.0	95	79	409	3.6	95	44	410	2.0	95	
12.4	226	315	7.9	95	113	375	4.7	95	73	418	3.4	95	40	450	2.0	95	71 (B5)
14.3	195	327	7.0	95	98	389	4.2	95	63	435	3.0	95	35	450	1.7	95	
15.5	181	338	6.7	95	90	402	4.0	95	58	449	2.9	95	32	450	1.6	95	
18.3	153	318	5.4	95	77	378	3.2	95	49	410	2.2	95	27	410	1.2	95	
19.7	142	326	5.1	95	71	388	3.0	95	46	410	2.1	95	25	410	1.1	95	
22.1	127	367	5.1	95	63	436	3.0	95	41	450	2.0	95	23	450	1.1	95	
25.3	111	378	4.6	95	55	450	2.7	95	36	450	1.8	95	20	450	0.98	95	
28.1	100	345	3.8	95	50	410	2.2	95	32	410	1.4	95	18	410	0.80	95	
32.3	87	345	3.3	95	43	410	2.0	95	28	410	1.3	95	16	410	0.70	95	

AR 60/3

**Kg** 20

28.0	100	387	4.4	93	50	460	2.6	93	32	460	1.7	93	18	460	0.92	93	100 (B5 - B14)
31.6	89	400	4.0	93	44	460	2.3	93	28	460	1.5	93	16	460	0.82	93	
35.7	78	376	3.3	93	39	420	1.9	93	25	420	1.2	93	14	420	0.66	93	90 (B5 - B14)
40.3	69	386	3.0	93	35	420	1.6	93	22	420	1.1	93	12	420	0.59	93	
45.1	62	436	3.0	93	31	460	1.6	93	20	460	1.0	93	11	460	0.57	93	80 (B5 - B14)
51.0	55	447	2.8	93	27	460	1.4	93	18	460	0.91	93	9.8	460	0.51	93	
55.2	51	460	2.6	93	25	460	1.3	93	16	460	0.84	93	9.1	460	0.47	93	71 (B5)
60.3	46	420	2.2	93	23	420	1.1	93	15	420	0.71	93	8.3	420	0.39	93	
72.7	39	460	2.0	93	19	460	1.0	93	12	460	0.64	93	6.9	460	0.36	93	
78.6	36	460	1.8	93	18	460	0.92	93	11	460	0.59	93	6.4	460	0.33	93	
90.4	31	460	1.6	93	15	460	0.80	93	10	460	0.52	93	5.5	460	0.29	93	
100.2	28	420	1.3	93	14	420	0.66	93	9.0	420	0.42	93	5.0	420	0.24	93	
112.2	25	460	1.3	93	12	460	0.65	93	8.0	460	0.42	93	4.5	460	0.23	93	
128.8	22	460	1.1	93	11	460	0.56	93	7.0	460	0.36	93	3.9	460	0.20	93	
143.0	20	420	0.93	93	9.8	420	0.46	93	6.3	420	0.30	93	3.5	420	0.17	93	
164.1	17	420	0.81	93	8.5	420	0.40	93	5.5	420	0.26	93	3.0	420	0.14	93	
185.2	15	420	0.71	93	7.5	420	0.36	93	4.8	420	0.23	93	2.7	420	0.13	93	

Pt <sub>N</sub> [kW]	tutti i rapporti / all ratios / alle Untersetzungen	
	60/1	9.0
	60/2	9.6
60/3	6.9	



1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 70/2



30

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
4.5	619.4	324.0	22.1	95	309.7	360.0	12.3	95	199.1	392.0	8.6	95	110.6	392.0	4.8	95	132 (B5 - B14)
5.7	494.8	342.0	18.7	95	247.4	380.0	10.4	95	159.0	413.8	7.3	95	88.4	413.8	4.0	95	
6.4	440.3	360.0	17.5	95	220.2	400.0	9.7	95	141.5	435.6	6.8	95	78.6	435.6	3.8	95	
7.2	390.2	378.0	16.3	95	195.1	420.0	9.0	95	125.4	457.3	6.3	95	69.7	457.3	3.5	95	
8.1	343.9	405.0	15.4	95	172.0	450.0	8.5	95	110.5	490.0	6.0	95	61.4	490.0	3.3	95	
9.3	301.1	423.0	14.0	95	150.5	470.0	7.8	95	96.8	511.8	5.5	95	53.8	511.8	3.0	95	
10.0	280.8	432.0	13.4	95	140.4	480.0	7.4	95	90.3	522.7	5.2	95	50.1	522.7	2.9	95	
11.8	237.2	468.0	12.2	95	118.6	520.0	6.8	95	76.2	566.2	4.8	95	42.4	566.2	2.6	95	
12.5	224.2	459.0	11.3	95	112.1	510.0	6.3	95	72.1	555.3	4.4	95	40.0	555.3	2.5	95	
13.4	209.0	486.0	11.2	95	104.5	540.0	6.2	95	67.2	588.0	4.4	95	37.3	588.0	2.4	95	
15.3	183.0	477.0	9.6	95	91.5	530.0	5.3	95	58.8	577.1	3.7	95	32.7	577.1	2.1	95	
17.8	157.3	495.0	8.6	95	78.7	550.0	4.8	95	50.6	598.9	3.3	95	28.1	598.9	1.9	95	
20.5	136.3	495.0	7.4	95	68.2	550.0	4.1	95	43.8	598.9	2.9	95	24.3	598.9	1.6	95	
23.5	119.0	387.0	5.1	95	59.5	430.0	2.8	95	38.2	468.2	2.0	95	21.2	468.2	1.1	95	
26.6	105.3	504.0	5.8	95	52.7	560.0	3.2	95	33.8	609.8	2.3	95	18.8	609.8	1.3	95	
29.3	95.6	513.0	5.4	95	47.8	570.0	3.0	95	30.7	620.7	2.1	95	17.1	620.7	1.2	95	
33.6	83.4	513.0	4.7	95	41.7	570.0	2.6	95	26.8	620.7	1.8	95	14.9	620.7	1.0	95	
38.7	72.3	531.0	4.2	95	36.2	590.0	2.4	95	23.2	642.4	1.6	95	12.9	642.4	0.91	95	
45.4	61.7	396.0	2.7	95	30.8	440.0	1.5	95	19.8	479.1	1.0	95	11.0	479.1	0.58	95	
52.4	53.4	396.0	2.3	95	26.7	440.0	1.3	95	17.2	479.1	0.91	95	9.5	479.1	0.50	95	

AR 70/3



30

37.1	75.4	540.0	4.6	93	37.7	600.0	2.5	93	24.2	653.3	1.8	93	13.5	653.3	0.99	93	100 (B5 - B14)
41.9	66.8	540.0	4.1	93	33.4	600.0	2.3	93	21.5	653.3	1.6	93	11.9	653.3	0.88	93	
50.9	55.0	540.0	3.3	93	27.5	600.0	1.9	93	17.7	653.3	1.3	93	9.8	653.3	0.72	93	
52.9	52.9	540.0	3.2	93	26.5	600.0	1.8	93	17.0	653.3	1.3	93	9.4	653.3	0.69	93	
59.8	46.8	540.0	2.8	93	23.4	600.0	1.6	93	15.1	653.3	1.1	93	8.4	653.3	0.62	93	
67.7	41.4	540.0	2.5	93	20.7	600.0	1.4	93	13.3	653.3	1.0	93	7.4	653.3	0.54	93	
72.5	38.6	540.0	2.3	93	19.3	600.0	1.3	93	12.4	653.3	0.91	93	6.9	653.3	0.51	93	
83.2	33.6	540.0	2.0	93	16.8	600.0	1.1	93	10.8	653.3	0.80	93	6.0	653.3	0.44	93	
89.5	31.3	540.0	1.9	93	15.6	600.0	1.1	93	10.1	653.3	0.74	93	5.6	653.3	0.41	93	
96.4	29.0	540.0	1.8	93	14.5	600.0	1.0	93	9.3	653.3	0.69	93	5.2	653.3	0.38	93	
104.3	26.8	540.0	1.6	93	13.4	600.0	0.91	93	8.6	653.3	0.63	93	4.8	653.3	0.35	93	
113.2	24.7	540.0	1.5	93	12.4	600.0	0.84	93	8.0	653.3	0.58	93	4.4	653.3	0.32	93	
119.8	23.4	540.0	1.4	93	11.7	600.0	0.79	93	7.5	653.3	0.55	93	4.2	653.3	0.31	93	
135.2	20.7	540.0	1.3	93	10.4	600.0	0.70	93	6.7	653.3	0.49	93	3.7	653.3	0.27	93	
148.8	18.8	540.0	1.1	93	9.4	600.0	0.64	93	6.0	653.3	0.44	93	3.4	653.3	0.25	93	
170.8	16.4	540.0	1.0	93	8.2	600.0	0.55	93	5.3	653.3	0.39	93	2.9	653.3	0.22	93	
192.7	14.5	540.0	0.88	93	7.3	600.0	0.49	93	4.7	653.3	0.34	93	2.6	653.3	0.19	93	
231.1	12.1	450.0	0.61	93	6.1	500.0	0.34	93	3.9	544.4	0.24	93	2.2	544.4	0.13	93	
260.8	10.7	468.0	0.57	93	5.4	520.0	0.31	93	3.5	566.2	0.22	93	1.9	566.2	0.12	93	

Pt <sub>N</sub> [kW]	tutti i rapporti / all ratios / alle Untersetzungen	
	70/2	12.0
	70/3	8.6

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (A-1.5). Per maggiori informazioni contattare il nostro uff. tecnico.

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (A-1.5). For details please contact our technical office.

HINWEIS. Für den Fall, daß die in den Tabellen angegebenen Nennleistungen eingerahmt sind, ist die thermische Leistungsgrenze der Getriebe zu beachten. (A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.



1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 80/1

**Kg** 21

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
1.2	2355	260	66.1	97	1177	260	33.0	97	757	260	21.2	97	420	260	11.8	97	160 (B5) 132 (B5) 112 (B5) 100 (B5) 90 (B5) 80 (B5)
1.4	2026	270	59.0	97	1013	270	29.5	97	651	270	19.0	97	362	270	10.5	97	
1.8	1532	280	46.3	97	766	280	23.2	97	492	280	14.9	97	274	280	8.3	97	
2.0	1375	305	45.3	97	687	305	22.6	97	442	305	14.5	97	245	305	8.1	97	
2.4	1179	330	42.0	97	589	330	21.0	97	379	330	13.5	97	211	330	7.5	97	
2.7	1044	330	37.2	97	522	330	18.6	97	336	330	12.0	97	186	330	6.6	97	
2.9	964	330	34.3	97	482	330	17.2	97	310	330	11.0	97	172	330	6.1	97	
3.3	844	330	30.1	97	422	330	15.0	97	271	330	9.7	97	151	330	5.4	97	
3.6	788	330	28.1	97	394	330	14.0	97	253	330	9.0	97	141	330	5.0	97	
4.8	585	330	20.8	97	293	330	10.4	97	188	330	6.7	97	104	330	3.7	97	
5.3	528	330	18.8	97	264	330	9.4	97	170	330	6.0	97	94	330	3.4	97	
5.8	480	330	17.1	97	240	330	8.5	97	154	330	5.5	97	86	330	3.1	97	
6.4	439	330	15.6	97	219	330	7.8	97	141	330	5.0	97	78	330	2.8	97	

AR 80/2

**Kg** 42

2.6	1081	444	53	95	541	529	32	95	347	590	23	95	193	813	17.3	95	160 (B5) 132 (B5) 112 (B5) 100 (B5) 90 (B5) 80 (B5)
3.7	759	465	39	95	379	553	23	95	244	618	16.6	95	136	851	12.7	95	
4.2	665	500	37	95	333	595	22	95	214	664	15.6	95	119	915	12.0	95	
4.5	621	529	36	95	310	629	22	95	200	702	15.4	95	111	940	11.5	95	
6.7	415	553	25	95	208	658	15.1	95	134	735	10.8	95	74	940	7.7	95	
7.4	378	575	24	95	189	684	14.3	95	122	764	10.2	95	68	940	7.0	95	
7.8	359	595	24	95	179	707	14.0	95	115	790	10.0	95	64	940	6.6	95	
8.7	322	612	22	95	161	728	12.9	95	103	813	9.3	95	57	940	6.0	95	
10.0	281	629	19.5	95	141	748	11.6	95	90	835	8.3	95	50	940	5.2	95	
11.1	252	644	17.9	95	126	766	10.7	95	81	855	7.6	95	45	940	4.7	95	
12.4	226	658	16.4	95	113	782	9.7	95	73	874	7.0	95	40	940	4.2	95	
14.2	198	684	14.9	95	99	813	8.9	95	64	908	6.4	95	35	940	3.7	95	
15.2	184	707	14.4	95	92	841	8.5	95	59	939	6.1	95	33	940	3.4	95	
18.1	155	728	12.4	95	78	866	7.4	95	50	940	5.2	95	28	940	2.9	95	
19.4	145	748	11.9	95	72	889	7.1	95	46	940	4.8	95	26	940	2.7	95	
22.7	123	766	10.4	95	62	910	6.2	95	40	940	4.1	95	22	940	2.3	95	
24.9	112	790	9.8	95	56	940	5.8	95	36	940	3.7	95	20	940	2.1	95	
28.9	97	790	8.4	95	48	940	5.0	95	31	940	3.2	95	17	940	1.8	95	
31.8	88	790	7.7	95	44	940	4.6	95	28	940	2.9	95	16	940	1.6	95	

AR 80/3

**Kg** 42

28.1	100	813	9.1	93	50	967	5.4	93	32	967	3.5	93	18	967	1.9	93	112 (B5) 100 (B5) 90 (B5) 80 (B5)
31.7	88	841	8.4	93	44	967	4.8	93	28	967	3.1	93	16	967	1.7	93	
35.7	78	866	7.6	93	39	967	4.3	93	25	967	2.7	93	14	967	1.5	93	
40.3	69	889	6.9	93	35	967	3.8	93	22	967	2.4	93	12	967	1.3	93	
44.0	64	916	6.6	93	32	967	3.5	93	20	967	2.2	93	11	967	1.2	93	
50.9	55	940	5.8	93	27	967	3.0	93	18	967	1.9	93	9.8	967	1.1	93	
55.1	51	967	5.5	93	25	967	2.8	93	16	967	1.8	93	9.1	967	0.99	93	
65.7	43	967	4.6	93	21	967	2.3	93	14	967	1.5	93	7.6	967	0.83	93	
76.0	37	967	4.0	93	18	967	2.0	93	12	967	1.3	93	6.6	967	0.72	93	
82.2	34	967	3.7	93	17	967	1.9	93	11	967	1.2	93	6.1	967	0.66	93	
90.0	31	967	3.4	93	16	967	1.7	93	10	967	1.1	93	5.6	967	0.61	93	
104.8	27	967	2.9	93	13	967	1.6	93	8.6	967	0.94	93	4.8	967	0.52	93	
117.2	24	967	2.6	93	12	967	1.3	93	7.7	967	0.84	93	4.3	967	0.46	93	
134.3	21	967	2.3	93	10	967	1.1	93	6.7	967	0.73	93	3.7	967	0.41	93	
149.3	19	967	2.0	93	9.4	967	1.0	93	6.0	967	0.66	93	3.3	967	0.36	93	
171.2	16	967	1.8	93	8.2	967	0.89	93	5.3	967	0.57	93	2.9	967	0.32	93	
197.5	14	967	1.5	93	7.1	967	0.77	93	4.5	967	0.50	93	2.5	967	0.27	93	

Pt <sub>N</sub> [kW]	tutti i rapporti / all ratios / alle Untersetzungen	
	80/1	14.0
	80/2	15.0
	80/3	10.7



1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 90/2



Table with 17 columns: ir, n1 = 2800 min-1 (n2, T2M, P, RD), n1 = 1400 min-1 (n2, T2M, P, RD), n1 = 900 min-1 (n2, T2M, P, RD), n1 = 500 min-1 (n2, T2M, P, RD), IEC. Rows include gear ratios from 3.9 to 48.2.

AR 90/3



Table with 17 columns: ir, n1 = 2800 min-1 (n2, T2M, P, RD), n1 = 1400 min-1 (n2, T2M, P, RD), n1 = 900 min-1 (n2, T2M, P, RD), n1 = 500 min-1 (n2, T2M, P, RD), IEC. Rows include gear ratios from 23.0 to 274.0.

Table with 2 columns: PtN [kW] and values for 90/2 (18.0) and 90/3 (12.4). Header: tutti i rapporti / all ratios / alle Untersetzungen

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (A-1.5). Per maggiori informazioni contattare il nostro uff. tecnico.

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (A-1.5). For details please contact our technical office.

HINWEIS. Für den Fall, daß die in den Tabellen angegebenen Nennleistungen eingerahmt sind, ist die thermische Leistungsgrenze der Getriebe zu beachten. (A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.



1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 100/1



55

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC	
	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %		
1.3	2178	480	112.8	97	1089	480	56.4	97	700	480	36.3	97	389	480	20.2	97	200 (B5)	
1.9	1447	490	76.5	97	723	490	38.3	97	465	490	24.6	97	258	490	13.7	97		
2.2	1289	600	83.5	97	644	600	41.7	97	414	600	26.8	97	230	600	14.9	97		180 (B5)
3.0	947	600	61.3	97	474	600	30.7	97	304	600	19.7	97	169	600	11.0	97		
3.5	812	600	52.6	97	406	600	26.3	97	261	600	16.9	97	145	600	9.4	97		160 (B5)
3.9	717	600	46.4	97	359	600	23.2	97	230	600	14.9	97	128	600	8.3	97		
5.4	515	530	29.5	97	257	530	14.7	97	166	550	9.8	97	92	550	5.5	97		132 (B5-B14)
5.9	472	530	27.0	97	236	530	13.5	97	152	550	9.0	97	84	550	5.0	97		
6.9	404	460	20.1	97	202	480	10.5	97	130	500	7.0	97	72	550	4.3	97		
7.5	373	450	18.1	97	187	470	9.5	97	120	500	6.5	97	67	500	3.6	97		100 (B5)

AR 100/2



60

2.4	1148	913	115	95	574	1085	69	95	369	1212	49	95	205	1670	38	95	200 (B5)	
2.7	1026	956	108	95	513	1136	64	95	330	1269	46	95	183	1747	35	95		
3.7	753	1026	85	95	376	1221	51	95	242	1363	36	95	134	1878	28	95		180 (B5)
4.9	569	1085	68	95	285	1291	40	95	183	1441	29	95	102	1930	22	95		
6.9	409	1136	51	95	204	1351	30	95	131	1509	22	95	73	1930	15.5	95		160 (B5)
7.5	375	1181	49	95	187	1404	29	95	120	1568	21	95	67	1930	14.2	95		
7.9	354	1221	48	95	177	1452	28	95	114	1621	20	95	63	1930	13.5	95		
8.9	316	1257	44	95	158	1495	26	95	101	1670	18.7	95	56	1930	12.0	95		132 (B5-B14)
9.9	284	1291	40	95	142	1535	24	95	91	1714	17.2	95	51	1930	10.8	95		
11.1	253	1322	37	95	126	1572	22	95	81	1755	15.7	95	45	1930	9.6	95		112 (B5)
12.1	232	1351	35	95	116	1606	21	95	75	1794	14.7	95	41	1930	8.8	95		
14.1	199	1404	31	95	99	1670	18.3	95	64	1865	13.1	95	35	1930	7.5	95	100 (B5)	
15.9	176	1352	28	95	88	1726	16.7	95	56	1928	12.0	95	31	1930	6.7	95		
17.6	159	1395	26	95	80	1778	15.6	95	51	1930	10.9	95	28	1930	6.0	95		
19.9	141	1535	24	95	70	1825	14.1	95	45	1930	9.6	95	25	1930	5.3	95		
22.2	126	1572	22	95	63	1869	13.0	95	41	1930	8.6	95	23	1930	4.8	95		
24.2	116	1623	21	95	58	1930	12.3	95	37	1930	7.9	95	21	1930	4.4	95		
28.3	99	1623	17.7	95	50	1930	10.5	95	32	1930	6.8	95	18	1930	3.8	95		
30.3	93	1623	16.6	95	46	1930	9.8	95	30	1930	6.3	95	17	1930	3.5	95		
35.3	79	1623	14.2	95	40	1930	8.4	95	25	1930	5.4	95	14	1930	3.0	95		
38.3	73	1623	13.1	95	37	1930	7.8	95	24	1930	5.0	95	13	1930	2.8	95		

AR 100/3



60

29.1	96	1669	18.1	93	48	1985	10.7	93	31	1985	6.9	93	17	1985	3.8	93	132 (B5)	
32.5	86	1726	16.8	93	43	1985	9.6	93	28	1985	6.2	93	15	1985	3.4	93		
36.4	77	1777	15.4	93	38	1985	8.6	93	25	1985	5.5	93	14	1985	3.1	93		112 (B5)
40.6	69	1825	14.2	93	35	1985	7.7	93	22	1985	5.0	93	12	1985	2.8	93		
45.2	62	1879	13.1	93	31	1985	6.9	93	20	1985	4.4	93	11	1985	2.5	93		100 (B5)
52.8	53	1930	11.5	93	26	1985	5.9	93	17	1985	3.8	93	9.5	1985	2.1	93		
56.7	49	1985	11.0	93	25	1985	5.5	93	16	1985	3.5	93	8.8	1985	2.0	93		
64.5	43	1985	9.7	93	22	1985	4.9	93	14	1985	3.1	93	7.8	1985	1.7	93		90 (B5)
73.6	38	1985	8.5	93	19	1985	4.3	93	12	1985	2.7	93	6.8	1985	1.5	93		
78.9	35	1985	7.9	93	18	1985	4.0	93	11	1985	2.5	93	6.3	1985	1.4	93		
91.9	30	1985	6.7	93	15	1985	3.4	93	9.7	1985	2.2	93	5.4	1985	1.2	93		
98.6	28	1985	6.3	93	14	1985	3.2	93	9.1	1985	2.0	93	5.1	1985	1.1	93		
117.8	24	1985	5.3	93	12	1985	2.7	93	7.6	1985	1.7	93	4.2	1985	0.95	93		
129.5	22	1985	4.8	93	11	1985	2.4	93	7.0	1985	1.6	93	3.9	1985	0.86	93		
147.2	19	1985	4.3	93	9.5	1985	2.1	93	6.1	1985	1.4	93	3.4	1985	0.76	93		
161.8	17	1985	3.9	93	8.7	1985	1.9	93	5.6	1985	1.2	93	3.1	1985	0.69	93		
177.1	16	1985	3.5	93	7.9	1985	1.8	93	5.1	1985	1.1	93	2.8	1985	0.63	93		

tutti i rapporti / all ratios / alle Untersetzungen

P<sub>tN</sub> [kW]

100/1

21.0

100/2

23.0

100/3

18.5

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (A-1.5). Per maggiori informazioni contattare il nostro uff. tecnico.

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (A-1.5). For details please contact our technical office.

HINWEIS. Für den Fall, daß die in den Tabellen angegebenen Nennleistungen eingerahmt sind, ist die thermische Leistungsgrenze der Getriebe zu beachten. (A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.



1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

Table for AR 110/2 gearboxes. Columns include input speed (n1), output speed (n2), torque (T2M), power (P), efficiency (RD), and IEC. Rows list various gear ratios from 3.8 to 46.4.

Table for AR 110/3 gearboxes. Columns include input speed (n1), output speed (n2), torque (T2M), power (P), efficiency (RD), and IEC. Rows list various gear ratios from 23.6 to 214.6.

Summary table for PtN [kW] across ratios 110/2 and 110/3. Values are 25.5 and 19.5 respectively.

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (A-1.5). Per maggiori informazioni contattare il nostro uff. tecnico.

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (A-1.5). For details please contact our technical office.

HINWEIS. Für den Fall, daß die in den Tabellen angegebenen Nennleistungen eingerahmt sind, ist die thermische Leistungsgrenze der Getriebe zu beachten. (A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.



1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 120/2



155

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
2.8	1005	1380	152	95	503	1700	94	95	323	1700	60	95	179	1700	34	95	225 (B5) 200 (B5) 180 (B5) 160 (B5) 132 (B5-B14) 112 (B5) 100(B5)
3.9	726	1380	110	95	363	1700	68	95	233	1700	44	95	130	1700	24	95	
5.2	537	1460	86	95	268	1800	53	95	172	1800	34	95	96	1800	19	95	
6.1	457	1620	81	95	229	2000	50	95	147	2280	37	95	82	2720	24	95	
7.7	366	1780	72	95	183	2200	44	95	118	2500	32	95	65	3000	22	95	
8.5	330	2030	74	95	165	2500	45	95	106	2850	33	95	59	3000	21	95	
10.6	264	2270	66	95	132	2280	41	95	85	3000	29	95	47	3000	17	95	
11.5	244	2430	65	95	122	3000	40	95	78	3000	28	95	44	3000	16	95	
14.1	199	2430	53	95	100	3000	33	95	64	3000	23	95	36	3000	13	95	
17.7	158	2430	42	95	79	3000	26	95	51	3000	18	95	28	3000	10	95	
19.3	145	2430	39	95	73	3000	24	95	47	3000	17	95	26	3000	9.4	95	
21.0	133	2430	36	95	67	3000	22	95	43	3000	16	95	24	3000	8.6	95	
22.1	127	2430	34	95	63	3000	21	95	41	3000	15	95	23	3000	8.2	95	
23.1	121	2430	32	95	61	3000	20	95	39	3000	14	95	22	3000	7.8	95	
24.0	116	2430	31	95	58	3000	19	95	37	3000	14	95	21	3000	7.5	95	
27.0	104	2430	28	95	52	3000	17	95	33	3000	12	95	19	3000	6.7	95	
28.9	97	2430	26	95	48	3000	16	95	31	3000	11	95	17	3000	6.3	95	
29.6	95	2430	25	95	47	3000	16	95	30	3000	11	95	17	3000	6.1	95	
33.7	83	2430	22	95	41	3000	14	95	27	3000	10	95	15	3000	5.4	95	
37.0	76	2430	20	95	38	3000	12	95	24	3000	8.8	95	14	3000	4.9	95	

AR 120/3



155

40.7	69	2550	20	93	34	3300	13	93	22	3300	8.2	93	12	3300	4.6	93	132 (B5) 112 (B5) 100 (B5) 90 (B5)
45.7	61	2640	18	93	31	3300	11	93	20	3300	7.3	93	11	3300	4.1	93	
50.9	55	2700	17	93	28	3300	10	93	18	3300	6.6	93	10	3300	3.7	93	
57.1	49	2760	15	93	25	3300	9.1	93	16	3300	5.9	93	8.8	3300	3.3	93	
62.2	45	2840	14	93	23	3300	8.4	93	14	3300	5.4	93	8.0	3300	3.0	93	
72.6	39	2900	13	93	19	3300	7.2	93	12	3300	4.6	93	6.9	3300	2.6	93	
77.7	36	2960	12	93	18	3300	6.7	93	12	3300	4.3	93	6.4	3300	2.4	93	
82.2	34	3040	12	93	17	3300	6.3	93	11	3300	4.1	93	6.1	3300	2.3	93	
90.7	31	3100	11	93	15	3300	5.7	93	10	3300	3.7	93	5.5	3300	2.0	93	
102.6	27	3180	10	93	14	3300	5.1	93	8.8	3300	3.3	93	4.9	3300	1.8	93	
114.4	24	3250	9.0	93	12	3300	4.5	93	7.9	3300	2.9	93	4.4	3300	1.6	93	
124.9	22	3300	8.3	93	11	3300	4.2	93	7.2	3300	2.7	93	4.0	3300	1.5	93	
142.9	20	3300	7.3	93	10	3300	3.6	93	6.3	3300	2.3	93	3.5	3300	1.3	93	
156.0	18	3300	6.7	93	9.0	3300	3.3	93	5.8	3300	2.1	93	3.2	3300	1.2	93	
175.7	16	3300	5.9	93	8.0	3300	3.0	93	5.1	3300	1.9	93	2.8	3300	1.1	93	
182.0	15	3300	5.7	93	7.7	3300	2.9	93	4.9	3300	1.8	93	2.7	3300	1.0	93	
197.1	14	3300	5.3	93	7.1	3300	2.6	93	4.6	3300	1.7	93	2.5	3300	0.9	93	
205.0	14	3300	5.1	93	6.8	3300	2.5	93	4.4	3300	1.6	93	2.4	3300	0.9	93	
222.0	13	3300	4.7	93	6.3	3300	2.3	93	4.1	3300	1.5	93	2.3	3300	0.8	93	
256.0	11	3300	4.1	93	5.5	3300	2.0	93	3.5	3300	1.3	93	2.0	3300	0.7	93	
277.3	10	3300	3.8	93	5.0	3300	1.9	93	3.2	3300	1.2	93	1.8	3300	0.7	93	

Pt <sub>N</sub> [kW]	tutti i rapporti / all ratios / alle Untersetzungen	
	120/2	33.0
	120/3	22.1

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (A-1.5). Per maggiori informazioni contattare il nostro uff. tecnico.

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (A-1.5). For details please contact our technical office.

HINWEIS. Für den Fall, daß die in den Tabellen angegebenen Nennleistungen eingerahmt sind, ist die thermische Leistungsgrenze der Getriebe zu beachten. (A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.





1.6 Prestazioni riduttori AR

1.6 AR gearboxes performances

1.6 Leistungen der AR-Getriebe

AR 140/2



195

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
5.4	521.0	2160.0	124.1	95	260.5	2400.0	68.9	95	167.5	2613.3	48.2	95	93.0	2613.3	26.8	95	250 (B5) 225 (B5)
6.9	408.3	2700.0	121.5	95	204.2	3000.0	67.5	95	131.3	3266.7	47.3	95	72.9	3266.7	26.3	95	
9.0	311.4	3870.0	132.8	95	155.7	4300.0	73.8	95	100.1	4682.2	51.7	95	55.6	4682.2	28.7	95	200 (B5)
11.5	244.0	3870.0	104.1	95	122.0	4300.0	57.8	95	78.4	4682.2	40.5	95	43.6	4682.2	22.5	95	
15.3	182.9	3870.0	78.0	95	91.4	4300.0	43.3	95	58.8	4682.2	30.3	95	32.7	4682.2	16.9	95	180 (B5)
17.4	160.6	3870.0	68.5	95	80.3	4300.0	38.1	95	51.6	4682.2	26.6	95	28.7	4682.2	14.8	95	
23.3	120.3	3870.0	51.3	95	60.2	4300.0	28.5	95	38.7	4682.2	20.0	95	21.5	4682.2	11.1	95	160 (B5)
27.4	102.3	3870.0	43.6	95	51.1	4300.0	24.2	95	32.9	4682.2	17.0	95	18.3	4682.2	9.4	95	
30.0	93.3	3870.0	39.8	95	46.7	4300.0	22.1	95	30.0	4682.2	15.5	95	16.7	4682.2	8.6	95	132 (B5)
36.5	76.7	3870.0	32.7	95	38.3	4300.0	18.2	95	24.6	4682.2	12.7	95	13.7	4682.2	7.1	95	
46.0	60.9	3870.0	26.0	95	30.5	4300.0	14.4	95	19.6	4682.2	10.1	95	10.9	4682.2	5.6	95	

AR 140/3



195

47.1	59.5	3870.0	25.9	93	29.7	4300.0	14.4	93	19.1	4682.2	10.1	93	10.6	4682.2	5.60	93	225 (B5)
60.1	46.6	3870.0	20.3	93	23.3	4300.0	11.3	93	15.0	4682.2	7.9	93	8.3	4682.2	4.39	93	
73.9	37.9	3870.0	16.5	93	18.9	4300.0	9.2	93	12.2	4682.2	6.4	93	6.8	4682.2	3.57	93	200 (B5)
80.1	34.9	3870.0	15.2	93	17.5	4300.0	8.5	93	11.2	4682.2	5.9	93	6.2	4682.2	3.29	93	
94.3	29.7	3870.0	12.9	93	14.8	4300.0	7.2	93	9.5	4682.2	5.0	93	5.3	4682.2	2.80	93	180 (B5)
103.3	27.1	3870.0	11.8	93	13.5	4300.0	6.6	93	8.7	4682.2	4.6	93	4.8	4682.2	2.55	93	
110.6	25.3	3870.0	11.0	93	12.7	4300.0	6.1	93	8.1	4682.2	4.3	93	4.5	4682.2	2.38	93	160 (B5)
119.9	23.3	3870.0	10.2	93	11.7	4300.0	5.7	93	7.5	4682.2	4.0	93	4.2	4682.2	2.20	93	
125.8	22.3	3870.0	9.7	93	11.1	4300.0	5.4	93	7.2	4682.2	3.8	93	4.0	4682.2	2.09	93	132 (B5 - B14)
141.1	19.8	3870.0	8.6	93	9.9	4300.0	4.8	93	6.4	4682.2	3.4	93	3.5	4682.2	1.87	93	
154.6	18.1	3870.0	7.9	93	9.1	4300.0	4.4	93	5.8	4682.2	3.1	93	3.2	4682.2	1.70	93	112 (B5)
168.7	16.6	3870.0	7.2	93	8.3	4300.0	4.0	93	5.3	4682.2	2.8	93	3.0	4682.2	1.56	93	
188.3	14.9	3870.0	6.5	93	7.4	4300.0	3.6	93	4.8	4682.2	2.5	93	2.7	4682.2	1.40	93	100 (B5)
198.5	14.1	3870.0	6.1	93	7.1	4300.0	3.4	93	4.5	4682.2	2.4	93	2.5	4682.2	1.33	93	
217.5	12.9	3870.0	5.6	93	6.4	4300.0	3.1	93	4.1	4682.2	2.2	93	2.3	4682.2	1.21	93	
264.8	10.6	3870.0	4.6	93	5.3	4300.0	2.6	93	3.4	4682.2	1.8	93	1.9	4682.2	1.00	93	

Pt <sub>N</sub> [kW]	tutti i rapporti / all ratios / alle Untersetzungen	
	140/2	45.0
	140/3	38.6

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (A-1.5). Per maggiori informazioni contattare il nostro uff. tecnico.

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (A-1.5). For details please contact our technical office.

HINWEIS. Für den Fall, daß die in den Tabellen angegebenen Nennleistungen eingerahmt sind, ist die thermische Leistungsgrenze der Getriebe zu beachten. (A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.































1.8 Dimensioni

1.8 Dimensions

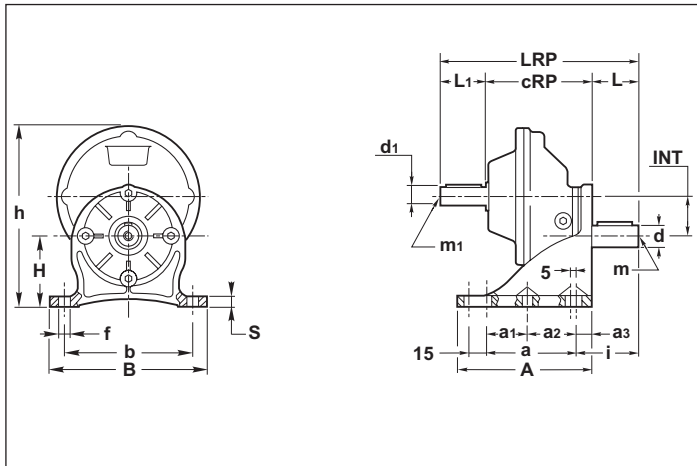
1.8 Abmessungen



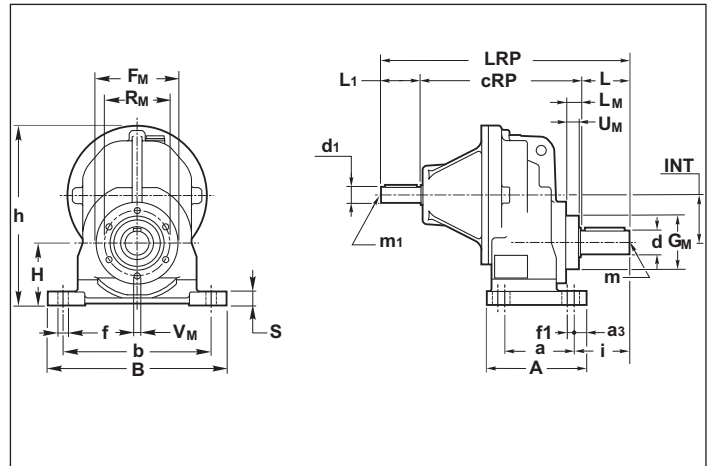
Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

AM/1 - AR/1 - AC/1

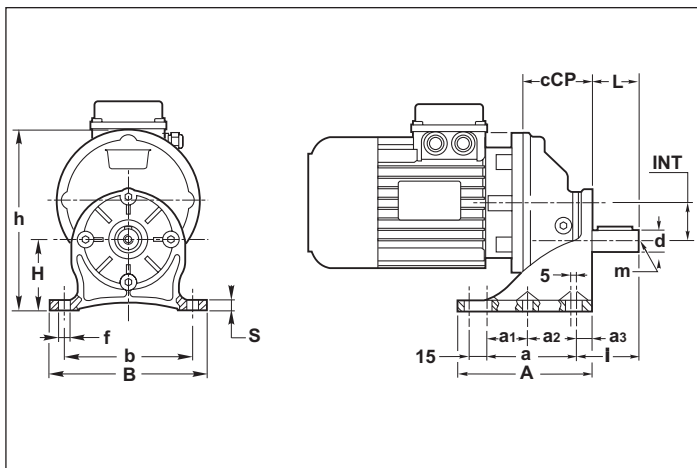
ARP (32)



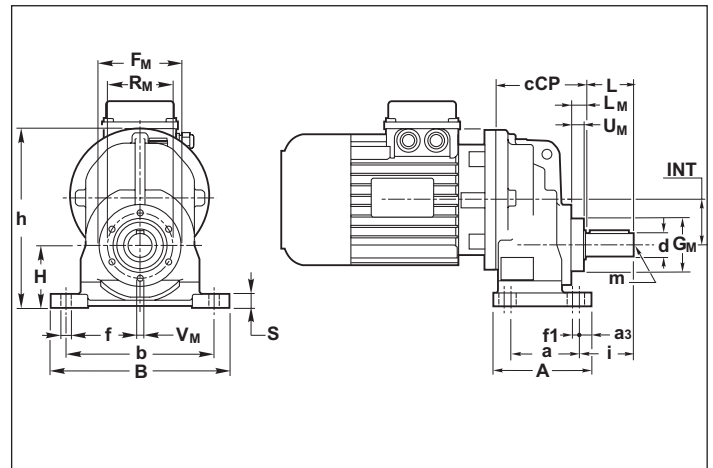
ARP (40 - 100)



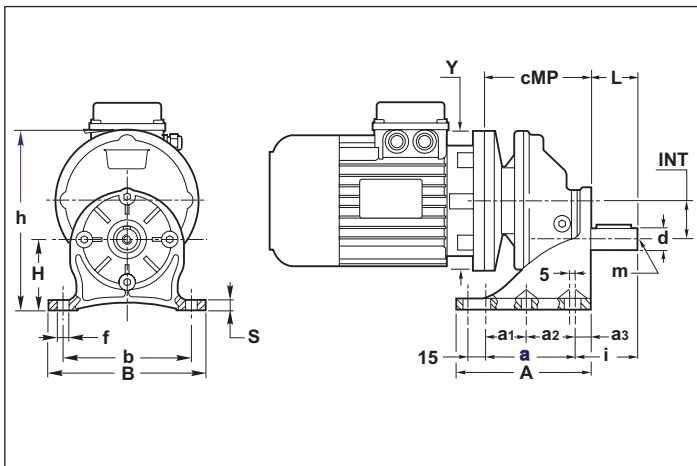
ACP (32)



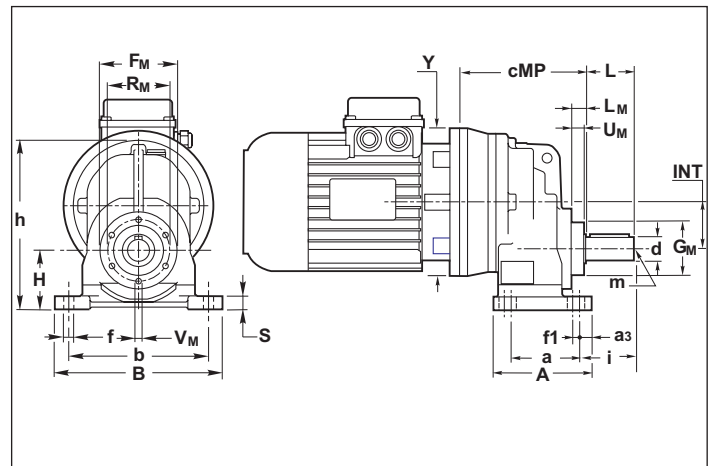
ACP (40 - 100)



AMP (32)



AMP (40 - 100)





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

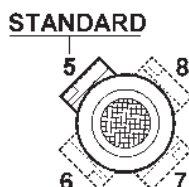
AM AC AR	a	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	A	b	B	cRP	d h6	d <sub>1</sub> j6	F <sub>M</sub>	f	f1	G <sub>M</sub>	h	H	i	L	L <sub>1</sub>	L <sub>M</sub>	LRP	m	m <sub>1</sub>	R <sub>M</sub>	S	U <sub>M</sub>	V <sub>M</sub>	INT
32	77	35	42	13	115	110	135	92	19 (14)	16	—	9	5	—	153	60	53 (43)	40 (30)	40	—	172 (162)	M6 (M6)	M6	—	9	—	—	33
40	45	—	—	12	85	105	130	141	19 (20)	16	82	8.5	2	54	162	50	53 (53)	40 (40)	40	14	221 (221)	M6 (M6)	M6	66	12	13	6	42
50	70	—	—	12	100	150	180	161	24 (25)	16	82	11	7	54	181	63	56 (56)	50 (50)	40	14	251 (251)	M8 (M8)	M6	66	14	13	6	48
60	70	—	—	16	120	165	195	193	28 (30)	19	110	11	8.5	74	221	80	67.5 (67.5)	60 (60)	40	17	293 (293)	M10 (M10)	M6	94	15	15	8	61
80	85	—	—	21	135	185	230	218	38 (40)	24	156	14	—	114	276	100	105	80	50	20	348	M10 (M10)	M8	136	20	18	10	76
100	130	—	—	17	173	240	295	284.5	48 (50)	28	156	18	—	114	345	125	129	110	60	20	454	M12 (M12)	M8	136	22	17	10	95



IEC	AMP../1												ACP../1					
	32		40		50		60		80		100		32	40	50	60	80	100
	Y	cMP	Y	cMP	Y	cMP	Y	cMP	Y	cMP	Y	cMP	cCP					
B5	120	92	140	125	140	132	160	159	200	199	250	236	59	86	93	115	142	189
	140	92	160	125	160	132	200	174	250	209.5	300	236						
	160	92	200	145	200	152	250	184	300	230	350	300.5						
	200	102	250	155	250	162	300	208	350	260	400	305.5						
B14	90•	92	120	145	120	152	120	174.5	—	—	200	236	59	86	93	115	142	189
	105•	92	140	145	140	152	140	174.5	—	—	—	—						
	120	102	160	155	160	162	160	184	—	—	—	—						
	—	—	—	—	—	—	200	208	—	—	—	—						

**N.B.**  
La configurazione standard della flangia attacco motore prevede 4 fori a 45° (esempio x: vedi par. 1.3).  
Per le flange contrassegnate con il simbolo (•) i fori per il fissaggio al motore sono disposti in croce (esempio +). Pertanto è opportuno valutare l'ingombro della morsettiera del motore che verrà installato in quanto essa verrà a trovarsi orientata a 45° rispetto agli assi. Per la scelta della posizione della morsettiera rispetto agli assi fare riferimento allo schema seguente (in cui la posizione 5 è quella standard):

**Note.**  
The standard configuration for the holes is 45° to the axles (like an x: see par. 1.3).  
For the B14 flanges marked with (•) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please choose the terminal board position referring to the following sketch (in which n° 5 is the standard position):



**HINWEIS.**  
In der Standardkonfiguration sind die 4 Flanschbohrungen im 45°-Winkel zu den Achsen angeordnet (wie ein x: siehe Kapitel 1.3).  
Bei B14-Flanschen, die mit (•) gekennzeichnet sind, sind die Bohrungen auf den Achsen angeordnet (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird. Die Lage des Klemmenkastens des Motors wählen Sie bitte anhand der folgenden Skizze (Pos.5 ist Standardposition):

Le dimensioni cMP si riferiscono alle combinazioni albero/flangia B5 e B14, standard.  
Per le dimensioni relative a combinazioni albero/flangia archiesta, contattare il ns. servizio tecnico.

The cMP dimensions refer to the standard B5 and B14 shaft/flange combinations.  
As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.

Die Maße cMP beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.





1.8 Dimensioni

1.8 Dimensions

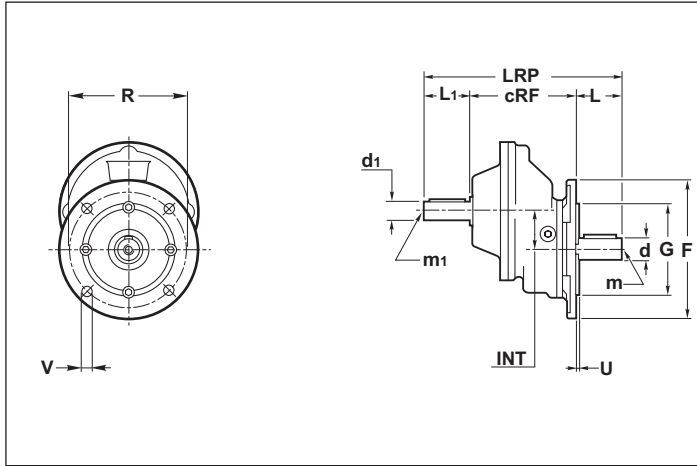
1.8 Abmessungen



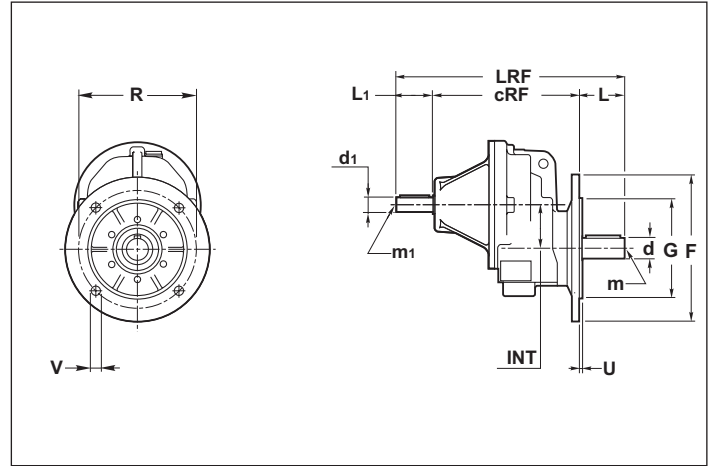
Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

# AM/1 - AR/1 - AC/1

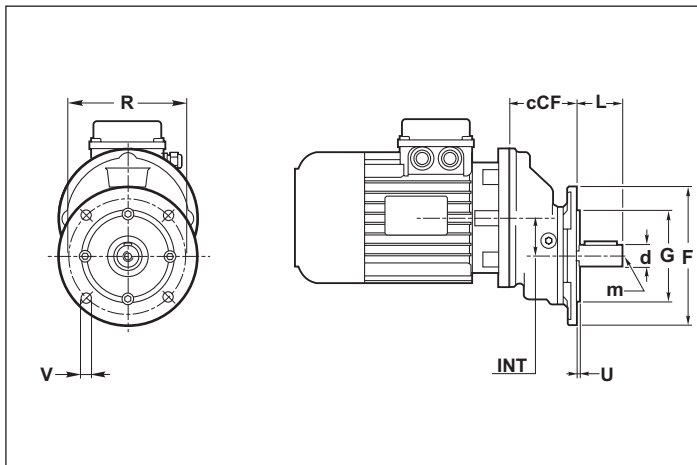
### ARF (32)



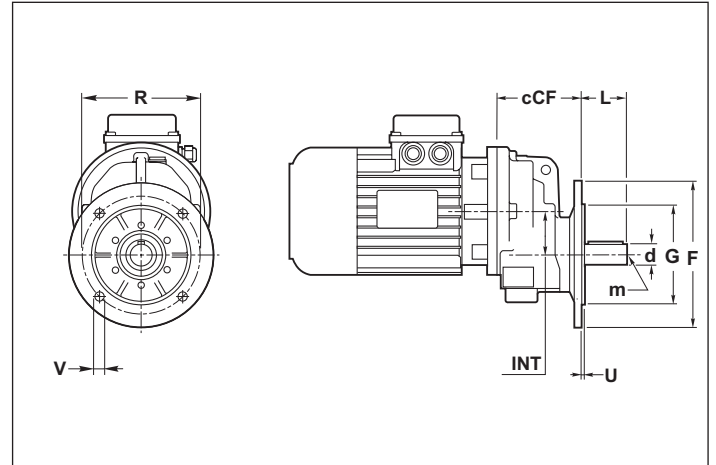
### ARF (40 - 100)



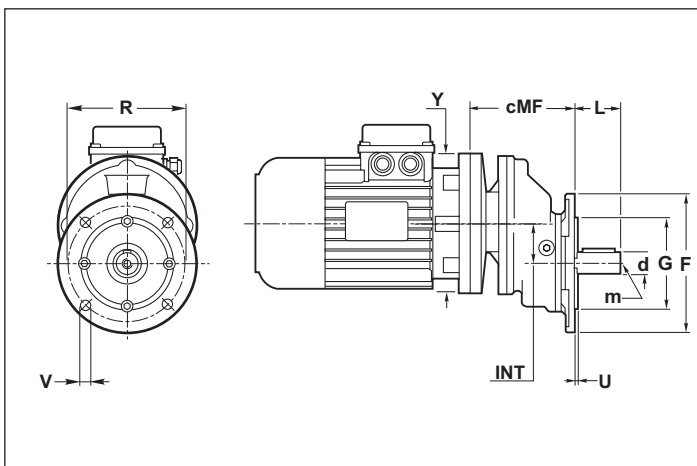
### ACF (32)



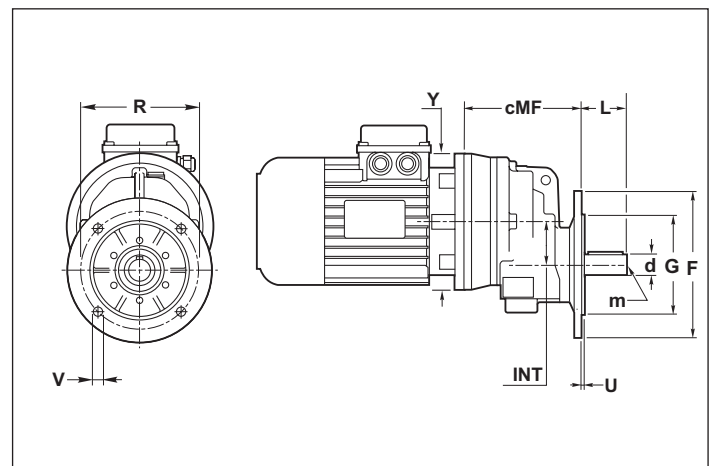
### ACF (40 - 100)



### AMF (32)



### AMF (40 - 100)





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

AM AC AR	cRF	d h6	d <sub>1</sub> j6	L	L <sub>1</sub>	LRF	m	m <sub>1</sub>	INT
32	92	19 (14)	16	30 (40)	40	172 (162)	M6 (M6)	M6	33
40	141	19 (20)	16	40 (40)	40	221 (221)	M6 (M6)	M6	42
50	161	24 (25)	16	50 (50)	40	251 (251)	M8 (M8)	M6	48
60	193	28 (30)	19	60 (60)	40	293 (193)	M10 (M10)	M6	61
80	218	38 (40)	24	80	50	248	M10 (M10)	M8	76
100	284.5	48 (50)	28	110	60	454	M12 (M12)	M8	95

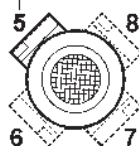
	32			40				50				60			80		100	
	F1	F2	F3	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F1	F2	F1	F2
F	120	140	160	120	140	160	200	120	140	160	200	160	200	250	250	300	250	300
G (g6)	80	95	110	80	95	110	130	80	95	110	130	110	130	180	180	230	180	230
R	100	115	130	100	115	130	165	100	115	130	165	130	165	215	215	265	215	265
V	9	9	10	9	9	10	13	9	9	10	13	10	13	15	15	15	15	15
U	3	3.5	3.5	3	3.5	3.5	3.5	3	3.5	3.5	3.5	3	3.5	3.5	4	4	4	4

IEC	AMF../1												ACF../1					
	32		40		50		60		80		100		32	40	50	60	80	100
	Y	cMF	Y	cMF	Y	cMF	Y	cMF	Y	cMF	Y	cMF	cCF					
B5	120	92	140	125	140	132	160	159	200	199	250	236	59	86	93	115	142	189
	140	92	160	125	160	132	200	174	250	209.5	300	236						
	160	92	200	145	200	152	250	184	300	230.5	350	300.5						
	200	102	250	155	250	162	300	208	350	260	400	305.5						
B14	90•	92	120	145	120	152	120	174.5	—	—	200	236						
	105•	92	140	145	140	152	140	174.5	—	—	—	—						
	120	102	160	155	160	162	160	184	—	—	—	—						
	—	—	—	—	—	—	200	208	—	—	—	—						

**N.B.**  
La configurazione standard della flangia attacco motore prevede 4 fori a 45° (esempio x: vedi par. 1.3).  
Per le flange contrassegnate con il simbolo (•) i fori per il fissaggio al motore sono disposti in croce (esempio +). Pertanto è opportuno valutare l'ingombro della morsettiera del motore che verrà installato in quanto essa verrà a trovarsi orientata a 45° rispetto agli assi. Per la scelta della posizione della morsettiera rispetto agli assi fare riferimento allo schema seguente (in cui la posizione 5 è quella standard):

**Note.**  
*The standard configuration for the holes is 45° to the axles (like an x: see par. 1.3).*  
*For the B14 flanges marked with (•) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please choose the terminal board position referring to the following sketch (in which n° 5 is the standard position):*

**STANDARD**



Le dimensioni cMF si riferiscono alle combinazioni albero/flangia B5 e B14, standard.  
Per le dimensioni relative a combinazioni albero/flangia arichiesta, contattare il ns. servizio tecnico.

*The cMF dimensions refer to the standard B5 and B14 shaft/flange combinations. As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.*

**HINWEIS.**  
In der Standardkonfiguration sind die 4 Flanschbohrungen im 45°-Winkel zu den Achsen angeordnet (wie ein x: siehe Kapitel 1.3).  
Bei B14-Flanschen, die mit (•) gekennzeichnet sind, sind die Bohrungen auf den Achsen angeordnet (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird. Die Lage des Klemmenkastens des Motors wählen Sie bitte anhand der folgenden Skizze (Pos.5 ist Standardposition):

Die Maße cMF beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.



1.8 Dimensioni

1.8 Dimensions

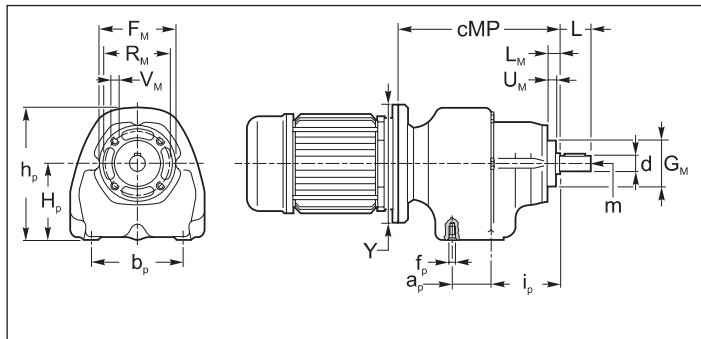
1.8 Abmessungen



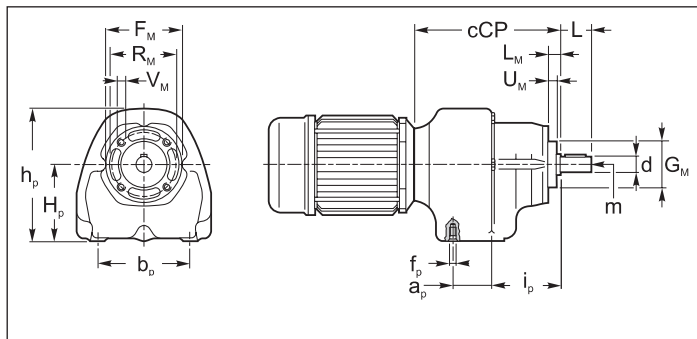
Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

AM/2-3 - AR/2-3 - AC/2-3

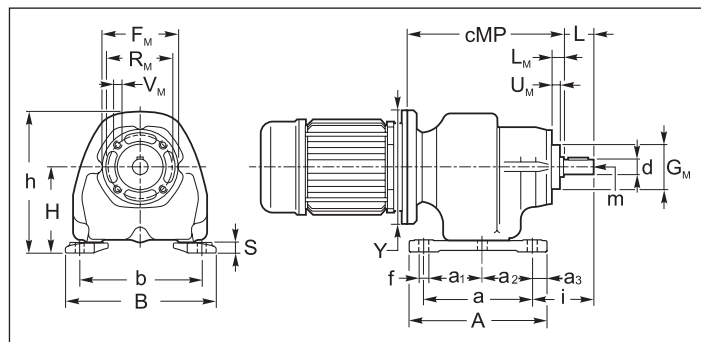
AM (25)



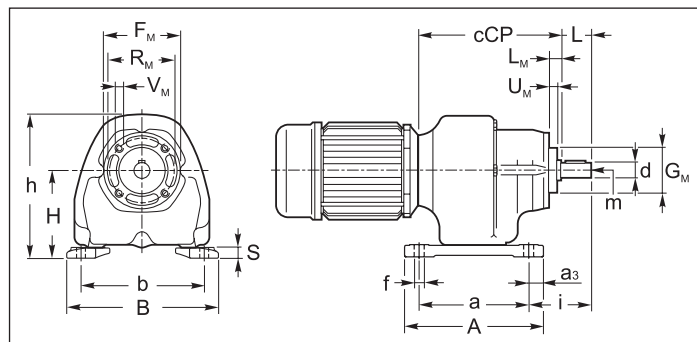
AC (25)



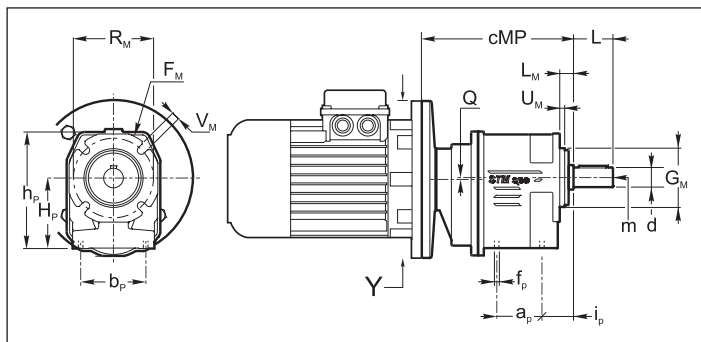
AMP (25)



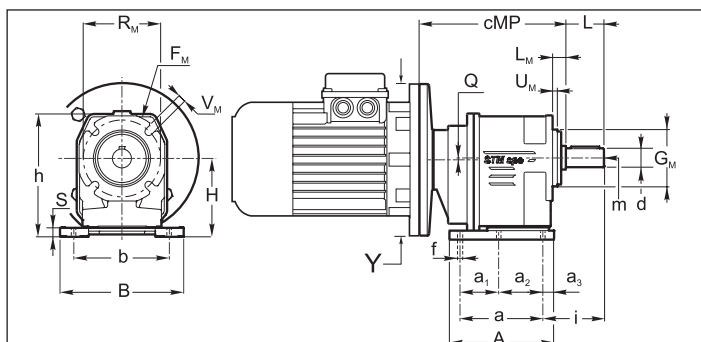
ACP (25)



AM (35 - 41 - 45)



AMP (35 - 45) - AMP1 - AMP2 (41)





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

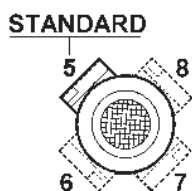
AM AC	a	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	A	b	B	d j6(A25)-h6	f	h	H	i	L	m	Q	S
25	71	—	—	9.5	90	90±1	111	11 (14)	6.5	103	63	47 (50)	22 (25)	M5	-	8
35	87 ±2	37 ±2	50 ±2	11.5 ±1	110	110	130	16 (19) (20)	8.5	132	85	48±1 (58) (58)	30 (40) (40)	M6 (M6) (M6)	-	9
41	P1	87 ±2	37 ±2	50 ±2	110	110	130	20 (19) (25)	8.5	135	85	59±1 (59) (69)	40 (40) (50)	M6 (M6) (M8)	/2-2 /3-8	9
	P2	85	—	—	10	105	130		9.5	130	80	58 (58) (68)				10
45	107.5±2	47.5±2	60±2	13.5 ±1	135	130	155	25 (24) (30)	11	154	100	69±1 (69) (79)	50 (50) (60)	M8 (M8) (M10)	/2-3 /3-9.5	11

	a <sub>p</sub>	b <sub>p</sub>	f <sub>p</sub>	i <sub>p</sub>	h <sub>p</sub>	H <sub>p</sub>	F <sub>M</sub>	G <sub>M</sub> (g6)	L <sub>M</sub>	R <sub>M</sub>	V <sub>M</sub>	U <sub>M</sub>
25	23	66	M6	49	95	55	55	33	9	46	M6	6
35	50	55	M8	20.5	122	75	95	60	11	80	8	5
41	50	67	M8	20.5	122	72	95	60	11	80	8	5
45	60	75	M8	22.5	142	88	111	70	12	85	8	5

	IEC	25		35		41		45		25	35	41	45
		Y	cMP	Y	cMP	Y	cMP	Y	cMP				
AMP../2	B5	120	116	—	—	140	151.5	160	171.5	93.5	—	—	—
		140	116	140	126.5	160	151.5	200 (IEC 80)	171.5				
				160	126.5	200	160	200 (IEC 90)	182.0				
				200	136.0	—	—	250	184.0				
	B14	80•	116	90•	126.5	90•	151.5	105•	171.5				
		90	116	105	126.5	105•	151.5	120	171.5				
				120	136.0	120	160	140	182.0				
						140	160	160	184.0				
AMP../3	B5	120	116	120	144.0	140	168	160	188				
		140	116	140	144.0	160	168	200	188				
			—	—									
			—	—									
	B14	80•	116	80•	144.0	90	168	105	188				
		90	116	90	144.0	105	168	120	188				
		—	—										

**N.B.**  
La configurazione standard della flangia attacco motore prevede 4 fori a 45° (esempio x: vedi par. 1.3).  
Per le flange contrassegnate con il simbolo (•) i fori per il fissaggio al motore sono disposti in croce (esempio +). Pertanto è opportuno valutare l'ingombro della morsettiere del motore che verrà installato in quanto essa verrà a trovarsi orientata a 45° rispetto agli assi. Per la scelta della posizione della morsettiere rispetto agli assi fare riferimento allo schema seguente (in cui la posizione 5 è quella standard):

**+Note.**  
*The standard configuration for the holes is 45° to the axles (like an x: see par. 1.3).*  
*For the B14 flanges marked with (•) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please choose the terminal board position referring to the following sketch (in which n° 5 is the standard position):*



Le dimensioni cMP si riferiscono alle combinazioni albero/flangia B5 e B14, standard.  
Per le dimensioni relative a combinazioni albero/flangia arichiesta, contattare il ns. servizio tecnico.

*The cMP dimensions refer to the standard B5 and B14 shaft/flange combinations. As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.*

**HINWEIS.**  
In der Standardkonfiguration sind die 4 Flanschbohrungen im 45°-Winkel zu den Achsen angeordnet (wie ein x: siehe Kapitel 1.3).  
Bei B14-Flanschen, die mit (•) gekennzeichnet sind, sind die Bohrungen auf den Achsen angeordnet (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird. Die Lage des Klemmenkastens des Motors wählen Sie bitte anhand der folgenden Skizze (Pos.5 ist Standardposition):

Die Maße cMP beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.



1.8 Dimensioni

1.8 Dimensions

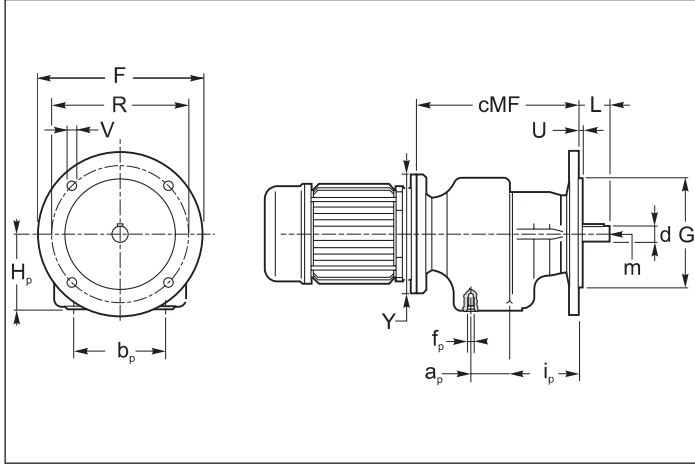
1.8 Abmessungen



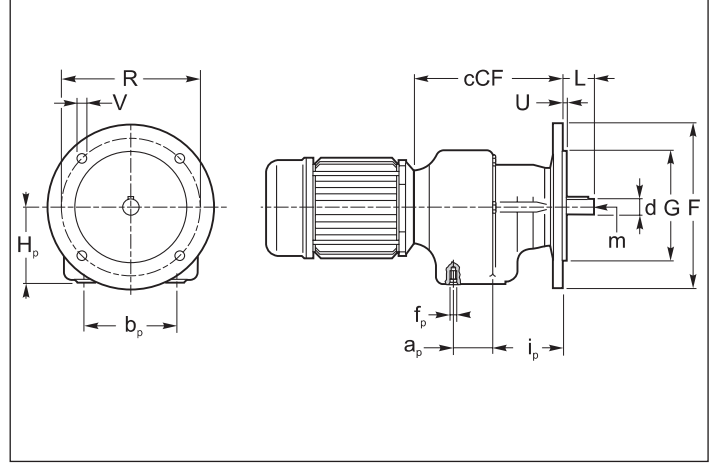
Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

AM/2-3 - AR/2-3 - AC/2-3

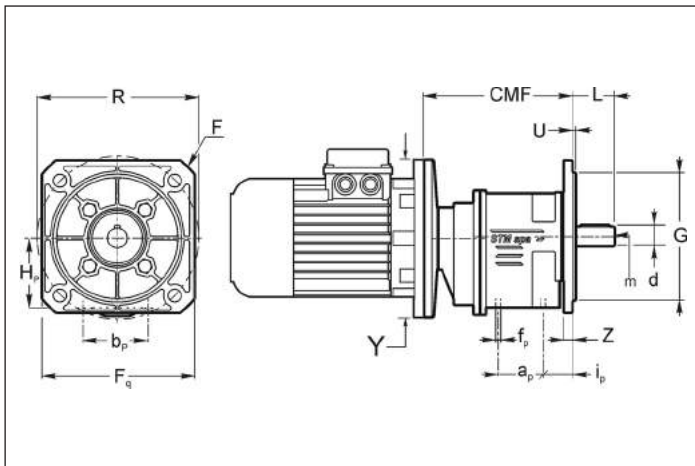
AMF (25)



ACF (25)



AMF (35 - 41 - 45)





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

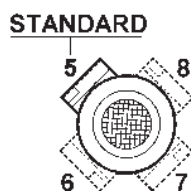
AM AC	ap	bp	fp	ip	Hp	d j6(A25)-h6	f	L	m	Q	S
25	23	66	M6	49	55	11 (14)	6.5	22 (25)	M5	-	8
35	50	55	M8	20.5	75	16 (19) (20)	8.5	30 (40) (40)	M6 (M6) (M6)	-	9
41	50	67	M8	20.5	72	20 (19) (25)	9.5	40 (40) (50)	M6 (M6) (M8)	/2-2 /3-8	10
45	60	75	M8	22.5	88	25 (24) (30)	11	50 (50) (60)	M8 (M8) (M10)	/2-3 /3-9.5	11

	AMF - ACF									
	25		35			41			45	
	F1	F2	F1	F2	F3	F1	F2	F3	F1	F2
F	105	120	140	160	200	140	160	200	160	200
F <sub>a</sub>	—	—	110	120	150	110	120	150	120	160
G(g6)	70	80	95	110	130	95	110	130	110	130
R	85	100	115	130	165	115	130	165	130	165
V	7	7	9	9	13	9	9	13	9	13
U	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5

	IEC	25		35		41		45		25	35	41	45
		Y	cMF	Y	cMF	Y	cMF	Y	cMF				
AMF../2	B5	120	116	—	—	140	151.5	160	171.5	93.5	—	—	—
		140	116	140	126.5	160	151.5	200 (IEC 80)	171.5				
				160	126.5	200	160	200 (IEC 90)	182.0				
				200	136.0	—	—	250	184.0				
	B14	80•	116	90•	126.5	90•	151.5	105•	171.5				
		90	116	105	126.5	105•	151.5	120	171.5				
				120	136.0	120	160	140	182.0				
						140	160	160	184.0				
AMF../3	B5	120	116	120	144.0	140	168	160	188.0				
		140	116	140	144.0	160	168	200	188.0				
			—	—									
			—	—									
	B14	80•	116	80•	144.0	90	168	105	188.0				
		90	116	90	144.0	105	168	120	188.0				
		—	—										

**N.B.**  
La configurazione standard della flangia attacco motore prevede 4 fori a 45° (esempio x: vedi par. 1.3). Per le flange contrassegnate con il simbolo (•) i fori per il fissaggio al motore sono disposti in croce (esempio +). Pertanto è opportuno valutare l'ingombro della morsettiere del motore che verrà installato in quanto essa verrà a trovarsi orientata a 45° rispetto agli assi. Per la scelta della posizione della morsettiere rispetto agli assi fare riferimento allo schema seguente (in cui la posizione 5 è quella standard):

**NOTE:**  
The standard configuration for the holes is 45° to the axles (like an x: see par. 1.3). For the B14 flanges marked with (•) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please choose the terminal board position referring to the following sketch (in which n° 5 is the standard position):



**HINWEIS.**  
In der Standardkonfiguration sind die 4 Flanschbohrungen im 45°-Winkel zu den Achsen angeordnet (wie ein x: siehe Kapitel 1.3). Bei B14-Flanschen, die mit (•) gekennzeichnet sind, sind die Bohrungen auf den Achsen angeordnet (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird. Die Lage des Klemmenkastens des Motors wählen Sie bitte anhand der folgenden Skizze (Pos.5 ist Standardposition):

Le dimensioni cMF si riferiscono alle combinazioni albero/flangia B5 e B14, standard. Per le dimensioni relative a combinazioni albero/flangia arichiesta, contattare il ns. servizio tecnico.

The cMF dimensions refer to the standard B5 and B14 shaft/flange combinations. As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.

Die Maße cMF beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.



1.8 Dimensioni

1.8 Dimensions

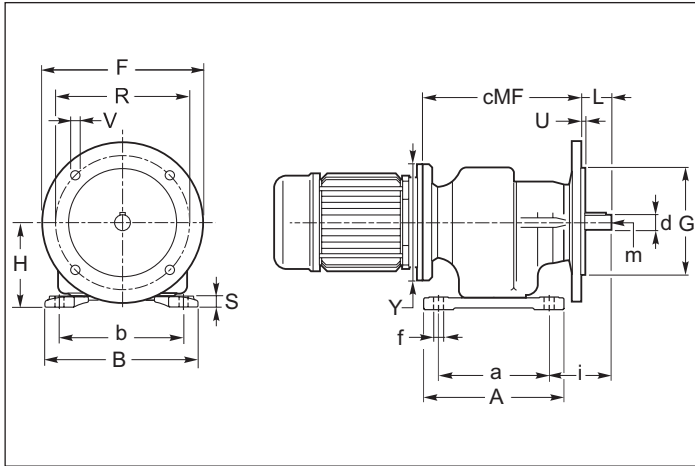
1.8 Abmessungen



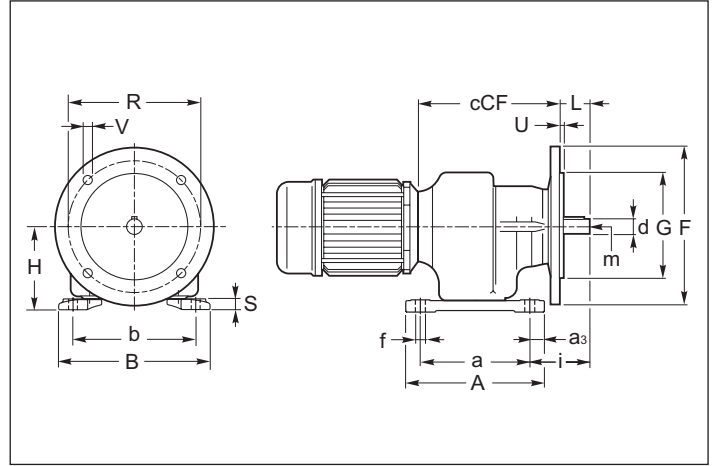
Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

AM/2-3 - AR/2-3 - AC/2-3

AMP/F.. (25)

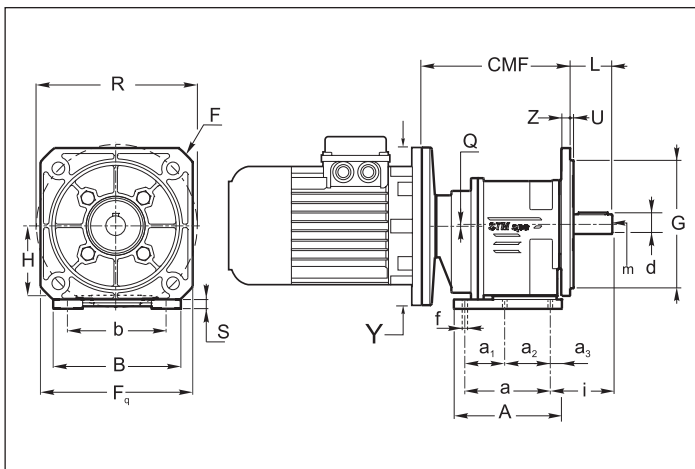


ACP/F.. (25)



AMP/F. (35-45)

AMP1/F.-AMP2/F. (41)





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

AM AC	a	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	A	b	B	d j6(A25)-h6	f	h	H	i	L	m	Q	S
25	71	—	—	9.5	90	90±1	111	11 (14)	6.5	103	63	47 (50)	22 (25)	M5	-	8
35	87 ±2	37 ±2	50 ±2	11.5 ±1	110	110	130	16 (19) (20)	8.5	132	85	48±1 (58) (58)	30 (40) (40)	M6 (M6) (M6)	-	9
41	P1	87 ±2	37 ±2	50 ±2	110	110	130	20 (19) (25)	8.5	135	85	59±1 (59) (69)	40 (40) (50)	M6 (M6) (M8)	/2-2 /3-8	9
	P2	85	—	—	10	105	110		130	9.5	130	80				58 (58) (68)
45	107.5±2	47.5±2	60±2	13.5 ±1	135	130	155	25 (24) (30)	11	154	100	69±1 (69) (79)	50 (50) (60)	M8 (M8) (M10)	/2-3 /3-9.5	11

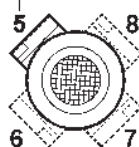
	AMP/F. - ACP/F.									
	25		35			41			45	
	F1	F2	F1	F2	F3	F1	F2	F3	F1	F2
F	105	120	140	160	200	140	160	200	160	200
F <sub>Q</sub>	—	—	110	120	150	110	120	150	120	160
G(g6)	70	80	95	110	130	95	110	130	110	130
R	85	100	115	130	165	115	130	165	130	165
V	7	7	9	9	13	9	9	13	9	13
U	3	3	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.5

	IEC	25		35		41		45		25	35	41	45
		Y	cMF	Y	cMF	Y	cMF	Y	cMF				
		cCP											
AMP/F../2	B5	120	116	—	—	140	151.5	160	171.5	93.5	—	—	—
		140	116	140	126.5	160	151.5	200 (IEC 80)	171.5				
				160	126.5	200	160	200 (IEC 90)	182.0				
				200	136.0	—	—	250	184.0				
	B14	80•	116	90•	126.5	90•	151.5	105•	171.5				
		90	116	105	126.5	105•	151.5	120	171.5				
AMP/F../3	B5			120	144.0	140	168	160	188.0				
				140	144.0	160	168	200	188.0				
				—	—								
				—	—								
	B14	80•	116	80•	144.0	90	168	105	188.0				
		90	116	90	144.0	105	168	120	188.0				
					—	—							

N.B.  
La configurazione standard della flangia attacco motore prevede 4 fori a 45° (esempio x: vedi par. 1.3). Per le flange contrassegnate con il simbolo (•) i fori per il fissaggio al motore sono disposti in croce (esempio +). Pertanto è opportuno valutare l'ingombro della morsetteria del motore che verrà installato in quanto essa verrà a trovarsi orientata a 45° rispetto agli assi. Per la scelta della posizione della morsetteria rispetto agli assi fare riferimento allo schema seguente (in cui la posizione 5 è quella standard):

NOTE:  
The standard configuration for the holes is 45° to the axles (like an x: see par. 1.3). For the B14 flanges marked with (•) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please choose the terminal board position referring to the following sketch (in which n° 5 is the standard position):

STANDARD



Le dimensioni cMF si riferiscono alle combinazioni albero/flangia B5 e B14, standard. Per le dimensioni relative a combinazioni albero/flangia arichiesta, contattare il ns. servizio tecnico.

The cMF dimensions refer to the standard B5 and B14 shaft/flange combinations. As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.

HINWEIS.  
In der Standardkonfiguration sind die 4 Flanschbohrungen im 45°-Winkel zu den Achsen angeordnet (wie ein x: siehe Kapitel 1.3). Bei B14-Flanschen, die mit (•) gekennzeichnet sind, sind die Bohrungen auf den Achsen angeordnet (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird. Die Lage des Klemmenkastens des Motors wählen Sie bitte anhand der folgenden Skizze (Pos.5 ist Standardposition):

Die Maße cMF beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

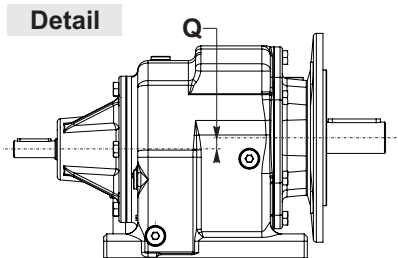
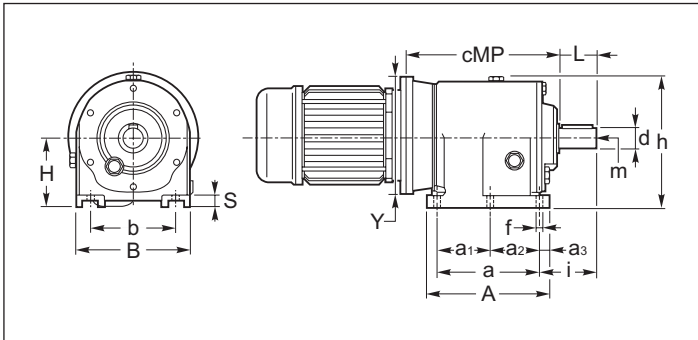


Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

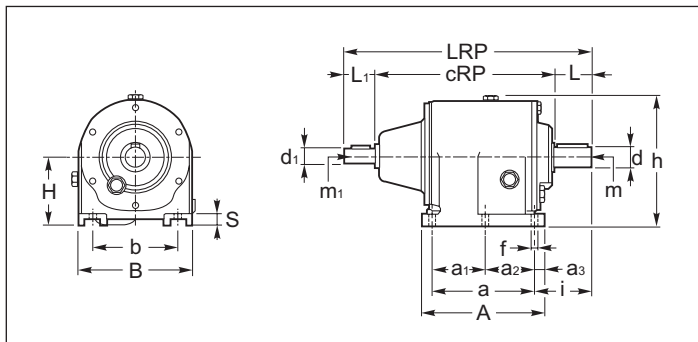
AM/2-3 - AR/2-3 - AC/2-3

AMP (50-55-60-70-80-90-100-110-120-140)

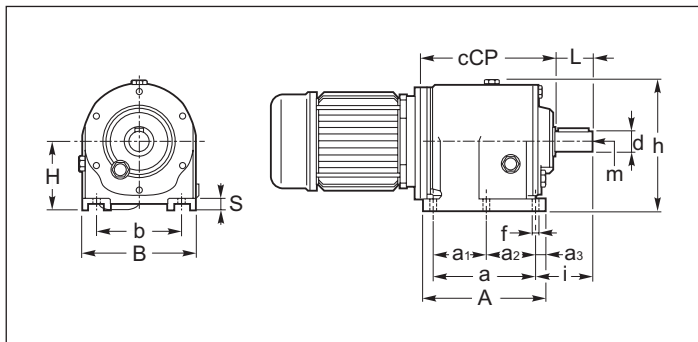
55-70-90-110-140



ARP (50-55-60-70-80-90-100-110-120-140)



ACP (50-55-60-70-80-90)





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

AM AC AR	a	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	A	b	B	cRP	d h6	d <sub>1</sub> j6	f	h	H	i	L	L <sub>1</sub>	LRP	m	m <sub>1</sub>	Q	S
50	130			12.5	155	110	145	227	25 (24) (30)	16	9.5	170	90	75 (75) (85)	50 (50) (60)	40	317 (317) (327)	M8 (M8) (M10)	M6	—	15
55	165			15	195	135	180	<sup>/2</sup> 238.5 <sup>/3</sup> 257.0	30	16	14	203	115	90	60	40	<sup>/2</sup> 338.5 <sup>/3</sup> 357.0	M10	M6	11	23
60	165			15	195	135	185	269	30 (28) (35)	19	14	210	115	90 (90) (100)	60 (60) (70)	40	369 (369) (379)	M10 (M10) (M10)	M6	—	20
70	195			20	235	150	210	<sup>/2</sup> 266.5 <sup>/3</sup> 288.5	35	19	14	233	130	100	70	40	<sup>/2</sup> 376.5 <sup>/3</sup> 398.5	M10	M6	13.5	23
80	205			20	245	170	230	309.5	40 (38)	24	20	265	140	115 (115)	80 (80)	50	440 (440)	M10 (M10)	M8	—	25
90	260			25	310	215	280	<sup>/2</sup> 332.5 <sup>/3</sup> 347.5	50 (48)	24	20	307	195	140	100	50	<sup>/2</sup> 482.5 <sup>/3</sup> 497.5	M12 (M12)	M8	39.5	35
100	260			21	306	215	290	395	50 (48)	28	20	322	180	140 (140)	100 (100)	60	555 (555)	M12 (M12)	M8	—	35
110	310			25	360	250	320	422	60	28	23	351	225	160	120	60	602	M12	M8	36	35
120	310			27.5	365	250	350	460	60	38	23	415	225	160	120	80	660	M12	M10	—	45
140	370			35	440	290	400	<sup>/2</sup> 458.5 <sup>/3</sup> 508.0	70	38	27	423	270	185	140	110	<sup>/2</sup> 708.5 <sup>/3</sup> 758.0	M16	M10	41.4	60

AMP	IEC	50		55		60		70		80		90		100		110		120		140	
		Y	cMP	Y	cMP	Y	cMP	Y	cMP	Y	cMP	Y	cMP	Y	cMP	Y	cMP	Y	cMP	Y	cMP
AMP../2	B5	140	198	160	233.5	160	235	200	284.5	200	291	250	313	250	347.4	250	374	250	409	300	465
		160	198	200	233.5	200	250	250	284.5	250	303	300	345	300	347.4	300	374	300	409	350	474
		200	218	250	244	250	260	300	284.5	300	322	350	364	350	411.4	350	438	350	451.5	400	479
		250	228	—	—	300	284	—	—	350	352	—	—	400	416.4	400	443	400	456.5	450	519
	B14	120	218	120	233.5	120	250	200	284.5	—	—	—	—	200	347.4	200	374	200	409	—	—
		140	218	140	233.5	140	250	—	—	—	—	—	—	—	—	—	—	—	—	—	—
160		228	160	244	160	260	160	262	—	—	—	—	—	—	—	—	—	—	—	—	
AMP../3	B5	140	198	140	228	160	235	160	254.5	200	291	200	338.5	200	340.4	200	367	200	392	250	457
		160	198	160	228	200	250	200	269.5	250	301	250	331	250	350.4	250	377	250	410	300	457
		200	218	200	238	250	260	250	279.5	—	—	—	—	300	370.4	300	397	300	421	350	499.5
		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	400	504.5
	B14	120	218	120	238	120	250	120	269.5	—	—	—	—	—	—	—	—	—	—	200	457
		140	218	140	238	140	250	140	269.5	—	—	—	—	—	—	—	—	—	—	—	—
—	—	—	—	160	260	160	279.5	—	—	—	—	—	—	—	—	—	—	—	—	—	

ACP	50	55	60	70	80	90
	cCF					
ACP../2	159	—	191	—	234	—
ACP../3	159	189	191	210.5	234	271

Le dimensioni cMP si riferiscono alle combinazioni albero/flangia B5 e B14, standard.  
Per le dimensioni relative a combinazioni albero/flangia arichiesta, contattare il ns. servizio tecnico.

The cMP dimensions refer to the standard B5 and B14 shaft/flange combinations.  
As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.

Die Maße cMP beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.



1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

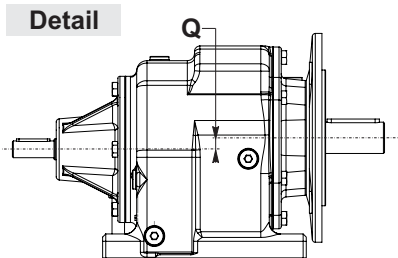
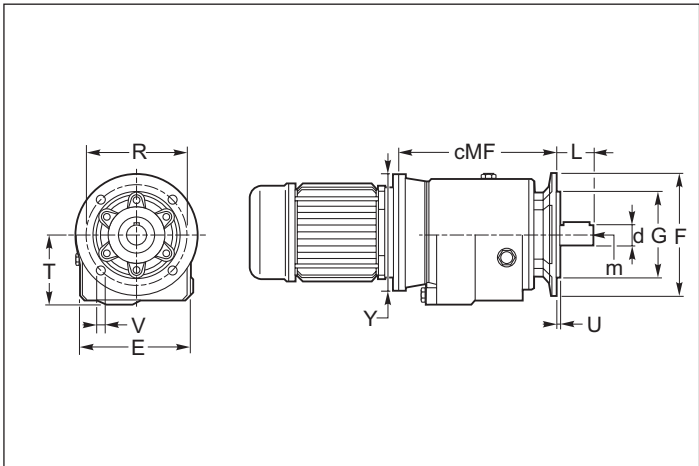


Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

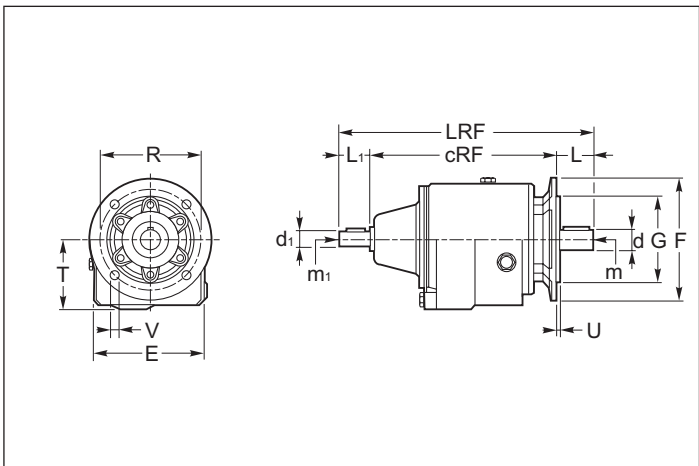
AM/2-3 - AR/2-3 - AC/2-3

AMF (50-55-60-70-80-90-100-110-120-140)

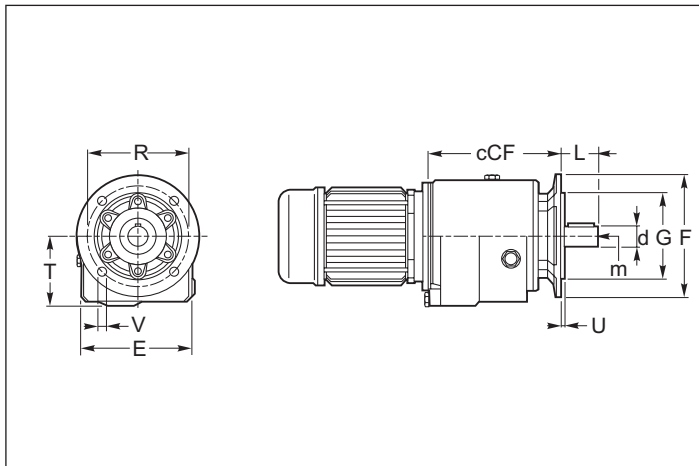
55-70-90-110-140



ARF (50-55-60-70-80-90-100-110-120-140)



ACF (50-55-60-70-80-90)





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

AM AC AR	cRF	d h6	d <sub>1</sub> j6	E	L	L <sub>1</sub>	LRF	m	m <sub>1</sub>	Q	T
50	235	25 (24) (30)	16	145	50 (50) (60)	40	325 (325) (335)	M8 (M8) (M10)	M6	—	89.5
55	/2 238 /3 256.5	30	16	186	60	40	/2 338 /3 356.5	M10	M6	11	114
60	280	30 (28) (35)	19	185	60 (60) (70)	40	380 (380) (390)	M10 (M10) (M10)	M6	—	114
70	/2 266.5 /3 288.5	35	19	212	70	40	/2 376.5 /3 398.5	M10	M6	13.5	129
80	317	40 (38)	24	230	80 (80)	50	447 (447)	M10 (M10)	M8	—	139
90	/2 332.5 /3 347.5	50 (48)	24	264	100	50	/2 482.5 /3 497.5	M12 (M12)	M8	39.5	192.5
100	395	50 (48)	28	290	100 (100)	60	555 (555)	M12 (M12)	M8	—	178
110	422	60	28	314	120	60	602	M12	M8	36	222
120	491	60	38	350	120	80	691	M12	M10	—	225
140	/2 458.5 /3 508.0	70	38	414	140	110	/2 708.5 /3 758.0	M16	M10	41.4	322

		AMF.. - ACF..																																							
		50				55				60				70				80				90				100				110				120				140			
		F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4	F1	F2	F3	F4				
<b>F</b>		120	160	200	250	160	200	250	160	200	250	160	200	250	300	250	300	250	300	350	300	350	400	350	400	350	450	400	450	400	350	450	400	350	400	450	400				
<b>F<sub>Q</sub></b>		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—				
<b>G(g6)</b>		80	110	130	180	110	130	180	110	130	180	180	230	180	230	230	250	230	250	250	250	350	300	250	350	300	250	350	300	250	350	300	250	350	300	250	350				
<b>R</b>		100	130	165	215	130	165	215	130	165	215	215	265	215	265	265	300	265	300	300	300	400	350	300	400	350	300	400	350	300	400	350	300	350	400	350	400				
<b>V</b>		9	10	13	15	10	13	15	10	13	15	15	15	15	15	15	19	15	19	19	19	19*	18	19	19*	18	19	19*	18	19	19*	18	19	19*	19*	19*	19*				
<b>U</b>		3	3.5	3.5	4	3	3.5	3.5	3	3.5	3.5	4	4	4	4	4	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5				

\* 8 fori / holes

AMF	IEC	50		55		60		70		80		90		100		110		120		140			
		Y	cMF	Y	cMF	Y	cMF	Y	cMF	Y	cMF	Y	cMF	Y	cMF	Y	cMF	Y	cMF	Y	cMF		
AMF../2	B5	140	206	160	233.5	160	246	200	284.5	200	298	250	313	250	347.4	250	374	250	440	300	465		
		160	206	200	233.5	200	261	250	284.5	250	308	300	345	300	347.4	300	374	300	440	350	474		
		200	226	250	243.5	250	271	300	284.5	300	329	350	364	350	411.4	350	438	350	482.5	400	479		
		250	236	—	—	300	295	—	—	350	359	—	—	400	416.4	400	443	400	487.5	450	519		
	—																			450	496.5	550	519
	B14	120	226	120	233.5	120	261	200	284.5	—				200	347.4	200	374	200	440	—			
		140	226	140	233.5	140	261	—	—	—				—	—	—	—	—	—				
		160	236	160	243.5	160	271	160	262	—				—	—	—	—	—	—				
—				200	295	—	—	—				—	—	—	—	—	—						
AMF../3	B5	140	206	140	228	160	246	160	254.5	200	298	200	331	200	340.4	200	367	200	423	250	457		
		160	206	160	228	200	261	200	269.5	250	308	250	338.5	250	350.4	250	377	250	445	300	457		
		200	226	200	238	250	271	250	279.5	—				300	370.4	300	397	300	452	350	499.5		
		—																			400	504.5	450
	B14	120	226	120	238	120	261	120	269.5	—				—	—	—	—	—	—				
		140	226	140	238	140	261	140	269.5	—				—	—	—	—	—	—				
		—				160	271	160	279.5	—				—	—	—	—	—	—				
		—																			200	457	—

ACF	50	55	60	70	80	90
	cCP					
ACF../2	167	—	202	—	241	—
ACF../3	167	189	202	210.5	241	271

Le dimensioni cMF si riferiscono alle combinazioni albero/flangia B5 e B14, standard. Per le dimensioni relative a combinazioni albero/flangia arichiesta, contattare il ns. servizio tecnico.

The cMF dimensions refer to the standard B5 and B14 shaft/flange combinations. As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.

Die Maße cMF beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.



1.8 Dimensioni

1.8 Dimensions

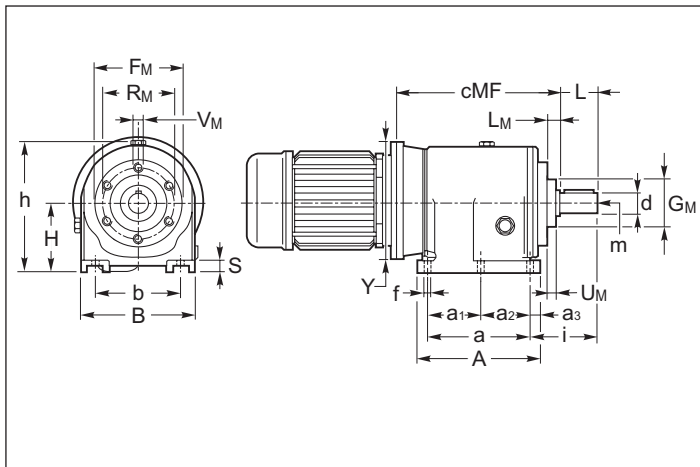
1.8 Abmessungen



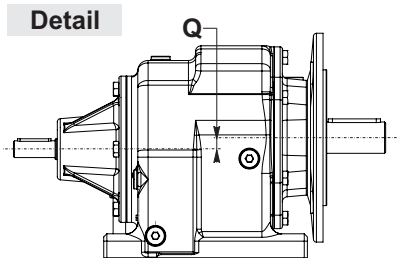
Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

AM/2-3 - AR/2-3 - AC/2-3

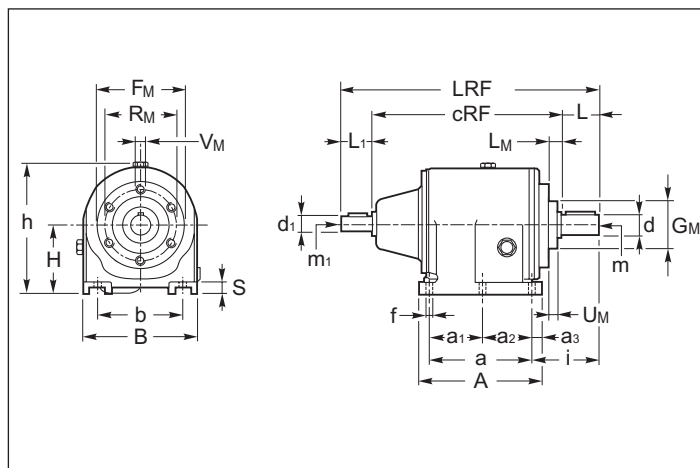
AMP/F (50-55-60-70-80-90-110-120-140)



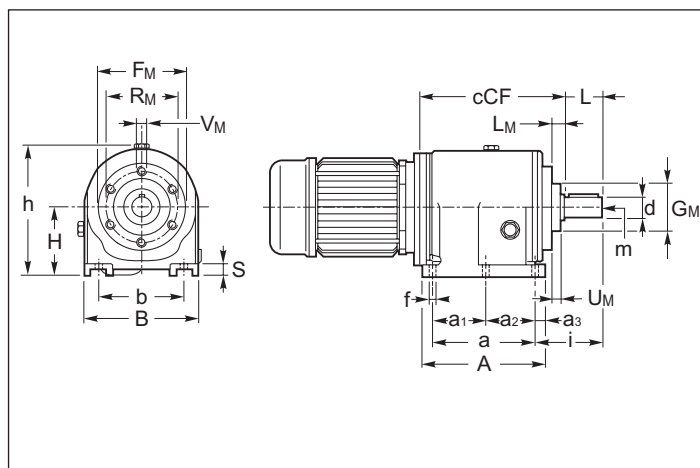
55-70-90-110-140



ARP/F (50-55-60-70-80-90-110-120-140)



ACP/F (50-55-60-70-80-90)





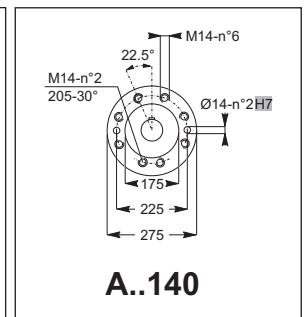
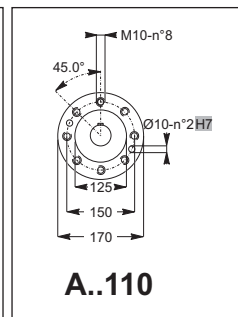
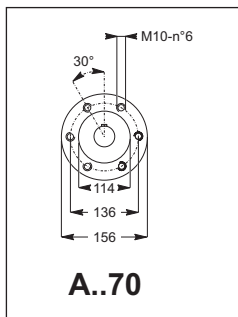
1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

AM AC AR	a	a <sub>1</sub>	a <sub>2</sub>	a <sub>3</sub>	A	b	B	cRP	d h6	d <sub>1</sub> j6	f	h	H	i	L	L <sub>1</sub>	LRF	m	m <sub>1</sub>	Q	S
50	130			12.5	155	110	145	235	25 (24) (30)	16	9.5	170	90	83 (83) (93)	50 (50) (60)	40	325 (325) (335)	M8 (M8) (M10)	M6	—	15
55	165			15	195	135	180	<sup>/2</sup> 238.5 <sup>/3</sup> 257.0	30	16	14	203	115	90	60	40	<sup>/2</sup> 338.5 <sup>/3</sup> 357.0	M10	M6	11	23
60	165			15	195	135	185	280	30 (28) (35)	19	14	210	115	101 (101) (111)	60 (60) (70)	40	380 (380) (390)	M10 (M10) (M10)	M6	—	20
70	195			20	235	150	210	<sup>/2</sup> 266.5 <sup>/3</sup> 288.5	35	19	14	233	130	100	70	40	<sup>/2</sup> 376.5 <sup>/3</sup> 398.5	M10	M6	13.5	23
80	205			20	245	170	230	317	40 (38)	24	20	265	140	123 (123)	80 (80)	50	447 (447)	M10 (M10)	M8	—	25
90	260			25	310	215	280	<sup>/2</sup> 332.5 <sup>/3</sup> 347.5	50 (48)	24	20	307	195	140	100	50	<sup>/2</sup> 482.5 <sup>/3</sup> 497.5	M12 (M12)	M8	39.5	35
110	310			25	360	250	320	422	60	28	23	351	225	160	120	60	602	M12	M8	36	35
120	310			27.5	365	250	350	491	60	38	23	415	225	191	120	80	691	M12	M10	—	45
140	370			35	440	290	400	<sup>/2</sup> 458.5 <sup>/3</sup> 508.0	70	38	27	423	270	185	140	110	<sup>/2</sup> 708.5 <sup>/3</sup> 758.0	M16	M10	41.4	60

	AMP/F. - ACP/F.								
	50	55	60	70	80	90	110	120	140
F <sub>M</sub>	110	110	110	Look picture	156.9	155	Look picture	230	Look picture
G <sub>M</sub> (g6)	74	74	74		114	110 (G6)		170	
L <sub>M</sub>	16	16	16	20	20	23	31.5	26.5	45.5
R <sub>M</sub>	94	94	94	Look picture	136	130	Look picture	200	Look picture
V <sub>M</sub>	M8	M8	M8		M10	M10		M12	
U <sub>M</sub>	7	6	6	7	13	10	10	18	22



	IEC	50		55		60		70		80		90		100		110		120		140	
		Y	cMF	Y	cMF	Y	cMF	Y	cMF	Y	cMF	Y	cMP	Y	cMF	Y	cMF	Y	cMF	Y	cMF
AMP/F../2	B5	140	206	160	233.5	160	246	200	284.5	200	298	250	313	250	347.4	250	374	250	440	300	465
		160	206	200	233.5	200	261	250	284.5	250	308	300	345	300	347.4	300	374	300	440	350	474
		200	226	250	244	250	271	300	284.5	300	329	350	364	350	411.4	350	438	350	482.5	400	479
		250	236	—	—	300	295	—	—	350	359	—	—	400	416.4	400	443	400	487.5	450	519
	B14	120	226	120	233.5	120	261	200	284.5	—	—	—	—	200	347.4	200	374	200	440	—	—
		140	226	140	233.5	140	261	—	—	—	—	—	—	—	—	—	—	—	—	—	—
160		236	160	244	160	271	160	262	—	—	—	—	—	—	—	—	—	—	—	—	
AMP/F../3	B5	140	206	140	228	160	246	160	254.5	200	298	200	331	200	340.4	200	367	200	423	250	457
		160	206	160	228	200	261	200	269.5	250	308	250	338.5	250	350.4	250	377	250	445	300	457
		200	226	200	238	250	271	250	279.5	—	—	—	—	300	370.4	300	397	300	452	350	499.5
	B14	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	400	504.5
		—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	450	513.5
		120	226	120	238	120	261	120	269.5	—	—	—	—	—	—	—	—	—	—	200	457
140	226	140	238	140	261	140	269.5	—	—	—	—	—	—	—	—	—	—	—	—	—	

ACP/F	50	55	60	70	80	90
	cCP					
ACP/F../2	167	—	202	—	241	—
ACPF../3	167	189	202	210.5	241	271

Le dimensioni cMF si riferiscono alle combinazioni albero/flangia B5 e B14, standard. Per le dimensioni relative a combinazioni albero/flangia arichiesta, contattare il ns. servizio tecnico.

The cMF dimensions refer to the standard B5 and B14 shaft/flange combinations. As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.

Die Maße cMF beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.



1.8 Dimensioni

1.8 Dimensions

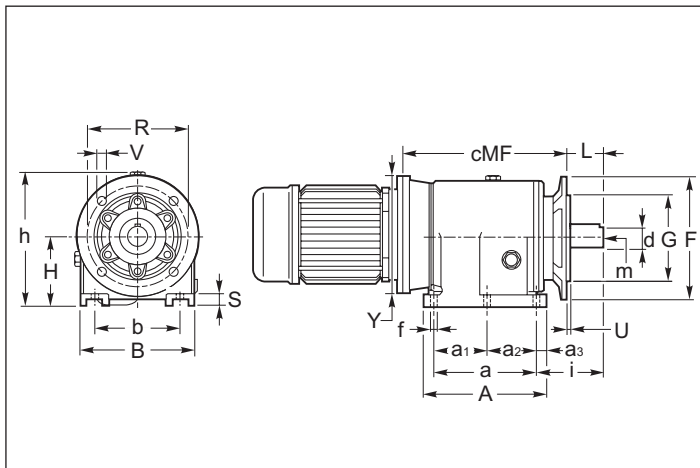
1.8 Abmessungen



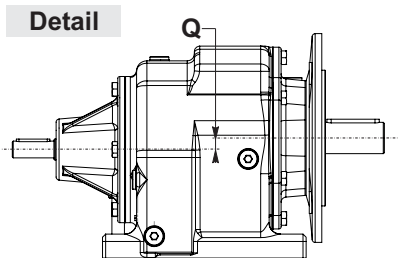
Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

AM/2-3 - AR/2-3 - AC/2-3

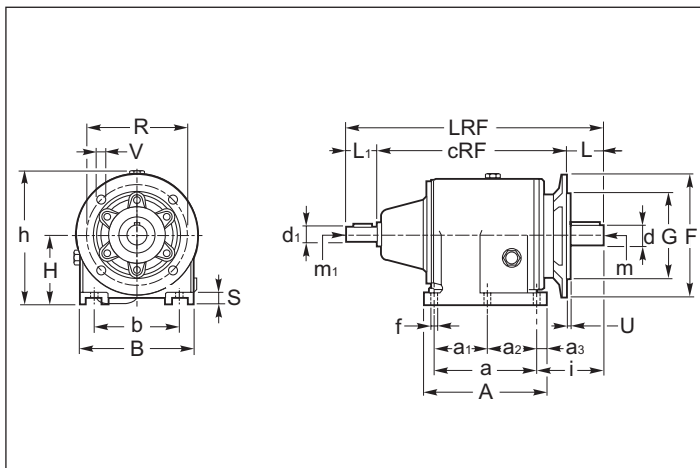
AMP/F1.. (50- 55-60-70-80-90-120-140)



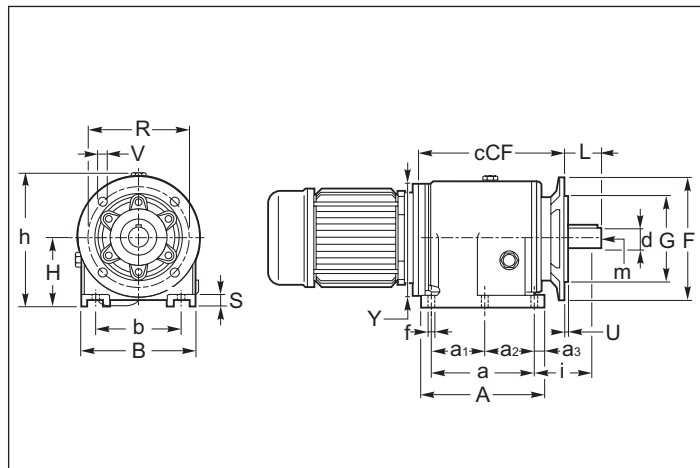
55-70-90-110-140



ARP/F1.. (50- 55-60-70-80-90-120-140)



ACP/F1.. (50-55-60-70-80-90)





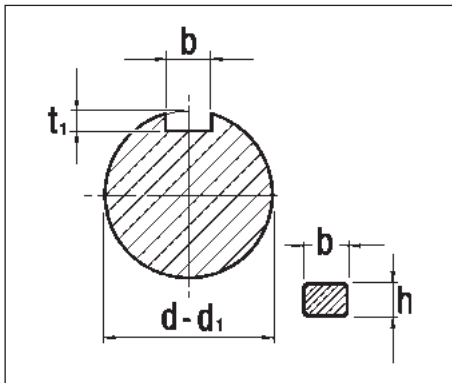




1.9 Linguette

1.9 Keys

1.9 Federn



Albero entrata  
Input shaft  
Antriebswelle

Albero uscita  
Output shaft  
Abtriebswelle

$d_1$	$b \times h$	$t_1$
16	5 x 5	3.0
19	6 x 6	3.5
24	8 x 7	4.0
28	8 x 7	4.0

$d$	$b \times h$	$t_1$
11	4 x 4	2.5
14	5 x 5	3.0
16	5 x 5	3.0
19	6 x 6	3.5
20	6 x 6	3.5
24	8 x 7	4.0
25	8 x 7	4.0
28	8 x 7	4.0
30	8 x 7	4.0
35	10 x 8	5.0
38	10 x 8	5.0
40	12 x 8	5.0
48	14 x 9	5.5
50	14 x 9	5.5
60	18 x 11	7.0
70	20 x 12	7.5



**1.0 Riduttori - motoriduttori ortogonali O**  
**1.0 Helical bevelgearboxes and geared motors O**  
**1.0 Kegelradgetriebe - Kegelradgetriebemotoren O**

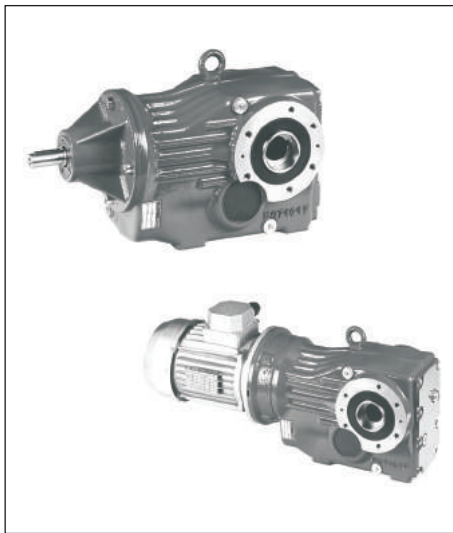
O

1.1	Caratteristiche tecniche
1.2	Designazione
1.2	Versioni
1.4	Lubrificazione
1.5	Carichi radiali e assiali
1.6	Prestazioni riduttori
1.7	Prestazioni motoriduttori
1.8	Dimensioni
1.9	Accessori

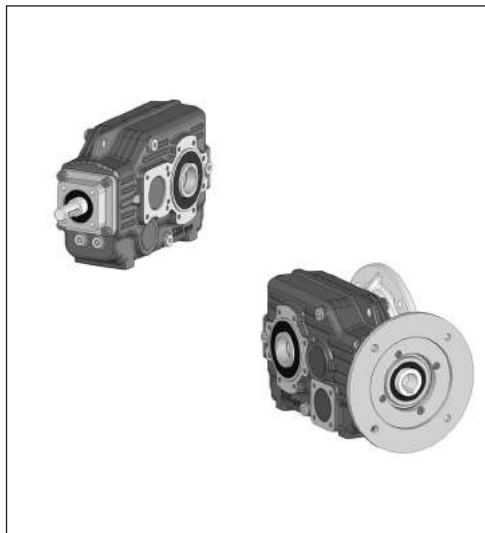
<i>Technical characteristics</i>
<i>Designation</i>
<i>Versions</i>
<i>Lubrication</i>
<i>Axial and overhung loads</i>
<i>Gearboxes performances</i>
<i>Gearmotors performances</i>
<i>Dimensions</i>
<i>Accessories</i>

Technische Eigenschaften
Bezeichnungen
Ausführungen
Schmierung
Radiale und Axiale Belastungen
Leistungen der Getriebe
Leistungen der Getriebemotoren
Abmessungen
Zubehör

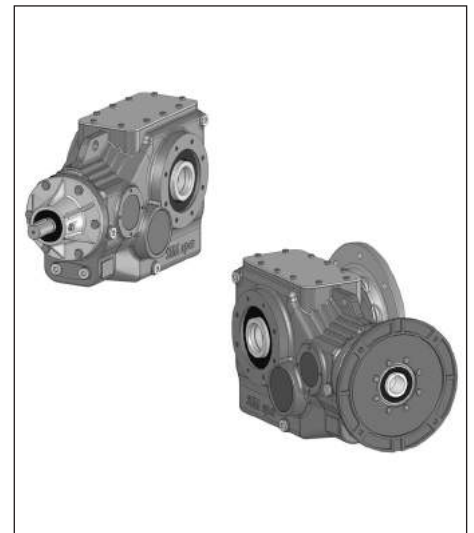
C1
C2
C3
C9
C12
C14
C28
C44
C74



63-71-90-112



80-100-125-140-160-180



132-150-170-190

**1.1 Caratteristiche tecniche**

Questi prodotti sicuramente colpiscono per la robustezza, dovuta alla realizzazione della carcassa in struttura monolitica, che abbinata alla scelta tecnica di avere solo rapporti di riduzione ricavati da versioni a tre stadi di ingranaggi, collocano il prodotto finito in una alta fascia qualitativa e prestazionale.

In opzione, sono sempre disponibili:

- il dispositivo antiretro, che impedisce l'inversione del moto per effetto del carico.
- il calettatore, per fissaggi rigidi e precisi anche con molte inversioni di moto.
- le bussole coniche, che uniscono ampia intercambiabilità con facilità di smontaggio.

**1.1 Technical characteristics**

*These new products strike for the robustness due to the realisation of the housing in monolithic structure which, combined to the technical choice to have only reduction ratio obtained from 3 gears stage, put the final product in a very high qualitative and performance band.*

*Also appreciated options are:*

- *the backstop device that prevents backdriving in case of incline conveyors.*
- *the shrink disk for rigid and accurate mounting also with a lot start-up/hour.*
- *the taper bushing join interchangeable with easy dismounting.*

**1.1 Technische Eigenschaften**

Diese neuen Produkte beindrucken sicherlich durch ihre Stärke, basierend auf einem monolithischen Gehäuse in Verbindung mit der technischen Entscheidung nur Unteretzungsverhältnisse mit dreistufigen Zahnradgetrieben zu verwenden, und führen somit zu einem hochwertigen und leistungsstarken Endprodukt.

Als Option stehen jederzeit zur Verfügung:

- die Rücklaufsperr, die eine Richtungsänderung des Motors bei Beladung verhindert.
- die Klemmen, für starre und präzise Befestigungen auch bei vielen Umkehrbewegungen
- die konischen Buchsen, die sowohl eine allseitige Austauschbarkeit als auch eine leichte Demontage ermöglichen.



1.2 Designazione

1.2 Designation

1.2 Bezeichnung

Masc hine	Input Versio n	Output versio n	Size	Output Flange	Mounting Position Output Flange	Output Shaft	Shaft Diameter	Mount ing Shaft	Rotation Sense BSTOP	Mounting Device BSTOP	Shaft Arrage ment	Cooling fan	Reduction ratio	Input Shaft	Designazione Motori Designation Motors Bezeichnung Motoren	Mounting positions	Position Terminal Box	WEB: Reference Designation	
00 M	01 IV	02 OV	03 SIZE	04 OF	05 MPOF	06 OS	08 SD	09 MS	10 RS BSTOP	11 MD BSTOP	12 SA	13 CF	14 IR	16 IS		17 MP	19 PMT	CODE: Example of Order	
O	M	P F	63 71 80 90 100 112 125 132 140 150 160 170 180 190	— F1 F2 F3 P	— S	— C N B D DB CD FD FDB QL L	— Nessuna indicazione diametro standard  No indications standard diameter  Keine Angabe Standard-dur chmesser  Ø... Diametro foro opzionale  Optional hollow shaft diameter  Optionaler Hohlwellen durchmesse	— S	— O A	— S	— —	— —	— —	80B5 80B14 ...	—	M1 M2 M3 M4 M5 M6	1 2 3 4	↓	 OMP 71 C 1:37.0 80 B5
														—	Look CT 18				
	—													—	 ORP 63 P SC 1:27.4				
	—													Look CT 18					

00 M - Macchina

M - Maschine

M - Getriebe



O

01 IV - Versione Entrata

IV - Input Version

IV - Antriebausführung

M	R	C	
			63
			71
			80
			90
			100
			112
			125
			132
			140
			150
			160
			170
			180
			190

Disponibile / available / verfügbar

Non disponibile / not available / nicht verfügbar



1.2 Designazione

02 OV - Versione Uscita

1.2 Designation

OV - Output Version

1.2 Bezeichnung

OV - Abtriebausführung

P - F

<b>P</b>		<b>63</b>
<b>P</b>		<b>71</b>
<b>F</b>		<b>90</b> <b>112</b>
<p><b>3-stages</b></p> <p>Senso di rotazione Direction of rotation Drehrichtung</p>		

<b>P</b>		<b>80</b> <b>100</b> <b>125</b> <b>140</b> <b>160</b> <b>180</b>
<b>F</b>		
<p><b>2-stages</b></p> <p>Senso di rotazione Direction of rotation Drehrichtung</p> <p>Senso di rotazione Direction of rotation Drehrichtung</p> <p><b>Only with OS=QL-L RSBSTOP=O - A - AR</b></p>		

<b>P</b>		<b>132</b> <b>150</b> <b>170</b> <b>190</b>
<b>F</b>		
<p><b>3-stages</b></p> <p>Senso di rotazione Direction of rotation Drehrichtung</p>		

03 SIZE - Grandezza

SIZE - Size

SIZE - Größe

63	71	80	90	100	112	125	132	140	150	160	170	180	190
----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

04 OF - Flangia Uscita

OF - Output Flange

OF - Flansche am Abtrieb

	<b>F.</b>	<b>P</b>
—	Flangia Uscita F. / Output Flange F./ Flansche am Abtrieb F.	Flangia Uscita P / Output Flange P/ Flansche am Abtrieb P
Senza Flangia Without Flange Ohne Flansche		

05 MPOF - Lato Flangia Uscita

MPOF - Mounting Position Output Flange

MPOF - Montageseite Abtriebsflansch

— Nessuna indicazione = flangia uscita con montaggio destro.  
**S** = flange uscita con montaggio sinistro.

— No indication (standard) = output flange on right side;  
**S** = output flange on left side.

— Keine Angabe (Standard) = Abtriebsflansch rechts.  
**S** = Abtriebsflansch links.

—	Flangia in uscita a destra Output flange on right side Flansch am Abtriebe rechts			
<b>S</b>	Flangia in uscita a sinistra Output flange on left side Flansch am Abtrieb links			

63-71-90-112

80-100-125-140-160-180

132-150-170-190



1.2 Designazione

1.2 Designation

1.2 Bezeichnung

06 OS - Estremità uscita

OS - Output shaft

OS - Wellenende - Abtrieb



— Nessuna indicazione = albero forato;  
**C** = albero forato con calettatore  
**N** = Sporgente Integrale  
**B** = albero bisporgente integrale  
**D** = Sporgente Scanalato  
**DB** = Bisporgente integrale Scanalato  
**CD** = Albero forato Scanalato  
**FD** = Flangia brocciata  
**FDB** = Flangia brocciata  
 Bisporgente  
**QL** = Quick Locking  
**L** = Predisposizione "Quick Locking "

— No indication = shaft with keyway;  
**C** = hollow shaft with shrink disk  
**N** = Output shaft  
**B** = Double integral output shaft  
**D** = Splined output shaft  
**DB** = Double splined shaft  
**CD** = Splined hollow shaft  
**FD** = Broached flange  
**FDB** = Double broached flange  
**QL** = Quick Locking  
**L** = Adjustment "Quick Locking "

— Keine Angabe = Hohlwelle mit Paßfedernut  
**C** = Hohlwelle mit Schrumpfscheibe  
**N** = Holwelle mit Wellenende  
**B** = Doppeltem Integralwelle  
**D** = Abtriebswelle mit Keilende  
**DB** = Doppelseitig verzahnte Welle  
**CD** = Verzahnte Hohlwelle  
**FD** = Geräumtem Flansch  
**FDB** = Geräumter Doppelflansch  
**QL** = Quick Locking  
**L** = Vorbereitung "Quick Locking "

08 SD - Diametro albero

SD - Shaft diameter

SD - Durchmesser Abtriebswelle

— Nessuna indicazione = diametro standard;  
**diametro opzionale** = vedi tabella.

— No indications = standard diameter;  
**optional diameter** = see table.

— Keine Angabe = Standard-durchmesser  
**Optionaler durchmesser** = siehe Tabelle.

	Standard	Optional	Standard	Optional	Standard	Optional					
	—	∅...	—	∅...	(standard) ∅...	(standard) ∅...					
<b>63</b>	(∅ 30)	∅ 25 ∅ 28	(∅ 30)	not available	(∅ 30 Standard)	(∅ 30 Optional)	(DIN 5482 35 x 31)	(DIN 5482 28 x 25)	(DIN 5482 35 x 31)	(DIN 5482 35 x 31)	(DIN 5482 35 x 31)
<b>71</b>	(∅ 35)	∅ 30 ∅ 32	(∅ 35)		(∅ 35 Standard)	(∅ 35 Optional)	(DIN 5482 35 x 31)	(DIN 5482 35 x 31)	(DIN 5482 35 x 31)	(DIN 5482 35 x 31)	(DIN 5482 35 x 31)
<b>80</b>	(∅ 32)	∅ 30 ∅ 35	(∅ 35)		(∅ 32 Standard)	(∅ 32 Optional)	(DIN 5482 40 x 36)	(DIN 5482 35 x 31)	(DIN 5482 40 x 36)	(DIN 5482 40 x 36)	(DIN 5482 40 x 36)
<b>90</b>	(∅ 40)	∅ 42 ∅ 45 ∅ 48	(∅ 40)		(∅ 40 Standard)	(∅ 40 Optional)	(DIN 5482 40 x 36)	(DIN 5482 40 x 36)	(DIN 5482 40 x 36)	(DIN 5482 40 x 36)	(DIN 5482 40 x 36)
<b>100</b>	(∅ 45)	∅ 40 ∅ 50	(∅ 45)		(∅ 45 Standard)	(∅ 45 Optional)	(DIN 5482 58 x 53)	(DIN 5482 45 x 41)	(DIN 5482 58 x 53)	(DIN 5482 58 x 53)	(DIN 5482 58 x 53)
<b>112</b>	(∅ 50)	∅ 55	(∅ 50)		(∅ 50 Standard)	(∅ 50 Optional)	(DIN 5482 58 x 53)	(DIN 5482 50 x 45)	(DIN 5482 58 x 53)	(DIN 5482 58 x 53)	(DIN 5482 58 x 53)
<b>125</b>	(∅ 55)	∅ 50 ∅ 60	(∅ 55)		(∅ 55 Standard)	(∅ 55 Optional)	(DIN 5482 70 x 64)	(DIN 5482 55 x 50)	(DIN 5482 70 x 64)	(DIN 5482 70 x 64)	(DIN 5482 70 x 64)
<b>132</b>	(∅ 60)	∅ 70	(∅ 60)	∅70	(∅ 60 Standard) ∅70 (Optional)	(FIAT 70)	(DIN 5482 70 x 64)	(FIAT 70)	(FIAT 70)	(FIAT 70)	
<b>140</b>	(∅ 70)	∅ 60	(∅ 70)	not available	(∅ 70 Standard)	(FIAT 70)	(DIN 5482 70 x 64)	(FIAT 70)	(FIAT 70)	(FIAT 70)	
<b>150</b>	(∅ 70)	∅ 80	(∅ 70)	∅80	(∅ 70 Standard) ∅80 (Optional)	(FIAT 80)	(DIN 5482 80 x 74)	(FIAT 80)	(FIAT 80)	(FIAT 80)	
<b>160</b> <b>170</b>	(∅ 90)	not available	(∅ 90)	not available	(∅ 90 Standard)	(FIAT 95)	(DIN 5482 90 x 84)	(FIAT 95)	(FIAT 95)	(FIAT 95)	
<b>180</b> <b>190</b>	(∅ 100)	not available	(∅ 100)		(∅ 100 Standard)	(DIN 5480 105 x 80)	(DIN 5482 100 x 94)	(DIN 5480 105 x 80)	(DIN 5482 105 x 80)	(DIN 5480 105 x 80)	



### 1.2 Designazione

### 1.2 Designation

### 1.2 Bezeichnung

**08SD** - Diametro albero



**SD** - Shaft diameter

**SD** - Durchmesser Abtriebswelle

diametro = vedi tabella.

diameter = see table.

Durchmesser = siehe Tabelle.

Grandezza Size Größe		
<b>71</b>	∅ 20 - ∅ 25 - ∅ 30	Contattare nostro ufficio tecnico commerciale Please, contact our technical sales dept. Bitte setzen Sie sich mit unserer technischen Abteilung in Verbindung
<b>80</b>		
<b>90</b>	∅ 25 - ∅ 30 - ∅ 35 - ∅ 38 - ∅ 40 - ∅ 42 - ∅ 45 - ∅ 48	
<b>100</b>		
<b>112</b>	∅ 30 - ∅ 35 - ∅ 40 - ∅ 45 - ∅ 50	
<b>125</b>	∅ 35 - ∅ 40 - ∅ 45 - ∅ 48 - ∅ 50 - ∅ 55	
<b>132</b>	∅ 40 - ∅ 45 - ∅ 50 - ∅ 55 - ∅ 60 - ∅ 65	
<b>140</b>		
<b>150</b>	∅ 45 - ∅ 50 - ∅ 55 - ∅ 60 - ∅ 65 - ∅ 70 - ∅ 75	
<b>160</b>	∅ 55 - ∅ 60 - ∅ 65 - ∅ 70 - ∅ 75 - ∅ 80	
<b>170</b>		
<b>180</b>	∅ 70 - ∅ 75 - ∅ 80 - ∅ 85 - ∅ 90	
<b>190</b>		

**09MS** - Posizione Albero


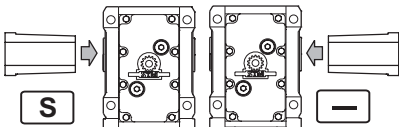

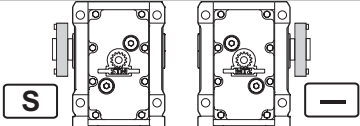

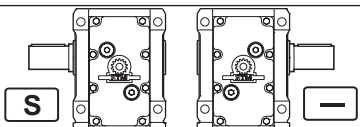

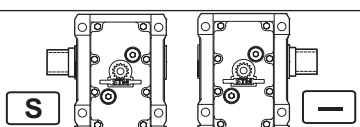

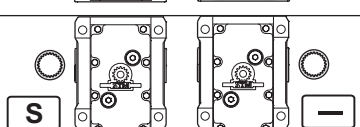

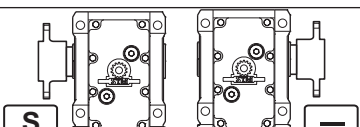
**MS** - Mounting Shaft

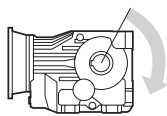
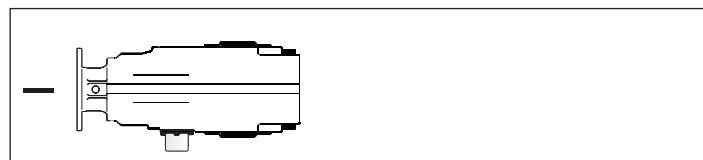
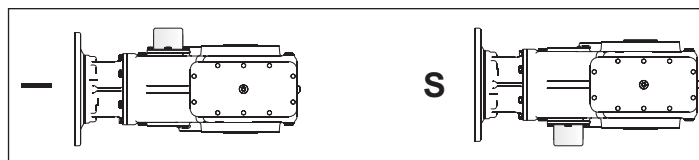
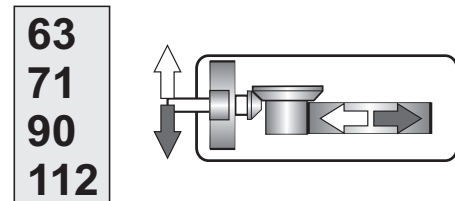
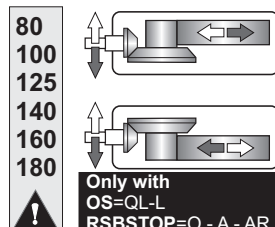
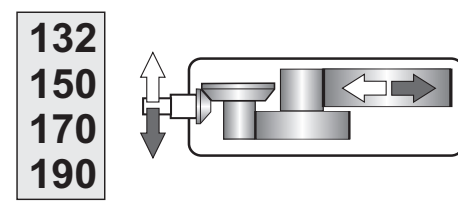
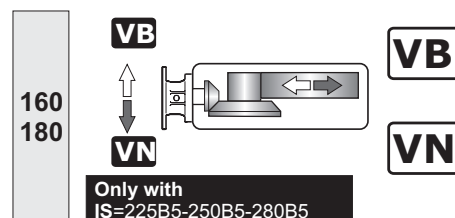
**MS** - Montageposition Welle

— Nessuna indicazione = lato destro (standard);  
**S** = lato sinistro, montaggio dalla parte opposta (opzionale).

— No indication (standard) = on right side;  
**S** = on left side, on the opposite.

— Keine Angabe (Standard) = rechts;  
**S** = links.

Quick Locking		<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="border: 1px solid black; padding: 2px;">132-150-170-190 80-100-125-140-160-180</div>  <div style="border: 1px solid black; padding: 2px;">71-90-112</div> </div> <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">80-100-125-140-160-180</div> <div style="border: 1px solid black; padding: 2px; margin-top: 2px; font-size: 8px;">                 Only with                  OS=QL-L                  RSBSTOP=O - A - AR             </div>
Albero forato con calettatore Hollow shaft with shrink disc Holwelle mit Schrumpfscheibe		
Sporgente Integrale Output shaft Holwelle mit Wellenende		
Sporgente Scanalato Splined output shaft Abtriebswelle mit Keilende		
Albero forato Scanalato Splined hollow shaft Verzahnte Holwelle		
Flangia brocciata Broached flange Geräumtem Flansch		

**1.2 Designazione****10 RSBSTOP** - Senso di rotazione (valido solo se richiesto dispositivo antiretro)**O** = ORARIO (il riduttore può ruotare solo in senso orario visto dal lato destro come in figura);  
**A** = ANTIORARIO.**AR**=Riduttore è predisposto con antiretro.**11 MDBSTOP** - Posizione antiretro— Nessuna indicazione = (standard);  
**S** = montaggio dalla parte opposta (opzionale).  
N.B.  
only 132-150-170-190**80-100-125-140-160-180****1.2 Designation****RSBSTOP** - *Rotation sense (only necessary for solution with backstop device)***O** = *CLOCKWISE (looking at the gearbox from the perspective shown below).*  
**A** = *ANTICLOCKWISE.***AR**=Gearbox is Adjustment with backstop.**MDBSTOP** - *Mounting backstop device*— *No indication = (standard);*  
**S** = *on the opposite.*  
N.B.  
solo 132-150-170-190**132-150-170-190****1.2 Bezeichnung****RSBSTOP** - *Drehrichtung (Nur bei Ausföhrungen mit RÖcklaufsperr)***O** = im Uhrzeigersinn (bei Betrachtung des Getriebes aus der unten dargestellten Perspektive);  
**A** = Gegen den Uhrzeigersinn.**AR**=Der Getriebe wird mit der RÖcklaufsperr vorbereitet.**MDBSTOP** - *Montageposition RÖcklaufsperr)*— Keine Angabe = (Standard);  
**S** = Gegenteile.  
N.B.  
nur 132-150-170-190**12 SA** - Esecuzione grafica— Nessuna indicazione = Come in figura (Standard);  
NB:  
Solo per le grandezze **80-100-125-132-140-150-160-170-180-190** è possibile concordare una esecuzione speciale con nostro Ufficio Commerciale.**SA** - *Shaft arrangement*— *No indication=Like a picture (standard);*  
NB:  
Only for sizes **80-100-125-132-140-150-160-170-180-190** is available to agree a special arrangement with our sales dept.**SA** - *Grafische Ausföhrung*— Keine Mitteilung= wie hier bezeichnet (Standard)  
Wichtig:  
Nur fuer die Groessen **80-100-125-132-140-150-160-170-180-190** kann man eine Sonderausföhrung mit unserer Verkaufsabteilung besprechen.**13 CF** - Ventole di raffreddamento**CF** - *Cooling fans***A Richiesta** - Sono normalmente applicate su riduttori con un solo senso di rotazione. Indicare nella richiesta il senso di rotazione riferendosi all'albero veloce (freccia nera - **VN** e freccia bianca **VB**)**On Request** - They are usually applied on gearboxes with one direction of rotation. Specify the required direction of rotation referring to input shaft (black arrow - **VN** and white arrow - **VB**)**Auf Anfrage** - Sie werden üblicherweise bei Getrieben mit einer Drehrichtung verwendet. Geben Sie die gewünschte Drehrichtung in Bezug auf die Antriebswelle an (schwarzer Pfeil - **VN** und weißer Pfeil **VB**)**CF** - *KÖhllÖferräder***14 IR** - Rapporto di riduzione

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

**IR** - *Reduction ratio*

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

**IR** - *Übersetzungsverhältnis*

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



## 1.2 Designazione

### 16 IS - Albero Entrata

Nella tab. sono riportate le grandezze motore accoppiabili (IEC) unitamente alle dimensioni albero/flangia motore standard

Legenda:

11/140 (B5): combinazioni albero/flangia standard

11/120 : combinazioni albero/flangia a richiesta

## 1.2 Designation

### IS - Input Shaft

In table the possible shaft/flange dimensions IEC standard are listed.

Key:

11/140 : standard shaft/flange combination

11/120 : shaft/flange combinations upon request

## 1.2 Bezeichnung

### IS - Antriebswelle

In Tabelle sind die möglichen Welle/Flansch-Abmessungen IEC-Standard aufgelistet.

Legende:

11/140 : Standardkombinationen Welle/Flansch

11/120 : Sonderkombinationen Welle/Flansch

### Possibili accoppiamenti con motori IEC - Possible couplings with IEC motors - Mögliche Verbindungen mit IEC-Motoren

		OM	
		IEC	ir (Tutti / All / Alle)
63	63	11/140 (B5)	
	71	14/160 (B5)	
	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140	
	90	24/200 (B5) - 24/140 (B14) - 24/160 - 24/120	
	100-112	28/250 (B5) - 28/160 (B14)	
71	63	11/140 (B5)	
	71	14/160 (B5) - 14/200 - 14/140 - 14/120	
	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140	
	90	24/200 (B5) - 24/140 (B14) - 24/160 - 24/120	
	100-112	28/250 (B5) - 28/160 (B14)	
80	71	14/160 (B5) - 14/250 - 14/200 - 14/140 - 14/120	
	80	19/200 (B5) - 19/120 (B14) - 19/250 - 19/160 - 19/140	
	90	24/200 (B5) - 24/140 (B14) - 24/250 - 24/160 - 24/120	
	100-112	28/250 (B5) - 28/160 (B14) - 28/200 - 28/140 - 28/120	
90	71	14/160 (B5)	
	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140	
	90	24/200 (B5) - 24/140 (B14) - 24/300 - 24/250 - 24/160 - 24/120	
	100-112	28/250 (B5) - 28/160 (B14) - 28/200 - 28/300	
	132	38/300 (B5) - 38/200 (B14) - 38/250	
100	80	19/200 (B5) - 19/300 - 19/250	
	90	24/200 (B5) - 24/300 - 24/250	
	100-112	28/250 (B5) - 28/300 - 28/200	
	132	38/300 (B5) - 38/200 (B14) - 38/250	
112	80	19/200 (B5)	
	90	24/200 (B5)	
	100-112	28/250 (B5) - 28/350 - 28/300	
	132	38/300 (B5) - 38/350 - 38/250	
125	160	42/350 (B5) - 42/300 - 42/250	
	80	19/200 (B5)	
	90	24/200 (B5) - 24/300 - 24/250	
	100-112	28/250 (B5) - 28/300 - 28/200	
	132	38/300 (B5) - 38/200 (B14) - 38/250	
	160*	42/350 (B5)	
	180*	48/350 (B5)	

		OM	
		IEC	ir (Tutti / All / Alle)
132	90	24/200 (B5)	
	100-112	28/250 (B5)	
	132	38/300 (B5)	
	160*	42/350 (B5)	
	180*	48/350 (B5)	
140	80	19/200 (B5)	
	90	24/200 (B5) - 24/300 - 24/250	
	100-112	28/250 (B5) - 28/300 - 28/200	
	132	38/300 (B5) - 38/200 (B14) - 38/250	
	160*	42/350 (B5)	
	180*	48/350 (B5)	
150	200*	55/400 (B5)	
	100-112	28/250 (B5)	
	132	38/300 (B5)	
	160*	42/350 (B5)	
	180*	48/350 (B5)	
160	200*	55/400 (B5)	
	132*	38/300 (B5)	
	160*	42/350 (B5)	
	180*	48/350 (B5)	
	225*	60/450 (B5) - (on request with fan)	
170	250*	65/550 (B5) - (on request with fan)	
	280*	75/550 (B5) - (on request with fan)	
	100-112	28/250 (B5)	
	132	38/300 (B5)	
	160*	42/350 (B5)	
	180*	48/350 (B5)	
180	200*	55/400 (B5)	
	225*	60/450 (B5)	
	250*	65/550 (B5) - (on request with fan)	
	280*	75/550 (B5) - (on request with fan)	
	132*	38/300 (B5)	
	160*	42/350 (B5)	
	180*	48/350 (B5)	
	200*	55/400 (B5)	
190	225*	60/450 (B5)	
	250*	65/550 (B5)	
	132	38/300 (B5)	
	160*	42/350 (B5)	
	180*	48/350 (B5)	
	200*	55/400 (B5)	

\* Tutti i PAM sono forniti con giunto ROTEX. Per i PAM segnati da asterisco vedere le prescrizioni (per prescrizioni di montaggio vedere sezione A paragrafo "Installazione" - 1.12)

\* All PAM configurations supplied with ROTEX coupling. Where PAM configuration is marked with an asterisk, see directions for mounting directions, see section A, paragraph "Installation" - 1.12)

\* Alle PAM werden sie mit Kupplung Typ ROTEX geliefert. Bei den mit einem Sternchen gekennzeichneten PAM siehe Vorgaben (hinsichtlich Montagegenauigkeit siehe Abschnitt A im Paragraph "Einbau" - 1.12).



**Posizione morsetti - Vedere - 19 - PMT - Pagina C8**  
**Terminal board position - Look - 19 - PMT - Page C8**  
**Lage des Klemmenkastens - Siehe - 19 - PMT - Auf Seite C8**

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

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

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





**1.2 Designazione**

**1.2 Designation**

**1.2 Bezeichnung**

**16 IS - Albero Entrata**

**IS - Input Shaft**

**IS - Antriebswelle**

— Nessuna indicazione = diametro standard;

— No indications = standard diameter;

— Keine Angabe = Standard-durchmesser

OR		<b>63</b>	<b>71</b>	<b>80</b>	<b>90</b>	<b>100</b>	<b>112</b>	<b>125</b>	<b>132</b>	<b>140</b>	<b>150</b>	<b>160</b>	<b>170</b>	<b>180</b>	<b>190</b>
		(∅ 16)	(∅ 16)	(∅ 19)	(∅ 19)	(∅ 24)	(∅ 24)	(∅ 28)	(∅ 32)	(∅ 38)	(∅ 42)	*	(∅ 50)	*	(∅ 60)

\*Contattare il ns. servizio tecnico / Contact our technical dept / Wenden Sie sich an unseren technischen Service

**17 MP - Posizioni di montaggio**

**MP - Mounting positions**

**MP - Einbaulagen**

**[M2, M3, M4, M5, M6]** Posizioni di montaggio con indicazione dei tappi di livello, carico e scarico; se non specificato si considera standard la posizione **M1** (vedi par. 1.4)

**[M2, M3, M4, M5, M6]** Mounting position with indication of breatherm level and drain plugs; if not specified, standard position is **M1** (see par. 1.4).

Montageposition **[M2, M3, M4, M5, M6]** mit Angabe von . Entlüftung, Schaugläsern und Ablasschraube. Wenn nicht näher spezifiziert, wird die Standard - position **M1** zugrunde gelegt (s. Abschnitt 1.4).

**18 OPT-ACC. - Opzioni**

**OPT-ACC - Options**

**OPT-ACC. - Optionen**

vedi par. 1.9 see pa. 1.9 s. Abschnitt 1.9	ACC1	<b>AL</b>	Alberi lenti - AL	Output shafts - AL	Abtriebswellen - AL
		<b>PROT.</b>	Coperchio di protezione	Protection cover	Schutzvorrichtungdeckel
		<b>FF</b>	FF - Kit	FF - Kit	FF - Kit
		<b>RR</b>	Kit rosetta di montaggio	Mounting washer kit	Kit Montagescheibe
	ACC3	<b>BRS_VKL</b>	Braccio Reazione Semplice_con bocca_VKL	Torque arm - Single_with VKL_bushing	Drehmomentstütze - Normal_mit VKL - Buchse
vedi Sezione A-1.12 see Section A-1.12 s. Abschnitt A-1.12	OPT.	<b>OPT</b>	Materiale degli anelli di tenuta	Materials of Seals	Dichtungsstoffe
		<b>OPT1</b>	Stato fornitura olio	Scope of the supply - Options - OIL	Optionen - Lieferzustand - Optionen - Öl
		<b>OPT2</b>	Verniciatura	Painting and surface protection	Lackierung und Oberflächenschutzl

**Nota BRS\_VKL**  
E' possibile montare il braccio di reazione solo sulle versioni flangiate .

**Note BRS\_VKL**  
Only to flange casing is possible to mount a torque arm

**HINWEIS BRS\_VKL**  
Man kann die Dremomentstuetze nur bei den Versionen mit Flansch anbauen.

**19 PMT - Posizioni della Morsettiera**

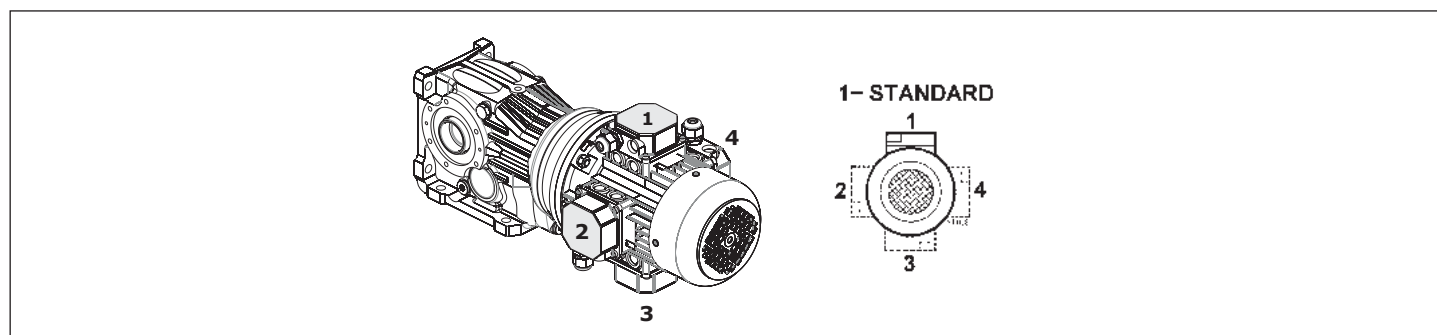
**PMT - Position Terminal Box**

**PMT - Montagposition Klemmenkasten**

**[2, 3, 4]** Posizione della morsettiera del motore se diversa da quella standard (1).

**[2, 3, 4]** Position of the motor terminal box if different from the standard one (1).

Montageposition Klemmenkasten **[2, 3, 4]**, wenn abweichend von Standardposition [1] (für Motorgetriebe).





1.4 Lubrificazione

1.4 Lubrication

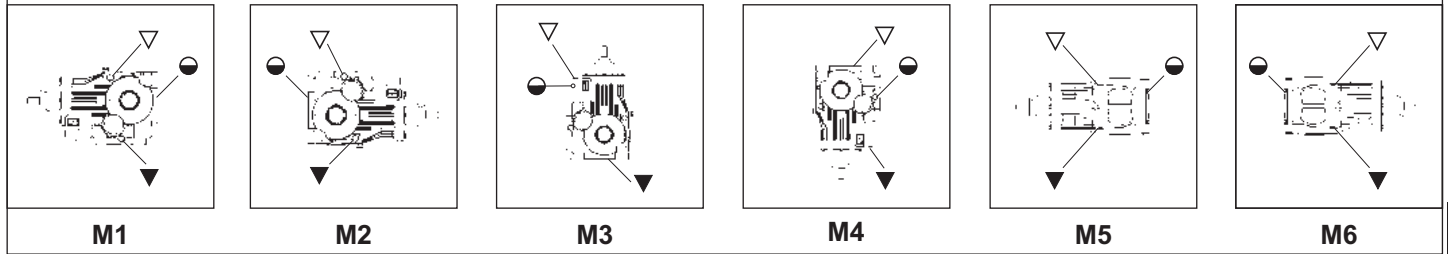
1.4 Schmierung



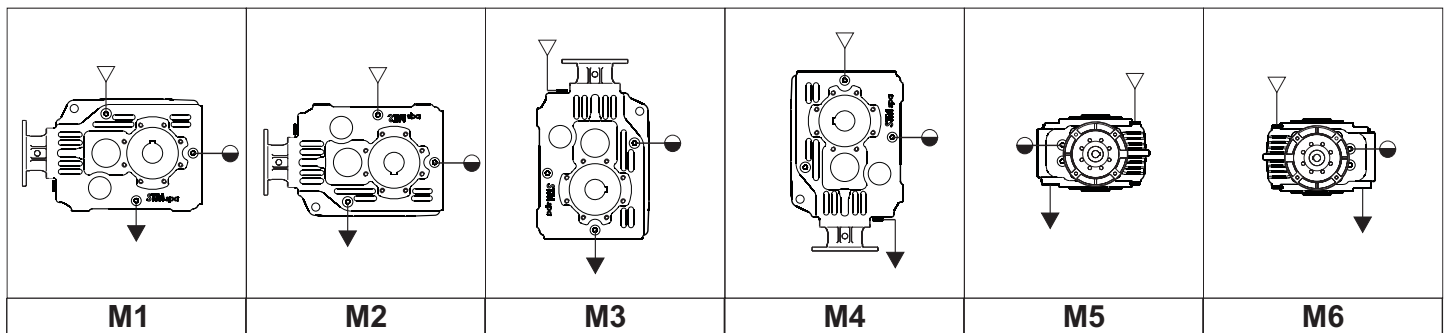
Posizioni di montaggio  
Mounting positions  
Montagepositionen



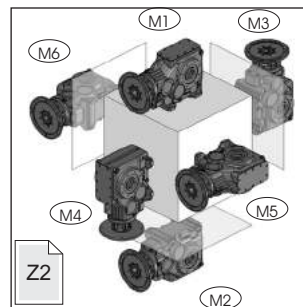
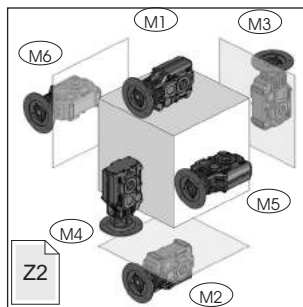
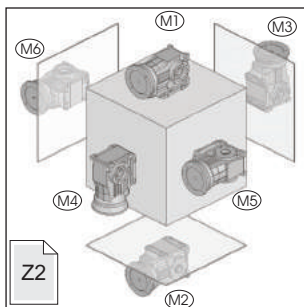
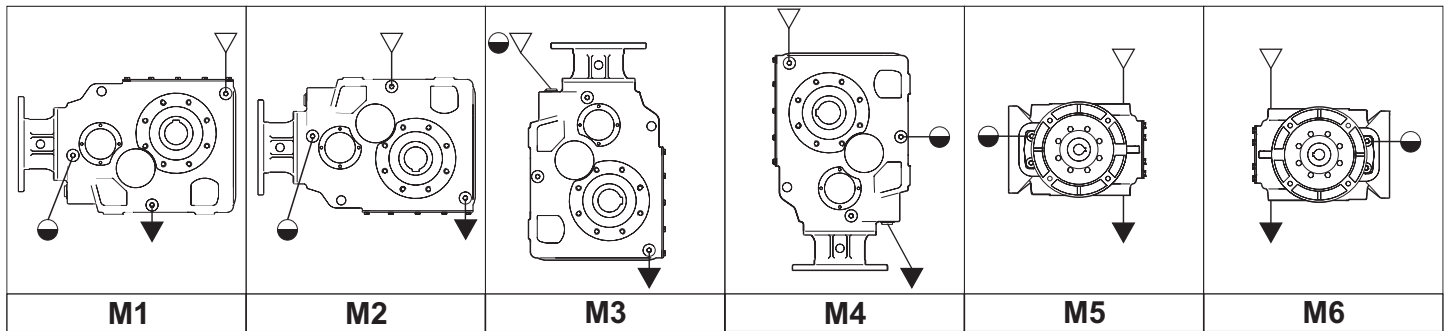
63 - 71 - 90 - 112



80 - 100 - 125 - 140 - 160 - 180



132 - 150 - 170 - 190



- ▽ Carico / Breather plug / Nachfüllen - Entlüftung
- Livello / Level plug / Pegel
- ▼ Scarico / Drain plug / Auslauf



## 1.4 Lubrificazione

## 1.4 Lubrication

## 1.4 Schmierung

Posizioni di montaggio - Mounting positions - Montagepositionen				
	Posizioni Positions Positionen	Prescrizioni da indicare in fase d'ordine Ordering requirements Anforderungen bei der Bestellung		
		63		Non necessaria Not necessary Nicht erforderlich
OR OM OC	71	M1-M2 M3-M4 M5-M6	Necessaria Necessary Erforderlich	
	80			
	90			
	100			
	112			
	125			
	132			
	140			
	150			
	160			
	170			
	180			
190				

**TARGHETTA - RIDUTTORE****NON NECESSARIA**

Indicata sempre nella targhetta del riduttore la posizione di montaggio "M1".

**NECESSARIA**

La posizione richiesta è indicata nella targhetta del riduttore

**Identification Plate - Gearbox****NOT NECESSARY**

The mounting position is always indicated on the nameplate "M1".

**NECESSARY**

The indication it on the label of the gearbox

**Typeschild - Getriebe****NICHT ERFORDERLICH**

Die Einbaulage ist immer auf dem Typenschild angegeben "M1".

**ERFORDERLICH**

Findet man die angefragte Position auf dem Typenschild des Getriebe



## 1.4 Lubrificazione

## 1.4 Lubrication

## 1.4 Schmierung

Lub	Quantità di lubrificante - Lubricant Quantity - Schmiermittelmenge - [Kg]							OPT1	Tappi-Plug-Stopfen			
		M1	M2	M3	M4	M5	M6		N°	Diameter	Type	
OR OM OC	63	WITH ANTIRUN BACK DEVICE	1.260	1.260	1.260	1.260	1.260	1.260	INOIL_STD	1	1/4"	
		WITHOUT ANTIRUN BACK DEVICE	1.300	1.300	1.300	1.300	1.300	1.300				
	71	WITH ANTIRUN BACK DEVICE	1.350	1.250	1.850	1.550	1.700	1.700		1	1/4"	
		WITHOUT ANTIRUN BACK DEVICE	1.350	1.250	1.950	1.550	1.700	1.700				
	80	—	1.000	1.000	1.400	1.200	1.300	1.300	OUTOIL	8	1/4"	
	90	WITH ANTIRUN BACK DEVICE	2.700	2.700	3.600	2.700	2.700	2.700		7	1/4"	
		WITHOUT ANTIRUN BACK DEVICE	3.000	3.000	3.850	3.000	3.000	3.000		8	1/4"	
	100	—	2.200	2.200	2.500	2.500	2.600	2.600		7	1/4"	
	112	WITH ANTIRUN BACK DEVICE	5.000	5.000	7.500	5.000	5.000	5.000		8	3/8"	
		WITHOUT ANTIRUN BACK DEVICE	5.500	5.500	8.200	5.500	5.500	5.500		8	1/2"	
	125	—	4.000	4.000	4.400	4.400	4.500	4.500		8	1/2"	
	132	—	8.000	8.000	14.00	7.500	11.00	11.00		8	1/2"	
	140	—	9.100	9.100	10.20	10.50	13.30	13.30		8	1/2"	
	150	—	11.00	11.00	21.00	12.00	16.50	16.50		8	1/2"	
	160	—	12.00	14.00	17.00	13.00	18.00	18.00		8	1/2"	
	170	—	17.00	17.00	33.00	17.00	24.50	24.50		8	1/2"	
	180	—	16.50	18.00	22.50	17.00	24.50	24.50	8	1/2"		
	190	—	23.00	25.00	43.80	25.00	33.00	33.00	8	1/2"		



Quantità indicative; durante il riempimento attenersi alla spia di livello.

durante il riempimento attenersi alla spia di livello.

Indicative quantities, check the oil sight glass during filling.

Richtungsweisende Mengen, bei der Auffüllung auf das Füllstand-Kontrollfenster Bezug nehmen.

**Attentione !:**

Il tappo di sfiato è allegato solo nei riduttori che hanno più di un tappo olio

**Warning!:**

A breather plug is supplied only with worm gearboxes that have more than one oil plug

**Achtung!:**

Der Entlüftungsstopfen ist lediglich bei den Getrieben vorhanden, die über mehr als einen Ölfüllstopfen verfügen

**Nota:** Se in fase d'ordine la posizione di montaggio è omessa, il riduttore verrà fornito con i tappi predisposti per la posizione M1.

**Note:** If the mounting position is not specified in the order, the worm gearbox supplied will have plugs pre-arranged for position M1.

**Anmerkung:** Sollte in der Auftragsphase die Einbaulage nicht angegeben werden, wird das Getriebe mit Stopfen für die Einbaulage M1.

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

*The supply of gearboxes with different plug pre-arrangements has to be agreed with the manufacturer.*

Lieferungen, die eine Auslegung hinsichtlich der Stopfen aufweisen, die von den Angaben in der Tabelle abweichen, müssen vorab vereinbart werden..



### 1.5 Carichi radiali e assiali

Quando la trasmissione del moto avviene tramite meccanismi che generano carichi radiali sull'estremità dell'albero, è necessario verificare che i valori risultanti non eccedano quelli indicati nelle tabelle.

Nella Tab. 3.4 sono riportati i valori dei carichi radiali ammissibili per l'albero veloce ( $Fr_1$ ). Come carico assiale ammissibile contemporaneo si ha:

$$Fa_1 = 0.2 \times Fr_1$$

Tab. 3.4

### 1.5 Axial and overhung load

*Should transmission movement determine radial loads on the angular shaft end, it is necessary to make sure that resulting values do not exceed the ones indicated in the tables.*

*In Table 3.4 permissible radial load for input shaft are listed ( $Fr_1$ ). Contemporary permissible axial load is given by the following formula:*

$$Fa_1 = 0.2 \times Fr_1$$

### 1.5 Radiale und axiale Belastungen

Wird das Wellenende auch durch Radialkräfte belastet, so muß sichergestellt werden, daß die resultierenden Werte die in der Tabelle angegebenen nicht überschreiten.

In Tabelle 3.4 sind die Werte der zulässigen Radialbelastungen für die Antriebswelle ( $Fr_1$ ) angegeben. Die Axialbelastung beträgt dann:

$$Fa_1 = 0.2 \times Fr_1$$

#### 63 - 71 - 80 - 90 - 100 - 112 - 125

$n_1$ [min <sup>-1</sup> ]	$Fr_1$ [N]						
	OR .						
	63	71	80	90	100	112	125
2800	320	430	450	520	650	600	800
1400	400	550	550	700	800	800	1000
900	450	600	600	800	900	920	1200
500	500	850	850	1100	1000	1300	1600

#### 132 - 140 - 150 - 160 - 170 - 180 - 190

$n_1$ [min <sup>-1</sup> ]	$Fr_1$ [N]						
	OR .						
	132	140	150	160	170	180	190
2800	1100	1500	1800	Contattare il ns. servizio tecnico / Contact our technical dept / Wenden Sie sich an unseren technischen Service	2800	Contattare il ns. servizio tecnico / Contact our technical dept / Wenden Sie sich an unseren technischen Service	4300
1400	1500	2000	4400		6400		
900	2200	2500	4800		7000		
500	2800	3000	5500		7500		

In Tab. 3.5 sono riportati i valori dei carichi radiali ammissibili per l'albero lento ( $Fr_2$ ). Come carico assiale ammissibile contemporaneo si ha:

$$Fa_2 = 0.2 \times Fr_2$$

*In Table 3.5 permissible radial loads for output shaft are listed ( $Fr_2$ ). Permissible axial load is given by the following formula:*

$$Fa_2 = 0.2 \times Fr_2$$

In Tabelle 3.5 sind die Werte der zulässigen Radialbelastungen für die Abtriebswelle ( $Fr_2$ ) angegeben. Als zulässige Axialbelastung gilt:

$$Fa_2 = 0.2 \times Fr_2$$



1.5 Carichi radiali e assiali

1.5 Axial and overhung load

1.5 Radiale und axiale Belastungen

Tab. 3.5

63 - 71 - 80 - 90 - 100 - 112 - 125							
Fr <sub>2</sub> [N]							
n <sub>2</sub> [min <sup>-1</sup> ]	63	71	80	90	100	112	125
400	1500	2900	5000	9000	8000	11000	12500
320	1750	3000	5500	10000	9000	11500	14000
260	1950	3300	6000	10600	10000	12000	16000
200	2050	3600	6000	11400	10000	12500	16000
160	2250	3700	6000	12000	10000	13200	16000
125	2400	4050	6000	12500	10000	13300	16000
90	2750	4400	6500	13500	10000	15000	16000
60	2900	4800	7100	13500	10600	16600	17000
40	3300	5300	7500	13500	11800	17500	19000
25	4000	6500	8000	13500	12500	17500	20000
16	4500	6500	8000	13500	12500	17500	20000
10	5300	6500	8000	13500	12500	17500	20000
5	6400	6500	8000	13500	12500	17500	20000

132 - 140 - 150 - 160 - 170 - 180 - 190					
Fr <sub>2</sub> [N]					
n <sub>2</sub> [min <sup>-1</sup> ]	132	140	150	160 - 170	180 - 190
320	13500	14000	17500	19400	25200
250	15500	16000	19200	21100	27800
200	16500	18000	20500	23300	29500
160	17500	18500	22100	24800	32000
112	19000	20000	23500	27000	35200
63	23000	28000	27500	34200	44600
36	29000	30000	34000	41000	53200
<12.5	32500	35000	43000	57000	65000

I carichi radiali indicati nelle tabelle si intendono applicati a metà della sporgenza dell'albero lento standard (vedi fig. 2.6) e sono riferiti ai riduttori operanti con fattore di servizio 1.

Valori intermedi relativi a velocità non riportate possono essere ottenuti per interpolazione considerando però che Fr<sub>1</sub> a 500 min<sup>-1</sup> e Fr<sub>2</sub> a 5 min<sup>-1</sup> rappresentano i carichi massimi consentiti. Per i carichi non agenti sulla mezzeria dell'albero lento o veloce si ha:

- a 0.3 della sporgenza:  $F_{rx} = 1.25 \times F_{r1-2}$
- a 0.8 della sporgenza:  $F_{rx} = 0.8 \times F_{r1-2}$

The radial loads shown in the tables are applied on the middle of standard shaft extensions (see fig. 2.6). Base of these values is a service factor 1.

Values for speeds that are not listed can be obtained through interpolation but it must be considered that Fr<sub>1</sub> at 500 min<sup>-1</sup> and Fr<sub>2</sub> at 5 min<sup>-1</sup> represent the maximum allowable loads.

For radial loads which are not applied on the middle of the shafts, the following values can be calculated:

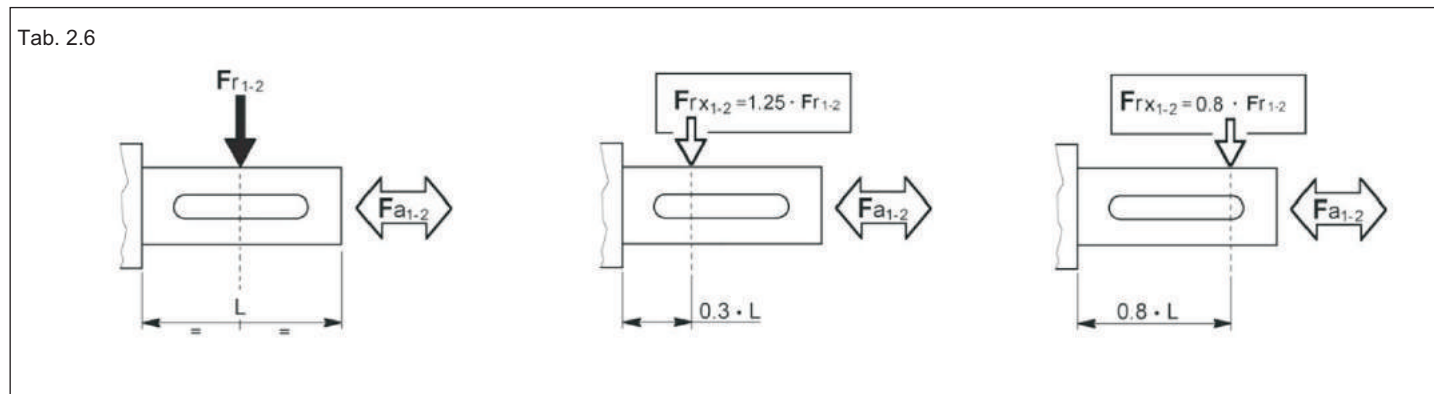
- at 0.3 from extension:  $F_{rx} = 1.25 \times F_{r1-2}$
- at 0.8 from extension:  $F_{rx} = 0.8 \times F_{r1-2}$

Bei den in der Tabelle angegebenen Radialbelastungen wird eine Kräfteinwirkung auf die Mitte der Standardwelle (s. A. 2.6) angenommen; außerdem wird ein Betriebsfaktor 1 zugrunde gelegt. Zwischenwerte für nicht aufgeführte Drehzahlen können durch Interpolation ermittelt werden. Hierbei ist jedoch zu berücksichtigen, daß Fr<sub>1</sub> bei 500 min<sup>-1</sup> und für Fr<sub>2max</sub> bei 5 min<sup>-1</sup> die maximal zulässigen Belastungen repräsentieren.

Ist die Einwirkung der Radialkraft nicht in der Mitte der Welle, so können die zulässigen Radiallasten folgendermaßen ermittelt werden:

- 0.3 vom Wellenabsatz entfernt:  $F_{rx} = 1.25 \times F_{r1-2}$
- 0.8 vom Wellenabsatz entfernt:  $F_{rx} = 0.8 \times F_{r1-2}$

Tab. 2.6





OR 63



10.5

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
7.9	354	140	5.8	90	177	170	3.5	90	114	190	2.5	90	63	200	1.5	90	112 B5 112 B14 100 B5 100 B14 90 B5 90 B14 80 B5 80 B14 71 B5 63 B5
10.3	272	150	4.7	90	136	185	2.9	90	88	200	2.0	90	49	215	1.2	90	
11.5	244	155	4.4	90	122	190	2.7	90	78	205	1.9	90	44	220	1.1	90	
13.3	211	175	4.3	90	105	220	2.7	90	68	235	1.9	90	38	245	1.1	90	
14.8	189	180	4.0	90	94	220	2.4	90	61	240	1.7	90	34	250	0.99	90	
17.2	163	185	3.5	90	82	220	2.1	90	52	245	1.5	90	29	255	0.86	90	
19.5	143	190	3.2	90	72	230	1.9	90	46	245	1.3	90	26	255	0.77	90	
23.7	118	220	3.0	90	59	240	1.6	90	38	260	1.1	90	21	270	0.66	90	
27.5	102	225	2.7	90	51	240	1.4	90	33	260	1.0	90	18.2	270	0.57	90	
31.2	90	230	2.4	90	45	240	1.3	90	29	260	0.88	90	16.0	270	0.50	90	
35.8	78	230	2.1	90	39	250	1.1	90	25	260	0.76	90	14.0	270	0.44	90	
44.6	63	230	1.7	90	31	250	0.90	90	20	260	0.61	90	11.2	270	0.35	90	
52.4	53	230	1.4	90	27	250	0.79	90	17.2	260	0.52	90	9.5	270	0.30	90	
69.0	41	230	1.1	90	20	250	0.58	90	13.0	260	0.39	90	7.2	270	0.23	90	
79.5	35	230	0.94	90	17.6	250	0.51	90	11.3	260	0.34	90	6.3	270	0.20	90	
90.6	31	200	0.72	90	15.4	230	0.41	90	9.9	250	0.29	90	5.5	265	0.17	90	
103.8	27	200	0.63	90	13.5	235	0.37	90	8.7	250	0.25	90	4.8	265	0.15	90	
129.3	22	200	0.51	90	10.8	240	0.30	90	7.0	260	0.21	90	3.9	270	0.12	90	
151.9	18.4	205	0.44	90	9.2	245	0.26	90	5.9	260	0.18	90	3.3	280	0.11	90	
200.1	14.0	210	0.34	90	7.0	250	0.20	90	4.5	260	0.14	90	2.5	280	0.08	90	
243.3	11.5	230	0.31	90	5.8	250	0.17	90	3.7	270	0.12	90	2.1	290	0.07	90	
280.4	10.0	230	0.27	90	5.0	250	0.15	90	3.2	280	0.10	90	1.8	290	0.06	90	
346.4	8.1	230	0.22	90	4.0	250	0.12	90	2.6	280	0.08	90	1.4	290	0.05	90	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	2.8

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



OR 71



18.0

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	
6.9	408	220	10.4	90	204	270	6.4	90	131	294	4.5	90	73	296	2.5	90	112 B5 112 B14
8.4	333	250	9.7	90	167	300	5.8	90	107	312	3.9	90	59	313	2.1	90	
9.9	282	260	8.5	90	141	320	5.2	90	91	350	3.7	90	50	350	2.0	90	
11.4	246	280	8.0	90	123	340	4.9	90	79	380	3.5	90	44	435	2.2	90	
13.9	201	320	7.5	90	100	400	4.7	90	65	440	3.3	90	36	490	2.1	90	
16.5	170	330	6.5	90	85	400	4.0	90	55	440	2.8	90	30	500	1.7	90	
18.7	150	330	5.8	90	75	410	3.6	90	48	460	2.6	90	27	560	1.8	90	
22.9	122	350	5.0	90	61	430	3.1	90	39	490	2.2	90	22	585	1.5	90	
27.1	103	375	4.5	90	52	460	2.8	90	33	525	2.0	90	18.5	597	1.3	90	
30.6	92	375	4.0	90	46	460	2.5	90	29	525	1.8	90	16.4	597	1.1	90	
37.1	76	375	3.3	90	38	460	2.0	90	24	525	1.5	90	13.5	597	0.94	90	
42.6	66	375	2.9	90	33	460	1.8	90	21	525	1.3	90	11.7	597	0.81	90	
49.3	57	375	2.5	90	28	460	1.5	90	18.2	525	1.1	90	10.1	599	0.70	90	
53.4	52	375	2.3	90	26	460	1.4	90	16.9	525	1.0	90	9.4	602	0.66	90	
57.9	48	375	2.1	90	24	460	1.3	90	15.5	525	0.95	90	8.6	604	0.60	90	
76.1	37	375	1.6	90	18.4	460	0.98	90	11.8	525	0.72	90	6.6	610	0.47	90	
87.4	32	375	1.4	90	16.0	460	0.86	90	10.3	525	0.63	90	5.7	612	0.41	90	
98.6	28	375	1.2	90	14.2	460	0.76	90	9.1	525	0.56	90	5.1	614	0.36	90	
107.6	26	375	1.1	90	13.0	460	0.70	90	8.4	525	0.51	90	4.6	598	0.32	90	
123.5	23	375	1.0	90	11.3	460	0.60	90	7.3	525	0.45	90	4.0	608	0.28	90	
143.1	19.6	375	0.86	90	9.8	460	0.52	90	6.3	525	0.38	90	3.5	618	0.25	90	
154.8	18.1	375	0.79	90	9.0	460	0.48	90	5.8	525	0.35	90	3.2	621	0.23	90	
168.0	16.7	375	0.73	90	8.3	460	0.44	90	5.4	525	0.33	90	3.0	622	0.22	90	
179.6	15.6	375	0.68	90	7.8	460	0.42	90	5.0	513	0.30	90	2.8	555	0.18	90	
193.6	14.5	375	0.63	90	7.2	460	0.39	90	4.6	516	0.28	90	2.6	558	0.17	90	
209.4	13.4	375	0.58	90	6.7	460	0.36	90	4.3	522	0.26	90	2.4	567	0.16	90	
220.8	12.7	375	0.55	90	6.3	460	0.34	90	4.1	525	0.25	90	2.3	625	0.17	90	
253.4	11.0	375	0.48	90	5.5	460	0.29	90	3.6	525	0.22	90	2.0	625	0.15	90	
286.0	9.8	375	0.43	90	4.9	460	0.26	90	3.1	525	0.19	90	1.7	625	0.12	90	
298.8	9.4	375	0.41	90	4.7	460	0.25	90	3.0	525	0.18	90	1.7	590	0.12	90	
342.9	8.2	375	0.36	90	4.1	460	0.22	90	2.6	525	0.16	90	1.5	607	0.11	90	
387.0	7.2	375	0.31	90	3.6	460	0.19	90	2.3	525	0.14	90	1.3	618	0.09	90	



112 B5  
112 B14  
  
100 B5  
100 B14  
  
90 B5  
90 B14  
  
80 B5  
80 B14  
  
71 B5  
  
63 B5

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	4.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.





OR 80



20.0

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
5,2	544	279	16,7	95	272	310	9,3	95	175	315	6,1	95	97	315	3,4	95	112 B5 112 B14  100 B5 100 B14  90 B5 90 B14  80 B5 80 B14  71 B5
7,1	394	342	14,8	95	197	380	8,2	95	127	386	5,4	95	70	386	3,0	95	
10,0	281	450	13,9	95	140	500	7,7	95	90	508	5,1	95	50	508	2,8	95	
11,9	234	495	12,8	95	117	550	7,1	95	75	558	4,6	95	42	558	2,6	95	
14,6	191	540	11,4	95	96	600	6,3	95	61	609	4,1	95	34	609	2,3	95	
16,7	168	540	10,0	95	84	600	5,6	95	54	609	3,6	95	30	609	2,0	95	
21,2	132	540	7,9	95	66	600	4,4	95	42	609	2,8	95	24	609	1,6	95	
24,2	116	540	6,9	95	58	600	3,8	95	37	609	2,5	95	21	609	1,4	95	
31,0	90	495	4,9	95	45	550	2,7	95	29	558	1,8	95	16,1	558	1,0	95	
39,8	70	495	3,8	95	35	550	2,1	95	23	558	1,4	95	12,6	558	0,8	95	
51,0	55	495	3,0	95	27	550	1,7	95	17,6	558	1,1	95	9,8	558	0,6	95	
57,0	49	450	2,4	95	25	500	1,4	95	15,8	508	0,9	95	8,8	508	0,5	95	
73,2	38	495	2,1	95	19,1	550	1,2	95	12,3	558	0,8	95	6,8	558	0,4	95	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	9.5

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori OR

1.6 OR gearboxes performances

1.6 Leistungen der OR-Getriebe

OR 90



44.0

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	
7.2	388	325	14.7	90	194	430	9.7	90	125	457	6.6	90	69	545	4.4	90	132 B5 132 B14  112 B5 112 B14  100 B5 100 B14  90 B5 90 B14  80 B5 80 B14  71 B5
9.0	310	350	12.6	90	155	450	8.1	90	100	490	5.7	90	55	586	3.7	90	
10.1	276	357	11.5	90	138	500	8.0	90	89	550	5.7	90	49	600	3.4	90	
11.5	244	400	11.4	90	122	520	7.4	90	79	560	5.1	90	44	613	3.1	90	
13.0	215	406	10.2	90	108	540	6.8	90	69	570	4.6	90	38	613	2.7	90	
14.0	200	528	12.3	90	100	590	6.9	90	64	740	5.5	90	36	850	3.6	90	
15.7	178	570	11.8	90	89	720	7.5	90	57	780	5.2	90	32	950	3.5	90	
17.7	158	570	10.5	90	79	750	6.8	90	51	820	4.9	90	28	950	3.1	90	
20.1	139	610	9.9	90	70	790	6.4	90	45	870	4.6	90	25	950	2.8	90	
23.0	122	640	9.1	90	61	820	5.8	90	39	900	4.1	90	22	950	2.4	90	
25.7	109	700	8.9	90	55	900	5.8	90	35	980	4.0	90	19.5	1122	2.5	90	
28.8	97	740	8.4	90	49	910	5.2	90	31	1040	3.8	90	17.3	1122	2.3	90	
32.5	86	740	7.4	90	43	910	4.6	90	28	1040	3.4	90	15.4	1122	2.0	90	
36.9	76	740	6.5	90	38	910	4.0	90	24	1040	2.9	90	13.5	1122	1.8	90	
42.2	66	740	5.7	90	33	910	3.5	90	21	1040	2.5	90	11.9	1122	1.6	90	
45.2	62	740	5.3	90	31	910	3.3	90	19.9	1040	2.4	90	11.1	1122	1.4	90	
52.4	53	740	4.6	90	27	910	2.9	90	17.2	1040	2.1	90	9.5	1122	1.2	90	
59.5	47	740	4.0	90	24	910	2.5	90	15.1	1040	1.8	90	8.4	1122	1.1	90	
73.3	38	740	3.3	90	19.1	910	2.0	90	12.3	1040	1.5	90	6.8	1122	0.89	90	
80.7	35	740	3.0	90	17.4	910	1.8	90	11.2	1040	1.4	90	6.2	1122	0.81	90	
92.5	30	740	2.6	90	15.1	910	1.6	90	9.7	1040	1.2	90	5.4	1122	0.70	90	
94.4	30	740	2.6	90	14.8	910	1.6	90	9.5	1040	1.1	90	5.3	1122	0.69	90	
106.7	26	740	2.2	90	13.1	910	1.4	90	8.4	1040	1.0	90	4.7	1122	0.61	90	
122.3	23	740	2.0	90	11.4	910	1.2	90	7.4	1040	0.90	90	4.1	1122	0.54	90	
131.1	21	740	1.8	90	10.7	910	1.1	90	6.9	1040	0.83	90	3.8	1122	0.50	90	
151.9	18.4	740	1.6	90	9.2	910	0.97	90	5.9	1040	0.71	90	3.3	1122	0.43	90	
165.2	16.9	740	1.5	90	8.5	910	0.90	90	5.4	1040	0.65	90	3.0	1122	0.39	90	
212.6	13.2	740	1.1	90	6.6	910	0.70	90	4.2	1040	0.51	90	2.4	1122	0.31	90	
234.1	12.0	740	1.0	90	6.0	910	0.64	90	3.8	1040	0.46	90	2.1	1122	0.27	90	
268.3	10.4	740	0.90	90	5.2	910	0.55	90	3.4	1040	0.41	90	1.9	1122	0.25	90	
294.9	9.5	740	0.82	90	4.7	910	0.50	90	3.1	1040	0.38	90	1.7	1122	0.22	90	
309.6	9.0	740	0.77	90	4.5	910	0.48	90	2.9	1040	0.35	90	1.6	1122	0.21	90	
338.1	8.3	740	0.71	90	4.1	910	0.43	90	2.7	1040	0.33	90	1.5	1122	0.20	90	
390.0	7.2	740	0.62	90	3.6	910	0.38	90	2.3	1040	0.28	90	1.3	1122	0.17	90	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	6.2

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegeben Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



**OR 100**



32.0

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
5,2	544	450	27,0	95	272	500	15,0	95	175	508	9,8	95	97	508	5,4	95	132 B5 132 B14  112 B5 100 B5 90 B5 80 B5
7,4	378	684	28,5	95	189	760	15,8	95	121	771	10,3	95	67	771	5,7	95	
10,0	281	882	27,3	95	140	980	15,2	95	90	995	9,9	95	50	995	5,5	95	
12,2	230	900	22,8	95	115	1000	12,7	95	74	1015	8,3	95	41	1015	4,6	95	
14,6	191	1035	21,8	95	96	1150	12,1	95	61	1167	7,9	95	34	1167	4,4	95	
17,0	165	1080	19,7	95	83	1200	10,9	95	53	1218	7,1	95	29	1218	4,0	95	
21,2	132	1035	15,1	95	66	1150	8,4	95	42	1167	5,5	95	24	1167	3,0	95	
24,6	114	1080	13,6	95	57	1200	7,5	95	37	1218	4,9	95	20	1218	2,7	95	
31,0	90	990	9,9	95	45	1100	5,5	95	29	1117	3,6	95	16,1	1117	2,0	95	
40,5	69	945	7,2	95	35	1050	4,0	95	22	1066	2,6	95	12,4	1066	1,5	95	
51,0	55	1035	6,3	95	27	1150	3,5	95	17,6	1167	2,3	95	9,8	1167	1,3	95	
58,0	48	900	4,8	95	24	1000	2,7	95	15,5	1015	1,7	95	8,6	1015	1,0	95	
73,2	38	900	3,8	95	19,1	1000	2,1	95	12,3	1015	1,4	95	6,8	1015	0,8	95	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	14.5

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

*NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical*

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

*NOTE. Listed weights are for reference only and can vary according to the gearbox version.*

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori OR

1.6 OR gearboxes performances

1.6 Leistungen der OR-Getriebe

OR 112



68.0

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
7.7	366	540	23	90	183	670	14.3	90	118	760	10.4	90	65	800	6.1	90	160 B5 132 B5 112 B5 100 B5 90 B5 80 B5
8.9	315	580	21	90	157	715	13.1	90	101	810	9.5	90	56	850	5.5	90	
11.8	238	690	19.1	90	119	850	11.8	90	77	970	8.7	90	43	1000	5.0	90	
13.1	214	720	17.9	90	107	890	11.1	90	69	1000	8.0	90	38	1050	4.6	90	
16.1	174	940	19.0	90	87	1160	11.7	90	56	1300	8.5	90	31	1400	5.0	90	
17.9	156	1000	18.2	90	78	1230	11.2	90	50	1400	8.1	90	28	1450	4.7	90	
20.9	134	1040	16.2	90	67	1280	10.0	90	43	1460	7.3	90	24	1500	4.2	90	
22.3	126	1350	19.8	90	63	1750	12.8	90	40	1850	8.6	90	22	1900	4.9	90	
23.6	119	1100	15.2	90	59	1350	9.3	90	38	1540	6.8	90	21	1500	3.7	90	
25.6	109	1130	14.3	90	55	1400	9.0	90	35	1600	6.5	90	19.5	1600	3.6	90	
29.4	95	1420	15.7	90	48	1750	9.8	90	31	1900	6.9	90	17.0	1900	3.8	90	
32.8	85	1450	14.3	90	43	1750	8.8	90	27	1900	6.0	90	15.2	1900	3.4	90	
38.2	73	1450	12.3	90	37	1750	7.5	90	24	1900	5.3	90	13.1	1900	2.9	90	
43.2	65	1450	11.0	90	32	1750	6.5	90	21	1900	4.6	90	11.6	1900	2.6	90	
46.8	60	1450	10.1	90	30	1750	6.1	90	19.2	1900	4.2	90	10.7	1900	2.4	90	
53.4	52	1450	8.8	90	26	1750	5.3	90	16.9	1900	3.7	90	9.4	1900	2.1	90	
57.2	49	1450	8.3	90	24	1750	4.9	90	15.7	1900	3.5	90	8.7	1900	1.9	90	
64.6	43	1450	7.3	90	22	1750	4.5	90	13.9	1900	3.1	90	7.7	1900	1.7	90	
77.0	36	1450	6.1	90	18.2	1750	3.7	90	11.7	1900	2.6	90	6.5	1900	1.4	90	
85.4	33	1450	5.6	90	16.4	1750	3.3	90	10.5	1900	2.3	90	5.9	1900	1.3	90	
93.9	30	1450	5.1	90	14.9	1750	3.0	90	9.6	1900	2.1	90	5.3	1900	1.2	90	
102.8	27	1450	4.6	90	13.6	1750	2.8	90	8.8	1900	1.9	90	4.9	1900	1.1	90	
110.9	25	1450	4.2	90	12.6	1750	2.6	90	8.1	1900	1.8	90	4.5	1900	0.99	90	
125.2	22	1450	3.7	90	11.2	1750	2.3	90	7.2	1900	1.6	90	4.0	1900	0.88	90	
135.6	21	1450	3.5	90	10.3	1750	2.1	90	6.6	1900	1.5	90	3.7	1900	0.82	90	
154.8	18.1	1450	3.1	90	9.0	1750	1.8	90	5.8	1900	1.3	90	3.2	1900	0.71	90	
166.0	16.9	1450	2.9	90	8.4	1750	1.7	90	5.4	1900	1.2	90	3.0	1900	0.66	90	
194.9	14.4	1450	2.4	90	7.2	1750	1.5	90	4.6	1750	0.94	90	2.6	1750	0.53	90	
223.5	12.5	1450	2.1	90	6.3	1750	1.3	90	4.0	1900	0.88	90	2.2	1900	0.49	90	
247.9	11.3	1450	1.9	90	5.6	1750	1.1	90	3.6	1900	0.80	90	2.0	1900	0.44	90	
272.4	10.3	1450	1.7	90	5.1	1750	1.0	90	3.3	1900	0.73	90	1.8	1900	0.40	90	
298.1	9.4	1450	1.6	90	4.7	1750	0.96	90	3.0	1900	0.66	90	1.7	1900	0.38	90	
342.9	8.2	1450	1.4	90	4.1	1750	0.83	90	2.6	1750	0.53	90	1.5	1750	0.31	90	
375.3	7.5	1450	1.3	90	3.7	1750	0.75	90	2.4	1750	0.49	90	1.3	1750	0.26	90	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	9.5

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegeben Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



OR 125



56.0

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
5,2	544	900	53,9	95	272	1000	30,0	95	175	1015	19,5	95	97	1015	10,9	95	180 B5 160 B5 132 B5 132 B14 112 B5 100 B5 90 B5 80 B5
7,4	378	1170	48,7	95	189	1300	27,1	95	121	1320	17,7	95	67	1320	9,8	95	
10,2	276	1620	49,2	95	138	1800	27,3	95	89	1827	17,8	95	49	1827	9,9	95	
12,2	230	1710	43,4	95	115	1900	24,1	95	74	1929	15,7	95	41	1929	8,7	95	
14,6	191	1935	40,8	95	96	2150	22,7	95	61	2182	14,8	95	34	2182	8,2	95	
17,0	165	2070	37,7	95	83	2300	20,9	95	53	2335	13,7	95	29	2335	7,6	95	
21,2	132	1935	28,2	95	66	2150	15,6	95	42	2182	10,2	95	24	2182	5,7	95	
24,6	114	2070	26,0	95	57	2300	14,4	95	37	2335	9,4	95	20	2335	5,2	95	
31,9	88	2025	19,6	95	44	2250	10,9	95	28	2284	7,1	95	15,7	2284	3,9	95	
40,5	69	1845	14,1	95	35	2050	7,8	95	22	2081	5,1	95	12,4	2081	2,8	95	
52,6	53	2070	12,2	95	27	2300	6,8	95	17,1	2335	4,4	95	9,5	2335	2,4	95	
58,0	48	1800	9,6	95	24	2000	5,3	95	15,5	2030	3,5	95	8,6	2030	1,9	95	
75,4	37	1800	7,4	95	18,6	2000	4,1	95	11,9	2030	2,7	95	6,6	2030	1,5	95	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	20.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



OR 132



ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
16.0	175.3	1530.0	30.2	93.0	87.7	1700.0	16.8	93.0	56.3	1725.5	10.9	93.0	31.3	1725.5	6.1	93.0	180 B5 160 B5 132 B5 112 B5 100 B5 90 B5
17.9	156.1	1620.0	28.5	93.0	78.0	1800.0	15.8	93.0	50.2	1827.0	10.3	93.0	27.9	1827.0	5.7	93.0	
20.3	138.3	1800.0	28.0	93.0	69.1	2000.0	15.6	93.0	44.4	2030.0	10.2	93.0	24.7	2030.0	5.6	93.0	
21.7	129.3	1980.0	28.8	93.0	64.7	2200.0	16.0	93.0	41.6	2233.0	10.5	93.0	23.1	2233.0	5.8	93.0	
24.3	115.1	2070.0	26.8	93.0	57.6	2300.0	14.9	93.0	37.0	2334.5	9.7	93.0	20.6	2334.5	5.4	93.0	
27.5	102.0	2412.0	27.7	93.0	51.0	2680.0	15.4	93.0	32.8	2720.2	10.0	93.0	18.2	2720.2	5.6	93.0	
31.2	89.8	2835.0	28.7	93.0	44.9	3150.0	15.9	93.0	28.9	3197.3	10.4	93.0	16.0	3197.3	5.8	93.0	
36.3	77.2	3150.0	27.4	93.0	38.6	3500.0	15.2	93.0	24.8	3552.5	9.9	93.0	13.8	3552.5	5.5	93.0	
41.7	67.1	3150.0	23.8	93.0	33.5	3500.0	13.2	93.0	21.6	3552.5	8.6	93.0	12.0	3552.5	4.8	93.0	
44.9	62.3	3150.0	22.1	93.0	31.2	3500.0	12.3	93.0	20.0	3552.5	8.0	93.0	11.1	3552.5	4.5	93.0	
52.6	53.2	3150.0	18.9	93.0	26.6	3500.0	10.5	93.0	17.1	3552.5	6.8	93.0	9.5	3552.5	3.8	93.0	
57.3	48.9	3150.0	17.3	93.0	24.4	3500.0	9.6	93.0	15.7	3552.5	6.3	93.0	8.7	3552.5	3.5	93.0	
65.1	43.0	3150.0	15.2	93.0	21.5	3500.0	8.5	93.0	13.8	3552.5	5.5	93.0	7.7	3552.5	3.1	93.0	
76.3	36.7	3150.0	13.0	93.0	18.4	3500.0	7.2	93.0	11.8	3552.5	4.7	93.0	6.6	3552.5	2.6	93.0	
83.0	33.7	3150.0	12.0	93.0	16.9	3500.0	6.6	93.0	10.8	3552.5	4.3	93.0	6.0	3552.5	2.4	93.0	
90.8	30.8	3150.0	10.9	93.0	15.4	3500.0	6.1	93.0	9.9	3552.5	4.0	93.0	5.5	3552.5	2.2	93.0	
99.4	28.2	3150.0	10.0	93.0	14.1	3500.0	5.5	93.0	9.1	3552.5	3.6	93.0	5.0	3552.5	2.0	93.0	
109.4	25.6	3150.0	9.1	93.0	12.8	3500.0	5.0	93.0	8.2	3552.5	3.3	93.0	4.6	3552.5	1.8	93.0	
125.5	22.3	3150.0	7.9	93.0	11.2	3500.0	4.4	93.0	7.2	3552.5	2.9	93.0	4.0	3552.5	1.6	93.0	
136.7	20.5	3150.0	7.3	93.0	10.2	3500.0	4.0	93.0	6.6	3552.5	2.6	93.0	3.7	3552.5	1.5	93.0	
149.5	18.7	3150.0	6.6	93.0	9.4	3500.0	3.7	93.0	6.0	3552.5	2.4	93.0	3.3	3552.5	1.3	93.0	
164.6	17.0	3150.0	6.0	93.0	8.5	3500.0	3.4	93.0	5.5	3552.5	2.2	93.0	3.0	3552.5	1.2	93.0	
180.0	15.6	3150.0	5.5	93.0	7.8	3500.0	3.1	93.0	5.0	3552.5	2.0	93.0	2.8	3552.5	1.1	93.0	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	23.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegeben Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



**OR 140**

**Kg** 110.0

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
7,6	369	3600	146,4	95	184	4000	81,3	95	119	4060	53,1	95	66	4060	29,5	95	200 B5 180 B5 160 B5 132 B5 132 B14 112 B5 100 B5 90 B5 80 B5
10,3	272	3600	108,0	95	136	4000	60,0	95	87	4060	39,2	95	49	4060	21,8	95	
12,3	228	3690	92,9	95	114	4100	51,6	95	73	4162	33,7	95	41	4162	18,7	95	
14,9	187	3780	78,1	95	94	4200	43,4	95	60	4263	28,3	95	33	4263	15,7	95	
20,2	139	3780	57,8	95	69	4200	32,1	95	45	4263	20,9	95	25	4263	11,6	95	
24,6	114	3870	48,5	95	57	4300	27,0	95	37	4365	17,6	95	20	4365	9,8	95	
33,4	84	3960	36,6	95	42	4400	20,3	95	27	4466	13,3	95	15,0	4466	7,4	95	
40,7	69	3690	28,0	95	34	4100	15,5	95	22	4162	10,1	95	12,3	4162	5,6	95	
51,3	55	4050	24,4	95	27	4500	13,5	95	17,5	4568	8,8	95	9,7	4568	4,9	95	
57,4	49	3780	20,3	95	24	4200	11,3	95	15,7	4263	7,4	95	8,7	4263	4,1	95	
72,3	39	3600	15,4	95	19	4000	8,5	95	12,4	4060	5,6	95	6,9	4060	3,1	95	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	32.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

*NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical*

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

*NOTE. Listed weights are for reference only and can vary according to the gearbox version.*

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori OR

1.6 OR gearboxes performances

1.6 Leistungen der OR-Getriebe

OR 150



120

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC																		
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD																			
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%																			
15.7	178.2	2430.0	48.8	93.0	89.1	2700.0	27.1	93.0	57.3	2740.5	17.7	93.0	31.8	2740.5	9.8	93.0	200 B5																		
18.6	150.3	2880.0	48.7	93.0	75.1	3200.0	27.1	93.0	48.3	3248.0	17.7	93.0	26.8	3248.0	9.8	93.0		180 B5																	
21.6	129.9	3510.0	51.3	93.0	65.0	3900.0	28.5	93.0	41.8	3958.5	18.6	93.0	23.2	3958.5	10.3	93.0			160 B5																
22.9	122.5	3780.0	52.1	93.0	61.2	4200.0	29.0	93.0	39.4	4263.0	18.9	93.0	21.9	4263.0	10.5	93.0				132 B5															
25.9	108.3	4050.0	49.4	93.0	54.2	4500.0	27.4	93.0	34.8	4567.5	17.9	93.0	19.3	4567.5	9.9	93.0					112 B5														
30.3	92.4	4500.0	46.8	93.0	46.2	5000.0	26.0	93.0	29.7	5075.0	17.0	93.0	16.5	5075.0	9.4	93.0						100 B5													
34.5	81.2	4500.0	41.1	93.0	40.6	5000.0	22.9	93.0	26.1	5075.0	14.9	93.0	14.5	5075.0	8.3	93.0							200 B5												
36.9	75.8	4500.0	38.4	93.0	37.9	5000.0	21.3	93.0	24.4	5075.0	13.9	93.0	13.5	5075.0	7.7	93.0								180 B5											
42.6	65.7	4500.0	33.3	93.0	32.8	5000.0	18.5	93.0	21.1	5075.0	12.1	93.0	11.7	5075.0	6.7	93.0									160 B5										
46.0	60.8	4500.0	30.8	93.0	30.4	5000.0	17.1	93.0	19.5	5075.0	11.2	93.0	10.9	5075.0	6.2	93.0										132 B5									
54.3	51.6	4500.0	26.1	93.0	25.8	5000.0	14.5	93.0	16.6	5075.0	9.5	93.0	9.2	5075.0	5.3	93.0											112 B5								
59.4	47.2	4500.0	23.9	93.0	23.6	5000.0	13.3	93.0	15.2	5075.0	8.7	93.0	8.4	5075.0	4.8	93.0												100 B5							
66.7	42.0	4500.0	21.3	93.0	21.0	5000.0	11.8	93.0	13.5	5075.0	7.7	93.0	7.5	5075.0	4.3	93.0													200 B5						
78.7	35.6	4500.0	18.0	93.0	17.8	5000.0	10.0	93.0	11.4	5075.0	6.5	93.0	6.4	5075.0	3.6	93.0														180 B5					
86.0	32.5	4500.0	16.5	93.0	16.3	5000.0	9.2	93.0	10.5	5075.0	6.0	93.0	5.8	5075.0	3.3	93.0															160 B5				
94.6	29.6	4500.0	15.0	93.0	14.8	5000.0	8.3	93.0	9.5	5075.0	5.4	93.0	5.3	5075.0	3.0	93.0																132 B5			
101.7	27.5	4500.0	13.9	93.0	13.8	5000.0	7.7	93.0	8.8	5075.0	5.1	93.0	4.9	5075.0	2.8	93.0																	112 B5		
109.8	25.5	4500.0	12.9	93.0	12.8	5000.0	7.2	93.0	8.2	5075.0	4.7	93.0	4.6	5075.0	2.6	93.0																		100 B5	
129.5	21.6	4500.0	11.0	93.0	10.8	5000.0	6.1	93.0	7.0	5075.0	4.0	93.0	3.9	5075.0	2.2	93.0																			200 B5
141.6	19.8	4500.0	10.0	93.0	9.9	5000.0	5.6	93.0	6.4	5075.0	3.6	93.0	3.5	5075.0	2.0	93.0																			
155.7	18.0	4500.0	9.1	93.0	9.0	5000.0	5.1	93.0	5.8	5075.0	3.3	93.0	3.2	5075.0	1.8	93.0	160 B5																		
185.5	15.1	4320.0	7.3	93.0	7.5	4800.0	4.1	93.0	4.9	4872.0	2.7	93.0	2.7	4872.0	1.5	93.0		132 B5																	
204.2	13.7	4140.0	6.4	93.0	6.9	4600.0	3.6	93.0	4.4	4669.0	2.3	93.0	2.4	4669.0	1.3	93.0	100 B5																		

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	28.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegeben Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.





OR 160



170

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
5.2	542.6	4140	247.6	95	271.3	4600	137.6	95	174.4	5008.9	96.3	95	96.9	5008.9	53.5	95	280 B5 250 B5 225 B5 200 B5 180 B5 160 B5 132 B5
7.6	369.0	6120	248.9	95	184.5	6800	138.3	95	118.6	7404.4	96.8	95	65.9	7404.4	53.8	95	
10.3	272.2	6750	202.5	95	136.1	7500	112.5	95	87.5	8166.7	78.8	95	48.6	8166.7	43.8	95	
11.2	250.0	6750	186.0	95	125.0	7500	103.3	95	80.3	8166.7	72.3	95	44.6	8166.7	40.2	95	
12.3	228.4	6750	169.9	95	114.2	7500	94.4	95	73.4	8166.7	66.1	95	40.8	8166.7	36.7	95	
13.5	207.6	6480	148.2	95	103.8	7200	82.4	95	66.7	7840.0	57.7	95	37.1	7840.0	32.0	95	
16.9	165.2	6750	122.9	95	82.6	7500	68.3	95	53.1	8166.7	47.8	95	29.5	8166.7	26.6	95	
18.5	151.7	6750	112.9	95	75.9	7500	62.7	95	48.8	8166.7	43.9	95	27.1	8166.7	24.4	95	
20.2	138.7	6750	103.2	95	69.3	7500	57.3	95	44.6	8166.7	40.1	95	24.8	8166.7	22.3	95	
22.2	126.0	6750	93.7	95	63.0	7500	52.1	95	40.5	8166.7	36.5	95	22.5	8166.7	20.3	95	
24.6	113.7	6120	76.7	95	56.9	6800	42.6	95	36.6	7404.4	29.8	95	20.3	7404.4	16.6	95	
28.0	99.9	4500	49.6	95	50.0	5000	27.5	95	32.1	5444.4	19.3	95	17.8	5444.4	10.7	95	
30.5	91.8	4860	49.2	95	45.9	5400	27.3	95	29.5	5880.0	19.1	95	16.4	5880.0	10.6	95	
33.4	83.9	5400	49.9	95	41.9	6000	27.7	95	27.0	6533.3	19.4	95	15.0	6533.3	10.8	95	
36.7	76.2	5850	49.1	95	38.1	6500	27.3	95	24.5	7077.8	19.1	95	13.6	7077.8	10.6	95	
40.7	68.8	6120	46.4	95	34.4	6800	25.8	95	22.1	7404.4	18.0	95	12.3	7404.4	10.0	95	

Pt <sub>n</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	51.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegeben Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori OR

1.6 OR gearboxes performances

1.6 Leistungen der OR-Getriebe

OR 170



180

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
15.5	180.9	4140.0	84.3	93.0	90.4	4600.0	46.8	93.0	58.1	4669.0	30.6	94.0	32.3	4669.0	17.0	93.0	225 B5 200 B5 180 B5 160 B5 132 B5 112 B5 100 B5
17.5	160.1	4500.0	81.1	93.0	80.1	5000.0	45.1	93.0	51.5	5075.0	29.4	94.0	28.6	5075.0	16.3	93.0	
18.6	150.3	5040.0	85.3	93.0	75.2	5600.0	47.4	93.0	48.3	5684.0	30.9	94.0	26.8	5684.0	17.2	93.0	
23.7	118.1	6300.0	83.8	93.0	59.1	7000.0	46.6	93.0	38.0	7105.0	30.4	94.0	21.1	7105.0	16.9	93.0	
25.2	110.9	6750.0	84.3	93.0	55.4	7500.0	46.8	93.0	35.6	7612.5	30.6	94.0	19.8	7612.5	17.0	93.0	
28.8	97.2	6750.0	73.9	93.0	48.6	7500.0	41.0	93.0	31.2	7612.5	26.8	94.0	17.4	7612.5	14.9	93.0	
30.9	90.7	6750.0	69.0	93.0	45.4	7500.0	38.3	93.0	29.2	7612.5	25.0	94.0	16.2	7612.5	13.9	93.0	
35.7	78.4	6750.0	59.6	93.0	39.2	7500.0	33.1	93.0	25.2	7612.5	21.6	94.0	14.0	7612.5	12.0	93.0	
41.8	66.9	6750.0	50.9	93.0	33.5	7500.0	28.3	93.0	21.5	7612.5	18.4	94.0	12.0	7612.5	10.2	93.0	
45.6	61.5	6750.0	46.7	93.0	30.7	7500.0	26.0	93.0	19.8	7612.5	16.9	94.0	11.0	7612.5	9.4	93.0	
49.8	56.2	6750.0	42.7	93.0	28.1	7500.0	23.7	93.0	18.1	7612.5	15.5	94.0	10.0	7612.5	8.6	93.0	
54.3	51.6	6750.0	39.2	93.0	25.8	7500.0	21.8	93.0	16.6	7612.5	14.2	94.0	9.2	7612.5	7.9	93.0	
64.0	43.7	6750.0	33.2	93.0	21.9	7500.0	18.5	93.0	14.1	7612.5	12.0	94.0	7.8	7612.5	6.7	93.0	
68.9	40.6	6750.0	30.9	93.0	20.3	7500.0	17.2	93.0	13.1	7612.5	11.2	94.0	7.3	7612.5	6.2	93.0	
75.0	37.3	6750.0	28.4	93.0	18.7	7500.0	15.8	93.0	12.0	7612.5	10.3	94.0	6.7	7612.5	5.7	93.0	
81.7	34.3	6750.0	26.0	93.0	17.1	7500.0	14.5	93.0	11.0	7612.5	9.4	94.0	6.1	7612.5	5.2	93.0	
89.4	31.3	6750.0	23.8	93.0	15.7	7500.0	13.2	93.0	10.1	7612.5	8.6	94.0	5.6	7612.5	4.8	93.0	
98.4	28.5	6750.0	21.6	93.0	14.2	7500.0	12.0	93.0	9.1	7612.5	7.8	94.0	5.1	7612.5	4.4	93.0	
113.9	24.6	6750.0	18.7	93.0	12.3	7500.0	10.4	93.0	7.9	7612.5	6.8	94.0	4.4	7612.5	3.8	93.0	
124.1	22.6	6750.0	17.2	93.0	11.3	7500.0	9.5	93.0	7.3	7612.5	6.2	94.0	4.0	7612.5	3.5	93.0	
135.8	20.6	6750.0	15.7	93.0	10.3	7500.0	8.7	93.0	6.6	7612.5	5.7	94.0	3.7	7612.5	3.2	93.0	
149.4	18.7	6750.0	14.2	93.0	9.4	7500.0	7.9	93.0	6.0	7612.5	5.2	94.0	3.3	7612.5	2.9	93.0	
162.7	17.2	6750.0	13.1	93.0	8.6	7500.0	7.3	93.0	5.5	7612.5	4.7	94.0	3.1	7612.5	2.6	93.0	
178.1	15.7	6210.0	11.0	93.0	7.9	6900.0	6.1	93.0	5.1	7003.5	4.0	94.0	2.8	7003.5	2.2	93.0	
196.0	14.3	5940.0	9.6	93.0	7.1	6600.0	5.3	93.0	4.6	6699.0	3.5	94.0	2.6	6699.0	1.9	93.0	

C



Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	34.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



**OR 180**



240

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
5.2	542.6	5400	323.0	95	271.3	6000	179.4	95	174.4	6533	125.6	95	96.9	6533	69.8	95	280 B5 250 B5 225 B5 200 B5 180 B5 160 B5 132 B5
7.6	369.0	7920	322.1	95	184.5	8800	179.0	95	118.6	9582	125.3	95	65.9	9582	69.6	95	
10.3	272.2	9450	283.5	95	136.1	10500	157.5	95	87.5	11433	110.3	95	48.6	11433	61.3	95	
11.2	250.0	9450	260.4	95	125.0	10500	144.6	95	80.3	11433	101.3	95	44.6	11433	56.3	95	
12.3	228.4	9450	237.9	95	114.2	10500	132.2	95	73.4	11433	92.5	95	40.8	11433	51.4	95	
13.5	207.6	8820	201.8	95	103.8	9800	112.1	95	66.7	10671	78.5	95	37.1	10671	43.6	95	
16.9	165.2	8640	157.4	95	82.6	9600	87.4	95	53.1	10453	61.2	95	29.5	10453	34.0	95	
18.5	151.7	9450	158.1	95	75.9	10500	87.8	95	48.8	11433	61.5	95	27.1	11433	34.1	95	
20.2	138.7	9450	144.4	95	69.3	10500	80.2	95	44.6	11433	56.2	95	24.8	11433	31.2	95	
22.2	126.0	9450	131.2	95	63.0	10500	72.9	95	40.5	11433	51.0	95	22.5	11433	28.4	95	
24.6	113.7	8550	107.2	95	56.9	9500	59.5	95	36.6	10344	41.7	95	20.3	10344	23.2	95	
30.5	91.8	6660	67.4	95	45.9	7400	37.4	95	29.5	8058	26.2	95	16.4	8058	14.6	95	
33.4	83.9	7290	67.4	95	41.9	8100	37.4	95	27.0	8820	26.2	95	15.0	8820	14.6	95	
36.7	76.2	8010	67.3	95	38.1	8900	37.4	95	24.5	9691	26.2	95	13.6	9691	14.5	95	
40.7	68.8	8820	66.9	95	34.4	9800	37.1	95	22.1	10671	26.0	95	12.3	10671	14.4	95	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	65.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

*NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical*

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

*NOTE. Listed weights are for reference only and can vary according to the gearbox version.*

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori OR

1.6 OR gearboxes performances

1.6 Leistungen der OR-Getriebe

OR 190



250

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
15.5	180.9	5796.0	118.0	93.0	90.4	6440.0	65.6	93.0	58.1	6537	42.8	93.0	32.3	6537	23.8	93.0	250 B5 225 B5 200 B5 180 B5 160 B5 132 B5
17.5	160.1	6300.0	113.6	93.0	80.1	7000.0	63.1	93.0	51.5	7105	41.2	93.0	28.6	7105	22.9	93.0	
18.6	150.3	7056.0	119.4	93.0	75.2	7840.0	66.4	93.0	48.3	7958	43.3	93.0	26.8	7958	24.1	93.0	
23.7	118.1	8640.0	114.9	93.0	59.1	9600.0	63.8	93.0	38.0	9744	41.7	93.0	21.1	9744	23.1	93.0	
25.2	110.9	8820.0	110.1	93.0	55.4	9800.0	61.2	93.0	35.6	9947	39.9	93.0	19.8	9947	22.2	93.0	
28.8	97.2	9000.0	98.5	93.0	48.6	10000.0	54.7	93.0	31.2	10150	35.7	93.0	17.4	10150	19.8	93.0	
30.9	90.7	9225.0	94.2	93.0	45.4	10250.0	52.4	93.0	29.2	10404	34.2	93.0	16.2	10404	19.0	93.0	
35.7	78.4	9450.0	83.5	93.0	39.2	10500.0	46.4	93.0	25.2	10658	30.3	93.0	14.0	10658	16.8	93.0	
41.8	66.9	9450.0	71.2	93.0	33.5	10500.0	39.6	93.0	21.5	10658	25.8	93.0	12.0	10658	14.3	93.0	
45.6	61.5	9450.0	65.4	93.0	30.7	10500.0	36.3	93.0	19.8	10658	23.7	93.0	11.0	10658	13.2	93.0	
49.8	56.2	9450.0	59.8	93.0	28.1	10500.0	33.2	93.0	18.1	10658	21.7	93.0	10.0	10658	12.0	93.0	
54.3	51.6	9450.0	54.9	93.0	25.8	10500.0	30.5	93.0	16.6	10658	19.9	93.0	9.2	10658	11.1	93.0	
64.0	43.7	9450.0	46.5	93.0	21.9	10500.0	25.8	93.0	14.1	10658	16.9	93.0	7.8	10658	9.4	93.0	
68.9	40.6	9450.0	43.2	93.0	20.3	10500.0	24.0	93.0	13.1	10658	15.7	93.0	7.3	10658	8.7	93.0	
75.0	37.3	9450.0	39.7	93.0	18.7	10500.0	22.1	93.0	12.0	10658	14.4	93.0	6.7	10658	8.0	93.0	
81.7	34.3	9450.0	36.5	93.0	17.1	10500.0	20.3	93.0	11.0	10658	13.2	93.0	6.1	10658	7.3	93.0	
89.4	31.3	9450.0	33.3	93.0	15.7	10500.0	18.5	93.0	10.1	10658	12.1	93.0	5.6	10658	6.7	93.0	
97.9	28.6	9450.0	30.4	93.0	14.3	10500.0	16.9	93.0	9.2	10658	11.0	93.0	5.1	10658	6.1	93.0	
113.9	24.6	9450.0	26.2	93.0	12.3	10500.0	14.5	93.0	7.9	10658	9.5	93.0	4.4	10658	5.3	93.0	
124.1	22.6	9450.0	24.0	93.0	11.3	10500.0	13.3	93.0	7.3	10658	8.7	93.0	4.0	10658	4.8	93.0	
135.8	20.6	9450.0	21.9	93.0	10.3	10500.0	12.2	93.0	6.6	10658	8.0	93.0	3.7	10658	4.4	93.0	
147.8	18.9	9450.0	20.2	93.0	9.5	10500.0	11.2	93.0	6.1	10658	7.3	93.0	3.4	10658	4.1	93.0	
162.7	17.2	9450.0	18.3	93.0	8.6	10500.0	10.2	93.0	5.5	10658	6.6	93.0	3.1	10658	3.7	93.0	
178.1	15.7	9225.0	16.3	93.0	7.9	10250.0	9.1	93.0	5.1	10404	5.9	93.0	2.8	10404	3.3	93.0	
196.0*	14.3	9000.0	14.5	93.0	7.1	10000.0	8.0	93.0	4.6	10150	5.2	93.0	2.6	10150	2.9	93.0	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	43.0

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

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

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

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

*NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department). For details please contact our technical*

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

*NOTE. Listed weights are for reference only and can vary according to the gearbox version.*

HINWEIS. Die angegeben Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.7 Prestazioni motoriduttori

n <sub>2</sub> min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
-------------------------------------	----	----------	-----	-------	--

0.09 kW

n<sub>1</sub> = 860 min<sup>-1</sup>

63B 6

44	19.5	18	14.0	<b>63</b>	63B 6
31	27.5	25	10.5	<b>63</b>	63B 6
28	31.2	28	9.3	<b>63</b>	63B 6
24	35.8	32	8.1	<b>63</b>	63B 6
19.3	44.6	40	6.5	<b>63</b>	63B 6
16.4	52.4	47	5.5	<b>63</b>	63B 6
12.5	69.0	62	4.2	<b>63</b>	63B 6
10.8	79.5	71	3.6	<b>63</b>	63B 6
9.5	90.6	82	3.1	<b>63</b>	63B 6
8.3	103.8	93	2.7	<b>63</b>	63B 6
6.7	129.3	116	2.2	<b>63</b>	63B 6
5.7	151.9	137	1.9	<b>63</b>	63B 6
4.8	179.6	162	3.2	<b>71</b>	63B 6
4.4	193.6	174	3.0	<b>71</b>	63B 6
4.3	200.1	180	1.4	<b>63</b>	63B 6
3.9	220.8	199	2.6	<b>71</b>	63B 6
3.5	243.3	219	1.2	<b>63</b>	63B 6
3.4	253.4	228	2.3	<b>71</b>	63B 6
3.1	280.4	252	1.1	<b>63</b>	63B 6
3.0	286.0	257	2.0	<b>71</b>	63B 6
2.5	342.9	308	1.7	<b>71</b>	63B 6
2.5	346.4	312	0.9	<b>63</b>	63B 6
2.2	387.0	348	1.5	<b>71</b>	63B 6

0.13 kW

n<sub>1</sub> = 1360 min<sup>-1</sup>  
n<sub>1</sub> = 860 min<sup>-1</sup>

63A 4  
63C 6

57	23.7	20	12.3	<b>63</b>	63A 4
50	27.5	23	10.6	<b>63</b>	63A 4
44	30.6	25	18.3	<b>71</b>	63A 4
44	31.2	26	9.3	<b>63</b>	63A 4
38	35.8	29	8.5	<b>63</b>	63A 4
31	44.6	37	6.8	<b>63</b>	63A 4
26	52.4	43	5.8	<b>63</b>	63A 4
19.7	69.0	57	4.4	<b>63</b>	63A 4
17.1	79.5	65	3.8	<b>63</b>	63A 4
15.0	90.6	74	3.1	<b>63</b>	63A 4
13.1	103.8	85	2.8	<b>63</b>	63A 4
10.5	129.3	106	2.3	<b>63</b>	63A 4
9.0	151.9	125	2.0	<b>63</b>	63A 4
8.1	168.0	138	3.3	<b>71</b>	63A 4
7.6	179.6	148	3.1	<b>71</b>	63A 4
7.0	193.6	159	2.9	<b>71</b>	63A 4
6.8	200.1	164	1.5	<b>63</b>	63A 4
6.5	209.4	172	2.7	<b>71</b>	63A 4
6.2	220.8	181	2.5	<b>71</b>	63A 4
5.6	243.3	200	1.3	<b>63</b>	63A 4
5.4	253.4	208	2.2	<b>71</b>	63A 4
4.8	280.4	230	1.1	<b>63</b>	63A 4
4.6	298.8	245	1.9	<b>71</b>	63A 4
4.0	342.9	282	1.6	<b>71</b>	63A 4
3.9	346.4	285	0.9	<b>63</b>	63A 4
3.5	387.0	318	1.4	<b>71</b>	63A 4
2.9	298.8	388	1.4	<b>71</b>	63C 6
2.5	342.9	445	1.2	<b>71</b>	63C 6
2.2	387.0	503	1.0	<b>71</b>	63C 6

1.7 Gearmotors performances

n <sub>2</sub> min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
-------------------------------------	----	----------	-----	-------	--

0.18 kW

n<sub>1</sub> = 1370 min<sup>-1</sup>  
n<sub>1</sub> = 870 min<sup>-1</sup>

63B 4  
71A 6

92	14.8	17	13.1	<b>63</b>	63B 4
80	17.2	19	11.4	<b>63</b>	63B 4
70	19.5	22	10.4	<b>63</b>	63B 4
58	23.7	27	9.0	<b>63</b>	63B 4
50	27.5	31	7.7	<b>63</b>	63B 4
44	31.2	35	6.8	<b>63</b>	63B 4
38	35.8	40	6.2	<b>63</b>	63B 4
31	44.6	50	5.0	<b>63</b>	63B 4
26	52.4	59	4.2	<b>63</b>	63B 4
19.9	69.0	78	3.2	<b>63</b>	63B 4
17.2	79.5	90	2.8	<b>63</b>	63B 4
15.1	90.6	102	2.2	<b>63</b>	63B 4
13.2	103.8	117	2.0	<b>63</b>	63B 4
11.1	123.5	139	3.3	<b>71</b>	63B 4
10.6	129.3	146	1.6	<b>63</b>	63B 4
9.6	143.1	162	2.8	<b>71</b>	63B 4
9.0	151.9	172	1.4	<b>63</b>	63B 4
8.9	154.8	175	2.6	<b>71</b>	63B 4
8.2	168.0	190	2.4	<b>71</b>	63B 4
7.6	179.6	203	2.3	<b>71</b>	63B 4
7.1	193.6	219	2.1	<b>71</b>	63B 4
6.8	200.1	226	1.1	<b>63</b>	63B 4
6.5	209.4	236	1.9	<b>71</b>	63B 4
6.2	220.8	249	1.8	<b>71</b>	63B 4
5.6	243.3	275	0.9	<b>63</b>	63B 4
5.4	253.4	286	1.6	<b>71</b>	63B 4
4.9	280.4	317	0.8	<b>63</b>	63B 4
4.8	286.0	323	1.4	<b>71</b>	63B 4
4.6	298.8	337	1.4	<b>71</b>	63B 4
4.0	342.9	387	1.2	<b>71</b>	63B 4
3.5	387.0	437	1.1	<b>71</b>	63B 4
3.0	294.9	524	2.0	<b>90</b>	71A 6
2.9	298.8	531	1.0	<b>71</b>	71A 6
2.8	309.6	551	1.9	<b>90</b>	71A 6
2.6	338.1	601	1.7	<b>90</b>	71A 6
2.5	342.9	610	0.9	<b>71</b>	71A 6
2.2	390.0	694	1.5	<b>90</b>	71A 6

0.22 kW

n<sub>1</sub> = 1400 min<sup>-1</sup>

63C 4

122	11.5	15	12.3	<b>63</b>	63C 4
105	13.3	18	12.3	<b>63</b>	63C 4
94	14.8	20	11.0	<b>63</b>	63C 4
82	17.2	23	9.5	<b>63</b>	63C 4
72	19.5	26	8.7	<b>63</b>	63C 4
59	23.7	32	7.5	<b>63</b>	63C 4
51	27.5	37	6.5	<b>63</b>	63C 4
45	31.2	42	5.7	<b>63</b>	63C 4
39	35.8	48	5.2	<b>63</b>	63C 4
31	44.6	60	4.2	<b>63</b>	63C 4
27	52.4	71	3.5	<b>63</b>	63C 4
20	69.0	93	2.7	<b>63</b>	63C 4
17.6	79.5	107	2.3	<b>63</b>	63C 4
15.4	90.6	122	1.9	<b>63</b>	63C 4

1.7 Leistungen der Getriebemotoren

n <sub>2</sub> min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
-------------------------------------	----	----------	-----	-------	--

0.22 kW

n<sub>1</sub> = 1400 min<sup>-1</sup>

63C 4

13.5	103.8	140	1.7	<b>63</b>	63C 4
11.3	123.5	167	2.8	<b>71</b>	63C 4
10.8	129.3	175	1.4	<b>63</b>	63C 4
9.8	143.1	193	2.4	<b>71</b>	63C 4
9.2	151.9	205	1.2	<b>63</b>	63C 4
9.0	154.8	209	2.2	<b>71</b>	63C 4
8.3	168.0	227	2.0	<b>71</b>	63C 4
7.8	179.6	243	1.9	<b>71</b>	63C 4
7.2	193.6	262	1.8	<b>71</b>	63C 4
7.0	200.1	270	0.9	<b>63</b>	63C 4
6.7	209.4	283	1.6	<b>71</b>	63C 4
6.3	220.8	298	1.5	<b>71</b>	63C 4
5.5	253.4	343	1.3	<b>71</b>	63C 4
4.9	286.0	386	1.2	<b>71</b>	63C 4
4.7	298.8	404	1.1	<b>71</b>	63C 4
4.1	342.9	463	1.0	<b>71</b>	63C 4
3.6	387.0	523	0.9	<b>71</b>	63C 4

0.25 kW

n<sub>1</sub> = 1370 min<sup>-1</sup>  
n<sub>1</sub> = 870 min<sup>-1</sup>

71A 4  
71B 6

173	7.9	12	13.7	<b>63</b>	71A 4
133	10.3	16	11.5	<b>63</b>	71A 4
119	11.5	18	10.6	<b>63</b>	71A 4
103	13.3	21	10.6	<b>63</b>	71A 4
92	14.8	23	9.5	<b>63</b>	71A 4
80	17.2	27	8.2	<b>63</b>	71A 4
70	19.5	31	7.5	<b>63</b>	71A 4
58	23.7	37	6.4	<b>63</b>	71A 4
50	27.5	43	5.6	<b>63</b>	71A 4
44	31.2	49	4.9	<b>63</b>	71A 4
38	35.8	56	4.5	<b>63</b>	71A 4
31	44.6	70	3.6	<b>63</b>	71A 4
26	52.4	82	3.0	<b>63</b>	71A 4
19.9	69.0	108	2.3	<b>63</b>	71A 4
17.2	79.5	125	2.0	<b>63</b>	71A 4
15.7	87.4	137	3.4	<b>71</b>	71A 4
15.1	90.6	142	1.6	<b>63</b>	71A 4
13.9	98.6	155	3.0	<b>71</b>	71A 4
13.2	103.8	163	1.4	<b>63</b>	71A 4
12.7	107.6	169	2.7	<b>71</b>	71A 4
11.1	123.5	194	2.4	<b>71</b>	71A 4
10.6	129.3	203	1.2	<b>63</b>	71A 4
9.0	151.9	238	1.0	<b>63</b>	71A 4
8.9	154.8	243	1.9	<b>71</b>	71A 4
8.2	168.0	263	1.7	<b>71</b>	71A 4
7.6	179.6	282	1.6	<b>71</b>	71A 4
6.5	209.4	328	1.4	<b>71</b>	71A 4
6.4	212.6	333	2.7	<b>90</b>	71A 4
6.2	220.8	346	1.3	<b>71</b>	71A 4
5.9	234.1	367	2.5	<b>90</b>	71A 4
5.4	253.4	397	1.2	<b>71</b>	71A 4
5.1	268.3	421	2.2	<b>90</b>	71A 4
4.8	286.0	449	1.0	<b>71</b>	71A 4
4.6	294.9	463	2.0	<b>90</b>	71A 4
4.6	298.8	469	1.0	<b>71</b>	71A 4
4.4	309.6	486	1.9	<b>90</b>	71A 4



### 1.7 Prestazioni motoriduttori

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>0.25 kW</b>	$n_1$ = 1370 min <sup>-1</sup>	71A 4
	$n_1$ = 870 min <sup>-1</sup>	71B 6

4.1	338.1	530	1.7	90	71A 4
4.0	342.9	538	0.9	71	71A 4
3.5	390.0	612	1.5	90	71A 4
3.4	253.4	626	0.8	71	71B 6
3.0	294.9	728	1.4	90	71B 6
2.8	309.6	765	1.4	90	71B 6
2.6	338.1	835	1.2	90	71B 6
2.2	390.0	963	1.1	90	71B 6

<b>0.37 kW</b>	$n_1$ = 2790 min <sup>-1</sup>	63C 2
	$n_1$ = 1380 min <sup>-1</sup>	71B 4
	$n_1$ = 910 min <sup>-1</sup>	80A 6
	$n_1$ = 880 min <sup>-1</sup>	71C 6

271	10.3	12	12.8	63	63C 2
243	11.5	13	11.9	63	63C 2
210	13.3	15	11.6	63	63C 2
188	14.8	17	10.6	63	63C 2
174	7.9	18	9.3	63	71B 4
163	17.2	20	9.5	63	63C 2
143	19.5	22	8.5	63	63C 2
134	10.3	24	7.8	63	71B 4
120	11.5	26	7.2	63	71B 4
104	13.3	31	7.2	63	71B 4
93	14.8	34	6.4	63	71B 4
80	17.2	40	5.6	63	71B 4
71	19.5	45	5.1	63	71B 4
58	23.7	55	4.4	63	71B 4
50	27.5	63	3.8	63	71B 4
44	31.2	72	3.3	63	71B 4
39	35.8	82	3.0	63	71B 4
31	44.6	103	2.4	63	71B 4
26	52.4	121	2.1	63	71B 4
20	69.0	159	1.6	63	71B 4
19	73.2	178	3.1	80	71 B4
18.1	76.1	175	2.6	71	71B 4
17.4	79.5	183	1.4	63	71B 4
15.8	87.4	201	2.3	71	71B 4
15.2	90.6	209	1.1	63	71B 4
14.0	98.6	227	2.0	71	71B 4
13.3	103.8	239	1.0	63	71B 4
12.8	107.6	248	1.9	71	71B 4
11.3	122.3	282	3.2	90	71B 4
11.2	123.5	285	1.6	71	71B 4
10.7	129.3	298	0.8	63	71B 4
10.1	87.4	316	1.7	71	71C 6
8.9	154.8	357	1.3	71	71B 4
8.4	165.2	381	2.4	90	71B 4
8.2	168.0	387	1.2	71	71B 4
7.7	179.6	414	1.1	71	71B 4
7.1	193.6	446	1.0	71	71B 4
6.6	209.4	483	1.0	71	71B 4
6.5	212.6	490	1.9	90	71B 4
6.2	220.8	509	0.9	71	71B 4
5.9	234.1	539	1.7	90	71B 4
5.4	253.4	584	0.8	71	71B 4
5.1	268.3	618	1.5	90	71B 4
4.9	179.6	649	0.8	71	71C 6
4.7	294.9	680	1.3	90	71B 4

### 1.7 Gearmotors performances

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>0.37 kW</b>	$n_1$ = 2790 min <sup>-1</sup>	63C 2
	$n_1$ = 1380 min <sup>-1</sup>	71B 4
	$n_1$ = 910 min <sup>-1</sup>	80A 6
	$n_1$ = 880 min <sup>-1</sup>	71C 6

4.5	309.6	713	1.3	90	71B 4
4.1	338.1	779	1.2	90	71B 4
4.1	223.5	781	2.4	112	80A 6
3.7	247.9	866	2.2	112	80A 6
3.5	390.0	899	1.0	90	71B 4
2.8	309.6	1119	0.9	90	71C 6
2.4	375.3	1311	1.3	112	80A 6

<b>0.55 kW</b>	$n_1$ = 2800 min <sup>-1</sup>	71B 2
	$n_1$ = 1380 min <sup>-1</sup>	71C 4
	$n_1$ = 1390 min <sup>-1</sup>	80A 6
	$n_1$ = 910 min <sup>-1</sup>	80B 6

354	7.9	13	10.5	63	71B 2
272	10.3	17	8.6	63	71B 2
244	11.5	19	8.0	63	71B 2
211	13.3	22	7.8	63	71B 2
174	7.9	27	6.3	63	71C 4
134	10.3	35	5.3	63	71C 4
120	11.5	39	4.8	63	71C 4
104	13.3	46	4.8	63	71C 4
93	14.8	51	4.3	63	71C 4
80	17.2	59	3.7	63	71C 4
71	19.5	67	3.4	63	71C 4
58	23.7	81	3.0	63	71C 4
50	27.5	94	2.6	63	71C 4
44	31.2	107	2.2	63	71C 4
39	35.8	123	2.0	63	71C 4
32	42.6	146	3.2	71	71C 4
31	44.6	153	1.6	63	71C 4
28	49.3	169	2.7	71	71C 4
27	51.0	185	3.0	80	71 C4
26	52.4	179	1.4	63	71C 4
26	53.4	183	2.5	71	71C 4
24	57.0	206	2.4	80	71 C4
24	57.9	198	2.3	71	71C 4
20	69.0	236	1.1	63	71C 4
18,9	73.2	265	2.1	80	71 C4
18.1	76.1	261	1.8	71	71C 4
17.4	79.5	272	0.9	63	71C 4
15.8	87.4	299	1.5	71	71C 4
14.9	92.5	317	2.9	90	71C 4
14.0	98.6	338	1.4	71	71C 4
12.9	106.7	366	2.5	90	71C 4
12.8	107.6	369	1.2	71	71C 4
11.3	122.3	419	2.2	90	71C 4
11.2	123.5	423	1.1	71	71C 4
10.5	131.1	449	2.0	90	71C 4
9.6	143.1	490	0.9	71	71C 4
9.1	151.9	520	1.7	90	71C 4
8.9	154.8	530	0.9	71	71C 4
8.4	166.0	565	3.1	112	80A 4
8.4	165.2	566	1.6	90	71C 4
8.2	168.0	575	0.8	71	71C 4
7.1	194.9	663	2.6	112	80A 4
6.5	212.6	728	1.2	90	71C 4
6.2	223.5	760	2.3	112	80A 4
5.9	234.1	802	1.1	90	71C 4
5.1	268.3	919	1.0	90	71C 4

### 1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>0.55 kW</b>	$n_1$ = 2800 min <sup>-1</sup>	71B 2
	$n_1$ = 1380 min <sup>-1</sup>	71C 4
	$n_1$ = 1390 min <sup>-1</sup>	80A 4
	$n_1$ = 910 min <sup>-1</sup>	80B 6

5.1	272.4	926	1.9	112	80A 4
5.1	271.4	950	2.8	125	71C 4
4.7	298.1	1014	1.7	112	80A 4
4.5	309.6	1060	0.9	90	71C 4
4.1	342.9	1166	1.5	112	80A 4
3.7	375.3	1276	1.4	112	80A 4


<b>0.75 kW</b>	$n_1$ = 2800 min <sup>-1</sup>	71C 2
	$n_1$ = 1390 min <sup>-1</sup>	80B 4
	$n_1$ = 910 min <sup>-1</sup>	80C 6

354	7.9	18	7.7	63	71C 2
272	10.3	24	6.3	63	71C 2
244	11.5	26	5.9	63	71C 2
211	13.3	31	5.7	63	71C 2
176	7.9	37	4.6	63	80B 4
135	10.3	48	3.9	63	80B 4
121	11.5	53	3.6	63	80B 4
105	13.3	61	3.6	63	80B 4
94	14.8	69	3.2	63	80B 4
81	17.2	80	2.8	63	80B 4
71	19.5	91	2.5	63	80B 4
59	23.7	110	2.2	63	80B 4
51	27.5	127	1.9	63	80B 4
45	30.6	142	3.2	71	80B 4
44	31.2	145	1.7	63	80B 4
39	35.8	166	1.5	63	80B 4
37	37.1	172	2.7	71	80B 4
35	39.8	195	2.8	80	80 B4
33	42.6	197	2.3	71	80B 4
31	44.6	207	1.2	63	80B 4
28	49.3	229	2.0	71	80B 4
27	51.0	250	2.2	80	80 B4
27	52.4	243	1.0	63	80B 4
26	53.4	247	1.9	71	80B 4
24	57.0	279	1.8	80	80 B4
23	59.5	276	3.3	90	80B 4
20	69.0	320	0.8	63	80B 4
19.0	73.2	358	2.8	100	80 B4
19.0	73.2	358	1.5	80	80 B4
19.0	73.3	340	2.7	90	80B 4
18.3	76.1	353	1.3	71	80B 4
17.2	80.7	374	2.4	90	80B 4
15.9	87.4	405	1.1	71	80B 4
15.0	92.5	429	2.1	90	80B 4
14.1	98.6	457	1.0	71	80B 4
13.0	106.7	495	1.8	90	80B 4
12.9	107.6	499	0.9	71	80B 4
11.4	122.3	567	1.6	90	80B 4
11.3	123.5	573	0.8	71	80B 4
10.6	131.1	608	1.5	90	80B 4
10.2	135.6	629	2.8	112	80B 4
9.2	151.9	704	1.3	90	80B 4
9.0	154.8	718	2.4	112	80B 4
8.4	165.2	766	1.2	90	80B 4
8.4	166.0	770	2.3	112	80B 4
7.1	194.9	904	1.9	112	80B 4
6.5	212.6	986	0.9	90	80B 4





**1.7 Prestazioni motoriduttori**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	---


<b>0.75 kW</b>	$n_1=2800\text{ min}^{-1}$	71C 2
	$n_1=1390\text{ min}^{-1}$	80B 4
	$n_1=910\text{ min}^{-1}$	80C 6

6.2	223.5	1036	1.7	112	80B 4
5.9	234.1	1086	0.8	90	80B 4
5.6	247.9	1149	1.5	112	80B 4
5.1	272.4	1263	1.4	112	80B 4
4.7	298.1	1383	1.3	112	80B 4
4.1	342.9	1590	1.1	112	80B 4
3.7	375.3	1740	1.0	112	80B 4

<b>0.88 kW</b>	$n_1=1350\text{ min}^{-1}$	80C 4
----------------	----------------------------	-------

171	7.9	44	3.8	63	80C 4
131	10.3	58	3.2	63	80C 4
118	11.5	64	3.0	63	80C 4
102	13.3	74	3.0	63	80C 4
91	14.8	83	2.6	63	80C 4
79	17.2	96	2.3	63	80C 4
69	19.5	109	2.1	63	80C 4
59	22.9	128	3.3	71	80C 4
57	23.7	133	1.8	63	80C 4
50	27.1	152	3.0	71	80C 4
49	27.5	154	1.6	63	80C 4
44	31.0	183	3.0	80	80 C4
38	35.8	200	1.2	63	80C 4
36	37.1	208	2.2	71	80C 4
34	39.8	235	2.3	80	80 C4
32	42.6	238	1.9	71	80C 4
30	44.6	250	1.0	63	80C 4
27	49.3	276	1.7	71	80C 4
26	51.0	302	1.8	80	80 C4
26	52.4	293	3.1	90	80C 4
26	52.4	293	0.9	63	80C 4
24	57.0	337	1.5	80	80 C4
23	57.9	324	1.4	71	80C 4
23	58.0	343	2.9	100	80 C4
23	59.5	333	2.7	90	80C 4
18,4	73,2	433	2,3	100	80 C4
18,4	73,2	433	1,3	80	80 C4
18,4	73,3	411	2,2	90	80C 4
17,7	76,1	427	1,1	71	80C 4
16,7	80,7	452	2,0	90	80C 4
15,5	87,4	489	0,9	71	80C 4
14,6	92,5	518	1,8	90	80C 4
14,4	93,9	526	3,3	112	80C 4
12,7	106,7	598	1,5	90	80C 4
12,2	110,9	621	2,8	112	80C 4
10,3	131,1	735	1,2	90	80C 4
10,0	135,6	760	2,3	112	80C 4
8,9	151,9	851	1,1	90	80C 4
8,7	154,8	868	2,0	112	80C 4
8,2	165,2	896	1,0	90	80C 4
8,1	166,0	830	1,9	112	80C 4
6,9	194,9	1092	1,6	112	80C 4
6,0	223,5	1252	1,4	112	80C 4
5,0	272,4	1526	1,1	112	80C 4
3,9	342,9	1921	0,9	112	80C 4


**1.7 Gearmotors performances**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>1.1 kW</b>	$n_1=2830\text{ min}^{-1}$	80B 2
	$n_1=1390\text{ min}^{-1}$	80D 4
	$n_1=920\text{ min}^{-1}$	90L 6

549	5,2	18	15,6	80	80 B2
358	7,9	26	5,3	63	80B 2
275	10,3	34	4,4	63	80B 2
247	11,5	38	4	63	80B 2
213	13,3	44	3,9	63	80B 2
191	14,8	50	3,6	63	80B 2
176	7,9	54	3,2	63	80D 4
165	17,2	57	3,2	63	80B 2
145	19,5	65	2,9	63	80B 2
135	10,3	70	2,6	63	80D 4
121	11,5	78	2,4	63	80D 4
105	13,3	90	2,4	63	80D 4
94	14,8	101	2,2	63	80D 4
81	17,2	117	1,9	63	80D 4
74	18,7	127	3,2	71	80D 4
71	19,5	133	1,7	63	80D 4
61	22,9	156	2,8	71	80D 4
59	23,7	161	1,5	63	80D 4
51	27,5	187	1,3	63	80D 4
51	27,1	184	2,5	71	80D 4
45	30,6	208	2,2	71	80D 4
45	31,0	223	2,5	80	80 D4
44	31,2	213	1,1	63	80D 4
39	35,8	243	1	63	80D 4
39	73,2	258	2,0	80	80 B2
37	37,1	252	1,8	71	80D 4
35	39,8	286	1,9	80	80 D4
33	42,6	290	1,6	71	80D 4
33	42,2	287	3,2	90	80D 4
31	44,6	303	0,8	63	80D 4
28	49,3	336	1,4	71	80D 4
27	51,0	367	1,5	80	80 D4
27	52,4	356	2,6	90	80D 4
26	53,4	363	1,3	71	80D 4
24	57,0	409	1,2	80	80 D4
24	57,9	394	1,2	71	80D 4
24	58,0	417	2,4	100	80 D4
23	59,5	404	2,3	90	80D 4
19,0	73,3	498	1,8	90	80D 4
19,0	73,2	526	1,9	100	80 D4
19,0	73,2	526	1,0	80	80 D4
18,3	76,1	518	0,9	71	80D 4
18,0	51,0	554	2,1	100	90 L6
18,0	51,0	554	1,0	80	90 L6
18,0	77	524	3,3	112	80D 4
17,2	80,7	549	1,7	90	80D 4
16,3	85,4	581	3	112	80D 4
16,1	57,0	619	0,8	80	90 L6
15,9	87,4	594	0,8	71	80D 4
15,9	58,0	629	1,6	100	90 L6
14,8	93,9	639	2,7	112	80D 4
14,7	94,4	642	1,4	90	80D 4
13,5	102,8	699	2,5	112	80D 4
13,0	106,7	726	1,3	90	80D 4
12,6	73,2	794	1,3	100	90 L6
12,5	110,9	754	2,3	112	80D 4
12,2	75,4	818	2,5	125	90 L6
11,4	122,3	832	1,1	90	80D 4
11,1	125,2	852	2,1	112	80D 4

**1.7 Leistungen der Getriebemotoren**


$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	---

<b>1.1 kW</b>	$n_1=2830\text{ min}^{-1}$	80B 2
	$n_1=1390\text{ min}^{-1}$	80D 4
	$n_1=920\text{ min}^{-1}$	90L 6

10,6	131,1	892	1	90	80D 4
10,2	135,6	923	1,9	112	80D 4
9,2	151,9	1033	0,9	90	80D 4
9,0	154,8	1053	1,7	112	80D 4
8,4	109,4	1174	3,0	132	90 L6
8,4	166	1129	1,5	112	80D 4
8,4	165,2	1124	0,8	90	80D 4
7,3	125,5	1347	2,6	132	90 L6
7,1	194,9	1326	1,3	112	80D 4
6,7	136,7	1467	2,4	132	90 L6
6,2	223,5	1520	1,2	112	80D 4
6,2	149,5	1605	2,2	132	90 L6
5,6	247,9	1686	1	112	80D 4
5,6	164,6	1766	2,0	132	90 L6
5,1	180,0	1932	1,8	132	90 L6
5,1	272,4	1853	0,9	112	80D 4
4,7	298,1	2028	0,9	112	80D 4




### 1.7 Prestazioni motoriduttori

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	---

<b>1.5 kW</b>	$n_1 = 2830 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$ $n_1 = 925 \text{ min}^{-1}$	80C 2 90L 4 90LB 6
---------------	--	--------------------------

$n_2$	ir	T2	FS'	OM-OC	Motor
549	5,2	24,8	11,5	80	80 C2
412	6,9	31	7	71	80C 2
358	7,9	36	3,9	63	80C 2
337	8,4	38	6,5	71	80C 2
275	10,3	47	3,2	63	80C 2
247	11,5	52	3,0	63	80C 2
213	13,3	61	2,9	63	80C 2
191	14,8	68	2,7	63	80C 2
177	7,9	73	2,3	63	90L 4
165	17,2	78	2,4	63	80C 2
145	19,5	89	2,1	63	80C 2
136	10,3	95	2,0	63	90L 4
123	11,4	105	3,2	71	90L 4
122	11,5	106	1,8	63	90L 4
105	13,3	122	1,8	63	90L 4
100	13,9	128	3,1	71	90L 4
94	14,8	137	1,6	63	90L 4
85	16,5	152	2,6	71	90L 4
82	17,2	158	1,4	63	90L 4
75	18,7	172	2,4	71	90L 4
72	19,5	180	1,3	63	90L 4
66	21,2	206	2,9	80	90 L 4
61	22,9	211	2,0	71	90L 4
59	23,7	219	1,1	63	90L 4
58	24,2	235	2,6	80	90 L 4
52	27,1	249	1,8	71	90L 4
51	27,5	253	0,9	63	90L 4
46	30,6	282	1,6	71	90L 4
45	31,0	302	1,8	80	90 L 4
45	31,2	288	0,8	63	90L 4
43	32,5	300	3,0	90	90L 4
38	36,9	340	2,7	90	90L 4
38	37,1	342	1,3	71	90L 4
35	39,8	387	1,4	80	90 L 4
35	40,5	393	2,7	100	90 L 4
33	42,2	388	2,3	90	90L 4
33	42,6	392	1,2	71	90L 4
31	45,2	416	2,2	90	90L 4
28	49,3	454	1,0	71	90L 4
27	51,0	496	2,3	100	90 L 4
27	51,0	496	1,1	80	90 L 4
27	52,4	482	1,9	90	90L 4
26	53,4	491	0,9	71	90L 4
25	57,0	554	0,9	80	90 L 4
24	58,0	564	1,8	100	90 L 4
24	57,2	527	3,3	112	90L 4
24	59,5	548	1,7	90	90L 4
24	57,9	533	0,9	71	90L 4
22	64,6	594	2,9	112	90L 4
19,1	73,2	712	1,4	100	90 L 4
19,1	73,2	712	0,8	80	90 L 4
19,1	73,3	675	1,3	90	90L 4
18,6	75,4	733	2,7	125	90 L 4
18,2	77	709	2,5	112	90L 4
17,4	80,7	743	1,2	90	90L 4
16,4	85,4	787	2,2	112	90L 4
15,1	92,5	852	1,1	90	90L 4
14,9	93,9	865	2,0	112	90L 4

### 1.7 Gearmotors performances

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--


<b>1.5 kW</b>	$n_1 = 2830 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$ $n_1 = 925 \text{ min}^{-1}$	80C 2 90L 4 90LB 6
---------------	--	--------------------------

$n_2$	ir	T2	FS'	OM-OC	Motor
13,6	102,8	946	1,8	112	90L 4
13,1	106,7	983	0,9	90	90L 4
12,8	109,4	1052	3,3	132	90 L 4
12,6	110,9	1021	1,7	112	90L 4
11,4	122,3	1126	0,8	90	90L 4
11,2	125,2	1153	1,5	112	90L 4
11,2	125,5	1207	2,9	132	90 L 4
10,3	135,6	1249	1,4	112	90L 4
10,2	136,7	1314	2,7	132	90 L 4
9,4	149,5	1438	2,4	132	90 L 4
9,0	154,8	1426	1,2	112	90L 4
8,5	164,6	1583	2,2	132	90 L 4
8,4	166	1529	1,1	112	90L 4
7,8	180,0	1732	2,0	132	90 L 4
7,2	194,9	1795	1,0	112	90L 4
6,8	136,7	1989	1,8	132	90LB 6
6,3	223,5	2058	0,9	112	90L 4
6,2	149,5	2176	1,6	132	90LB 6
5,6	164,6	2396	1,5	132	90LB 6
5,1	180,0	2621	1,4	132	90LB 6

<b>1.8 kW</b>	$n_1 = 2770 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$ $n_1 = 940 \text{ min}^{-1}$	80D 2 90LB 4 100B 6
---------------	--	---------------------------

$n_2$	ir	T2	FS'	OM-OC	Motor
538	5,2	30,4	9,3	80	80 D2
404	6,9	38	5,7	71	80D 2
350	7,9	44	3,2	63	80D 2
279	9,9	55	4,7	71	80D 2
269	10,3	57	2,6	63	80D 2
241	11,5	64	2,4	63	80D 2
208	13,3	74	2,4	63	80D 2
187	14,8	83	2,2	63	80D 2
177	7,9	87	1,9	63	90LB 4
167	8,4	93	3,2	71	90LB 4
141	9,9	110	2,9	71	90LB 4
136	10,3	114	1,6	63	90LB 4
123	11,4	126	2,7	71	90LB 4
122	11,5	127	1,5	63	90LB 4
105	13,3	147	1,5	63	90LB 4
100	13,9	154	2,6	71	90LB 4
94	14,8	164	1,3	63	90LB 4
85	16,5	182	2,2	71	90LB 4
82	17,2	190	1,2	63	90LB 4
75	18,7	207	2	71	90LB 4
72	19,5	216	1,1	63	90LB 4
66	21,2	247	2,4	80	90 LB4
61	23	254	3,2	90	90LB 4
61	22,9	253	1,7	71	90LB 4
59	23,7	262	0,9	63	90LB 4
58	24,2	282	2,1	80	90 LB4
55	25,7	284	3,2	90	90LB 4
52	27,1	299	1,5	71	90LB 4
51	27,5	304	0,8	63	90LB 4
49	28,8	319	2,9	90	90LB 4
46	30,6	338	1,4	71	90LB 4
45	31,0	362	3,0	100	90 LB4
45	31,0	362	1,5	80	90 LB4
43	32,5	360	2,5	90	90LB 4

### 1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	---

<b>1.8 kW</b>	$n_1 = 2770 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$ $n_1 = 940 \text{ min}^{-1}$	80D 2 90LB 4 100B 6
---------------	--	---------------------------

$n_2$	ir	T2	FS'	OM-OC	Motor
38	37,1	410	1,1	71	90LB 4
35	39,8	464	1,2	80	90 LB4
35	40,5	472	2,2	100	90 LB4
33	42,2	466	2	90	90LB 4
33	42,6	470	1	71	90LB 4
31	45,2	500	1,8	90	90LB 4
28	49,3	545	0,8	71	90LB 4
27	51,0	595	1,9	100	90 LB4
27	51,0	595	0,9	80	90 LB4
26	53,4	590	3	112	90LB 4
26	53,4	590	0,8	71	90LB 4
25	57,0	665	0,8	80	90 LB4
24	58,0	677	3,0	125	90 LB4
24	58,0	677	1,5	100	90 LB4
24	57,2	632	2,8	112	90LB 4
24	59,5	657	1,4	90	90LB 4
22	64,6	713	2,5	112	90LB 4
19,1	73,2	854	1,2	100	90 LB4
19,1	73,3	810	1,1	90	90LB 4
18,6	75,4	879	2,3	125	90 LB4
18,2	77	851	2,1	112	90LB 4
17,4	80,7	892	1	90	90LB 4
16,4	85,4	944	1,9	112	90LB 4
15,4	90,8	1048	3,3	132	90LB 4
15,1	92,5	1022	0,9	90	90LB 4
14,9	93,9	1038	1,7	112	90LB 4
14,1	99,4	1147	3,1	132	90LB 4
13,6	102,8	1136	1,5	112	90LB 4
12,8	109,4	1263	2,8	132	90LB 4
12,6	110,9	1226	1,4	112	90LB 4
11,2	125,2	1384	1,3	112	90LB 4
11,2	125,5	1449	2,4	132	90LB 4
10,9	86,0	1479	3,4	150	100B 6
10,3	135,6	1499	1,2	112	90LB 4
10,2	136,7	1577	2,2	132	90LB 4
9,9	94,6	1626	3,1	150	100B 6
9,4	149,5	1726	2,0	132	90LB 4
9,2	101,7	1748	2,9	150	100B 6
9	154,8	1711	1	112	90LB 4
8,6	109,8	1887	2,7	150	100B 6
8,5	164,6	1899	1,8	132	90LB 4
8,4	166	1835	1	112	90LB 4
7,8	180,0	2078	1,7	132	90LB 4
7,3	129,5	2226	2,3	150	100B 6
7,2	194,9	2154	0,8	112	90LB 4
6,9	135,8	2334	3,3	170	100B 6
6,9	136,7	2349	1,5	132	100B 6
6,6	141,6	2434	2,1	150	100B 6
6,3	149,4	2568	3,0	170	100B 6
6,3	149,5	2570	1,4	132	100B 6
6,0	155,7	2676	1,9	150	100B 6
5,8	162,7	2797	2,7	170	100B 6
5,7	164,6	2829	1,3	132	100B 6
5,3	178,1	3061	2,3	170	100B 6
5,2	180,0	3095	1,1	132	100B 6
5,1	185,5	3189	1,5	150	100B 6
4,8	196,0	3368	2,0	170	100B 6
4,6	204,2	3510	1,3	150	100B 6





1.7 Prestazioni motoriduttori

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>2.2 kW</b>	$n_1 = 2840 \text{ min}^{-1}$	90L 2
	$n_1 = 1410 \text{ min}^{-1}$	100A 4
	$n_1 = 940 \text{ min}^{-1}$	100BL 6

551	5.2	36	7.8	<b>80</b>	90L 2
414	6.9	46	4.8	<b>71</b>	90L 2
359	7.9	53	2.7	<b>63</b>	90L 2
338	8.4	56	4.5	<b>71</b>	90L 2
286	9.9	66	3.9	<b>71</b>	90L 2
276	10.3	68	2.2	<b>63</b>	90L 2
250	11.4	76	3.7	<b>71</b>	90L 2
248	11.5	76	2	<b>63</b>	90L 2
214	13.3	88	2	<b>63</b>	90L 2
206	6.9	92	2.9	<b>71</b>	100A 4
192	14.8	99	1.8	<b>63</b>	90L 2
182	5.2	109	2.9	<b>80</b>	100BL 6
178	7.9	106	1.6	<b>63</b>	100A 4
168	8.4	113	2.7	<b>71</b>	100A 4
142	9.9	133	2.4	<b>71</b>	100A 4
137	10.3	138	1.3	<b>63</b>	100A 4
132	7.1	151	2.6	<b>80</b>	100BL 6
124	11.4	153	2.2	<b>71</b>	100A 4
123	11.5	154	1.2	<b>63</b>	100A 4
109	13	174	3.1	<b>90</b>	100A 4
106	13.3	178	1.2	<b>63</b>	100A 4
101	14	188	3.1	<b>90</b>	100A 4
101	13.9	187	2.1	<b>71</b>	100A 4
96	14.6	207	2.9	<b>80</b>	100A 4
95	14.8	199	1.1	<b>63</b>	100A 4
86	16.5	221	1.8	<b>71</b>	100A 4
85	16.7	236	2.5	<b>80</b>	100A 4
82	17.2	230	1	<b>63</b>	100A 4
79	17.7	238	3.2	<b>90</b>	100A 4
75	18.7	251	1.6	<b>71</b>	100A 4
72	19.5	262	0.9	<b>63</b>	100A 4
70	20.1	270	2.9	<b>90</b>	100A 4
66	21.2	300	2.0	<b>80</b>	100A 4
61	23	308	2.7	<b>90</b>	100A 4
61	22.9	308	1.4	<b>71</b>	100A 4
58	24.2	342	1.8	<b>80</b>	100A 4
55	25.7	344	2.6	<b>90</b>	100A 4
52	27.1	363	1.3	<b>71</b>	100A 4
49	28.8	387	2.4	<b>90</b>	100A 4
46	30.6	410	1.1	<b>71</b>	100A 4
45	31.0	439	2.5	<b>100</b>	100A 4
45	31.0	439	1.3	<b>80</b>	100A 4
43	32.5	436	2.1	<b>90</b>	100A 4
38	36.9	495	1.8	<b>90</b>	100A 4
38	37.1	497	0.9	<b>71</b>	100A 4
35	39.8	563	1.0	<b>80</b>	100A 4
35	40.5	573	1.8	<b>100</b>	100A 4
33	42.2	565	1.6	<b>90</b>	100A 4
33	42.6	571	0.8	<b>71</b>	100A 4
31	45.2	606	1.5	<b>90</b>	100A 4
30	46.8	627	2.8	<b>112</b>	100A 4
28	51.0	723	1.6	<b>100</b>	100A 4
28	51.0	723	0.8	<b>80</b>	100A 4
27	52.4	702	1.3	<b>90</b>	100A 4
27	52.6	744	3.1	<b>125</b>	100A 4
26	53.4	716	2.4	<b>112</b>	100A 4
25	57.2	768	2.3	<b>112</b>	100A 4
24	58.0	821	2.4	<b>125</b>	100A 4
24	58.0	821	1.2	<b>100</b>	100A 4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>2.2 kW</b>	$n_1 = 2840 \text{ min}^{-1}$	90L 2
	$n_1 = 1410 \text{ min}^{-1}$	100A 4
	$n_1 = 940 \text{ min}^{-1}$	100BL 6

24	59.5	797	1.1	<b>90</b>	100A 4
22	64.6	866	2	<b>112</b>	100A 4
19.3	73.2	1036	1.0	<b>100</b>	100A 4
19.2	73.3	983	0.9	<b>90</b>	100A 4
18.7	75.4	1067	1.9	<b>125</b>	100A 4
18.5	76.3	1068	3.3	<b>132</b>	100A 4
18.4	51.0	1084	1.1	<b>100</b>	100BL 6
18.3	77	1033	1.7	<b>112</b>	100A 4
17.9	52.6	1116	2.1	<b>125</b>	100BL 6
17.5	80.7	1082	0.8	<b>90</b>	100A 4
17.0	83.0	1163	3.0	<b>132</b>	100A 4
16.5	85.4	1146	1.5	<b>112</b>	100A 4
16.2	58.0	1232	1.6	<b>125</b>	100BL 6
16.2	58.0	1232	0.8	<b>100</b>	100A 4
15.5	90.8	1272	2.8	<b>132</b>	100A 4
15	93.9	1259	1.4	<b>112</b>	100A 4
14.2	99.4	1392	2.5	<b>132</b>	100A 4
13.7	102.8	1378	1.3	<b>112</b>	100A 4
13.0	72.3	1536	2.6	<b>140</b>	100BL 6
12.9	109.4	1532	2.3	<b>132</b>	100A 4
12.8	109.8	1538	3.3	<b>150</b>	100A 4
12.7	110.9	1487	1.2	<b>112</b>	100A 4
12.5	75.4	1601	1.3	<b>125</b>	100BL 6
11.9	78.7	1653	3.1	<b>150</b>	100BL 6
11.3	125.2	1679	1	<b>112</b>	100A 4
11.2	125.5	1758	2.0	<b>132</b>	100A 4
10.9	129.5	1813	2.8	<b>150</b>	100A 4
10.4	135.6	1819	1	<b>112</b>	100A 4
10.3	136.7	1914	1.8	<b>132</b>	100A 4
10.0	141.6	1983	2.5	<b>150</b>	100A 4
9.4	149.5	2094	1.7	<b>132</b>	100A 4
9.2	101.7	2137	2.4	<b>150</b>	100BL 6
9.1	154.8	2076	0.8	<b>112</b>	100A 4
9.1	155.7	2181	2.3	<b>150</b>	100A 4
8.7	162.7	2279	3.3	<b>170</b>	100A 4
8.6	164.6	2305	1.5	<b>132</b>	100A 4
8.5	166	2227	0.8	<b>112</b>	100A 4
7.9	178.1	2494	2.8	<b>170</b>	100A 4
7.8	180.0	2522	1.4	<b>132</b>	100A 4
7.6	185.5	2599	1.8	<b>150</b>	100A 4
7.6	124.1	2607	2.9	<b>170</b>	100BL 6
7.2	196.0	2745	2.4	<b>170</b>	100A 4
6.9	204.2	2860	1.6	<b>150</b>	100A 4
6.9	136.7	2871	1.2	<b>132</b>	100BL 6
6.6	141.6	2974	1.7	<b>150</b>	100BL 6
6.3	149.4	3139	2.4	<b>170</b>	100BL 6
6.3	149.5	3141	1.1	<b>132</b>	100BL 6
6.0	155.7	3271	1.6	<b>150</b>	100BL 6
5.8	162.7	3419	2.2	<b>170</b>	100BL 6
5.7	164.6	3458	1.0	<b>132</b>	100BL 6
5.3	178.1	3741	1.9	<b>170</b>	100BL 6
5.2	180.0	3783	0.9	<b>132</b>	100BL 6
5.1	185.5	3898	1.2	<b>150</b>	100BL 6
4.8	196.0	4117	1.6	<b>170</b>	100BL 6
4.6	204.2	4290	1.1	<b>150</b>	100BL 6

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>3 kW</b>	$n_1 = 2840 \text{ min}^{-1}$	90LB 2
	$n_1 = 1420 \text{ min}^{-1}$	100B 4
	$n_1 = 940 \text{ min}^{-1}$	112B 6

551	5.2	49.4	5.8	<b>80</b>	90LB 2
414	6.9	62	3.5	<b>71</b>	90LB 2
359	7.9	72	1.9	<b>63*</b>	90LB 2
338	8.4	76	3.3	<b>71</b>	90LB 2
286	9.9	90	2.9	<b>71</b>	90LB 2
276	10.3	93	1.6	<b>63*</b>	90LB 2
276	5.2	99	3.1	<b>80</b>	100B 4
250	11.4	103	2.7	<b>71</b>	90LB 2
248	11.5	104	1.5	<b>63*</b>	90LB 2
214	13.3	121	1.5	<b>63*</b>	90LB 2
207	6.9	125	2.2	<b>71</b>	100B 4
200	7.1	136	2.8	<b>80</b>	100B 4
197	7.2	131	3.3	<b>90</b>	100B 4
192	14.8	135	1.3	<b>63*</b>	90LB 2
180	7.9	144	1.2	<b>63*</b>	100B 4
169	8.4	153	2	<b>71</b>	100B 4
157	9	164	2.7	<b>90</b>	100B 4
143	9.9	180	1.8	<b>71</b>	100B 4
142	10.0	191	2.6	<b>80</b>	100B 4
140	10.1	184	2.7	<b>90</b>	100B 4
138	10.3	187	1	<b>63*</b>	100B 4
125	11.4	207	1.6	<b>71</b>	100B 4
124	11.5	208	2.5	<b>90</b>	100B 4
124	11.5	208	0.9	<b>63*</b>	100B 4
119	11.9	229	2.4	<b>80</b>	100B 4
109	13	236	2.3	<b>90</b>	100B 4
107	13.3	241	0.9	<b>63*</b>	100B 4
102	13.9	253	1.6	<b>71</b>	100B 4
101	14	254	2.3	<b>90</b>	100B 4
97	14.6	281	2.1	<b>80</b>	100B 4
96	14.8	269	0.8	<b>63*</b>	100B 4
90	15.7	285	2.5	<b>90</b>	100B 4
86	16.5	299	1.3	<b>71</b>	100B 4
85	16.7	320	1.9	<b>80</b>	100B 4
80	17.7	322	2.3	<b>90</b>	100B 4
76	18.7	340	1.2	<b>71</b>	100B 4
71	20.1	366	2.2	<b>90</b>	100B 4
68	20.9	380	3.4	<b>112</b>	100B 4
67	21.2	407	2.8	<b>100</b>	100B 4
67	21.2	407	1.5	<b>80</b>	100B 4
62	23	418	2	<b>90</b>	100B 4
62	22.9	416	1	<b>71</b>	100B 4
60	23.6	429	3.1	<b>112</b>	100B 4
59	24.2	463	1.3	<b>80</b>	100B 4
58	24.6	471	2.5	<b>100</b>	100B 4
55	25.6	465	3	<b>112</b>	100B 4
55	25.7	466	1.9	<b>90</b>	100B 4
52	27.1	492	0.9	<b>71</b>	100B 4
49	28.8	524	1.7	<b>90</b>	100B 4
48	29.4	534	3.3	<b>112</b>	100B 4
46	30.6	555	0.8	<b>71</b>	100B 4
46	31.0	595	1.9	<b>100</b>	100B 4
46	31.0	595	0.9	<b>80</b>	100B 4
44	32.5	591	1.5	<b>90</b>	100B 4
43	32.8	595	2.9	<b>112</b>	100B 4
37	38.2	694	2.5	<b>112</b>	100B 4
35	40.5	775	2.6	<b>125</b>	100B 4
35	40.5	775	1.4	<b>100</b>	100B 4



1.7 Prestazioni motoriduttori


1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	OM-OC	
-------------------------------------	----	----------------------	-----	-------	---

<b>3 kW</b>	n <sub>1</sub> = 2840 min <sup>-1</sup>	90LB 2
	n <sub>1</sub> = 1420 min <sup>-1</sup>	100B 4
	n <sub>1</sub> = 940 min <sup>-1</sup>	112B 6

34	42.2	766	1.2	<b>90</b>	100B 4
33	43.2	784	2.2	<b>112</b>	100B 4
31	45.2	821	1.1	<b>90</b>	100B 4
30	46.8	849	2.1	<b>112</b>	100B 4
28	51.0	978	1.2	<b>100</b>	100B 4
27	52.6	1008	2.3	<b>125</b>	100B 4
27	53.4	969	1.8	<b>112</b>	100B 4
27	52.4	951	1	<b>90</b>	100B 4
25	57.2	1039	1.7	<b>112</b>	100B 4
25	57.3	1087	3.2	<b>132</b>	100B 4
24	58.0	1112	1.8	<b>125</b>	100B 4
24	58.0	1112	0.9	<b>100</b>	100B 4
24	59.5	1080	0.8	<b>90</b>	100B 4
22	64.6	1172	1.5	<b>112</b>	100B 4
22	65.1	1235	2.8	<b>132</b>	100B 4
20	72.3	1386	2.9	<b>140</b>	100B 4
18.8	75.4	1445	1.4	<b>125</b>	100B 4
18.6	76.3	1446	2.4	<b>132</b>	100B 4
18.4	51.0	1478	0.8	<b>100</b>	112B 6
18.4	77	1399	1.3	<b>112</b>	100B 4
18.3	51.3	1485	3.1	<b>140</b>	112B 6
18.0	78.7	1492	3.4	<b>150</b>	100B 4
17.9	52.6	1522	1.5	<b>125</b>	112B 6
17.1	83.0	1575	2.2	<b>132</b>	100B 4
16.6	85.4	1551	1.1	<b>112</b>	100B 4
16.5	86.0	1632	3.1	<b>150</b>	100B 4
16.4	57.4	1662	2.6	<b>140</b>	112B 6
16.2	58.0	1680	1.2	<b>125</b>	112B 6
15.6	90.8	1723	2.0	<b>132</b>	100B 4
15.1	93.9	1705	1	<b>112</b>	100B 4
15.0	94.6	1794	2.8	<b>150</b>	100B 4
14.3	99.4	1885	1.9	<b>132</b>	100B 4
14.0	101.7	1929	2.6	<b>150</b>	100B 4
13.8	102.8	1866	0.9	<b>112</b>	100B 4
13.0	72.3	2094	1.9	<b>140</b>	112B 6
13.0	109.4	2075	1.7	<b>132</b>	100B 4
12.9	109.8	2082	2.4	<b>150</b>	100B 4
12.8	110.9	2014	0.9	<b>112</b>	100B 4
12.5	75.4	2183	0.9	<b>125</b>	112B 6
11.4	124.1	2353	3.2	<b>170</b>	100B 4
11.3	125.5	2381	1.5	<b>132</b>	100B 4
11.0	129.5	2455	2.0	<b>150</b>	100B 4
10.5	135.8	2575	2.9	<b>170</b>	100B 4
10.4	136.7	2592	1.4	<b>132</b>	100B 4
10.0	141.6	2685	1.9	<b>150</b>	100B 4
9.5	149.4	2834	2.6	<b>170</b>	100B 4
9.5	149.5	2835	1.2	<b>132</b>	100B 4
9.1	155.7	2953	1.7	<b>150</b>	100B 4
8.7	162.7	3086	2.4	<b>170</b>	100B 4
8.6	164.6	3121	1.1	<b>132</b>	100B 4
8.0	178.1	3377	2.0	<b>170</b>	100B 4
7.9	180.0	3415	1.0	<b>132</b>	100B 4
7.7	185.5	3519	1.4	<b>150</b>	100B 4
7.2	196.0	3716	1.8	<b>170</b>	100B 4
7.0	204.2	3873	1.2	<b>150</b>	100B 4
6.9	135.8	3890	2.0	<b>170</b>	112B 6
6.9	136.7	3915	0.9	<b>132</b>	112B 6
6.6	141.6	4056	1.3	<b>150</b>	112B 6


n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	OM-OC	
-------------------------------------	----	----------------------	-----	-------	--

<b>3 kW</b>	n <sub>1</sub> = 2840 min <sup>-1</sup>	90LB 2
	n <sub>1</sub> = 1420 min <sup>-1</sup>	100B 4
	n <sub>1</sub> = 940 min <sup>-1</sup>	112B 6

6.3	149.4	4281	1.8	170	112B 6
6.3	149.5	4283	0.8	132	112B 6
6.0	155.7	4461	1.1	150	112B 6
5.8	162.7	4662	1.6	170	112B 6
5.7	164.6	4715	0.8	132	112B 6
5.3	178.1	5101	1.4	170	112B 6
5.1	185.5	5316	0.9	150	112B 6
4.8	196.0	5614	1.2	170	112B 6
4.6	204.2	5850	0.8	150	112B 6

<b>4 kW</b>	n <sub>1</sub> = 2860 min <sup>-1</sup>	100B 2
	n <sub>1</sub> = 1410 min <sup>-1</sup>	100BL 4

555	5.2	65	4.3	<b>80</b>	100 B2
417	6.9	82	2.7	<b>71*</b>	100B 2
362	7.9	95	1.5	<b>63*</b>	100B 2
340	8.4	101	2.5	<b>71*</b>	100B 2
317	9	109	3.2	<b>90</b>	100B 2
288	9.9	119	2.2	<b>71*</b>	100B 2
282	10.1	122	2.9	<b>90</b>	100B 2
278	10.3	124	1.2	<b>63*</b>	100B 2
274	5.2	133	2.3	<b>80</b>	100 BL4
251	11.4	137	2	<b>71*</b>	100B 2
249	11.5	138	1.1	<b>63*</b>	100B 2
220	13	156	2.6	<b>90</b>	100B 2
206	6.9	167	1.6	<b>71*</b>	100BL 4
198	7.1	183	2.1	<b>80</b>	100 BL4
195	7.2	176	2.4	<b>90</b>	100BL 4
178	7.9	193	0.9	<b>63*</b>	100BL 4
172	16.7	212	2.6	<b>80</b>	100 B2
168	8.4	205	1.5	<b>71*</b>	100BL 4
159	8.9	217	3.3	<b>112</b>	100BL 4
156	9	220	2	<b>90</b>	100BL 4
142	9.9	242	1.3	<b>71*</b>	100BL 4
141	10.0	257	1.9	<b>80</b>	100 BL4
139	10.1	247	2	<b>90</b>	100BL 4
124	11.4	277	1.2	<b>71*</b>	100BL 4
123	11.5	279	1.9	<b>90</b>	100BL 4
120	11.8	287	3	<b>112</b>	100BL 4
118	11.9	307	1.8	<b>80</b>	100 BL4
109	13	317	1.7	<b>90</b>	100BL 4
108	13.1	320	2.8	<b>112</b>	100BL 4
101	14	341	1.7	<b>90</b>	100BL 4
101	13.9	340	1.2	<b>71*</b>	100BL 4
96	14.6	377	3.1	<b>100</b>	100 BL4
96	14.6	377	1.6	<b>80</b>	100 BL4
90	15.7	383	1.9	<b>90</b>	100BL 4
88	16.1	393	3	<b>112</b>	100BL 4
86	16.5	401	1	<b>71*</b>	100BL 4
85	16.7	429	1.4	<b>80</b>	100 BL4
83	17.0	437	2.7	<b>100</b>	100 BL4
79	17.9	438	2.8	<b>112</b>	100BL 4
79	17.7	433	1.7	<b>90</b>	100BL 4
75	18.7	456	0.9	<b>71*</b>	100BL 4
70	20.1	491	1.6	<b>90</b>	100BL 4
67	20.9	510	2.5	<b>112</b>	100BL 4
66	21.2	546	2.1	<b>100</b>	100 BL4

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	OM-OC	
-------------------------------------	----	----------------------	-----	-------	---

<b>4 kW</b>	n <sub>1</sub> = 2860 min <sup>-1</sup>	100B 2
	n <sub>1</sub> = 1410 min <sup>-1</sup>	100BL 4

66	21.2	546	1.1	<b>80</b>	100 BL4
63	22.3	543	3.2	<b>112</b>	100BL 4
61	23	561	1.5	<b>90</b>	100BL 4
60	23.6	576	2.3	<b>112</b>	100BL 4
58	24.2	622	1.0	<b>80</b>	100 BL4
57	24.6	633	1.9	<b>100</b>	100 BL4
55	25.6	624	2.2	<b>112</b>	100BL 4
55	25.7	626	1.4	<b>90</b>	100BL 4
49	28.8	703	1.3	<b>90</b>	100BL 4
48	29.4	717	2.4	<b>112</b>	100BL 4
45	31.0	798	1.4	<b>100</b>	100 BL4
44	31.9	822	2.7	<b>125</b>	100 BL4
43	32.8	800	2.2	<b>112</b>	100BL 4
43	32.5	793	1.1	<b>90</b>	100BL 4
38	36.9	900	1	<b>90</b>	100BL 4
37	38.2	932	1.9	<b>112</b>	100BL 4
35	40.5	1041	2.0	<b>125</b>	100 BL4
35	40.5	1041	1.0	<b>100</b>	100 BL4
34	41.7	1063	3.3	<b>132</b>	100BL 4
33	43.2	1053	1.7	<b>112</b>	100BL 4
33	42.2	1028	0.9	<b>90</b>	100BL 4
31	44.9	1144	3.1	<b>132</b>	100BL 4
31	45.2	1102	0.8	<b>90</b>	100BL 4
30	46.8	1140	1.5	<b>112</b>	100BL 4
28	51.0	1314	0.9	<b>100</b>	100 BL4
27	52.6	1353	1.7	<b>125</b>	100 BL4
27	52.6	1340	2.6	<b>132</b>	100BL 4
26	53.4	1301	1.3	<b>112</b>	100BL 4
25	57.3	1459	2.4	<b>132</b>	100BL 4
25	57.4	1477	2.8	<b>140</b>	100 BL4
24	58.0	1493	1.3	<b>125</b>	100 BL4
24	59.4	1512	3.3	<b>150</b>	100BL 4
22	64.6	1574	1.1	<b>112</b>	100BL 4
22	65.1	1659	2.1	<b>132</b>	100BL 4
21	66.7	1699	2.9	<b>150</b>	100BL 4
19	72.3	1861	2.1	<b>140</b>	100 BL4
19	75.4	1940	1.0	<b>125</b>	100 BL4
18.5	76.3	1942	1.8	<b>132</b>	100BL 4
18.3	77	1878	0.9	<b>112</b>	100BL 4
17.9	78.7	2003	2.5	<b>150</b>	100BL 4
17.0	83.0	2115	1.7	<b>132</b>	100BL 4
16.5	85.4	2083	0.8	<b>112</b>	100BL 4
16.4	86.0	2191	2.3	<b>150</b>	100BL 4
15.8	89.4	2277	3.3	<b>170</b>	100BL 4
15.5	90.8	2313	1.5	<b>132</b>	100BL 4
14.9	94.6	2409	2.1	<b>150</b>	100BL 4
14.3	98.4	2506	3.0	<b>170</b>	100BL 4
14.2	99.4	2532	1.4	<b>132</b>	100BL 4
13.9	101.7	2590	1.9	<b>150</b>	100BL 4
12.9	109.4	2786	1.3	<b>132</b>	100BL 4
12.8	109.8	2796	1.8	<b>150</b>	100BL 4
12.4	113.9	2901	2.6	<b>170</b>	100BL 4
11.4	124.1	3160	2.4	<b>170</b>	100BL 4
11.2	125.5	3197	1.1	<b>132</b>	100BL 4
10.9	129.5	3297	1.5	<b>150</b>	100BL 4
10.4	135.8	3457	2.2	<b>170</b>	100BL 4
10.3	136.7	3480	1.0	<b>132</b>	100BL 4
10.0	141.6	3605	1.4	<b>150</b>	100BL 4

**1.7 Prestazioni motoriduttori**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

**4 kW** $n_1=2860\text{ min}^{-1}$   
 $n_1=1410\text{ min}^{-1}$ 100B 2  
100BL 4

9.4	149.4	3805	2.0	<b>170</b>	100BL 4
9.4	149.5	3807	0.9	<b>132</b>	100BL 4
9.1	155.7	3965	1.3	<b>150</b>	100BL 4
8.7	162.7	4144	1.8	<b>170</b>	100BL 4
8.6	164.6	4191	0.8	<b>132</b>	100BL 4
7.9	178.1	4534	1.5	<b>170</b>	100BL 4
7.8	180.0	4585	0.8	<b>132</b>	100BL 4
7.6	185.5	4725	1.0	<b>150</b>	100BL 4
7.2	196.0	4990	1.3	<b>170</b>	100BL 4
6.9	204.2	5200	0.9	<b>150</b>	100BL 4

**5.5 kW** $n_1=2880\text{ min}^{-1}$   
 $n_1=1400\text{ min}^{-1}$ 112B 2  
112BL 4

559	5.2	89	3.2	<b>80</b>	112 B2
420	6.9	113	2	<b>71*</b>	112B 2
405	7.1	123	2.8	<b>80</b>	112 B2
399	7.2	118	2.7	<b>90</b>	112B 2
343	8.4	138	1.8	<b>71*</b>	112B 2
319	9	148	2.4	<b>90</b>	112B 2
290	9.9	163	1.6	<b>71*</b>	112B 2
289	10.0	173	2.7	<b>80</b>	112 B2
284	10.1	167	2.1	<b>90</b>	112B 2
272	5.2	184	2.7	<b>100</b>	112BL4
272	5.2	184	1.7	<b>80</b>	112BL4
253	11.4	187	1.5	<b>71*</b>	112B 2
251	11.5	188	2.1	<b>90</b>	112B 2
204	6.9	232	1.2	<b>71*</b>	112BL4
197	7.1	253	1.5	<b>80</b>	112BL4
197	14.6	254	2.2	<b>80</b>	112 B2
194	7.2	244	1.8	<b>90</b>	112BL4
189	7.4	264	2.9	<b>100</b>	112BL4
183	7.7	258	2.6	<b>112</b>	112BL4
173	16.7	289	1.9	<b>80</b>	112 B2
167	8.4	284	1.1	<b>71*</b>	112BL4
157	8.9	300	2.4	<b>112</b>	112BL4
155	9	305	1.5	<b>90</b>	112BL4
141	9.9	335	1	<b>71*</b>	112BL4
140	10.0	355	2.8	<b>100</b>	112BL4
140	10.0	355	1.4	<b>80</b>	112BL4
138	10.1	343	1.5	<b>90</b>	112BL4
123	11.4	384	0.9	<b>71*</b>	112BL4
122	11.5	387	1.3	<b>90</b>	112BL4
119	11.8	397	2.1	<b>112</b>	112BL4
117	11.9	426	1.3	<b>80</b>	112BL4
117	24.6	426	2.6	<b>100</b>	112 B2
115	12.2	434	2.3	<b>100</b>	112BL4
108	13	439	1.2	<b>90</b>	112BL4
107	13.1	443	2	<b>112</b>	112BL4
100	14	472	1.2	<b>90</b>	112BL4
100	13.9	471	0.8	<b>71*</b>	112BL4
96	14.6	522	2.2	<b>100</b>	112BL4
96	14.6	522	1.2	<b>80</b>	112BL4
89	15.7	531	1.4	<b>90</b>	112BL4
87	16.1	544	2.1	<b>112</b>	112BL4
84	16.7	594	1.0	<b>80</b>	112BL4
83	17.0	605	2.0	<b>100</b>	112BL4
79	17.7	599	1.3	<b>90</b>	112BL4

**1.7 Gearmotors performances**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

**5.5 kW** $n_1=2880\text{ min}^{-1}$   
 $n_1=1400\text{ min}^{-1}$ 112B 2  
112BL 4

78	17.9	633	2.8	<b>132</b>	112BL4
78	17.9	606	2	<b>112</b>	112BL4
70	20.1	680	1.2	<b>90</b>	112BL4
69	20.3	714	2.8	<b>132</b>	112BL4
67	20.9	706	1.8	<b>112</b>	112BL4
66	21.2	756	2.8	<b>125</b>	112BL4
66	21.2	756	1.5	<b>100</b>	112BL4
66	21.2	756	0.8	<b>80</b>	112BL4
65	21.7	764	2.9	<b>132</b>	112BL4
63	22.3	751	2.3	<b>112</b>	112BL4
61	23	776	1.1	<b>90</b>	112BL4
59	23.6	798	1.7	<b>112</b>	112BL4
58	24.3	858	2.7	<b>132</b>	112BL4
57	24.6	876	2.6	<b>125</b>	112BL4
57	24.6	876	1.4	<b>100</b>	112BL4
55	25.6	864	1.6	<b>112</b>	112BL4
55	25.7	866	1	<b>90</b>	112BL4
51	27.5	968	2.8	<b>132</b>	112BL4
49	28.8	974	0.9	<b>90</b>	112BL4
48	29.4	993	1.8	<b>112</b>	112BL4
45	31.0	1106	1.0	<b>100</b>	112BL4
45	31.2	1100	2.9	<b>132</b>	112BL4
44	31.9	1139	2.0	<b>125</b>	112BL4
43	32.8	1107	1.6	<b>112</b>	112BL4
43	32.5	1099	0.8	<b>90</b>	112BL4
39	36.3	1280	2.7	<b>132</b>	112BL4
37	38.2	1291	1.4	<b>112</b>	112BL4
35	40.5	1442	1.4	<b>125</b>	112BL4
34	40.7	1451	2.8	<b>140</b>	112BL4
34	41.7	1472	2.4	<b>132</b>	112BL4
33	42.6	1504	3.3	<b>150</b>	112BL4
32	43.2	1458	1.2	<b>112</b>	112BL4
31	44.9	1585	2.2	<b>132</b>	112BL4
30	46.0	1624	3.1	<b>150</b>	112BL4
30	46.8	1579	1.1	<b>112</b>	112BL4
27	51.3	1828	2.5	<b>140</b>	112BL4
27	52.6	1874	1.2	<b>125</b>	112BL4
27	52.6	1856	1.9	<b>132</b>	112BL4
26	53.4	1802	1	<b>112</b>	112BL4
26	54.3	1914	2.6	<b>150</b>	112BL4
25	113.9	1953	3.5	<b>170</b>	112B 2
24	57.3	2021	1.7	<b>132</b>	112BL4
24	57.4	2046	2.1	<b>140</b>	112BL4
24	58.0	2068	1.0	<b>125</b>	112BL4
24	57.2	1933	0.9	<b>112</b>	112BL4
22	64.6	2180	0.8	<b>112</b>	112BL4
21	65.1	2297	1.5	<b>132</b>	112BL4
21	66.7	2353	2.1	<b>150</b>	112BL4
20	68.9	2430	3.1	<b>170</b>	112BL4
19	72.3	2578	1.6	<b>140</b>	112BL4
18.7	75.0	2646	2.8	<b>170</b>	112BL4
18.4	76.3	2690	1.3	<b>132</b>	112BL4
17.1	81.7	2882	2.6	<b>170</b>	112BL4
16.9	83.0	2928	1.2	<b>132</b>	112BL4
16.3	86.0	3034	1.6	<b>150</b>	112BL4
15.7	89.4	3154	2.4	<b>170</b>	112BL4
15.4	90.8	3204	1.1	<b>132</b>	112BL4
14.8	94.6	3336	1.5	<b>150</b>	112BL4
14.1	99.4	3506	1.0	<b>132</b>	112BL4

**1.7 Leistungen der Getriebemotoren**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

**5.5 kW** $n_1=2880\text{ min}^{-1}$   
 $n_1=1400\text{ min}^{-1}$ 112B 2  
112BL 4

13.8	101.7	3587	1.4	<b>150</b>	112BL4
12.8	109.4	3858	0.9	<b>132</b>	112BL4
12.8	109.8	3872	1.3	<b>150</b>	112BL4
11.3	124.1	4375	1.7	<b>170</b>	112BL4
11.2	125.5	4427	0.8	<b>132</b>	112BL4
9.9	141.6	4993	1.0	<b>150</b>	112BL4
7.9	178.1	6279	1.1	<b>170</b>	112BL4



### 1.7 Prestazioni motoriduttori

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>7.5 kW</b>	$n_1 = 2860 \text{ min}^{-1}$	112BL 2
	$n_1 = 1440 \text{ min}^{-1}$	132M 4

555	5.2	122.6	2.3	<b>80</b>	112BL2
417	6.9	155	1.4	<b>71*</b>	112BL 2
402	7.1	169.2	2.1	<b>80</b>	112BL2
396	7.2	163	2	<b>90*</b>	112BL 2
374	7.7	172	3.1	<b>112</b>	112BL 2
340	8.4	189	1.3	<b>71*</b>	112BL 2
322	8.9	200	2.9	<b>112</b>	112BL 2
317	9	204	1.7	<b>90*</b>	112BL 2
288	9.9	224	1.2	<b>71*</b>	112BL 2
287	10.0	237.1	1.9	<b>80</b>	112BL2
282	10.1	229	1.6	<b>90*</b>	112BL 2
280	5.2	243.4	2.1	<b>100</b>	132M4
251	11.4	256	1.1	<b>71*</b>	112BL 2
250	11.5	258	1.5	<b>90*</b>	112BL 2
243	11.8	265	2.6	<b>112</b>	112BL 2
239	11.9	284.1	1.8	<b>80</b>	112BL2
220	13	293	1.4	<b>90*</b>	112BL 2
218	13.1	295	2.4	<b>112</b>	112BL 2
205	13.9	314	1	<b>71*</b>	112BL 2
200	7.2	323	1.3	<b>90*</b>	132M 4
195	14.6	348.2	3.0	<b>100</b>	112BL2
195	14.6	348.2	1.6	<b>80</b>	112BL2
194	7.4	350.4	2.2	<b>100</b>	132M4
188	7.7	343	2	<b>112</b>	132M 4
178	16.1	363	2.6	<b>112</b>	112BL 2
172	16.7	396.7	1.4	<b>80</b>	112BL2
169	17.0	403.6	2.7	<b>100</b>	112BL2
162	8.9	398	1.8	<b>112</b>	132M 4
159	9	404	1.1	<b>90*</b>	132M 4
144	10.0	471.0	2.1	<b>100</b>	132M4
142	10.1	454	1.1	<b>90*</b>	132M 4
135	21.2	504.7	2.1	<b>100</b>	112BL2
135	21.2	504.7	1.1	<b>80</b>	112BL2
126	11.5	513	1	<b>90*</b>	132M 4
122	11.8	526	1.6	<b>112</b>	132M 4
118	12.2	574.8	1.7	<b>100</b>	132M4
111	13	582	0.9	<b>90*</b>	132M 4
110	13.1	587	1.5	<b>112</b>	132M 4
103	14	626	0.9	<b>90*</b>	132M 4
98	14.6	691.6	1.7	<b>100</b>	132M4
92	15.7	704	1	<b>90*</b>	132M 4
90	16.0	747	2.3	<b>132</b>	132M 4
89	16.1	721	1.6	<b>112</b>	132M 4
85	17.0	802	2.9	<b>125</b>	132M4
85	17.0	802	1.5	<b>100</b>	132M4
81	17.7	794	0.9	<b>90*</b>	132M 4
80	17.9	839	2.1	<b>132</b>	132M 4
80	17.9	803	1.6	<b>112</b>	132M 4
72	20.1	901	0.9	<b>90*</b>	132M 4
71	20.3	947	2.1	<b>132</b>	132M 4
69	20.9	937	1.4	<b>112</b>	132M 4
68	21.2	1002	2.1	<b>125</b>	132M4
68	21.2	1002	1.1	<b>100</b>	132M4
67	21.7	1012	2.2	<b>132</b>	132M 4
65	22.3	996	1.8	<b>112</b>	132M 4
63	23	1029	0.8	<b>90*</b>	132M 4
61	23.6	1058	1.3	<b>112</b>	132M 4
59	24.3	1137	2.0	<b>132</b>	132M 4
59	24.6	1162	2.0	<b>125</b>	132M4

### 1.7 Gearmotors performances

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>7.5 kW</b>	$n_1 = 2860 \text{ min}^{-1}$	112BL 2
	$n_1 = 1440 \text{ min}^{-1}$	132M 4

59	24.6	1162	1.0	<b>100</b>	132M4
56	25.6	1146	1.2	<b>112</b>	132M 4
56	25.7	1149	0.8	<b>90*</b>	132M 4
52	27.5	1283	2.1	<b>132</b>	132M 4
51	28.0	1324	3.8	<b>160</b>	132M4
49	29.4	1317	1.3	<b>112</b>	132M 4
48	30.3	1416	3.5	<b>150</b>	132M 4
47	30.5	1442	5.1	<b>180</b>	132M4
47	30.5	1442	3.7	<b>160</b>	132M4
46	31.0	1466	0.8	<b>100</b>	132M4
46	31.2	1458	2.2	<b>132</b>	132M 4
45	31.9	1509	1.5	<b>125</b>	132M4
44	32.8	1468	1.2	<b>112*</b>	132M 4
43	33.4	1578	5.1	<b>180</b>	132M4
43	33.4	1578	3.8	<b>160</b>	132M4
43	33.4	1578	2.8	<b>140</b>	132M4
42	34.5	1613	3.1	<b>150</b>	132M 4
40	36.3	1697	2.1	<b>132</b>	132M 4
39	36.7	1736	5.1	<b>180</b>	132M4
39	36.7	1736	3.7	<b>160</b>	132M4
39	36.9	1726	2.9	<b>150</b>	132M 4
38	38.2	1711	1	<b>112*</b>	132M 4
36	40.5	1912	1.1	<b>125</b>	132M4
35	40.7	1924	5.1	<b>180</b>	132M4
35	40.7	1924	3.5	<b>160</b>	132M4
35	40.7	1924	2.1	<b>140</b>	132M4
35	41.7	1951	1.8	<b>132</b>	132M 4
34	42.6	1994	2.5	<b>150</b>	132M 4
33	43.2	1933	0.9	<b>112</b>	132M 4
32	44.9	2101	1.7	<b>132</b>	132M 4
32	45.6	2130	3.5	<b>170</b>	132M 4
31	46.0	2152	2.3	<b>150</b>	132M 4
29	49.8	2331	3.2	<b>170</b>	132M 4
28	51.3	2423	1.9	<b>140</b>	132M4
27	52.6	2484	0.9	<b>125</b>	132M4
27	52.6	2461	1.4	<b>132</b>	132M 4
27	54.3	2538	2.0	<b>150</b>	132M 4
27	54.3	2538	3.0	<b>170</b>	132M 4
25	57.3	2679	1.3	<b>132</b>	132M 4
25	57.4	2712	1.5	<b>140</b>	132M4
24	59.4	2775	1.8	<b>150</b>	132M 4
22	64.0	2994	3.5	<b>190</b>	132M 4
22	64.0	2994	2.5	<b>170</b>	132M 4
22	65.1	3045	1.1	<b>132</b>	132M 4
22	66.7	3119	1.6	<b>150</b>	132M 4
21	68.9	3222	3.3	<b>190</b>	132M 4
21	68.9	3222	2.3	<b>170</b>	132M 4
20	72.3	3417	1.2	<b>140</b>	132M4
19.2	75.0	3508	2.1	<b>170</b>	132M 4
19.2	75.0	3508	3.0	<b>190</b>	132M 4
18.9	76.3	3566	1.0	<b>132</b>	132M 4
18.3	78.7	3678	1.4	<b>150</b>	132M 4
17.6	81.7	3821	2.7	<b>190</b>	132M 4
17.6	81.7	3821	2.0	<b>170</b>	132M 4
17.3	83.0	3882	0.9	<b>132</b>	132M 4
16.7	86.0	4022	1.2	<b>150</b>	132M 4
16.1	89.4	4181	2.5	<b>190</b>	132M 4
16.1	89.4	4181	1.8	<b>170</b>	132M 4
15.9	90.8	4247	0.8	<b>132</b>	132M 4

### 1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>7.5 kW</b>	$n_1 = 2860 \text{ min}^{-1}$	112BL 2
	$n_1 = 1440 \text{ min}^{-1}$	132M 4

15.2	94.6	4423	1.1	<b>150</b>	132M 4
14.7	97.9	4575	2.3	<b>190</b>	132M 4
14.6	98.4	4601	1.6	<b>170</b>	132M 4
14.5	99.4	4648	0.8	<b>132</b>	132M 4
14.2	101.7	4755	1.1	<b>150</b>	132M 4
13.2	109.4	5115	0.7	<b>132</b>	132M 4
13.1	109.8	5134	1.0	<b>150</b>	132M 4
12.6	113.9	5327	2.0	<b>190</b>	132M 4
12.6	113.9	5327	1.4	<b>170</b>	132M 4
11.6	124.1	5801	1.3	<b>170</b>	132M 4
11.6	124.1	5801	1.8	<b>190</b>	132M 4
11.1	129.5	6053	0.8	<b>150</b>	132M 4
10.6	135.8	6348	1.7	<b>190</b>	132M 4
10.6	135.8	6348	1.2	<b>170</b>	132M 4
10.2	141.6	6619	0.8	<b>150</b>	132M 4
9.7	147.8	6913	1.5	<b>190</b>	132M 4
9.6	149.4	6986	1.1	<b>170</b>	132M 4
9.2	155.7	7280	0.7	<b>150</b>	132M 4
8.9	162.7	7607	1.4	<b>190</b>	132M 4
8.9	162.7	7607	1.0	<b>170</b>	132M 4
8.1	178.1	8325	1.2	<b>190</b>	132M 4
8.1	178.1	8325	0.8	<b>170</b>	132M 4
7.3	196.0	9162	1.1	<b>190</b>	132M 4
7.3	196.0	9162	0.7	<b>170</b>	132M 4



$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

9.2 kW		$n_1 = 1450 \text{ min}^{-1}$		132ML 4	
--------	--	-------------------------------	--	---------	--

281	5.2	293	1.7	<b>100</b>	132ML4
201	7.2	393	1.1	<b>90*</b>	132ML 4
196	7.4	422	3.1	<b>125</b>	132ML4
196	7.4	422	1.8	<b>100</b>	132ML4
189	7.7	417	1.6	<b>112</b>	132ML 4
163	8.9	485	1.5	<b>112</b>	132ML 4
161	9	492	0.9	<b>90*</b>	132ML 4
145	10.0	568	1.7	<b>100</b>	132ML4
143	10.1	553	0.9	<b>90*</b>	132ML 4
143	10.2	579	3.1	<b>125</b>	132ML4
127	11.5	625	0.8	<b>90*</b>	132ML 4
123	11.8	641	1.3	<b>112</b>	132ML 4
119	12.2	693	2.7	<b>125</b>	132ML4
119	12.2	693	1.4	<b>100</b>	132ML4
111	13.1	715	1.2	<b>112</b>	132ML 4
99	14.6	834	2.6	<b>125</b>	132ML4
99	14.6	834	1.4	<b>100</b>	132ML4
92	15.7	895	3.0	<b>150</b>	132ML 4
92	15.7	857	0.8	<b>90*</b>	132ML 4
91	16.0	910	1.9	<b>132</b>	132ML 4
90	16.1	878	1.3	<b>112</b>	132ML 4
85	17.0	966	2.4	<b>125</b>	132ML4
85	17.0	966	1.2	<b>100</b>	132ML4
82	17.7	968	0.8	<b>90*</b>	132ML 4
81	17.9	979	1.3	<b>112</b>	132ML 4
81	17.9	1022	1.8	<b>132</b>	132ML 4
78	18.6	1061	3.0	<b>150</b>	132ML 4
72	20.3	1153	1.7	<b>132</b>	132ML 4
69	20.9	1141	1.1	<b>112</b>	132ML 4
68	21.2	1208	1.8	<b>125</b>	132ML4
68	21.2	1208	1.0	<b>100</b>	132ML4
67	21.6	1228	3.2	<b>150</b>	132ML 4
67	21.7	1233	1.8	<b>132</b>	132ML 4
63	22.9	1302	3.2	<b>150</b>	132ML 4
61	23.6	1288	1	<b>112</b>	132ML 4
60	24.3	1385	1.7	<b>132</b>	132ML 4
59	24.6	1400	1.6	<b>125</b>	132ML4
59	24.6	1400	0.9	<b>100</b>	132ML4
59	24.6	1402	3.1	<b>140</b>	132ML4
57	25.6	1395	1	<b>112</b>	132ML 4
56	25.9	1472	3.1	<b>150</b>	132ML 4
53	27.5	1563	1.7	<b>132</b>	132ML 4
52	28.0	1596	3.1	<b>160</b>	132ML4
49	29.4	1604	1.1	<b>112</b>	132ML 4
48	30.3	1725	2.9	<b>150</b>	132ML 4
48	30.5	1738	4.3	<b>180</b>	132ML4
48	30.5	1738	3.1	<b>160</b>	132ML4
47	31.2	1776	1.8	<b>132</b>	132ML 4
45	31.9	1819	1.2	<b>125</b>	132ML4
44	32.8	1788	1	<b>112</b>	132ML 4
43	33.4	1902	4.3	<b>180</b>	132ML4
43	33.4	1902	3.2	<b>160</b>	132ML4
43	33.4	1902	2.3	<b>140</b>	132ML4
42	34.5	1964	2.5	<b>150</b>	132ML 4
40	36.3	2067	1.7	<b>132</b>	132ML 4
39	36.7	2093	4.3	<b>180</b>	132ML4
39	36.7	2093	3.1	<b>160</b>	132ML4
39	36.9	2103	2.4	<b>150</b>	132ML 4
38	38.2	2085	0.8	<b>112</b>	132ML 4
36	40.5	2304	0.9	<b>125</b>	132ML4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

9.2 kW		$n_1 = 1450 \text{ min}^{-1}$		132ML 4	
--------	--	-------------------------------	--	---------	--

36	40.7	2319	4.2	<b>180</b>	132ML4
36	40.7	2319	2.9	<b>160</b>	132ML4
36	40.7	2319	1.8	<b>140</b>	132ML4
35	41.7	2377	1.5	<b>132</b>	132ML 4
35	41.8	2383	3.1	<b>170</b>	132ML 4
34	42.6	2429	2.1	<b>150</b>	132ML 4
32	44.9	2559	1.4	<b>132</b>	132ML 4
32	45.6	2595	2.9	<b>170</b>	132ML 4
31	46.0	2622	1.9	<b>150</b>	132ML 4
29	49.8	2839	2.6	<b>170</b>	132ML 4
28	51.3	2921	1.5	<b>140</b>	132ML4
28	52.6	2994	0.8	<b>125</b>	132ML4
28	52.6	2997	1.2	<b>132</b>	132ML 4
27	54.3	3092	1.6	<b>150</b>	132ML 4
27	54.3	3092	3.4	<b>190</b>	132ML 4
27	54.3	3092	2.4	<b>170</b>	132ML 4
25	57.3	3263	1.1	<b>132</b>	132ML 4
25	57.4	3270	1.3	<b>140</b>	132ML4
24	59.4	3381	1.5	<b>150</b>	132ML 4
23	64.0	3648	2.9	<b>190</b>	132ML 4
23	64.0	3648	2.1	<b>170</b>	132ML 4
22	65.1	3709	0.9	<b>132</b>	132ML 4
22	66.7	3800	1.3	<b>150</b>	132ML 4
21	68.9	3925	2.7	<b>190</b>	132ML 4
21	68.9	3925	1.9	<b>170</b>	132ML 4
20	72.3	4119	1.0	<b>140</b>	132ML4
19.3	75.0	4274	1.8	<b>170</b>	132ML 4
19	75.0	4274	2.5	<b>190</b>	132ML 4
19.0	76.3	4344	0.8	<b>132</b>	132ML 4
18.4	78.7	4481	1.1	<b>150</b>	132ML 4
17.7	81.7	4654	2.3	<b>190</b>	132ML 4
18	81.7	4654	1.6	<b>170</b>	132ML 4
17.5	83.0	4730	0.7	<b>132</b>	132ML 4
16.9	86.0	4900	1.0	<b>150</b>	132ML 4
16.2	89.4	5093	2.1	<b>190</b>	132ML 4
16.2	89.4	5093	1.5	<b>170</b>	132ML 4
16.0	90.8	5174	0.7	<b>132</b>	132ML 4
15.3	94.6	5389	0.9	<b>150</b>	132ML 4
14.8	97.9	5574	1.9	<b>190</b>	132ML 4
14.7	98.4	5605	1.3	<b>170</b>	132ML 4
14.3	101.7	5793	0.9	<b>150</b>	132ML 4
13.2	109.8	6254	0.8	<b>150</b>	132ML 4
12.7	113.9	6489	1.6	<b>190</b>	132ML 4
12.7	113.9	6489	1.2	<b>170</b>	132ML 4
11.7	124.1	7066	1.1	<b>170</b>	132ML 4
11.7	124.1	7066	1.5	<b>190</b>	132ML 4
11.2	129.5	7374	0.7	<b>150</b>	132ML 4
10.7	135.8	7733	1.4	<b>190</b>	132ML 4
10.7	135.8	7733	1.0	<b>170</b>	132ML 4
9.8	147.8	8421	1.2	<b>190</b>	132ML 4
9.7	149.4	8510	0.9	<b>170</b>	132ML 4
8.9	162.7	9268	1.1	<b>190</b>	132ML 4
8.9	162.7	9268	0.8	<b>170</b>	132ML 4
8.1	178.1	10141	1.0	<b>190</b>	132ML 4
8.1	178.1	10141	0.7	<b>170</b>	132ML 4
7.4	196.0	11161	0.9	<b>190</b>	132ML 4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--



1.7 Prestazioni motoriduttori

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>11 kW</b>	$n_1= 2940 \text{ min}^{-1}$ $n_1= 1455 \text{ min}^{-1}$	132M 2 160M 4
--------------	--	------------------

571	5.2	175	2.6	<b>100</b>	132M2
407	7.2	232	1.4	<b>90*</b>	132M 2
397	7.4	252	2.8	<b>100</b>	132M2
384	7.7	246	2.2	<b>112*</b>	132M 2
331	8.9	286	2	<b>112*</b>	132M 2
326	9	290	1.2	<b>90*</b>	132M 2
295	10.0	338	2.7	<b>100</b>	132M2
290	10.1	326	1.1	<b>90*</b>	132M 2
282	5.2	353	2.8	<b>125</b>	160M4
257	11.5	368	1.1	<b>90*</b>	132M 2
250	11.8	378	1.8	<b>112*</b>	132M 2
242	12.2	413	2.2	<b>100</b>	132M2
226	13	418	1	<b>90*</b>	132M 2
224	13.1	422	1.7	<b>112*</b>	132M 2
210	14	450	1.2	<b>90*</b>	132M 2
201	14.6	497	2.1	<b>100</b>	132M2
196	7.4	509	2.6	<b>125</b>	160M4
190	7.7	497	1.3	<b>112*</b>	160M 4
173	17.0	576	1.9	<b>100</b>	132M2
164	8.9	578	1.2	<b>112*</b>	160M 4
146	20.1	647	0.9	<b>90*</b>	132M 2
143	10.2	697	2.6	<b>125</b>	160M4
139	21.2	720	2.7	<b>125</b>	132M2
139	21.2	720	1.5	<b>100</b>	132M2
132	22.3	716	1.9	<b>112*</b>	132M 2
124	11.8	764	1.1	<b>112*</b>	160M 4
120	12.2	834	2.3	<b>125</b>	160M4
120	24.6	834	2.5	<b>125</b>	132M2
120	24.6	834	1.3	<b>100</b>	132M2
111	13.1	852	1	<b>112*</b>	160M 4
99	14.6	1004	2.1	<b>125</b>	160M4
95	31.0	1053	1.0	<b>100</b>	132M2
93	15.7	1066	2.5	<b>150</b>	160M 4
92	31.9	1084	1.9	<b>125</b>	132M2
91	16.0	1084	1.6	<b>132</b>	160M 4
90	16.1	1046	1.1	<b>112*</b>	160M 4
86	17.0	1163	2.0	<b>125</b>	160M4
81	17.9	1218	1.5	<b>132</b>	160M 4
81	17.9	1166	1.1	<b>112*</b>	160M 4
78	18.6	1264	2.5	<b>150</b>	160M 4
72	20.2	1385	3.0	<b>140</b>	160M4
72	20.3	1374	1.5	<b>132</b>	160M 4
70	20.9	1360	0.9	<b>112*</b>	160M 4
69	21.2	1455	1.5	<b>125</b>	160M4
68	21.6	1463	2.7	<b>150</b>	160M 4
67	21.7	1469	1.5	<b>132</b>	160M 4
65	22.3	1446	1.2	<b>112*</b>	160M 4
64	22.9	1552	2.7	<b>150</b>	160M 4
62	23.6	1535	0.9	<b>112*</b>	160M 4
60	24.3	1650	1.4	<b>132</b>	160M 4
59	24.6	1686	1.4	<b>125</b>	160M4
59	24.6	1689	2.5	<b>140</b>	160M4
57	25.6	1663	0.8	<b>112*</b>	160M 4
56	25.9	1755	2.6	<b>150</b>	160M 4
53	27.5	1863	1.4	<b>132</b>	160M 4
52	28.0	1922	2.6	<b>160</b>	160M4
51	28.8	1955	3.8	<b>170</b>	160M 4
49	29.4	1912	0.9	<b>112*</b>	160M 4
48	30.3	2056	2.4	<b>150</b>	160M 4
48	30.5	2093	3.5	<b>180</b>	160M4

1.7 Gearmotors performances

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>11 kW</b>	$n_1= 2940 \text{ min}^{-1}$ $n_1= 1455 \text{ min}^{-1}$	132M 2 160M 4
--------------	--	------------------

48	30.5	2093	2.6	<b>160</b>	160M4
47	30.9	2094	3.6	<b>170</b>	160M 4
47	31.2	2116	1.5	<b>132</b>	160M 4
46	31.9	2191	1.0	<b>125</b>	160M4
44	32.8	2131	0.8	<b>112*</b>	160M 4
44	33.4	2290	3.5	<b>180</b>	160M4
44	33.4	2290	2.6	<b>160</b>	160M4
44	33.4	2290	1.9	<b>140</b>	160M4
42	34.5	2341	2.1	<b>150</b>	160M 4
41	35.7	2423	3.1	<b>170</b>	160M 4
41	72.3	2455	1.5	<b>140</b>	132M2
40	36.3	2463	1.4	<b>132</b>	160M 4
40	36.7	2520	3.5	<b>180</b>	160M4
40	36.7	2520	2.6	<b>160</b>	160M4
39	36.9	2506	2.0	<b>150</b>	160M 4
36	40.7	2792	3.5	<b>180</b>	160M4
36	40.7	2792	2.4	<b>160</b>	160M4
36	40.7	2792	1.5	<b>140</b>	160M4
35	41.7	2832	1.2	<b>132</b>	160M 4
35	41.8	2839	3.7	<b>190</b>	160M 4
35	41.8	2839	2.6	<b>170</b>	160M 4
34	42.6	2894	1.7	<b>150</b>	160M 4
32	44.9	3050	1.1	<b>132</b>	160M 4
32	45.6	3092	3.4	<b>190</b>	160M 4
32	45.6	3092	2.4	<b>170</b>	160M 4
32	46.0	3124	1.6	<b>150</b>	160M 4
29	49.8	3383	3.1	<b>190</b>	160M 4
29	49.8	3383	2.2	<b>170</b>	160M 4
28	51.3	3518	1.3	<b>140</b>	160M4
28	52.6	3572	1.0	<b>132</b>	160M 4
27	54.3	3684	1.4	<b>150</b>	160M 4
27	54.3	3684	2.9	<b>190</b>	160M 4
27	54.3	3684	2.0	<b>170</b>	160M 4
25	57.3	3888	0.9	<b>132</b>	160M 4
25	57.4	3937	1.1	<b>140</b>	160M4
25	59.4	4028	1.2	<b>150</b>	160M 4
23	64.0	4346	2.4	<b>190</b>	160M 4
23	64.0	4346	1.7	<b>170</b>	160M 4
22	65.1	4420	0.8	<b>132</b>	160M 4
22	66.7	4528	1.1	<b>150</b>	160M 4
21	68.9	4677	2.2	<b>190</b>	160M 4
21	68.9	4677	1.6	<b>170</b>	160M 4
20	72.3	4960	0.8	<b>140</b>	160M4
19.4	75.0	5093	1.5	<b>170</b>	160M 4
19.4	75.0	5093	2.1	<b>190</b>	160M 4
19.1	76.3	5176	0.7	<b>132</b>	160M 4
18.5	78.7	5339	0.9	<b>150</b>	160M 4
17.8	81.7	5546	1.9	<b>190</b>	160M 4
17.8	81.7	5546	1.4	<b>170</b>	160M 4
16.9	86.0	5838	0.9	<b>150</b>	160M 4
16.3	89.4	6069	1.7	<b>190</b>	160M 4
16.3	89.4	6069	1.2	<b>170</b>	160M 4
15.4	94.6	6421	0.8	<b>150</b>	160M 4
14.9	97.9	6641	1.6	<b>190</b>	160M 4
14.8	98.4	6679	1.1	<b>170</b>	160M 4
14.3	101.7	6902	0.7	<b>150</b>	160M 4
13.3	109.8	7452	0.7	<b>150</b>	160M 4
12.8	113.9	7732	1.4	<b>190</b>	160M 4
12.8	113.9	7732	1.0	<b>170</b>	160M 4
11.7	124.1	8420	0.9	<b>170</b>	160M 4

1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>11 kW</b>	$n_1= 2940 \text{ min}^{-1}$ $n_1= 1455 \text{ min}^{-1}$	132M 2 160M 4
--------------	--	------------------

11.7	124.1	8420	1.2	<b>190</b>	160M 4
10.7	135.8	9214	1.1	<b>190</b>	160M 4
10.7	135.8	9214	0.8	<b>170</b>	160M 4
9.8	147.8	10034	1.0	<b>190</b>	160M 4
9.7	149.4	10140	0.7	<b>170</b>	160M 4
8.9	162.7	11043	1.0	<b>190</b>	160M 4
8.9	162.7	11043	0.7	<b>170</b>	160M 4
8.2	178.1	12084	0.8	<b>190</b>	160M 4
7.4	196.0	13299	0.8	<b>190</b>	160M 4





1.7 Prestazioni motoriduttori

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>15 kW</b>		$n_1=2900\text{ min}^{-1}$ $n_1=1455\text{ min}^{-1}$	132ML 2 160L 4
--------------	--	--	-------------------

563	5.2	242	1.9	100*	132ML2
402	7.2	321	1	90*	132ML 2
391	7.4	348	2.0	100*	132ML2
379	7.7	340	1.6	112*	132ML 2
326	8.9	395	1.5	112*	132ML 2
321	9	401	0.9	90*	132ML 2
291	10.0	468	1.9	100*	132ML 2
286	10.1	451	0.8	90*	132ML 2
282	5.2	482	2.1	125	160L4
253	11.5	509	0.8	90*	132ML 2
247	11.8	523	1.3	112*	132ML 2
238	12.2	571	3.0	125	132ML2
238	12.2	571	1.6	100*	132ML2
221	13.1	583	1.2	112*	132ML 2
207	14	622	0.8	90*	132ML 2
198	14.6	687	2.9	125	132ML2
198	14.6	687	1.5	100*	132ML2
196	7.4	693	1.9	125	160L4
190	7.7	678	1	112*	160L 4
185	15.7	729	3.4	150	132ML 2
182	16.0	742	2.1	132	132ML 2
171	17.0	796	2.6	125	132ML2
171	17.0	796	1.4	100*	132ML2
164	8.9	788	0.9	112*	160L 4
162	17.9	833	2.0	132	132ML 2
156	18.6	865	3.4	150	132ML 2
143	10.2	950	1.9	125	160L4
143	20.3	940	1.9	132	132ML 2
139	20.9	930	1.1	112*	132ML 2
137	21.2	995	2.0	125	132ML2
137	21.2	995	1.1	100*	132ML2
134	21.7	1005	2.0	132	132ML 2
130	22.3	989	1.4	112*	132ML 2
124	11.8	1042	0.8	112*	160L 4
120	12.2	1138	1.7	125	160L4
119	24.3	1129	1.9	132	132ML 2
118	24.6	1154	1.8	125	132ML2
118	24.6	1154	1.0	100*	132ML2
113	25.6	1138	1	112*	132ML 2
112	25.9	1200	3.4	150	132ML 2
106	27.5	1275	1.9	132	132ML 2
99	14.6	1369	1.6	125	160L4
97	14.9	1398	3.0	140	160L4
95	30.5	1431.6	3.4	160	132ML2
94	15.5	1433	3.2	170	160L 4
93	15.7	1454	1.9	150	160L 4
91	16.0	1478	1.2	132	160L 4
90	16.1	1427	0.8	112*	160L 4
87	33.4	1567	3.4	160	132ML2
86	17.0	1587	1.4	125	160L4
83	17.5	1618	3.1	170	160L 4
81	17.9	1660	1.1	132	160L 4
81	17.9	1590	0.8	112*	160L 4
79	36.7	1724	3.4	160	132ML2
78	18.6	1724	3.2	170	160L 4
78	18.6	1724	1.9	150	160L 4
72	20.2	1889	2.2	140	160L4
72	20.3	1874	1.1	132	160L 4
71	40.7	1910	3.2	160	132ML2
69	21.2	1984	1.1	125	160L4
68	21.6	1995	2.0	150	160L 4
67	21.7	2004	1.1	132	160L 4
65	22.3	1972	0.9	112*	160L 4
64	22.9	2116	2.0	150	160L 4
61	23.7	2194	3.2	170	160L 4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>15 kW</b>		$n_1=2900\text{ min}^{-1}$ $n_1=1455\text{ min}^{-1}$	132ML 2 160L 4
--------------	--	--	-------------------

60	24.3	2251	1.0	132	160L 4
59	24.6	2299	1.0	125	160L4
59	24.6	2303	3.0	160	160L4
59	24.6	2303	1.9	140	160L4
58	25.2	2337	3.2	170	160L 4
56	25.9	2393	1.9	150	160L 4
53	27.5	2540	1.1	132	160L 4
52	28.0	2620	1.9	160	160L4
51	28.8	2665	2.8	170	160L 4
48	30.3	2803	1.8	150	160L 4
48	30.5	2853	2.6	180	160L4
48	30.5	2853	1.9	160	160L4
47	30.9	2856	3.6	190	160L 4
47	30.9	2856	2.6	170	160L 4
47	31.2	2885	1.1	132	160L 4
46	31.9	2988	0.8	125	160L4
44	33.4	3122	2.6	180	160L4
44	33.4	3122	1.9	160	160L4
44	33.4	3122	1.4	140	160L4
42	34.5	3192	1.6	150	160L 4
41	35.7	3304	3.2	190	160L 4
41	35.7	3304	2.3	170	160L 4
40	36.3	3358	1.0	132	160L 4
40	36.7	3436	2.6	180	160L4
40	36.7	3436	1.9	160	160L4
39	36.9	3417	1.5	150	160L 4
36	40.7	3807	2.6	180	160L4
36	40.7	3807	1.8	160	160L4
36	40.7	3807	1.1	140	160L4
35	41.7	3862	0.9	132	160L 4
35	41.8	3871	2.7	190	160L 4
35	41.8	3871	1.9	170	160L 4
34	42.6	3946	1.3	150	160L 4
32	44.9	4159	0.8	132	160L 4
32	45.6	4216	2.5	190	160L 4
32	45.6	4216	1.8	170	160L 4
32	46.0	4260	1.2	150	160L 4
29	49.8	4613	2.3	190	160L 4
29	49.8	4613	1.6	170	160L 4
28	51.3	4797	0.9	140	160L4
28	52.6	4870	0.7	132	160L 4
27	54.3	5024	1.0	150	160L 4
27	54.3	5024	2.1	190	160L 4
27	54.3	5024	1.5	170	160L 4
25	57.3	5302	0.7	132	160L 4
25	57.4	5369	0.8	140	160L4
25	59.4	5493	0.9	150	160L 4
23	64.0	5927	1.8	190	160L 4
23	64.0	5927	1.3	170	160L 4
22	66.7	6175	0.8	150	160L 4
21	68.9	6377	1.6	190	160L 4
21	68.9	6377	1.2	170	160L 4
19.4	75.0	6945	1.1	170	160L 4
19.4	75.0	6945	1.5	190	160L 4
18.5	78.7	7281	0.7	150	160L 4
17.8	81.7	7563	1.4	190	160L 4
17.8	81.7	7563	1.0	170	160L 4
16.3	89.4	8276	1.3	190	160L 4
16.3	89.4	8276	0.9	170	160L 4
14.9	97.9	9056	1.2	190	160L 4
14.8	98.4	9108	0.8	170	160L 4
12.8	113.9	10544	1.0	190	160L 4
12.8	113.9	10544	0.7	170	160L 4
11.7	124.1	11482	0.7	170	160L 4
11.7	124.1	11482	0.9	190	160L 4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>15 kW</b>		$n_1=2900\text{ min}^{-1}$ $n_1=1455\text{ min}^{-1}$	132ML 2 160L 4
--------------	--	--	-------------------

10.7	135.8	12564	0.8	190	160L 4
9.8	147.8	13683	0.8	190	160L 4
8.9	162.7	15058	0.7	190	160L 4



1.7 Prestazioni motoriduttori

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>18.5 kW</b>	$n_1 = 2910 \text{ min}^{-1}$	160L 2
	$n_1 = 1460 \text{ min}^{-1}$	180M 4
	$n_1 = 970 \text{ min}^{-1}$	200L 6

<b>18.5 kW</b>	$n_1 = 2910 \text{ min}^{-1}$	160L 2
	$n_1 = 1460 \text{ min}^{-1}$	180M 4
	$n_1 = 970 \text{ min}^{-1}$	200L 6

<b>18.5 kW</b>	$n_1 = 2910 \text{ min}^{-1}$	160L 2
	$n_1 = 1460 \text{ min}^{-1}$	180M 4
	$n_1 = 970 \text{ min}^{-1}$	200L 6

565	5.2	297	3.1	<b>125</b>	160L 2
392	7.4	428	2.8	<b>125</b>	160L 2
380	7.7	418	1.3	<b>112*</b>	160L 2
327	8.9	486	1.2	<b>112*</b>	160L 2
286	10.2	586	2.8	<b>125</b>	160L 2
283	5.2	608	1.6	<b>125</b>	180M 4
247	11.8	643	1.1	<b>112*</b>	160L 2
239	12.2	702	2.5	<b>125</b>	160L 2
222	13.1	716	1	<b>112*</b>	160L 2
199	14.6	844	2.3	<b>125</b>	160L 2
197	7.4	875	1.5	<b>125</b>	180M 4
185	15.7	897	2.8	<b>150</b>	160L 2
182	16.0	912	1.7	<b>132</b>	160L 2
181	16.1	880	1.1	<b>112*</b>	160L 2
172	17.0	978	2.2	<b>125</b>	160L 2
162	17.9	1024	1.6	<b>132</b>	160L 2
162	17.9	981	1	<b>112*</b>	160L 2
156	18.6	1063	2.8	<b>150</b>	160L 2
144	10.2	1199	1.5	<b>125</b>	180M 4
144	20.3	1156	1.6	<b>132</b>	160L 2
137	21.2	1223	1.6	<b>125</b>	160L 2
135	21.6	1230	2.9	<b>150</b>	160L 2
134	21.7	1236	1.6	<b>132</b>	160L 2
127	22.9	1305	2.9	<b>150</b>	160L 2
123	23.6	1291	0.9	<b>112*</b>	160L 2
120	12.2	1436	1.3	<b>125</b>	180M 4
120	24.3	1388	1.5	<b>132</b>	160L 2
119	12.3	1447	2.8	<b>140</b>	180M 4
118	24.6	1418	1.5	<b>125</b>	160L 2
118	24.6	1420	2.8	<b>140</b>	160L 2
114	25.6	1398	0.8	<b>112*</b>	160L 2
113	25.9	1475	2.8	<b>150</b>	160L 2
106	27.5	1567	1.6	<b>132</b>	160L 2
104	28.0	1616	2.8	<b>160</b>	160L 2
100	14.6	1728	1.2	<b>125</b>	180M 4
99	29.4	1608	0.9	<b>112*</b>	160L 2
98	14.9	1765	2.4	<b>140</b>	180M 4
96	30.3	1729	2.6	<b>150</b>	160L 2
95	30.5	1760	2.8	<b>160</b>	160L 2
94	15.5	1808	3.6	<b>190</b>	180M 4
94	15.5	1808	2.5	<b>170</b>	180M 4
93	15.7	1835	1.5	<b>150</b>	180M 4
91	16.0	1866	0.9	<b>132</b>	180M 4
87	33.4	1926	2.8	<b>160</b>	160L 2
86	17.0	2003	1.1	<b>125</b>	180M 4
83	17.5	2043	3.4	<b>190</b>	180M 4
83	17.5	2043	2.4	<b>170</b>	180M 4
81	17.9	2096	0.9	<b>132</b>	180M 4
78	18.6	2176	3.6	<b>190</b>	180M 4
78	18.6	2176	2.6	<b>170</b>	180M 4
78	18.6	2176	1.5	<b>150</b>	180M 4
72	20.2	2384	3.1	<b>160</b>	180M 4
72	20.2	2384	1.8	<b>140</b>	180M 4
72	20.3	2366	0.8	<b>132</b>	180M 4
69	21.2	2504	0.9	<b>125</b>	180M 4
68	21.6	2518	1.5	<b>150</b>	180M 4
67	21.7	2529	0.9	<b>132</b>	180M 4
66	22.2	2624	2.9	<b>160</b>	180M 4
64	22.9	2671	1.6	<b>150</b>	180M 4

62	23.7	2769	3.5	<b>190</b>	180M 4
62	23.7	2769	2.5	<b>170</b>	180M 4
60	24.3	2841	0.8	<b>132</b>	180M 4
59	24.6	2902	0.8	<b>125</b>	180M 4
59	24.6	2907	3.3	<b>180</b>	180M 4
59	24.6	2907	2.3	<b>160</b>	180M 4
59	24.6	2907	1.5	<b>140</b>	180M 4
58	25.2	2950	3.3	<b>190</b>	180M 4
58	25.2	2950	2.5	<b>170</b>	180M 4
56	25.9	3020	1.5	<b>150</b>	180M 4
53	27.5	3207	0.8	<b>132</b>	180M 4
52	28.0	3308	1.5	<b>160</b>	180M 4
51	28.8	3365	3.0	<b>190</b>	180M 4
51	28.8	3365	2.2	<b>170</b>	180M 4
48	30.3	3539	1.4	<b>150</b>	180M 4
48	30.5	3602	2.1	<b>180</b>	180M 4
48	30.5	3602	1.5	<b>160</b>	180M 4
47	30.9	3605	2.8	<b>190</b>	180M 4
47	30.9	3605	2.1	<b>170</b>	180M 4
47	31.2	3642	0.9	<b>132</b>	180M 4
44	33.4	3942	2.1	<b>180</b>	180M 4
44	33.4	3942	1.5	<b>160</b>	180M 4
44	33.4	3942	1.1	<b>140</b>	180M 4
42	34.5	4029	1.2	<b>150</b>	180M 4
41	35.7	4171	2.5	<b>190</b>	180M 4
41	35.7	4171	1.8	<b>170</b>	180M 4
40	36.3	4239	0.8	<b>132</b>	180M 4
40	36.7	4338	2.1	<b>180</b>	180M 4
40	36.7	4338	1.5	<b>160</b>	180M 4
40	36.9	4313	1.2	<b>150</b>	180M 4
36	40.7	4806	2.0	<b>180</b>	180M 4
36	40.7	4806	1.4	<b>160</b>	180M 4
36	40.7	4806	0.9	<b>140</b>	180M 4
35	41.7	4875	0.7	<b>132</b>	180M 4
35	41.8	4887	2.1	<b>190</b>	180M 4
35	41.8	4887	1.5	<b>170</b>	180M 4
34	42.6	4981	1.0	<b>150</b>	180M 4
32	44.9	5250	0.7	<b>132</b>	180M 4
32	45.6	5322	2.0	<b>190</b>	180M 4
32	45.6	5322	1.4	<b>170</b>	180M 4
32	30.5	5422	1.5	<b>180</b>	200L 6
32	30.5	5422	1.1	<b>160</b>	200L 6
32	46.0	5378	0.9	<b>150</b>	180M 4
29	49.8	5824	1.8	<b>190</b>	180M 4
29	49.8	5824	1.3	<b>170</b>	180M 4
29	33.4	5933	1.5	<b>180</b>	200L 6
29	33.4	5933	1.1	<b>160</b>	200L 6
27	54.3	6342	0.8	<b>150</b>	180M 4
27	54.3	6342	1.7	<b>190</b>	180M 4
27	54.3	6342	1.2	<b>170</b>	180M 4
26	36.7	6529	1.5	<b>180</b>	200L 6
26	36.7	6529	1.1	<b>160</b>	200L 6
25	59.4	6934	0.7	<b>150</b>	180M 4
24	40.7	7234	1.5	<b>180</b>	200L 6
24	40.7	7234	1.0	<b>160</b>	200L 6
23	64.0	7481	1.4	<b>190</b>	180M 4
23	64.0	7481	1.0	<b>170</b>	180M 4
21	68.9	8050	1.3	<b>190</b>	180M 4
21	68.9	8050	0.9	<b>170</b>	180M 4

19.5	75.0	8766	0.9	<b>170</b>	180M 4
19.5	75.0	8766	1.2	<b>190</b>	180M 4
17.9	81.7	9547	1.1	<b>190</b>	180M 4
17.9	81.7	9547	0.8	<b>170</b>	180M 4
16.3	89.4	10447	1.0	<b>190</b>	180M 4
16.3	89.4	10447	0.7	<b>170</b>	180M 4
14.9	97.9	11432	0.9	<b>190</b>	180M 4
14.8	98.4	11497	0.7	<b>170</b>	180M 4
12.8	113.9	13309	0.8	<b>190</b>	180M 4
11.8	124.1	14494	0.7	<b>190</b>	180M 4
10.8	135.8	15861	0.7	<b>190</b>	180M 4







### 1.7 Prestazioni motoriduttori

### 1.7 Gearmotors performances

### 1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	---

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	---

**22 kW**

$n_1 = 2925 \text{ min}^{-1}$	180M 2
$n_1 = 1460 \text{ min}^{-1}$	180L 4
$n_1 = 975 \text{ min}^{-1}$	200L 6

**22 kW**

$n_1 = 2925 \text{ min}^{-1}$	180M 2
$n_1 = 1460 \text{ min}^{-1}$	180L 4
$n_1 = 975 \text{ min}^{-1}$	200L 6

**22 kW**

$n_1 = 2925 \text{ min}^{-1}$	180M 2
$n_1 = 1460 \text{ min}^{-1}$	180L 4
$n_1 = 975 \text{ min}^{-1}$	200L 6

568	5.2	351	2.6	125*	180M 2
394	7.4	506	2.4	125*	180M 2
288	10.2	693	2.4	125*	180M 2
283	5.2	704	1.4	125*	180L 4
240	12.2	830	2.1	125*	180M 2
200	14.6	999	2.0	125*	180M 2
197	7.4	1014	1.3	125*	180L 4
196	14.9	1020	3.8	140	180M 2
189	15.5	1045	4.0	170	180M 2
186	15.7	1061	2.3	150	180M 2
183	16.0	1078	1.4	132	180M 2
172	17.0	1157	1.8	125*	180M 2
167	17.5	1181	3.9	170	180M 2
163	17.9	1211	1.4	132	180M 2
157	18.6	1258	2.3	150	180M 2
145	20.2	1378	2.8	140	180M 2
144	20.3	1367	1.3	132	180M 2
144	10.2	1389	1.3	125*	180L 4
142	10.3	1406	2.8	140	180L 4
138	21.2	1447	1.4	125*	180M 2
136	21.6	1455	2.5	150	180M 2
135	21.7	1462	1.4	132	180M 2
128	22.9	1544	2.5	150	180M 2
123	23.7	1600	4.0	170	180M 2
120	24.3	1642	1.3	132	180M 2
120	12.2	1663	1.1	125*	180L 4
119	12.3	1676	2.4	140	180L 4
119	24.6	1678	1.3	125*	180M 2
119	24.6	1680	2.3	140	180M 2
116	25.2	1705	4.0	170	180M 2
113	25.9	1746	2.4	150	180M 2
107	27.5	1853	1.3	132	180M 2
104	28.0	1912	2.4	160	180M 2
102	28.8	1945	3.5	170	180M 2
100	14.6	2001	1.1	125*	180L 4
98	14.9	2043	2.1	140	180L 4
96	30.5	2082	3.2	180	180M 2
96	30.5	2082	2.3	160	180M 2
94	15.5	2094	3.1	190	180L 4
94	15.5	2094	2.2	170	180L 4
93	15.7	2125	1.3	150	180L 4
93	15.7	2125	1.3	150	180L 4
92	31.9	2180	0.9	125*	180M 2
91	16.0	2161	0.8	132	180L 4
91	16.0	2161	0.8	132	180L 4
88	33.4	2278	1.8	140	180M 2
86	16.9	2316	3.2	160	180L 4
86	17.0	2319	1.0	125*	180L 4
83	17.5	2365	3.0	190	180L 4
83	17.5	2365	3.0	190	180L 4
83	17.5	2365	3.0	190	180L 4
83	17.5	2365	2.1	170	180L 4
83	17.5	2365	2.1	170	180L 4
83	17.5	2365	2.1	170	180L 4
81	17.9	2427	0.7	132	180L 4
81	17.9	2427	0.7	132	180L 4
81	17.9	2427	0.7	132	180L 4
79	18.5	2523	3.0	160	180L 4
78	18.6	2519	3.1	190	180L 4

78	18.6	2519	3.1	190	180L 4
78	18.6	2519	3.1	190	180L 4
78	18.6	2519	2.2	170	180L 4
78	18.6	2519	2.2	170	180L 4
78	18.6	2519	2.2	170	180L 4
78	18.6	2520	1.3	150	180L 4
78	18.6	2520	1.3	150	180L 4
78	18.6	2520	1.3	150	180L 4
72	20.2	2760	2.7	160	180L 4
72	20.2	2760	1.5	140	180L 4
72	20.3	2739	0.7	132	180L 4
72	20.3	2739	0.7	132	180L 4
72	20.3	2739	0.7	132	180L 4
72	40.7	2778	1.4	140	180M 2
68	21.6	2915	1.3	150	180L 4
68	21.6	2915	1.3	150	180L 4
68	21.6	2915	1.3	150	180L 4
67	21.7	2929	0.8	132	180L 4
67	21.7	2929	0.8	132	180L 4
66	22.2	3038	3.5	180	180L 4
66	22.2	3038	2.5	160	180L 4
64	22.9	3093	1.4	150	180L 4
64	22.9	3093	1.4	150	180L 4
64	22.9	3093	1.4	150	180L 4
62	23.7	3206	3.0	190	180L 4
62	23.7	3206	3.0	190	180L 4
62	23.7	3206	2.2	170	180L 4
62	23.7	3206	2.2	170	180L 4
62	23.7	3206	2.2	170	180L 4
62	23.7	3206	2.2	170	180L 4
60	24.3	3290	0.7	132	180L 4
60	24.3	3290	0.7	132	180L 4
59	24.6	3366	2.8	180	180L 4
59	24.6	3366	2.0	160	180L 4
59	24.6	3366	1.3	140	180L 4
58	25.2	3415	2.9	190	180L 4
58	25.2	3415	2.9	190	180L 4
58	25.2	3415	2.2	170	180L 4
58	25.2	3415	2.2	170	180L 4
57	51.3	3499	1.2	140	180M 2
56	25.9	3497	1.3	150	180L 4
56	25.9	3497	1.3	150	180L 4
56	25.9	3497	1.3	150	180L 4
53	27.5	3713	0.7	132	180L 4
53	27.5	3713	0.7	132	180L 4
52	28.0	3830	1.3	160	180L 4
51	57.4	3917	1.0	140	180M 2
51	28.8	3896	2.6	190	180L 4
51	28.8	3896	2.6	190	180L 4
51	28.8	3896	1.9	170	180L 4
51	28.8	3896	1.9	170	180L 4
51	28.8	3896	1.9	170	180L 4
48	30.3	4098	1.2	150	180L 4
48	30.3	4098	1.2	150	180L 4
48	30.5	4171	1.8	180	180L 4
48	30.5	4171	1.3	160	180L 4
47	30.9	4174	2.5	190	180L 4
47	30.9	4174	2.5	190	180L 4
47	30.9	4174	1.8	170	180L 4
47	30.9	4174	1.8	170	180L 4
47	31.2	4217	0.7	132	180L 4

47	31.2	4217	0.7	132	180L 4
44	33.4	4564	1.8	180	180L 4
44	33.4	4564	1.3	160	180L 4
44	33.4	4564	1.0	140	180L 4
42	34.5	4666	1.1	150	180L 4
41	35.7	4829	2.2	190	180L 4
41	35.7	4829	1.6	170	180L 4
40	36.3	4908	0.7	132	180L 4
40	36.3	4908	0.7	132	180L 4
40	36.7	5023	1.8	180	180L 4
40	36.7	5023	1.3	160	180L 4
40	36.9	4994	1.0	150	180L 4
40	36.9	4994	1.0	150	180L 4
36	40.7	5565	1.8	180	180L 4
36	40.7	5565	1.2	160	180L 4
35	41.8	5658	1.9	190	180L 4
35	41.8	5658	1.9	190	180L 4
35	41.8	5658	1.3	170	180L 4
35	41.8	5658	1.3	170	180L 4
34	42.6	5768	0.9	150	180L 4
34	42.6	5768	0.9	150	180L 4
32	45.6	6162	1.7	190	180L 4
32	45.6	6162	1.2	170	180L 4
32	45.6	6162	1.2	170	180L 4
32	30.5	6245	1.3	180	200L 6
32	30.5	6245	0.9	160	200L 6
32	46.0	6227	0.8	150	180L 4
29	49.8	6743	1.6	190	180L 4
29	49.8	6743	1.6	190	180L 4
29	49.8	6743	1.1	170	180L 4
29	33.4	6834	1.3	180	200L 6
29	33.4	6834	1.0	160	200L 6
27	54.3	7343	0.7	150	180L 4
27	54.3	7343	0.7	150	180L 4
27	54.3	7343	1.4	190	180L 4
27	54.3	7343	1.4	190	180L 4
27	54.3	7343	1.0	170	180L 4
27	54.3	7343	1.0	170	180L 4
27	36.7	7521	1.3	180	200L 6
27	36.7	7521	0.9	160	200L 6
24	40.7	8333	1.3	180	200L 6
24	40.7	8333	0.9	160	200L 6
23	64.0	8663	1.2	190	180L 4
23	64.0	8663	0.9	170	180L 4
23	64.0	8663	0.9	170	180L 4
21	68.9	9321	1.1	190	180L 4
21	68.9	9321	1.1	190	180L 4
21	68.9	9321	0.8	170	180L 4
19.5	75.0	10151	0.7	170	180L 4
19.5	75.0	10151	0.7	170	180L 4
19.5	75.0	10151	1.0	190	180L 4
19.5	75.0	10151	1.0	190	180L 4
17.9	81.7	11054	0.9	190	180L 4
17.9	81.7	11054	0.7	170	180L 4
17.9	81.7	11054	0.7	170	180L 4
16.3	89.4	12096	0.9	190	180L 4
14.9	97.9	13237	0.8	190	180L 4
12.8	113.9	15411	0.7	190	180L 4
12.8	113.9	15411	0.7	190	180L 4



1.7 Prestazioni motoriduttori

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

$n_2$ $min^{-1}$	ir	T2 Nm	FS'	OM-OC	
---------------------	----	----------	-----	-------	---

<b>30 kW</b>	$n_1 = 2945\ min^{-1}$ $n_1 = 1465\ min^{-1}$	200L 2 200L 4
--------------	--	------------------

571	5.2	476.9	8.7	<b>160</b>	200L 2
388	7.6	701.3	5.2	<b>140</b>	200L 2
286	10.3	950.7	3.9	<b>140</b>	200L 2
240	12.3	1133	3.3	<b>140</b>	200L 2
197	14.9	1381	2.8	<b>140</b>	200L 2
193	7.6	1410	2.8	<b>140</b>	200L 4
190	15.5	1416	3.0	<b>170</b>	200L 2
187	15.7	1437	1.7	<b>150*</b>	200L 2
168	17.5	1599	2.9	<b>170</b>	200L 2
158	18.6	1703	3.0	<b>170</b>	200L 2
158	18.6	1704	1.7	<b>150*</b>	200L 2
146	20.2	1866	2.1	<b>140</b>	200L 2
142	10.3	1911	2.1	<b>140</b>	200L 4
137	21.6	1971	1.8	<b>150*</b>	200L 2
133	22.2	2054	3.3	<b>160</b>	200L 2
129	22.9	2091	1.8	<b>150*</b>	200L 2
124	23.7	2168	3.0	<b>170</b>	200L 2
120	24.6	2275	1.7	<b>140</b>	200L 2
120	12.3	2277	3.3	<b>160</b>	200L 4
120	12.3	2277	1.8	<b>140</b>	200L 4
117	25.2	2309	3.0	<b>170</b>	200L 2
114	25.9	2364	1.7	<b>150*</b>	200L 2
109	13.5	2506	2.9	<b>160</b>	200L 4
102	28.8	2634	3.5	<b>190</b>	200L 2
102	28.8	2634	2.6	<b>170</b>	200L 2
98	14.9	2777	1.5	<b>140</b>	200L 4
95	15.5	2846	2.3	<b>190</b>	200L 4
95	15.5	2846	1.6	<b>170</b>	200L 4
93	15.7	2888	0.9	<b>150*</b>	200L 4
88	33.4	3085	1.3	<b>140</b>	200L 2
86	16.9	3148	3.0	<b>180</b>	200L 4
86	16.9	3148	2.4	<b>160</b>	200L 4
84	17.5	3214	2.2	<b>190</b>	200L 4
84	17.5	3214	1.6	<b>170</b>	200L 4
79	18.5	3428	3.1	<b>180</b>	200L 4
79	18.5	3428	2.2	<b>160</b>	200L 4
79	18.6	3424	2.3	<b>190</b>	200L 4
79	18.6	3424	1.6	<b>170</b>	200L 4
79	18.6	3425	0.9	<b>150*</b>	200L 4
73	20.2	3751	2.8	<b>180</b>	200L 4
73	20.2	3751	2.0	<b>160</b>	200L 4
73	20.2	3751	1.1	<b>140</b>	200L 4
72	40.7	3762	1.0	<b>140</b>	200L 2
68	21.6	3962	1.0	<b>150*</b>	200L 4
66	22.2	4129	2.5	<b>180</b>	200L 4
66	22.2	4129	1.8	<b>160</b>	200L 4
64	22.9	4203	1.0	<b>150*</b>	200L 4
62	23.7	4357	2.2	<b>190</b>	200L 4
62	23.7	4357	1.6	<b>170</b>	200L 4
60	24.6	4574	2.1	<b>180</b>	200L 4
60	24.6	4574	1.5	<b>160</b>	200L 4
60	24.6	4574	0.9	<b>140</b>	200L 4
58	25.2	4641	2.1	<b>190</b>	200L 4
58	25.2	4641	1.6	<b>170</b>	200L 4
57	51.3	4740	0.9	<b>140</b>	200L 2
57	25.9	4752	0.9	<b>150*</b>	200L 4
52	28.0	5205	1.0	<b>160</b>	200L 4
51	57.4	5305	0.7	<b>140</b>	200L 2

$n_2$ $min^{-1}$	ir	T2 Nm	FS'	OM-OC	
---------------------	----	----------	-----	-------	--

<b>30 kW</b>	$n_1 = 2945\ min^{-1}$ $n_1 = 1465\ min^{-1}$	200L 2 200L 4
--------------	--	------------------

51	28.8	5295	1.9	<b>190</b>	200L 4
51	28.8	5295	1.4	<b>170</b>	200L 4
48	30.3	5569	0.9	<b>150*</b>	200L 4
48	30.5	5668	1.3	<b>180</b>	200L 4
48	30.5	5668	1.0	<b>160</b>	200L 4
47	30.9	5673	1.8	<b>190</b>	200L 4
47	30.9	5673	1.3	<b>170</b>	200L 4
44	33.4	6202	1.3	<b>180</b>	200L 4
44	33.4	6202	1.0	<b>160</b>	200L 4
44	33.4	6202	0.7	<b>140</b>	200L 4
42	34.5	6340	0.8	<b>150*</b>	200L 4
41	35.7	6563	1.6	<b>190</b>	200L 4
41	35.7	6563	1.1	<b>170</b>	200L 4
40	36.7	6826	1.3	<b>180</b>	200L 4
40	36.7	6826	1.0	<b>160</b>	200L 4
40	36.9	6787	0.7	<b>150*</b>	200L 4
36	40.7	7563	1.3	<b>180</b>	200L 4
36	40.7	7563	0.9	<b>160</b>	200L 4
35	41.8	7690	1.4	<b>190</b>	200L 4
35	41.8	7690	1.0	<b>170</b>	200L 4
32	45.6	8374	1.3	<b>190</b>	200L 4
32	45.6	8374	0.9	<b>170</b>	200L 4
29	49.8	9164	1.1	<b>190</b>	200L 4
29	49.8	9164	0.8	<b>170</b>	200L 4
27	54.3	9979	1.1	<b>190</b>	200L 4
27	54.3	9979	0.8	<b>170</b>	200L 4
23	64.0	11773	0.9	<b>190</b>	200L 4
21	68.9	12667	0.8	<b>190</b>	200L 4
20	75.0	13794	0.8	<b>190</b>	200L 4
17.9	81.7	15022	0.7	<b>190</b>	200L 4

<b>37 kW</b>	$n_1 = 2950\ min^{-1}$ $n_1 = 1475\ min^{-1}$	200L 2 225S 4
--------------	--	------------------

572	5.2	587.2	7.1	<b>160</b>	200L 2
389	7.6	863	4.2	<b>140*</b>	200L 2
287	10.3	1170	3.1	<b>140*</b>	200L 2
241	12.3	1395	2.7	<b>140*</b>	200L 2
197	14.9	1701	2.3	<b>140*</b>	200L 2
191	15.5	1743	3.4	<b>190</b>	200L 2
191	15.5	1743	2.4	<b>170*</b>	200L 2
188	15.7	1769	1.4	<b>150*</b>	200L 2
169	17.5	1969	3.3	<b>190</b>	200L 2
169	17.5	1969	2.3	<b>170*</b>	200L 2
160	18.5	2100	3.2	<b>160</b>	200L 2
158	18.6	2097	3.4	<b>190</b>	200L 2
158	18.6	2097	2.4	<b>170*</b>	200L 2
158	18.6	2098	1.4	<b>150*</b>	200L 2
146	20.2	2298	1.7	<b>140*</b>	200L 2
137	21.6	2427	1.5	<b>150*</b>	200L 2
132	11.2	2549	2.9	<b>160</b>	225S 4
129	22.9	2575	1.5	<b>150*</b>	200L 2
124	23.7	2669	3.3	<b>190</b>	200L 2
124	23.7	2669	2.4	<b>170*</b>	200L 2
120	12.3	2790	2.7	<b>160</b>	225S 4
120	24.6	2802	1.4	<b>140*</b>	200L 2
117	25.2	2843	3.2	<b>190</b>	200L 2

$n_2$ $min^{-1}$	ir	T2 Nm	FS'	OM-OC	
---------------------	----	----------	-----	-------	---

<b>37 kW</b>	$n_1 = 2950\ min^{-1}$ $n_1 = 1475\ min^{-1}$	200L 2 225S 4
--------------	--	------------------

117	25.2	2843	2.4	<b>170*</b>	200L 2
114	25.9	2911	1.4	<b>150*</b>	200L 2
109	13.5	3070	3.2	<b>180</b>	225S 4
109	13.5	3070	2.3	<b>160</b>	225S 4
102	28.8	3243	2.8	<b>190</b>	200L 2
102	28.8	3243	2.1	<b>170*</b>	200L 2
95	15.5	3486	1.8	<b>190</b>	225S 4
95	15.5	3486	1.3	<b>170*</b>	225S 4
88	33.4	3799	1.1	<b>140*</b>	200L 2
87	16.9	3856	2.5	<b>180</b>	225S 4
87	16.9	3856	1.9	<b>160</b>	225S 4
84	17.5	3938	1.8	<b>190</b>	225S 4
84	17.5	3938	1.3	<b>170*</b>	225S 4
80	18.5	4199	2.5	<b>180</b>	225S 4
80	18.5	4199	1.8	<b>160</b>	225S 4
79	18.6	4194	1.9	<b>190</b>	225S 4
79	18.6	4194	1.3	<b>170*</b>	225S 4
73	20.2	4595	2.3	<b>180</b>	225S 4
73	20.2	4595	1.6	<b>160</b>	225S 4
72	40.7	4632	0.8	<b>140*</b>	200L 2
66	22.2	5057	2.1	<b>180</b>	225S 4
66	22.2	5057	1.5	<b>160</b>	225S 4
62	23.7	5338	1.8	<b>190</b>	225S 4
62	23.7	5338	1.3	<b>170*</b>	225S 4
60	24.6	5603	1.7	<b>180</b>	225S 4
60	24.6	5603	1.2	<b>160</b>	225S 4
58	25.2	5686	1.7	<b>190</b>	225S 4
58	25.2	5686	1.3	<b>170*</b>	225S 4
58	51.3	5836	0.7	<b>140*</b>	200L 2
53	28.0	6376	0.8	<b>160</b>	225S 4
51	28.8	6486	1.5	<b>190</b>	225S 4
51	28.8	6486	1.2	<b>170*</b>	225S 4
48	30.5	6943	1.1	<b>180</b>	225S 4
48	30.5	6943	0.8	<b>160</b>	225S 4
48	30.9	6949	1.5	<b>190</b>	225S 4
44	33.4	7598	1.1	<b>180</b>	225S 4
44	33.4	7598	0.8	<b>160</b>	225S 4
41	35.7	8039	1.3	<b>190</b>	225S 4
41	35.7	8039	0.9	<b>170*</b>	225S 4
40	36.7	8362	1.1	<b>180</b>	225S 4
40	36.7	8362	0.8	<b>160</b>	225S 4
36	40.7	9264	1.1	<b>180</b>	225S 4
36	40.7	9264	0.7	<b>160</b>	225S 4
35	41.8	9420	1.1	<b>190</b>	225S 4
35	41.8	9420	0.8	<b>170*</b>	225S 4
32	45.6	10258	1.0	<b>190</b>	225S 4
32	45.6	10258	0.7	<b>170*</b>	225S 4
30	49.8	11225	0.9	<b>190</b>	225S 4
30	49.8	11225	0.7	<b>170*</b>	225S 4
27	54.3	12224	0.9	<b>190</b>	225S 4
23	64.0	14421	0.7	<b>190</b>	225S 4
21	68.9	15517	0.7	<b>190</b>	225S 4



### 1.7 Prestazioni motoriduttori

### 1.7 Gearmotors performances

### 1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	OM-OC	
----------------------------	----	----------	-----	-------	--

<b>45 kW</b>	$n_1 = 2945 \text{ min}^{-1}$ $n_1 = 1475 \text{ min}^{-1}$	225M 2 225M 4
--------------	--	------------------

<b>55 kW</b>	$n_1 = 2950 \text{ min}^{-1}$ $n_1 = 1475 \text{ min}^{-1}$	250M 2 250M 4
--------------	--	------------------

<b>75 kW</b>	$n_1 = 2975 \text{ min}^{-1}$ $n_1 = 1470 \text{ min}^{-1}$	280S 2 280S 4
--------------	--	------------------

571	5.2	707.8	5.8	160	225M 2
388	7.6	1041	5.9	160	225M 2
286	5.2	1413	3.3	160	225M 4
194	7.6	2078	3.3	160	225M 4
190	15.5	2123	2.8	190*	225M 2
190	15.5	2123	2.0	170*	225M 2
168	17.5	2399	2.7	190*	225M 2
168	17.5	2399	1.9	170*	225M 2
158	18.6	2555	2.8	190*	225M 2
158	18.6	2555	2.0	170*	225M 2
143	10.3	2817	2.7	160	225M 4
132	11.2	3068	3.4	180	225M 4
132	11.2	3068	2.4	160	225M 4
124	23.7	3251	2.7	190*	225M 2
124	23.7	3251	2.0	170*	225M 2
120	12.3	3357	3.1	180	225M 4
120	12.3	3357	2.2	160	225M 4
117	25.2	3463	2.6	190*	225M 2
117	25.2	3463	2.0	170*	225M 2
109	13.5	3695	2.7	180	225M 4
109	13.5	3695	1.9	160	225M 4
102	28.8	3951	2.3	190*	225M 2
102	28.8	3951	1.7	170*	225M 2
95	15.5	4240	1.5	190*	225M 4
95	15.5	4240	1.1	170*	225M 4
87	16.9	4641	2.1	180	225M 4
87	16.9	4641	1.6	160	225M 4
84	17.5	4789	1.5	190*	225M 4
84	17.5	4789	1.0	170*	225M 4
80	18.5	5054	1.5	160	225M 4
79	18.6	5101	1.5	190*	225M 4
79	18.6	5101	1.1	170*	225M 4
73	20.2	5530	1.9	180	225M 4
73	20.2	5530	1.4	160	225M 4
66	22.2	6086	1.7	180	225M 4
66	22.2	6086	1.2	160	225M 4
62	23.7	6492	1.5	190*	225M 4
62	23.7	6492	1.1	170*	225M 4
60	24.6	6743	1.4	180	225M 4
60	24.6	6743	1.0	160	225M 4
58	25.2	6915	1.4	190*	225M 4
58	25.2	6915	1.1	170*	225M 4
53	28.0	7673	0.7	160	225M 4
51	28.8	7888	1.3	190*	225M 4
51	28.8	7888	1.0	170*	225M 4
48	30.5	8355	0.9	180	225M 4
48	30.9	8451	1.2	190*	225M 4
48	30.9	8451	0.9	170*	225M 4
44	33.4	9143	0.9	180	225M 4
44	33.4	9143	0.7	160	225M 4
41	35.7	9777	1.1	190*	225M 4
41	35.7	9777	0.8	170*	225M 4
40	36.7	10062	0.9	180	225M 4
36	40.7	11149	0.9	180	225M 4
35	41.8	11456	0.9	190*	225M 4
35	41.8	11456	0.7	170*	225M 4
32	45.6	12476	0.8	190*	225M 4
30	49.8	13652	0.8	190*	225M 4
27	54.3	14867	0.7	190*	225M 4

572	5.2	863.6	4.8	160*	250M 2
389	7.6	1270	4.8	160*	250M 2
286	5.2	1727	3.5	180	250M 4
286	5.2	1727	2.7	160*	250M 4
263	11.2	1875	3.6	160*	250M 2
241	12.3	2052	3.3	160*	250M 2
219	13.5	2258	2.9	160*	250M 2
194	7.6	2540	3.5	180	250M 4
194	7.6	2540	2.7	160*	250M 4
191	15.5	2591	2.3	190*	250M 2
174	16.9	2836	3.0	180	250M 2
174	16.9	2836	2.4	160*	250M 2
169	17.5	2927	2.2	190*	250M 2
160	18.5	3088	3.1	180	250M 2
160	18.5	3088	2.2	160*	250M 2
158	18.6	3117	2.3	190*	250M 2
143	10.3	3443	3.0	180	250M 4
143	10.3	3443	2.2	160*	250M 4
132	11.2	3750	2.8	180	250M 4
132	11.2	3750	2.0	160*	250M 4
124	23.7	3967	2.2	190*	250M 2
120	12.3	4103	2.6	180	250M 4
120	12.3	4103	1.8	160*	250M 4
117	25.2	4226	2.1	190*	250M 2
109	13.5	4516	2.2	180	250M 4
109	13.5	4516	1.6	160*	250M 4
102	28.8	4820	1.9	190*	250M 2
95	15.5	5182	1.2	190*	250M 4
87	16.9	5672	1.7	180	250M 4
87	16.9	5672	1.3	160*	250M 4
84	17.5	5853	1.2	190*	250M 4
80	18.5	6177	1.7	180	250M 4
80	18.5	6177	1.2	160*	250M 4
79	18.6	6235	1.3	190*	250M 4
73	20.2	6759	1.6	180	250M 4
73	20.2	6759	1.1	160*	250M 4
66	22.2	7439	1.4	180	250M 4
66	22.2	7439	1.0	160*	250M 4
62	23.7	7934	1.2	190*	250M 4
60	24.6	8242	1.2	180	250M 4
60	24.6	8242	0.8	160*	250M 4
58	25.2	8451	1.2	190*	250M 4
51	28.8	9641	1.0	190*	250M 4
48	30.9	10330	1.0	190*	250M 4
41	35.7	11950	0.9	190*	250M 4
35	41.8	14002	0.7	190*	250M 4
32	45.6	15248	0.7	190*	250M 4

577	5.2	1168	3.5	160*	280S 2
392	7.6	1717	3.6	160*	280S 2
285	5.2	2363	2.5	180*	280S 4
285	5.2	2363	1.9	160*	280S 4
266	11.2	2535	2.7	160*	280S 2
243	12.3	2774	3.4	180*	280S 2
243	12.3	2774	2.4	160*	280S 2
221	13.5	3053	2.9	180*	280S 2
221	13.5	3053	2.1	160*	280S 2
194	7.6	3475	2.5	180*	280S 4
194	7.6	3475	2.0	160*	280S 4
176	16.9	3835	2.3	180*	280S 2
176	16.9	3835	1.8	160*	280S 2
161	18.5	4176	2.3	180*	280S 2
161	18.5	4176	1.6	160*	280S 2
143	10.3	4711	2.2	180*	280S 4
143	10.3	4711	1.6	160*	280S 4
131	11.2	5130	2.0	180*	280S 4
131	11.2	5130	1.5	160*	280S 4
120	12.3	5614	1.9	180*	280S 4
120	12.3	5614	1.3	160*	280S 4
109	13.5	6179	1.6	180*	280S 4
109	13.5	6179	1.2	160*	280S 4
98	30.5	6904	1.0	180*	280S 2
98	30.5	6904	0.7	160*	280S 2
87	16.9	7761	1.2	180*	280S 4
87	16.9	7761	1.0	160*	280S 4
80	18.5	8451	1.2	180*	280S 4
80	18.5	8451	0.9	160*	280S 4
73	20.2	9248	1.1	180*	280S 4
73	20.2	9248	0.8	160*	280S 4
66	22.2	10178	1.0	180*	280S 4
66	22.2	10178	0.7	160*	280S 4
60	24.6	11277	0.8	180*	280S 4

**NOTE.**  
 The power indicated is based on the mechanical capacities of the gearboxes. For the gearboxes marked with (\*) it is also necessary to obey the thermal capacity like shown on chapter A-1.5.

**N.B.**  
 Tutte le potenze indicate si riferiscono alla potenza meccanica dei riduttori. Per i riduttori contrassegnati con (\*) è opportuno effettuare la verifica della potenza limite termico secondo le indicazioni riportate nel par. A-1.5.

**HINWEIS.**  
 Die Leistungsangaben beziehen sich auf die mechanische Belasbarkeit der Getriebe. Bei den mit (\*) gekennzeichneten Getrieben ist außerdem die thermische Leistungsgrenze zu beachten (s. Kap A-1.5).



C





1.8 Dimensioni

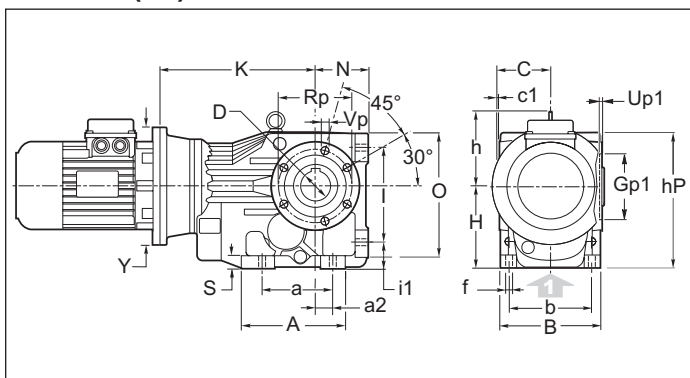
1.8 Dimensions

1.8 Abmessungen

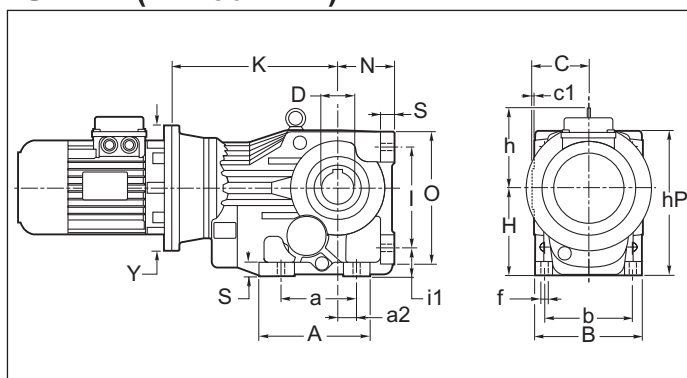
Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

OM 63 - 71 - 90 - 112

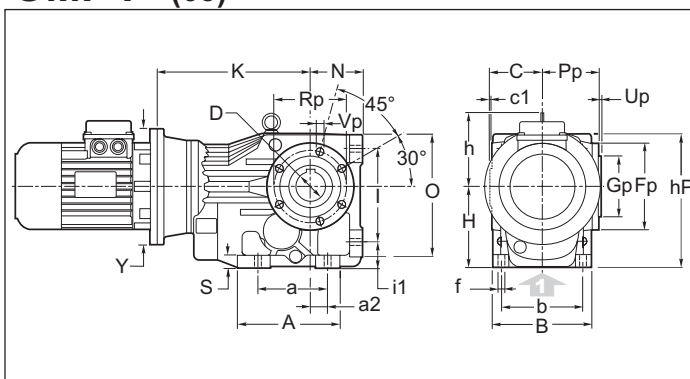
OMP (63)



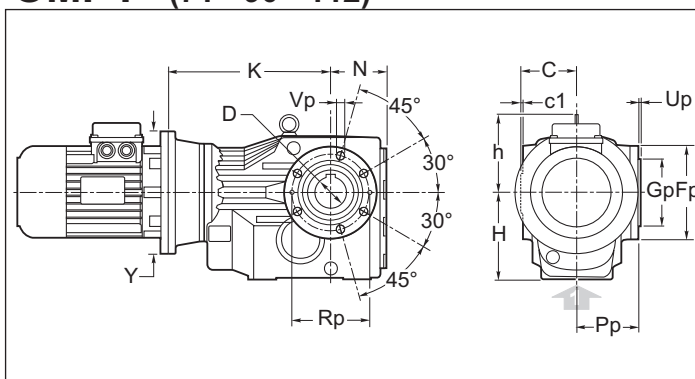
OMP (71 - 90 - 112)



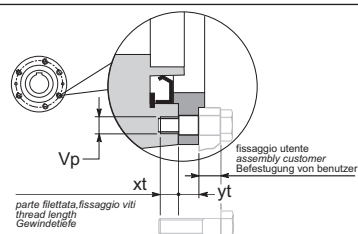
OMP P (63)



OMF P (71 - 90 - 112)



Particolare dei fori nella Flangia - "P"  
Detail holes of the flange - "P"



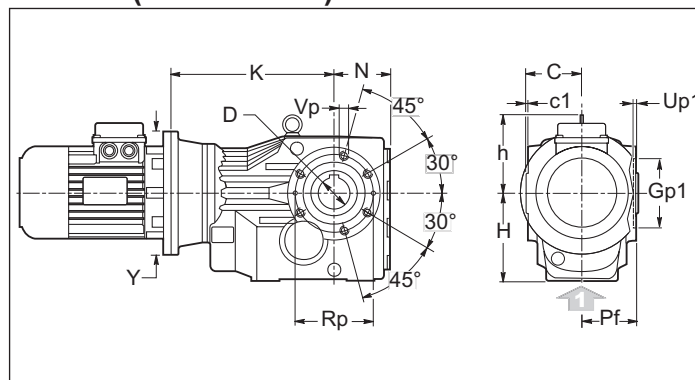
Per il fissaggio al riduttore con i fori "Vp" considerare la lunghezza delle viti adeguate, e che la quota "yt" non è filettata (vedi disegno).

When P-flange is used please consider that the threads "Vp" are in gearcase and that distance "yt" does not have a thread (see drawing).

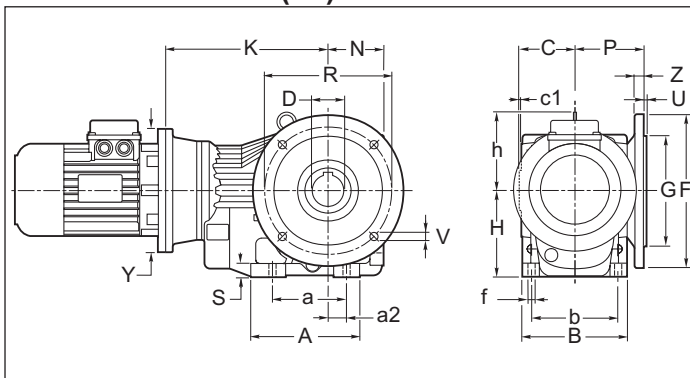
Bei Verwendung des P-Flansches ist zu beachten, daß sich die Gewinde im Getriebegehäuse befinden und daß Maß "yt" kein Gewinde besitzt. Details siehe Zeichnung.

	Vp	xt	yt
63	N°6 M6	12	11,5
71	N°6 M8	15	11
90	N°6 M12	18	12
112	N°6 M14	23	14

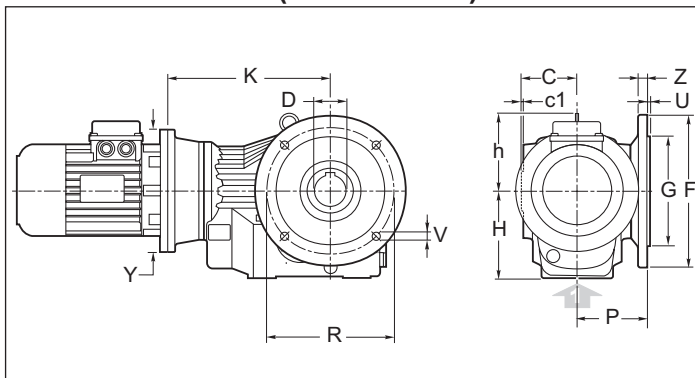
OMF (71 - 90 - 112)



OMP F1 - F2 (63)



OMF F1 - F2 (71 - 90 - 112)





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

OM.	a	A	a2	b	B	C	c1	D H7	f	h	H	hP	I	i1	N	O	Pf	S
63	110	147	28	100	120	60	2,5	30 (25) (28)	11	100	100	170	115	32	63	150	57.5	14
71	130	165	35	120	142	75	3	35 (30) (32)	11	108	112	183	130	37	71	170	72	18
90	120	182	30	140	170	90	3.5	40 (42) (45) (48)	14	129	140	232	160	45	90	212	86.5	22
112	150	215	40	165	200	105	4	50 (55)	17.5	151	180	294	200	55	112	264	101	25

OM.	Gp g6	Gp1 H7	Fp	Pp	Rp	Up	Up1	Vp	F		G g6	P	R	U	V	Z
									F1	F2						
63	80	75	105	69	90	3	3.5	N°6 M6x12	F1	160	110	84	130	3.5	N°4 φ 9	10
									F2	-	-		-	-	-	-
71	80	80	120	83	100	3	3.5	N°6 M8x15	F1	200	130	100	165	3.5	N°4 φ 11	12
									F2	160	110		130	3.5	N°4 φ 9x5	10
90	105	100	150	98.5	125	3.5	3.5	N°6 M12x18	F1	250	180	113	215	4	N°4 φ 13.5	15
									F2	-	-		-	-	-	-
112	125	125	175	115	150	3.5	4	N°6 M14x18	F1	300	230	142	265	4	N°4 φ 13.5	16
									F2	-	-		-	-	-	-

OM	IEC	Y	63	71	90	112
			K	K	K	K
	63 B5	140				
	71 B5	160	193.5	217	249	-
	80 B5	200				308.5
	80 B14	120	213.5	237	264	-
	90 B5	200				308.5
	90 B14	140	213.5	237	264	-
	100-112 B5	250				318.5
	100-112 B14	160	223.5	247	274	-
	132 B5	300				339.5
	132 B14	200	-		298	-
	160 B5	350				369.5

Le dimensioni K si riferiscono alle combinazioni albero/flangia B5 e B14, standard. Per le dimensioni relative a combinazioni albero/flangia archiesta, contattare il ns. servizio tecnico.

The K dimensions refer to the standard B5 and B14 shaft/flange combinations. As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.

Die Maße K beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.

PARTICOLARE CORPO IN VERSIONE FLANGIATA

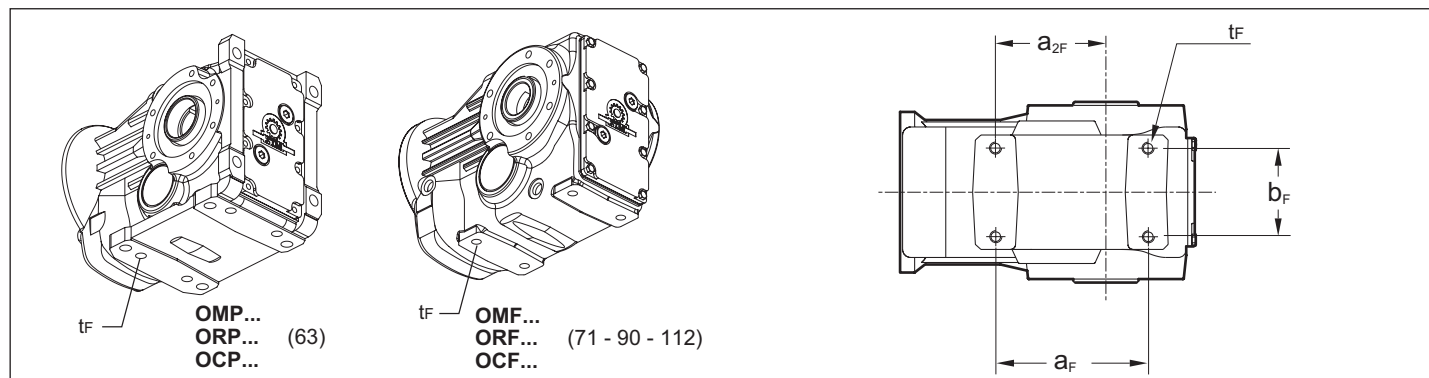
DETAIL OF THE FLANGED GEARCASE

DETAIL DES GÉHÁUSE MIT ABTRIEBSFLANSCH

Per un fissaggio del riduttore si possono utilizzare anche I 4 fori "t<sub>F</sub>" nel piano inferiore del corpo flangiato con interasse X e Z.

For the gearbox fixing also the 4 threads "t<sub>F</sub>" in the lower part of the flanged gearcase with dimensions X and Z can be used

Auch die vier Gewinde "t<sub>F</sub>", welche sich im unteren Teil des Geháuses befinden (mit den Maßen X und Z), können zur Montage des Getriebes verwendet werden.



	t <sub>F</sub>	b <sub>F</sub>	a <sub>F</sub>	a <sub>2F</sub>
63	N°4 M10 x 15	60	117	82
71	N°4 M10 x 15	70	140	100
90	N°4 M12 x 20	88	152	110
112	N°4 M16 x 24	102	170	122



1.8 Dimensioni

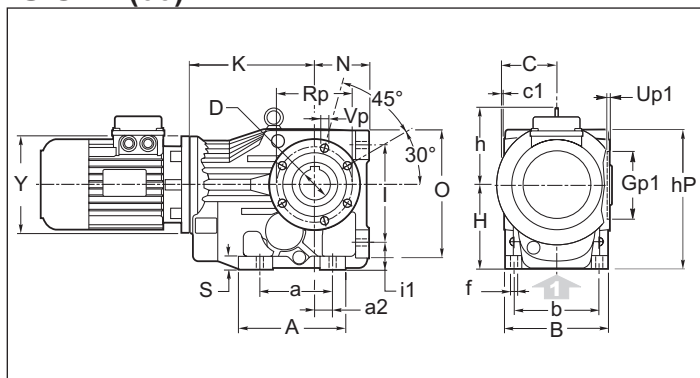
1.8 Dimensions

1.8 Abmessungen

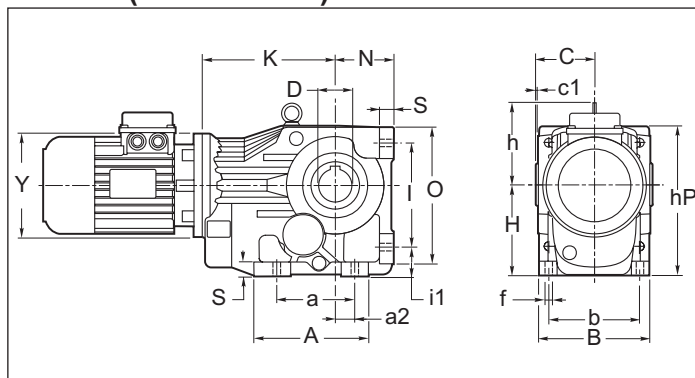
Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

OC 63 - 71 - 90 - 112

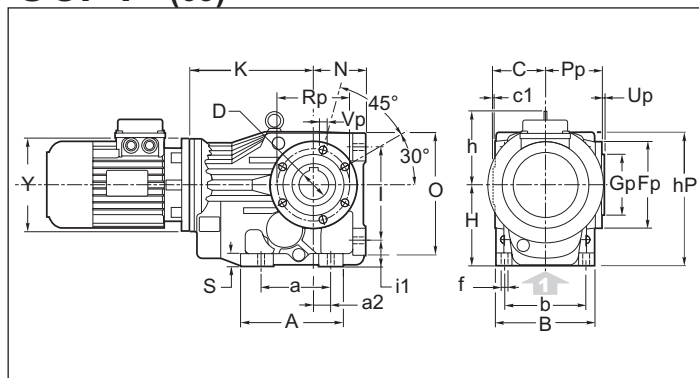
OCP (63)



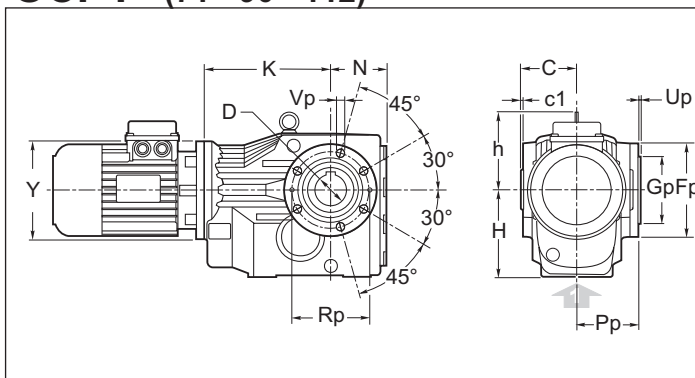
OCP (71 - 90 - 112)



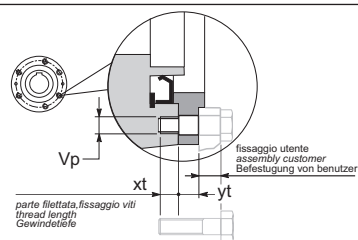
OCP P (63)



OCF P (71 - 90 - 112)



Particolari dei fori nella Flangia P  
Detail of the flange P holes

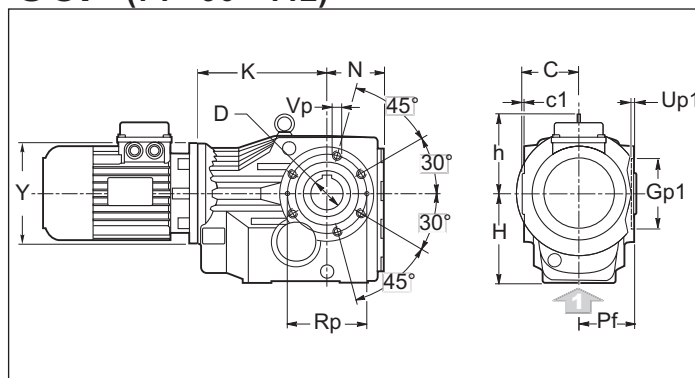


Per il fissaggio al riduttore con i fori "Vp" considerare la lunghezza delle viti adeguate, e che la quota "yt" non è filettata (vedi disegno).  
When P-flange is used please consider that the threads "Vp" are in gearbox and that distance "yt" does not have a thread (see drawing).

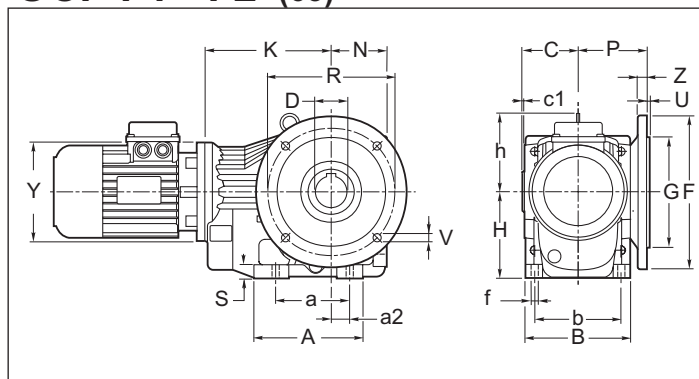
Bei Verwendung des P-Flansches ist zu beachten, daß sich die Gewinde im Getriebegehäuse befinden und daß Maß "yt" kein Gewinde besitzt. Details siehe Zeichnung.

	Vp	xt	yt
63	N°6 M6	12	11,5
71	N°6 M8	15	11
90	N°6 M12	18	12
112	N°6 M14	23	14

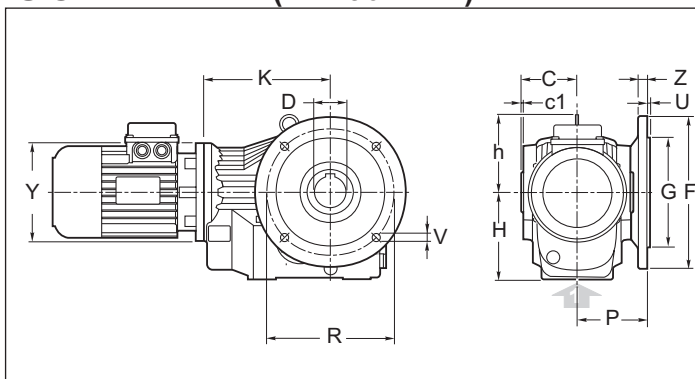
OCF (71 - 90 - 112)



OCP F1 - F2 (63)



OCF F1 - F2 (71 - 90 - 112)





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

OC.	a	A	a2	b	B	C	c1	D H7	f	h	H	hP	I	i1	N	O	Pf	S
63	110	147	28	100	120	60	2,5	30 (25) (28)	11	100	100	170	115	32	63	150	57.5	14
71	130	165	65	120	142	75	3	35 (30) (32)	11	108	112	183	130	37	71	170	72	18
90	120	182	30	140	170	90	3.5	40 (42) (45) (48)	14	129	140	232	160	45	90	212	86.5	22
112	150	215	40	165	200	105	4	50 (55)	17.5	151	180	294	200	55	112	264	101	25

OC.	Gp g6	Gp1 H7	Fp	Pp	Rp	Up	Up1	Vp	F		G g6	P	R	U	V	Z
									F1	F2						
63	80	75	105	69	90	3	3.5	N°6 M6x12	F1	160	110	84	130	3.5	N°4 φ 9	10
									F2	-						
71	80	80	120	83	100	3	3.5	N°6 M8x15	F1	200	130	100	165	3.5	N°4 φ 11	12
									F2	160						
90	105	100	150	98.5	125	3.5	3.5	N°6 M12x18	F1	250	180	113	215	4	N°4 φ 13.5	15
									F2	-						
112	125	125	175	115	150	3.5	4	N°6 M14x18	F1	300	230	142	265	4	N°4 φ 13.5	16
									F2	-						

OC.	63		71		90		112	
	Y	K	Y	K	Y	K	Y	K
	140	154	140	178	160	205	200	252

PARTICOLARE CORPO IN VERSIONE FLANGIATA

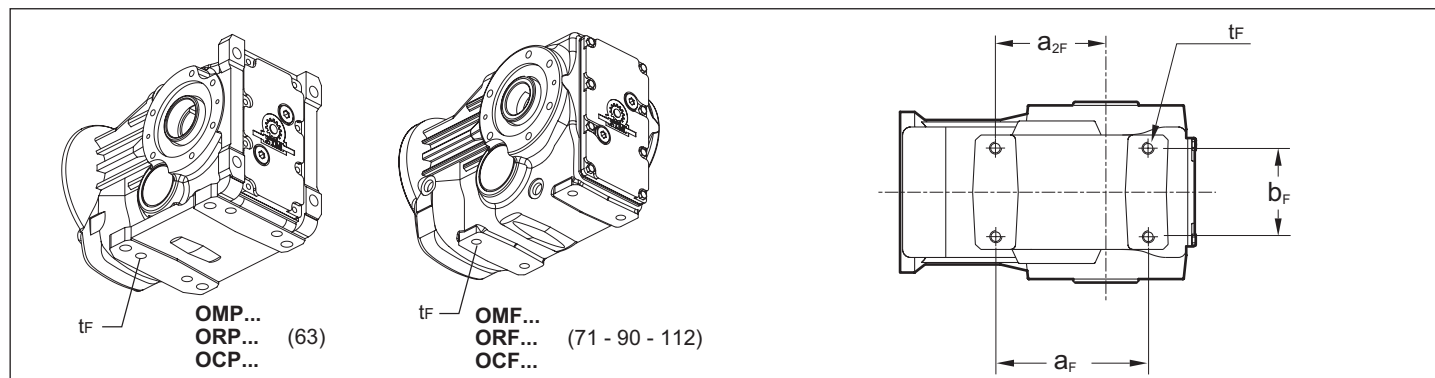
DETAIL OF THE FLANGED GEARCASE

DETAIL DES GEHÄUSES MIT ABTRIEBSFLANSCH

Per un fissaggio del riduttore si possono utilizzare anche I 4 fori "t<sub>F</sub>" nel piano inferiore del corpo flangiato con interasse X e Z.

For the gearbox fixing also the 4 threads "t<sub>F</sub>" in the lower part of the flanged gearcase with dimensions X and Z can be used

Auch die vier Gewinde "t<sub>F</sub>", welche sich im unteren Teil des Gehäuses befinden (mit den Maßen X und Z), können zur Montage des Getriebes verwendet werden.



	t <sub>F</sub>	b <sub>F</sub>	a <sub>F</sub>	a <sub>2F</sub>
63	N°4 M10 x 15	60	117	82
71	N°4 M10 x 15	70	140	100
90	N°4 M12 x 20	88	152	110
112	N°4 M16 x 24	102	170	122





1.8 Dimensioni

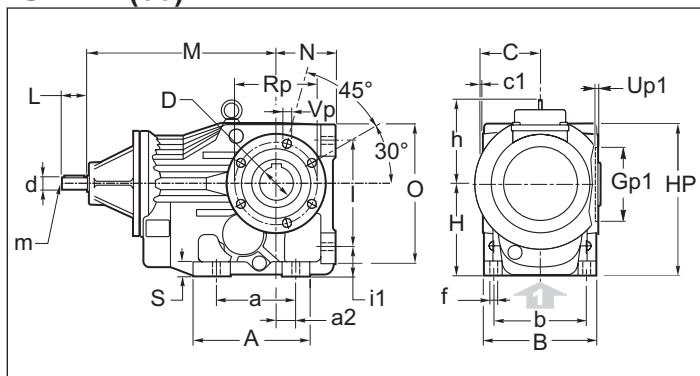
1.8 Dimensions

1.8 Abmessungen

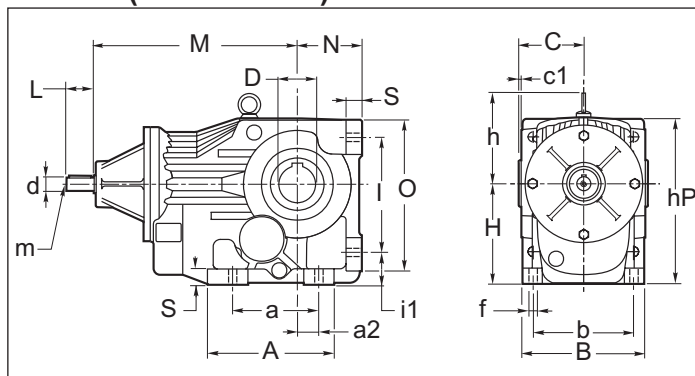
Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

OR 63 - 71 - 90 - 112

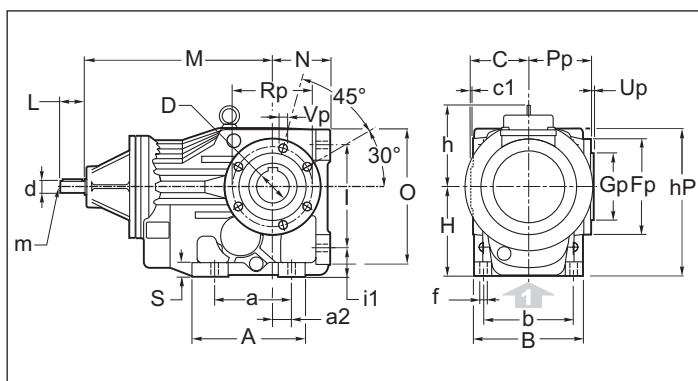
ORP (63)



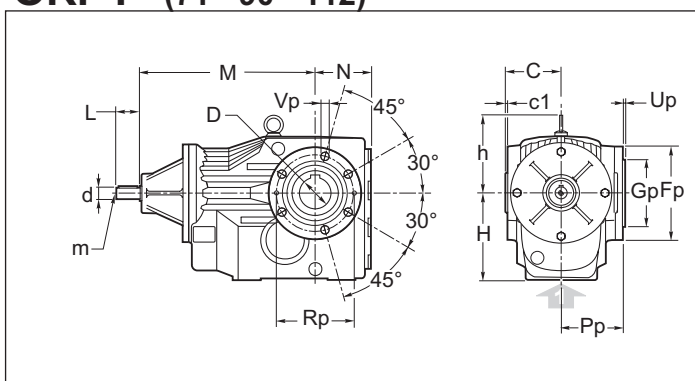
ORP (71 - 90 - 112)



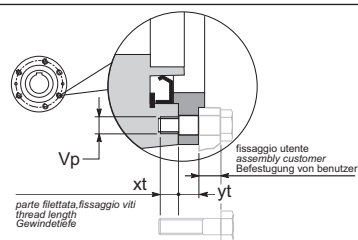
ORP P (63)



ORF P (71 - 90 - 112)



Particolari dei fori nella Flangia P  
Detail of the flange P holes

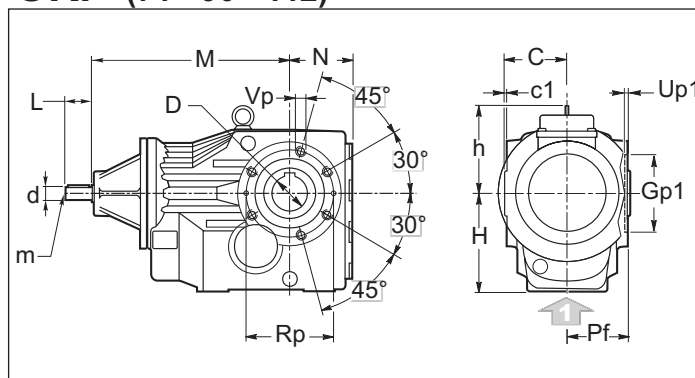


Per il fissaggio al riduttore con i fori "Vp" considerare la lunghezza delle viti adeguate, e che la quota "yt" non è filettata (vedi disegno).  
When P-flange is used please consider that the threads "Vp" are in gearcase and that distance "yt" does not have a thread (see drawing).

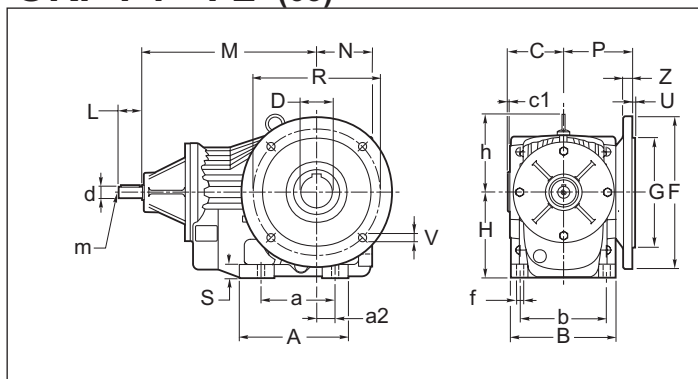
Bei Verwendung des P-Flansches ist zu beachten, daß sich die Gewinde im Getriebegehäuse befinden und daß Maß "yt" kein Gewinde besitzt. Details siehe Zeichnung.

	Vp	xt	yt
63	N°6 M6	12	11,5
71	N°6 M8	15	11
90	N°6 M12	18	12
112	N°6 M14	23	14

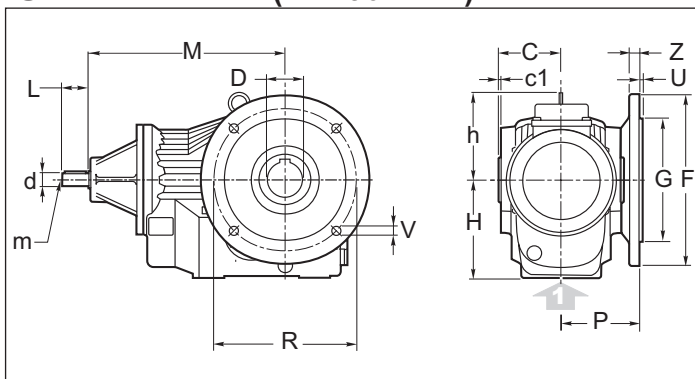
ORF (71 - 90 - 112)



ORP F1 - F2 (63)



ORF F1 - F2 (71 - 90 - 112)





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

OR.	a	A	a2	b	B	C	c1	D H7	d j6	f	h	H	hP	I	i1	L	m	M	N	O	Pf	S
63	110	147	28	100	120	60	2,5	30 (25) (28)	16	11	100	100	170	115	32	40	M6	222.5	63	150	57.5	14
71	130	165	35	120	142	75	3	35 (30) (32)	16	11	108	112	183	130	37	40	M6	246	71	170	72	18
90	120	182	30	140	170	90	3.5	40 (42) (45) (48)	19	14	129	140	232	160	45	40	M6	283	90	212	86.5	22
112	150	215	40	165	200	105	4	50 (55)	24	17.5	151	180	294	200	55	50	M8	328	112	264	101	25

OR.	Gp g6	Gp1 H7	Fp	Pp	Rp	Up	Up1	Vp	F		G g6	P	R	U	V	Z
									F1	F2						
63	80	75	105	69	90	3	3.5	N°6 M6x12	F1	160	110	84	130	3.5	N°4 φ 9	10
									F2	-						
71	80	80	120	83	100	3	3.5	N°6 M8x15	F1	200	130	100	165	3.5	N°4 φ 11	12
									F2	160						
90	105	100	150	98.5	125	3.5	3.5	N°6 M12x18	F1	250	180	113	215	4	N°4 φ 13.5	15
									F2	-						
112	125	125	175	115	150	3.5	4	N°6 M14x18	F1	300	230	142	265	4	N°4 φ 13.5	16
									F2	-						

PARTICOLARE CORPO IN VERSIONE FLANGIATA

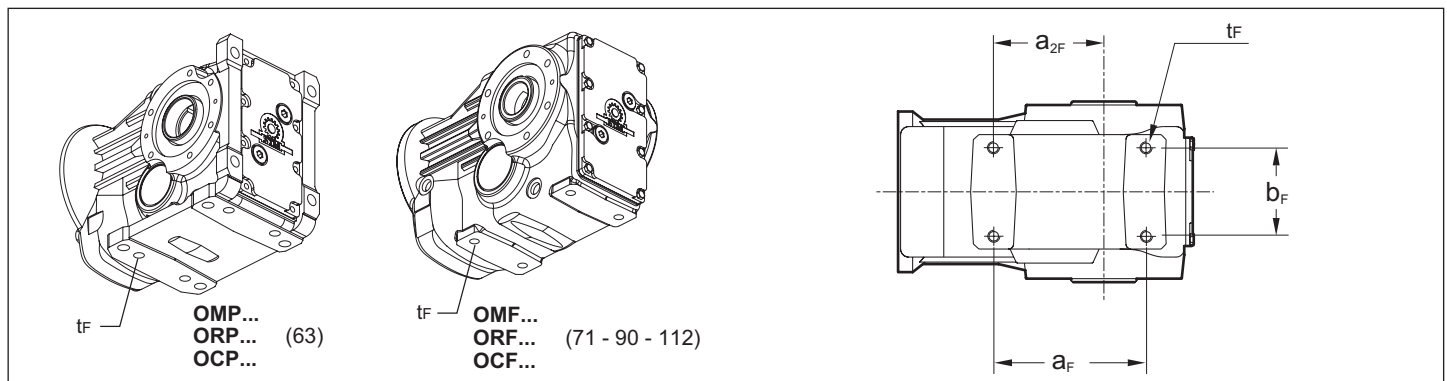
Per un fissaggio del riduttore si possono utilizzare anche i 4 fori "t<sub>F</sub>" nel piano inferiore del corpo flangiato.

DETAIL OF THE FLANGED GEARCASE

For the gearbox fixing also the 4 threads "t<sub>F</sub>" in the lower part of the flanged gearcase can be used.

DETAIL DES GEHÄUSES MIT ABTRIEBSFLANSCH

Auch die vier Gewinde "t<sub>F</sub>", welche sich im unteren Teil des Gehäuses befinden, können zur Montage des Getriebes verwendet werden.



	t <sub>F</sub>	b <sub>F</sub>	a <sub>F</sub>	a <sub>2F</sub>
63	N°4 M10 x 15	60	117	82
71	N°4 M10 x 15	70	140	100
90	N°4 M12 x 20	88	152	110
112	N°4 M16 x 24	102	170	122



1.8 Dimensioni

1.8 Dimensions

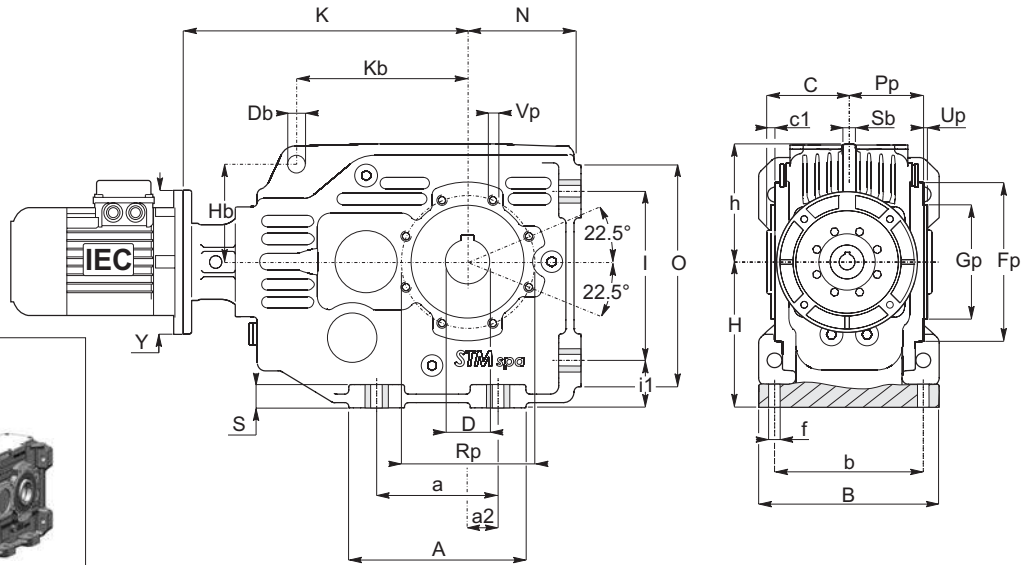
1.8 Abmessungen

Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

# OM 80-100-125-140-160-180

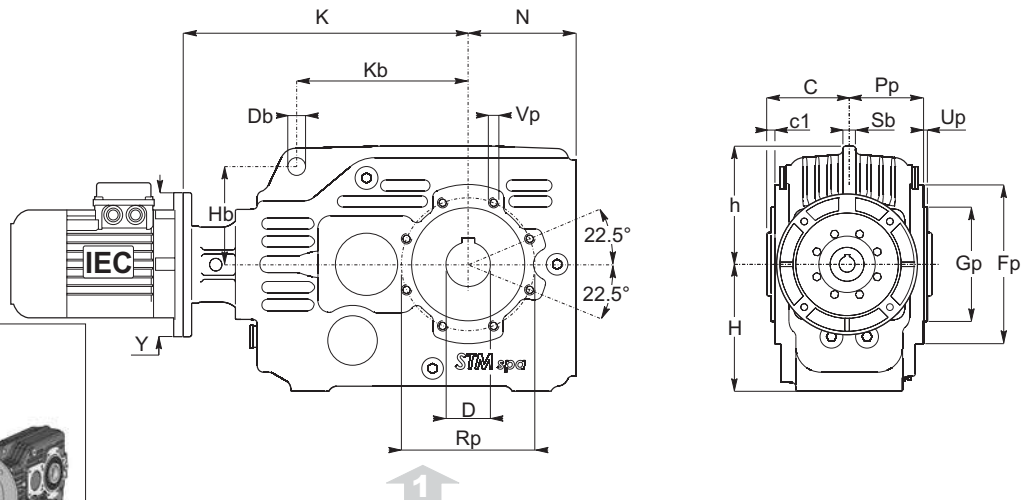
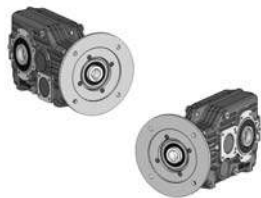
## OMP

80-100  
125-140  
160-180



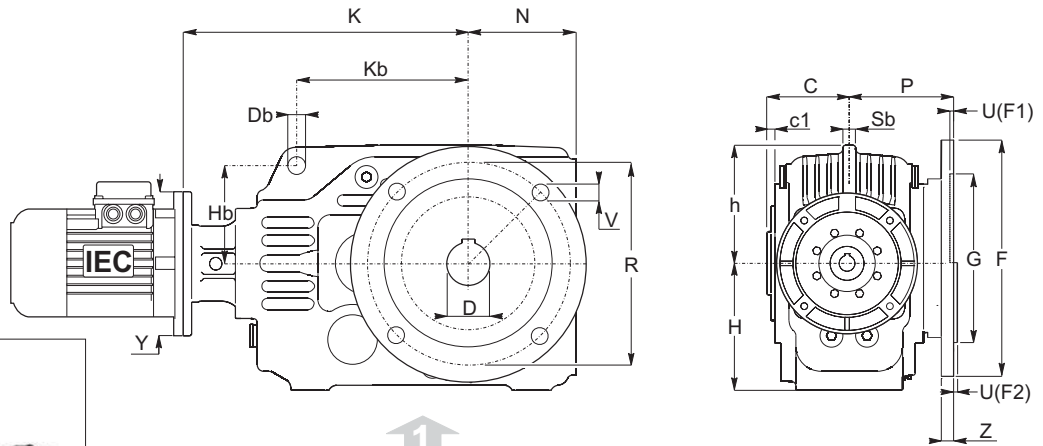
## OMF

80-100  
125-140  
160-180



## OMF F1-F2

80-100  
125-140  
160-180





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

OM	a	A	a2	b	B	C	c1	D H7	f	h	H		i1	I	N		O	S	Db	Kb	Hb	Sb
											OM F	OM P			OM F	OM P						
80	*					65	6,5	32 (30) (35)	*	93	100	*		85,5	*				13	135	77	10
100	120	175	30	140	170	77,5	7,0	45 (40) (50)	14	113	120	140	45	160	105,5	112	210	22	13	170	95	13
125	150	215	40	165	200	90	9,0	55 (50) (60)	18	140	145	180	55	200	140,5	132	265	25	16	215	118	15
140	270	325	90	210	260	110	6,5	70 (60)	22	182	190	212	62	260	175,5	160	315	26	26	275	150	18
160	315	378	110	240	290	151	6	90	22	198	190	245	55	295	193	200	355	30	26	290	155	18
180	355	425	125	270	330	170	5	100	26	209	206	275	75	325	208	225	395	35	32	320	155	25

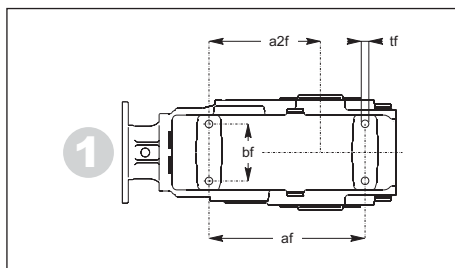
OM	Gp	Fp	Pp	Rp	Up	Vp		F		G F8	P	R	U	V	Z
								F1	F2	F1	F1	F1	F1	F1	F2
80	90 - g6	125	58,5	105	3	M8		F1	200	130	100	165	4,5	N°4 ø11	11
100	110 - g6	150	70,5	125	3	M8		F1	250	180	125	215	5	N°4 ø13	14
125	135 - g6	180	81,0	150	3	M10		F1	300	230	150	265	5	N°4 ø15	16
								F2	350	250 (g6)	150	300	5	N°4 ø18	18
140	170 - g6	230	103,5	200	4	M12		F1	350	250	180	300	6	N°4 ø17	25
								F1	400	300	183,5	350	5	N°4 ø18	18
160	180 - H7	280	145	225	7	M16		F2	450	350	183,5	400	5	N°8 ø18	25
								F3	350	250	180	300	6	N°4 ø17	25
180	200 - H7	302	165	250	7	M18		F1	550	450	221	500	5	N°8 ø18	25

OM	IEC	Y	80	100	125	140	160	180
			K	K	K	K	K	K
OM	71 B5	160	244	-	-	-	-	-
	80 B5	200	244	311	362	411	-	-
	80 B14	120	244	-	-	-	-	-
	90 B5	200	244	311	362	411	-	-
	90 B14	140	244	-	-	-	-	-
	100-112 B5	250	244	311	362	411	-	-
	100-112 B14	160	244	-	-	-	-	-
	132 B5	300	-	311	362	411	495	533
	132 B14	200	-	-	-	-	-	-
	160 B5	350	-	-	405	469	504	542
	180 B5	350	-	-	405	469	504	542
	200 B5	400	-	-	-	474	509	547
	225 B5	450	-	-	-	-	550.25	588.25
	250 B5	550	-	-	-	-	550.25	588.25
280 B5	550	-	-	-	-	550.25	588.25	

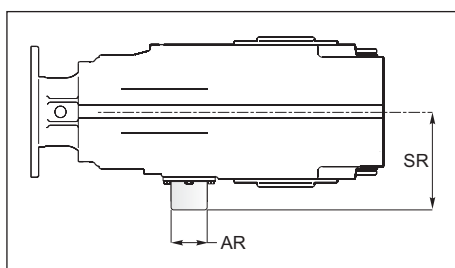
Le dimensioni K si riferiscono alle combinazioni albero/flangia B5 e B14, standard. Per le dimensioni relative a combinazioni albero/flangia arichiesta, contattare il ns. servizio tecnico.

The K dimensions refer to the standard B5 and B14 shaft/flange combinations. As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.

Die Maße K beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.



Particolare corpo in versione flangiata / Detail of the flanged gearcase Detail des géhäuses mit abtriebsflansch				
OM	af	a2f	bf	tf
80	175	125	64	M10
100	230	159	73	M12
125	300	210	88	M14
140	390	270	130	M18
160	-	-	-	-
180	-	-	-	-



Antiretro / Backstop Device / Rücklaufperre		
	AR	SR
80	50	72
100	55	93,5
125	60	110
140	80	124,5
160	*	
180	*	

\*Contattare il ns. servizio tecnico / Contact our technical dept / Wenden Sie sich an unseren technischen Service



1.8 Dimensioni

1.8 Dimensions

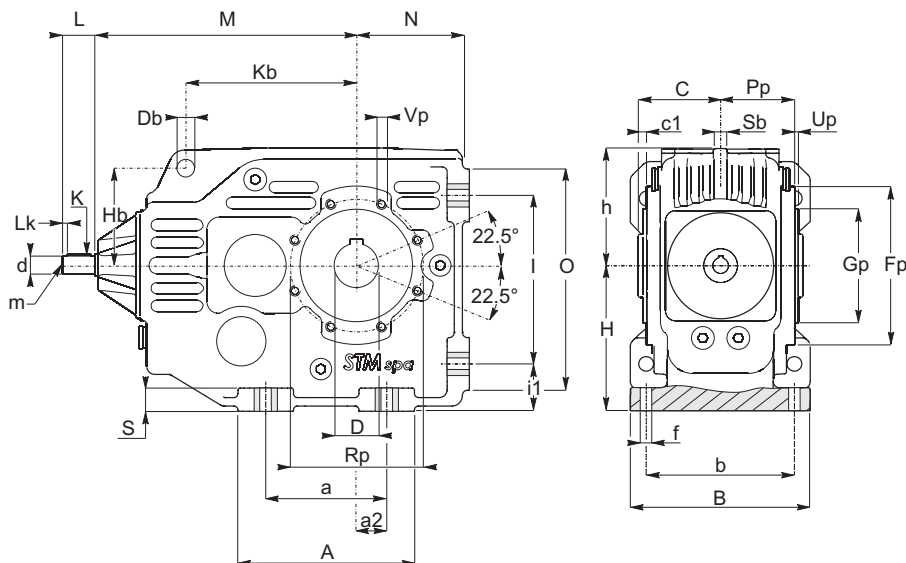
1.8 Abmessungen

Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

OR 80-100-125-140-160-180

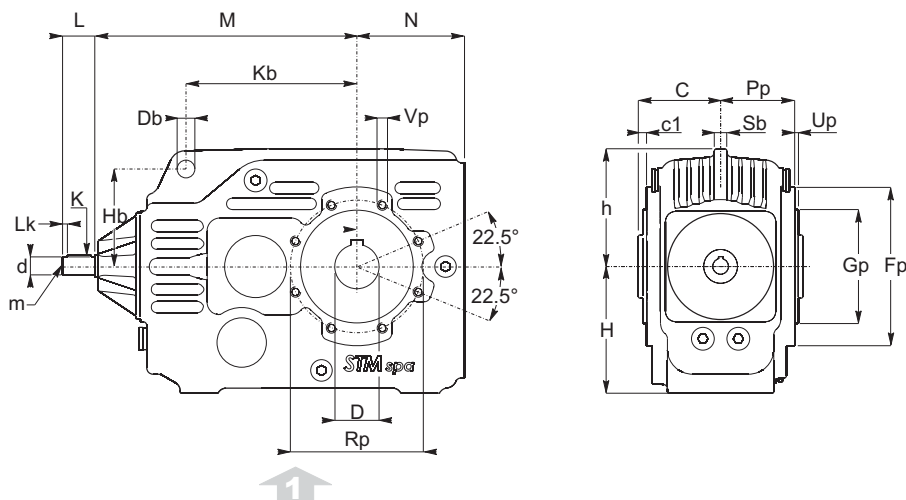
ORP

80-100  
125-140  
160-180



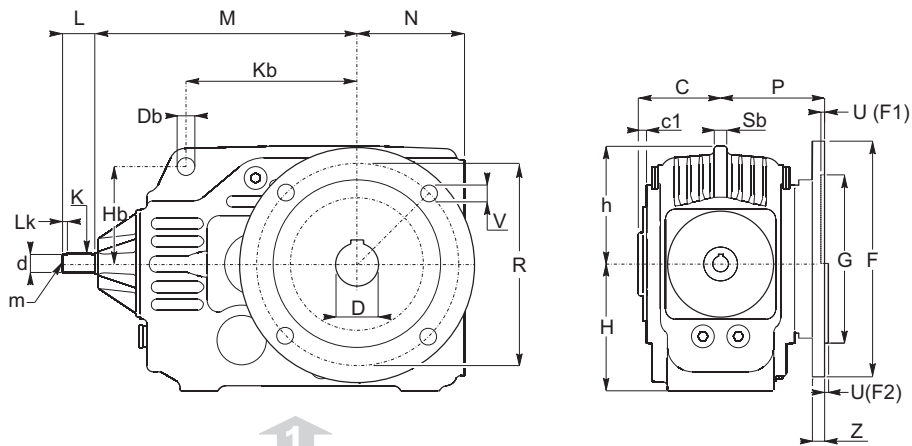
ORF

80-100  
125-140  
160-180



ORF  
F1-F2

80-100  
125-140  
160-180





1.8 Dimensioni

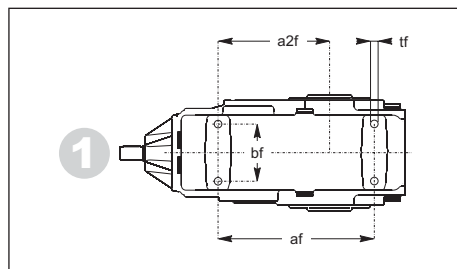
1.8 Dimensions

1.8 Abmessungen

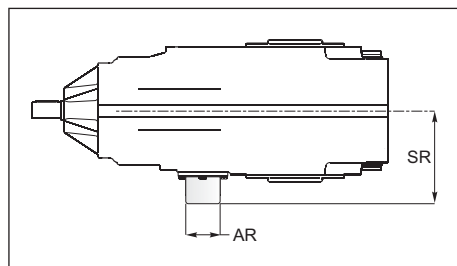
OM	a	A	a2	b	B	C	c1	D H7	f	h	H		i1	I	N		O	S	Db	Kb	Hb	Sb
											OM F	OM P			OM F	OM P						
80	*					65	6,5	32 (30) (35)	*	93	100	*		85,5	*			13	135	77	10	
100	120	175	30	140	170	77,5	7,0	45 (40) (50)	14	113	120	140	45	160	105,5	112	210	22	13	170	95	13
125	150	215	40	165	200	90	9,0	55 (50) (60)	18	140	145	180	55	200	140,5	132	265	25	16	215	118	15
140	270	325	90	210	260	110	6,5	70 (60)	22	182	190	212	62	260	175,5	160	315	26	26	275	150	18
160	315	378	110	240	290	151	6	90	22	198	190	245	55	295	193	200	355	30	26	290	155	18
180	355	425	125	270	330	170	5	100	26	209	206	275	75	325	208	225	395	35	32	320	155	25

OM	Gp	Fp	Pp	Rp	Up	Vp		F		G F8	P	R	U	V	Z
								F1							
80	90 - g6	125	58,5	105	3	M8		F1	200	130	100	165	4,5	N°4 ø11	11
100	110 - g6	150	70,5	125	3	M8		F1	250	180	125	215	5	N°4 ø13	14
125	135 - g6	180	81,0	150	3	M10	F1	300	230	150	265	5	N°4 ø15	16	
							F2	350	250 (g6)	150	300	5	N°4 ø18	18	
140	170 - g6	230	103,5	200	4	M12	F1	350	250	180	300	6	N°4 ø17	25	
							F1	400	300	183,5	350	5	N°4 ø18	18	
160	180 - H7	280	145	225	7	M16	F2	450	350	183,5	400	5	N°8 ø18	25	
							F3	350	250	180	300	6	N°4 ø17	25	
180	200 - H7	302	165	250	7	M18	F1	550	450	221	500	5	N°8 ø18	25	

OR	d	m	M	K	Lk	L
80	19 j6	M6	210	6x6x30	5	40
100	24 j6	M8	260	8x7x40	5	50
125	28 j6	M8	317	8x7x50	5	60
140	38 k6	M10	400	10x8x70	5	80
160	*					
180	*					



Particolare corpo in versione flangiata / Detail of the flanged gearcase Detail des gehäuses mit abtriebsflansch				
OM	af	a2f	bf	tf
80	175	125	64	M10
100	230	159	73	M12
125	300	210	88	M14
140	390	270	130	M18
160	-	-	-	-
180	-	-	-	-



Antiretro / Backstop Device / Rücklaufsperre		
	AR	SR
80	50	72
100	55	93,5
125	60	110
140	80	124,5
160	*	
180	*	

\*Contattare il ns. servizio tecnico / Contact our technical dept / Wenden Sie sich an unseren technischen Service



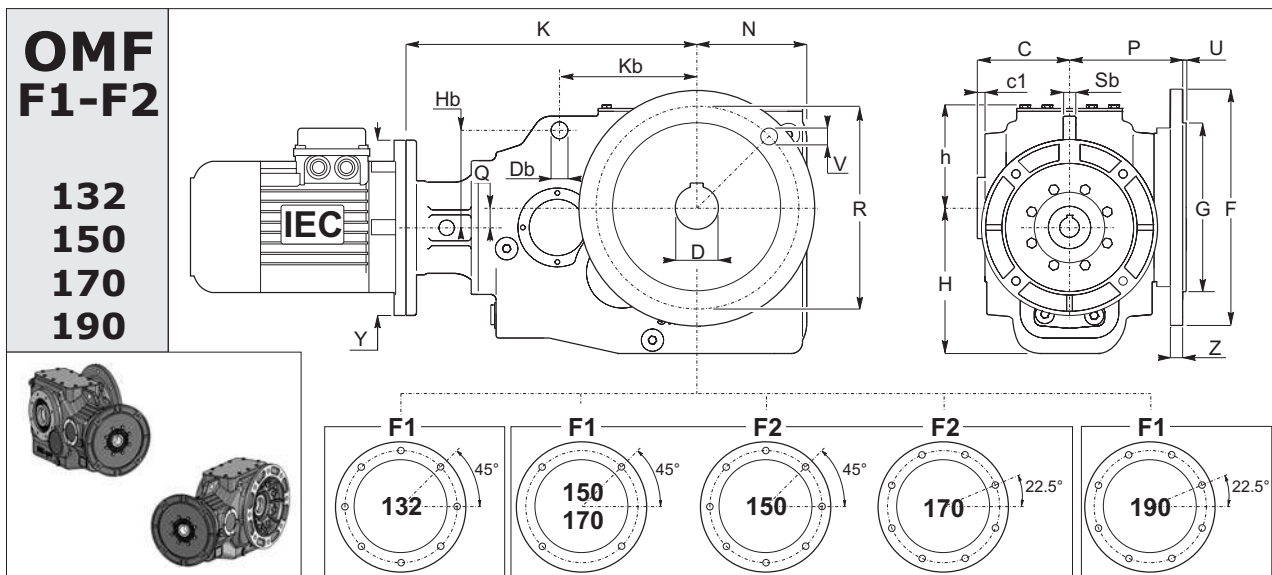
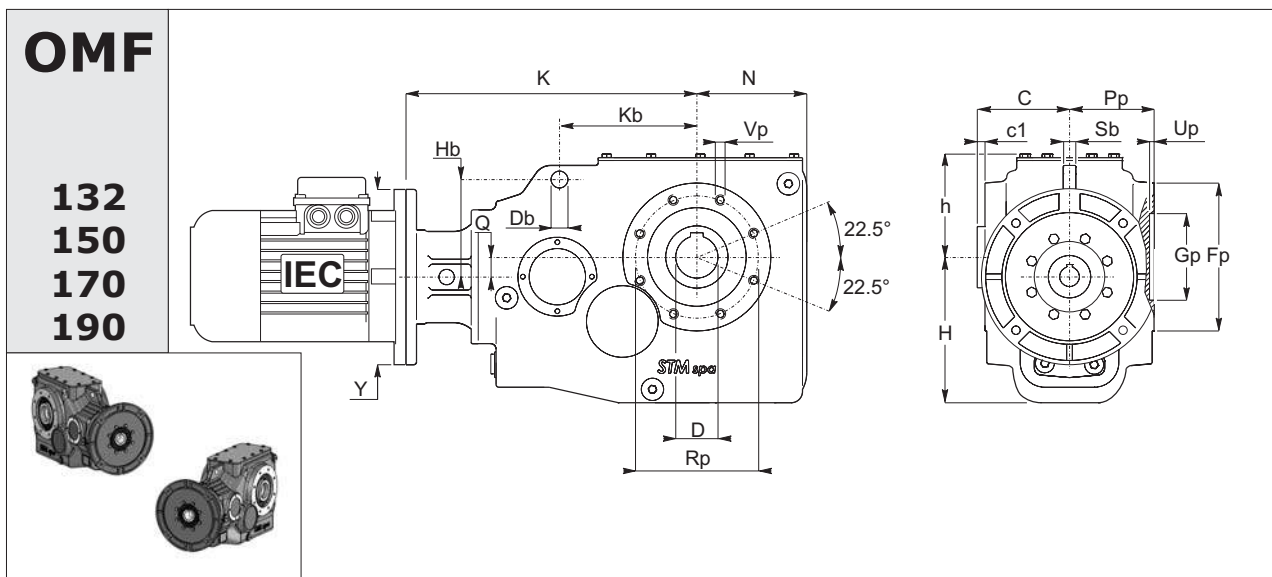
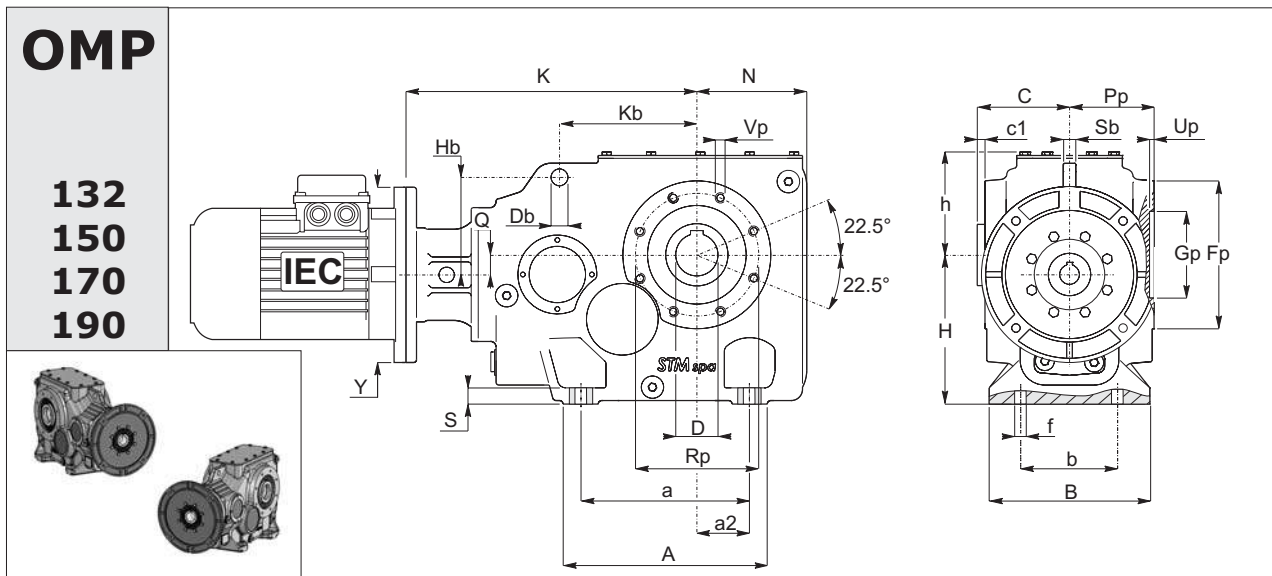
1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

# OM 132-150-170-190





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

OM	a	A	a2	b	B	C	c1	D H7	f	h	H		N	Q	S	Db	Kb	Hb	Sb
											OMP	OMF							
132	240	290	75	190	228	121	1	60 (70)	22	147	212	207	156	28	23	24	195	138	18
150	270	325	90	210	255	137	4.5	70 (80)	22	170	245	240	183	30	27	26	220	155	22
170	315	375	110	240	280	151	6	90	22	188	275	270	210	35	30	32	240	175	25
190	355	425	125	270	320	170	5	100	26	208.5	315	308	236	38	35	38	276	155	30

OM	Gp H7	Fp	Pp	Rp	Up	Vp	F		G g6	P	R	U	V	Z
							F1	F2						
132	140	210	120	175	7	N° 8 M12 x 24	F1	350	250	160	300	5	N° 8 φ 18	17
150	160	240	132.5	200	7	N° 8 M14 x 28	F1	400	300	174.5	350	5	N°4 φ 18	18
							F2	450	350	174.5	400	5	N°8 φ 19	18
170	180	275	145	225	7	N°8 M16 x 32	F1	400	300	183.5	350	5	N°4 φ 18	18
							F2	450	350	183.5	400	5	N°8 φ 18	25
190	200	310	165	250	7	N°8 M18 x 36	F1	550	450	221	500	5	N°8 φ 19	25

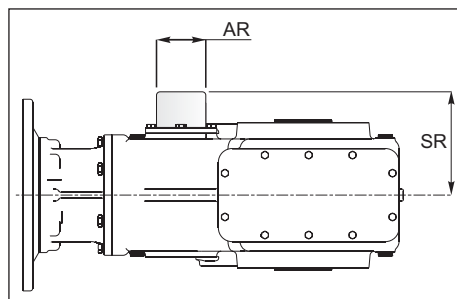
OM	IEC B5	132		150		170		190	
		Y	K	Y	K	Y	K	Y	K
	90	200	413	-	-	-	-	-	-
	100-112	250	413	250	455	250	484.5	-	-
	132	300	413	300	453	300	482.5	300	527.4
	160-180	350	456	350	512	350	562.5	350	586.4
	200	-	-	400	517	400	567.6	400	591.4
	225	-	-	-	-	450	576.5	450	632.4
	250	-	-	-	-	-	-	550	632.4

Le dimensioni K si riferiscono alle combinazioni albero/flangia B5 e B14, standard. Per le dimensioni relative a combinazioni albero/flangia arichiesta, contattare il ns. servizio tecnico.

The K dimensions refer to the standard B5 and B14 shaft/flange combinations. As far as the dimensions of shaft/flange combinations on request are concerned, please contact our technical department.

Die Maße K beziehen sich auf die Kombinationen Welle/Flansch B5 und B14 Standard. Hinsichtlich der Maße von Kombinationen Welle/Flansch auf Anfrage wenden Sie sich bitte an unseren technischen Kundendienst.

Antiretro:



backstop device:

Rücklaufperre:

	AR	SR
132	80	155
150	90	178.5
170	100	181.75
190	110	199





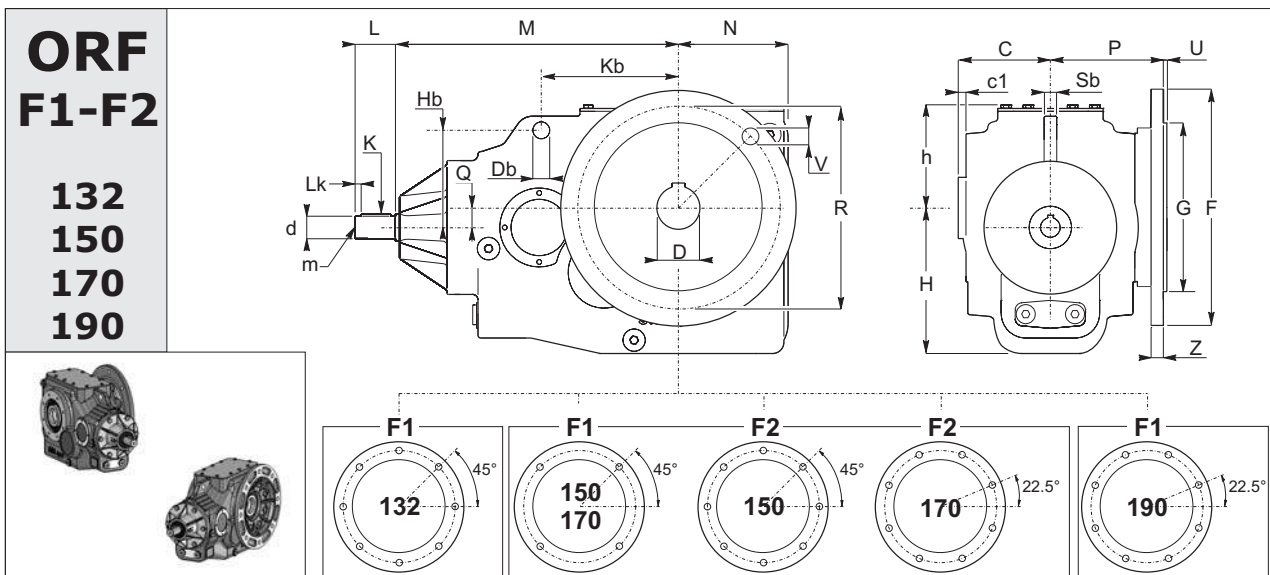
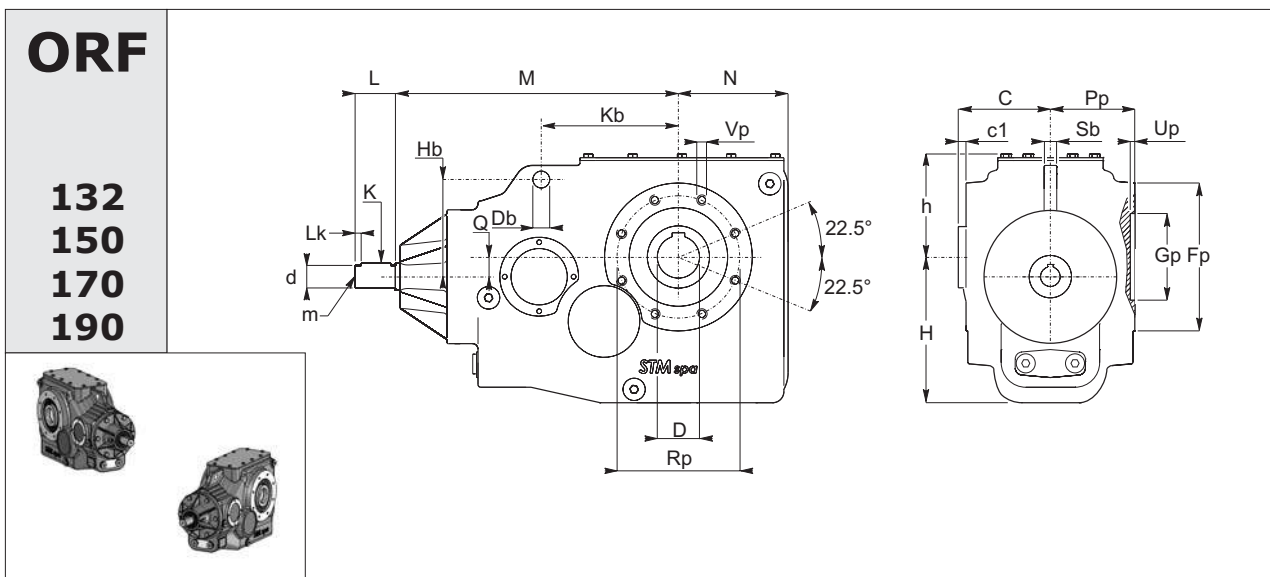
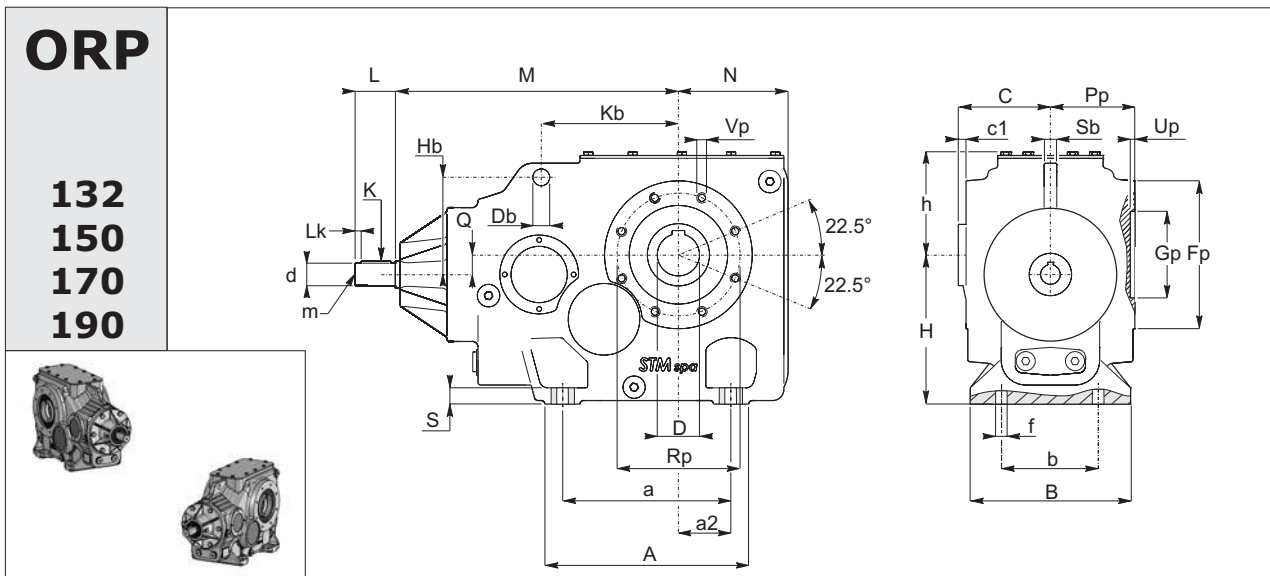
1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

Dimensioni riduttori  
Dimensions gearboxes  
Abmessungen Getriebes

# OR 132-150-170-190





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

OR	a	A	a2	b	B	C	c1	D H7	f	h	H		N	Q	S	Db	Kb	Hb	Sb
											ORP	ORF							
132	240	290	75	190	228	121	1	60 (70)	22	147	212	207	156	28	23	24	195	138	18
150	270	325	90	210	255	137	4.5	70 (80)	22	170	245	240	183	30	27	26	220	155	22
170	315	375	110	240	280	151	6	90	22	188	275	270	210	35	30	32	240	175	25
190	355	425	125	270	320	170	5	100	26	208.5	315	308	236	38	35	38	276	155	30

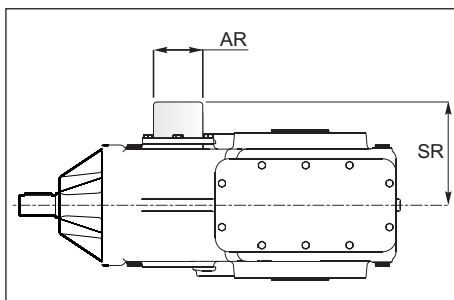
OR	Gp H7	Fp	Pp	Rp	Up	Vp	F		G g6	P	R	U	V	Z
							F1	F2						
132	140	210	120	175	7	N° 8 M12 x 24	F1	350	250	160	300	5	N° 8 φ 18	17
150	160	240	132.5	200	7	N° 8 M14 x 28	F1	400	300	174.5	350	5	N° 4 φ 18	18
							F2	450	350	174.5	400	5	N° 8 φ 19	18
170	180	275	145	225	7	N° 8 M16 x 32	F1	400	300	183.5	350	5	N° 4 φ 18	18
							F2	450	350	183.5	400	5	N° 8 φ 18	25
190	200	310	165	250	7	N° 8 M18 x 36	F1	550	450	221	500	5	N° 8 φ 19	25

OR	d j6	m	M	K	Lk	L
132	32	M10	390	10x8x50	5	60
150	42	M12	445	12x8x70	5	80
170	50	M16	495	14x9x90	5	100
190	60	M12	550	18x11x100	10	120

Antiretro:

backstop device:

Rücklaufsperre:



	AR	SR
132	80	155
150	90	178.5
170	100	181.75
190	110	199



**Pagina bianca  
Leerseite  
Blank page**



STIM  
team

**ESTREMITA USCITA - Accessori - Opzioni**  
**OUTPUT CONFIGURATIONS - Accessories - Options**  
**ENDEN DER AUSGANGSWELLEN - Zubehör - Optionen**

			Output shaft Double integral output shaft	<b>C60</b>
			Hollow shaft with keyway	<b>C61</b>
			Quick Locking Adjustment "Quick Locking"	<b>C64</b>
			Hollow shaft with shrink disk	<b>C66</b>
			Splined hollow shaft	<b>C69</b>
			Splined output shaft Double splined shaft	<b>C70</b>
			Broached flange Double broached flange	<b>C72</b>

<b>AL</b>	<b>BRS VKL</b>	<b>PROT</b>	<b>RR</b>	<b>FF</b>

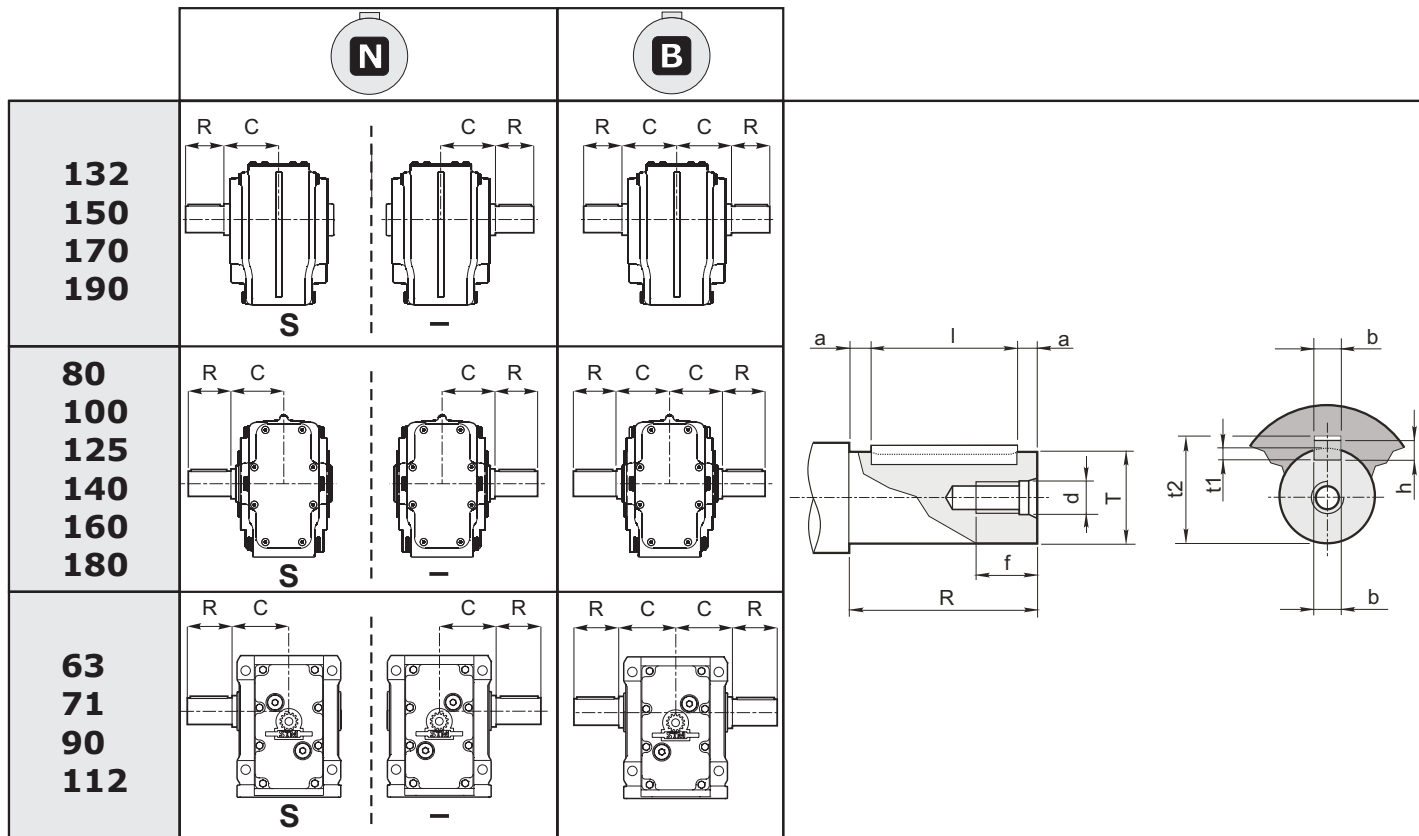
OPT - ACC. -  
Accessories - Options

**C74**

STIM  
team

C





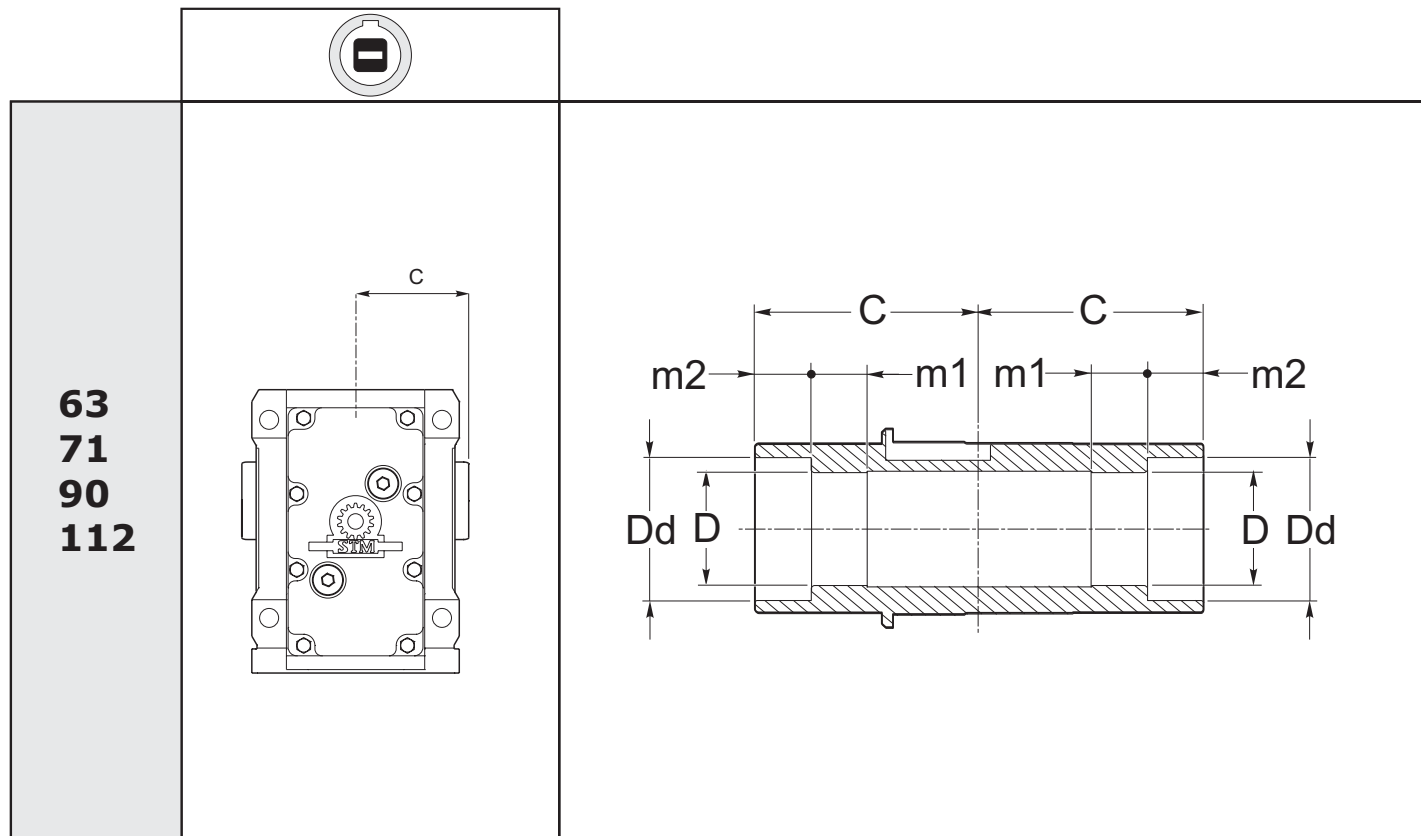
	Ø Albero Ø Shaft Ø Welle		Foro fil. testa Tapped hole Gewindebohrung Kopf		Cava Keyway Nut			Estremità d'albero Shaft end Wellenende		Linguetta Key Federkeil
	T	C	d	f	b	t1	t2	R	a	bxhxl
63	30 g6	60	M 10	25	8	4	33.3	60	5	8X7X50
71	35 g6	75	M 10	25	10	5	38.3	70	5	10x8x60
80	32 k6	71	M8	22	10	5	35.3	60	5	10x8x50
90	40 g6	90	M 10	25	12	5	43.3	80	5	12x8x70
100	45 g6	77.5	M 10	25	14	5.5	48.8	90	5	14x9x80
112	50 g6	105 - N 106 - B	M 12	32	14	5.5	53.8	100	5	14x9x90
125	55 g6	90	M 12	32	16	6	59.3	110	5	16x10x100
132	60 m6	121	M 12	35	18	7	64.4	112	6	18x11x100
	70 m6		M 16	39	20	7.5	74.9	125	7.5	20x12x110
140	70 m6	122	M16	39	20	7.5	74.9	125	7.5	20x12x110
150	70 m6	137	M 16	39	20	7.5	74.9	125	7.5	20x12x110
	80 m6		M 16	39	22	9	85.4	140	7.5	22x14x125
160 170	90 m6	151	M 16	39	25	9	95.4	160	10	25x14x140
180 190	100 m6	170	M 20	46	28	10	106.4	180	10	28x16x160



1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

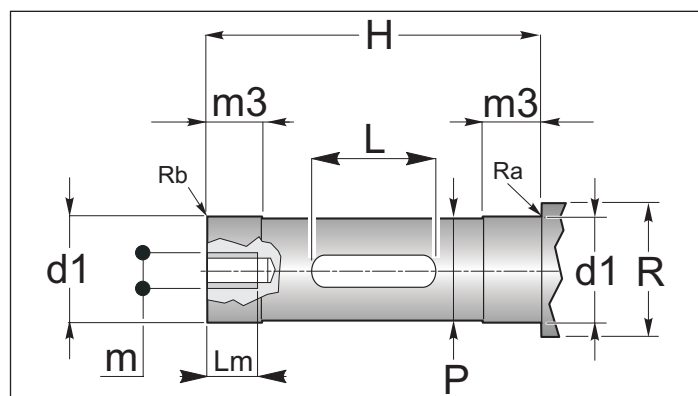
1.8.1 - ABTRIEBSWELLEN

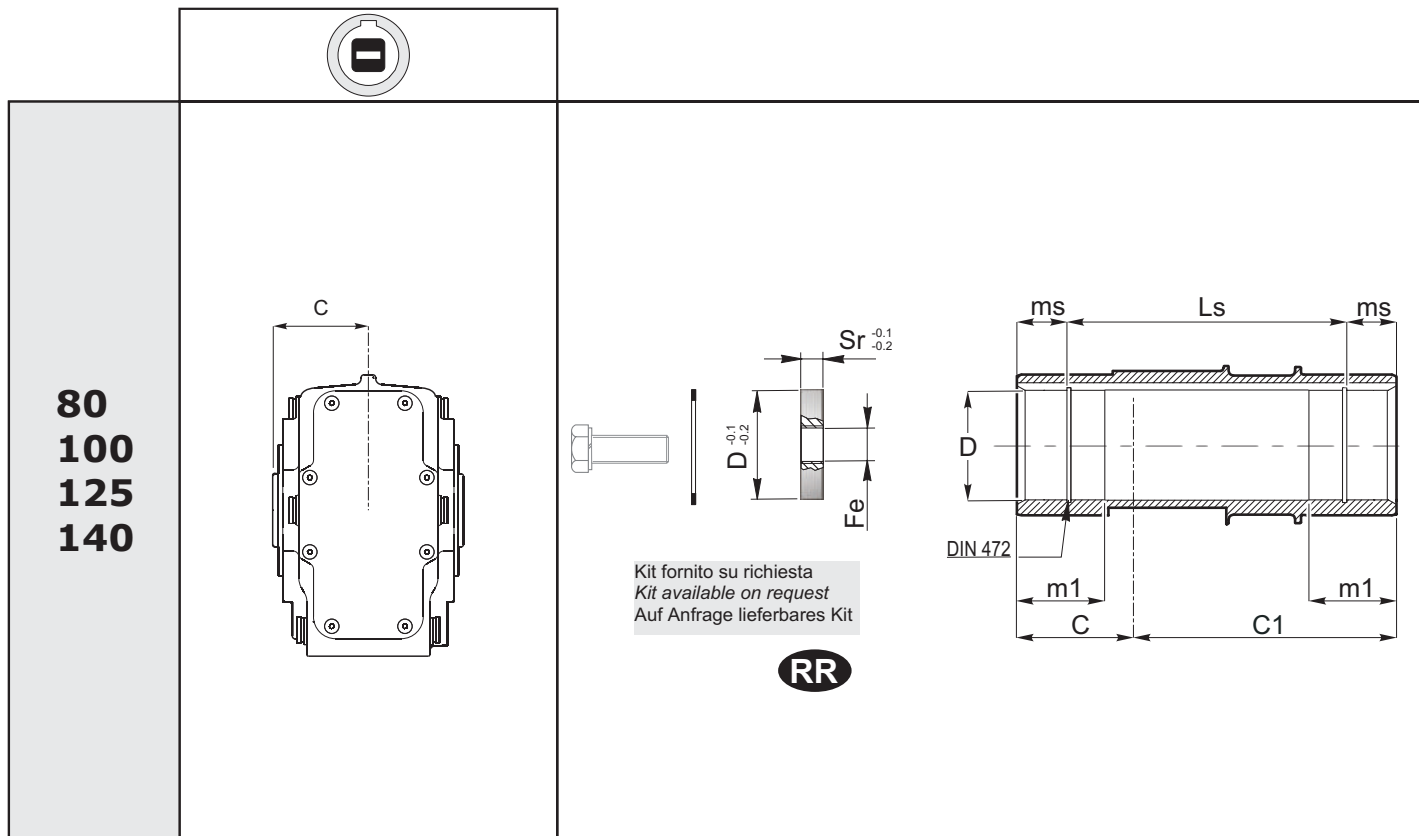


	63	71	90	112
<b>C</b>	60	75	90	105
<b>D</b>	30	35	40	50
<b>H7</b>	(25) (28)	(30) (32)	(42) (45) (48)	(55)
<b>m1</b>	15	30	35	35
<b>m2</b>	15	15	20	25
<b>Dd</b>	38	43	55	61

Perno macchina / Customer shaft / Maschinachse

	d1 h6	m3	Lm	m	H	L min	P	R	Ra	Rb
<b>63</b>	30 (25) (28)	20	25 (25) (25)	M 10 (M 8) (M 10)	88	50	29.8 (24.8) (27.8)	36		
<b>71</b>	35 (30) (32)	35	25	M 10	118	60	34.8 (29.8) (31.8)	42.5		
<b>90</b>	40 (42) (45) (48)	40	25	M 10	138	90	39.8 (41.8) (44.8) (47.8)	54.5		
<b>112</b>	50 (55)	35	32	M 12	158	110	49.8 (54.8)	60		

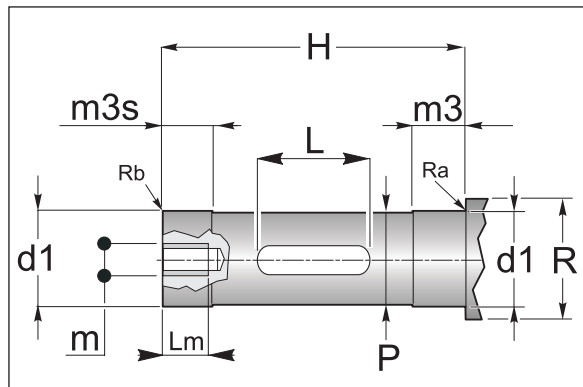




	80	100	125	140
C	65	77,5	90	110
D H7	32 (30) (35)	45 (40) (50)	55 (50) (60)	70 (60)
m1	35	42.5	55	60
ms	15	15	17.5	17.5
Ls	100	125	145	185

Perno macchina / Customer shaft / Maschinachse

	d1 h6	m3	m3s	Lm	m	H	L min	P	R	Ra	Rb	Sr	Fe
80	32 (30) (35)	30	30	25	M10	119	70	31.8 (29.8) (34.8)	42 (40) (45)			-	-
100	45 (50) (40)	45	15	25 (32) (25)	M 10 (M 12) (M 10)	125	80	44.8 (49.8) (39.8)	55 (60) (50)			10	M14
125	55 (60) (50)	60	20	32	M 12	142	110	54.8 (59.8) (49.8)	65 (70) (60)			15	M14
140	70 (60)	40	40	40 (35)	M20 (M12)	198	150	69.8 (59.8)	80 (70)			-	-

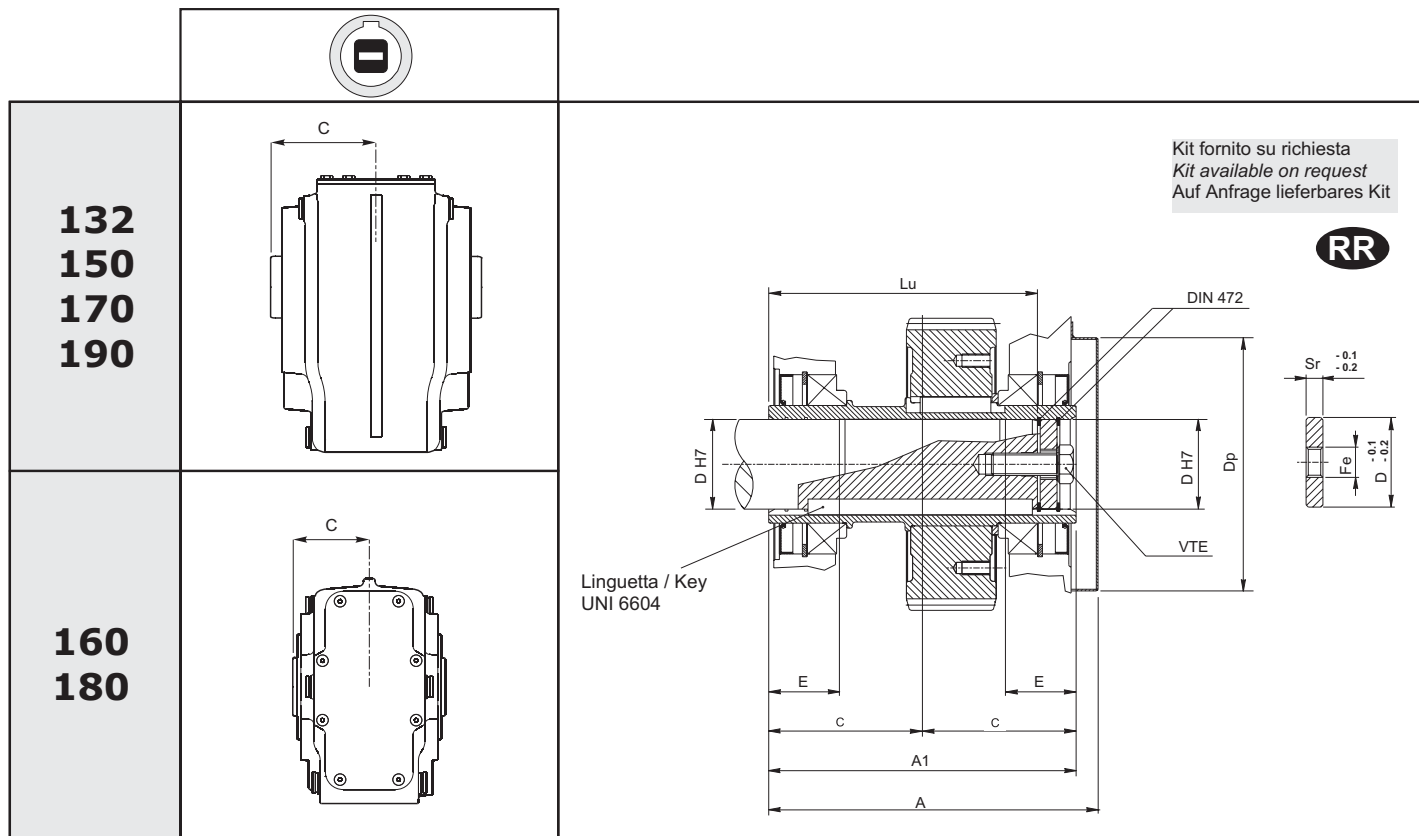




1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

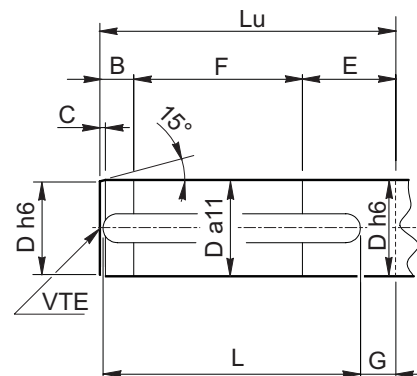
1.8.1 - ABTRIEBSWELLEN



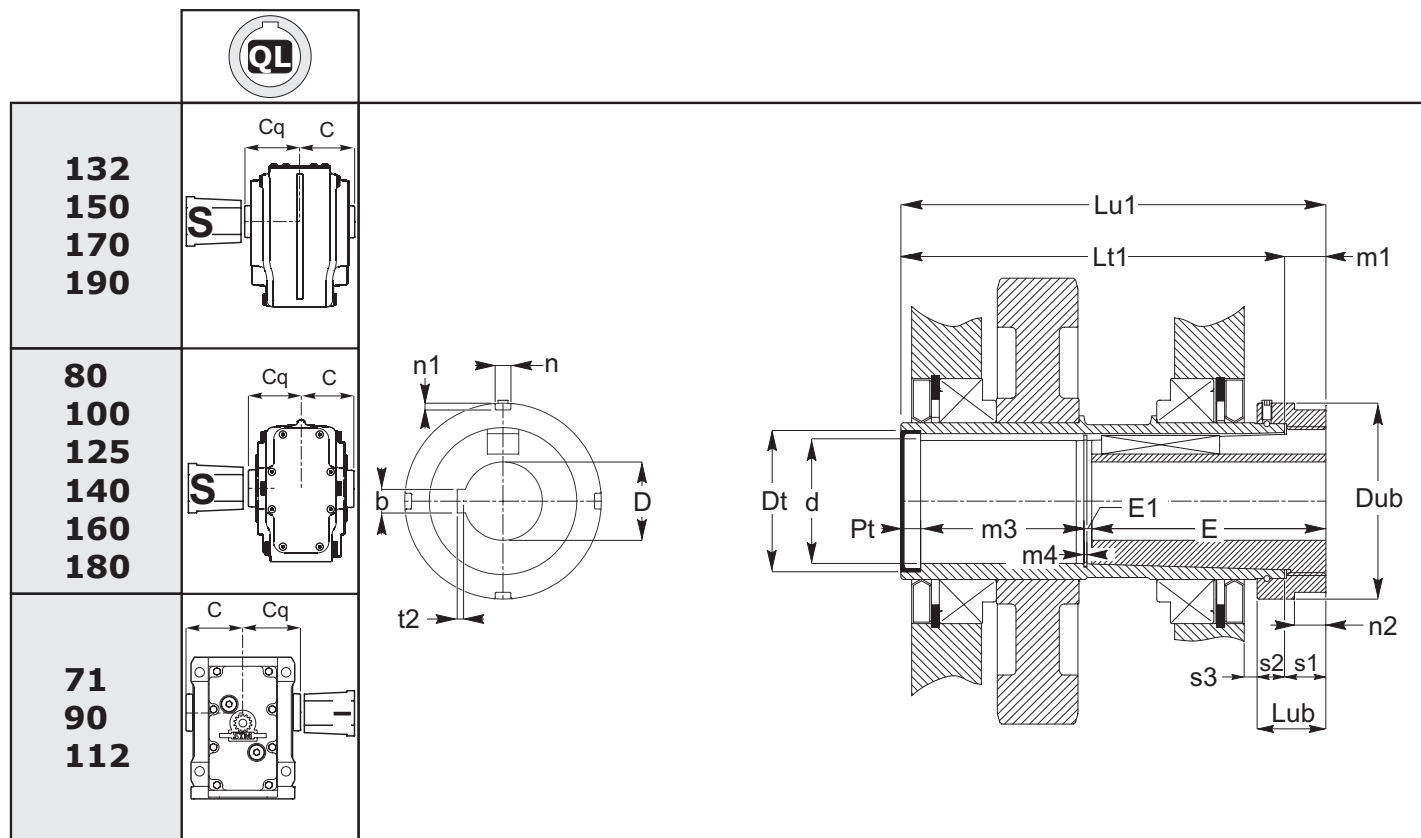
	132	150	160-170	180-190
A	269	302	332	379
A1	242	274	302	340
C	121	137	151	170
D	60 (70)	70 (80)	90	100
Dp	183	226	226	260
E	56	63	70	80
Lu	207.5	239.5	261	299
Sr	15	15	18	18
Fe	M27	M27	M30	M30
VTE	M20x60	M20x60	M24x75	M24x75

Albero Macchina / Machine shaft / Machine Shaft

	B	C	D	E	F	G	L	Lu	VTE
132	26.5	4	60 (70)	61	120	25	180	207.5	M20
150	33.5	4.5	70 (80)	68	138	36	200	239.5	M20
160 170	36	5	90	77	148	37	220	261	M24
180 190	44	5.5	100	85	170	43	250	299	M24







	71	80	90	100	112	125	132	140	150	160-170	180-190
C	75	65	90	77,5	105	90	121	110	137	151	170
Cq	111	101	126	113,5	141	126	157	146	173	187	206
d	35.2	35.2	49.2	49.2	54.2	60.2	70.2	69.2	80.2	90.2	100.2
dt	47	47	62	62	65	72	85	85	100	110	120
Dub	70	70	85	85	90	100	105	115	120	135	145
E	91	91	121	121	131	131	141	141	161	181	201
E1	3.5	3.5	3.5	3.5	3.5	3.5	4.2	4.2	4.2	4.2	5.2
Lt1	165	145	195	170	225	195	257	235	289	317	355
Lu1	186	166	216	191	246	216	278	256	310	338	376
Lub	35	35	35	35	35	35	35	35	35	35	35
m1	21	21	21	21	21	21	21	21	21	21	21
m3	84.5	64.5	83.5	58.5	101.5	71.5	120.8	98.8	132.8	140.8	157.8
m4	1.7	1.7	1.7	1.7	1.7	1.7	2.2	2.2	2.2	2.2	2.7
n2	15	15	15.5	15.5	15.5	16	16	16	17	17	17
s1	21	21	21	21	21	21	21	21	21	21	21
s2	14	14	14	14	14	14	14	14	14	14	14
s3	8	4.5	8	5	8.5	6.5	10	6	13	17	15
D	20	20	25	25	30	35	40	40	45	55	70
H7	25	25	30	30	35	40	45	45	50	60	75
	30	30	35	35	40	45	50	50	55	65	80
			40	40	45	48	55	55	60	70	85
			42	42	45	50	60	60	65	75	90
			45	45	50	55	65	65	70	80	
			48	48					75		
n	6	6	7	7	7	8	8	8	10	10	10
n1	2.5	2.5	3	3	3	3.5	3.5	3.5	4	4	4
b											
t2											
<b>UNI 6604</b>											

1.8.1 - ALBERI LENTI

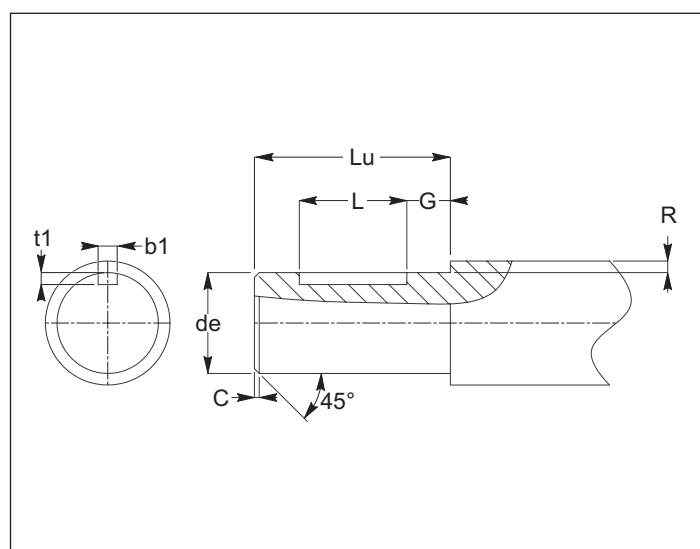
1.8.1 - OUTPUT SHAFT

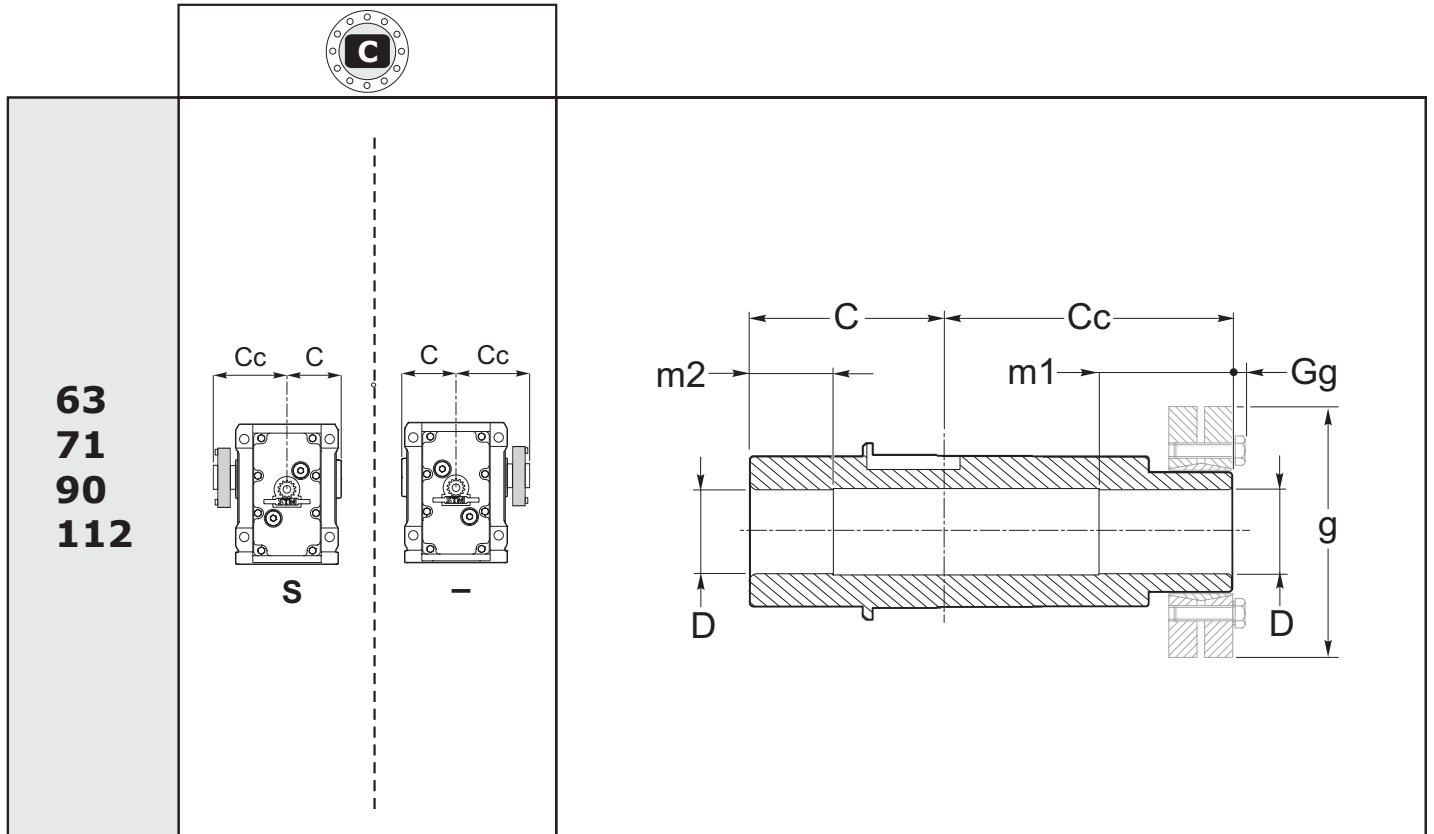
1.8.1 - ABTRIEBSWELLEN

Perno macchina / Customer shaft / Maschinachse

	C	de h6	G	L	Lu	R	b1	t1
<b>71</b>	1	(20)	10	40	90	5		
		(25)		50				
		(30)		60				
<b>80</b>	1	(20)	10	40	90	5		
		(25)		50				
		(30)		60				
<b>90</b>	1.5	(25)	10	50	120	5		
		(30)	10	60				
		(35)	10	70				
		(38)	10	70				
		(40)	5	80				
		(42)	5	80				
(45)	5	90						
(48)	5	90						
<b>100</b>	1.5	(25)	10	50	120	5		
		(30)	10	60				
		(35)	10	70				
		(38)	10	70				
		(40)	5	80				
		(42)	5	80				
(45)	5	90						
(48)	5	90						
<b>112</b>	1.5	(30)	10	60	130	5		
		(35)	10	70				
		(40)	10	80				
		(45)	5	90				
		(50)	5	100				
<b>125</b>	1.5	(35)	10	70	130	5		
		(40)	10	80				
		(45)	10	90				
		(48)	10	90				
		(50)	5	100				
		(55)	5	100				
<b>132</b>	1.5	(40)	10	80	140	7.5		
		(45)	10	90				
		(50)	10	100				
		(55)	5	100				
		(60)	5	120				
(65)	5	120						
<b>140</b>	1.5	(40)	10	80	140	7.5		
		(45)	10	90				
		(50)	10	100				
		(55)	5	100				
		(60)	5	120				
(65)	5	120						
<b>150</b>	2	(45)	10	90	160	7.5		
		(50)	10	100				
		(55)	10	100				
		(60)	5	120				
		(65)	5	120				
		(70)	5	120				
(75)	5	140						
<b>160</b> <b>170</b>	2	(55)	10	100	180	7.5		
		(60)	10	120				
		(65)	10	120				
		(70)	5	120				
		(75)	5	150				
(80)	5	150						
<b>180</b> <b>190</b>	2	(70)	10	120	200	10		
		(75)	10	150				
		(80)	10	150				
		(85)	5	170				
(90)	5	170						

UNI  
6604

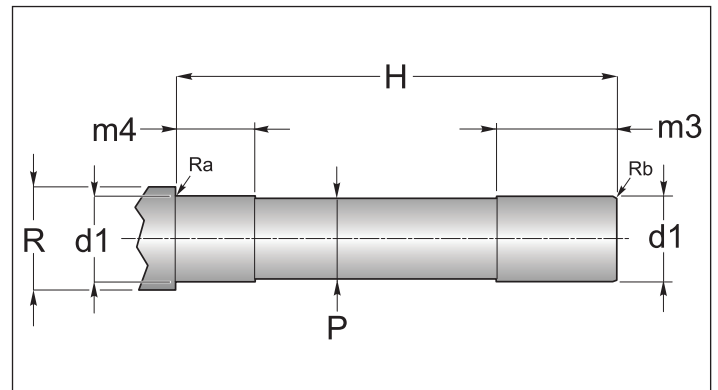




	63	71	90	112
<b>C</b>	60	75	90	105
<b>Cc</b>	85	100	120	140
<b>D</b> <b>H7</b>	30	35	40	50
<b>m1</b>	40	40	50	55
<b>m2</b>	25	25	30	40
<b>g</b>	72	80	90	110
<b>Gg</b>	4	4	6	1

Perno macchina / Customer shaft / Maschinachse

	d1 h6	H	m3	m4	P	R	Ra	Rb
<b>63</b>	30	145	45	30	29.8	36		
<b>71</b>	35	175	45	30	34.8	42.5		
<b>90</b>	40	210	55	35	39.8	54.5		
<b>112</b>	50	245	60	45	49.8	60		

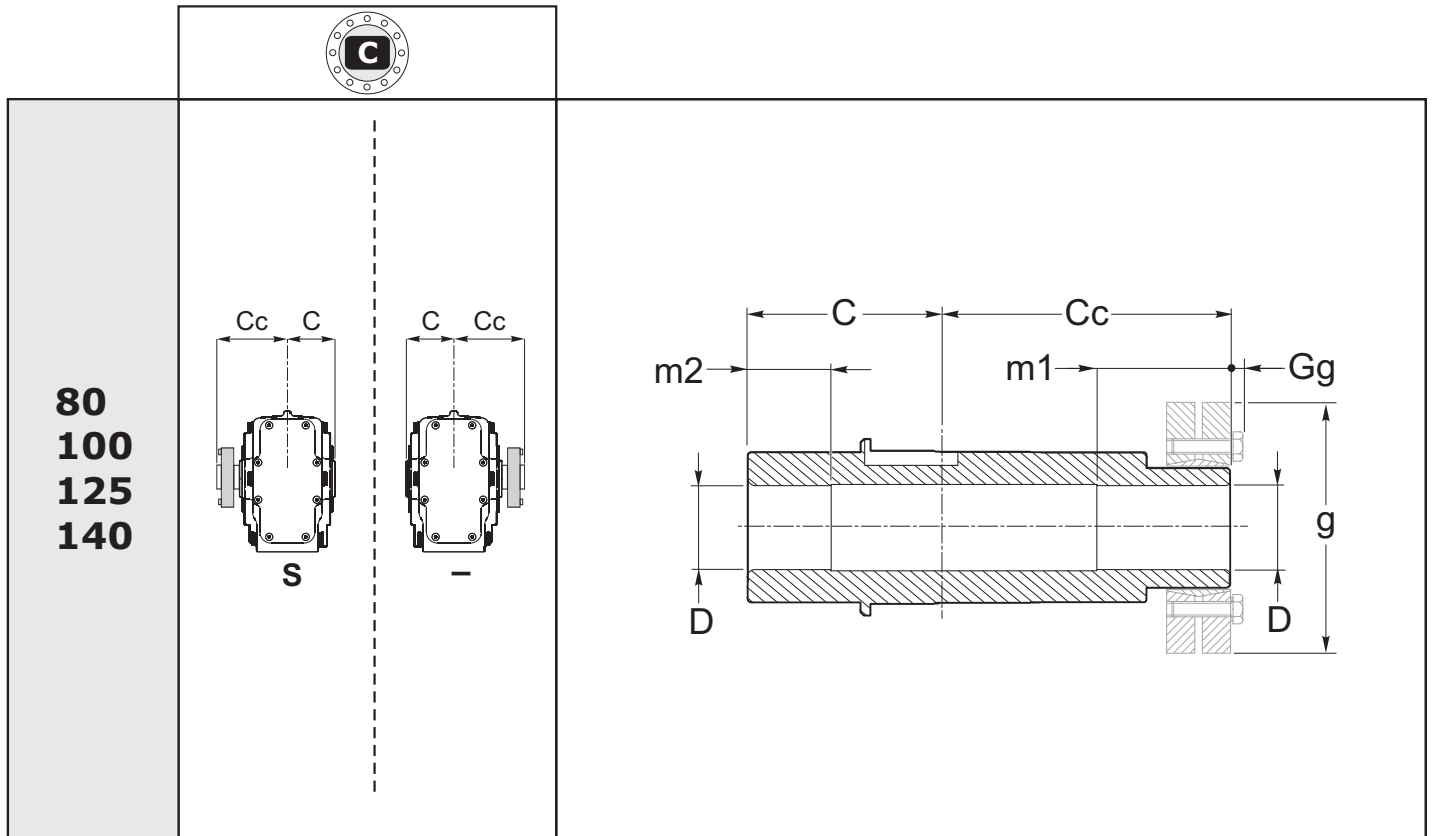




1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

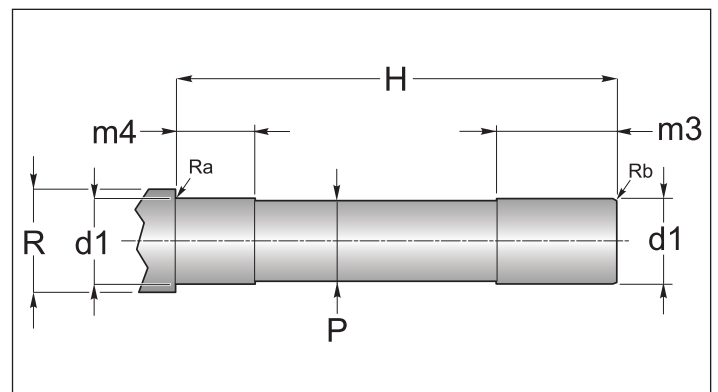
1.8.1 - ABTRIEBSWELLEN

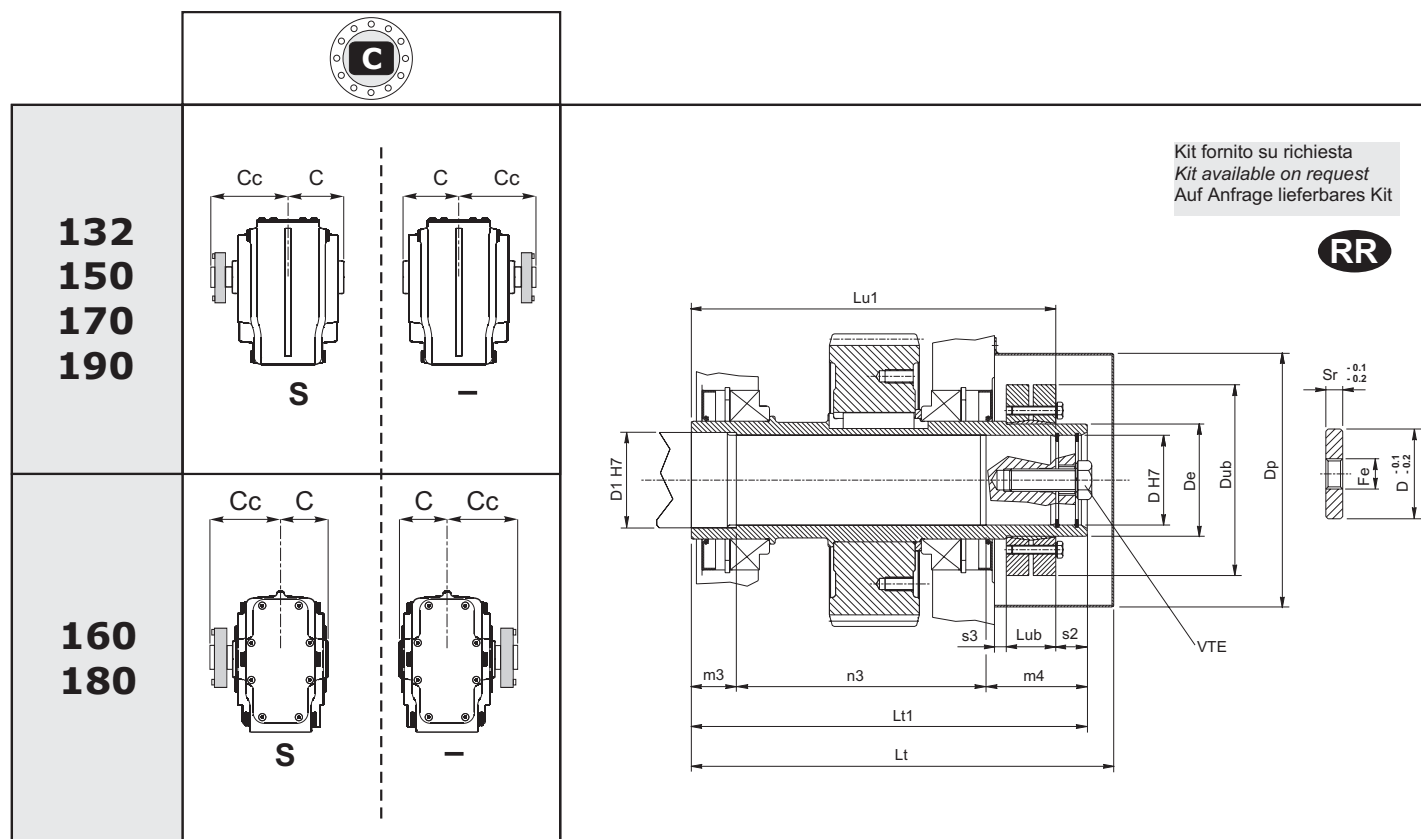


	80	100	125	140
C	65	77,5	90	110
Cc	95	107.5	125	154
D H7	35	45	55	70
m1	40	50	60	70
m2	30	30	50	60
g	80	100	115	155
Gg	-	4	4	-

Perno macchina / Customer shaft / Maschinachse

	d1 h6	H	m3	m4	P	R	Ra	Rb
80	35	160	45	35	34.8	45	0.5	0.5
100	45	190	55	35	44.8	55	0.5	1.0
125	55	215	65	55	54.8	65	0.5	1.0
140	70	264	80	60	69.8	80	0.5	1.0

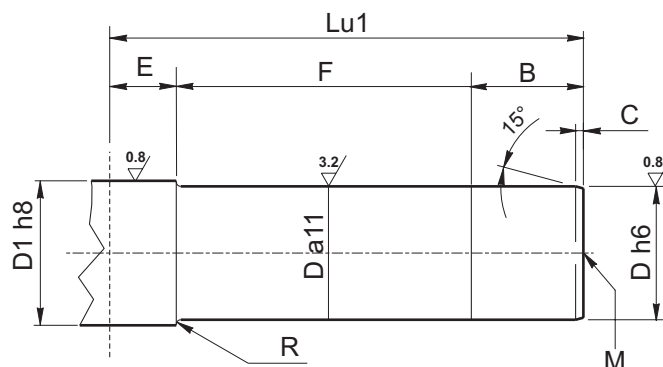


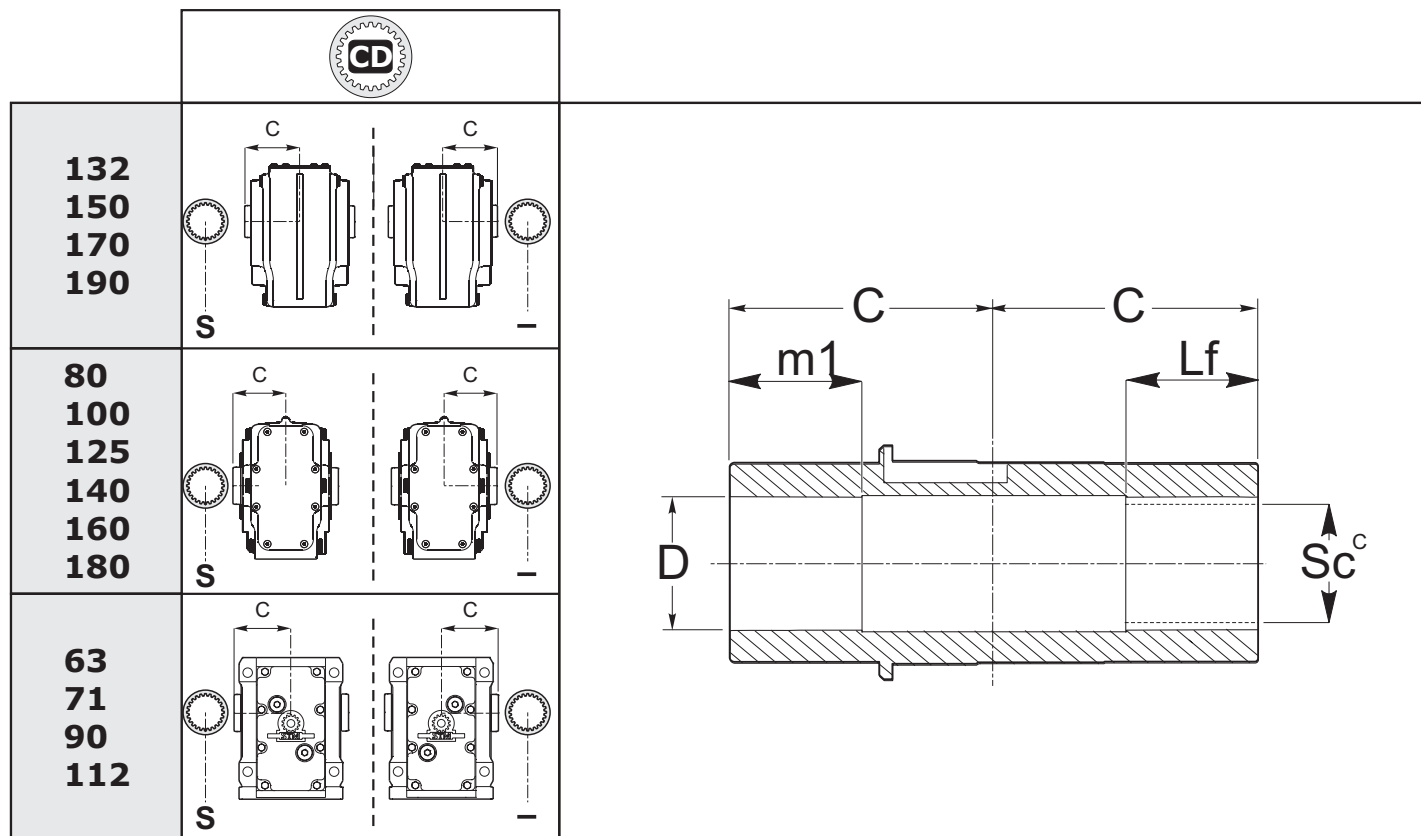


	132		150		160-170		180-190	
Lt	334.5		375.5		405.5		452.5	
Lt1	313		352		397		436	
m3	35		40		45		50	
n3	198		222		252		276	
m4	80		90		100		110	
Lu1	286		324		364		402	
Dp	183		226		226		260	
Dub	145	155	155	170	215	215	215	215
Lub	32.5	39	39	44	54	54	54	54
s2	30	27	30	28	33	33	34	34
C	121		137		151		170	
Cc	192		215		246		266	
D	60	70 (opz)	70	80 (opz)	90	90	100	100
D1	65	75	75	85	95	95	110	110
De	80	90	90	100	120	120	130	130
Sr	15		15		18		18	
Fe	M27		M27		M30		M30	
VTE	M20x60		M20x60		M24x75		M24x75	

Perno macchina / Customer shaft / Maschinachse

	132	150	160 170	180 190
B	58	67	72	81
C	4	4.5	5	5.5
D	60 (70)	70 (80)	90	100
D1	65 (75)	75 (85)	95	110
E	30	32	35	40
F	198	225	257	281
Lu1	286	324	364	402
M	M20	M20	M24	M24
R	2.2	2.5	2.5	3

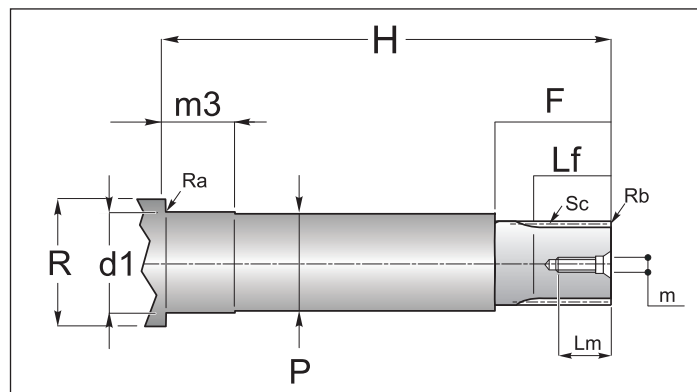




	63	71	80	90	100	112	125	132	140	150	160 170	180 190
<b>C</b>	60	75	65	90	77.5	105	90	121	110	137	151	170
<b>D</b> <b>H7</b>	30	37	37	45	47	55	57	72	72	82	92	102
<b>m1</b>	35	40	40	55	55	60	60	70	70	90	90	110
<b>Lf</b>	35	45	40	55	55	65	60	70	70	90	90	110
<b>Sc</b>	28 x 25 DIN 5482	35 x 31 DIN 5482	35 x 31 DIN 5482	40 x 36 DIN 5482	45 x 41 DIN 5482	50 x 45 DIN 5482	55 x 50 DIN 5482	70 x 64 DIN 5482	70 x 64 DIN 5482	80 x 74 DIN 5482	90 x 84 DIN 5482	100 x 94 DIN 5482

Perno macchina / Customer shaft / Maschinachse

	d1 h6	m3	H	P	R	R <sub>a</sub>	R <sub>b</sub>	Sc	F	Lf	Lm	m
<b>63</b>	30	30	117	29	40	0.5	1x45°	45	35	20	M8	
<b>71</b>	37	35	147	36	48	0.5	1x45°	50	40	25	M10	
<b>80</b>	37	35	127	36	48	0.5	1x45°	50	40	25	M10	
<b>90</b>	45	50	177	42	55	0.5	1x45°	65	55	25	M10	
<b>100</b>	47	50	155	46	60	1	1.5x45°	65	55	25	M10	
<b>112</b>	55	55	210	52	65	1	1.5x45°	75	65	35	M12	
<b>125</b>	57	55	175	56	75	1	1.5x45°	70	60	35	M12	
<b>132</b>	72	65	238	71	85	2	1.5x45°	80	70	39	M16	
<b>140</b>	72	65	217	71	85	2	1.5x45°	80	70	39	M16	
<b>150</b>	82	85	270	81	100	3	2x45°	100	90	39	M16	
<b>160</b> <b>170</b>	92	85	299	91	115	2	2x45°	100	90	39	M16	
<b>180</b> <b>190</b>	102	105	337	101	125	2	2x45°	120	110	39	M16	





					Profilo scanalato Splined profile Keilprofil													
	F	C	F	C	C	F	Sc	Z	mn	$\alpha$	dc (f7)	Sp						
<b>132</b> <b>150</b> <b>170</b> <b>190</b>					Look Drawing	63	60	35 x 31 DIN 5482				Look Drawing						
							71	35 x 31 DIN 5482										
							80	40 x 36 DIN 5482										
<b>80</b> <b>100</b> <b>125</b> <b>140</b> <b>160</b> <b>180</b>					Look Drawing	90	90	40 x 36 DIN 5482				Look Drawing						
							100	58 x 53 DIN 5482										
							112	58 x 53 DIN 5482										
							125	70 x 64 DIN 5482										
							132	70 x 64 DIN 5482										
<b>63</b> <b>71</b> <b>90</b> <b>112</b>					Look Drawing	112	105	58 x 53 DIN 5482				Look Drawing						
							125	70 x 64 DIN 5482										
							132	121	69.3	69	FIAT 70			26	2.58	30°	70	25
							140	122	69.3	69	FIAT 70			26	2.58	30°	70	25
							150	137	79.3	69	FIAT 80			27	2.82	30°	80	20
							160	151	94.3	74	FIAT 95			31	2.97	30°	95	25
							170	151	94.3	74	FIAT 95			31	2.97	30°	95	25
180	170	104.4	79	D. 105 DIN 5480	34	3	30°	106	25									
190	170	104.4	79	D. 105 DIN 5480	34	3	30°	106	25									

<b>63-71</b>		

<b>80-90</b>		



1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

1.8.1 - ABTRIEBSWELLEN

<p><b>100-112</b></p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p><b>125</b></p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p><b>132-140-150 160-170 180-190</b></p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>

C







1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

1.8.1 - ABTRIEBSWELLEN

			Dimensioni generali General dimensions Allgemeine Abmessungen																	
							de	∅ A	∅ B	C	Ce f8	N° Fori holes Anzahl der Bohrungen	∅ D	E	F	G	H	I	N h9	
<b>132</b> <b>150</b> <b>170</b> <b>190</b>																				
<b>80</b> <b>100</b> <b>125</b> <b>140</b> <b>160</b> <b>180</b>																				
<b>63</b> <b>71</b> <b>90</b> <b>112</b>																				
							<b>63</b>			60										
							<b>71</b>			75										
							<b>80</b>			71										
							<b>90</b>			90										
							<b>100</b>			77.5										
							<b>112</b>			105										
							<b>125</b>			90										
							<b>132</b>	70	200	160	121	100	4	17.5	M10	70	43	11	16	180
							<b>140</b>	70	200	160	122	100	4	17.5	M10	70	43	11	16	180
							<b>150</b>	80	220	180	137	110	4	19.5	M10	70	40	12	18	200
							<b>160</b>	95	240	190	151	130	8	19.5	M10	75	40	15	20	220
							<b>170</b>	95	240	190	151	130	8	19.5	M10	75	40	15	20	220
							<b>180</b>	105	250	200	170	145	8	21.5	M12	80	40	20	20	230
							<b>190</b>	105	250	200	170	145	8	21.5	M12	80	40	20	20	230

## 63-71

**FF** - Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit

## 80-90

**FF** - Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit

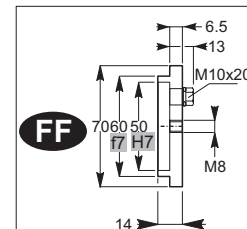
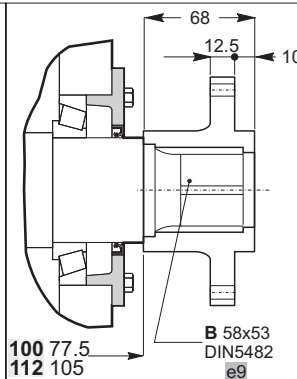
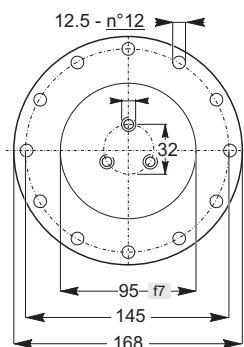


1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

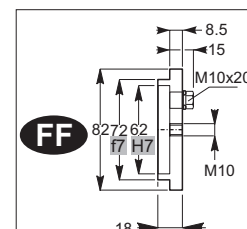
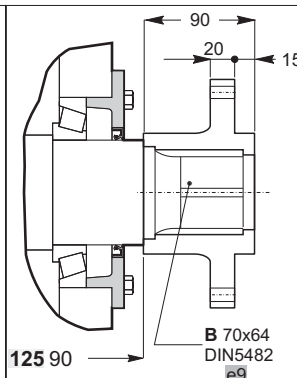
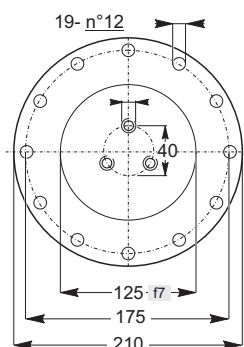
1.8.1 - ABTRIEBSWELLEN

**100-112**



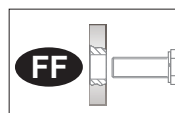
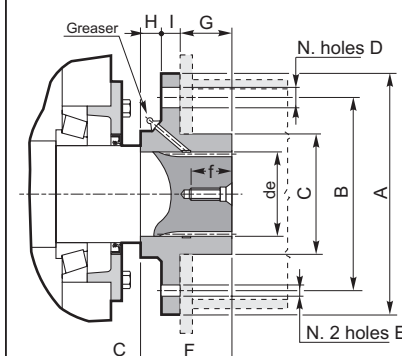
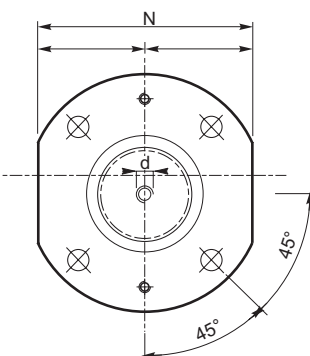
**FF** - Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit

**125**



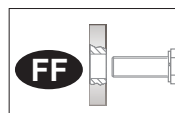
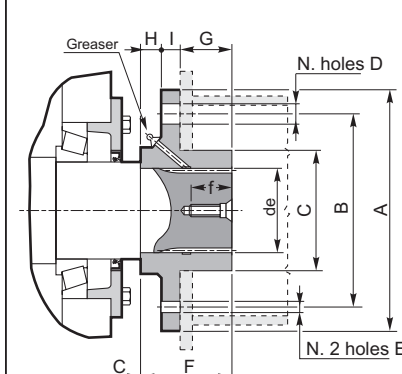
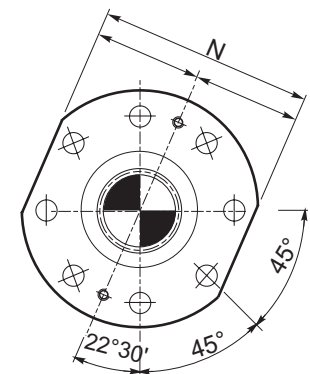
**FF** - Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit

**132-140-150**



**FF** - Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit

**160-170  
180-190**



**FF** - Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit



1.9 OPT - ACC. - Accessori - Opzioni

1.9 OPT - ACC. - Accessories - Options

1.9 OPT - ACC. Zubehör - Optionen

**BRS\_VKL**

**BRS\_VKL - BRACCIO DI REAZIONE**

Per il fissaggio del riduttore mediante tirante, viene fornito in allegato l'apposito braccio di reazione con boccia Vulkolan di cui è possibile il montaggio nelle due posizioni "A" o "B".

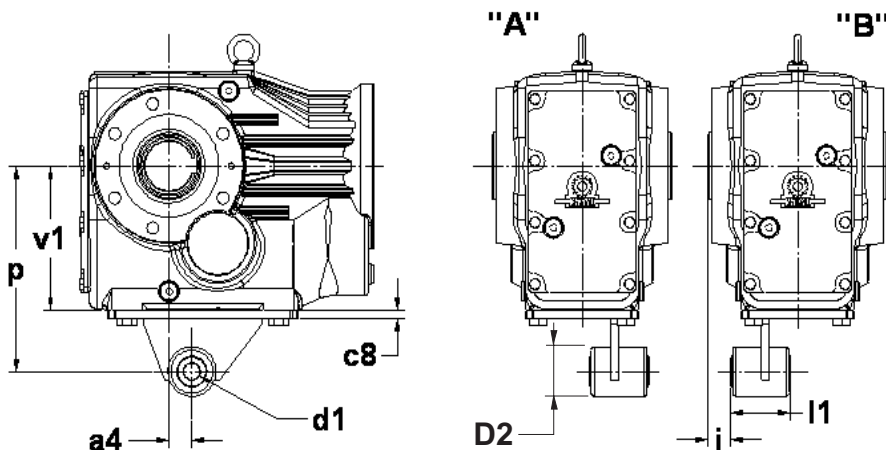
**BRS\_VKL - TORQUE ARM**

If the gearbox shall be shaft mounted as an extra part there is also available a torque arm with Vulkolan bushing, position "A" or "B".

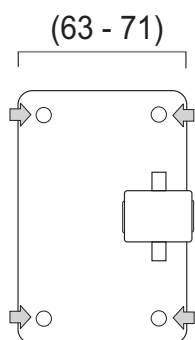
**BRS\_VKL - DREHMOMENTSTÜTZE**

Soll das Getriebe pendelnd gelagert werden, so ist als Zubehörteil auch eine Drehmomentstütze mit Vulkolan-Lagerbuchse erhältlich, Montageposition "A" oder "B".

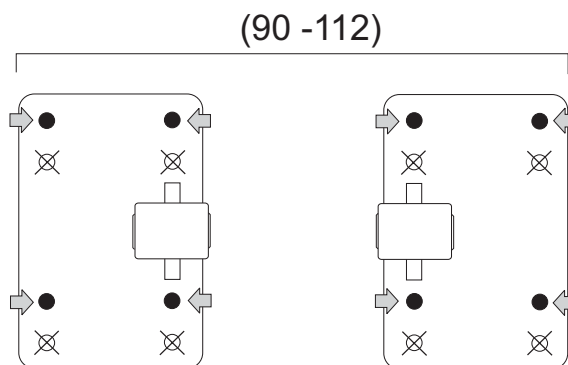
**63 - 71 - 90 - 112**



	a4	c8	D2	i	p	v1	d1	l1	viti
<b>63</b>	23.5	6	36	20	140	100	10 ± 0.1	34	N° 4TE M10x30 + N° 4 DADI
<b>71</b>	30	6	36	20	160	112	10 ± 0.1	34	N° 4TE M10x25
<b>90</b>	45	8	48	25	200	140	16 ± 0.1	56	N° 4TE M12x25
<b>112</b>	52.5	10	48	25	250	180	16 ± 0.1	56	N° 4TE M16x30



N.B.  
Per il fissaggio del braccio di reazione al corpo fare riferimento C 45-47-49.



N.B.  
To assembly torque arm look C 45-47-49

N.B.  
Für die drehmomentstütze befestigen sehen sie zeichnung C 45-47-49.

**Nota BRS\_VKL**  
E' possibile montare il braccio di reazione solo sulle versioni flangiate .

**Note BRS\_VKL**  
Only to flange casing is possible to mount a torque arm

**HINWEIS BRS\_VKL**  
Man kann die Dremomentstuetze nur bei den Versionen mit Flansch anbauen.



1.9 OPT - ACC. - Accessori - Opzioni

1.9 OPT - ACC. - Accessories - Options

1.9 OPT - ACC. Zubehör - Optionen

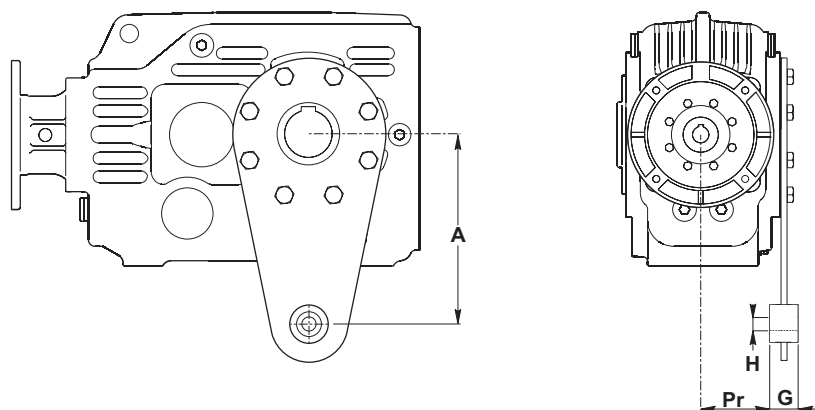
**BRS\_VKL**

BRS\_VKL - BRACCIO DI REAZIONE

BRS\_VKL - TORQUE ARM

BRS\_VKL - DREHMOMENTSTÜTZE

80 - 100 - 125 - 140 - 160 - 180



	A	G	H	Pr
80	200	25	20	49
100	200	25	20	61
125	250	30	25	69
140	300	35	35	91
160	450	35	35	132.5
180	450	35	35	152.5

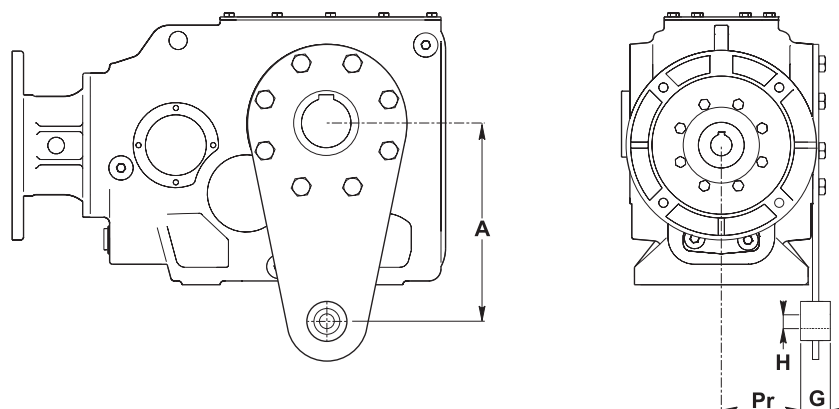
**BRS\_VKL**

BRS\_VKL - BRACCIO DI REAZIONE

BRS\_VKL - TORQUE ARM

BRS\_VKL - DREHMOMENTSTÜTZE

132 - 150 - 170 - 190



	A	G	H	Pr
132	300	30	25	108
150	350	30	25	120.5
170	450	35	35	132.5
190	450	35	35	152.5



1.9 OPT - ACC. - Accessori - Opzioni

1.9 OPT - ACC. - Accessories - Options

1.9 OPT - ACC. Zubehör - Optionen

**AL**

AL - ALBERO LENTO SPORGENTE

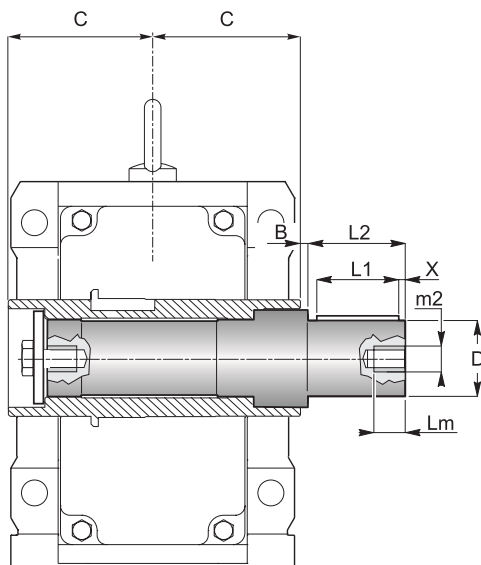
AL - SINGLE OUTPUT SHAFTS

AL - EINSEITIGE ABTRIEBSWELLEN

Tutti i riduttori sono forniti con albero lento cavo. A richiesta, possono essere forniti kit di montaggio per alberi sporgenti comprensivi di linguette, rondelle e viti di fissaggio. Le dimensioni delle linguette sono conformi alle norme UNI 6604-69.

All gearboxes are supplied with hollow output shaft. On request there are available also assembly kits including output shafts, keys, washers and assembly screws. The dimensions of the keys are conform with UNI 6604-69.

Alle Getriebe werden mit Abtriebshohlwelle geliefert. Auf Anfrage sind auch Montagekits inklusive Abtriebswellen, Paßfedern, Unterlegscheiben und Montageschrauben erhältlich. Die Abmessungen der Paßfedern sind konform mit der UNI 6604-69.



	B	C	D g6	m <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>m</sub>	X
63*	1	60	30	M10	50	60	25	5
71*	0	75	35	M10	60	70	25	5
90*	1	90	40	M10	70	80	25	5
112*	1	105	50	M12	90	100	32	5

\* ATTENZIONE

L'albero lento sporgente è fornito per essere installato sulla versione del riduttore con albero **CAVO** con diametro **STANDARD**.

\*ATTENTION

The output shaft is available only for standard hollow shaft diameter.

Achtung:

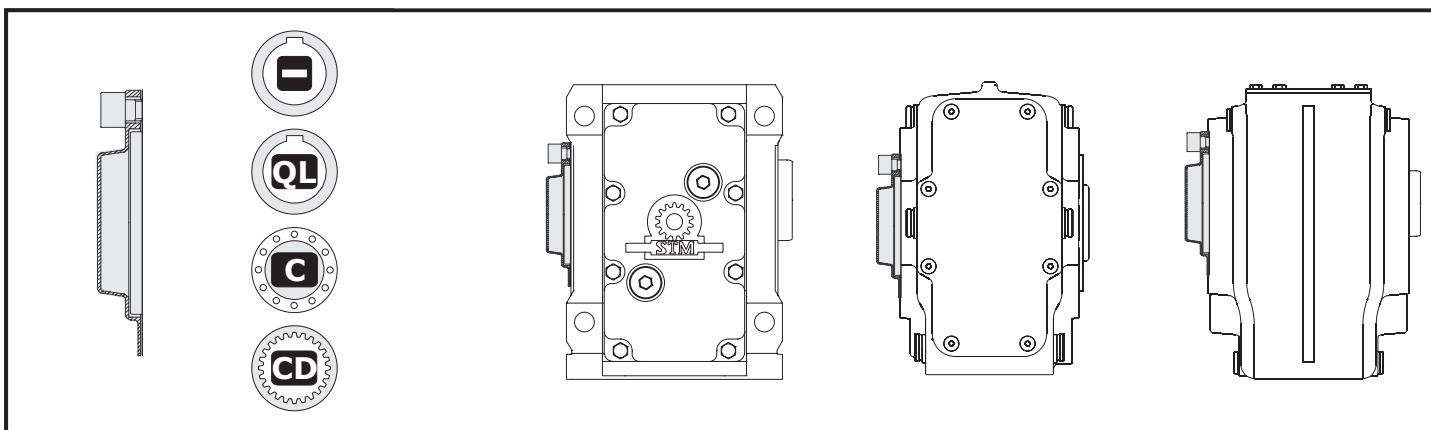
Die Einseitige Abtriebswelle wird fuer die Montage bei Getrieben mit Standart Hohlwelle geliefert.

**PROT**

PROT. - Coperchio di protezione

PROT. - Protection cover

PROT - Schutzvorrichtungdeckel

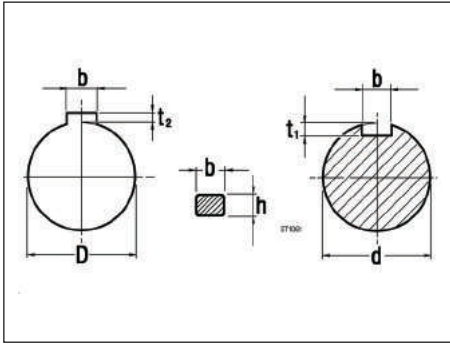




1.10 Linguette

1.10 Keys

1.10 Paßfedern



Albero entrata  
Input shaft  
Antriebswelle

Albero uscita  
Output shaft  
Abtriebswelle

d	bxh	t1	
16	5x5	3	0/ +0.1
19	6x6	3.5	
24	8x7	4	0/ +0.2
28	8X7	4	
32	10X8	5	
35	10X8	5	
40	12X8	5	
50	14X9	5.5	

D	bxh	t2	
25	8x7	3.3	0/ +0.2
28	8x7	3.3	
30	8x7	3.3	
32	10x8	3.3	
35	10x8	3.3	
40	12x8	3.3	
42	12x8	3.3	
45	14x9	3.8	
48	14x9	3.8	
50	14x9	3.8	
55	16x10	4.3	
60	18X11	4.4	
70	20X12	4.9	
80	22X14	5.4	
90	25X14	5.4	
100	28X16	6.4	







**1.0 Riduttori - motoriduttori ortogonali ad assi sghembi S**  
**1.0 The skew bevel helical gearboxes with skew axis S**  
**1.0 Diese getriebemotore sind mit zwei spiralstirnradstufen mit schraege achsen hergestellt S**

D

1.1	Caratteristiche tecniche	<i>Technical characteristics</i>	Technische Eigenschaften	D1
1.2	Designazione	<i>Designation</i>	Bezeichnungen	D2
1.4	Lubrificazione	<i>Lubrication</i>	Schmierung	D6
1.5	Carichi radiali e assiali	<i>Axial and overhung loads</i>	Radiale und Axiale Belastungen	D7
1.6	Prestazioni riduttori	<i>Gearboxes performances</i>	Leistungen der Getriebe	D8
1.7	Prestazioni motoriduttori	<i>Gearmotors performances</i>	Leistungen der Getriebemotoren	D10
1.8	Dimensioni	<i>Dimensions</i>	Abmessungen	D14
1.9	Accessori	<i>Accessories</i>	Zubehör	D19
1.10	Linguette	<i>Keys</i>	Paßfedern	D20



25 - 35 - 45

### 1.1 Caratteristiche tecniche

La fascia di bassa potenza non coperta dalla attuale gamma di riduttori ortogonali è da oggi disponibile con un inedito riduttore dal cinematismo brevettato.

Questo prodotto di nuovissima concezione ad ingranaggi elicoidali ad assi sghembi, riassume in un'unica macchina l'economicità del vite senza fine e l'alto rendimento degli ortogonali a coppia conica.

Le 3 taglie coprono un range di coppia da 100 Nm a 250 Nm, fornendo ad ogni applicazione il giusto prodotto per ottimizzare il rapporto coppia/costo.

### 1.1 Technical characteristics

*The low power bevel helical gearbox range, which was unavailable until today, is now ready by means of a brand new type of gearbox for which mechanical system STM has been given the copyright.*

*This very new and innovative gearbox relies on helical gears with oblique shafts and puts together in a single conception the economical cost typical worm gearboxes and high efficiency typical of bevel helical gearboxes with right angle pair.*

*The 3 sizes being planned cover a torque range ranging from 100 Nm a 250 Nm and will supply every application the best product to optimise ratio torque/cost.*

### 1.1 Technische Eigenschaften

Der Bereich der Low-Power, der nicht durch die aktuelle Auswahl an Winkelgetrieben abgedeckt wird, ist jetzt mittels eines neuen patentierten kinematischen Getriebes verfügbar. Diese allerneueste Konzeption der Schrägzahnräder, vereint in einer Maschine die Wirtschaftlichkeit des Schneckengetriebes mit der hohen Leistung des Kegelstirnradgetriebes.

Die drei Baugrößen decken einen Drehmomentbereich von 100 Nm bis 250 Nm ab und bieten somit für jede Anwendung das richtige Produkt zur Optimierung des Verhältnisses Drehmoments/Kosten.





1.2 Designazione

1.2 Designation

1.2 Bezeichnung

Maschine	Input Version	Size	Output Flange	Mounting Position Output Flange	Output Shaft	Shaft Diameter	Mounting Shaft	Reduction ratio	Input Shaft	Designazione Motori Designation Motors Bezeichnung Motoren	Input double extension	Mounting positions	Position Terminal Box	WEB: Reference Designation	
00 M	01 IV	02 SIZE	03 OF	04 MPOF	05 OS	07 SD	08 MS	09 IR	11 IS		12 BE	13 MP	15 PMT		
<b>S</b>	<b>M</b>	25 35 45	—	— — S	— — C B	— Nessuna indicazione diametro standard No indications standard diameter Keine Angabe Standard-durchmesser Ø... Diametro foro opzionale Optional hollow shaft diameter Optionaler Hohlwellen durchmesse	—	Vedi tabelle prestazioni See performance tables Siehe Leistungstabellen	80B5 80B14 ...	—	<b>Look CT 18</b>	—	M1 M2 M3 M4 M5 M6	1 2 3 4	←
										CODE: Example of Order					
										SM 45 1:10 80B5					
										SM 45 1:10 T 80 B 4 B5					
	—		FA												
	—		FB												
	—														
	—														S 45 1:10

00 M - Macchina

M - Maschine

M - Getriebe



S

01 IV - Versione Entrata

IV - Input Version

IV - Antriebsausführung

<b>M</b>		—													
													25		
													35		
													45		

Disponibile / available / verfügbar

02 SIZE - Grandezza

SIZE - Size

SIZE - Größe

25	35	45
----	----	----

Senso di Rotazione  
Rotation sense  
Drehrichtung



03 OF - Flangia Uscita

OF - Output Flange

OF - Flansche am Abtrieb

—	<b>F.</b>			
	Flangia Uscita F. / Output Flange F./ Flansche am Abtrieb F.			
Senza Flangia Without Flange Ohne Flansche		25	35	45
		F1	FA	F1
		F2	FB	F2
		F3	-	FL
		FL	-	-
		*FA	-	-
		(*) A richiesta / Upon Request / Auf Anfrage		



## 1.2 Designazione

## 1.2 Designation

## 1.2 Bezeichnung

### 04 MPOF - Lato Flangia Uscita

### MPOF - Mounting Position Output Flange

### MPOF - Montageseite Abtriebsflansch

— Nessuna indicazione = flangia uscita con montaggio destro.  
**S** = flange uscita con montaggio sinistro.

— *No indication (standard) = output flange on right side;*  
**S** = *output flange on left side.*

— Keine Angabe (Standard) = Abtriebsflansch rechts.  
**S** = Abtriebsflansch links.

—	Flangia in uscita a destra Output flange on right side Flansch am Abtriebe rechts	
<b>S</b>	Flangia in uscita a sinistra Output flange on left side Flansch am Abtrieb links	

### 05 OS - Estremità uscita

### OS - Output shaft

### OS - Wellenende - Abtrieb



— Nessuna indicazione = albero forato;  
**C** = albero forato con calettatore  
**B** = albero bisporgente integrale

— *No indication = shaft with keyway;*  
**C** = *hollow shaft with shrink disk*  
**B** = *Double integral output shaft*

— Keine Angabe = Hohlwelle mit Paßfedernut  
**C** = Hohlwelle mit Schrumpfscheibe  
**B** = Doppeltem Integralwelle

### 07 SD - Diametro albero




### SD - Shaft diameter

### SD - Durchmesser Abtriebswelle

— Nessuna indicazione = diametro standard;  
**diametro opzionale** = vedi tabella.

— *No indications = standard diameter;*  
**optional diameter** = *see table.*

— Keine Angabe = Standard-durchmesser  
**Optionaler durchmesser** = *siehe Tabelle.*

						
	Standard	Optional	Standard	Optional	Standard	Optional
	—	∅...	—	∅...	—	∅...
<b>25</b>	(∅ 19)	∅ 20 ∅ 24	(∅ 19)	not available	∅ 19	not available
<b>35</b>	(∅ 25)	∅ 28 ∅ 30	(∅ 25)		∅ 25	
<b>45</b>	(∅ 30)	∅ 28 ∅ 25	(∅ 30)		∅ 30	

### 08 MS - Posizione Albero


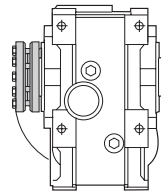
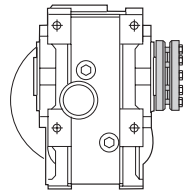
### MS - Mounting Shaft

### MS - Montageposition Welle

— Nessuna indicazione = lato destro (standard);  
**S** = lato sinistro, montaggio dalla parte opposta (opzionale).

— *No indication (standard) = on right side;*  
**S** = *on left side, on the opposite.*

— Keine Angabe (Standard) = rechts;  
**S** = links.

Albero forato con calettatore Hollow shaft with shrink disc Holwelle mit Schrumpfscheibe		<b>S</b>		—	
--	---	----------	--	---	---

**1.2 Designazione****09 IR - Rapporto di riduzione**

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

**11 IS - Albero Entrata**

Nella tab. sono riportate le grandezze motore accoppiabili (IEC) unitamente alle dimensioni albero/flangia motore standard

Legenda:

11/140 (B5): combinazioni albero/flangia standard

11/120 : combinazioni albero/flangia a richiesta

**1.2 Designation****IR - Reduction ratio**

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

**IS - Input Shaft**

In table the possible shaft/flange dimensions IEC standard are listed.

Key:

11/140 : standard shaft/flange combination

11/120 : shaft/flange combinations upon request

**1.2 Bezeichnung****IR - Übersetzungsverhältnis**

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

**IS - Antriebswelle**

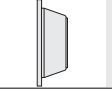
In Tabelle sind die möglichen Welle/Flansch-Abmessungen IEC-Standard aufgelistet.

Legende:

11/140 : Standardkombinationen Welle/Flansch

11/120 : Sonderkombinationen Welle/Flansch

**Possibili accoppiamenti con motori IEC - Possible couplings with IEC motors - Mögliche Verbindungen mit IEC-Motoren**

		 SM		
	↓ IEC			Tipo entrata Type Input Antriebtyp
<b>SM25</b>	90 <sup>(2)</sup>	24/200 (B5) - 24/140 (B14) 24/160 - 24/120 - 24/105• - 24/90•		Without coupling <b>ir</b> (Only 8-10-14)
	80 <sup>(1)</sup>	19/200 (B5) - 19/120 (B14) 19/160 - 19/140 - 19/105• - 19/90•		With coupling <b>ir</b> (Tutti / All / Alle)
	71	14/160 (B5) - 14/105• (B14) 14/200 - 14/140 - 14/120 - 14/90•		
	63	11/140 (B5) - 11/90• (B14) - 11/200 - 11/160 - 11/120 - 11/105•		
<b>SM 35</b>	90 <sup>(1)</sup>	24/200 (B5) - 24/140 (B14) 24/160 - 24/120 - 24/105•		With coupling <b>ir</b> (Tutti / All / Alle)
	80	19/200 (B5) - 19/120 (B14) 19/160 - 19/140 - 19/105•		
	71	14/160 (B5) - 14/105• (B14) 14/200 - 14/140 - 14/120		
<b>SM45</b>	112 <sup>(2)</sup>	28/160 (B14)		Without coupling <b>ir</b> (Only 8-10-14-16)
	100 <sup>(2)</sup>	28/160 (B14)		
	90 <sup>(1)</sup>	24/200 (B5) - 24/140 (B14) 24/160 - 24/120 - 24/105•		With coupling <b>ir</b> (Tutti / All / Alle)
	80	19/200 (B5) - 19/120 (B14) 19/160 - 19/140 - 19/105•		
	71	14/160 (B5) - 14/105• (B14) 14/200 - 14/140 - 14/120		

<sup>(1)</sup> **ATTENZIONE!-WARNING!-ACHTUNG!** (Vedere paragrafo 1.12-Sezione A)/(Look at chapter 1.12-Section A)/(s. S. 1.12-Abschnitt A)

<sup>(2)</sup> A richiesta / Upon Request / Auf Anfrage



**Posizione morsetti - Vedere - 15 - PMT - Pagina D5**  
**Terminal board position - Look - 15 - PMT - Page D5**  
**Lage des Klemmenkastens - Siehe - 15 - PMT - Auf Seite D5**

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

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

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



## 1.2 Designazione

## 1.2 Designation

## 1.2 Bezeichnung

### 12 BE - Bisporgenza Entrata

### BE - Input double extension

### BE - Doppelantrieb

Nessuna indicazione = ingresso senza bisporgenza;  
**B** = entrata con bisporgenza.

*No indication = no double extension*  
**B** = input double extension

Keine Beschreibung= kein Doppelantrieb  
**B**= Doppelantrieb

### 13 MP - Posizioni di montaggio

### MP - Mounting positions

### MP - Einbaulagen

**[M2, M3, M4, M5, M6]** Posizioni di montaggio con indicazione dei tappi di livello, carico e scarico; se non specificato si considera standard la posizione **M1** (vedi par. 1.4)

**[M2, M3, M4, M5, M6]** Mounting position with indication of breatherm level and drain plugs; if not specified, standard position is **M1** (see par. 1.4).

Montageposition **[M2, M3, M4, M5, M6]** mit Angabe von . Entlüftung, Schaugläsern und Ablassschraube. Wenn nicht näher spezifiziert, wird die Standard - position **M1** zugrunde gelegt (s. Abschnitt 1.4).

### 14 OPT-ACC. - Opzioni

### OPT-ACC. - Options

### OPT-ACC. - Optionen

vedi par. 1.9 see pa. 1.9 s. Abschnitt 1.9	ACC1	AL	Alberi lenti - AL	Output shafts - AL	Abtriebswellen - AL
		PROT.	Coperchio di protezione	Protection cover	Schultzvorrichtungdeckel
	ACC3	BRS	Braccio Reazione Semplice	Torque arm - Single	Drehmomentstütze - Normal
		BRS_VKL	Braccio Reazione Semplice_con boccola_VKL	Torque arm - Single_with VKL_bushing	Drehmomentstütze - Normal_mit VKL - Buchse

vedi Sezione A-1.12 see Section A-1.12 s. Abschnitt A-1.12	OPT.	OPT	Materiale degli anelli di tenuta	Materials of Seals	Dichtungsstoffe
		OPT1	Stato fornitura olio	Scope of the supply - Options - OIL	Optionen - Lieferzustand - Optionen - Öl
		OPT2	Verniciatura	Painting and surface protection	Lackierung und Oberflächenschutz

### 15 PMT - Posizioni della Morsettieria

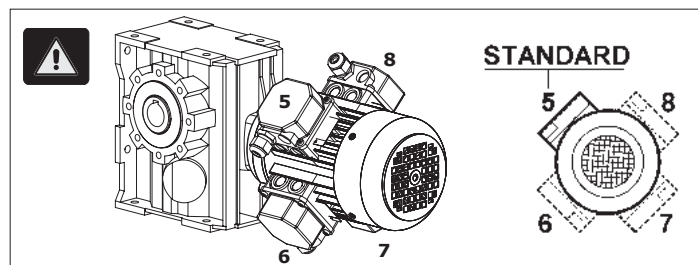
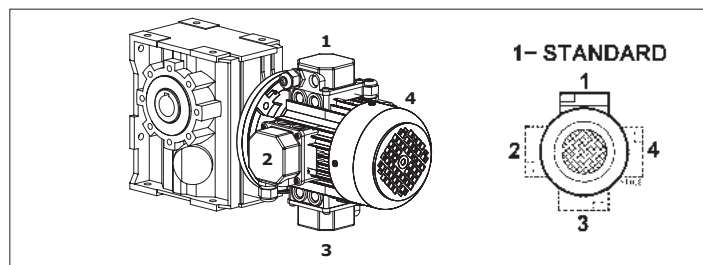
### PMT - Position Terminal Box

### PMT - Montagposition Klemmenkasten

**[2, 3, 4]** Posizione della morsettieria del motore se diversa da quella standard (1).

**[2, 3, 4]** Position of the motor terminal box if different from the standard one (1).

Montageposition Klemmenkasten **[2, 3, 4]**, wenn abweichend von Standardposition **[1]** (für Motorgetriebe).



**N.B.**  
 La configurazione standard della flangia attacco motore prevede 4 fori a 45°.

**Note.**  
 The standard configuration for the 4 holes is 45° to the axles (like an x: see par 2.3).

**HINWEIS.**  
 In der Standardkonfiguration sind die 4 Flanschbohrungen im 45°-Winkel zu den Achsen angeordnet

Per le flange contrassegnate con il simbolo (\*) (vedi pagina D4) i fori per il fissaggio al motore sono disposti in croce (esempio +). Pertanto è opportuno valutare l'ingombro della morsettieria del motore che verrà installato in quanto essa verrà a trovarsi orientata a 45° rispetto agli assi. Per la scelta della posizione della morsettieria rispetto agli assi fare riferimento allo schema seguente (in cui la posizione 5 è quella standard):

For the B14 flanges marked with (\*) (see page D4) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please choose the terminal board position referring to the following sketch (in which n° 5 is the standard position):

Bei B14-Flanschen, die mit (\*) (Siehe auf Seite D4) gekennzeichnet sind, sind die Bohrungen auf den Achsen angeordnet (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird. Die Lage des Klemmenkastens des Motors wählen Sie bitte anhand der folgenden Skizze (Pos. 5 ist Standardposition):



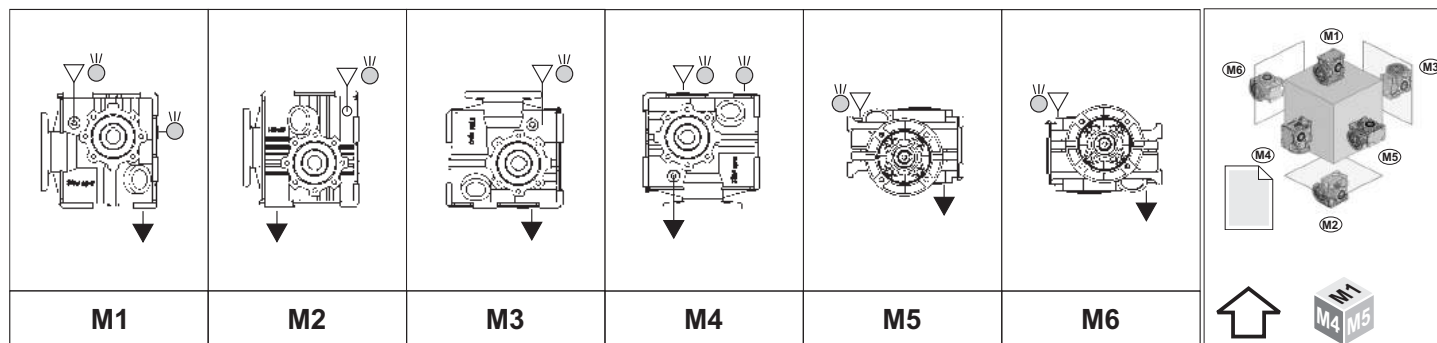
## 1.4 Lubrificazione

## 1.4 Lubrication

## 1.4 Schmierung



Posizioni di montaggio  
Mounting positions  
Montagepositionen



- Carico / Breather plug / Einfüll-u. Entlüftungsschraube
- Livello / Level plug / Schauglas
- Scarico / Drain plug / Ablasschraube
- Sfiato / Vent plug / Entlüftungsstopfen

Posizioni di montaggio - Mounting positions - Montagepositionen			
<b>SM</b>		Posizioni Positions Positionen	Prescrizioni da indicare in fase d'ordine Ordering requirements Anforderungen bei der Bestellung
	<b>25</b>	<b>M1-M2</b>	<b>Necessaria Necessary Erforderlich</b>
	<b>35</b>	<b>M3-M4</b>	
	<b>45</b>	<b>M5-M6</b>	

**TARGHETTA - RIDUTTORE****NON NECESSARIA**

Indicata sempre nella targhetta del riduttore la posizione di montaggio "M1".

**NECESSARIA**

La posizione richiesta è indicata nella targhetta del riduttore

**Identification Plate - Gearbox****NOT NECESSARY**

The mounting position is always indicated on the nameplate "M1".

**NECESSARY**

The indication it on the label of the gearbox

**Typeschild - Getriebe****NICHT ERFORDERLICH**

Die Einbaulage ist immer auf dem Typenschild angegeben "M1".

**ERFORDERLICH**

Findet man die angefragte Position auf dem Typenschild des Getriebe

<b>Lub</b> 	Quantità di lubrificante - Lubricant Quantity - Schmiermittelmenge - [Kg]								<b>OPT1</b>	Tappi-Plug-Stopfen		
		M1	M2	M3	M4	M5	M6	N°		Diameter	Type	
<b>SM</b>	<b>25</b>	0.300	0.480	0.480	0.480	0.480	0.480	<b>INOIL_STD</b>	2	1/8"		
	<b>35</b>	0.400	0.580	0.580	0.580	0.580	0.580		2	1/8"		
	<b>45</b>	0.500	0.850	0.800	0.800	0.800	0.800		3	1/4"		

**Attenzione !:**  
Il tappo di sfiato è allegato su tutte le grandezze dei riduttori

**Warning!**  
Breather plug is enclosed with every gearbox size and must be installed prior to operation

**Achtung!**  
Der Entlüftungsstopfen wird mitgeliefert und muss vor der Benutzung des Getriebes eingebaut werden.

**Nota:** Se in fase d'ordine la posizione di montaggio è omessa, il riduttore verrà fornito con i tappi predisposti per la posizione M1.

**Note:** If the mounting position is not specified in the order, the worm gearbox supplied will have plugs pre-arranged for position M1.

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

The supply of gearboxes with different plug pre-arrangements has to be agreed with the manufacturer.

**Anmerkung:** Sollte in der Auftragsphase die Einbaulage nicht angegeben werden, wird das Getriebe mit Stopfen für die Einbaulage M1.

Lieferungen, die eine Auslegung hinsichtlich der Stopfen aufweisen, die von den Angaben in der Tabelle abweichen, müssen vorab vereinbart werden..



### 1.5 Carichi radiali e assiali

Quando la trasmissione del moto avviene tramite meccanismi che generano carichi radiali sull'estremità dell'albero, è necessario verificare che i valori risultanti non eccedono quelli indicati nelle tabelle.

In Tab. 2.6 sono riportati i valori dei carichi radiali ammissibili per l'albero lento ( $F_{r2}$ ). Come carico assiale ammissibile contemporaneo si ha:

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

### 1.5 Axial and overhung load

*Should transmission movement determine radial loads on the angular shaft end, it is necessary to make sure that resulting values do not exceed the ones indicated in the tables.*

*In Table 2.6 permissible radial loads for output shaft are listed ( $F_{r2}$ ). Permissible axial load is given by the following formula:*

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

### 1.5 Radiale und axiale Belastungen

Wird das Wellenende auch durch Radialkräfte belastet, so muß sichergestellt werden, daß die resultierenden Werte die in der Tabelle angegebenen nicht überschreiten.

In Tabelle 2.6 sind die Werte der zulässigen Radialbelastungen für die Abtriebswelle ( $F_{r2}$ ) angegeben. Als zulässige Axialbelastung gilt:

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

Tab. 2.6

$n_2$ [min <sup>-1</sup> ]	$F_{r2}$ [N]		
	SM 25	SM 35	SM 45
400	1000	1250	1500
320	1000	1250	1750
260	1050	1313	1950
200	1100	1375	2050
160	1300	1625	2250
125	1300	1625	2400
90	1800	2250	2750
60	1800	2250	2900
40	1800	2250	3300
25	2300	2875	4000
16	2300	2875	4500
10	2800	3500	5300
5	3000	3750	6400

I carichi radiali indicati nelle tabelle si intendono applicati a metà della sporgenza dell'albero lento standard e sono riferiti ai riduttori operanti con fattore di servizio 1. Per i carichi non agenti sulla mezzeria dell'albero lento o veloce si ha:

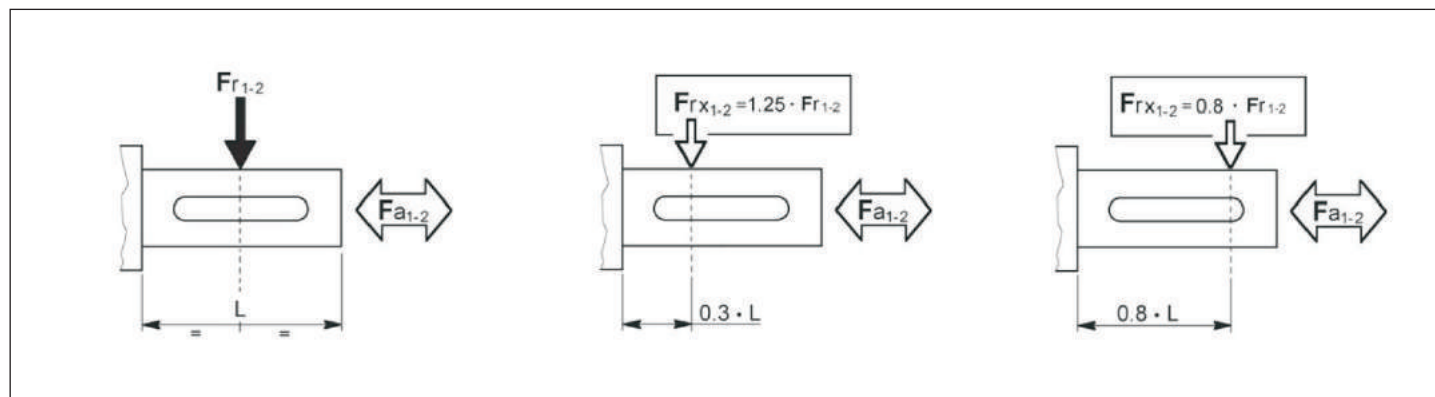
- a 0.3 della sporgenza:  
 $F_{rx} = 1.25 \times F_{r1-2}$
- a 0.8 dalla sporgenza:  
 $F_{rx} = 0.8 \times F_{r1-2}$

*The radial loads shown in the tables are applied on the middle of standard shaft extensions. Base of these values is a service factor 1. For radial loads which are not applied on the middle of the shafts, the following values can be calculated:*

- at 0.3 from extension:  
 $F_{rx} = 1.25 \times F_{r1-2}$
- at 0.8 from extension:  
 $F_{rx} = 0.8 \times F_{r1-2}$

Bei den in der Tabelle angegebenen Radialbelastungen wird eine Kraffteinwirkung auf die Mitte der Standardwelle angenommen; außerdem wird ein Betriebsfaktor 1 zugrunde gelegt. Ist die Einwirkung der Radialkraft nicht in der Mitte der Welle, so können die zulässigen Radiallasten folgendermaßen ermittelt werden:

- 0.3 vom Wellenabsatz entfernt:  
 $F_{rx} = 1.25 \times F_{r1-2}$
- 0.8 vom Wellenabsatz entfernt:  
 $F_{rx} = 0.8 \times F_{r1-2}$





1.6 Prestazioni riduttori SM

1.6 SM gearboxes performances

1.6 Leistungen der SM-Getriebe

**SM 25** **Kg** 5

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				IEC
	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	
8	350	67	2,71	90	175	70	1,43	90	113	74	0,96	90	90 B5 90 B14
10	280	81	2,63	90	140	85	1,38	90	90	89	0,93	90	
14	200	95	2,21	90	100	100	1,16	90	64	105	0,79	90	
18	156	95	1,72	90	78	100	0,90	90	50	105	0,61	90	
20	140	95	1,55	90	70	100	0,81	90	45	105	0,55	90	
25	112	95	1,24	90	56	100	0,65	90	36	105	0,44	90	
35	80	95	0,88	90	40	100	0,47	90	26	105	0,31	90	
45	62	95	0,69	90	31	100	0,36	90	20	105	0,24	90	
50	56	95	0,62	90	28	100	0,33	90	18	105	0,22	90	
56	50	95	0,55	90	25	100	0,29	90	16	105	0,20	90	
72	39	95	0,43	90	19	100	0,23	90	13	105	0,15	90	
80	35	95	0,39	90	18	100	0,20	90	11	105	0,14	90	
90	31	95	0,34	90	16	100	0,18	90	10	105	0,12	90	
100	28	95	0,31	90	14	100	0,16	90	9	105	0,11	90	

<b>P<sub>tN</sub> [kW]</b>	tutti i rapporti all ratios alle Untersetzungen
	1.6

**SM 35** **Kg** 7.5

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				IEC
	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	
8	350	86	3,48	90	175	90	1,83	90	113	95	1,24	90	90 B5 90 B14
10	280	109	3,56	90	140	115	1,87	90	90	121	1,26	90	
12,5	224	138	3,59	90	112	145	1,89	90	72	152	1,28	90	
14	200	138	3,21	90	100	145	1,69	90	64	152	1,14	90	
18	156	138	2,49	90	78	145	1,31	90	50	152	0,89	90	
20	140	138	2,24	90	70	145	1,18	90	45	152	0,80	90	
25	112	166	2,17	90	56	175	1,14	90	36	180	0,75	90	
29.75	94	162	1,77	90	47	170	0,93	90	30	180	0,63	90	
35	80	166	1,55	90	40	175	0,81	90	26	180	0,54	90	
45	62	157	1,13	90	31	165	0,60	90	20	173	0,40	90	
50	56	157	1,02	90	28	165	0,54	90	18	173	0,36	90	
56	50	157	0,91	90	25	165	0,48	90	16	173	0,32	90	
63	44	157	0,81	90	22	165	0,43	90	14	173	0,29	90	
70	40	157	0,73	90	20	165	0,38	90	13	173	0,26	90	
80	35	157	0,64	90	18	165	0,34	90	11	173	0,23	90	
95.20	29	157	0,54	90	15	165	0,28	90	9	173	0,19	90	
108	26	157	0,47	90	13	165	0,25	90	8	173	0,17	90	
120	23	157	0,43	90	12	165	0,22	90	8	173	0,15	90	
142.8	19	157	0,35	90	10	165	0,19	90	6	173	0,13	90	

<b>P<sub>tN</sub> [kW]</b>	tutti i rapporti all ratios alle Untersetzungen
	1.9

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore ().

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity ().

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten ().

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegeben Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori SM

1.6 SM gearboxes performances

1.6 Leistungen der SM-Getriebe

SM 45



10

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				IEC
	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	
8	350	100	4,07	90	175	110	2,24	90	113	130	1,70	90	100-112 B14  90 B5 90 B14  80 B5 80 B14  71 B5 71 B14
10	280	120	3,91	90	140	145	2,36	90	90	160	1,68	90	
14	200	180	4,19	90	100	200	2,33	90	64	225	1,68	90	
16	175	195	3,97	90	88	230	2,34	90	56	250	1,64	90	
18	160	200	3,72	90	80	230	2,14	90	51	230	1,38	90	
20	140	215	3,50	90	70	250	2,04	90	45	260	1,36	90	
25	112	220	2,87	90	56	250	1,63	90	36	260	1,09	90	
28	100	220	2,56	90	50	250	1,45	90	32	250	0,93	90	
32	88	230	2,34	90	44	250	1,27	90	28	260	0,85	90	
35	80	220	2,05	90	40	250	1,16	90	26	245	0,73	90	
40	70	230	1,87	90	35	250	1,02	90	23	260	0,68	90	
50	56	220	1,43	90	28	250	0,81	90	18	260	0,54	90	
56	50	220	1,28	90	25	250	0,73	90	16	260	0,49	90	
62	45	210	1,10	90	23	245	0,64	90	15	245	0,41	90	
70	40	220	1,02	90	20	250	0,58	90	13	260	0,39	90	
86,8	32	220	0,83	90	16	245	0,46	90	10	245	0,30	90	
100	28	200	0,65	90	14	240	0,39	90	9	260	0,27	90	
124	23	200	0,53	90	11	240	0,32	90	7	260	0,22	90	
148,8	19	200	0,44	90	9	240	0,26	90	6	245	0,17	90	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	2.5

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore ().

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity ().

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten ().

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.





**1.7 Prestazioni motoriduttori**

**1.7 Gearmotors performances**

**1.7 Leistungen der Getriebemotoren**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
<b>0.09 kW</b> <span style="float: right;"><math>n_1 = 860 \text{ min}^{-1}</math> 63B 6</span>					
108	8.0	7.2	10.3	SM 25	63B 6
86	10.0	9.0	9.9	SM 25	63B 6
61	14.0	12.6	8.3	SM 25	63B 6
48	18.0	16.2	6.5	SM 25	63B 6
43	20.0	18.0	5.8	SM 25	63B 6
34	25.0	22	4.7	SM 25	63B 6
25	35.0	31	3.3	SM 25	63B 6
19.1	45.0	40	2.6	SM 25	63B 6
17.2	50.0	45	2.3	SM 25	63B 6
15.4	56.0	50	2.1	SM 25	63B 6
11.9	72.0	65	1.6	SM 25	63B 6
10.8	80.0	72	1.5	SM 25	63B 6
9.6	90.0	81	1.3	SM 25	63B 6
8.6	100.0	90	1.2	SM 25	63B 6

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
<b>0.13 kW</b> <span style="float: right;"><math>n_1 = 1360 \text{ min}^{-1}</math> <math>n_1 = 860 \text{ min}^{-1}</math> 63A 4 63C 6</span>					
170	8.0	6.6	10.7	SM 25	63A4
136	10.0	8.2	10.3	SM 25	63A4
97	14.0	11.5	8.7	SM 25	63A4
76	18.0	14.8	6.8	SM 25	63A4
68	20.0	16.4	6.1	SM 25	63A4
54	25.0	21	4.9	SM 25	63A4
48	18.0	23	4.5	SM 25	63C6
43	20.0	26	4.0	SM 25	63C6
39	35.0	29	3.5	SM 25	63A4
30	45.0	37	2.7	SM 25	63A4
27	50.0	41	2.4	SM 25	63A4
24	56.0	46	2.2	SM 25	63A4
18.9	72.0	59	1.7	SM 25	63A4
17.0	80.0	66	1.5	SM 25	63A4
15.1	90.0	74	1.4	SM 25	63A4
13.6	100.0	82	1.2	SM 25	63A4
11.9	72.0	94	1.1	SM 25	63C6
10.8	80.0	104	1.0	SM 25	63C6
9.6	90.0	117	0.90	SM 25	63C6
8.6	100.0	130	0.81	SM 25	63C6

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
<b>0.18 kW</b> <span style="float: right;"><math>n_1 = 1370 \text{ min}^{-1}</math> <math>n_1 = 870 \text{ min}^{-1}</math> 63B 4 71A 6</span>					
171	8.0	9.0	7.7	SM 25	63B4
137	10.0	11.3	7.5	SM 25	63B4
109	8.0	14.2	5.2	SM 25	71A6
98	14.0	15.8	6.3	SM 25	63B4
76	18.0	20	4.9	SM 25	63B4
69	20.0	23	4.4	SM 25	63B4
55	25.0	28	3.5	SM 25	63B4
48	18.0	32	3.3	SM 25	71A6
44	20.0	36	3.0	SM 25	71A6
39	35.0	40	2.5	SM 25	63B4
35	25.0	44	2.4	SM 25	71A6
30	45.0	51	2.0	SM 25	63B4
27	50.0	56	1.8	SM 25	63B4
24	56.0	63	1.6	SM 25	63B4
19.0	72.0	81	1.2	SM 25	63B4
17.1	80.0	90	1.1	SM 25	63B4
15.2	90.0	102	0.98	SM 25	63B4
13.7	100.0	113	0.89	SM 25	63B4
12.4	70.0	124	2.1	SM 45	71A6
12.4	70.0	124	1.4	SM 35	71A6
12.1	72.0	128	0.82	SM 25	71A6
10.9	80.0	142	1.2	SM 35	71A6
10.0	86.8	154	1.6	SM 45	71A6
9.1	95.2	169	1.0	SM 35	71A6
8.7	100.0	178	1.5	SM 45	71A6
8.1	108.0	192	0.90	SM 35	71A6
7.3	120.0	213	0.81	SM 35	71A6
7.0	124.0	221	1.2	SM 45	71A6
5.8	148.8	265	0.93	SM 45	71A6

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
<b>0.22 kW</b> <span style="float: right;"><math>n_1 = 1400 \text{ min}^{-1}</math> 63C 4</span>					
175	8.0	10.8	6.5	SM 25	63C 4
140	10.0	13.5	6.3	SM 25	63C 4
100	14.0	18.9	5.3	SM 25	63C 4
78	18.0	24	4.1	SM 25	63C 4
70	20.0	27	3.7	SM 25	63C 4
56	25.0	34	3.0	SM 25	63C 4
40	35.0	47	2.1	SM 25	63C 4
31	45.0	61	1.6	SM 25	63C 4
28	50.0	68	1.5	SM 25	63C 4
25	56.0	76	1.3	SM 25	63C 4
19.4	72.0	97	1.0	SM 25	63C 4
17.5	80.0	108	0.93	SM 25	63C 4
15.6	90.0	122	0.82	SM 25	63C 4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
<b>0.25 kW</b> <span style="float: right;"><math>n_1 = 1370 \text{ min}^{-1}</math> <math>n_1 = 870 \text{ min}^{-1}</math> 71A 4 71B 6</span>					
199	14.0	10.8	8.8	SM 25	63B2
171	8.0	12.5	5.6	SM 25	71A4
155	18.0	13.9	6.9	SM 25	63B2
140	20.0	15.4	6.2	SM 25	63B2
137	10.0	15.7	5.4	SM 25	71A4
112	25.0	19.3	4.9	SM 25	63B2
110	12.5	19.6	7.4	SM 35	71A4
98	14.0	22	4.6	SM 25	71A4
76	18.0	28	3.5	SM 25	71A4
69	20.0	31	3.2	SM 25	71A4
62	14.0	35	3.0	SM 25	71B6
55	25.0	39	2.6	SM 25	71A4
50	56.0	43	2.2	SM 25	63B2
46	29.8	47	3.6	SM 35	71A4
39	35.0	55	3.2	SM 35	71A4
39	35.0	55	1.8	SM 25	71A4
34	40.0	63	4.0	SM 45	71A4
30	45.0	71	2.3	SM 35	71A4
30	45.0	71	1.4	SM 25	71A4
27	50.0	78	3.2	SM 45	71A4
27	50.0	78	2.1	SM 35	71A4
27	50.0	78	1.3	SM 25	71A4
24	56.0	88	2.8	SM 45	71A4
24	56.0	88	1.9	SM 35	71A4
24	56.0	88	1.1	SM 25	71A4
22	62.0	97	2.5	SM 45	71A4
22	63.0	99	1.7	SM 35	71A4
19.6	70.0	110	2.3	SM 45	71A4
19.6	70.0	110	1.5	SM 35	71A4
19.0	72.0	113	0.89	SM 25	71A4
17.1	80.0	125	1.3	SM 35	71A4
17.1	80.0	125	0.80	SM 25	71A4
15.8	86.8	136	1.8	SM 45	71A4
14.4	95.2	149	1.1	SM 35	71A4
13.7	100.0	157	1.5	SM 45	71A4
12.7	108.0	169	0.97	SM 35	71A4
11.4	120.0	188	0.88	SM 35	71A4
11.0	124.0	194	1.2	SM 45	71A4
9.2	148.8	233	1.0	SM 45	71A4
8.7	100.0	247	1.1	SM 45	71B6
7.0	124.0	306	0.85	SM 45	71B6



**1.7 Prestazioni motoriduttori**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
----------------------------	----	----------	-----	----	---

<b>0.37 kW</b>		$n_1 = 2790 \text{ min}^{-1}$ $n_1 = 1380 \text{ min}^{-1}$ $n_1 = 910 \text{ min}^{-1}$	63C 2 71B 4 80A 6
----------------	--	--	-------------------------

279	10.0	11.4	7.1	SM 25	63C2
199	14.0	16.0	6.0	SM 25	63C2
173	8.0	18.4	3.8	SM 25	71B4
155	18.0	21	4.6	SM 25	63C2
138	10.0	23	3.7	SM 25	71B4
112	25.0	28	3.3	SM 25	63C2
110	12.5	29	5.0	SM 35	71B4
99	14.0	32	3.1	SM 25	71B4
91	10.0	35	2.5	SM 25	80A6
77	18.0	41	3.5	SM 35	71B4
77	18.0	41	2.4	SM 25	71B4
69	20.0	46	3.1	SM 35	71B4
69	20.0	46	2.2	SM 25	71B4
55	25.0	58	3.0	SM 35	71B4
55	25.0	58	1.7	SM 25	71B4
46	29.8	69	2.5	SM 35	71B4
43	32.0	74	3.4	SM 45	71B4
39	35.0	81	3.1	SM 45	71B4
39	35.0	81	2.2	SM 35	71B4
39	35.0	81	1.2	SM 25	71B4
35	40.0	92	2.7	SM 45	71B4
31	45.0	104	1.6	SM 35	71B4
31	45.0	104	0.96	SM 25	71B4
28	50.0	115	2.2	SM 45	71B4
28	50.0	115	1.4	SM 35	71B4
28	50.0	115	0.87	SM 25	71B4
25	56.0	129	1.9	SM 45	71B4
25	56.0	129	1.3	SM 35	71B4
22	62.0	143	1.7	SM 45	71B4
22	63.0	145	1.1	SM 35	71B4
19.7	70.0	161	1.5	SM 45	71B4
19.7	70.0	161	1.0	SM 35	71B4
17.3	80.0	184	0.90	SM 35	71B4
15.9	86.8	200	1.2	SM 45	71B4
13.8	100.0	230	1.0	SM 45	71B4
11.1	124.0	286	0.84	SM 45	71B4

<b>0.55 kW</b>		$n_1 = 2800 \text{ min}^{-1}$ $n_1 = 1390 \text{ min}^{-1}$ $n_1 = 1380 \text{ min}^{-1}$	71B 2 80A 4 71C 4
----------------	--	---	-------------------------

350	8.0	13.5	5.0	SM 25	71B2
280	10.0	16.9	4.8	SM 25	71B2
200	14.0	24	4.0	SM 25	71B2
174	8.0	27	3.3	SM 35	80A4
174	8.0	27	2.6	SM 25	80A4
173	8.0	27	3.3	SM 35	71C4

**1.7 Gearmotors performances**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
----------------------------	----	----------	-----	----	--

<b>0.55 kW</b>		$n_1 = 2800 \text{ min}^{-1}$ $n_1 = 1390 \text{ min}^{-1}$ $n_1 = 1380 \text{ min}^{-1}$	71B 2 80A 4 71C 4
----------------	--	---	-------------------------

173	8.0	27	2.6	SM 25	71C4
156	18.0	30	3.1	SM 25	71B2
139	10.0	34	3.4	SM 35	80A4
139	10.0	34	2.5	SM 25	80A4
138	10.0	34	3.4	SM 35	71C4
138	10.0	34	2.5	SM 25	71C4
111	12.5	43	3.4	SM 35	80A4
110	12.5	43	3.4	SM 35	71C4
99	14.0	48	3.0	SM 35	80A4
99	14.0	48	2.1	SM 25	80A4
99	14.0	48	3.0	SM 35	71C4
99	14.0	48	2.1	SM 25	71C4
87	16.0	54	4.2	SM 45	80A4
86	16.0	55	4.2	SM 45	71C4
77	18.0	61	2.4	SM 35	80A4
77	18.0	61	1.6	SM 25	80A4
77	18.0	62	2.4	SM 35	71C4
77	18.0	62	1.6	SM 25	71C4
70	20.0	68	2.1	SM 35	80A4
70	20.0	68	1.5	SM 25	80A4
69	20.0	69	2.1	SM 35	71C4
69	20.0	69	1.5	SM 25	71C4
56	25.0	85	2.9	SM 45	80A4
56	25.0	85	2.1	SM 35	80A4
56	25.0	85	1.2	SM 25	80A4
55	25.0	86	2.9	SM 45	71C4
55	25.0	86	2.0	SM 35	71C4
55	25.0	86	1.2	SM 25	71C4
50	28.0	95	2.6	SM 45	80A4
49	28.0	96	2.6	SM 45	71C4
47	29.8	101	1.7	SM 35	80A4
46	29.8	102	1.7	SM 35	71C4
43	32.0	109	2.3	SM 45	80A4
43	32.0	110	2.3	SM 45	71C4
40	35.0	119	2.1	SM 45	80A4
40	35.0	119	1.5	SM 35	80A4
40	35.0	119	0.84	SM 25	80A4
39	35.0	120	2.1	SM 45	71C4
39	35.0	120	1.5	SM 35	71C4
39	35.0	120	0.83	SM 25	71C4
35	40.0	136	1.8	SM 45	80A4
35	40.0	137	1.8	SM 45	71C4
31	45.0	153	1.1	SM 35	80A4
31	45.0	154	1.1	SM 35	71C4
28	50.0	170	1.5	SM 45	80A4
28	50.0	170	0.97	SM 35	80A4
28	50.0	171	1.5	SM 45	71C4
28	50.0	171	0.96	SM 35	71C4

**1.7 Leistungen der Getriebemotoren**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
----------------------------	----	----------	-----	----	---

<b>0.55 kW</b>		$n_1 = 2800 \text{ min}^{-1}$ $n_1 = 1390 \text{ min}^{-1}$ $n_1 = 1380 \text{ min}^{-1}$	71B 2 80A 4 71C 4
----------------	--	---	-------------------------

25	56.0	190	1.3	SM 45	80A4
25	56.0	190	0.87	SM 35	80A4
25	56.0	192	1.3	SM 45	71C4
25	56.0	192	0.86	SM 35	71C4
22	62.0	211	1.2	SM 45	80A4
22	62.0	212	1.2	SM 45	71C4
19.9	70.0	238	1.1	SM 45	80A4
19.7	70.0	240	1.0	SM 45	71C4
16.0	86.8	295	0.83	SM 45	80A4
15.9	86.8	297	0.82	SM 45	71C4

<b>0.75 kW</b>		$n_1 = 2800 \text{ min}^{-1}$ $n_1 = 1390 \text{ min}^{-1}$	71C 2 80B 4
----------------	--	--	----------------

350	8.0	18.4	3.6	SM 25	71C2
280	10.0	23	3.5	SM 25	71C2
200	14.0	32	2.9	SM 25	71C2
174	8.0	37	3.0	SM 45	80B4
174	8.0	37	2.4	SM 35	80B4
174	8.0	37	1.9	SM 25	80B4
139	10.0	46	3.1	SM 45	80B4
139	10.0	46	2.5	SM 35	80B4
139	10.0	46	1.8	SM 25	80B4
111	12.5	58	2.5	SM 35	80B4
99	14.0	65	3.1	SM 45	80B4
99	14.0	65	2.2	SM 35	80B4
99	14.0	65	1.5	SM 25	80B4
87	16.0	74	3.1	SM 45	80B4
77	18.0	83	2.8	SM 45	80B4
77	18.0	83	1.7	SM 35	80B4
77	18.0	83	1.2	SM 25	80B4
70	20.0	93	2.7	SM 45	80B4
70	20.0	93	1.6	SM 35	80B4
70	20.0	93	1.1	SM 25	80B4
56	25.0	116	2.2	SM 45	80B4
56	25.0	116	1.5	SM 35	80B4
56	25.0	116	0.86	SM 25	80B4
50	28.0	130	1.9	SM 45	80B4
47	29.8	138	1.2	SM 35	80B4
43	32.0	148	1.7	SM 45	80B4
40	35.0	162	1.5	SM 45	80B4
40	35.0	162	1.1	SM 35	80B4
35	40.0	186	1.3	SM 45	80B4
28	50.0	232	1.1	SM 45	80B4
25	56.0	260	0.96	SM 45	80B4
22	62.0	288	0.85	SM 45	80B4



**1.7 Prestazioni motoriduttori**

**1.7 Gearmotors performances**

**1.7 Leistungen der Getriebemotoren**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
----------------------------	----	----------	-----	----	--

<b>0.88 kW</b>		$n_1 = 1350 \text{ min}^{-1}$		80C 4	
----------------	--	-------------------------------	--	-------	--

169	8.0	45	2.5	<b>SM 45</b>	80C4
169	8.0	45	2.0	<b>SM 35</b>	80C4
169	8.0	45	1.6	<b>SM 25</b>	80C4
135	10.0	56	2.6	<b>SM 45</b>	80C4
135	10.0	56	2.1	<b>SM 35</b>	80C4
135	10.0	56	1.5	<b>SM 25</b>	80C4
108	12.5	70	2.1	<b>SM 35</b>	80C4
96	14.0	78	2.5	<b>SM 45</b>	80C4
96	14.0	78	1.8	<b>SM 35</b>	80C4
96	14.0	78	1.3	<b>SM 25</b>	80C4
84	16.0	90	2.6	<b>SM 45</b>	80C4
75	18.0	101	2.3	<b>SM 45</b>	80C4
75	18.0	101	1.4	<b>SM 35</b>	80C4
75	18.0	101	0.99	<b>SM 25</b>	80C4
68	20.0	112	2.2	<b>SM 45</b>	80C4
68	20.0	112	1.3	<b>SM 35</b>	80C4
68	20.0	112	0.89	<b>SM 25</b>	80C4
54	25.0	140	1.8	<b>SM 45</b>	80C4
54	25.0	140	1.2	<b>SM 35</b>	80C4
48	28.0	157	1.6	<b>SM 45</b>	80C4
45	29.8	167	1.0	<b>SM 35</b>	80C4
42	32.0	179	1.4	<b>SM 45</b>	80C4
39	35.0	196	1.3	<b>SM 45</b>	80C4
39	35.0	196	0.89	<b>SM 35</b>	80C4
34	40.0	224	1.1	<b>SM 45</b>	80C4
27	50.0	280	0.89	<b>SM 45</b>	80C4
24	56.0	314	0.80	<b>SM 45</b>	80C4

<b>1.1 kW</b>		$n_1 = 2830 \text{ min}^{-1}$ $n_1 = 1390 \text{ min}^{-1}$		80B 2 80D 4	
---------------	--	--	--	----------------	--

354	8.0	27	3.2	<b>SM 35</b>	80B2
354	8.0	27	2.5	<b>SM 25</b>	80B2
283	10.0	33	3.3	<b>SM 35</b>	80B2
283	10.0	33	2.4	<b>SM 25</b>	80B2
226	12.5	42	3.3	<b>SM 35</b>	80B2
202	14.0	47	3.0	<b>SM 35</b>	80B2
202	14.0	47	2.0	<b>SM 25</b>	80B2
174	8.0	54	2.0	<b>SM 45</b>	80D4
174	8.0	54	1.7	<b>SM 35</b>	80D4
174	8.0	54	1.3	<b>SM 25</b>	80D4
139	10.0	68	2.1	<b>SM 45</b>	80D4
139	10.0	68	1.7	<b>SM 35</b>	80D4
139	10.0	68	1.2	<b>SM 25</b>	80D4
111	12.5	85	1.7	<b>SM 35</b>	80D4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
----------------------------	----	----------	-----	----	--

<b>1.1 kW</b>		$n_1 = 2830 \text{ min}^{-1}$ $n_1 = 1390 \text{ min}^{-1}$		80B 2 80D 4	
---------------	--	--	--	----------------	--

99	14.0	95	2.1	<b>SM 45</b>	80D4
99	14.0	95	1.5	<b>SM 35</b>	80D4
99	14.0	95	1.1	<b>SM 25</b>	80D4
87	16.0	109	2.1	<b>SM 45</b>	80D4
77	18.0	122	1.9	<b>SM 45</b>	80D4
77	18.0	122	1.2	<b>SM 35</b>	80D4
77	18.0	122	0.82	<b>SM 25</b>	80D4
70	20.0	136	1.8	<b>SM 45</b>	80D4
70	20.0	136	1.1	<b>SM 35</b>	80D4
56	25.0	170	1.5	<b>SM 45</b>	80D4
56	25.0	170	1.0	<b>SM 35</b>	80D4
50	28.0	190	1.3	<b>SM 45</b>	80D4
47	29.8	202	0.84	<b>SM 35</b>	80D4
43	32.0	218	1.1	<b>SM 45</b>	80D4
40	35.0	238	1.1	<b>SM 45</b>	80D4
35	40.0	272	0.92	<b>SM 45</b>	80D4

<b>1.5 kW</b>		$n_1 = 2830 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$		80C 2 90L 4	
---------------	--	--	--	----------------	--

354	8.0	36	2.7	<b>SM 45</b>	80C2
354	8.0	36	2.4	<b>SM 35</b>	80C2
354	8.0	36	1.8	<b>SM 25</b>	80C2
283	10.0	46	2.6	<b>SM 45</b>	80C2
283	10.0	46	2.4	<b>SM 35</b>	80C2
283	10.0	46	1.8	<b>SM 25</b>	80C2
226	12.5	57	2.4	<b>SM 35</b>	80C2
202	14.0	64	2.8	<b>SM 45</b>	80C2
202	14.0	64	2.2	<b>SM 35</b>	80C2
202	14.0	64	1.5	<b>SM 25</b>	80C2
175	8.0	74	1.5	<b>SM 45</b>	90L4
175	8.0	74	1.2	<b>SM 35</b>	90L4
175	8.0	74	0.95	<b>SM 25</b>	90L4
140	10.0	92	1.6	<b>SM 45</b>	90L4
140	10.0	92	1.2	<b>SM 35</b>	90L4
140	10.0	92	0.92	<b>SM 25</b>	90L4
112	12.5	115	1.3	<b>SM 35</b>	90L4
100	14.0	129	1.6	<b>SM 45</b>	90L4
100	14.0	129	1.1	<b>SM 35</b>	90L4
88	16.0	147	1.6	<b>SM 45</b>	90L4
78	18.0	166	1.4	<b>SM 45</b>	90L4
78	18.0	166	0.87	<b>SM 35</b>	90L4
70	20.0	184	1.4	<b>SM 45</b>	90L4
56	25.0	230	1.1	<b>SM 45</b>	90L4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
----------------------------	----	----------	-----	----	--

<b>1.5 kW</b>		$n_1 = 2830 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$		80C 2 90L 4	
---------------	--	--	--	----------------	--


50	28.0	258	0.97	<b>SM 45</b>	90L4
44	32.0	295	0.85	<b>SM 45</b>	90L4

<b>1.8 kW</b>		$n_1 = 2770 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$		80D 2 90LB 4	
---------------	--	--	--	-----------------	--

346	8.0	45	2.2	<b>SM 45</b>	80D2
346	8.0	45	1.9	<b>SM 35</b>	80D2
346	8.0	45	1.5	<b>SM 25</b>	80D2
277	10.0	56	2.1	<b>SM 45</b>	80D2
277	10.0	56	2.0	<b>SM 35</b>	80D2
277	10.0	56	1.5	<b>SM 25</b>	80D2
222	12.5	70	2.0	<b>SM 35</b>	80D2
198	14.0	78	2.3	<b>SM 45</b>	80D2
198	14.0	78	1.8	<b>SM 35</b>	80D2
198	14.0	78	1.2	<b>SM 25</b>	80D2
175	8.0	88	1.2	<b>SM 45</b>	90LB4
175	8.0	88	1.0	<b>SM 35</b>	90LB4
154	18.0	101	2.0	<b>SM 45</b>	80D2
154	18.0	101	1.4	<b>SM 35</b>	80D2
154	18.0	101	0.94	<b>SM 25</b>	80D2
140	10.0	111	1.3	<b>SM 45</b>	90LB4
140	10.0	111	1.0	<b>SM 35</b>	90LB4
112	12.5	138	1.0	<b>SM 35</b>	90LB4
100	14.0	155	1.3	<b>SM 45</b>	90LB4
100	14.0	155	0.94	<b>SM 35</b>	90LB4
88	16.0	177	1.3	<b>SM 45</b>	90LB4
78	18.0	199	1.2	<b>SM 45</b>	90LB4
70	20.0	221	1.1	<b>SM 45</b>	90LB4
56	25.0	276	0.90	<b>SM 45</b>	90LB4
50	28.0	309	0.81	<b>SM 45</b>	90LB4




### 1.7 Prestazioni motoriduttori

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
----------------------------	----	----------	-----	----	---

<b>2.2 kW</b>	$n_1 = 2840 \text{ min}^{-1}$	90L 2
	$n_1 = 1410 \text{ min}^{-1}$	100A 4
	$n_1 = 940 \text{ min}^{-1}$	100LB 6

355	8.0	53	1.9	<b>SM 45</b>	90L2
355	8.0	53	1.6	<b>SM 35</b>	90L2
355	8.0	53	1.3	<b>SM 25</b>	90L2
284	10.0	67	1.8	<b>SM 45</b>	90L2
284	10.0	67	1.6	<b>SM 35</b>	90L2
284	10.0	67	1.2	<b>SM 25</b>	90L2
227	12.5	83	1.7	<b>SM 35</b>	90L2
203	14.0	93	1.9	<b>SM 45</b>	90L2
203	14.0	93	1.5	<b>SM 35</b>	90L2
203	14.0	93	1.0	<b>SM 25</b>	90L2
176	8.0	107	1.0	<b>SM 45</b>	100A4
142	20.0	133	1.0	<b>SM 35</b>	90L2
141	10.0	134	1.1	<b>SM 45</b>	100A4
101	14.0	188	1.1	<b>SM 45</b>	100A4
95	29.8	198	0.82	<b>SM 35</b>	90L2
88	16.0	215	1.1	<b>SM 45</b>	100A4
78	18.0	241	0.95	<b>SM 45</b>	100A4
71	20.0	268	0.93	<b>SM 45</b>	100A4
67	14.0	282	0.80	<b>SM 45</b>	100BL6


### 1.7 Gearmotors performances

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
----------------------------	----	----------	-----	----	--

<b>3 kW</b>	$n_1 = 2840 \text{ min}^{-1}$	90LB 2
	$n_1 = 1420 \text{ min}^{-1}$	100LB 4

355	8.0	73	1.4	<b>SM 45</b>	90LB2
355	8.0	73	1.2	<b>SM 35</b>	90LB2
355	8.0	73	0.92	<b>SM 25</b>	90LB2
284	10.0	91	1.3	<b>SM 45</b>	90LB2
284	10.0	91	1.2	<b>SM 35</b>	90LB2
284	10.0	91	0.89	<b>SM 25</b>	90LB2
227	12.5	113	1.2	<b>SM 35</b>	90LB2
203	14.0	127	1.4	<b>SM 45</b>	90LB2
203	14.0	127	1.1	<b>SM 35</b>	90LB2
178	16.0	145	1.3	<b>SM 45</b>	90LB2
158	18.0	163	1.2	<b>SM 45</b>	90LB2
158	18.0	163	0.84	<b>SM 35</b>	90LB2
142	20.0	182	1.2	<b>SM 45</b>	90LB2
142	10.0	182	0.80	<b>SM 45</b>	100B4
114	25.0	227	0.97	<b>SM 45</b>	90LB2
101	28.0	254	0.87	<b>SM 45</b>	90LB2

### 1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	SM	
----------------------------	----	----------	-----	----	---

<b>4 kW</b>	$n_1 = 2860 \text{ min}^{-1}$	100B 2
-------------	-------------------------------	--------

358	8.0	96	1.0	<b>SM 45</b>	100B2
286	10.0	120	1.0	<b>SM 45</b>	100B2
204	14.0	168	1.1	<b>SM 45</b>	100B2
179	16.0	192	1.0	<b>SM 45</b>	100B2
159	18.0	216	0.92	<b>SM 45</b>	100B2
143	20.0	240	0.89	<b>SM 45</b>	100B2





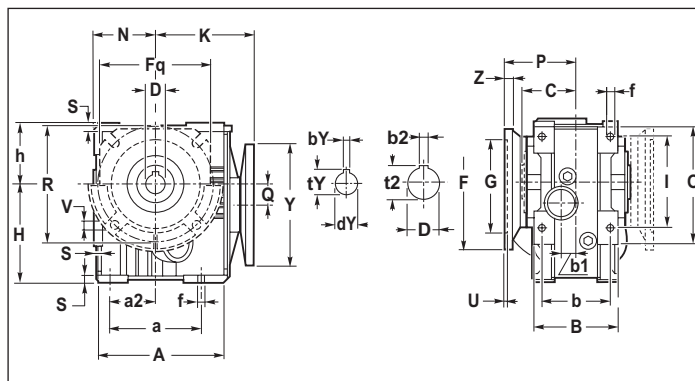
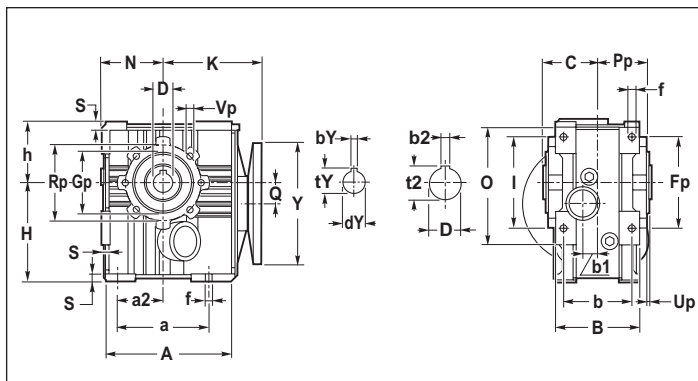
1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

SM 25 - 35 - 45

SM 25 - 35 - 45...F1...



Tab. 2.8.1

SM	A	a	a2	B	b	b1	C	D	f	h	H	I	N	O	Q	S	K
25	122	90	45	90	73.5	16,55	52.5	19 (20*) (24*)	9	65	107	90	65	122	25.5	8	100 <sup>(1)</sup>
35	130	100	50	95	75	17.5	60	25 (28*) (30*)	9	70	123.5	100	70	130	28.5	8	122.5
45	165	120	60	110	90	19	70	30 (25*) (28*)	9	80	130	120	80	155	27.5	10	129.5 <sup>(2)</sup>

<sup>(1)</sup> Per il PAM 90 B5 e B14 contattare Ufficio Commerciale  
<sup>(1)</sup> For PAM 90 B5 and B14, please contact Sales Department  
<sup>(1)</sup> Für PAM 90 B5 und B14 wenden Sie sich bitte an unsere Handelsabteilung

<sup>(2)</sup> Per il PAM 100-112 B14 contattare Ufficio Commerciale  
<sup>(2)</sup> For PAM 100-112 B14, please contact Sales Department  
<sup>(2)</sup> Für PAM 100-112 B14 wenden Sie sich bitte an unsere Handelsabteilung

\* A richiesta / Upon Request / Auf Anfrage

Tab. 2.8.2

SM	25	35	45
Fp	100	110	120
Gp	70	80	80
Pp	50	55.5	65
Rp	85	95	100
Up	2.5	2.5	3
Vp	M8	M8	M8

Tab. 2.8.3

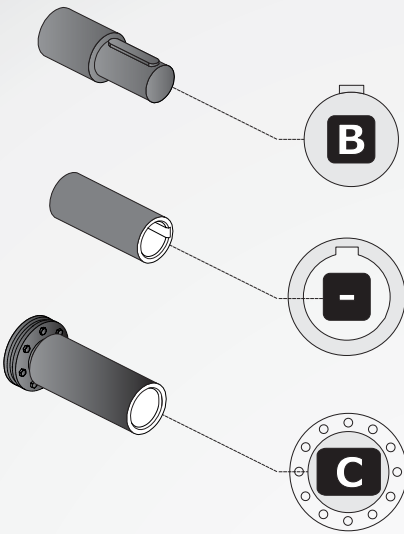
SM	F	Fq	G (g6)	P	R	U	V	Z
25	F1	175	-	115	78.5	5	11	11
	F2	200	-	130	94.5		13	
	F3	160	-	110	74.5		10	
	FL	180	-	115	108.5		11	
	* FA	125	110	70	96.5		8.5	
35	FA	180	142	115	84.5	6	11	10
	FB				114.5			
45	F1	175	-	115	124	5	11	10
	F2	175	-	115	93			
	FL	200	-	130	119			

\* A richiesta / Upon Request / Auf Anfrage



STIM  
team

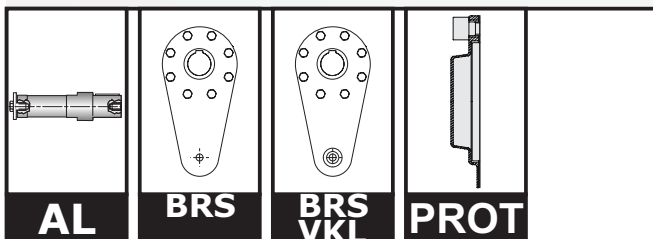
ESTREMITÀ USCITA - Accessori - Opzioni  
 OUTPUT CONFIGURATIONS - Accessories - Options  
 ENDEN DER AUSGANGSWELLEN - Zubehör - Optionen



Output shaft  
 Double integral output shaft **D16**

Hollow shaft with keyway **D17**

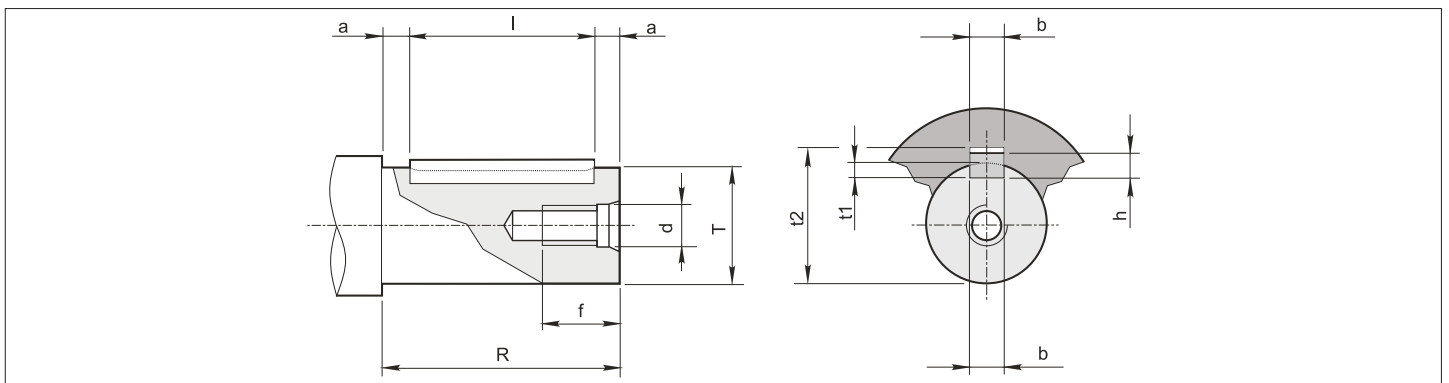
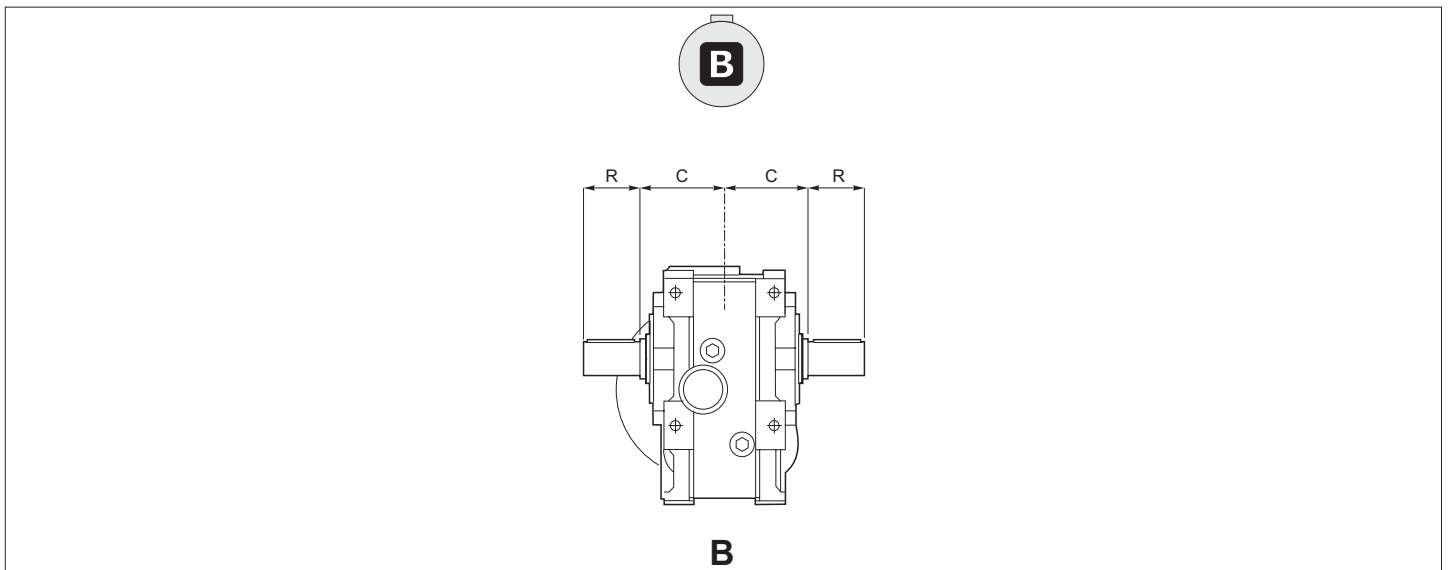
Hollow shaft with shrink disk **D18**



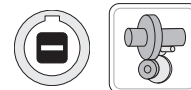
OPT - ACC. -  
 Accessories - Options **D19**

STIM  
team





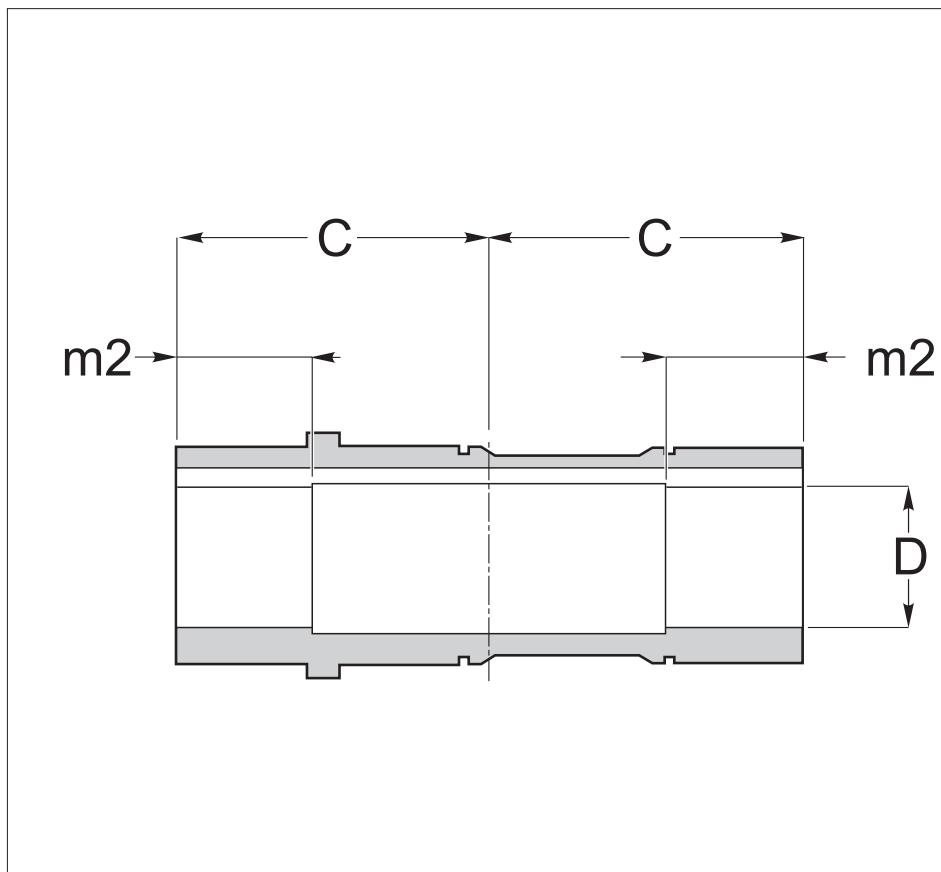
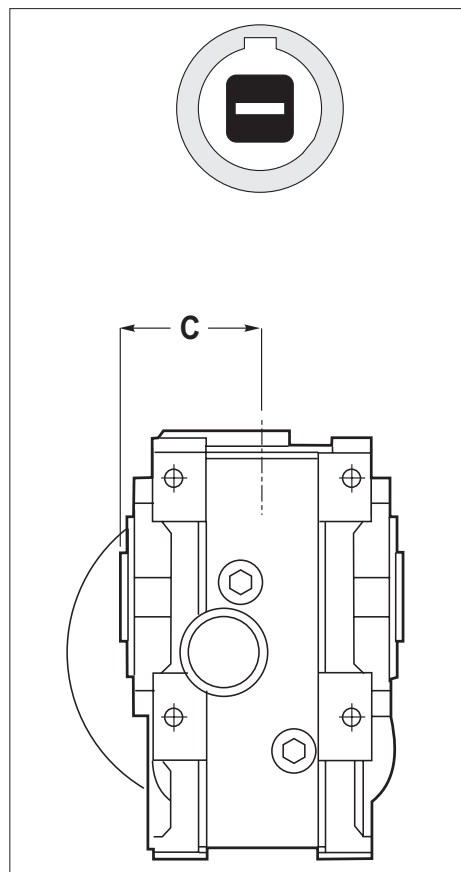
	Ø Albero Ø Shaft Ø Welle		Foro fil. testa Tapped hole Gewindebohrung Kopfi		Cava Keyway Nut			Estremità d'albero Shaft end Wellenende		Linguetta Key Federkeil
	T	C	d	f	b	t1	t2	R	a	bxhxl
<b>25</b>	19 g6	52.5	M 6	15	6	3.5	21.8	40	8	6X7X25
<b>35</b>	25 g6	60	M 8	22	8	4	28.3	60	10	8X7X40
<b>45</b>	30 g6	70	M 10	25	8	4	33.3	60	5	8X7X50



1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

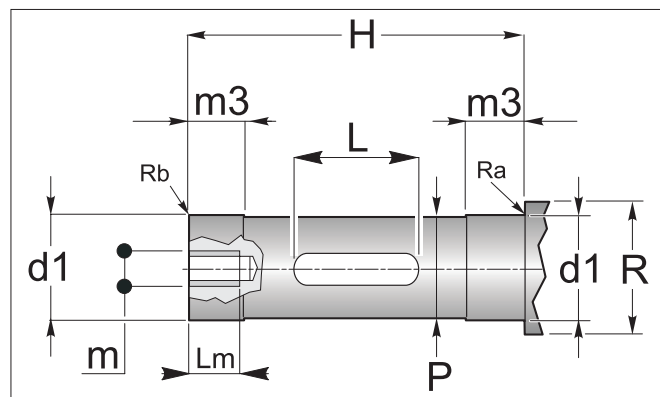
1.8.1 - ABTRIEBSWELLEN



	25	35	45
<b>C</b>	52.5	60	70
<b>D</b> <b>H7</b>	19 (24) (20)	25 (30) (28)	30 (28) (25)
<b>m2</b>	25.5	25.5	30.5

Perno macchina / Customer shaft / Maschinachse

	d1 g6	m3	Lm	m	H	L min	P	R	Ra	Rb
<b>25</b>	19 (24) (20)	30	15 (25) (15)	M 6 (M 8) (M 6)	103	40	18.8 (23.8) (19.8)	30		
<b>35</b>	25 (30) (28)	30	25 (25) (25)	M 8 (M 10) (M 10)	118	60	24.8 (29.8) (27.8)	40		
<b>45</b>	30 (28) (25)	35	25 (25) (25)	M 10 (M 10) (M 8)	138	60	29.8 (27.8) (24.8)	40		



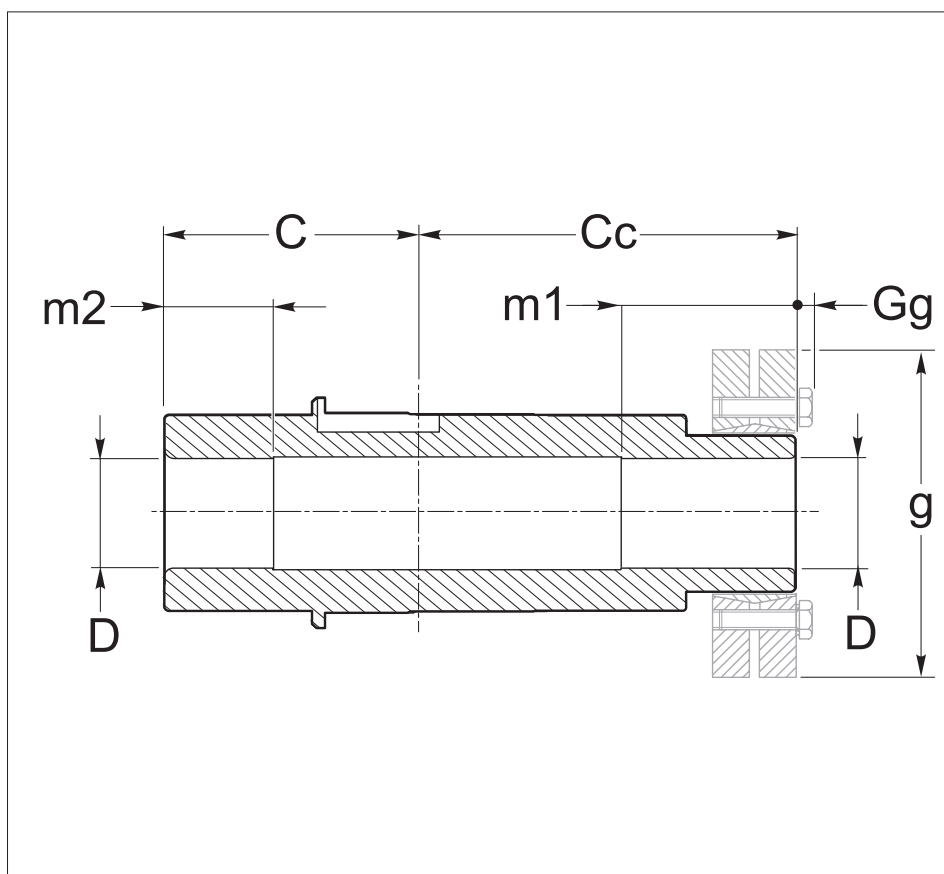
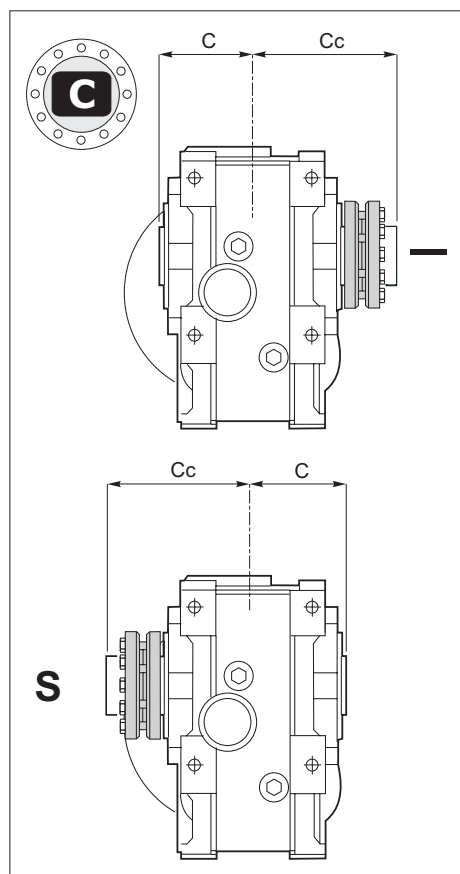




## 1.8.1 - ALBERI LENTI

## 1.8.1 - OUTPUT SHAFT

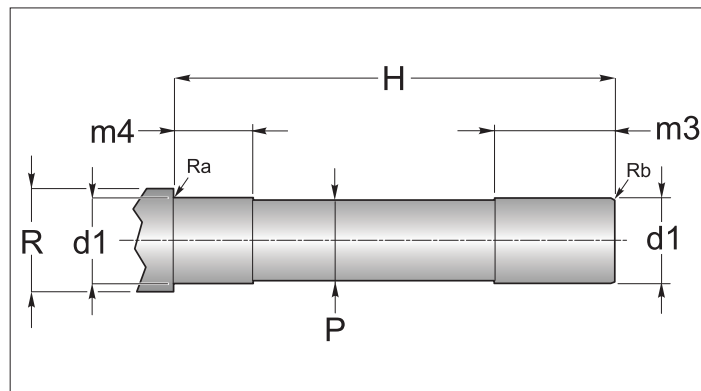
## 1.8.1 - ABTRIEBSWELLEN



	25	35	45
<b>C</b>	52.5	60	70
<b>Cc</b>	74.5	85	95
<b>D</b> H7	19	25	30
<b>m1</b>	35	40	45
<b>m2</b>	25.5	25.5	20
<b>g</b>	50	60	72
<b>Gg</b>	3.5	3.5	4

Perno macchina / Customer shaft / Maschinachse

	d1 h6	H	m3	m4	P	R	Ra	Rb
25	19	127	40	30	18.8	30		
35	25	145	45	30	24.8	40		
45	30	*	*	35	34.8	43		



\*Contattare il ns. servizio tecnico / Contact our technical dept / Wenden Sie sich an unseren technischen Service



**AL** AL - ALBERO LENTO  
SPORGENTE

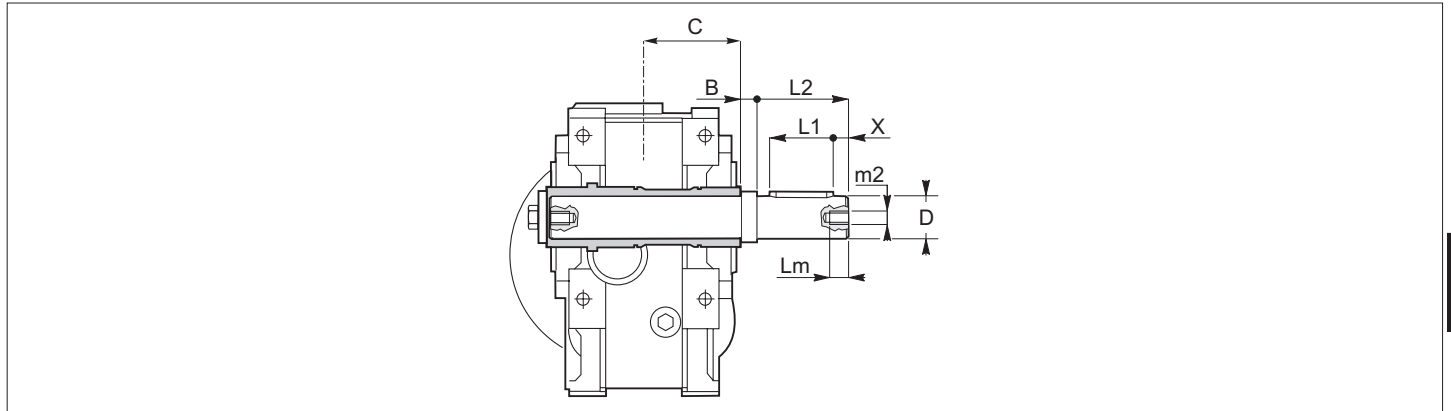
**AL - SINGLE OUTPUT SHAFTS**

**AL - EINSEITIGE ABTRIEBSWELLEN**

Tutti i riduttori sono forniti con albero lento cavo. A richiesta, possono essere forniti kit di montaggio per alberi sporgenti comprensivi di linguette, rondelle e viti di fissaggio. Le dimensioni delle linguette sono conformi alle norme UNI 6604-69.

All gearboxes are supplied with hollow output shaft. On request there are available also assembly kits including output shafts, keys, washers and assembly screws. The dimensions of the keys are conform with UNI 6604-69.

Alle Getriebe werden mit Abtriebshohlwelle geliefert. Auf Anfrage sind auch Montagekits inklusive Abtriebswellen, Paßfedern, Unterlegscheiben und Montageschrauben erhältlich. Die Abmessungen der Paßfedern sind konform mit der UNI 6604-69.



	B	C	D g6	m <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>m</sub>	X
25*	10	52.5	19	M 8	25	40	16	8
35*	10	60	25	M 8	40	60	20	10
45*	3	70	30	M 10	50	60	25	5

\* ATTENZIONE  
L'albero lento sporgente è fornito per essere installato sulla versione del riduttore con albero **CAVO** con diametro **STANDARD**.

\*ATTENTION  
The output shaft is available only for standard hollow shaft diameter.

Achtung:  
Die Einseitige Abtriebswelle wird fuer die Montage bei Getrieben mit Standart Hohlwelle geliefert.

**BRS**  
**BRS\_VKL** DI

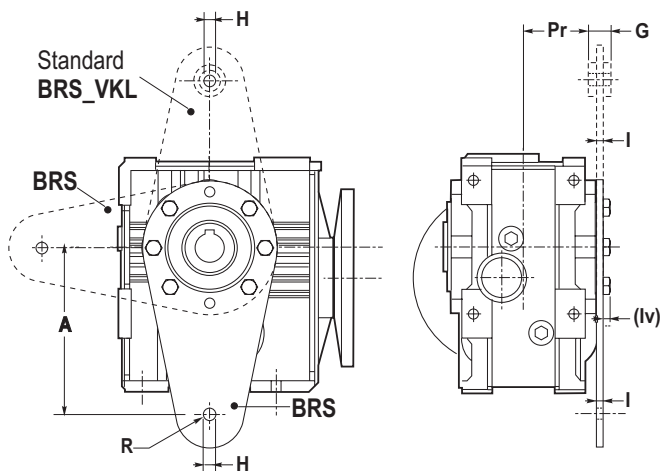
**BRS**  
**BRS\_VKL**  
**TORQUE ARM**

**BRS**  
**BRS\_VKL**  
**DREHMOMENTSTÜTZE**

Per il fissaggio del riduttore mediante tirante, viene fornito in allegato l'apposito braccio di reazione.

If the gearbox shall be shaft mounted as an extra part there is also available a torque arm.

Soll das Getriebe pendelnd gelagert werden, so ist als Zubehörteil auch eine Drehmomentstütze.



	A	G	H	I	Iv	Pr	R
25	100	15	10	4	5	44.5	25
35*	150	15	10	6	5	51.0	25
45	150	20	10	6	5	58	30

\* Solo Con Boccola in VKL / With VKL bushing

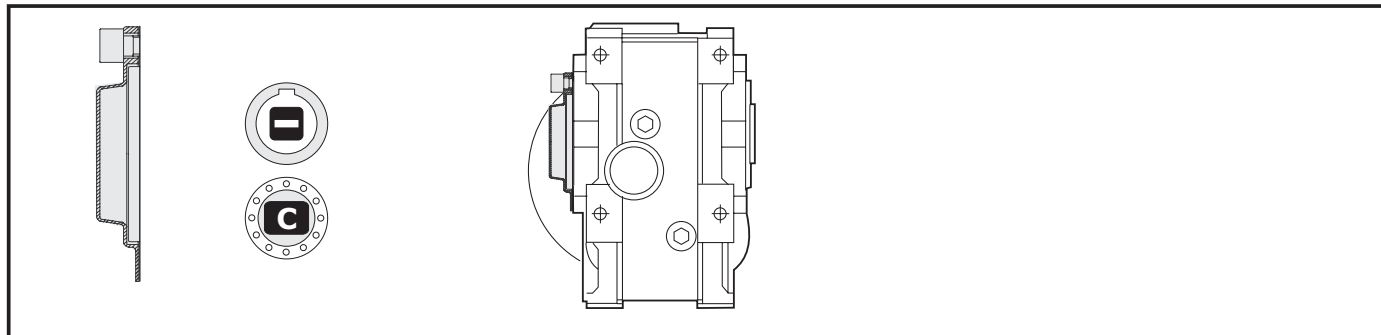


**PROT**

PROT. - Coperchio di protezione

PROT. - Protection cover

PROT - Schutzvorrichtungdeckel



1.10 Linguette

1.10 Keys

1.10 Paßfedern

Albero Entrata - Input Shaft - Antriebswelle

SR		
d	b <sub>1</sub>	t <sub>1</sub>
9	3	10.2
11	4	12.5
14	5	16.0
16	5	18.0
18	6	20.5
19	6	21.5
24	8	27.0
25	8	28.0
28	8	31.0
30	8	33.0
32	10	35.0
35	10	38.0
38	10	41.0
42	12	45.0
45	14	48.5
48	14	51.5
50	14	53.5
55	16	59.0
65	18	69.0

SM PAM B5				
PAM B5	Y	dY	bY	tY
56	120	9	3	10.4
63	140	11	4	12.8
71	160	14	5	16.3
80	200	19	6	21.8
90	200	24	8	27.3
100	250	28	8	31.3
112	250	28	8	31.3
132	300	38	10	41.3
160	350	42	12	45.3
180	350	48	14	51.8
200	400	55	16	59.3

SM PAM B14				
PAM B14	Y	dY	bY	tY
56	80	9	3	10.4
63	90	11	4	12.8
71	105	14	5	16.3
80	120	19	6	21.8
90	140	24	8	27.3
100	160	28	8	31.3
112	160	28	8	31.3
132	200	38	10	41.3

Albero Uscita - Output Shaft - Abtriebswelle

Albero Forato / shaft with keyway Hohlwelle mit Paßfedernut S - SR - SM		
D	b <sub>2</sub>	t <sub>2</sub>
14	5	16.3
18	6	20.8
19	6	21.8
24	8	27.3
25	8	28.3
28	8	31.3
30	8	33.3
32	10	35.3
35	10	38.3
42	12	45.3
45	14	48.8
48	14	51.8
50	14	53.8
55	16	59.3
65	18	69.4

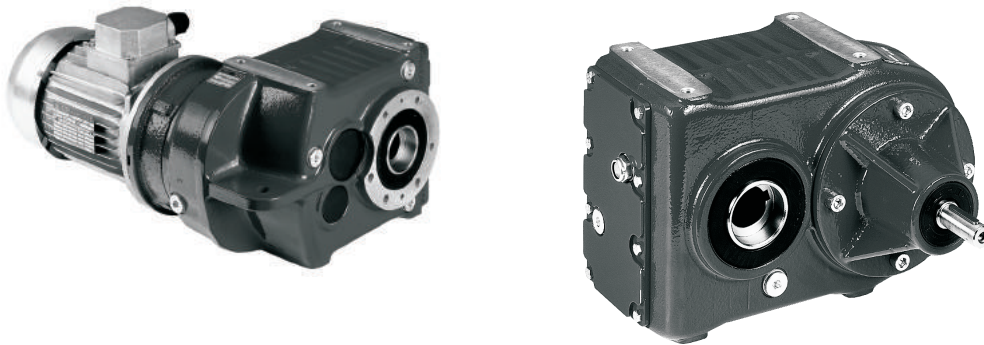
Albero Pieno / Solid shaft / Vollwelle S - SR - SM		
d <sub>2</sub>	b <sub>2</sub>	t <sub>2</sub>
9	3	10.2
11	4	12.5
14	5	16.0
16	5	18.0
18	6	20.5
19	6	21.5
24	8	27.0
25	8	28.0
28	8	31.0
30	8	33.0
32	10	35.0
35	10	38.0
38	10	41.0
42	12	45.0
45	14	48.5
48	14	51.5
50	14	53.5
55	16	59.0
65	18	69.0



1.0 Riduttori - motoriduttori paralleli - pendolari P  
 1.0 Shaft gearboxes - shaft mounted gearboxes and geared motors P  
 1.0 Flach- und Aufsteckgetriebe und-Getriebemotoren P

P

1.1	Caratteristiche tecniche	<i>Technical characteristics</i>	Technische Eigenschaften	E1
1.2	Designazione	<i>Designation</i>	Bezeichnungen	E2
1.4	Lubrificazione	<i>Lubrication</i>	Schmierung	E7
1.5	Carichi radiali e assiali	<i>Axial and overhung loads</i>	Radiale und Axiale Belastungen	E8
1.6	Prestazioni riduttori	<i>Gearboxes performances</i>	Leistungen der Getriebe	E9
1.7	Prestazioni motoriduttori	<i>Gearmotors performances</i>	Leistungen der Getriebemotoren	E14
1.8	Dimensioni	<i>Dimensions</i>	Abmessungen	E22
1.9	Accessori	<i>Accessories</i>	Zubehör	E40
1.10	Linguette	<i>Keys</i>	Paßfedern	E41



63 - 71 - 90 - 112 - 125

### 1.1 Caratteristiche tecniche

Questi prodotti sicuramente colpiscono per la robustezza, dovuta alla realizzazione della carcassa in struttura monolitica, che abbinata alla scelta tecnica di avere solo PAM diretti più compatti, collocano il prodotto finito in una alta fascia qualitativa e prestazionale: risultano quindi perfetti per applicazioni quali traslazione carrello e scorrimento ponte.

### 1.1 Technical characteristics

*These products strike for the robustness due to the realization of the housing in monolithic structure which, combined to the technical choice to have only direct IEC flange most compact, put the final product in a very high qualitative and performance band.*

### 1.1 Technische Eigenschaften

Diese neuen Produkte beindrucken sicherlich durch ihre Stärke, basierend auf einem monolithischen Gehäuse in Verbindung mit der technischen Entscheidung nur direkte massive PAM zu verwenden, und führen somit zu einem hochwertigen und leistungsstarken Endprodukt.



1.2 Designazione

1.2 Designation

1.2 Bezeichnung

Maschine	Input Version	Output version	Size	Output Flange	Output Shaft	Shaft Diameter	Mounting Shaft	Rotation Sense BSTOP	Reduction ratio	Input Shaft	Designazione Motori Designation Motors Bezeichnung Motoren	Mounting positions	Position Terminal Box	WEB: Reference Designation	
00 M	01 IV	02 OV	03 SIZE	04 OF	05 OS	07 SD	08 MS	09 RS BSTOP	10 IR	12 IS		13 MP	15 PMT	CODE: Example of Order	
<b>P</b>	<b>M</b>	<b>P</b> <b>F</b> <b>F</b>	63 71 90 112 125	— F1 F2 P	—	— Nessuna indicazione diametro standard	— S	<b>O</b> <b>A</b>	Vedi tabelle prestazioni See performance tables Siehe Leistungstabellen	80B5 80B14 ...	—	<b>M1</b> <b>M2</b> <b>M3</b> <b>M4</b> <b>M5</b> <b>M6</b>	1 2 3 4	PMP 63 1: 24.1 80 B5	
					<b>C</b>	No indications standard diameter				—	<b>Look CT 18</b>				PMP 71 -1:14.0 - T 56 A 4 B5
					<b>N</b>	Keine Angabe Standard-durchmesser				—	<b>Look CT 18</b>				PRP 90 P 1:125.0
	<b>B</b>				Ø... Diametro foro opzionale	—				<b>Look CT 18</b>	PCP 112 - 1:44.7 - T 56 A 4 B5				
	<b>D</b>				Optional hollow shaft diameter	—				<b>Look CT 18</b>					
	<b>R</b>				<b>DB</b>										
	<b>C</b>				<b>CD</b>										
					<b>FD</b>										
					<b>FDB</b>										
					<b>QL</b>										
					<b>L</b>										

00 M - Macchina

M - Maschine

M - Getriebe



P

01 IV - Versione Entrata

IV - Input Version

IV - Antriebsausführung

M	R	C	
			63
			71
			90
			112
			125

Disponibile / available / verfügbar  
Non disponibile / not available / nicht verfügbar

02 OV - Versione Uscita

OV - Output Version

OV - Abtriebsausführung

P	F
Riduttori e motoriduttori paralleli Parallel shaft gearboxes and motorgearboxes Flachgetriebe und -Flachtriebemotoren	Riduttori e motoriduttori pendolari Shaft mounted gearboxes and motorgearboxes Aufsteckgetriebe und Aufstecktriebemotoren



**1.2 Designazione**

**1.2 Designation**

**1.2 Bezeichnung**

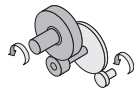
**03 SIZE - Grandezza**

**SIZE - Size**

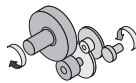
**SIZE - Größe**

	63	71	90	112	125
Stage	/2 and / 3			/2	

Senso di Rotazione  
Rotation sense  
Drehrichtung



2 - Stage



3 - Stage

**04 OF - Flangia Uscita**

**OF - Output Flange**

**OF - Flansche am Abtrieb**

—	F.	P
	Flangia Uscita F. / Output Flange F./ Flansche am Abtrieb F.	Flangia Uscita P / Output Flange P/ Flansche am Abtrieb P
Senza Flangia Without Flange Ohne Flansche		

**05 OS - Estremità uscita**

**OS - Output shaft**

**OS - Wellenende - Abtrieb**



— Nessuna indicazione = albero forato;  
**C** = albero forato con calettatore  
**N** = Sporgente Integrale  
**B** = albero bisporgente integrale  
**D** = Sporgente Scanalato  
**DB** = Bisporgente integrale Scanalato  
**CD** = Albero forato Scanalato  
**FD** = Flangia brocciata  
**FDB** = Flangia brocciata Bisporgente  
**QL** = Quick Locking  
**L** = Predisposizione "Quick Locking "

— No indication = shaft with keyway;  
**C** = hollow shaft with shrink disk  
**N** = Output shaft  
**B** = Double integral output shaft  
**D** = Splined output shaft  
**DB** = Double splined shaft  
**CD** = Splined hollow shaft  
**FD** = Broached flange  
**FDB** = Double broached flange  
**QL** = Quick Locking  
**L** = Adjustment "Quick Locking "

— Keine Angabe = Hohlwelle mit Paßfedernut  
**C** = Hohlwelle mit Schrumpfscheibe  
**N** = Holwelle mit Wellenende  
**B** = Doppeltem Integralwelle  
**D** = Abtriebswelle mit Keilende  
**DB** = Doppelseitig verzahnte Welle  
**CD** = Verzahnte Hohlwelle  
**FD** = Geräumtem Flansch  
**FDB** = Geraeumter Doppelflansch  
**QL** = Quick Locking  
**L** = Vorbereitung "Quick Locking "

**i** \* FD - FDB - Contattare il ns. servizio tecnico / Contact our technical dept / Wenden Sie sich an unseren technischen Service

**07 SD - Diametro albero**

**SD - Shaft diameter**

**SD - Durchmesser Abtriebswelle**

— Nessuna indicazione = diametro standard;  
**diametro opzionale** = vedi tabella.

— No indications = standard diameter;  
**optional diameter** = see table.

— Keine Angabe = Standard-durchmesser  
**Optionaler durchmesser** = siehe Tabelle.

					Standard Optional					
	Standard	Optional	Standard	Optional						
	—	∅...	—	∅...						
<b>63</b>	(∅ 30)	∅ 25 ∅ 28	(∅ 30)		(∅ 30 Standard)	(DIN 5482 35 x 31)	(DIN 5482 28 x 25)	(DIN 5482 35 x 31)		
<b>71</b>	(∅ 35)	∅ 30 ∅ 32	(∅ 35)		(∅ 35 Standard)	(DIN 5482 35 x 31)	(DIN 5482 35 x 31)	(DIN 5482 35 x 31)		
<b>90</b>	(∅ 40)	∅ 42 ∅ 45 ∅ 48	(∅ 40)	not available	(∅ 40 Standard)	(DIN 5482 40 x 36)	(DIN 5482 40 x 36)	(DIN 5482 40 x 36)		
<b>112</b>	(∅ 50)	∅ 55	(∅ 50)		(∅ 50 Standard)	(DIN 5482 58 x 53)	(DIN 5482 50 x 45)	(DIN 5482 58 x 53)		
<b>125</b>	(∅ 55)	∅ 50 ∅ 60	(∅ 55)		(∅ 55 Standard)	(DIN 5482 70 x 64)	(DIN 5482 55 x 50)	(DIN 5482 70 x 64)		



**1.2 Designazione**

**1.2 Designation**

**1.2 Bezeichnung**

**07**SD - Diametro albero

**SD** - Shaft diameter

**SD** - Durchmesser Abtriebswelle

diametro = vedi tabella.

diameter = see table.

Durchmesser = siehe Tabelle.

Grandezza Size Größe		
<b>71</b>	$\varnothing 20 - \varnothing 25 - \varnothing 30$ $\varnothing 25 - \varnothing 30 - \varnothing 35 - \varnothing 38 - \varnothing 40 - \varnothing 42 - \varnothing 45 - \varnothing 48$ $\varnothing 30 - \varnothing 35 - \varnothing 40 - \varnothing 45 - \varnothing 50$ $\varnothing 35 - \varnothing 40 - \varnothing 45 - \varnothing 48 - \varnothing 50 - \varnothing 55$	Contattare nostro ufficio tecnico commerciale Please, contact our technical sales dept. Bitte setzen Sie sich mit unserer technischen Abteilung in Verbindung
<b>80</b>		
<b>90</b>		
<b>112</b>		
<b>125</b>		

**08**MS - Posizione Albero

**MS** - Mounting Shaft

**MS** - Montageposition Welle

— Nessuna indicazione = lato destro (standard);  
**S** = lato sinistro, montaggio dalla parte opposta (opzionale).

— No indication (standard) = on right side;  
**S** = on left side, on the opposite.

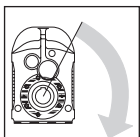
— Keine Angabe (Standard) = rechts;  
**S** = links.

Quick Locking		
Albero forato con calettatore Hollow shaft with shrink disc Holwelle mit Schrumpfscheibe		<b>S</b>
Sporgente Integrale Output shaft Holwelle mit Wellenende		<b>S</b>
Sporgente Scanalato Splined output shaft Abtriebswelle mit Keilende		<b>S</b>
Albero forato Scanalato Splined hollow shaft Verzahnnte Holwelle		<b>S</b>
Flangia brocciata Broached flange Geräumtem Flansch		<b>S</b>

**09**RSBSTOP - Senso di rotazione (valido solo se richiesto dispositivo antiretro)

**RSBSTOP** - Rotation sense (only necessary for solution with backstop device)

**RSBSTOP** - Drehrichtung (Nur bei Ausföhrungen mit Rücklaufsperr)



**O** = ORARIO (il riduttore può ruotare solo in senso orario visto dal lato destro come in figura);  
**A** = ANTIORARIO.

**O** = CLOCKWISE (looking at the gearbox from the perspective shown below).  
**A** = ANTICLOCKWISE.

**O** = im Uhrzeigersinn (bei Betrachtung des Getriebes aus der unten dargestellten Perspektive);  
**A** = Gegen den Uhrzeigersinn.

**10**IR- Rapporto di riduzione

**IR** - Reduction ratio

**IR** - Übersetzungsverhältnis

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

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

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



**1.2 Designazione**

**1.2 Designation**

**1.2 Bezeichnung**

**12 IS - Albero Entrata**

**IS - Input Shaft**

**IS - Antriebswelle**

Nella tab. sono riportate le grandezze motore accoppiabili (IEC) unitamente alle dimensioni albero/flangia motore standard

In table the possible shaft/flange dimensions IEC standard are listed.


In Tabelle sind die möglichen Welle/Flansch-Abmessungen IEC-Standard aufgelistet.


Legenda:  
**11/140 (B5)**: combinazioni albero/flangia standard  
 11/120 : combinazioni albero/flangia a richiesta

Key:  
**11/140** : standard shaft/flange combination  
 11/120 : shaft/flange combinations upon request

Legende:  
**11/140** : Standardkombinationen Welle/Flansch  
 11/120 : Sonderkombinationen Welle/Flansch

**Possibili accoppiamenti con motori IEC - Possible couplings with IEC motors - Mögliche Verbindungen mit IEC-Motoren**

		PM 	
		ir (Tutti / All / Alle)	
<b>PMP 63/2</b> <b>PMF 63/2</b>	63	<b>11/140 (B5)</b>	
	71	<b>14/160 (B5)</b>	
	80	<b>19/200 (B5) - 19/120 (B14)</b>	19/160 - 19/140
	90	<b>24/200 (B5) - 24/140 (B14)</b>	24/160 - 24/120
	100 112	<b>28/250 (B5) - 28/160 (B14)</b>	
<b>PMP 63/3</b> <b>PMF 63/3</b>	63	<b>11/140 (B5)</b>	
	71	<b>14/160 (B5)</b>	
	80	<b>19/200 (B5) - 19/120 (B14)</b>	19/160 - 19/140
<b>PMP 71/2</b> <b>PMF 71/2</b>	71	<b>14/160 (B5)</b>	14/200-14/140 - 14/120
	80	<b>19/200 (B5) - 19/120 (B14)</b>	19/160 - 19/140
	90	<b>24/200 (B5) - 24/140 (B14)</b>	24/160 - 24/120
	100 112	<b>28/250 (B5) - 28/160 (B14)</b>	
<b>PMP 71/3</b> <b>PMF 71/3</b>	63	<b>11/140 (B5)</b>	
	71	<b>14/160 (B5)</b>	14/200-14/140 - 14/120
	80	<b>19/200 (B5) - 19/120 (B14)</b>	19/160 - 19/140
	90	<b>24/200 (B5) - 24/140 (B14)</b>	24/160 - 24/120

		PM 	
		ir (Tutti / All / Alle)	
<b>PMP 90/2</b> <b>PMF 90/2</b>	90	<b>24/200 (B5)</b>	24/300 - 24/250
	100 112	<b>28/250 (B5)</b>	28/200 - 28/300
	132	<b>38/300 (B5) - 38/200 (B14)</b>	38/250
<b>PMP 90/3</b> <b>PMF 90/3</b>	71	<b>14/160 (B5)</b>	14/200-14/140-14/120
	80	<b>19/200 (B5) - 19/120 (B14)</b>	19/160 - 19/140
	90	<b>24/200 (B5) - 24/140 (B14)</b>	24/160 - 24/120
	100	<b>28/250 (B5) - 28/160 (B14)</b>	
<b>PMP 112/2</b> <b>PMF 112/2</b>	100 112	<b>28/250 (B5)</b>	28/350 - 28/300
	132	<b>38/300 (B5)</b>	38/350 - 38/250
	160	<b>42/350 (B5)</b>	42/300 - 42/250
	180	<b>48/350 (B5)</b>	
<b>PMP 112/3</b> <b>PMF 112/3</b>	80	<b>19/200 (B5)</b>	
	90	<b>24/200 (B5)</b>	
	100 112	<b>28/250 (B5)</b>	
<b>PMP 125/2</b>	100	<b>28/250 (B5)</b>	28/200 - 28/300
	112	<b>28/250 (B5)</b>	28/200 - 28/300
	132	<b>38/300 (B5) - 38/200 (B14)</b>	38/250
	160 <sup>1</sup>	<b>42/350 (B5)</b>	
	180 <sup>1</sup>	<b>48/350 (B5)</b>	
	200 <sup>1</sup>	<b>55/400 (B5)</b>	

<sup>1</sup> Da PAM 160 a PAM 200 forniti con giunto tipo Rotex (per prescrizione di montaggio vedere sezione A paragrafo "installazione" - 1.12)

<sup>1</sup> PAM 160 through PAM 200 come with Rotex coupling (for mounting directions, see section A, paragraph "Installation" - 1.12)

<sup>1</sup> Ab PAM 160 bis PAM 200 werden sie mit Kupplung Typ Rotex geliefert (hinsichtlich Montagegenauigkeit siehe Abschnitt A im Paragraph „Einbau“ - 1.12).



**Posizione morsetti - Vedere - 15 - PMT - Pagina E6**  
**Terminal board position - Look - 15 - PMT - Page E6**  
**Lage des Klemmenkastens - Siehe - 15 - PMT - Auf Seite E6**

Designazione motore elettrico Se è richiesto un motoriduttore completo di motore è necessario riportare la designazione di quest'ultimo. A tale proposito consultare il ns. catalogo dei motori elettrici Electronic Line.	Electric motor designation For applications requiring a gearmotor, motor designation must be specified. To this end, please refer to our Electronic Line electric motor catalogue.	Bezeichnung des Elektromotors Wird ein Getriebemotor komplett mit Elektromotor angefordert, müssen dessen Daten angegeben werden. Diesbezüglich verweisen wir auf unseren Katalog der Elektromotoren "Electronic Line".
---	---	--

**12 IS - Albero Entrata**

**IS - Input Shaft**

**IS - Antriebswelle**

— Nessuna indicazione = diametro standard;

— No indications = standard diameter;

— Keine Angabe = Standard-durchmesser

PR 	63	71	90	112	125
	(Ø 16)	(Ø 16)	(Ø 19)	(Ø 24)	(Ø 28)





**1.2 Designazione**

**1.2 Designation**

**1.2 Bezeichnung**

**13 MP - Posizioni di montaggio**

**[M2, M3, M4, M5, M6]** Posizioni di montaggio con indicazione dei tappi di livello, carico e scarico; se non specificato si considera standard la posizione **M1** (vedi par. 1.4)

**MP - Mounting positions**

**[M2, M3, M4, M5, M6]** Mounting position with indication of breather level and drain plugs; if not specified, standard position is **M1** (see par. 1.4).

**MP - Einbaulagen**

Montageposition **[M2, M3, M4, M5, M6]** mit Angabe von . Entlüftung, Schaugläsern und Ablasschraube. Wenn nicht näher spezifiziert, wird die Standard - position **M1** zugrunde gelegt (s. Abschnitt 1.4).

**14 OPT-ACC. - Opzioni**

**OPT-ACC. - Options**

**OPT-ACC. - Optionen**

vedi par. 1.9 see pa. 1.9 s. Abschnitt 1.9	<b>ACC1</b>	<b>AL</b>	Alberi lenti - AL	Output shafts - AL	Abtriebswellen - AL
		<b>PROT.</b>	Coperchio di protezione	Protection cover	Schutzzvorrichtungdeckel
		<b>FF</b>	FF - Kit	FF - Kit	FF - Kit
		<b>RR</b>	Kit rosetta di montaggio	Mounting washer kit	Kit Montagescheibe
<b>ACC3</b>	<b>AV</b>	ANTIVIBRANTE VKL	RUBBER BUFFER VKL	GUMMIHÜLSE VKL	

vedi Sezione A-1.12 see Section A-1.12 s. Abschnitt A-1.12	<b>OPT.</b>	<b>OPT</b>	Materiale degli anelli di tenuta	Materials of Seals	Dichtungsstoffe
		<b>OPT1</b>	Stato fornitura olio	Scope of the supply - Options - OIL	Optionen - Lieferzustand - Optionen - Öl
		<b>OPT2</b>	Verniciatura	Painting and surface protection	Lackierung und Oberflächenschutzl

**15 PMT - Posizioni della Morsettieria**

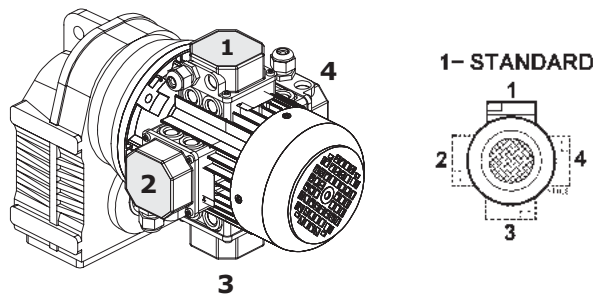
**[2, 3, 4]** Posizione della morsettieria del motore se diversa da quella standard (1).

**PMT - Position Terminal Box**

**[2, 3, 4]** Position of the motor terminal box if different from the standard one (1).

**PMT - Montagposition Klemmenkasten**

Montageposition Klemmenkasten **[2, 3, 4]**, wenn abweichend von Standardposition [1] (für Motorgetriebe).





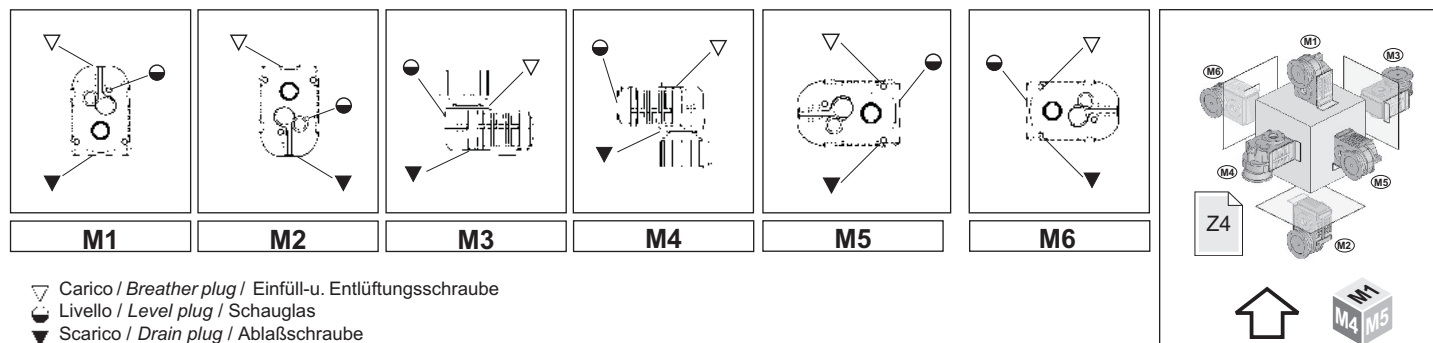
1.4 Lubrificazione

1.4 Lubrication

1.4 Schmierung



Posizioni di montaggio  
Mounting positions  
Montagepositionen



- ▽ Carico / Breather plug / Einfüll-u. Entlüftungsschraube
- Livello / Level plug / Schauglas
- ▽ Scarico / Drain plug / Ablasschraube

Posizioni di montaggio - Mounting positions - Montagepositionen			
PR PM PC		Posizioni Positions Positionen	Prescrizioni da indicare in fase d'ordine Ordering requirements Anforderungen bei der Bestellung
	63	M1-M2 M3-M4 M5-M6	Necessaria Necessary Erforderlich
	71		
	90		
	112		
125			

TARGHETTA - RIDUTTORE

NON NECESSARIA

Indicata sempre nella targhetta del riduttore la posizione di montaggio "M1".

NECESSARIA

La posizione richiesta è indicata nella targhetta del riduttore

Identification Plate - Gearbox

NOT NECESSARY

The mounting position is always indicated on the nameplate "M1".

NECESSARY

The indication it on the label of the gearbox

Typeschild - Getriebe

NICHT ERFORDERLICH

Die Einbaulage ist immer auf dem Typenschild angegeben "M1".

ERFORDERLICH

Findet man die angefragte Position auf dem Typenschild des Getriebe

Lub	Quantità di lubrificante - Lubricant Quantity - Schmiermittelmenge - [Kg]								OPT1	Tappi-Plug-Stopfen		
		M1	M2	M3	M4	M5	M6	N°		Diameter	Type	
PR PM PC	63	1.250	0.900	1.300	1.150	0.900	0.900	INOIL_STD	1	1/4"	▽	
	71	2.100	1.750	2.300	2.000	1.600	1.600		1	1/4"	▽	
	90	3.300	2.800	3.800	3.700	2.650	2.650	OUTOIL	4	1/4"	▽	
	112	7.300	7.100	8.000	7.000	6.000	6.000		4	1/4"	○	
	125	8.500	7.500	8.700	8.500	6.000	6.000		5	1/8"	○	

Quantità indicative; durante il riempimento attenersi alla spia di livello.

Indicative quantities, check the oil sight glass during filling.

Richtungsweisende Mengen, bei der Auffüllung auf das Füllstand-Kontrollfenster Bezug nehmen.

**Attenzione !:** Il tappo di sfiato è allegato solo nei riduttori che hanno più di un tappo olio

**Warning!:** A breather plug is supplied only with worm gearboxes that have more than one oil plug

**Achtung!:** Der Entlüftungsstopfen ist lediglich bei den Getrieben vorhanden, die über mehr als einen Öfüllstopfen verfügen

**Nota:** Se in fase d'ordine la posizione di montaggio è omessa, il riduttore verrà fornito con i tappi predisposti per la posizione M1.

**Note:** If the mounting position is not specified in the order, the worm gearbox supplied will have plugs pre-arranged for position M1.

**Anmerkung:** Sollte in der Auftragsphase die Einbaulage nicht angegeben werden, wird das Getriebe mit Stopfen für die Einbaulage M1.

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

The supply of gearboxes with different plug pre-arrangements has to be agreed with the manufacturer.

Lieferungen, die eine Auslegung hinsichtlich der Stopfen aufweisen, die von den Angaben in der Tabelle abweichen, müssen vorab vereinbart werden..



### 1.5 Carichi radiali e assiali

Quando la trasmissione del moto avviene tramite meccanismi che generano carichi radiali sull'estremità dell'albero, è necessario verificare che i valori risultanti non eccedono quelli indicati nelle tabelle.

Nella Tab. 4.3 sono riportati i valori dei carichi radiali ammissibili per l'albero veloce ( $F_{r1}$ ). Come carico assiale ammissibile contemporaneo si ha:

$$F_{a1} = 0.2 \times F_{r1}$$

In Tab. 4.4 sono riportati i valori dei carichi radiali ammissibili per l'albero lento ( $F_{r2}$ ). Come carico assiale ammissibile contemporaneo si ha:

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

Tab. 4.3

$n_1$ [min <sup>-1</sup> ]	$F_{r1}$ [N]								
	PR.								
	63/2	63/3	71/2	71/3	90/2	90/3	112/2	112/3	125/2
2800	200	550	600	600	600	1300	800	1400	1000
1400	400	700	900	800	700	1500	1400	1800	1200
900	400	800	1100	1000	800	1600	1500	2100	1300
500	400	950	1300	1200	900	1800	1800	2600	1500

Tab. 4.4

$n_2$ [min <sup>-1</sup> ]	$F_{r2}$ [N]				
	PM. - PR. - PC.				
	63	71	90	112	125
1100	—	3000	6500	—	—
950	1400	3050	7000	7600	—
775	1450	3100	7200	7900	—
625	1500	3230	7600	8300	—
500	1580	3340	7900	8800	10000
400	1660	3450	8300	9200	10500
320	1720	3550	8900	9800	11200
260	1750	3600	9000	10400	12000
200	1800	4100	9000	10800	12500
160	1950	4300	9000	11400	13000
125	2200	4600	9000	12000	14000
90	2400	4900	9000	13000	16000
60	2600	5000	9300	13800	18000
40	2800	5000	10000	15300	20000
25	3100	6000	11200	16500	20000
16	3800	6600	11500	17000	20000
10	4500	6600	11500	17400	20000

I carichi radiali indicati nelle tabelle si intendono applicati a metà della sporgenza dell'albero lento standard (vedi fig. 8.14) e sono riferiti ai riduttori operanti con fattore di servizio 1. Valori intermedi relativi a velocità non riportate possono essere ottenuti per interpolazione considerando però che  $F_{r1}$  a 500 min<sup>-1</sup> e  $F_{r2}$  a 5 min<sup>-1</sup> rappresentano i carichi massimi consentiti. Per i carichi non agenti sulla mezzeria dell'albero lento o veloce si ha:

- a 0.3 della sporgenza:  
 $F_{rx} = 1.25 \times F_{r1-2}$
- a 0.8 dalla sporgenza:  
 $F_{rx} = 0.8 \times F_{r1-2}$

### 1.5 Axial and overhung load

Should transmission movement determine radial loads on the angular shaft end, it is necessary to make sure that resulting values do not exceed the ones indicated in the tables.

In Table 4.3 permissible radial load for input shaft are listed ( $F_{r1}$ ). Contemporary permissible axial load is given by the following formula:

$$F_{a1} = 0.2 \times F_{r1}$$

In Table 4.4 permissible radial loads for output shaft are listed ( $F_{r2}$ ). Permissible axial load is given by the following formula:

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

### 1.5 Radiale und axiale Belastungen

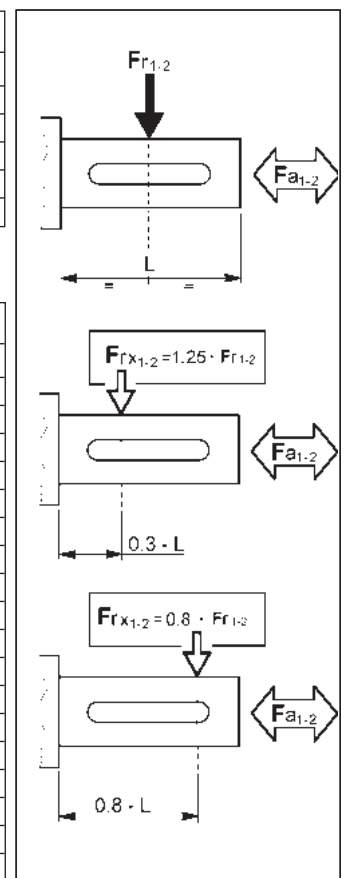
Wird das Wellenende auch durch Radialkräfte belastet, so muß sichergestellt werden, daß die resultierenden Werte die in der Tabelle angegebenen nicht überschreiten.

In Tabelle 4.3 sind die Werte der zulässigen Radialbelastungen für die Antriebswelle ( $F_{r1}$ ) angegeben. Die Axialbelastung beträgt dann:

$$F_{a1} = 0.2 \times F_{r1}$$

In Tabelle 4.4 sind die Werte der zulässigen Radialbelastungen für die Abtriebswelle ( $F_{r2}$ ) angegeben. Als zulässige Axialbelastung gilt:

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



The radial loads shown in the tables are applied on the middle of standard shaft extensions (see fig.8.14). Base of these values is a service factor 1.

Values for speeds that are not listed can be obtained through interpolation but it must be considered that  $F_{r1}$  at 500 min<sup>-1</sup> and  $F_{r2}$  at 5 min<sup>-1</sup> represent the maximum allowable loads.

For radial loads which are not applied on the middle of the shafts, the following values can be calculated:

- at 0.3 from extension:  
 $F_{rx} = 1.25 \times F_{r1-2}$
- at 0.8 from extension:  
 $F_{rx} = 0.8 \times F_{r1-2}$

Bei den in der Tabelle angegebenen Radialbelastungen wird eine Krafteinwirkung auf die Mitte der Standardwelle (s. A.8.14) angenommen; außerdem wird ein Betriebsfaktor 1 zugrunde gelegt. Zwischenwerte für nicht aufgeführte Drehzahlen können durch Interpolation ermittelt werden. Hierbei ist jedoch zu berücksichtigen, daß  $F_{r1}$  bei 500 min<sup>-1</sup> und für  $F_{r2max}$  bei 5 min<sup>-1</sup> die maximal zulässigen Belastungen repräsentieren.

Ist die Einwirkung der Radialkraft nicht in der Mitte der Welle, so können die zulässigen Radiallasten folgendermaßen ermittelt werden:

- 0.3 vom Wellenabsatz entfernt:  
 $F_{rx} = 1.25 \times F_{r1-2}$
- 0.8 vom Wellenabsatz entfernt:  
 $F_{rx} = 0.8 \times F_{r1-2}$



1.6 Prestazioni riduttori PR

1.6 PR gearboxes performances

1.6 Leistungen der PR-Getriebe

PR 63/2



9.0

Table with 4 main columns for input speeds (n1 = 2800, 1400, 900, 500 min-1) and 5 sub-columns (n2, T2M, P, RD) for each. Includes IEC ratings on the right.

PR 63/3



9.0

Table with 4 main columns for input speeds (n1 = 2800, 1400, 900, 500 min-1) and 5 sub-columns (n2, T2M, P, RD) for each. Includes IEC ratings on the right.

Summary table for PtN [kW] with text: tutti i rapporti all ratios alle Untersetzungen 5.6

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore...

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity...

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten...

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori PR

1.6 PR gearboxes performances

1.6 Leistungen der PR-Getriebe

PR 71/2



14.0

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	
2.6	1078.5	120	14.3	95	539.3	130	7.7	95	346.7	130	5.0	95	192.6	130	2.8	95	112 B5 112 B14
3.2	880.4	140	13.6	95	440.2	150	7.3	95	283.0	150	4.7	95	157.2	150	2.6	95	
3.8	745.8	160	13.2	95	372.9	175	7.2	95	239.7	180	4.8	95	133.2	180	2.6	95	
4.3	650.3	180	12.9	95	325.2	200	7.2	95	209.0	210	4.8	95	116.1	210	2.7	95	
5.3	530.9	180	10.5	95	265.4	210	6.1	95	170.6	230	4.3	95	94.8	230	2.4	95	
6.2	449.7	230	11.4	95	224.8	260	6.4	95	144.5	300	4.8	95	80.3	300	2.7	95	
7.1	395.3	270	11.8	95	197.6	300	6.5	95	127.1	330	4.6	95	70.6	330	2.6	95	
8.7	322.7	280	10.0	95	161.3	310	5.5	95	103.7	350	4.0	95	57.6	350	2.2	95	
10.2	273.3	370	11.1	95	136.7	420	6.3	95	87.9	470	4.6	95	48.8	470	2.5	95	
11.6	242.0	380	10.1	95	121.0	430	5.7	95	77.8	480	4.1	95	43.2	480	2.3	95	
12.3	228.2	280	7.0	95	114.1	300	3.8	95	73.3	310	2.5	95	40.7	310	1.4	95	
14.0	199.5	400	8.8	95	99.8	450	4.9	95	64.1	480	3.4	95	35.6	480	1.9	95	
16.1	173.9	420	8.0	95	86.9	460	4.4	95	55.9	480	3.0	95	31.0	480	1.6	95	
17.3	161.7	420	7.5	95	80.9	460	4.1	95	52.0	480	2.8	95	28.9	480	1.5	95	
18.7	150.0	420	6.9	95	75.0	460	3.8	95	48.2	480	2.6	95	26.8	480	1.4	95	
20.2	138.7	420	6.4	95	69.3	460	3.5	95	44.6	480	2.4	95	24.8	480	1.3	95	
21.9	127.8	420	5.9	95	63.9	460	3.2	95	41.1	480	2.2	95	22.8	480	1.2	95	
25.3	110.9	360	4.4	95	55.4	410	2.5	95	35.6	410	1.6	95	19.8	410	0.9	95	
28.8	97.2	410	4.4	95	48.6	460	2.5	95	31.2	460	1.6	95	17.4	460	0.9	95	
33.1	84.7	370	3.5	95	42.4	410	1.9	95	27.2	410	1.2	95	15.1	410	0.7	95	
37.3	75.1	365	3.0	95	37.5	410	1.7	95	24.1	410	1.1	95	13.4	420	0.6	95	
44.7	62.6	400	2.8	95	31.3	460	1.6	95	20.1	460	1.0	95	11.2	480	0.6	95	
50.5	55.5	400	2.4	95	27.7	460	1.4	95	17.8	460	0.9	95	9.9	480	0.5	95	

PR 71/3



14.0

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	
39.5	70.8	420	3.3	93	35.4	460	1.8	93	22.8	470	1.2	93	12.6	480	0.7	93	90 B5 90 B14
53.5	52.3	420	2.5	93	26.2	460	1.4	93	16.8	460	0.9	93	9.3	480	0.5	93	
60.8	46.0	420	2.2	93	23.0	460	1.2	93	14.8	460	0.8	93	8.2	480	0.4	93	
64.2	43.6	420	2.1	93	21.8	460	1.1	93	14.0	470	0.7	93	7.8	480	0.4	93	
75.4	37.2	420	1.8	93	18.6	460	1.0	93	11.9	470	0.6	93	6.6	480	0.4	93	
86.8	32.3	420	1.5	93	16.1	460	0.8	93	10.4	470	0.5	93	5.8	480	0.3	93	
91.5	30.6	420	1.4	93	15.3	460	0.8	93	9.8	470	0.5	93	5.5	480	0.3	93	
99.3	28.2	420	1.3	93	14.1	460	0.7	93	9.1	470	0.5	93	5.0	480	0.3	93	
107.5	26.0	420	1.2	93	13.0	460	0.7	93	8.4	470	0.4	93	4.6	480	0.3	93	
123.8	22.6	420	1.1	93	11.3	460	0.6	93	7.3	480	0.4	93	4.0	520	0.2	93	
134.3	20.9	420	1.0	93	10.4	460	0.5	93	6.7	490	0.4	93	3.7	520	0.2	93	
154.8	18.1	420	0.9	93	9.0	460	0.5	93	5.8	500	0.3	93	3.2	520	0.2	93	
163.2	17.2	420	0.8	93	8.6	460	0.4	93	5.5	470	0.3	93	3.1	480	0.2	93	
191.6	14.6	450	0.7	93	7.3	490	0.4	93	4.7	520	0.3	93	2.6	540	0.2	93	
220.8	12.7	450	0.6	93	6.3	500	0.4	93	4.1	520	0.2	93	2.3	540	0.1	93	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	7.5

N.B.  
Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE.  
Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical office.

HINWEIS.  
Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. par.A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B.  
I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE.  
Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS.  
Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori PR

1.6 PR gearboxes performances

1.6 Leistungen der PR-Getriebe

PR 90/2



30

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	
2.7	1025.6	270	30.5	95	512.8	330	18.7	95	329.7	330	12.0	95	183.2	330	6.7	95	132 B5 132 B14
4.2	662.1	390	28.5	95	331.0	480	17.5	95	212.8	480	11.3	95	118.2	480	6.3	95	
5.3	528.9	430	25.1	95	264.5	530	15.4	95	170.0	530	9.9	95	94.5	530	5.5	95	
5.9	470.7	450	23.3	95	235.3	560	14.5	95	151.3	560	9.3	95	84.1	560	5.2	95	
6.7	417.1	480	22.1	95	208.6	600	13.8	95	134.1	600	8.9	95	74.5	600	4.9	95	
7.8	361.0	520	20.7	95	180.5	650	12.9	95	116.0	700	9.0	95	64.5	720	5.1	95	
8.7	321.8	460	16.3	95	160.9	560	9.9	95	103.4	560	6.4	95	57.5	560	3.5	95	
9.3	300.2	460	15.2	95	150.1	560	9.3	95	96.5	560	6.0	95	53.6	560	3.3	95	
9.7	288.4	660	21.0	95	144.2	820	13.0	95	92.7	880	9.0	95	51.5	900	5.1	95	
10.9	256.7	700	19.8	95	128.3	860	12.2	95	82.5	920	8.4	95	45.8	920	4.6	95	
12.3	227.4	740	18.6	95	113.7	910	11.4	95	73.1	920	7.4	95	40.6	940	4.2	95	
14.0	200.5	740	16.4	95	100.2	910	10.1	95	64.4	920	6.5	95	35.8	940	3.7	95	
16.0	175.5	740	14.3	95	87.7	910	8.8	95	56.4	920	5.7	95	31.3	940	3.2	95	
17.1	163.7	740	13.4	95	81.8	910	8.2	95	52.6	920	5.3	95	29.2	940	3.0	95	
19.8	141.3	740	11.5	95	70.7	910	7.1	95	45.4	920	4.6	95	25.2	940	2.6	95	
21.4	130.7	740	10.7	95	65.4	910	6.6	95	42.0	920	4.3	95	23.3	940	2.4	95	
25.0	112.2	740	9.1	95	56.1	910	5.6	95	36.1	920	3.7	95	20.0	940	2.1	95	
27.7	101.0	740	8.2	95	50.5	910	5.1	95	32.5	920	3.3	95	18.0	940	1.9	95	
30.5	91.7	740	7.5	95	45.9	910	4.6	95	29.5	920	3.0	95	16.4	940	1.7	95	
35.0	80.0	700	6.2	95	40.0	850	3.7	95	25.7	890	2.5	95	14.3	920	1.4	95	
40.4	69.3	585	4.5	95	34.7	720	2.8	95	22.3	760	1.9	95	12.4	820	1.1	95	
44.1	63.5	700	4.9	95	31.8	860	3.0	95	20.4	950	2.1	95	11.3	1000	1.4	95	
50.9	55.0	700	4.2	95	27.5	860	2.6	95	17.7	950	1.9	95	9.8	1000	1.1	95	



PR 90/3



30

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	
38.7	72.3	700	5.7	93	36.2	910	3.7	93	23.2	945	2.5	93	12.9	945	1.4	93	100 B5 100 B14
43.7	64.0	750	5.4	93	32.0	910	3.3	93	20.6	945	2.2	93	11.4	945	1.2	93	
48.8	57.4	750	4.8	93	28.7	910	2.9	93	18.4	945	2.0	93	10.2	945	1.1	93	
55.2	50.7	720	4.1	93	25.4	910	2.6	93	16.3	945	1.7	93	9.1	945	1.0	93	
62.3	44.9	750	3.8	93	22.5	910	2.3	93	14.4	945	1.5	93	8.0	945	0.9	93	
70.6	39.7	800	3.6	93	19.8	910	2.0	93	12.8	945	1.4	93	7.1	945	0.8	93	
76.3	36.7	800	3.3	93	18.3	910	1.9	93	11.8	945	1.3	93	6.6	945	0.7	93	
82.8	33.8	800	3.0	93	16.9	910	1.7	93	10.9	945	1.2	93	6.0	945	0.6	93	
93.3	30.0	800	2.7	93	15.0	910	1.5	93	9.6	945	1.0	93	5.4	945	0.6	93	
100.6	27.8	800	2.5	93	13.9	910	1.4	93	8.9	945	1.0	93	5.0	945	0.5	93	
108.9	25.7	910	2.6	93	12.9	910	1.3	93	8.3	945	0.9	93	4.6	945	0.5	93	
125.0	22.4	910	2.3	93	11.2	910	1.1	93	7.2	945	0.8	93	4.0	945	0.4	93	
141.0	19.9	910	2.0	93	9.9	910	1.0	93	6.4	945	0.7	93	3.5	945	0.4	93	
155.2	18.0	910	1.8	93	9.0	910	0.9	93	5.8	945	0.6	93	3.2	945	0.3	93	
178.1	15.7	910	1.6	93	7.9	910	0.8	93	5.1	945	0.5	93	2.8	945	0.3	93	
201.0	13.9	910	1.4	93	7.0	910	0.7	93	4.5	945	0.5	93	2.5	945	0.3	93	
224.4	12.5	910	1.3	93	6.2	910	0.6	93	4.0	945	0.4	93	2.2	945	0.2	93	
253.2	11.1	910	1.1	93	5.5	910	0.6	93	3.6	945	0.4	93	2.0	945	0.2	93	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	10.5

N.B.  
Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE.  
Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical office.

HINWEIS.  
Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. par.A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B.  
I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE.  
Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS.  
Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori PR

1.6 PR gearboxes performances

1.6 Leistungen der PR-Getriebe

PR 112/2



Table with 4 main columns for input speeds n1 = 2800, 1400, 900, and 500 min^-1. Each column contains sub-columns for n2, T2M, P, and RD. The table lists performance data for various gear ratios (ir) and IEC classes (180 B5, 160 B5, 132 B5, 112 B5, 100 B5).

PR 112/3



Table with 4 main columns for input speeds n1 = 2800, 1400, 900, and 500 min^-1. Each column contains sub-columns for n2, T2M, P, and RD. The table lists performance data for various gear ratios (ir) and IEC classes (112 B5, 100 B5, 90 B5, 80 B5).

Summary table for PtN [kW] showing 'tutti i rapporti all ratios alle Untersetzungen 16.5'.

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore...

NOTE. Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity...

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten...

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori PR

1.6 PR gearboxes performances

1.6 Leistungen der PR-Getriebe

PR 125/2



105

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	
5,4	514,7	900,0	51,1	95	257,4	1000,0	28,4	95	165,5	1088,9	19,9	95	91,9	1088,9	11,0	95	200 B5  180 B5  160 B5  132 B5 132 B14  112 B5  100 B5
6,5	427,8	1080,0	50,9	95	213,9	1200,0	28,3	95	137,5	1306,7	19,8	95	76,4	1306,7	11,0	95	
8,2	341,9	1350,0	50,9	95	171,0	1500,0	28,3	95	109,9	1633,3	19,8	95	61,1	1633,3	11,0	95	
9,9	284,2	1440,0	45,1	95	142,1	1600,0	25,1	95	91,3	1742,2	17,5	95	50,7	1742,2	9,7	95	
12,5	223,9	1620,0	40,0	95	111,9	1800,0	22,2	95	72,0	1960,0	15,5	95	40,0	1960,0	8,6	95	
15,1	186,0	1710,0	35,1	95	93,0	1900,0	19,5	95	59,8	2068,9	13,6	95	33,2	2068,9	7,6	95	
19,9	140,9	1800,0	27,9	95	70,4	2000,0	15,5	95	45,3	2177,8	10,9	95	25,2	2177,8	6,0	95	
25,1	111,5	1890,0	23,2	95	55,8	2100,0	12,9	95	35,9	2286,7	9,0	95	19,9	2286,7	5,0	95	
30,2	92,7	1980,0	20,2	95	46,3	2200,0	11,2	95	29,8	2395,6	7,9	95	16,6	2395,6	4,4	95	
38,2	73,3	2070,0	16,7	95	36,7	2300,0	9,3	95	23,6	2504,4	6,5	95	13,1	2504,4	3,6	95	
44,3	63,3	1980,0	13,8	95	31,6	2200,0	7,7	95	20,3	2395,6	5,4	95	11,3	2395,6	3,0	95	
53,1	52,8	1980,0	11,5	95	26,4	2200,0	6,4	95	17,0	2395,6	4,5	95	9,4	2395,6	2,5	95	
57,5	48,7	1980,0	10,6	95	24,3	2200,0	5,9	95	15,7	2395,6	4,1	95	8,7	2395,6	2,3	95	



P <sub>tN</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	21.0

N.B.  
Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE.  
Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical office.

HINWEIS.  
Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. par.A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B.  
I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE.  
Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS.  
Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.





**1.7 Prestazioni motoriduttori  
PMP - PCP - PMF - PCF**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
----------------------------	----	----------	-----	------------------------	--

**0.09 kW**

$n_1 = 860 \text{ min}^{-1}$

63B 6

64	13.5	13	19.9	<b>63/2</b>	63B 6
60	14.4	14	16.8	<b>63/2</b>	63B 6
51	16.9	16	15.9	<b>63/2</b>	63B 6
43	19.8	19	13.6	<b>63/2</b>	63B 6
36	24.1	23	10.7	<b>63/2</b>	63B 6
33	26.1	25	10.1	<b>63/2</b>	63B 6
27	31.7	30	8.3	<b>63/2</b>	63B 6
23	36.6	35	7.2	<b>63/2</b>	63B 6
19.8	43.4	40	6.2	<b>63/3</b>	63B 6
18.3	47.0	44	5.8	<b>63/3</b>	63B 6
16.1	53.3	50	5.1	<b>63/3</b>	63B 6
15.0	57.2	53	4.8	<b>63/3</b>	63B 6
13.9	61.8	57	4.4	<b>63/3</b>	63B 6
12.4	69.6	65	3.9	<b>63/3</b>	63B 6
11.4	75.4	70	3.6	<b>63/3</b>	63B 6
10.6	81.4	76	3.4	<b>63/3</b>	63B 6
9.7	88.4	82	3.0	<b>63/3</b>	63B 6
8.7	98.9	92	2.7	<b>63/3</b>	63B 6
7.5	114.4	106	2.4	<b>63/3</b>	63B 6
6.4	135.4	126	2.0	<b>63/3</b>	63B 6
5.8	149.1	139	1.8	<b>63/3</b>	63B 6
5.3	163.2	152	3.1	<b>71/3</b>	63B 6
5.2	164.7	153	1.6	<b>63/3</b>	63B 6
4.7	181.3	169	1.5	<b>63/3</b>	63B 6
4.5	191.6	178	2.9	<b>71/3</b>	63B 6
4.0	216.9	202	1.3	<b>63/3</b>	63B 6
3.9	220.8	205	2.5	<b>71/3</b>	63B 6

**0.13 kW**

$n_1 = 1360 \text{ min}^{-1}$   
 $n_1 = 860 \text{ min}^{-1}$

63A 4  
63C 6

94	14.4	12	17.6	<b>63/2</b>	63A 4
80	16.9	15	17.1	<b>63/2</b>	63A 4
69	19.8	17	14.6	<b>63/2</b>	63A 4
56	24.1	21	11.0	<b>63/2</b>	63A 4
52	26.1	23	10.6	<b>63/2</b>	63A 4
43	31.7	27	8.7	<b>63/2</b>	63A 4
37	36.6	32	7.9	<b>63/2</b>	63A 4
31	43.4	37	6.8	<b>63/3</b>	63A 4
26	53.3	45	5.5	<b>63/3</b>	63A 4
24	57.2	49	5.1	<b>63/3</b>	63A 4
22	61.8	52	4.8	<b>63/3</b>	63A 4
19.5	69.6	59	4.2	<b>63/3</b>	63A 4
18.0	75.4	64	3.9	<b>63/3</b>	63A 4
16.7	81.4	69	3.6	<b>63/3</b>	63A 4
15.4	88.4	75	3.3	<b>63/3</b>	63A 4
13.8	98.9	84	3.0	<b>63/3</b>	63A 4
11.9	114.4	97	2.6	<b>63/3</b>	63A 4
10.0	135.4	115	2.2	<b>63/3</b>	63A 4
9.1	149.1	127	2.0	<b>63/3</b>	63A 4
8.3	163.2	139	3.3	<b>71/3</b>	63A 4
8.3	164.7	140	1.8	<b>63/3</b>	63A 4
7.5	181.3	154	1.6	<b>63/3</b>	63A 4
7.1	191.6	163	3.0	<b>71/3</b>	63A 4
6.3	216.9	184	1.4	<b>63/3</b>	63A 4
6.2	220.8	187	2.7	<b>71/3</b>	63A 4
5.3	163.2	219	2.1	<b>71/3</b>	63C 6

**1.7 PMP - PCP - PMF - PCF  
Gearmotors performances**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
----------------------------	----	----------	-----	------------------------	--

**0.13 kW**

$n_1 = 1360 \text{ min}^{-1}$   
 $n_1 = 860 \text{ min}^{-1}$

63A 4  
63C 6

5.2	164.7	221	1.1	<b>63/3</b>	63C 6
4.0	216.9	291	0.9	<b>63/3</b>	63C 6
3.9	220.8	296	1.8	<b>71/3</b>	63C 6

**0.18 kW**

$n_1 = 1370 \text{ min}^{-1}$   
 $n_1 = 870 \text{ min}^{-1}$

63B 4  
71A 6

152	9.0	11	19.6	<b>63/2</b>	63B 4
132	10.4	12	17.7	<b>63/2</b>	63B 4
116	11.8	14	16.7	<b>63/2</b>	63B 4
101	13.5	16	15.5	<b>63/2</b>	63B 4
95	14.4	17	12.8	<b>63/2</b>	63B 4
81	16.9	20	12.4	<b>63/2</b>	63B 4
69	19.8	24	10.6	<b>63/2</b>	63B 4
57	24.1	29	8.0	<b>63/2</b>	63B 4
52	26.1	31	7.7	<b>63/2</b>	63B 4
43	31.7	38	6.4	<b>63/2</b>	63B 4
37	36.6	44	5.7	<b>63/2</b>	63B 4
32	43.4	51	4.9	<b>63/3</b>	63B 4
29	47.0	55	4.6	<b>63/3</b>	63B 4
26	53.3	62	4.0	<b>63/3</b>	63B 4
24	57.2	67	3.7	<b>63/3</b>	63B 4
22	61.8	72	3.5	<b>63/3</b>	63B 4
19.7	69.6	81	3.1	<b>63/3</b>	63B 4
18.2	75.4	88	2.8	<b>63/3</b>	63B 4
16.8	81.4	95	2.6	<b>63/3</b>	63B 4
15.5	88.4	103	2.4	<b>63/3</b>	63B 4
13.9	98.9	115	2.2	<b>63/3</b>	63B 4
12.0	114.4	133	1.9	<b>63/3</b>	63B 4
11.1	123.8	144	3.2	<b>71/3</b>	63B 4
10.2	134.3	157	2.9	<b>71/3</b>	63B 4
10.1	135.4	158	1.6	<b>63/3</b>	63B 4
9.2	149.1	174	1.4	<b>63/3</b>	63B 4
8.9	154.8	181	2.5	<b>71/3</b>	63B 4
8.4	163.2	190	2.4	<b>71/3</b>	63B 4
8.3	164.7	192	1.3	<b>63/3</b>	63B 4
7.6	181.3	212	1.2	<b>63/3</b>	63B 4
7.2	191.6	224	2.2	<b>71/3</b>	63B 4
6.3	216.9	253	1.0	<b>63/3</b>	63B 4
6.2	220.8	258	1.9	<b>71/3</b>	63B 4
5.3	163.2	300	1.6	<b>71/3</b>	71A 6
5.3	164.7	303	0.8	<b>63/3</b>	71A 6
4.9	178.1	327	2.9	<b>90/3</b>	71A 6
3.9	220.8	406	1.3	<b>71/3</b>	71A 6
3.4	253.2	465	2.0	<b>90/3</b>	71A 6

**0.22 kW**

$n_1 = 1400 \text{ min}^{-1}$

63C 4

467	3.0	4	18.7	<b>63/2</b>	63C 4
359	3.9	6	19.8	<b>63/2</b>	63C 4
280	5.0	7	19.6	<b>63/2</b>	63C 4
226	6.2	9	18.1	<b>63/2</b>	63C 4

**1.7 Leistungen der PMP - PCP -  
PMF - PCF Getriebemotoren**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
----------------------------	----	----------	-----	------------------------	--

**0.22 kW**

$n_1 = 1400 \text{ min}^{-1}$

63C 4

189	7.4	11	17.1	<b>63/2</b>	63C 4
156	9.0	13	16.4	<b>63/2</b>	63C 4
119	11.8	17	14.0	<b>63/2</b>	63C 4
97	14.4	21	10.7	<b>63/2</b>	63C 4
83	16.9	24	10.4	<b>63/2</b>	63C 4
71	19.8	28	8.9	<b>63/2</b>	63C 4
58	24.1	34	6.7	<b>63/2</b>	63C 4
44	31.7	45	5.3	<b>63/2</b>	63C 4
32	43.4	61	4.1	<b>63/3</b>	63C 4
26	53.3	74	3.4	<b>63/3</b>	63C 4
23	61.8	86	2.9	<b>63/3</b>	63C 4
20	69.6	97	2.6	<b>63/3</b>	63C 4
17.2	81.4	114	2.2	<b>63/3</b>	63C 4
15.8	88.4	123	2.0	<b>63/3</b>	63C 4
14.2	98.9	138	1.8	<b>63/3</b>	63C 4
14.1	99.3	139	3.3	<b>71/3</b>	63C 4
12.2	114.4	160	1.6	<b>63/3</b>	63C 4
11.3	123.8	173	2.7	<b>71/3</b>	63C 4
9.4	149.1	208	1.2	<b>63/3</b>	63C 4
9.0	154.8	216	2.1	<b>71/3</b>	63C 4
7.7	181.3	253	1.0	<b>63/3</b>	63C 4
7.3	191.6	267	1.8	<b>71/3</b>	63C 4
6.5	216.9	303	0.8	<b>63/3</b>	63C 4
6.3	220.8	308	1.6	<b>71/3</b>	63C 4

**0.25 kW**

$n_1 = 1370 \text{ min}^{-1}$   
 $n_1 = 870 \text{ min}^{-1}$

71A 4  
71B 6

457	3.0	5	16.1	<b>63/2</b>	71A 4
351	3.9	6	17.0	<b>63/2</b>	71A 4
319	4.3	7	18.3	<b>63/2</b>	71A 4
274	5.0	8	16.9	<b>63/2</b>	71A 4
245	5.6	9	17.3	<b>63/2</b>	71A 4
211	6.5	11	15.8	<b>63/2</b>	71A 4
185	7.4	12	14.7	<b>63/2</b>	71A 4
171	8.0	13	15.1	<b>63/2</b>	71A 4
152	9.0	15	14.1	<b>63/2</b>	71A 4
132	10.4	17	12.8	<b>63/2</b>	71A 4
116	11.8	20	12.0	<b>63/2</b>	71A 4
95	14.4	24	9.2	<b>63/2</b>	71A 4
81	16.9	28	8.9	<b>63/2</b>	71A 4
69	19.8	33	7.6	<b>63/2</b>	71A 4
57	24.1	40	5.8	<b>63/2</b>	71A 4
52	26.1	43	5.6	<b>63/2</b>	71A 4
43	31.7	52	4.6	<b>63/2</b>	71A 4
37	36.6	61	4.1	<b>63/2</b>	71A 4
32	43.4	70	3.6	<b>63/3</b>	71A 4
29	47.0	76	3.3	<b>63/3</b>	71A 4
24	57.2	93	2.7	<b>63/3</b>	71A 4
22	61.8	100	2.5	<b>63/3</b>	71A 4
19.7	69.6	113	2.2	<b>63/3</b>	71A 4
18.2	75.4	122	2.0	<b>63/3</b>	71A 4
16.8	81.4	132	1.9	<b>63/3</b>	71A 4
15.5	88.4	143	1.7	<b>63/3</b>	71A 4
15.0	91.5	148	3.1	<b>71/3</b>	71A 4
13.9	98.9	160	1.6	<b>63/3</b>	71A 4



**1.7 Prestazioni motoriduttori**  
**PMP - PCP - PMF - PCF**

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------------------	-----	------------------------	--

<b>0.25 kW</b>	n <sub>i</sub> = 1370 min <sup>-1</sup>	71A 4
	n <sub>i</sub> = 870 min <sup>-1</sup>	71B 6

13.8	99.3	161	2.9	<b>71/3</b>	71A 4
12.0	114.4	185	1.3	<b>63/3</b>	71A 4
10.2	134.3	218	2.1	<b>71/3</b>	71A 4
10.1	135.4	219	1.1	<b>63/3</b>	71A 4
9.2	149.1	242	1.0	<b>63/3</b>	71A 4
8.9	154.8	251	1.8	<b>71/3</b>	71A 4
8.4	163.2	265	1.7	<b>71/3</b>	71A 4
8.3	164.7	267	0.9	<b>63/3</b>	71A 4
7.6	181.3	294	0.9	<b>63/3</b>	71A 4
7.2	191.6	311	1.6	<b>71/3</b>	71A 4
6.8	201.0	326	2.8	<b>90/3</b>	71A 4
6.2	220.8	358	1.4	<b>71/3</b>	71A 4
5.4	253.2	410	2.2	<b>90/3</b>	71A 4
5.3	163.2	417	1.1	<b>71/3</b>	71B 6
4.5	191.6	489	1.1	<b>71/3</b>	71B 6
4.3	201.0	513	1.8	<b>90/3</b>	71B 6
3.4	253.2	646	1.5	<b>90/3</b>	71B 6

<b>0.37 kW</b>	n <sub>i</sub> = 2790 min <sup>-1</sup>	63C 2
	n <sub>i</sub> = 1380 min <sup>-1</sup>	71B 4
	n <sub>i</sub> = 910 min <sup>-1</sup>	80A 6
	n <sub>i</sub> = 880 min <sup>-1</sup>	71C 6

715	3.9	5	19.2	<b>63/2</b>	63C 2
649	4.3	5	18.4	<b>63/2</b>	63C 2
558	5.0	6	18.3	<b>63/2</b>	63C 2
498	5.6	7	18.6	<b>63/2</b>	63C 2
460	3.0	7	11.0	<b>63/2</b>	71B 4
431	3.2	8	19.3	<b>71/2</b>	71B 4
354	3.9	9	11.6	<b>63/2</b>	71B 4
321	4.3	10	12.4	<b>63/2</b>	71B 4
276	5.0	12	11.5	<b>63/2</b>	71B 4
246	5.6	14	11.7	<b>63/2</b>	71B 4
223	6.2	15	10.6	<b>63/2</b>	71B 4
212	6.5	16	10.8	<b>63/2</b>	71B 4
173	8.0	19	10.3	<b>63/2</b>	71B 4
153	9.0	22	9.6	<b>63/2</b>	71B 4
133	10.4	25	8.7	<b>63/2</b>	71B 4
117	11.8	29	8.2	<b>63/2</b>	71B 4
102	13.5	33	7.6	<b>63/2</b>	71B 4
96	14.4	35	6.3	<b>63/2</b>	71B 4
82	16.9	41	6.1	<b>63/2</b>	71B 4
70	19.8	48	5.2	<b>63/2</b>	71B 4
57	24.1	59	3.9	<b>63/2</b>	71B 4
53	26.1	63	3.8	<b>63/2</b>	71B 4
44	31.7	77	3.1	<b>63/2</b>	71B 4
38	36.6	89	2.8	<b>63/2</b>	71B 4
32	43.4	103	2.4	<b>63/3</b>	71B 4
29	47.0	112	2.2	<b>63/3</b>	71B 4
26	53.3	127	2.0	<b>63/3</b>	71B 4
23	60.8	145	3.2	<b>71/3</b>	71B 4
22	61.8	147	1.7	<b>63/3</b>	71B 4
19.8	69.6	166	1.5	<b>63/3</b>	71B 4
18.3	75.4	180	2.6	<b>71/3</b>	71B 4
18.3	75.4	180	1.4	<b>63/3</b>	71B 4
15.9	86.8	207	2.2	<b>71/3</b>	71B 4
15.6	88.4	211	1.2	<b>63/3</b>	71B 4

**1.7 PMP - PCP - PMF - PCF**  
**Gearmotors performances**

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------------------	-----	------------------------	--

<b>0.37 kW</b>	n <sub>i</sub> = 2790 min <sup>-1</sup>	63C 2
	n <sub>i</sub> = 1380 min <sup>-1</sup>	71B 4
	n <sub>i</sub> = 910 min <sup>-1</sup>	80A 6
	n <sub>i</sub> = 880 min <sup>-1</sup>	71C 6

14.0	98.9	236	1.1	<b>63/3</b>	71B 4
13.9	99.3	236	1.9	<b>71/3</b>	71B 4
12.8	107.5	256	1.8	<b>71/3</b>	71B 4
12.1	114.4	272	0.9	<b>63/3</b>	71B 4
11.1	123.8	295	1.6	<b>71/3</b>	71B 4
11.0	125.0	298	3.1	<b>90/3</b>	71B 4
10.3	134.3	320	1.4	<b>71/3</b>	71B 4
9.8	141.0	336	2.7	<b>90/3</b>	71B 4
8.9	154.8	369	1.2	<b>71/3</b>	71B 4
8.9	155.2	370	2.5	<b>90/3</b>	71B 4
7.2	191.6	456	1.1	<b>71/3</b>	71B 4
6.9	201.0	479	1.9	<b>90/3</b>	71B 4
6.3	220.8	526	1.0	<b>71/3</b>	71B 4
5.5	253.2	603	1.5	<b>90/3</b>	71B 4
4.4	201.0	751	1.3	<b>90/3</b>	71C 6
4.1	220.9	798	2.3	<b>112/3</b>	80A 6
3.5	253.2	946	1.0	<b>90/3</b>	71C 6
3.3	278.1	1004	1.9	<b>112/3</b>	80A 6

<b>0.55 kW</b>	n <sub>i</sub> = 2800 min <sup>-1</sup>	71B 2
	n <sub>i</sub> = 1380 min <sup>-1</sup>	71C 4
	n <sub>i</sub> = 1390 min <sup>-1</sup>	80A 4
	n <sub>i</sub> = 910 min <sup>-1</sup>	80B 6

933	3.0	5	14.4	<b>63/2</b>	71B 2
718	3.9	7	12.9	<b>63/2</b>	71B 2
651	4.3	8	12.4	<b>63/2</b>	71B 2
531	2.6	9	13.8	<b>71/2</b>	71C 4
460	3.0	11	7.4	<b>63/2</b>	71C 4
431	3.2	12	13.0	<b>71/2</b>	71C 4
363	3.8	14	12.7	<b>71/2</b>	71C 4
354	3.9	14	7.8	<b>63/2</b>	71C 4
321	4.3	16	8.4	<b>63/2</b>	71C 4
276	5.0	18	7.7	<b>63/2</b>	71C 4
246	5.6	20	7.9	<b>63/2</b>	71C 4
223	6.2	22	7.1	<b>63/2</b>	71C 4
212	6.5	24	7.2	<b>63/2</b>	71C 4
186	7.4	27	6.7	<b>63/2</b>	71C 4
173	8.0	29	6.9	<b>63/2</b>	71C 4
153	9.0	33	6.5	<b>63/2</b>	71C 4
133	10.4	38	5.9	<b>63/2</b>	71C 4
117	11.8	43	5.5	<b>63/2</b>	71C 4
102	13.5	49	5.1	<b>63/2</b>	71C 4
96	14.4	52	4.2	<b>63/2</b>	71C 4
82	16.9	61	4.1	<b>63/2</b>	71C 4
70	19.8	72	3.5	<b>63/2</b>	71C 4
67	20.5	74	3.1	<b>63/2</b>	71C 4
57	24.1	87	2.6	<b>63/2</b>	71C 4
53	26.1	94	2.5	<b>63/2</b>	71C 4
44	31.7	115	2.1	<b>63/2</b>	71C 4
42	33.1	120	3.4	<b>71/2</b>	71C 4
38	36.6	132	1.9	<b>63/2</b>	71C 4
37	37.3	135	3.0	<b>71/2</b>	71C 4
35	39.5	140	3.3	<b>71/3</b>	71C 4
32	43.4	154	1.6	<b>63/3</b>	71C 4
31	44.7	162	2.8	<b>71/2</b>	71C 4
29	47.0	166	1.5	<b>63/3</b>	71C 4
27	50.5	183	2.5	<b>71/2</b>	71C 4

**1.7 Leistungen der PMP - PCP - PMF - PCF**  
**Getriebemotoren**

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------------------	-----	------------------------	--

<b>0.55 kW</b>	n <sub>i</sub> = 2800 min <sup>-1</sup>	71B 2
	n <sub>i</sub> = 1380 min <sup>-1</sup>	71C 4
	n <sub>i</sub> = 1390 min <sup>-1</sup>	80A 4
	n <sub>i</sub> = 910 min <sup>-1</sup>	80B 6

26	53.3	189	1.3	<b>63/3</b>	71C 4
26	53.5	189	2.4	<b>71/3</b>	71C 4
23	60.8	215	2.1	<b>71/3</b>	71C 4
22	61.8	219	1.1	<b>63/3</b>	71C 4
21	64.2	227	2.0	<b>71/3</b>	71C 4
19.8	69.6	246	1.0	<b>63/3</b>	71C 4
18.3	75.4	267	1.7	<b>71/3</b>	71C 4
18.3	75.4	267	0.9	<b>63/3</b>	71C 4
18.1	76.3	270	3.4	<b>90/3</b>	71C 4
17.0	81.4	288	0.9	<b>63/3</b>	71C 4
16.7	82.8	293	3.1	<b>90/3</b>	71C 4
15.1	91.5	324	1.4	<b>71/3</b>	71C 4
14.8	93.3	330	2.8	<b>90/3</b>	71C 4
13.9	99.3	351	1.3	<b>71/3</b>	71C 4
13.7	100.6	356	2.6	<b>90/3</b>	71C 4
12.8	107.5	381	1.2	<b>71/3</b>	71C 4
12.7	108.9	385	2.4	<b>90/3</b>	71C 4
11.1	123.8	438	1.0	<b>71/3</b>	71C 4
11.0	125.0	442	2.1	<b>90/3</b>	71C 4
10.3	134.3	475	1.0	<b>71/3</b>	71C 4
9.8	141.0	499	1.8	<b>90/3</b>	71C 4
8.9	154.8	548	0.8	<b>71/3</b>	71C 4
8.9	155.2	549	1.7	<b>90/3</b>	71C 4
8.3	167.0	587	3.0	<b>112/3</b>	80A 4
7.7	178.1	630	1.4	<b>90/3</b>	71C 4
6.3	220.9	776	2.3	<b>112/3</b>	80A 4
6.1	224.4	794	1.1	<b>90/3</b>	71C 4
5.8	241.0	847	2.1	<b>112/3</b>	80A 4
5.5	253.2	896	1.0	<b>90/3</b>	71C 4
4.8	191.5	1028	1.8	<b>112/3</b>	80B 6
4.5	201.0	1079	0.9	<b>90/3</b>	80B 6
3.3	278.1	1493	1.3	<b>112/3</b>	80B 6

<b>0.75 kW</b>	n <sub>i</sub> = 2800 min <sup>-1</sup>	71C 2
	n <sub>i</sub> = 1390 min <sup>-1</sup>	80B 4
	n <sub>i</sub> = 910 min <sup>-1</sup>	80C 6

933	3.0	7	10.6	<b>63/2</b>	71C 2
718	3.9	9	9.5	<b>63/2</b>	71C 2
651	4.3	10	9.1	<b>63/2</b>	71C 2
560	5.0	12	9.1	<b>63/2</b>	71C 2
500	5.6	14	9.2	<b>63/2</b>	71C 2
452	6.2	15	8.6	<b>63/2</b>	71C 2
431	6.5	16	8.5	<b>63/2</b>	71C 2
378	7.4	18	7.8	<b>63/2</b>	71C 2
356	3.9	19	5.8	<b>63/2</b>	80B 4
323	4.3	21	6.2	<b>63/2</b>	80B 4
278	5.0	24	5.7	<b>63/2</b>	80B 4
248	5.6	27	5.8	<b>63/2</b>	80B 4
224	6.2	30	5.3	<b>63/2</b>	80B 4
214	6.5	32	5.3	<b>63/2</b>	80B 4
188	7.4	36	5.0	<b>63/2</b>	80B 4
174	8.0	39	5.1	<b>63/2</b>	80B 4
154	9.0	44	4.8	<b>63/2</b>	80B 4
134	10.4	51	4.3	<b>63/2</b>	80B 4
118	11.8	58	4.1	<b>63/2</b>	80B 4
97	14.4	70	3.1	<b>63/2</b>	80B 4



1.7 Prestazioni motoriduttori  
PMP - PCP - PMF - PCF

n <sub>2</sub> min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------	-----	------------------------	--

<b>0.75 kW</b>	n <sub>1</sub> = 2800 min <sup>-1</sup> n <sub>1</sub> = 1390 min <sup>-1</sup> n <sub>1</sub> = 910 min <sup>-1</sup>	71C 2 80B 4 80C 6
----------------	--	-------------------------

82	16.9	83	3.0	<b>63/2</b>	80B 4
70	19.8	97	2.6	<b>63/2</b>	80B 4
58	24.1	118	1.9	<b>63/2</b>	80B 4
55	25.3	124	3.3	<b>71/2</b>	80B 4
53	26.1	128	1.9	<b>63/2</b>	80B 4
48	28.8	141	3.3	<b>71/2</b>	80B 4
44	31.7	155	1.5	<b>63/2</b>	80B 4
42	33.1	162	2.5	<b>71/2</b>	80B 4
38	36.6	179	1.4	<b>63/2</b>	80B 4
37	37.3	183	2.2	<b>71/2</b>	80B 4
35	39.5	189	2.4	<b>71/3</b>	80B 4
32	43.4	208	1.2	<b>63/3</b>	80B 4
30	47.0	225	1.1	<b>63/3</b>	80B 4
28	50.5	247	1.9	<b>71/2</b>	80B 4
26	53.3	255	1.0	<b>63/3</b>	80B 4
25	55.2	265	3.4	<b>90/3</b>	80B 4
24	57.2	274	0.9	<b>63/3</b>	80B 4
23	60.8	291	1.6	<b>71/3</b>	80B 4
22	61.8	296	0.8	<b>63/3</b>	80B 4
22	62.3	299	3.0	<b>90/3</b>	80B 4
22	64.2	308	1.5	<b>71/3</b>	80B 4
18.4	75.4	361	1.3	<b>71/3</b>	80B 4
18.2	76.3	366	2.5	<b>90/3</b>	80B 4
16.8	82.8	397	2.3	<b>90/3</b>	80B 4
16.0	86.8	416	1.1	<b>71/3</b>	80B 4
15.2	91.5	438	1.0	<b>71/3</b>	80B 4
14.9	93.3	447	2.0	<b>90/3</b>	80B 4
12.9	107.5	515	0.9	<b>71/3</b>	80B 4
12.8	108.4	519	3.4	<b>112/3</b>	80B 4
10.8	128.3	615	2.8	<b>112/3</b>	80B 4
9.9	141.0	676	1.3	<b>90/3</b>	80B 4
8.3	167.0	800	2.2	<b>112/3</b>	80B 4
7.8	178.1	853	1.1	<b>90/3</b>	80B 4
6.3	220.9	1059	1.7	<b>112/3</b>	80B 4
6.2	224.4	1075	0.8	<b>90/3</b>	80B 4
5.0	278.1	1333	1.3	<b>112/3</b>	80B 4
4.1	220.9	1617	1.2	<b>112/3</b>	80C 6
3.3	278.1	2036	0.9	<b>112/3</b>	80C 6

<b>0.88 kW</b>	n <sub>1</sub> = 1350 min <sup>-1</sup>	80C 4
----------------	---	-------

450	3.0	18	4.5	<b>63/2</b>	80C 4
346	3.9	23	4.8	<b>63/2</b>	80C 4
314	4.3	25	5.1	<b>63/2</b>	80C 4
270	5.0	30	4.7	<b>63/2</b>	80C 4
241	5.6	33	4.8	<b>63/2</b>	80C 4
218	6.2	37	4.4	<b>63/2</b>	80C 4
208	6.5	38	4.4	<b>63/2</b>	80C 4
182	7.4	44	4.1	<b>63/2</b>	80C 4
169	8.0	47	4.2	<b>63/2</b>	80C 4
150	9.0	53	3.9	<b>63/2</b>	80C 4
130	10.4	62	3.6	<b>63/2</b>	80C 4
114	11.8	70	3.4	<b>63/2</b>	80C 4
100	13.5	80	3.1	<b>63/2</b>	80C 4
94	14.4	85	2.6	<b>63/2</b>	80C 4

1.7 PMP - PCP - PMF - PCF  
Gearmotors performances

n <sub>2</sub> min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------	-----	------------------------	--

<b>0.88 kW</b>	n <sub>1</sub> = 1350 min <sup>-1</sup>	80C 4
----------------	---	-------

80	16.9	100	2.5	<b>63/2</b>	80C 4
68	19.8	117	2.1	<b>63/2</b>	80C 4
66	20.5	121	1.9	<b>63/2</b>	80C 4
56	24.1	143	1.6	<b>63/2</b>	80C 4
53	25.3	150	2.7	<b>71/2</b>	80C 4
43	31.7	187	1.3	<b>63/2</b>	80C 4
41	33.1	196	2.1	<b>71/2</b>	80C 4
34	39.5	229	2.0	<b>71/3</b>	80C 4
31	43.4	251	1.0	<b>63/3</b>	80C 4
29	47.0	272	0.9	<b>63/3</b>	80C 4
28	48.8	283	3.2	<b>90/3</b>	80C 4
27	50.5	299	1.5	<b>71/2</b>	80C 4
22	60.8	352	1.3	<b>71/3</b>	80C 4
22	62.3	361	2.5	<b>90/3</b>	80C 4
17.9	75.4	437	1.1	<b>71/3</b>	80C 4
17.7	76.3	442	2.1	<b>90/3</b>	80C 4
16.3	82.8	479	1.9	<b>90/3</b>	80C 4
15.6	86.8	503	0.9	<b>71/3</b>	80C 4
14.8	91.5	530	0.9	<b>71/3</b>	80C 4
14.5	93.3	540	1.7	<b>90/3</b>	80C 4
14.4	93.6	542	3.2	<b>112/3</b>	80C 4
13.6	99.3	575	0.8	<b>71/3</b>	80C 4
13.4	100.6	582	1.6	<b>90/3</b>	80C 4
12.5	108.4	628	2.8	<b>112/3</b>	80C 4
12.4	108.9	630	1.4	<b>90/3</b>	80C 4
11.5	117.2	679	2.6	<b>112/3</b>	80C 4
10.8	125.0	724	1.3	<b>90/3</b>	80C 4
9.1	148.0	857	2.0	<b>112/3</b>	80C 4
8.7	155.2	899	1.0	<b>90/3</b>	80C 4
7.6	178.1	1031	0.9	<b>90/3</b>	80C 4
7.0	191.5	1109	1.6	<b>112/3</b>	80C 4
6.1	220.9	1279	1.4	<b>112/3</b>	80C 4
4.9	278.1	1610	1.1	<b>112/3</b>	80C 4

<b>1.1 kW</b>	n <sub>1</sub> = 2830 min <sup>-1</sup> n <sub>1</sub> = 1390 min <sup>-1</sup>	80B 2 80D 4
---------------	--	----------------

943	3.0	11	7.3	<b>63/2</b>	80B 2
726	3.9	14	6.5	<b>63/2</b>	80B 2
658	4.3	15	6.3	<b>63/2</b>	80B 2
566	5.0	18	6.2	<b>63/2</b>	80B 2
505	5.6	20	6.3	<b>63/2</b>	80B 2
463	3.0	22	3.7	<b>63/2</b>	80D 4
356	3.9	28	3.9	<b>63/2</b>	80D 4
323	4.3	31	4.2	<b>63/2</b>	80D 4
278	5.0	36	3.9	<b>63/2</b>	80D 4
248	5.6	40	4.0	<b>63/2</b>	80D 4
224	6.2	45	3.6	<b>63/2</b>	80D 4
214	6.5	47	3.6	<b>63/2</b>	80D 4
188	7.4	53	3.4	<b>63/2</b>	80D 4
174	8.0	57	3.5	<b>63/2</b>	80D 4
154	9.0	65	3.2	<b>63/2</b>	80D 4
134	10.4	75	2.9	<b>63/2</b>	80D 4
118	11.8	85	2.8	<b>63/2</b>	80D 4
103	13.5	97	2.6	<b>63/2</b>	80D 4

1.7 Leistungen der PMP - PCP -  
PMF - PCF Getriebemotoren

n <sub>2</sub> min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------	-----	------------------------	--

<b>1.1 kW</b>	n <sub>1</sub> = 2830 min <sup>-1</sup> n <sub>1</sub> = 1390 min <sup>-1</sup> n <sub>1</sub> = 1400 min <sup>-1</sup> n <sub>1</sub> = 920 min <sup>-1</sup>	80B 2 80D 4 90S 4 90L 6
---------------	---	----------------------------------

97	14.4	103	2.1	<b>63/2</b>	80D 4
82	16.9	121	2.1	<b>63/2</b>	80D 4
74	18.7	134	3.4	<b>71/2</b>	80D 4
70	19.8	142	1.8	<b>63/2</b>	80D 4
69	20.2	145	3.2	<b>71/2</b>	80D 4
68	20.5	147	1.6	<b>63/2</b>	80D 4
63	21.9	157	2.9	<b>71/2</b>	80D 4
58	24.1	173	1.3	<b>63/2</b>	80D 4
53	26.1	187	1.3	<b>63/2</b>	80D 4
48	28.8	207	2.2	<b>71/2</b>	80D 4
44	31.7	228	1.1	<b>63/2</b>	80D 4
42	33.1	238	1.7	<b>71/2</b>	80D 4
38	36.6	263	1.0	<b>63/2</b>	80D 4
37	37.3	268	1.5	<b>71/2</b>	80D 4
36	38.7	272	3.3	<b>90/3</b>	80D 4
35	39.5	278	1.7	<b>71/3</b>	80D 4
32	43.4	305	0.8	<b>63/3</b>	80D 4
32	43.7	307	3.0	<b>90/3</b>	80D 4
31	44.7	321	1.4	<b>71/2</b>	80D 4
28	48.8	343	2.7	<b>90/3</b>	80D 4
28	50.5	363	1.3	<b>71/2</b>	80D 4
26	53.5	376	1.2	<b>71/3</b>	80D 4
25	55.2	388	2.3	<b>90/3</b>	80D 4
23	60.8	427	1.1	<b>71/3</b>	80D 4
22	62.3	438	2.1	<b>90/3</b>	80D 4
22	64.2	451	1.0	<b>71/3</b>	80D 4
19.7	70.6	496	1.8	<b>90/3</b>	80D 4
19.1	72.6	510	3.4	<b>112/3</b>	80D 4
18.4	75.4	530	0.9	<b>71/3</b>	80D 4
18.2	76.3	536	1.7	<b>90/3</b>	80D 4
17.7	78.5	552	3.2	<b>112/3</b>	80D 4
16.8	82.8	582	1.6	<b>90/3</b>	80D 4
15.9	87.3	614	2.9	<b>112/3</b>	80D 4
14.9	93.3	656	1.4	<b>90/3</b>	80D 4
14.9	93.6	658	2.7	<b>112/3</b>	80D 4
13.8	100.6	707	1.3	<b>90/3</b>	80D 4
12.8	108.4	762	2.3	<b>112/3</b>	80D 4
11.9	117.2	824	2.1	<b>112/3</b>	80D 4
11.1	125.0	879	1.0	<b>90/3</b>	80D 4
10.8	128.3	902	1.9	<b>112/3</b>	80D 4
9.9	141.0	991	0.9	<b>90/3</b>	80D 4
9.4	148.0	1040	1.7	<b>112/3</b>	80D 4
9.0	155.2	1091	0.8	<b>90/3</b>	80D 4
8.3	167.0	1174	1.5	<b>112/3</b>	80D 4
7.3	191.5	1346	1.3	<b>112/3</b>	80D 4
6.3	220.9	1553	1.1	<b>112/3</b>	80D 4
5.8	241.0	1694	1.0	<b>112/3</b>	80D 4
5.0	278.1	1955	0.9	<b>112/3</b>	80D 4



**1.7 Prestazioni motoriduttori  
PMP - PCP - PMF - PCF**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
----------------------------	----	----------	-----	------------------------	--

<b>1.5 kW</b>	$n_1 = 2830$ min <sup>-1</sup>	80C 2
	$n_1 = 1400$ min <sup>-1</sup>	90L 4

943	3.0	14	5.3	<b>63/2</b>	80C 2
884	3.2	15	9.1	<b>71/2</b>	80C 2
726	3.9	19	4.8	<b>63/2</b>	80C 2
658	4.3	21	4.6	<b>63/2</b>	80C 2
566	5.0	24	4.6	<b>63/2</b>	80C 2
505	5.6	27	4.6	<b>63/2</b>	80C 2
467	3.0	29	2.7	<b>63/2</b>	90L 4
359	3.9	38	2.9	<b>63/2</b>	90L 4
326	4.3	42	3.1	<b>63/2</b>	90L 4
280	5.0	49	2.9	<b>63/2</b>	90L 4
250	5.6	54	2.9	<b>63/2</b>	90L 4
226	6.2	60	2.7	<b>63/2</b>	90L 4
215	6.5	63	2.7	<b>63/2</b>	90L 4
189	7.4	72	2.5	<b>63/2</b>	90L 4
175	8.0	78	2.6	<b>63/2</b>	90L 4
156	9.0	87	2.4	<b>63/2</b>	90L 4
135	10.4	101	2.2	<b>63/2</b>	90L 4
119	11.8	115	2.0	<b>63/2</b>	90L 4
114	12.3	120	2.5	<b>71/2</b>	90L 4
104	13.5	131	1.9	<b>63/2</b>	90L 4
100	14.0	136	3.3	<b>71/2</b>	90L 4
97	14.4	140	1.6	<b>63/2</b>	90L 4
87	16.1	157	2.9	<b>71/2</b>	90L 4
83	16.9	164	1.5	<b>63/2</b>	90L 4
81	17.3	168	2.7	<b>71/2</b>	90L 4
75	18.7	182	2.5	<b>71/2</b>	90L 4
71	19.8	192	1.3	<b>63/2</b>	90L 4
69	20.2	196	2.3	<b>71/2</b>	90L 4
68	20.5	199	1.2	<b>63/2</b>	90L 4
64	21.9	213	2.2	<b>71/2</b>	90L 4
58	24.1	234	1.0	<b>63/2</b>	90L 4
55	25.3	246	1.7	<b>71/2</b>	90L 4
54	26.1	254	0.9	<b>63/2</b>	90L 4
49	28.8	280	1.6	<b>71/2</b>	90L 4
46	30.5	296	3.1	<b>90/2</b>	90L 4
42	33.1	322	1.3	<b>71/2</b>	90L 4
40	35.0	340	2.5	<b>90/2</b>	90L 4
38	37.3	363	1.1	<b>71/2</b>	90L 4
35	39.5	376	1.2	<b>71/3</b>	90L 4
32	44.1	429	2.0	<b>90/2</b>	90L 4
31	44.7	435	1.1	<b>71/2</b>	90L 4
28	50.5	491	0.9	<b>71/2</b>	90L 4
28	50.9	495	1.7	<b>90/2</b>	90L 4
26	53.5	509	0.9	<b>71/3</b>	90L 4
25	55.2	525	1.7	<b>90/3</b>	90L 4
24	58.5	557	3.1	<b>112/3</b>	90L 4
22	62.3	593	1.5	<b>90/3</b>	90L 4
22	62.7	597	2.9	<b>112/3</b>	90L 4
19.8	70.6	672	1.4	<b>90/3</b>	90L 4
19.3	72.6	691	2.5	<b>112/3</b>	90L 4
18.3	76.3	726	1.3	<b>90/3</b>	90L 4
17.8	78.5	747	2.3	<b>112/3</b>	90L 4
16.9	82.8	788	1.2	<b>90/3</b>	90L 4
16.0	87.3	831	2.1	<b>112/3</b>	90L 4
15.0	93.3	888	1.0	<b>90/3</b>	90L 4
15.0	93.6	891	2.0	<b>112/3</b>	90L 4
13.9	100.6	957	1.0	<b>90/3</b>	90L 4
12.9	108.4	1032	1.7	<b>112/3</b>	90L 4
12.9	108.9	1036	0.9	<b>90/3</b>	90L 4

**1.7 PMP - PCP - PMF - PCF  
Gearmotors performances**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
----------------------------	----	----------	-----	------------------------	--

<b>1.5 kW</b>	$n_1 = 2830$ min <sup>-1</sup>	580C 2
	$n_1 = 1400$ min <sup>-1</sup>	90L 4

11.9	117.2	1115	1.6	<b>112/3</b>	90L 4
10.9	128.3	1221	1.4	<b>112/3</b>	90L 4
9.5	148.0	1408	1.2	<b>112/3</b>	90L 4
8.4	167.0	1589	1.1	<b>112/3</b>	90L 4
7.3	191.5	1822	1.0	<b>112/3</b>	90L 4
6.3	220.9	2102	0.8	<b>112/3</b>	90L 4

<b>1.8 kW</b>	$n_1 = 2770$ min <sup>-1</sup>	80D 2
	$n_1 = 1400$ min <sup>-1</sup>	90LB 4
	$n_1 = 940$ min <sup>-1</sup>	100B 6

923	3.0	18	4.4	<b>63/2</b>	80D 2
710	3.9	23	3.9	<b>63/2</b>	80D 2
644	4.3	25	3.7	<b>63/2</b>	80D 2
554	5.0	29	3.7	<b>63/2</b>	80D 2
467	3.0	35	2.3	<b>63/2</b>	90LB 4
359	3.9	45	2.4	<b>63/2</b>	90LB 4
326	4.3	50	2.6	<b>63/2</b>	90LB 4
280	5.0	58	2.4	<b>63/2</b>	90LB 4
264	5.3	62	3.4	<b>71/2</b>	90LB 4
250	5.6	65	2.4	<b>63/2</b>	90LB 4
226	6.2	72	2.2	<b>63/2</b>	90LB 4
215	6.5	76	2.2	<b>63/2</b>	90LB 4
189	7.4	86	2.1	<b>63/2</b>	90LB 4
175	8.0	93	2.1	<b>63/2</b>	90LB 4
161	8.7	101	3.1	<b>71/2</b>	90LB 4
156	9.0	105	2.0	<b>63/2</b>	90LB 4
121	11.6	135	3.2	<b>71/2</b>	90LB 4
119	11.8	138	1.7	<b>63/2</b>	90LB 4
114	12.3	143	2.1	<b>71/2</b>	90LB 4
104	13.5	157	1.6	<b>63/2</b>	90LB 4
100	14.0	163	2.8	<b>71/2</b>	90LB 4
97	14.4	168	1.3	<b>63/2</b>	90LB 4
87	16.1	188	2.4	<b>71/2</b>	90LB 4
83	16.9	197	1.3	<b>63/2</b>	90LB 4
81	17.3	202	2.3	<b>71/2</b>	90LB 4
75	18.7	218	2.1	<b>71/2</b>	90LB 4
71	19.8	231	1.1	<b>63/2</b>	90LB 4
69	20.2	236	2.0	<b>71/2</b>	90LB 4
68	20.5	239	1.0	<b>63/2</b>	90LB 4
64	21.9	255	1.8	<b>71/2</b>	90LB 4
58	24.1	281	0.8	<b>63/2</b>	90LB 4
56	25.0	292	3.1	<b>90/2</b>	90LB 4
55	25.3	295	1.4	<b>71/2</b>	90LB 4
51	27.7	323	2.8	<b>90/2</b>	90LB 4
49	28.8	336	1.4	<b>71/2</b>	90LB 4
46	30.5	356	2.6	<b>90/2</b>	90LB 4
42	33.1	386	1.1	<b>71/2</b>	90LB 4
38	37.3	435	0.9	<b>71/2</b>	90LB 4
35	39.5	451	1.0	<b>71/3</b>	90LB 4
35	40.4	471	1.5	<b>90/2</b>	90LB 4
32	44.1	514	1.7	<b>90/2</b>	90LB 4
31	44.7	521	0.9	<b>71/2</b>	90LB 4
28	50.9	594	1.4	<b>90/2</b>	90LB 4
27	51.2	585	2.9	<b>112/3</b>	90LB 4
22	62.3	711	1.3	<b>90/3</b>	90LB 4
22	62.7	716	2.4	<b>112/3</b>	90LB 4
21	44.3	761	2.9	<b>125</b>	100B 6

**1.7 Leistungen der PMP - PCP -  
PMF - PCF Getriebemotoren**

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
----------------------------	----	----------	-----	------------------------	--

<b>1.8 kW</b>	$n_1 = 2770$ min <sup>-1</sup>	80D 2
	$n_1 = 1400$ min <sup>-1</sup>	90LB 4

19.8	70.6	806	1.1	<b>90/3</b>	90LB 4
19.3	72.6	829	2.1	<b>112/3</b>	90LB 4
18.3	76.3	871	1.0	<b>90/3</b>	90LB 4
17.8	78.5	896	2.0	<b>112/3</b>	90LB 4
17.7	53.1	912	2.4	<b>125</b>	100B 6
16.9	82.8	945	1.0	<b>90/3</b>	90LB 4
16,3	57,5	988	2,3	<b>125</b>	100B 6
16.0	87.3	997	1.8	<b>112/3</b>	90LB 4
15.0	93.3	1065	0.9	<b>90/3</b>	90LB 4
15.0	93.6	1069	1.6	<b>112/3</b>	90LB 4
12.9	108.4	1238	1.4	<b>112/3</b>	90LB 4
11.9	117.2	1338	1.3	<b>112/3</b>	90LB 4
10.9	128.3	1465	1.2	<b>112/3</b>	90LB 4
9.5	148.0	1690	1.0	<b>112/3</b>	90LB 4
8.4	167.0	1907	0.9	<b>112/3</b>	90LB 4
7.3	191.5	2187	0.8	<b>112/3</b>	90LB 4

<b>2.2 kW</b>	$n_1 = 2840$ min <sup>-1</sup>	90L 2
	$n_1 = 1410$ min <sup>-1</sup>	100A 4
	$n_1 = 940$ min <sup>-1</sup>	100LB 6

1092	2.6	18	6.6	<b>71/2</b>	90L 2
947	3.0	21	3.7	<b>63/2</b>	90L 2
888	3.2	22	6.2	<b>71/2</b>	90L 2
728	3.9	27	3.3	<b>63/2</b>	90L 2
660	4.3	30	3.1	<b>63/2</b>	90L 2
568	5.0	35	3.1	<b>63/2</b>	90L 2
507	5.6	39	3.2	<b>63/2</b>	90L 2
470	3.0	42	1.9	<b>63/2</b>	100A 4
441	3.2	45	3.3	<b>71/2</b>	100A 4
437	6.5	46	3.0	<b>63/2</b>	90L 2
371	3.8	54	3.3	<b>71/2</b>	100A 4
362	3.9	55	2.0	<b>63/2</b>	100A 4
328	4.3	61	3.3	<b>71/2</b>	100A 4
328	4.3	61	2.1	<b>63/2</b>	100A 4
282	5.0	71	2.0	<b>63/2</b>	100A 4
266	5.3	75	2.8	<b>71/2</b>	100A 4
252	5.6	79	2.0	<b>63/2</b>	100A 4
227	6.2	88	3.0	<b>71/2</b>	100A 4
227	6.2	88	1.8	<b>63/2</b>	100A 4
217	6.5	92	1.8	<b>63/2</b>	100A 4
199	7.1	101	3.0	<b>71/2</b>	100A 4
191	7.4	105	1.7	<b>63/2</b>	100A 4
176	8.0	113	1.8	<b>63/2</b>	100A 4
162	8.7	123	2.5	<b>71/2</b>	100A 4
157	9.0	127	1.6	<b>63/2</b>	100A 4
138	10.2	144	2.9	<b>71/2</b>	100A 4
136	10.4	147	1.5	<b>63/2</b>	100A 4
122	11.6	164	2.6	<b>71/2</b>	100A 4
119	11.8	167	1.4	<b>63/2</b>	100A 4
115	12.3	174	1.7	<b>71/2</b>	100A 4
104	13.5	191	1.3	<b>63/2</b>	100A 4
101	14.0	198	2.3	<b>71/2</b>	100A 4
98	14.4	204	1.1	<b>63/2</b>	100A 4
88	16.1	228	2.0	<b>71/2</b>	100A 4
83	16.9	239	1.0	<b>63/2</b>	100A 4
75	18.7	265	1.7	<b>71/2</b>	100A 4
71	19.8	280	3.2	<b>90/2</b>	100A 4
71	19.8	280	0.9	<b>63/2</b>	100A 4
70	20.2	286	1.6	<b>71/2</b>	100A 4
64	21.9	310	1.5	<b>71/2</b>	100A 4



1.7 Prestazioni motoriduttori  
PMP - PCP - PMF - PCF

n <sub>2</sub> min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------	-----	------------------------	--

<b>2.2 kW</b>	n <sub>1</sub> = 2840 min <sup>-1</sup>	90L 2
	n <sub>1</sub> = 1410 min <sup>-1</sup>	100A 4
	n <sub>1</sub> = 940 min <sup>-1</sup>	100BL 6

56	25.0	354	2.6	90/2	100A 4
56	25.3	358	1.1	71/2	100A 4
51	27.7	392	2.3	90/2	100A 4
49	28.8	408	1.1	71/2	100A 4
46	30.5	432	2.1	90/2	100A 4
43	33.1	469	0.9	71/2	100A 4
40	35.0	495	1.7	90/2	100A 4
35	40.4	572	1.3	90/2	100A 4
35	40.7	576	3.0	112/2	100A 4
32	44.3	620	3.5	125	100A 4
28	50.9	721	1.2	90/2	100A 4
28	51.2	710	2.4	112/3	100A 4
27	53.1	7434	3.0	125	100A 4
25	57.5	805	2.7	125	100A 4
23	62.3	863	1.1	90/3	100A 4
22	62.7	869	2.0	112/3	100A 4
21.2	44.3	930	2.4	125	100BL 6
21	67.4	934	1.9	112/3	100A 4
20	141.0	970	0.9	90/3	90L 2
18.5	76.3	1057	0.9	90/3	100A 4
18.0	78.5	1088	1.6	112/3	100A 4
17.7	53.1	1115	2.0	125	100BL 6
16.3	57.5	1208	1.8	125	100BL 6
16.2	87.3	1210	1.4	112/3	100A 4
15.1	93.6	1297	1.3	112/3	100A 4
13.0	108.4	1502	1.2	112/3	100A 4
12.0	117.2	1624	1.1	112/3	100A 4
11.0	128.3	1778	1.0	112/3	100A 4
9.5	148.0	2051	0.9	112/3	100A 4

<b>3 kW</b>	n <sub>1</sub> = 2840 min <sup>-1</sup>	90LB 2
	n <sub>1</sub> = 1420 min <sup>-1</sup>	100B 4
	n <sub>1</sub> = 940 min <sup>-1</sup>	112B 6

1092	2.6	25	4.8	71/2	90LB 2
947	3.0	29	2.7	63/2	90LB 2
888	3.2	31	4.6	71/2	90LB 2
728	3.9	37	2.4	63/2	90LB 2
660	4.3	41	2.3	63/2	90LB 2
568	5.0	48	2.3	63/2	90LB 2
546	2.6	50	2.6	71/2	100B 4
473	3.0	58	1.4	63/2	100B 4
444	3.2	61	2.4	71/2	100B 4
374	3.8	73	2.4	71/2	100B 4
364	3.9	75	1.5	63/2	100B 4
330	4.3	82	2.4	71/2	100B 4
330	4.3	82	1.6	63/2	100B 4
284	5.0	96	1.5	63/2	100B 4
268	5.3	102	2.1	71/2	100B 4
254	5.6	107	1.5	63/2	100B 4
229	6.2	119	2.2	71/2	100B 4
229	6.2	119	1.3	63/2	100B 4
218	6.5	125	1.4	63/2	100B 4
200	7.1	136	2.2	71/2	100B 4
192	7.4	142	1.3	63/2	100B 4

1.7 PMP - PCP - PMF - PCF  
Gearmotors performances

n <sub>2</sub> min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------	-----	------------------------	--

<b>3 kW</b>	n <sub>1</sub> = 2840 min <sup>-1</sup>	90LB 2
	n <sub>1</sub> = 1420 min <sup>-1</sup>	100B 4
	n <sub>1</sub> = 940 min <sup>-1</sup>	112B 6

178	8.0	153	1.3	63/2	100B 4
163	8.7	167	3.4	90/2	100B 4
163	8.7	167	1.9	71/2	100B 4
158	9.0	173	1.2	63/2	100B 4
153	9.3	178	3.1	90/2	100B 4
137	10.4	199	1.1	63/2	100B 4
122	11.6	222	1.9	71/2	100B 4
120	11.8	226	1.0	63/2	100B 4
115	12.3	236	1.3	71/2	100B 4
105	13.5	259	1.0	63/2	100B 4
101	14.0	268	3.4	90/2	100B 4
101	14.0	268	1.7	71/2	100B 4
89	16.0	307	3.0	90/2	100B 4
88	16.1	309	1.5	71/2	100B 4
83	17.1	328	2.8	90/2	100B 4
82	17.3	332	1.4	71/2	100B 4
76	18.7	358	1.3	71/2	100B 4
72	19.8	380	2.4	90/2	100B 4
70	20.2	387	1.2	71/2	100B 4
66	21.4	410	2.2	90/2	100B 4
65	21.9	420	1.1	71/2	100B 4
57	25.0	479	1.9	90/2	100B 4
56	25.3	485	0.8	71/2	100B 4
56	25.4	487	3.3	112/2	100B 4
51	27.7	531	1.7	90/2	100B 4
49	28.8	552	0.8	71/2	100B 4
49	29.1	558	3.1	112/2	100B 4
41	35.0	671	1.3	90/2	100B 4
35	40.4	774	0.9	90/2	100B 4
35	40.7	780	2.2	112/2	100B 4
32	44.1	845	1.0	90/2	100B 4
32	44.7	857	2.0	112/2	100B 4
32	44.3	839	2.6	125	100B 4
28	50.9	976	0.9	90/2	100B 4
28	51.2	961	1.8	112/3	100B 4
27	53.1	1007	2.2	125	100B 4
25	57.5	1091	2.0	125	100B 4
23	62.7	1176	1.5	112/3	100B 4
19.6	72.6	1362	1.3	112/3	100B 4
18.1	78.5	1473	1.2	112/3	100B 4
16.3	87.3	1638	1.1	112/3	100B 4
15.2	93.6	1756	1.0	112/3	100B 4
13.1	108.4	2034	0.9	112/3	100B 4

<b>4 kW</b>	n <sub>1</sub> = 2860 min <sup>-1</sup>	100B 2
	n <sub>1</sub> = 1410 min <sup>-1</sup>	100BL 4

1100	2.6	33	3.6	71/2	100B 2
953	3.0	38	2.0	63/2	100B 2
894	3.2	41	3.4	71/2	100B 2
753	3.8	48	3.3	71/2	100B 2
733	3.9	49	1.8	63/2	100B 2
665	4.3	55	3.3	71/2	100B 2
665	4.3	55	1.7	63/2	100B 2
542	2.6	67	1.9	71/2	100BL 4
470	3.0	77	1.0	63/2	100BL 4

1.7 Leistungen der PMP - PCP -  
PMF - PCF Getriebemotoren

n <sub>2</sub> min <sup>-1</sup>	ir	T2 Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------	-----	------------------------	--

<b>4 kW</b>	n <sub>1</sub> = 2860 min <sup>-1</sup>	100B 2
	n <sub>1</sub> = 1410 min <sup>-1</sup>	100BL 4

441	3.2	82	1.8	71/2	100BL 4
371	3.8	98	1.8	71/2	100BL 4
362	3.9	100	1.1	63/2	100BL 4
328	4.3	111	1.8	71/2	100BL 4
328	4.3	111	1.2	63/2	100BL 4
282	5.0	129	1.1	63/2	100BL 4
266	5.3	136	1.5	71/2	100BL 4
252	5.6	144	1.1	63/2	100BL 4
227	6.2	160	1.6	71/2	100BL 4
227	6.2	160	1.0	63/2	100BL 4
199	7.1	183	1.6	71/2	100BL 4
191	7.4	190	0.9	63/2	100BL 4
181	7.8	201	3.2	90/2	100BL 4
176	8.0	206	1.0	63/2	100BL 4
162	8.7	224	2.5	90/2	100BL 4
162	8.7	224	1.4	71/2	100BL 4
157	9.0	232	0.9	63/2	100BL 4
147	9.7	247	3.3	90/2	112A 4
138	10.2	263	1.6	71/2	100BL 4
136	10.4	268	0.8	63/2	100BL 4
129	10.9	281	3.1	90/2	100BL 4
122	11.6	299	1.4	71/2	100BL 4
115	12.3	317	2.9	90/2	100BL 4
115	12.3	317	0.9	71/2	100BL 4
101	14.0	360	2.5	90/2	100BL 4
101	14.0	360	1.2	71/2	100BL 4
88	16.0	412	2.2	90/2	100BL 4
88	16.1	414	1.1	71/2	100BL 4
82	17.1	440	2.1	90/2	100BL 4
82	17.3	445	1.0	71/2	100BL 4
75	18.7	481	1.0	71/2	100BL 4
71	19.8	510	1.8	90/2	100BL 4
66	21.4	551	1.7	90/2	100BL 4
64	21.9	564	0.8	71/2	100BL 4
56	25.0	643	1.4	90/2	100BL 4
56	25.1	639	3.3	125	100BL 4
56	25.4	654	2.5	112/2	100BL 4
51	27.7	713	1.3	90/2	100BL 4
48	29.1	749	2.3	112/2	100BL 4
47	30.2	769	2.9	125	100BL 4
46	30.5	785	1.2	90/2	100BL 4
40	35.0	901	0.9	90/2	100BL 4
37	38.2	972	2.4	125	100BL 4
36	38.9	1001	1.7	112/2	100BL 4
32	43.7	1101	0.8	90/3	100BL 4
32	44.3	1127	2.0	125	100BL 4
32	44.7	1150	1.5	112/2	100BL 4
28	51.2	1290	1.3	112/3	100BL 4
27	53.1	1352	1.6	125	100BL 4
25	57.5	1464	1.5	125	100BL 4
24	58.5	1474	1.2	112/3	100BL 4
21	67.4	1698	1.0	112/3	100BL 4
19.4	72.6	1829	1.0	112/3	100BL 4
18.0	78.5	1978	0.9	112/3	100BL 4



1.7 Prestazioni motoriduttori  
PMP - PCP - PMF - PCF

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------------------	-----	------------------------	--

<b>5.5 kW</b>	n <sub>1</sub> = 2880 min <sup>-1</sup> n <sub>1</sub> = 1400 min <sup>-1</sup>	112B 2 112BL 4
---------------	--	-------------------

1108	2.6	45	2.7	<b>71/2</b>	112B 2
960	3.0	52	1.5	<b>63/2</b>	112B 2
900	3.2	55	2.5	<b>71/2</b>	112B 2
758	3.8	66	2.4	<b>71/2</b>	112B 2
738	3.9	68	1.3	<b>63/2</b>	112B 2
670	4.3	75	2.4	<b>71/2</b>	112B 2
670	4.3	75	1.3	<b>63/2</b>	112B 2
576	5.0	87	1.3	<b>63/2</b>	112B 2
543	5.3	92	2.0	<b>71/2</b>	112B 2
538	2.6	93	1.4	<b>71/2</b>	112BL 4
519	2.7	96	3.4	<b>90/2</b>	112BL 4
438	3.2	114	1.3	<b>71/2</b>	112BL 4
368	3.8	135	1.3	<b>71/2</b>	112BL 4
333	4.2	150	3.2	<b>90/2</b>	112BL 4
326	4.3	153	1.3	<b>71/2</b>	112BL 4
326	4.3	153	0.8	<b>63/2</b>	112BL 4
264	5.3	189	2.8	<b>90/2</b>	112BL 4
264	5.3	189	1.1	<b>71/2</b>	112BL 4
250	5.6	200	0.8	<b>63/2</b>	112BL 4
237	5.9	210	2.7	<b>90/2</b>	112BL 4
226	6.2	221	1.2	<b>71/2</b>	112BL 4
209	6.7	239	2.5	<b>90/2</b>	112BL 4
197	7.1	253	1.2	<b>71/2</b>	112BL 4
179	7.8	278	2.3	<b>90/2</b>	112BL 4
161	8.7	310	1.8	<b>90/2</b>	112BL 4
161	8.7	310	1.0	<b>71/2</b>	112BL 4
151	9.3	331	1.7	<b>90/2</b>	112BL 4
144	9.7	346	3.2	<b>112/2</b>	112BL 4
137	10.2	364	1.2	<b>71/2</b>	112BL 4
128	10.9	388	2.2	<b>90/2</b>	112BL 4
126	11.1	396	2.8	<b>112/2</b>	112BL 4
114	12.3	438	2.1	<b>90/2</b>	112BL 4
113	12.4	442	3.2	<b>112/2</b>	112BL 4
100	14.0	499	1.8	<b>90/2</b>	112BL 4
100	14.0	499	0.9	<b>71/2</b>	112BL 4
97	14.5	517	3.0	<b>112/2</b>	112BL 4
93	15.1	531	3.6	<b>125</b>	112BL 4
88	16.0	570	1.6	<b>90/2</b>	112BL 4
87	16.1	574	0.8	<b>71/2</b>	112BL 4
86	16.3	581	2.8	<b>112/2</b>	112BL 4
82	17.1	609	1.5	<b>90/2</b>	112BL 4
79	17.7	631	2.7	<b>112/2</b>	112BL 4
71	19.8	706	1.3	<b>90/2</b>	112BL 4
70	19.9	701	2.9	<b>125</b>	112BL 4
69	20.2	720	2.4	<b>112/2</b>	112BL 4
65	21.4	763	1.2	<b>90/2</b>	112BL 4
65	21.7	773	2.3	<b>112/2</b>	112BL 4
56	25.0	891	1.0	<b>90/2</b>	112BL 4
56	25.1	885	2.4	<b>125</b>	112BL 4
55	25.4	905	1.8	<b>112/2</b>	112BL 4
48	29.1	1037	1.7	<b>112/2</b>	112BL 4
46	30.2	1065	2.1	<b>125</b>	112BL 4
46	30.5	1087	0.8	<b>90/2</b>	112BL 4
43	32.3	1151	1.5	<b>112/2</b>	112BL 4
37	38.2	1347	1.7	<b>125</b>	112BL 4
36	38.9	1386	1.3	<b>112/2</b>	112BL 4
34	40.7	1451	1.2	<b>112/2</b>	112BL 4
32	44.3	1561	1.4	<b>125</b>	112BL 4
31	44.7	1593	1.1	<b>112/2</b>	112BL 4

1.7 PMP - PCP - PMF - PCF  
Gearmotors performances

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------------------	-----	------------------------	--

<b>5.5 kW</b>	n <sub>1</sub> = 2880 min <sup>-1</sup> n <sub>1</sub> = 1400 min <sup>-1</sup>	112B 2 112BL 4
---------------	--	-------------------

29	48.9	1743	1.0	<b>112/2</b>	112BL 4
26	53.1	1872	1.2	<b>125</b>	112BL 4
24	57.5	2028	1.1	<b>125</b>	112BL 4
24	58.5	2041	0.9	<b>112/3</b>	112BL 4

<b>7.5 kW</b>	n <sub>1</sub> = 2860 min <sup>-1</sup> n <sub>1</sub> = 1440 min <sup>-1</sup>	112BL 2 132M 4
---------------	--	-------------------

1100	2.6	62	1.9	<b>71/2*</b>	112BL 2
953	3.0	71	1.1	<b>63/2*</b>	112BL 2
894	3.2	76	1.8	<b>71/2*</b>	112BL 2
753	3.8	90	1.8	<b>71/2*</b>	112BL 2
733	3.9	93	1.0	<b>63/2*</b>	112BL 2
665	4.3	102	1.8	<b>71/2*</b>	112BL 2
665	4.3	102	0.9	<b>63/2*</b>	112BL 2
572	5.0	119	0.9	<b>63/2*</b>	112BL 2
540	5.3	126	1.4	<b>71/2*</b>	112BL 2
533	2.7	128	2.6	<b>90/2</b>	132M 4
485	5.9	140	3.2	<b>90/2</b>	112BL 2
461	6.2	148	1.6	<b>71/2*</b>	112BL 2
461	6.2	148	0.9	<b>63/2*</b>	112BL 2
403	7.1	169	1.6	<b>71/2*</b>	112BL 2
367	7.8	186	2.8	<b>90/2</b>	112BL 2
343	4.2	198	2.4	<b>90/2</b>	132M 4
272	5.3	250	2.1	<b>90/2</b>	132M 4
244	5.9	279	2.0	<b>90/2</b>	132M 4
236	6.1	288	3.3	<b>112/2</b>	132M 4
215	6.7	317	1.9	<b>90/2</b>	132M 4
212	6.8	321	3.1	<b>112/2</b>	132M 4
185	7.8	369	1.8	<b>90/2</b>	132M 4
182	7.9	373	2.8	<b>112/2</b>	132M 4
166	8.7	411	1.4	<b>90/2</b>	132M 4
162	8.9	421	2.6	<b>112/2</b>	132M 4
148	9.7	458	2.4	<b>112/2</b>	132M 4
148	9.7	458	1.8	<b>90/2</b>	132M 4
132	10.9	515	1.7	<b>90/2</b>	132M 4
130	11.1	525	2.1	<b>112/2</b>	132M 4
117	12.3	581	1.6	<b>90/2</b>	132M 4
116	12.4	586	2.4	<b>112/2</b>	132M 4
115	12.5	585	3.1	<b>125</b>	132M 4
103	14.0	662	1.4	<b>90/2</b>	132M 4
99	14.5	685	2.3	<b>112/2</b>	132M 4
96	15.1	704	2.7	<b>125</b>	132M 4
90	16.0	756	1.2	<b>90/2</b>	132M 4
88	16.3	770	2.1	<b>112/2</b>	132M 4
84	17.1	808	1.1	<b>90/2</b>	132M 4
81	17.7	836	2.0	<b>112/2</b>	132M 4
73	19.8	936	1.0	<b>90/2</b>	132M 4
72	19.9	929	2.2	<b>125</b>	132M 4
71	20.2	955	1.8	<b>112/2</b>	132M 4
67	21.4	1011	0.9	<b>90/2</b>	132M 4
66	21.7	1025	1.7	<b>112/2</b>	132M 4
57	25.1	1174	1.8	<b>125</b>	132M 4
57	25.4	1200	1.3	<b>112/2</b>	132M 4
49	29.1	1375	1.3	<b>112/2</b>	132M 4
48	30.2	1412	1.6	<b>125</b>	132M 4

1.7 Leistungen der PMP - PCP -  
PMF - PCF Getriebemotoren

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------------------	-----	------------------------	--

<b>7.5 kW</b>	n <sub>1</sub> = 2860 min <sup>-1</sup> n <sub>1</sub> = 1440 min <sup>-1</sup>	112BL 2 132M 4
---------------	--	-------------------

45	32.3	1526	1.1	<b>112/2</b>	132M 4
38	38.2	1785	1,3	<b>125</b>	132M 4
37	38.9	1838	1.0	<b>112/2</b>	132M 4
35	40.7	1923	0.9	<b>112/2</b>	132M 4
33	44.3	2069	1,1	<b>125</b>	132M 4
32	44.7	2112	0.8	<b>112/2</b>	132M 4
27	53.1	2482	0,9	<b>125</b>	132M 4
25	57,5	2688	0,8	<b>125</b>	132M 4

<b>9.2 kW</b>	n <sub>1</sub> = 1450 min <sup>-1</sup>	132ML 4
---------------	---	---------

537	2.7	155	2.1	<b>90/2</b>	132ML 4
426	3.4	196	3.3	<b>112/2</b>	132ML 4
363	4.0	230	3.3	<b>112/2</b>	132ML 4
345	4.2	242	2.0	<b>90/2</b>	132ML 4
315	4.6	265	3.1	<b>112/2</b>	132ML 4
274	5.3	305	1.7	<b>90/2</b>	132ML 4
246	5.9	340	1.6	<b>90/2</b>	132ML 4
238	6.1	351	2.7	<b>112/2</b>	132ML 4
216	6.7	386	1.6	<b>90/2</b>	132ML 4
213	6.8	391	2.5	<b>112/2</b>	132ML 4
186	7.8	449	1.4	<b>90/2</b>	132ML 4
184	7.9	455	2.3	<b>112/2</b>	132ML 4
167	8.7	501	1.1	<b>90/2</b>	132ML 4
163	8.9	512	2.1	<b>112/2</b>	132ML 4
156	9.3	535	1.0	<b>90/2</b>	132ML 4
149	9.7	558	2.0	<b>112/2</b>	132ML 4
149	9.7	558	1.5	<b>90/2</b>	132ML 4
147	9.9	561	2.9	<b>125</b>	132ML 4
133	10.9	627	1.4	<b>90/2</b>	132ML 4
131	11.1	639	1.7	<b>112/2</b>	132ML 4
118	12.3	708	1.3	<b>90/2</b>	132ML 4
117	12.4	714	2.0	<b>112/2</b>	132ML 4
116	12.5	712	2.5	<b>125</b>	132ML 4
104	14.0	806	1.1	<b>90/2</b>	132ML 4
100	14.5	835	1.9	<b>112/2</b>	132ML 4
96	15.1	857	2,2	<b>125</b>	132ML 4
91	16.0	921	1.0	<b>90/2</b>	132ML 4
89	16.3	938	1.7	<b>112/2</b>	132ML 4
85	17.1	984	0.9	<b>90/2</b>	132ML 4
82	17.7	1019	1.7	<b>112/2</b>	132ML 4
73	19.9	1132	1,8	<b>125</b>	132ML 4
72	20.2	1163	1,5	<b>112/2</b>	132ML 4
67	21.7	1249	1,4	<b>112/2</b>	132ML 4
58	25.1	1430	1,5	<b>125</b>	132ML 4
57	25.4	1462	1,1	<b>112/2</b>	132ML 4
50	29.1	1675	1,0	<b>112/2</b>	132ML 4
48	30.2	1720	1,3	<b>125</b>	132ML 4
45	32.3	1859	0,9	<b>112/2</b>	132ML 4
38	38,2	2175	1,1	<b>125</b>	132ML 4
33	44,3	2520	0,9	<b>125</b>	132ML 4
27	53,1	3023	0,7	<b>125</b>	132ML 4
25	57,5	3275	0,7	<b>125</b>	132ML 4



**1.7 Prestazioni motoriduttori  
PMP - PCP - PMF - PCF**

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------------------	-----	------------------------	--

<b>11 kW</b>	n <sub>1</sub> = 2940 min <sup>-1</sup>	132M 2
	n <sub>1</sub> = 1455 min <sup>-1</sup>	160M 4

1089	2,7	92	2,9	90/2*	132M 2
865	3,4	115	4,5	112/2	132M 2
700	4,2	143	2,7	90/2*	132M 2
555	5,3	180	2,4	90/2*	132M 2
502	2,9	199	3,0	112/2	160M 4
428	3,4	233	2,7	112/2	160M 4
364	4,0	274	2,7	112/2	160M 4
316	4,6	316	2,6	112/2	160M 4
267	5,4	369	2,7	125	160M 4
239	6,1	418	2,3	112/2	160M 4
222	6,5	444	2,7	125	160M 4
214	6,8	466	2,1	112/2	160M 4
184	7,9	542	1,9	112/2	160M 4
178	8,2	556	2,7	125	160M 4
163	8,9	610	1,8	112/2	160M 4
150	9,7	665	1,7	112/2	160M 4
148	9,9	669	2,4	125	160M 4
131	11,1	761	1,4	112/2	160M 4
117	12,4	851	1,7	112/2	160M 4
116	12,5	849	2,1	125	160M 4
100	14,5	995	1,6	112/2	160M 4
97	15,1	1021	1,9	125	160M 4
89	16,3	1118	1,5	112/2	160M 4
82	17,7	1214	1,4	112/2	160M 4
73	19,9	1349	1,5	125	160M 4
72	20,2	1386	1,3	112/2	160M 4
67	21,7	1488	1,2	112/2	160M 4
58	25,1	1704	1,2	125	160M 4
57	25,4	1742	0,9	112/2	160M 4
50	29,1	1996	0,9	112/2	160M 4
48	30,2	2050	1,1	125	160M 4
38	38,2	2591	0,9	125	160M 4
33	44,3	3003	0,7	125	160M 4

<b>15 kW</b>	n <sub>1</sub> = 2900 min <sup>-1</sup>	132ML 2
	n <sub>1</sub> = 1455 min <sup>-1</sup>	160L 4

1074	2,7	127	2,1	90/2*	132ML 2
853	3,4	160	3,3	112/2	132ML 2
725	4,0	188	3,2	112/2	132ML 2
690	4,2	197	2,0	90/2*	132ML 2
630	4,6	216	3,1	112/2	132ML 2
547	5,3	249	1,7	90/2*	132ML 2
502	2,9	271	2,2	112/2	160L 4
428	3,4	318	2,0	112/2	160L 4
364	4,0	374	2,0	112/2	160L 4
316	4,6	430	1,9	112/2	160L 4
267	5,4	503	2,0	125	160L 4
239	6,1	571	1,7	112/2	160L 4
222	6,5	606	2,0	125	160L 4
214	6,8	636	1,6	112/2	160L 4
184	7,9	739	1,4	112/2	160L 4
178	8,2	758	2,0	125	160L 4
163	8,9	832	1,3	112/2	160L 4
150	9,7	907	1,2	112/2	160L 4
148	9,9	912	1,8	125	160L 4
131	11,1	1038	1,1	112/2	160L 4

**1.7 PMP - PCP - PMF - PCF  
Gearmotors performances**

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------------------	-----	------------------------	--

<b>15 kW</b>	n <sub>1</sub> = 2900 min <sup>-1</sup>	132ML 2
	n <sub>1</sub> = 1455 min <sup>-1</sup>	160L 4

117	12,4	1160	1,2	112/2	160L 4
116	12,5	1158	1,6	125	160L 4
100	14,5	1356	1,1	112/2	160L 4
97	15,1	1393	1,4	125	160L 4
89	16,3	1525	1,1	112/2	160L 4
82	17,7	1655	1,0	112/2	160L 4
73	19,9	1840	1,1	125	160L 4
72	20,2	1889	0,9	112/2	160L 4
67	21,7	2030	0,9	112/2	160L 4
58	25,1	2323	0,9	125	160L 4
48	30,2	2795	0,8	125	160L 4
38	38,2	3534	0,7	125	160L 4

<b>18.5 kW</b>	n <sub>1</sub> = 2910 min <sup>-1</sup>	160L 2
	n <sub>1</sub> = 1460 min <sup>-1</sup>	180M 4
	n <sub>1</sub> = 970 min <sup>-1</sup>	200L 6

1003	2,9	167	2,9	112/2*	160L 2
856	3,4	196	2,7	112/2*	160L 2
728	4,0	231	2,6	112/2*	160L 2
633	4,6	265	2,5	112/2*	160L 2
535	5,4	310	2,9	125	160L 2
477	6,1	352	2,2	112/2*	160L 2
445	6,5	374	2,9	125	160L 2
428	6,8	392	2,1	112/2*	160L 2
368	7,9	456	1,9	112/2*	160L 2
355	8,2	467	2,9	125	160L 2
327	8,9	513	1,7	112/2*	160L 2
300	9,7	559	1,6	112/2*	160L 2
295	9,9	562	2,6	125	160L 2
268	5,4	635	1,6	125	180M 4
262	11,1	640	1,5	112/2*	160L 2
235	12,4	715	1,6	112/2*	160L 2
223	6,5	765	1,6	125	180M 4
201	14,5	836	1,5	112/2*	160L 2
179	16,3	940	1,4	112/2*	160L 2
178	8,2	957	1,6	125	180M 4
164	17,7	1021	1,4	112/2*	160L 2
148	9,9	1151	1,4	125	180M 4
144	20,2	1165	1,2	112/2*	160L 2
134	21,7	1252	1,2	112/2*	160L 2
117	12,5	1461	1,2	125	180M 4
115	25,4	1465	1,0	112/2*	160L 2
100	29,1	1678	0,9	112/2*	160L 2
97	15,1	1758	1,1	125	180M 4
73	19,9	2322	0,9	125	180M 4
58	25,1	2933	0,7	125	180M 4

<b>22 kW</b>	n <sub>1</sub> = 2925 min <sup>-1</sup>	180M 2
	n <sub>1</sub> = 1460 min <sup>-1</sup>	180L 4
	n <sub>1</sub> = 975 min <sup>-1</sup>	200L 6

538	5,4	367	2,5	125*	180M 2
447	6,5	442	2,5	125*	180M 2
357	8,2	553	2,5	125*	180M 2
297	9,9	665	2,2	125*	180M 2
268	5,4	736	1,4	125*	180L 4
223	6,5	885	1,4	125*	180L 4

**1.7 Leistungen der PMP - PCP -  
PMF - PCF Getriebemotoren**

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PMP - PCP PMF - PCF	
-------------------------------------	----	----------------------	-----	------------------------	--

<b>22 kW</b>	n <sub>1</sub> = 2925 min <sup>-1</sup>	180M 2
	n <sub>1</sub> = 1460 min <sup>-1</sup>	180L 4
	n <sub>1</sub> = 975 min <sup>-1</sup>	200L 6

178	8,2	1108	1,4	125*	180L 4
148	9,9	1333	1,2	125*	180L 4
117	12,5	1692	1,1	125*	180L 4
97	15,1	2036	0,9	125*	180L 4
73	19,9	2689	0,7	125*	180L 4

<b>30 kW</b>	n <sub>1</sub> = 2945 min <sup>-1</sup>	200L 2
	n <sub>1</sub> = 1465 min <sup>-1</sup>	200L 4

541	5,4	497	1,8	125*	200L 2
450	6,5	599	1,8	125*	200L 2
360	8,2	749	1,8	125*	200L 2
299	9,9	901	1,6	125*	200L 2
269	5,4	1000	1,0	125*	200L 4
224	6,5	1203	1,0	125*	200L 4
179	8,2	1505	1,0	125*	200L 4
149	9,9	1811	0,9	125*	200L 4
117	12,5	2299	0,8	125*	200L 4
97	15,1	2767	0,7	125*	200L 4

<b>37 kW</b>	n <sub>1</sub> = 2950 min <sup>-1</sup>	200L 2
	n <sub>1</sub> = 1475 min <sup>-1</sup>	225S 4

542	5,4	612	1,5	125*	200L 2
451	6,5	737	1,5	125*	200L 2
360	8,2	922	1,5	125*	200L 2
299	9,9	1109	1,3	125*	200L 2
236	12,5	1408	1,2	125*	200L 2
196	15,1	1695	1,0	125*	200L 2
148	19,9	2238	0,8	125*	200L 2
118	25,1	2826	0,7	125*	200L 2

N.B.  
Tutte le potenze indicate si riferiscono alla potenza meccanica dei riduttori. Per i riduttori contrassegnati con (\*) è opportuno effettuare la verifica della potenza limite termico secondo le indicazioni riportate nel par. A-1.7.

NOTE.  
The indicated power is based on the mechanical capacities of the gearboxes. For the gearboxes marked with (\*) it is also necessary to obey the thermal capacity like shown on chapter A-1.7.

HINWEIS.  
Die Leistungsangaben beziehen sich auf die mechanische Belasbarkeit der Getriebe. Bei den mit (\*) gekennzeichneten Getrieben ist außerdem die thermische Leistungsgrenze zu beachten (s. Kap. A-1.7).





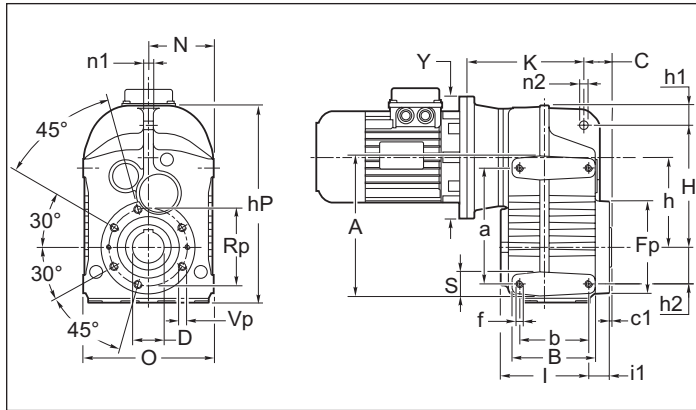


1.8 Dimensioni

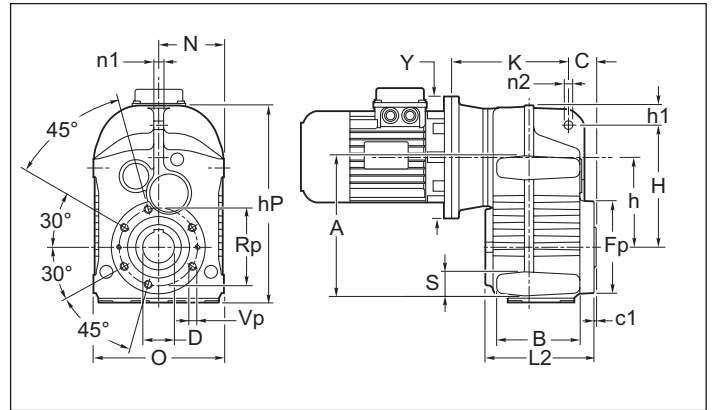
1.8 Dimensions

1.8 Abmessungen

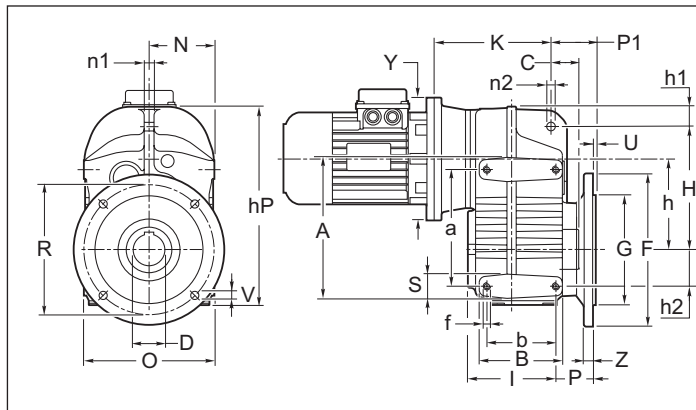
**PMP**



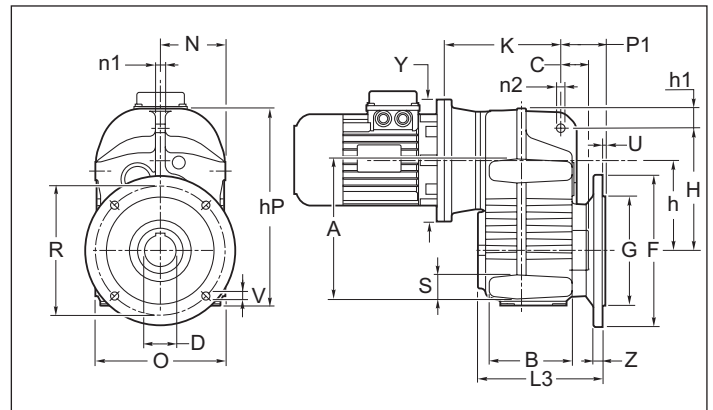
**PMF**



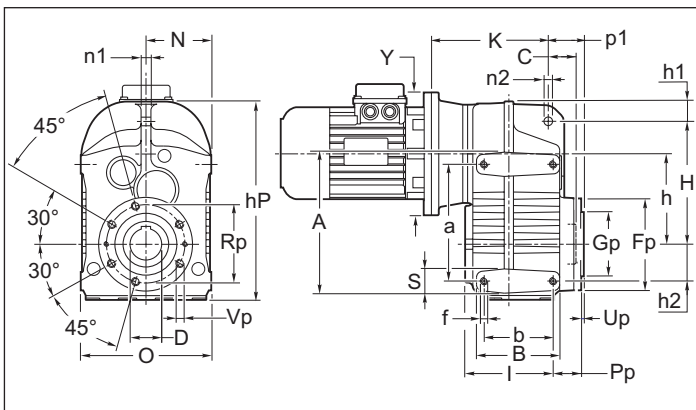
**PMP F1 - F2**



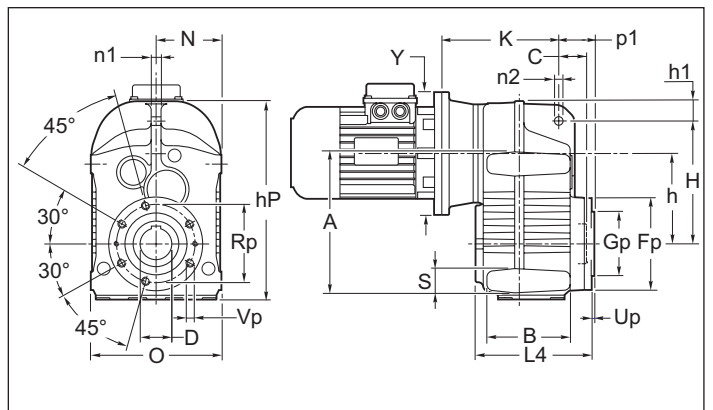
**PMF F1 - F2**



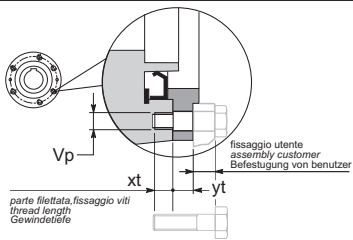
**PMP P**



**PMF P**



**Particolare dei fori nella Flangia - "P"**  
**Detail holes of the flange - "P"**



Per il fissaggio al riduttore con i fori "Vp" considerare la lunghezza delle viti adeguate, e che la quota "yt" non è filettata (vedi disegno).

When P-flange is used please consider that the threads "Vp" are in gearbox and that distance "yt" does not have a thread (see drawing).

Bei Verwendung des P-Flansches ist zu beachten, daß sich die Gewinde im Getriebegehäuse befinden und daß Maß "yt" kein Gewinde besitzt. Details siehe Zeichnung.

	Vp	xt	yt
63	N°6 M6	12	11,5
71	N°6 M8	15	11
90	N°6 M12	18	12
112	N°6 M14	23	14



1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

P.P P.F	a	A	b	B	C	c1	D H7	f	h	hP	H	h1	h2	I	I1	L2	L3	L4	N	n1	n2
63	115	135	77	95	31.5	2.5	30 (25) (28)	N° 8 M8x12	103. 5	240	152	23.5	31	96.5	20	116.5	143	128	P.F 84.5 P.P 82.5	12	14
71	145	170	93	120	35	3	35 (30) (32)	N° 8 M10x15	117	268	165	26	43	119	28	147	175	158	P.F 92 P.P 90	12	14
90	190	220	112	135	45	3.5	40 (42) (45) (48)	N° 8 M12x17	147	324	200	33	60	143	33.5	176.5	203.5	188.5	P.F 109 P.P 106	16	14
112	240	280	140	166	50	4	50 (55)	N° 8 M16x23	184	400	255	35.5	70	172.5	32.5	205	246	219	P.F 138 P.P 135	20	22
125	310	350	125	158	44.5	2.5	55 (60) (50)	N°8 M16x30	222	502	310	45	100	157	27	169	247	169	P.P 152.5	24	22

P.P P.F	S	Fp	Gp	O	p1	P1	Pp	Rp	Up	Vp	F	G g6	P	R	U	V	Z	
63	20	105	80	P.F 169	43.5	59	31.5	90	3	N°6 M6x12	F1	160	110	46.5	130	3.5	N°4 φ 9	10
				F2							—	—	—		—			
71	25	120	80	P.F 184	46	63.5	39	100	3	N°6 M8x14	F1	200	130	56	165	3.5	N°4 φ 11	12
				F2							160	110	130		3.5	N°4 φ 9.5	10	
90	30	150	105	P.F 218	57	72	45.5	125	3.5	N°6 M12x18	F1	250	180	60.5	215	4	N°4 φ 13.5	15
				F2							—	—	—		—	—		
112	40	175	125	P.F 276	63	91	46.5	150	3.5	N°6 M14x21	F1	300	230	73.5	265	4	N°4 φ 13.5	16
				F2							—	—	—		—	—		
125	40	200	140	305	42	110	21	165	6	N°8 M12x20	F1	350	250	90	300	5	N°4 ø 18	18

PM 2 stages	IEC	Y	63 K	71 K	90 K	112 K	125 K
	63 B5	140	119.5	-	-	-	-
71 B5	160	139.5*	-	-	-	-	
80 B5	200	139.5	-	-	-	-	
80 B14	120	139.5	159	-	-	-	
90 B5	200	139.5	-	-	205	-	
90 B14	140	139.5	-	-	-	-	
100-112 B5	250	149.5	169	-	205	255	204
100-112 B14	160	149.5	169	-	-	-	-
132 B5	300	-	-	-	205	255	204
132 B14	200	-	-	-	-	-	-
160 B5	350	-	-	-	-	255	268
180 B5	350	-	-	-	-	-	268
200 B5	400	-	-	-	-	-	273

PM 3 stages	IEC	Y	63 K	71 K	90 K	112 K
	63 B5	140	124.5	153	-	-
71 B5	160	128.5	153	173*	175	-
80 B5	200	152.5	173	-	190	219.5
80 B14	120	152.5	173	-	190	-
90 B5	200	152.5	173	-	190	219.5
90 B14	140	152.5	173	-	190	-
100-112 B5	250	152.5	173	-	190	229.5
100-112 B14	160	152.5	173	-	190	-
132 B5	300	152.5	173	-	190	-
132 B14	200	152.5	173	-	190	-
160 B5	350	152.5	173	-	190	-

\* Con calettatore in posizione standard.

\* With shrink disc in standard positions.

\* Mit Schrumpfscheibe in Standardposition.

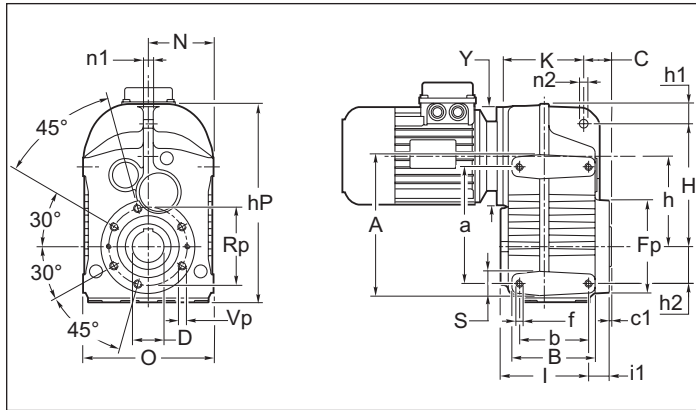


1.8 Dimensioni

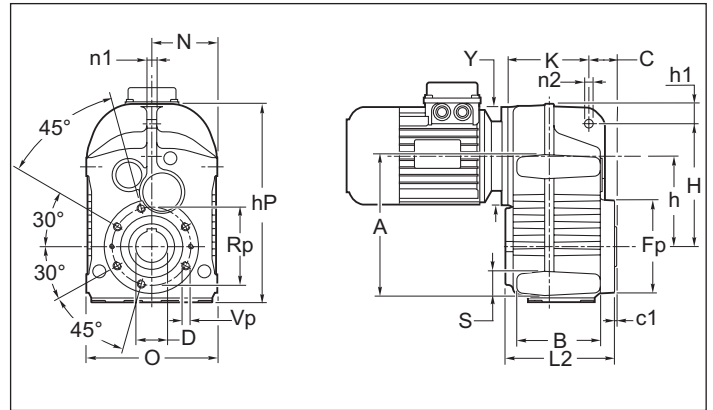
1.8 Dimensions

1.8 Abmessungen

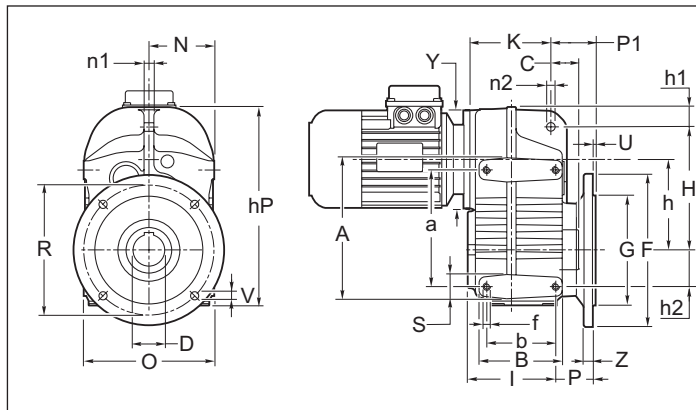
PCP



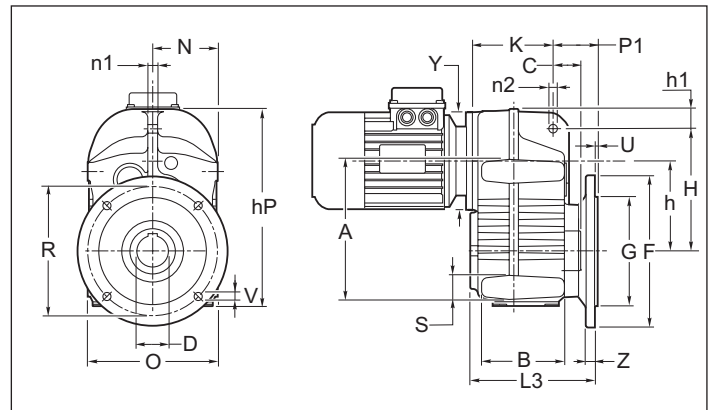
PCF



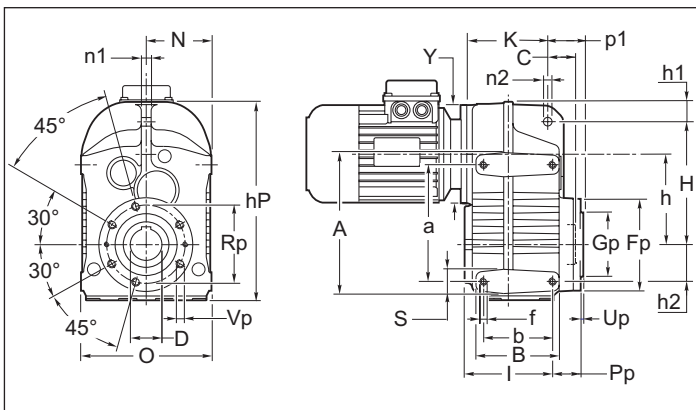
PCP F1 - F2



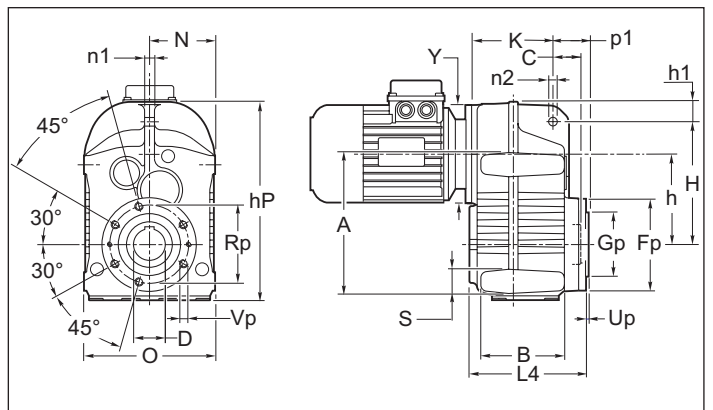
PCF F1 - F2



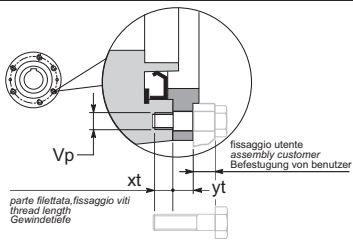
PCP P



PCF P



Particolare dei fori nella Flangia - "P"  
Detail holes of the flange - "P"



Per il fissaggio al riduttore con i fori "Vp" considerare la lunghezza delle viti adeguate, e che la quota "yt" non è filettata (vedi disegno).

When P-flange is used please consider that the threads "Vp" are in gearcase and that distance "yt" does not have a thread (see drawing).

Bei Verwendung des P-Flansches ist zu beachten, daß sich die Gewinde im Getriebegehäuse befinden und daß Maß "yt" kein Gewinde besitzt. Details siehe Zeichnung.

	Vp	xt	yt
63	N°6 M6	12	11,5
71	N°6 M8	15	11
90	N°6 M12	18	12
112	N°6 M14	23	14



1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

P.P P.F	a	A	b	B	C	c1	D H7	f	h	hP	H	h1	h2	I	I1	L2	L3	L4	N	n1	n2
63	115	135	77	95	31.5	2.5	30 (25) (28)	N° 8 M8x12	103.5	240	152	23.5	31	96.5	20	116.5	143	128	P.F 84.5	12	14
																			P.P 82.5		
71	145	170	93	120	35	3	35 (30) (32)	N° 8 M10x15	117	268	165	26	43	119	28	147	175	158	P.F 92	12	14
																			P.P 90		
90	190	220	112	135	45	3.5	40 (42) (45) (48)	N° 8 M12x17	147	324	200	33	60	143	33.5	176.5	203.5	188.5	P.F 109	16	14
																			P.P 106		
112	240	280	140	166	50	4	50 (55)	N° 8 M16x23	184	400	255	35.5	70	172.5	32.5	205	246	219	P.F 138	20	22
																			P.P 135		

P.P P.F	S	Fp	Gp	O	p1	P1	Pp	Rp	Up	Vp	F	G g6	P	R	U	V	Z	
63	20	105	80	P.F 169	43.5	59	31.5	90	3	N°6 M6x12	F1	160	110	46.5	130	3.5	N°4 φ 9	10
				F2							—	—	—		—			
71	25	120	80	P.F 184	46	63.5	39	100	3	N°6 M8x14	F1	200	130	56	165	3.5	N°4 φ 11	12
				F2							160	110	130		3.5	N°4 φ 9.5	10	
90	30	150	105	P.F 218	57	72	45.5	125	3.5	N°6 M12x18	F1	250	180	60.5	215	4	N°4 φ 13.5	15
				F2							—	—	—		—			
112	40	175	125	P.F 276	63	91	46.5	150	3.5	N°6 M14x21	F1	300	230	73.5	265	4	N°4 φ 13.5	16
				F2							—	—	—		—			

PC. 2 stadi	63		71		90		112	
	Y	K (PC.)	Y	K (PC.)	Y	K (PC.)	Y	K (PC.)
	140	81	140	114	160	131	200	163

PC. 3 stadi	63		71		90		112	
	Y	K (PC.)	Y	K (PC.)	Y	K (PC.)	Y	K (PC.)
	140	98	140	114	160	131	200	163

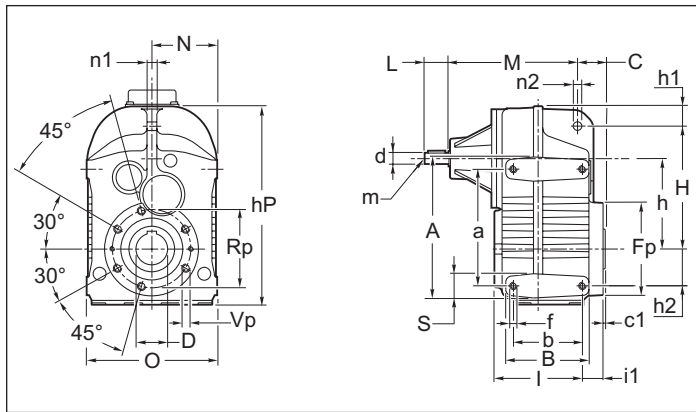


1.8 Dimensioni

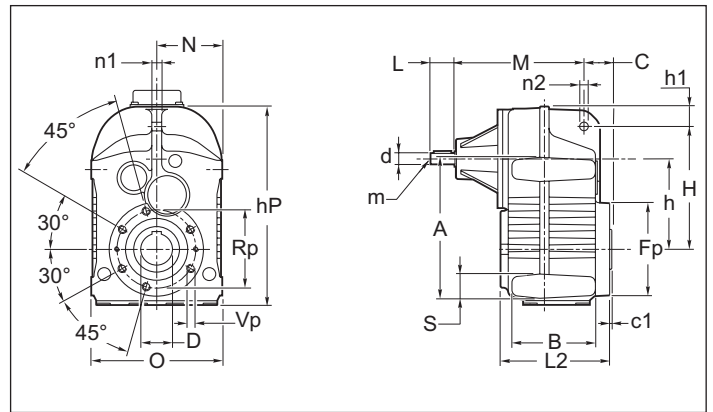
1.8 Dimensions

1.8 Abmessungen

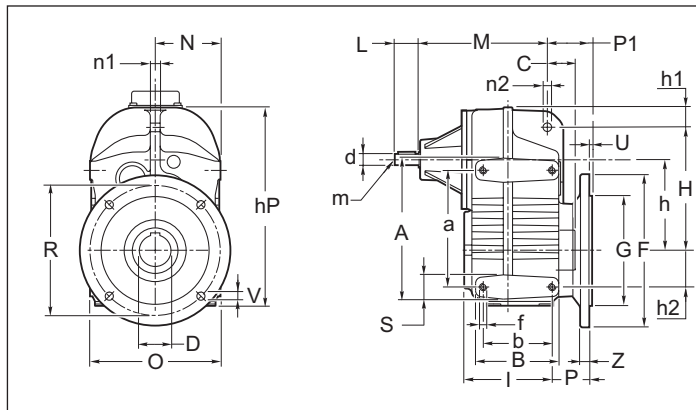
PRP



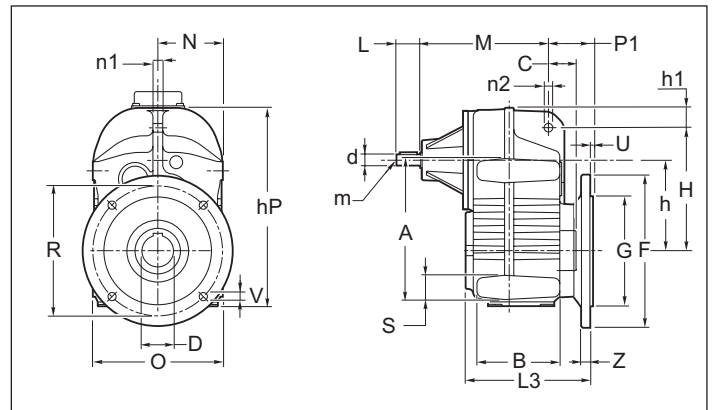
PRF



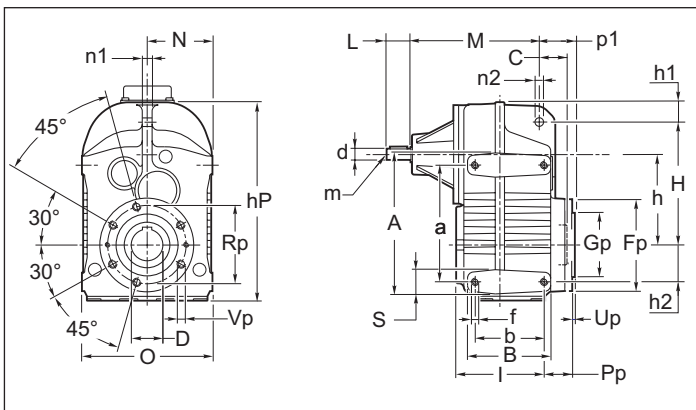
PRP F1 - F2



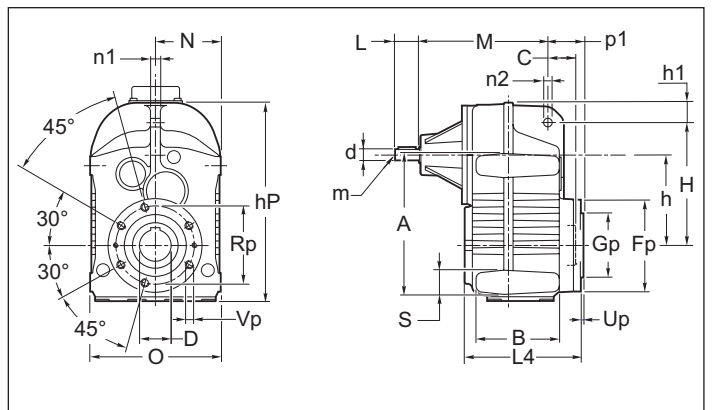
PRF F1 - F2



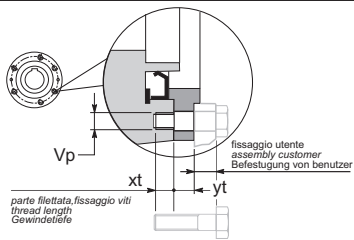
PRP P



PRF P



Particolare dei fori nella Flangia - "P"  
Detail holes of the flange - "P"



Per il fissaggio al riduttore con i fori "Vp" considerare la lunghezza delle viti adeguate, e che la quota "yt" non è filettata (vedi disegno).

When P-flange is used please consider that the threads "Vp" are in gearbox and that distance "yt" does not have a thread (see drawing).

Bei Verwendung des P-Flansches ist zu beachten, daß sich die Gewinde im Getriebegehäuse befinden und daß Maß "yt" kein Gewinde besitzt. Details siehe Zeichnung.

	Vp	xt	yt
63	N°6 M6	12	11,5
71	N°6 M8	15	11
90	N°6 M12	18	12
112	N°6 M14	23	14



1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

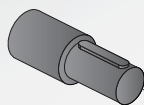
P.P P.F	a	A	b	B	C	c1	d j6	D H7	f	h	hP	H	h1	h2	l	l1	L	L2	L3	L4	m	M	N
63	115	135	77	95	31.5	2.5	16	30 (25) (28)	N° 8 M8x12	103.5	240	152	23.5	31	96.5	20	40	116.5	143	128	M6	148.5 2 st.	P.F 84.5
								136.5 3 st.														P.P 82.5	
71	145	170	93	120	35	3	16	35 (30) (32)	N° 8 M10x15	117	268	165	26	43	119	28	40	147	175	158	M6	163.5 2 st.	P.F 92
								182 3 st.														P.P 90	
90	190	220	112	135	45	3.5	19	40 (42) (45) (48)	N° 8 M12x17	147	324	200	33	60	143	33.5	40	176.5	203.5	188.5	M6	187 2 st.	P.F 109
								209 3 st.														P.P 106	
112	240	280	140	166	50	4	24	50 (55)	N° 8 M16x23	184	400	255	35.5	70	172.5	32.5	50	205	246	219	M8	223.5 2 s	P.F 138
								t. 239 3 st.														P.P 135	
125	310	350	125	158	44.5	2.5	28	55 (60) (50)	N°8 N16x30	222	502	310	45	100	157	27	60	169	247	169	M8	252	152.5

P.P P.F	n1	n2	O	p1	P1	S	Fp	Gp	Pp	Rp	Up	Vp		F	G g6	P	R	U	V	Z
63	12	14	P.F 169	43.5	59	20	105	80	31.5	90	3	N°6 M6x12	F1	160	110	46.5	130	3.5	N°4 φ 9	10
			P.P 165										F2	—	—		—	—		
71	12	14	P.F 184	46	63.5	25	120	80	39	100	3	N°6 M8x14	F1	200	130	56	165	3.5	N°4 φ 11	12
			P.P 180										F2	160	110		130	3.5	N°4 φ 9.5	10
90	16	14	P.F 218	57	72	30	150	105	45.5	125	3.5	N°6 M12x18	F1	250	180	60.5	215	4	N°4 φ 13.5	15
			P.P 212										F2	—	—		—	—		
112	20	22	P.F 276	63	91	40	175	125	46.5	150	3.5	N°6 M14x21	F1	300	230	73.5	265	4	N°4 φ 13.5	16
			P.P 270										F2	—	—		—	—		
125	24	22	P.P 305	42	110	40	200	140	21	165	6	N°8 M12x20	F1	350	250	90	300	5	N° ø18	18



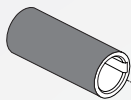
ESTREMITA USCITA - Accessori - Opzioni  
OUTPUT CONFIGURATIONS - Accessories - Options  
ENDEN DER AUSGANGSWELLEN - Zubehör - Optionen

STIM  
team



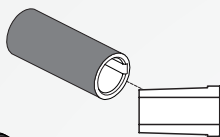
Output shaft  
Double integral output shaft

E29



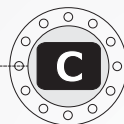
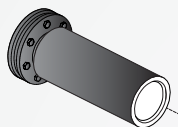
Hollow shaft with keyway

E30



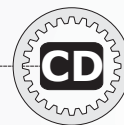
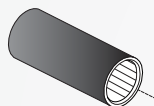
Quick Locking  
Adjustment "Quick Locking"

E32



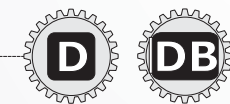
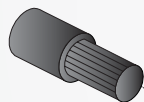
Hollow shaft with shrink disk

E34



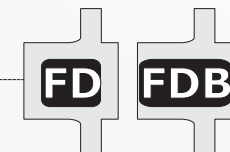
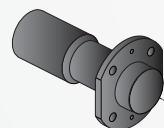
Splined hollow shaft

E35



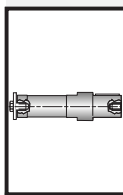
Splined output shaft  
Double splined shaft

E36

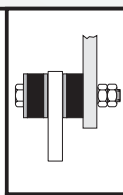


Broached flange  
Double broached flange

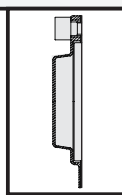
E38



AL



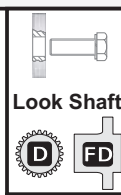
AV



PROT



RR



FF

Look Shaft

Look Shaft

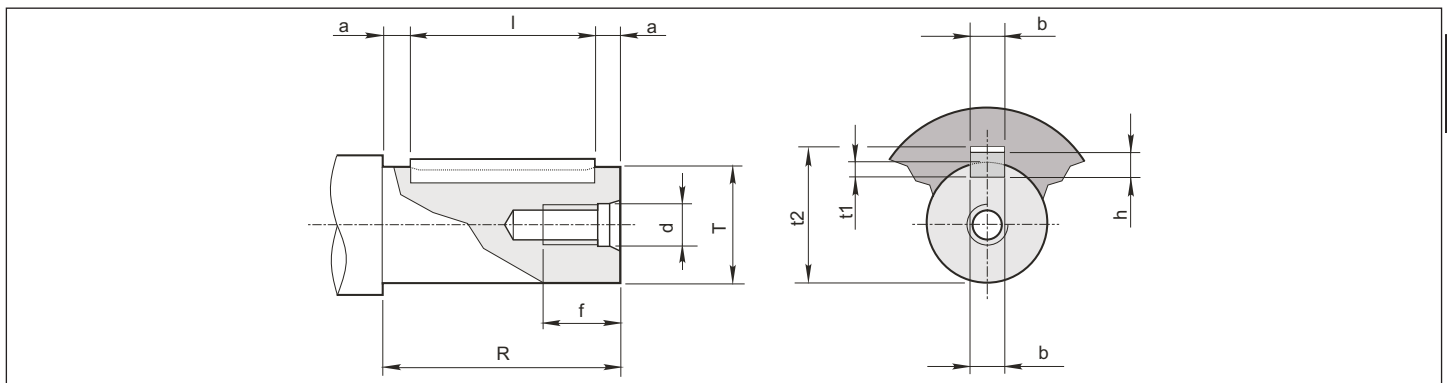
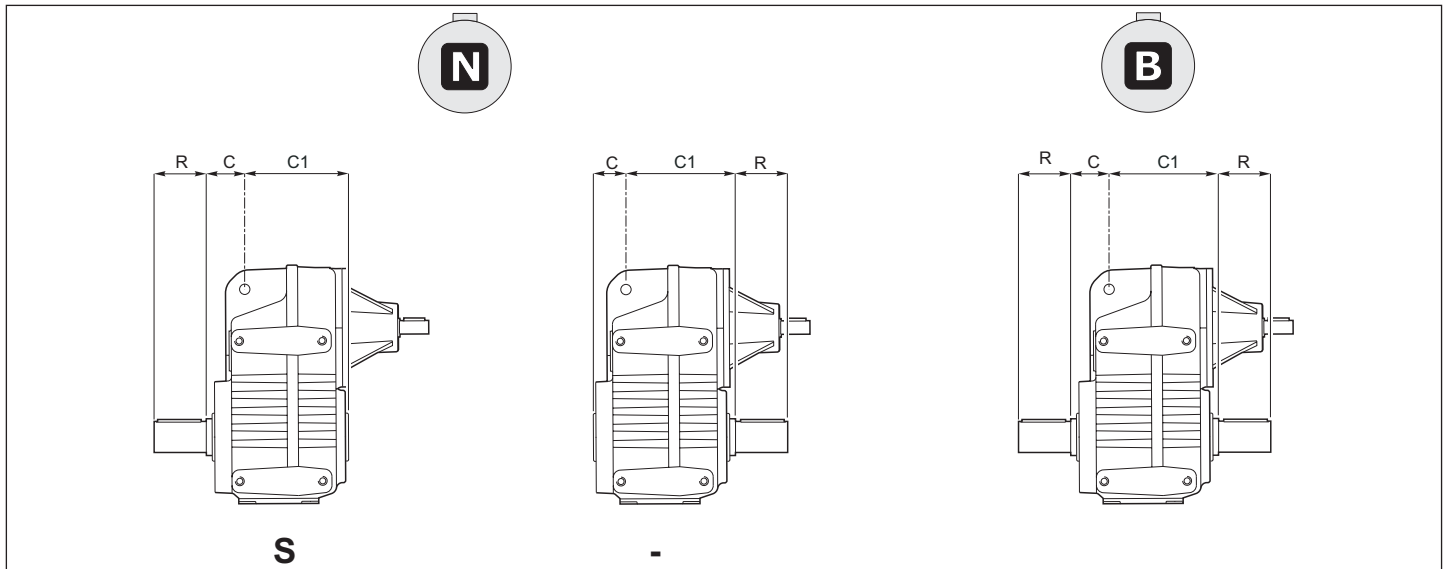
OPT - ACC. -  
Accessories - Options

E40

1.8.1 - ALBERI LENTI

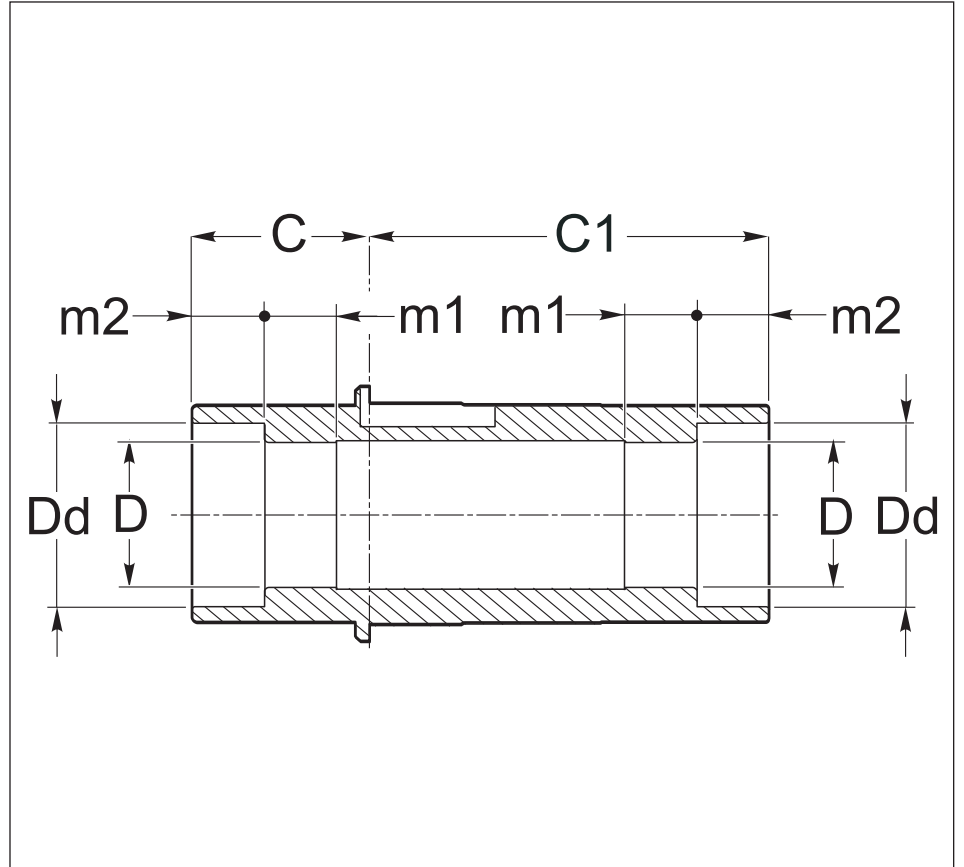
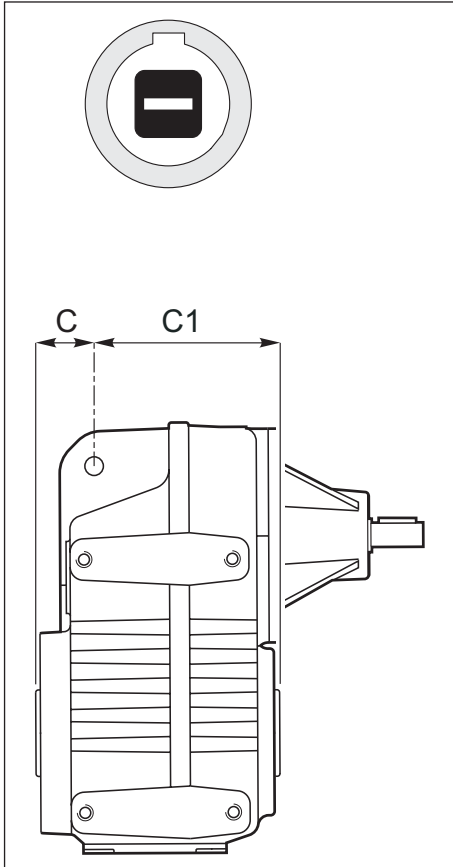
1.8.1 - OUTPUT SHAFT

1.8.1 - ABTRIEBSWELLEN



	Ø Albero Ø Shaft Ø Welle			Foro fil. testa Tapped hole Gewindebohrung Kopfi		Cava Keyway Nut			Estremità d'albero Shaft end Wellenende		Linguetta Key Federkeil
	T	C	C1	d	f	b	t1	t2	R	a	bxhxl
<b>63</b>	30 g6	31.5	88.5	M 10	25	8	4	33.3	60	5	8X7X50
<b>71</b>	35 g6	35	115	M 10	25	10	5	38.3	70	5	10x8x60
<b>90</b>	40 g6	45	135	M 10	25	12	5	43.3	80	5	12x8x70
<b>112</b>	50 g6	50 - N 51 - B	160 - N 161 - B	M 12	32	14	5.5	53.8	100	5	14x9x90
<b>125</b>	55 g6	44.5	135.5	M 12	32	16	6	59.3	110	5	16x10x100

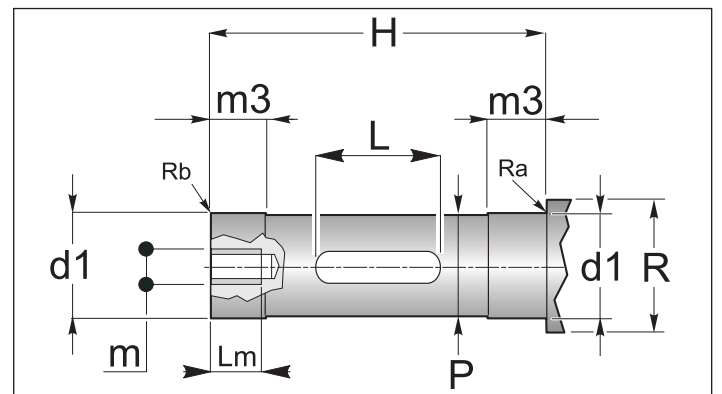




	<b>63</b>	<b>71</b>	<b>90</b>	<b>112</b>
<b>C</b>	31.5	35	45	50
<b>C1</b>	88.5	115	135	160
<b>D</b>	30	35	40	50
<b>H7</b>	(25) (28)	(30) (32)	(42) (45) (48)	(55)
<b>m1</b>	15	30	35	35
<b>m2</b>	15	15	20	25
<b>Dd</b>	38	43	55	61

Perno macchina / Customer shaft / Maschinachse

	d1 h6	m3	Lm	m	H	L min	P	R	Ra	Rb
<b>63</b>	30 (25) (28)	20	25 (25) (25)	M 10 (M 8) (M 10)	88	50	29.8 (24.8) (27.8)	36		
<b>71</b>	35 (30) (32)	35	25	M 10	118	60	34.8 (29.8) (31.8)	42.5		
<b>90</b>	40 (42) (45) (48)	40	25	M 10	138	90	39.8 (41.8) (44.8) (47.8)	54.5		
<b>112</b>	50 (55)	35	32	M 12	158	110	49.8 (54.8)	60		

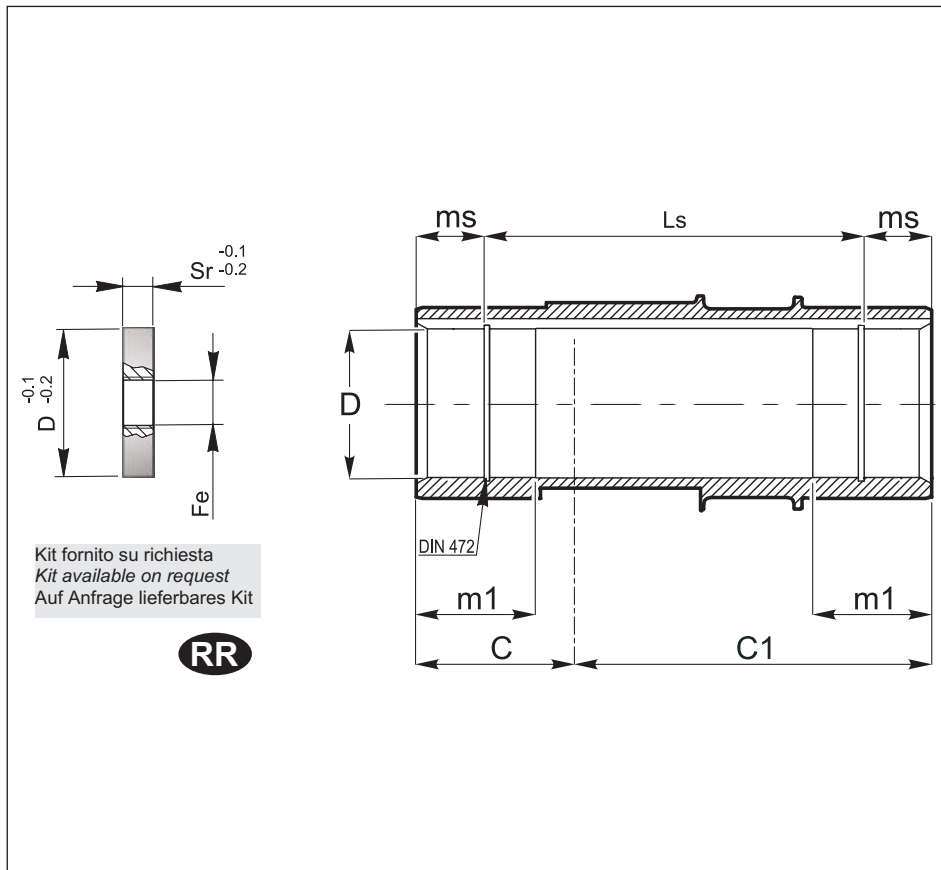
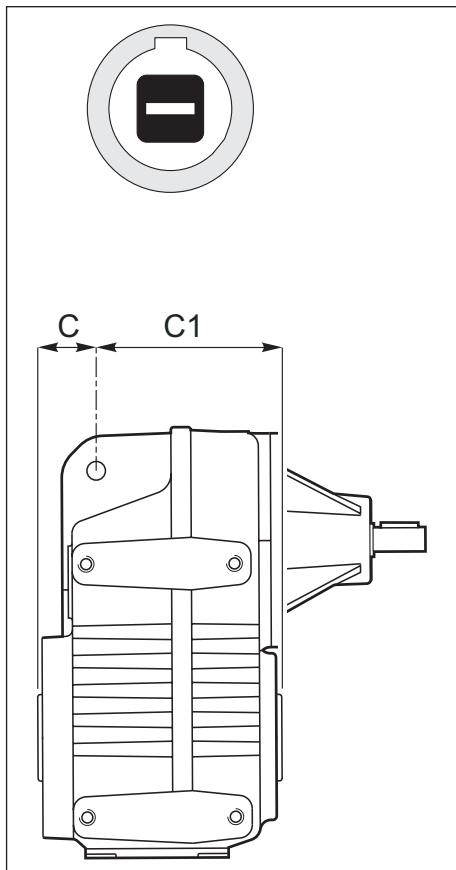




1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

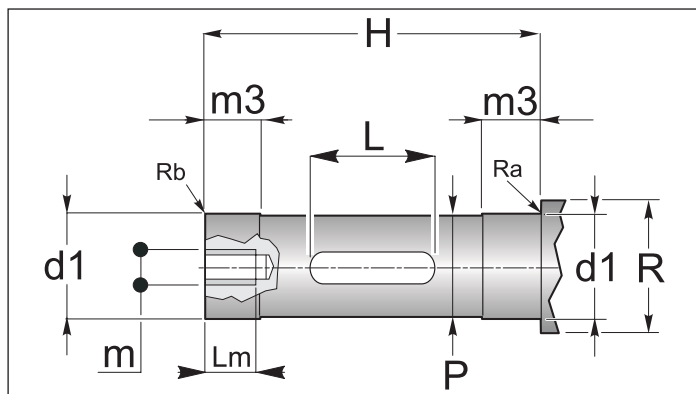
1.8.1 - ABTRIEBSWELLEN

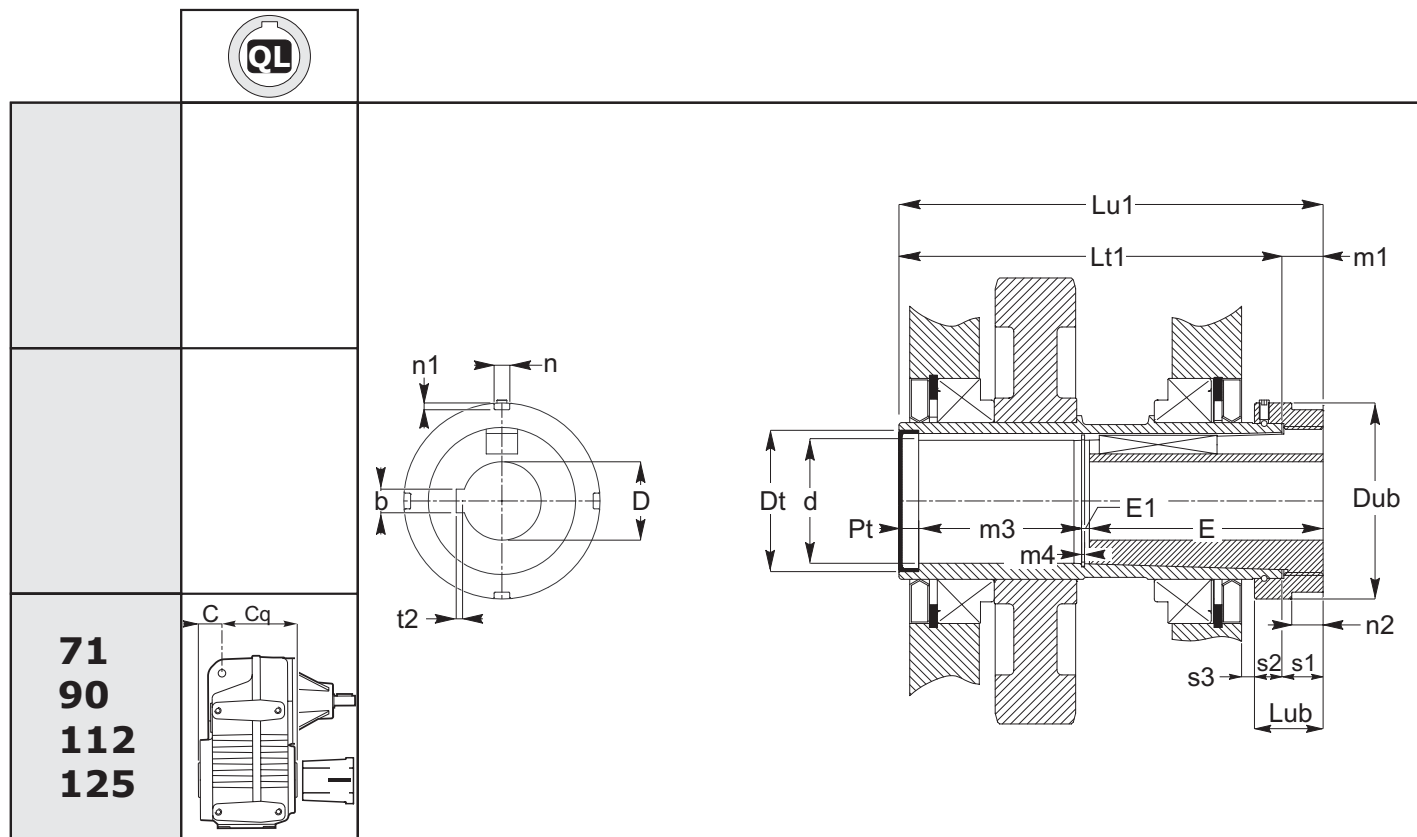


	<b>125</b>
C	44.5
<b>C1</b>	135.5
D	55
H7	(60)
	(50)
m1	55
ms	17.5
Ls	145

Perno macchina / Customer shaft / Maschinachse

	d1 h6	m3	Lm	m	H	L min	P	R	Ra	Rb
<b>125</b>	55 (60) (50)	60	32	M 12	142	110	54.8 (59.8) (49.8)	65 (70) (60)		

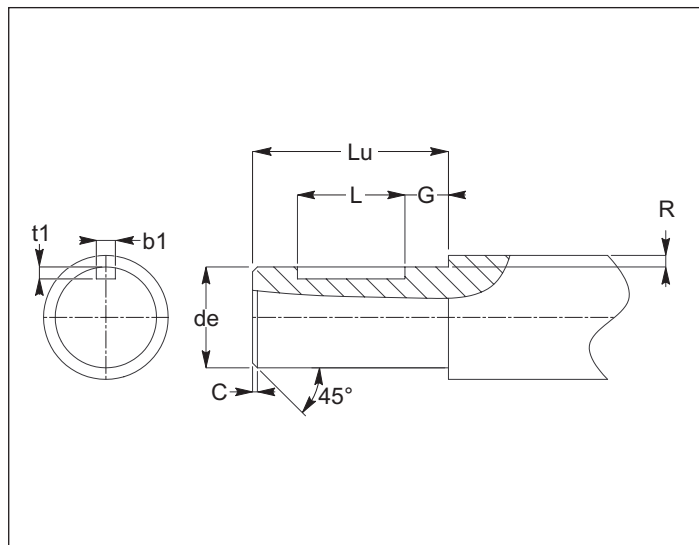




	71	90	112	125
C	35	45	50	44.5
Cq	151	171	196	171.5
d	35.2	49.2	54.2	60.2
dt	47	62	65	72
Dub	70	85	90	100
E	91	121	131	131
E1	3.5	3.5	3.5	3.5
Lt1	165	195	225	195
Lu1	186	216	246	216
Lub	35	35	35	35
m1	21	21	21	21
m3	84.5	83.5	101.5	71.5
m4	1.7	1.7	1.7	1.7
n2	15	15.5	15.5	16
s1	21	21	21	21
s2	14	14	14	14
s3	8	8	8.5	6.5
D		25		35
H7	20	30	30	40
	25	35	35	45
	30	38	40	48
		40	45	50
		42	50	55
		45		
		48		
n	6	7	7	8
n1	2.5	3	3	3.5
b	UNI 6604			
t2				

Perno macchina / Customer shaft / Maschinachse

	C	de h6	G	L	Lu	R	b1	t1
<b>71</b>	1	(20)	10	40	90	5	<b>UNI 6604</b>	
		(25)	10	50				
		(30)	10	60				
<b>90</b>	1.5	(25)	10	50	120	5		
		(30)	10	60				
		(35)	10	70				
		(38)	10	70				
		(40)	5	80				
		(42)	5	80				
<b>112</b>	1.5	(45)	5	90	130	5		
		(48)	5	90				
		(30)	10	60				
		(35)	10	70				
		(40)	10	80				
<b>125</b>	1.5	(45)	5	90	130	5		
		(48)	10	90				
		(50)	5	100				
		(35)	10	70				
		(40)	10	80				
		(55)	5	100				

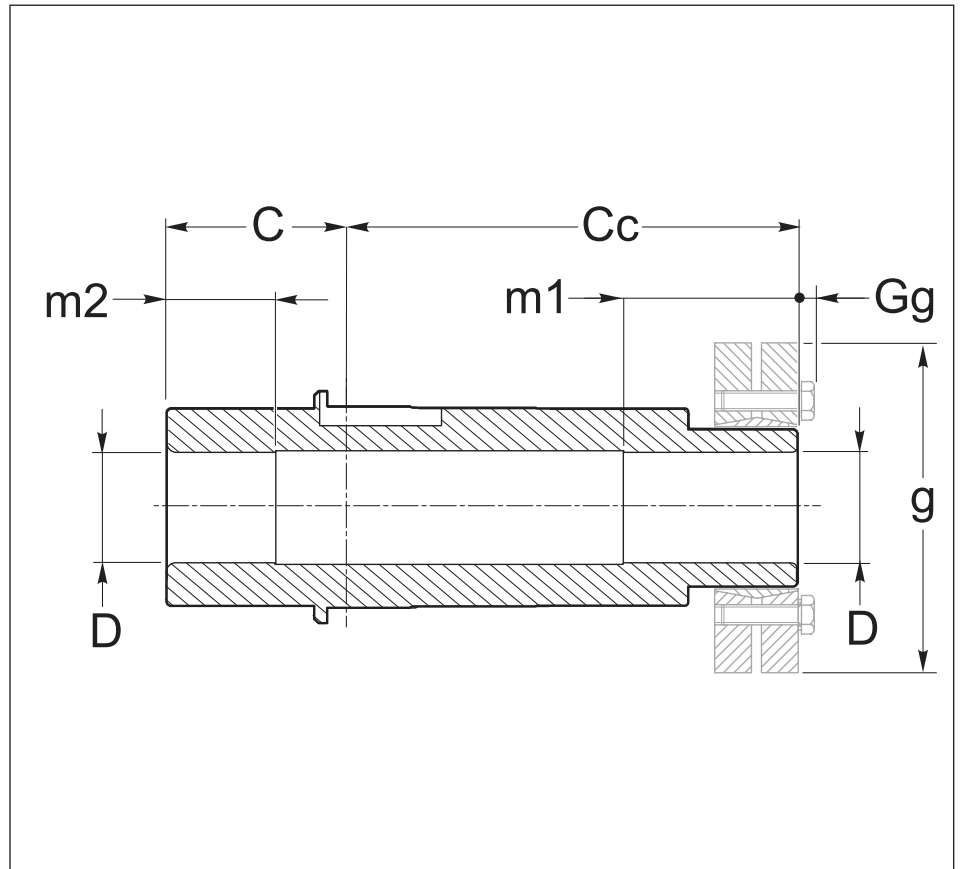
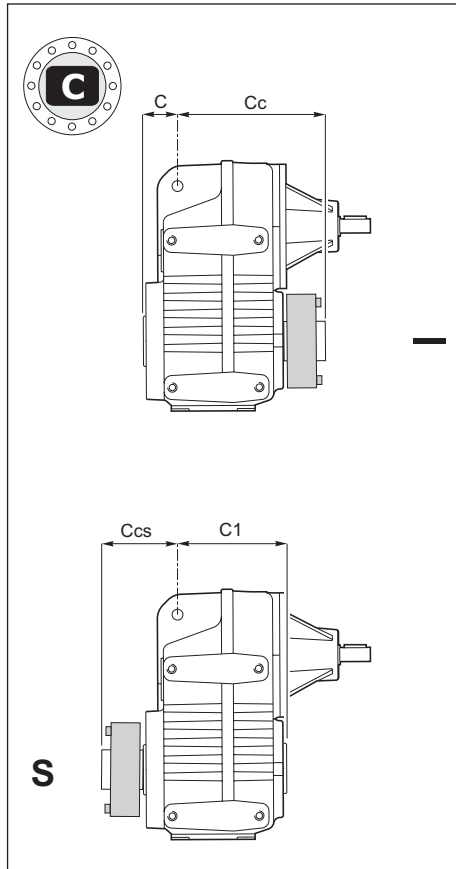




1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

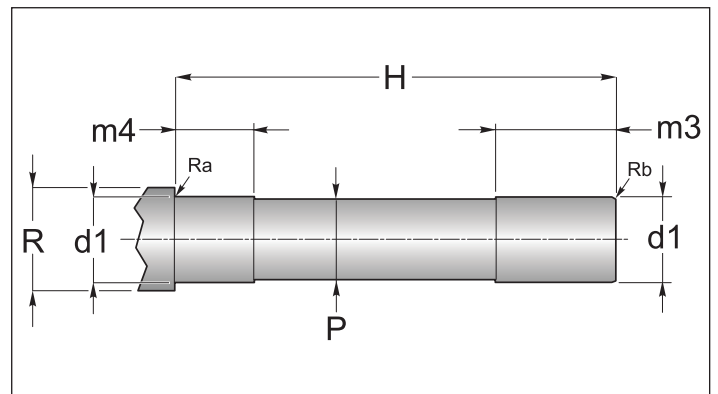
1.8.1 - ABTRIEBSWELLEN



	63	71	90	112	125
<b>C</b>	31.5	35	45	50	44.5
<b>Cc</b>	113.5	140	165	195	170.5
<b>C1</b>	88.5	115	135	160	135.5
<b>Ccs</b>	56.5	60	75	85	79.5
<b>D</b> <b>H7</b>	30	35	40	50	55
<b>m1</b>	40	40	50	55	60
<b>m2</b>	25	25	30	40	50
<b>g</b>	72	80	90	110	115
<b>Gg</b>	4	4	6	1	4

Perno macchina / Customer shaft / Maschinachse

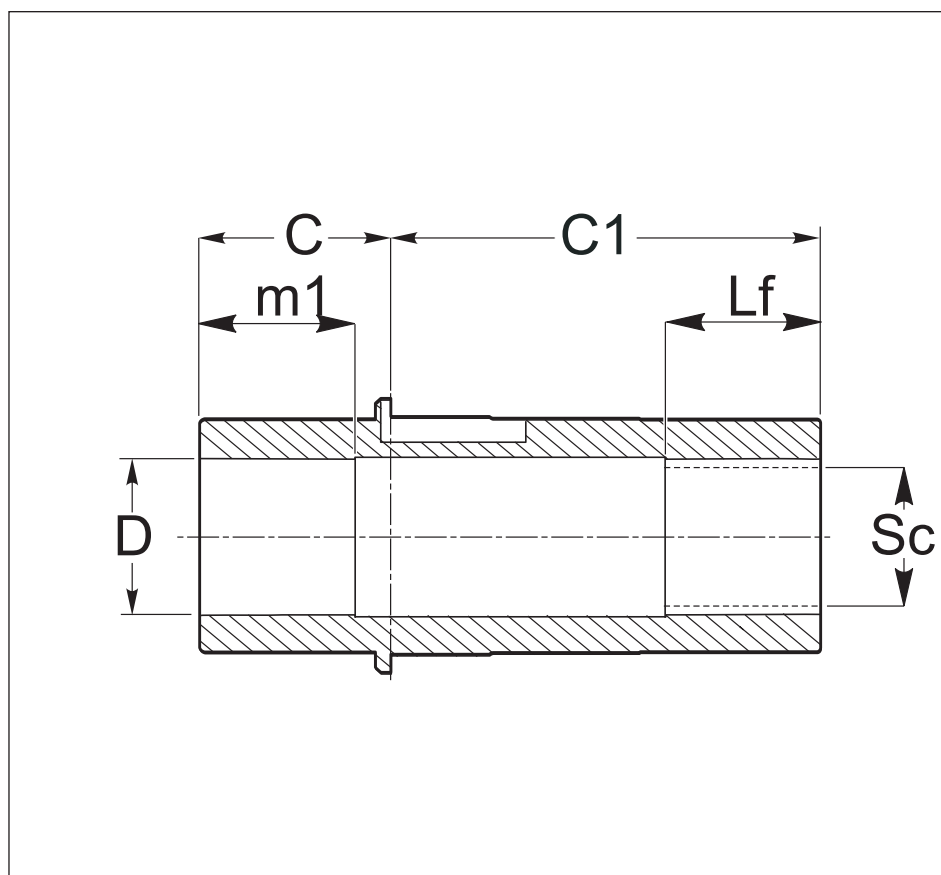
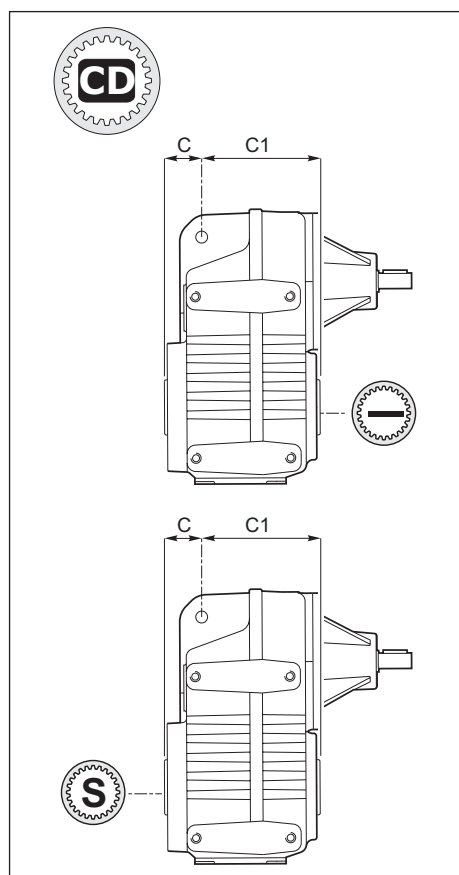
	d1 h6	H	m3	m4	P	R	Ra	Rb
<b>63</b>	30	145	45	30	29.8	36		
<b>71</b>	35	175	45	30	34.8	42.5		
<b>90</b>	40	210	55	35	39.8	54.5		
<b>112</b>	50	245	60	45	49.8	60		
<b>125</b>	55	215	65	55	54.8	65		



1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

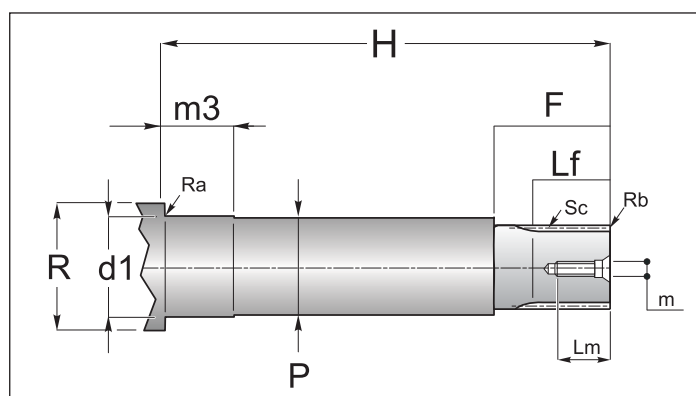
1.8.1 - ABTRIEBSWELLEN

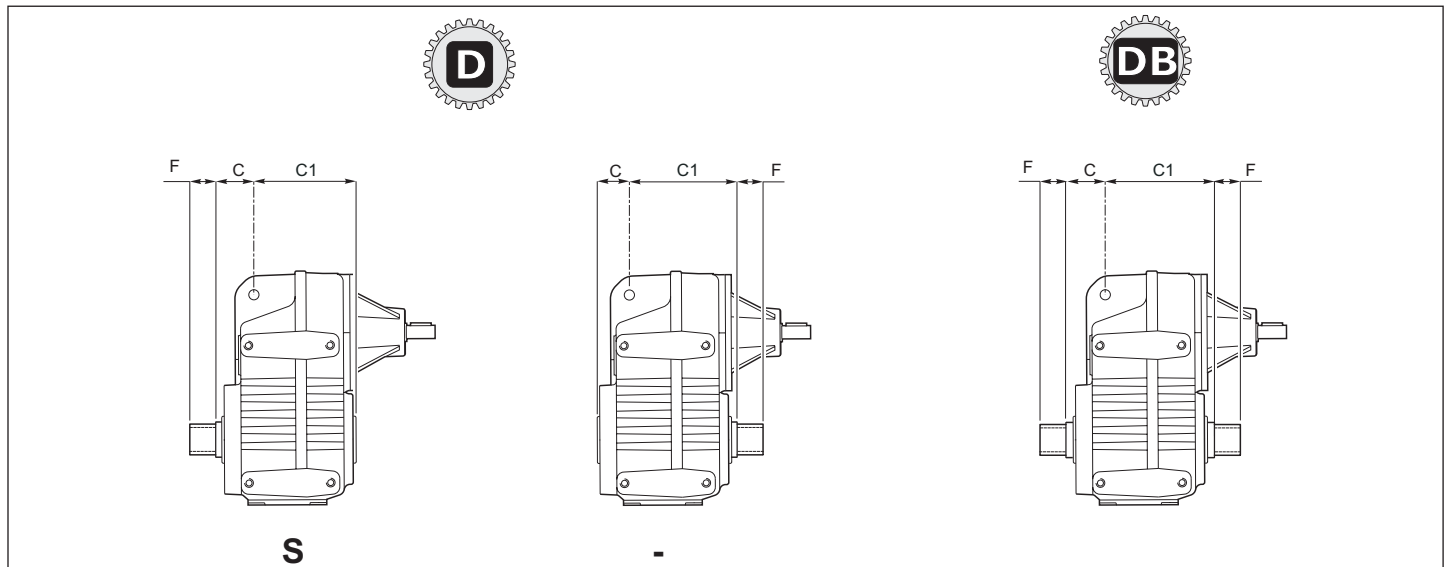


	63	71	90	112	125
<b>C</b>	31.5	35	45	50	44.5
<b>C1</b>	88.5	115	135	160	135.5
<b>D</b> <b>H7</b>	30	37	45	55	57
<b>m1</b>	35	40	55	60	60
<b>Lf</b>	35	45	55	65	60
<b>Sc</b>	28 x 25 DIN 5482	35 x 31 DIN 5482	40 x 36 DIN 5482	50 x 45 DIN 5482	55x50 DIN 5482

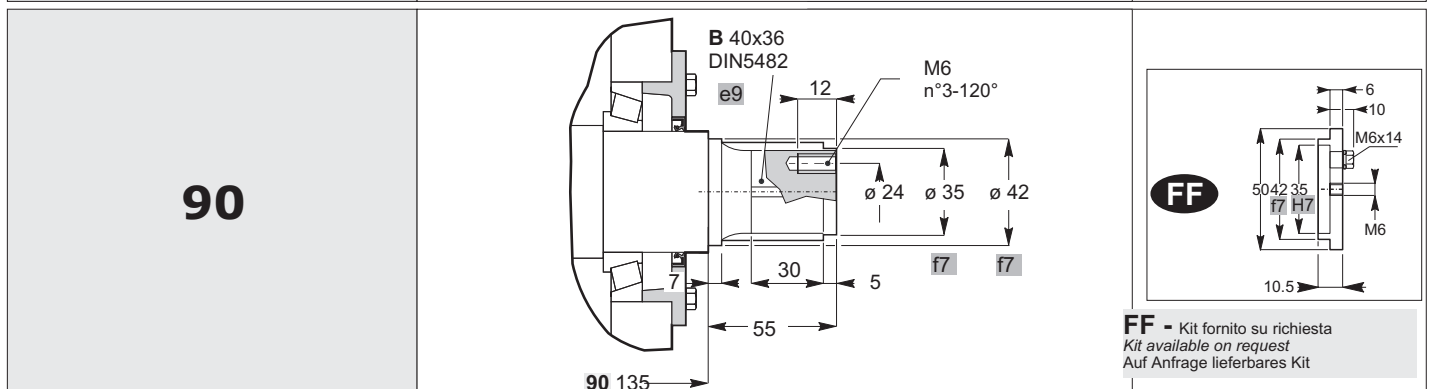
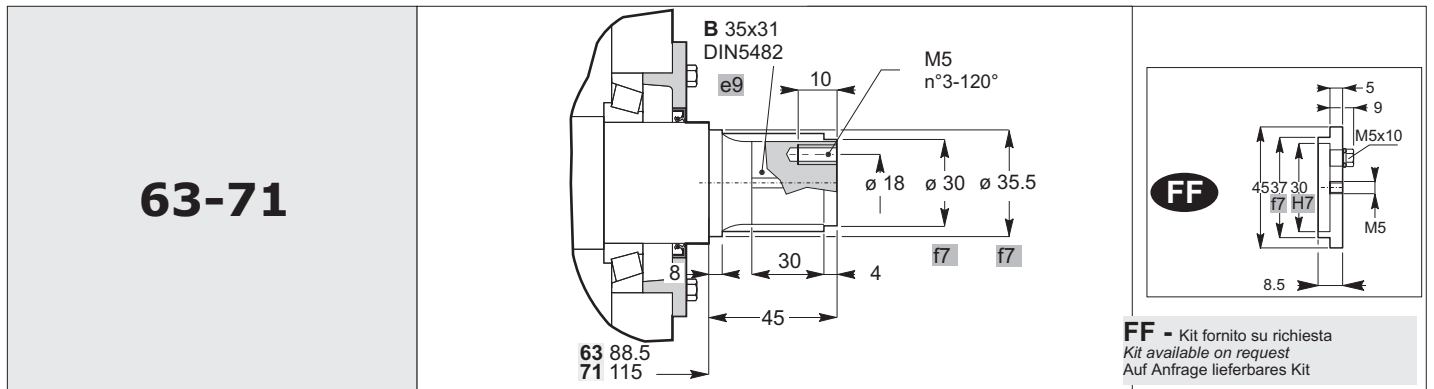
Perno macchina / Customer shaft / Maschinachse

	d1 h6	m 3	H	P	R	R <sub>a</sub>	R <sub>b</sub>	Sc	F	Lf	Lm	m
<b>63</b>	30	30	117	29	40	0.5	1x45°	45	35	20	M8	
<b>71</b>	37	35	147	36	48	0.5	1x45°	50	40	25	M10	
<b>90</b>	45	50	177	42	55	0.5	1x45°	65	55	25	M10	
<b>112</b>	55	55	210	52	65	1	1.5x45°	75	65	35	M12	
<b>125</b>	57	55	175	56	75	1	1.5x45°	70	60	35	M12	





	C	C1	de (h10)	F	Profilo scanalato / Splined profile / Keilprofil					
					Sc	Z	mn	$\alpha$	dc (f7)	Sp
63	31.5	88.5	Look Drawing			35 x 31	DIN 5482			Look Drawing
71	35	115				35 x 31				
90	45	135				40 x 36				
112	50	160				58 x 53				
125	44.5	135.5				70x64				

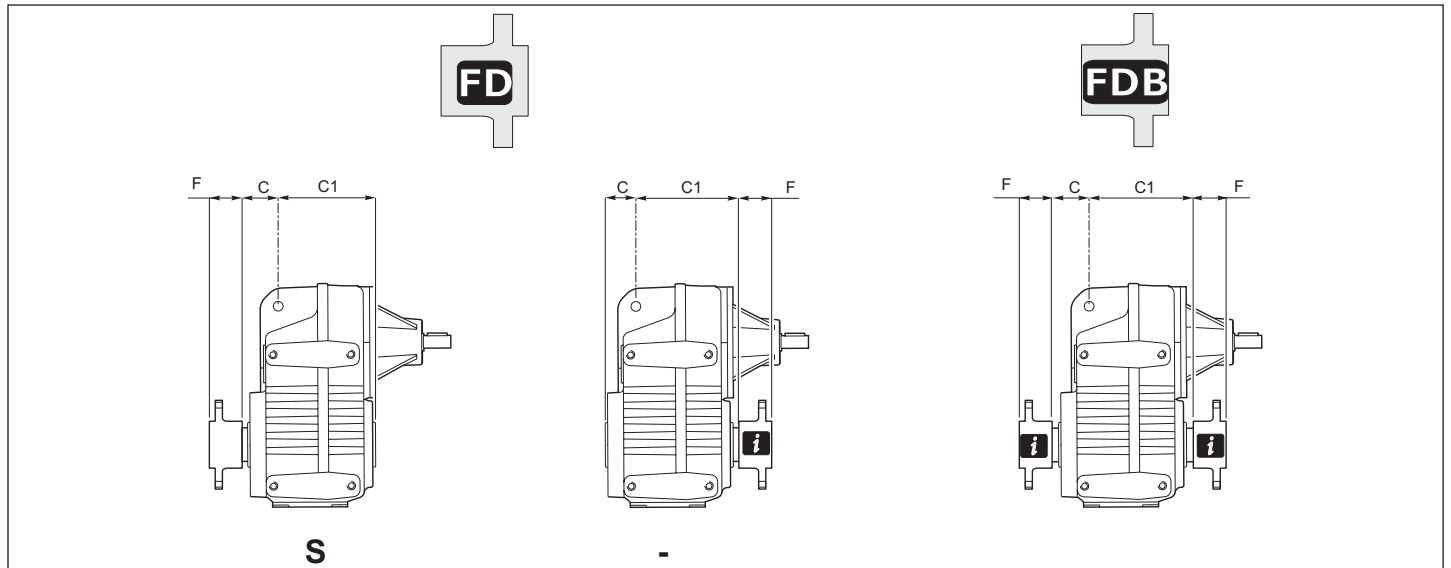




<h1>112</h1>		<p><b>FF</b> - Kit fornito su richiesta  <i>Kit available on request</i>          Auf Anfrage lieferbares Kit</p>
<h1>125</h1>		<p><b>FF</b> - Kit fornito su richiesta  <i>Kit available on request</i>          Auf Anfrage lieferbares Kit</p>







\*Contattare il ns. servizio tecnico / Contact our technical dept / Wenden Sie sich an unseren technischen Service

Dimensioni generali / General dimensions / Allgemeine Abmessungen														
	de	∅ A	∅ B	∅ C	∅ C1	∅ Ce f8	N° Fori holes Anzahl der Bohrungen	∅ D	E	F	G	H	I	N h9
63	Look Drawing			31.5	88.5	Look Drawing								
71				35	115									
90				45	135									
112				50	160									
125				44.5	135.5									

<b>63-71</b>			
	<b>FF</b> - Kit fornito su richiesta <i>Kit available on request</i> Auf Anfrage lieferbares Kit		
<b>90</b>			
	<b>FF</b> - Kit fornito su richiesta <i>Kit available on request</i> Auf Anfrage lieferbares Kit		



1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

1.8.1 - ABTRIEBSWELLEN

<h1>112</h1>			<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<h1>125</h1>			<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>





1.9 OPT - ACC. - Accessori - Opzioni

1.9 OPT - ACC. - Accessories - Options

1.9 OPT - ACC. Zubehör - Optionen

**AV**

**ANTIVIBRANTE VKL**

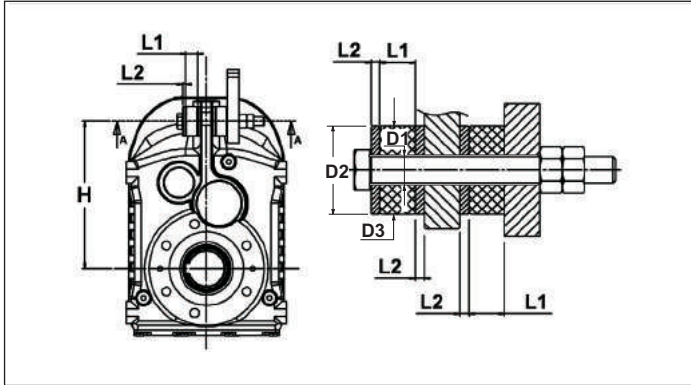
**RUBBER BUFFER VKL**

**GUMMIHÜLSE VKL**

Per riduttori e motoriduttori pendolari.

For shaft mounted gearboxes and geared motors.

Für aufsteckgetriebe und aufsteckgetriebe-motoren.



P.P - P.F	D1	D2	D3	L1	L2	H
<b>63</b>	12.5	40	40	16	4	152
<b>71</b>	12.5	40	40	16	4	165
<b>90</b>	12.5	40	40	16	4	200
<b>112</b>	21	60	60	22	8	255
<b>125</b>	21	60	60	22	8	310

**AL**

**AL - ALBERO LENTO SPORGENTE**

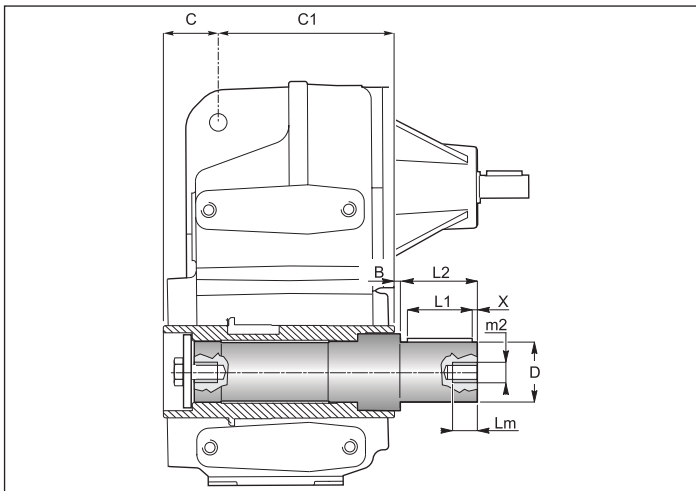
**AL - SINGLE OUTPUT SHAFTS**

**AL - EINSEITIGE ABTRIEBSWELLEN**

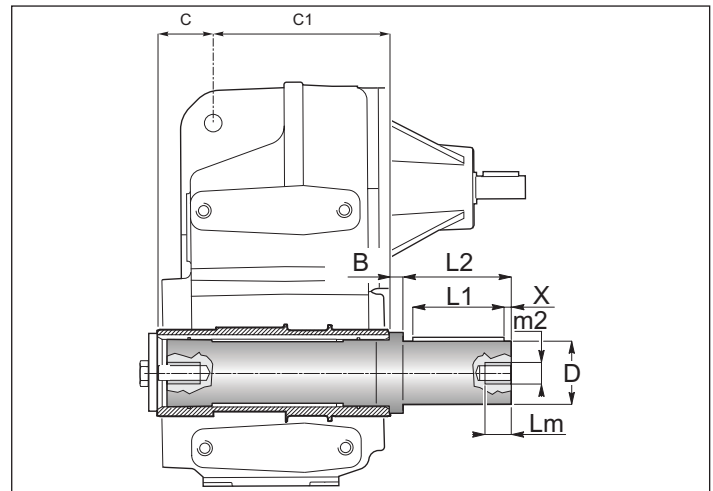
Tutti i riduttori sono forniti con albero lento cavo. A richiesta, possono essere forniti kit di montaggio per alberi sporgenti comprensivi di linguette, rondelle e viti di fissaggio. Le dimensioni delle linguette sono conformi alle norme UNI 6604-69.

All gearboxes are supplied with hollow output shaft. On request there are available also assembly kits including output shafts, keys, washers and assembly screws. The dimensions of the keys are conform with UNI 6604-69.

Alle Getriebe werden mit Abtriebshohlwelle geliefert. Auf Anfrage sind auch Montagekits inklusive Abtriebswellen, Paßfedern, Unterlegscheiben und Montageschrauben erhältlich. Die Abmessungen der Paßfedern sind konform mit der UNI 6604-69.



**63-71-90-112**



**125**

	B	C	C1	D g6	m <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>m</sub>	X
<b>63*</b>	1	31.5	88.5	30	M10	50	60	25	5
<b>71*</b>	1	35	115	35	M10	60	70	25	5
<b>90*</b>	1	45	135	40	M10	70	80	25	5
<b>112*</b>	1	50	160	50	M12	90	100	32	5
<b>125*</b>	26	44.5	135.5	55	M 12	100	110	32	5

\* ATTENZIONE  
L'albero lento sporgente è fornito per essere installato sulla versione del riduttore con albero **CAVO** con diametro **STANDARD**.

\*ATTENTION  
The output shaft is available only for standard hollow shaft diameter.

Achtung:  
Die Einseitige Abtriebswelle wird fuer die Montage bei Getrieben mit Standart Hohlwelle geliefert.



1.9 OPT - ACC. - Accessori - Opzioni

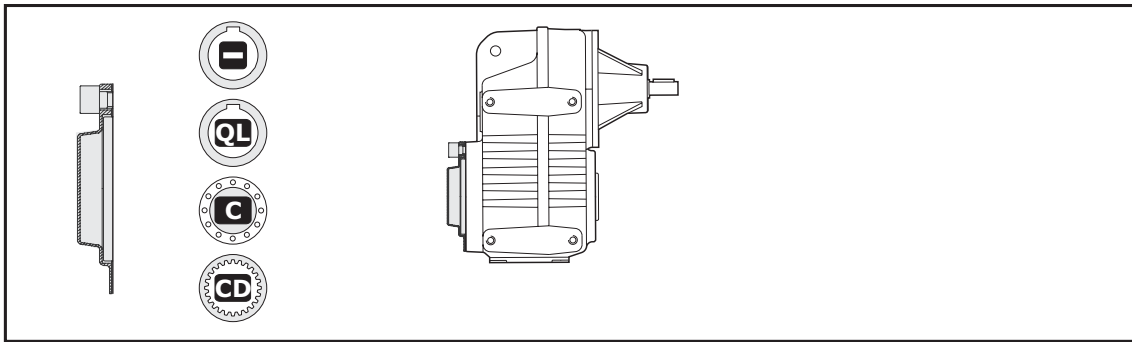
1.9 OPT - ACC. - Accessories - Options

1.9 OPT - ACC. Zubehör - Optionen

**PROT** PROT. - Coperchio di protezione

**PROT.** - Protection cover

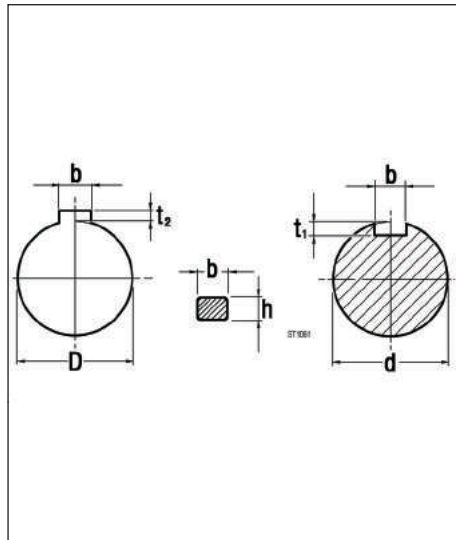
**PROT** - Schutzvorrichtungdeckel



1.10 Linguette

1.10 Keys

1.10 Paßfedern



**Albero entrata**  
*Input shaft*  
**Antriebswelle**

**Albero uscita**  
*Output shaft*  
**Abtriebswelle**

Tab. 4.17

d	bxh	t1	
			0/ +0.1
16	5x5	3	
19	6x6	3.5	
24	8x7	4	0/ +0.2

D	bxh	t2	
			0/ +0.2
25	8x7	3.3	
28	8x7	3.3	0/ +0.2
30	8x7	3.3	0/ +0.2
32	10x8	3.3	0/ +0.2
35	10x8	3.3	0/ +0.2
40	12x8	3.3	0/ +0.2
42	12x8	3.3	0/ +0.2
45	14x9	3.8	0/ +0.2
48	14x9	3.8	0/ +0.2
50	14x9	3.8	0/ +0.2
55	16x10	4.3	0/ +0.2
60	18x11	4.4	0/ +0.3



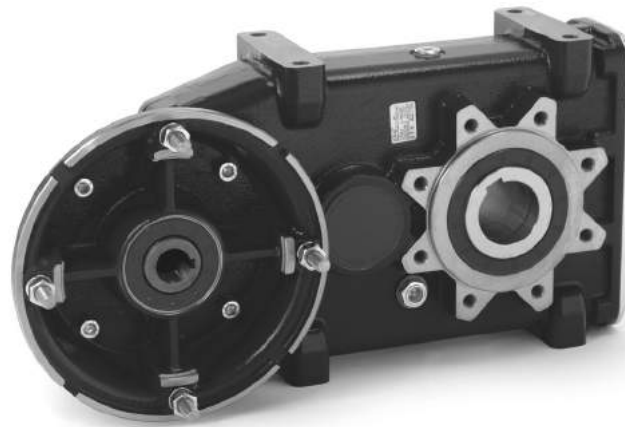




1.0 Riduttori - motoriduttori paralleli - pendolari Lunghi PL  
 1.0 Shaft gearboxes - shaft mounted gearboxes Long version PL  
 1.0 Flach- und Aufsteckgetriebe und-Getriebemotoren PL

PL

1.1	Caratteristiche tecniche	<i>Technical characteristics</i>	Technische Eigenschaften	F1
1.2	Designazione	<i>Designation</i>	Bezeichnungen	F2
1.4	Lubrificazione	<i>Lubrication</i>	Schmierung	F7
1.5	Carichi radiali e assiali	<i>Axial and overhung loads</i>	Radiale und Axiale Belastungen	F8
1.6	Prestazioni riduttori	<i>Gearboxes performances</i>	Leistungen der Getriebe	F9
1.7	Prestazioni motoriduttori	<i>Gearmotors performances</i>	Leistungen der Getriebemotoren	F18
1.8	Dimensioni	<i>Dimensions</i>	Abmessungen	F25
1.9	Accessori	<i>Accessories</i>	Zubehör	F48
1.10	Linguette	<i>Keys</i>	Paßfedern	F49



25 - 45 - 65 - 85 - 95 - 105 - 115 - 125 - 135

### 1.1 Caratteristiche tecniche

Il riduttore a passo lungo per le applicazioni che necessitano di avere il motore e l'applicazione nello stesso lato: il risultato è un'installazione semplice ed estremamente versatile, per molteplici applicazioni quali coclee, mescolatori e sollevamenti. La progettazione di questa serie di riduttori è stata impostata su una struttura monolitica di straordinaria rigidità. Questo permette l'applicazione di carichi elevati senza rischi di deformazione, che ne comprometterebbero le prestazioni.

### 1.1 Technical characteristics

*This extended center distance gearbox is specifically intended for who need to have the engine and the application on the same side: the result is a very flexible and easy to install unit particularly suitable for a wide range of applications such as screw conveyors, mixers and winch/drum lifting drives. The design of this range of gear units is based on one body piece casting giving increased rigidity. This allows to apply high loads without risks of deformation which might negatively affect technical performances.*

### 1.1 Technische Eigenschaften

Das Getriebe mit langem Radstand ist für Anwendungen, bei denen der Motor und die Anwendung auf der gleichen Seite sein müssen: das Ergebnis ist eine einfache und sehr vielfältige Installation für eine Vielzahl von Anwendungen wie Förderschnecken, Mischer und Hebeeinrichtungen. Das Design dieser Getriebeserie basiert auf einer monolithischen Struktur mit außergewöhnlicher Steifigkeit. Hierdurch werden Anwendungen mit hohen Belastungen ermöglicht, ohne die Gefahr einer Verformung, welche die Leistungen beeinträchtigen würde



1.2 Designazione

1.2 Designation

1.2 Bezeichnung

Maschine	Input Version	Size	Output Flange	Output Shaft	Shaft Diameter	Mounting Shaft	Reduction ratio	Input Shaft	Designazione Motori Designation Motors Bezeichnung Motoren	Mounting positions	Position Terminal Box	WEB: Reference Designation			
00 M	01 IV	02 SIZE	03 OF	04 OS	06 SD	07 MS	08 IR	10 IS		11 MP	13 PMT				
PL	M	25	—	—	—	—	Vedi tabelle prestazioni See performance tables	80B5 80B14 ...	—	M1 M2 M3 M4 M5 M6	1 2 3 4	 PLM 25 1: 23.8 80 B5			
		45	—	C	Nessuna indicazione diametro standard	—		—							
		65	—	B	No indications standard diameter	—		—							
		85	F1	D	Keine Angabe Standard-durchmesser	—		—	Look CT 18						
		95	F2	DB	Standard-durchmesser	—		—	—						
	R	105	FA	CD	Ø...	—	Siehe Leistungstabellen	—	—			—	—	—	 PLR 65 F1 1: 138.8
		115	FB	FD	Diametro foro opzionale	—		—	—						
		125	—	FDB	Optional hollow shaft diameter	—		—	—						
		135	—	QL	Optionaler Hohlwellen durchmesser	—		—	—						
		—	—	L	Optionaler Hohlwellen durchmesser	—		—	—			Look CT 18	—	—	
C	—	—	—	—	—	—	—	—	—	—	—				

00 M - Macchina

M - Maschine

M - Getriebe



PL

01 IV - Versione Entrata

IV - Input Version

IV - Antriebsausführung

M	R	C	
	—		25
	—		45
			65
			85
			95
			105
		—	115
		—	125
		—	135

Disponibile / available / verfügbar  
 Non disponibile / not available / nicht verfügbar

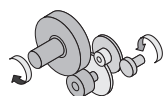
02 SIZE - Grandezza

SIZE - Size

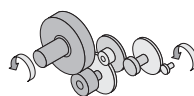
SIZE - Größe

	25	45	65	85	95	105	115	125	135
Stages	/3 and /4					/3			

Senso di Rotazione  
 Rotation sense  
 Drehrichtung



3 - Stage



4 - Stage



1.2 Designazione

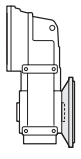
1.2 Designation

1.2 Bezeichnung

03 OF - Flangia Uscita

OF - Output Flange

OF - Flansche am Abtrieb

—	<b>F.</b>
Flangia Uscita F. / Output Flange F. / Flansche am Abtrieb F.	
Senza Flangia Without Flange Ohne Flansche	

Le flange sono disponibili nella versione standard solo come indicato in figura le Flange sono tutte modulari fatta eccezione per la grandezza 65.

*Flanges are only available in standard version as shown in the figure all flanges can be modulated except for dimension 65.*

Die Flanschen sind in der Standard-Version nur so wie abgebildet verfgbar bei allen Flanschen handelt es sich mit Ausnahme der Baugröße 65 um Modulflanschen.

04 OS - Estremità uscita

OS - Output shaft


OS - Wellenende - Abtrieb



— Nessuna indicazione = albero forato;  
**C** = albero forato con calettatore  
**N** = Sporgente Integrale  
**B** = albero bisporgente integrale  
**D** = Sporgente Scanalato  
**DB** = Bisporgente integrale Scanalato  
**CD** = Albero forato Scanalato  
**FD** = Flangia brocciata  
**FDB** = Flangia brocciata Bisporgente  
**QL** = Quick Locking  
**L** = Predisposizione "Quick Locking "

— No indication = shaft with keyway;  
**C** = hollow shaft with shrink disk  
**N** = Output shaft  
**B** = Double integral output shaft  
**D** = Splined output shaft  
**DB** = Double splined shaft  
**CD** = Splined hollow shaft  
**FD** = Broached flange  
**FDB** = Double broached flange  
**QL** = Quick Locking  
**L** = Adjustment "Quick Locking "

— Keine Angabe = Hohlwelle mit Paßfedernut  
**C** = Hohlwelle mit Schrumpfscheibe  
**N** = Holwelle mit Wellenende  
**B** = Doppeltem Integralwelle  
**D** = Abtriebswelle mit Keilende  
**DB** = Doppelseitig verzahnte Welle  
**CD** = Verzahnte Hohlwelle  
**FD** = Geräumtem Flansch  
**FDB** = Geräumter Doppelflansch  
**QL** = Quick Locking  
**L** = Vorbereitung "Quick Locking "

 \* FD - FDB - Contattare il ns. servizio tecnico / Contact our technical dept / Wenden Sie sich an unseren technischen Service

06 SD - Diametro albero










SD - Shaft diameter

SD - Durchmesser Abtriebswelle

— Nessuna indicazione = diametro standard;  
**diametro opzionale** = vedi tabella.



— No indications = standard diameter;  
**optional diameter** = see table.

— Keine Angabe = Standard-durchmesser  
**Optionaler durchmesser** = siehe Tabelle.

											
	Standard	Optional	Standard	Optional	Standard Optional		Standard	Standard	Standard	Standard	Standard
	—	∅...	—	∅..	— (standard) ∅... (Optional)	— (standard) ∅... (Optional)	—	—	—	—	—
<b>25</b>	(∅ 20)	∅ 24 ∅ 19	(∅ 20)	<b>not available</b>	(∅ 20 Standard)		-	-	-	-	-
<b>45</b>	(∅ 30)	∅ 25	(∅ 30)		(∅ 30 Standard)		(DIN 5482 35 x 31)	(DIN 5482 28 x 25)	(DIN 5482 35 x 31)	(DIN 5482 35 x 31)	(DIN 5482 35 x 31)
<b>65</b>	(∅ 35)	∅ 30	(∅ 35)		(∅ 35 Standard)		(DIN 5482 40 x 36)	(DIN 5482 35 x 31)	(DIN 5482 40 x 36)	(DIN 5482 40 x 36)	(DIN 5482 40 x 36)
<b>85</b>	(∅ 45)	∅ 50 ∅ 40	(∅ 45)		(∅ 45 Standard)		(DIN 5482 58 x 53)	(DIN 5482 45 x 41)	(DIN 5482 58 x 53)	(DIN 5482 58 x 53)	(DIN 5482 58 x 53)
<b>95</b>	(∅ 55)	∅ 60 ∅ 50	(∅ 55)		(∅ 55 Standard)		(DIN 5482 70 x 64)	(DIN 5482 55 x 50)	(DIN 5482 70 x 64)	(DIN 5482 70 x 64)	(DIN 5482 70 x 64)
<b>105</b>	(∅ 60)	∅ 70	(∅ 60)	∅ 70	(∅ 60 Standard) ∅ 70 (Optional)	(FIAT 70)	(DIN 5482 70 x 64)	(FIAT 70)	(FIAT 70)	(FIAT 70)	
<b>115</b>	(∅ 70)	∅ 80	(∅ 70)	∅ 80	(∅ 70 Standard) ∅ 80 (Optional)	(FIAT 80)	(DIN 5482 80 x 74)	(FIAT 80)	(FIAT 80)	(FIAT 80)	
<b>125</b>	(∅ 90)	<b>not available</b>	(∅ 90)	<b>not available</b>	(∅ 90 Standard)	(FIAT 95)	(DIN 5482 90 x 84)	(FIAT 95)	(FIAT 95)	(FIAT 95)	
<b>135</b>	(∅ 100)		(∅ 100)		(∅ 100 Standard)	(DIN 5480 105 x 80)	(DIN 5482 100 x 94)	(DIN 5480 105 x 80)	(DIN 5480 105 x 80)		



**1.2 Designazione****06SD - Diametro albero****diametro** = vedi tabella.**1.2 Designation****SD - Shaft diameter****diameter** = see table.**1.2 Bezeichnung****SD - Durchmesser Abtriebswelle****Durchmesser** = siehe Tabelle.

Grandezza Size Größe		
<b>85</b>	∅ 25 - ∅ 30 - ∅ 35 - ∅ 38 - ∅ 40 - ∅ 42 - ∅ 45 - ∅ 48	Contattare nostro ufficio tecnico commerciale Please, contact our technical sales dept. Bitte setzen Sie sich mit unserer technischen Abteilung in Verbindung
<b>95</b>	∅ 35 - ∅ 40 - ∅ 45 - ∅ 48 - ∅ 50 - ∅ 55	
<b>105</b>	∅ 40 - ∅ 45 - ∅ 50 - ∅ 55 - ∅ 60 - ∅ 65	
<b>115</b>	∅ 45 - ∅ 50 - ∅ 55 - ∅ 60 - ∅ 65 - ∅ 70 - ∅ 75	
<b>125</b>	∅ 55 - ∅ 60 - ∅ 65 - ∅ 70 - ∅ 75 - ∅ 80	
<b>135</b>	∅ 70 - ∅ 75 - ∅ 80 - ∅ 85 - ∅ 90	

**07MS - Posizione Albero**


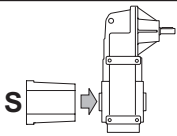

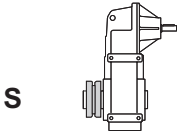
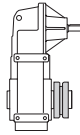

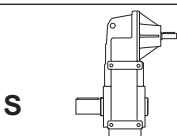
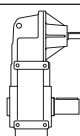

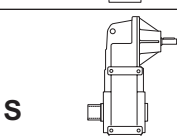
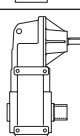

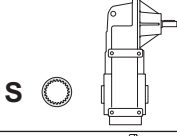
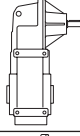

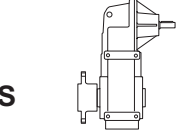
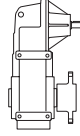
— Nessuna indicazione = lato destro (standard);  
**S** = lato sinistro, montaggio dalla parte opposta (opzionale).

**MS - Mounting Shaft**

— No indication (standard) = on right side;  
**S** = on left side, on the opposite.

**MS - Montageposition Welle**

— Keine Angabe (Standard) = rechts;  
**S** = links.

Quick Locking				
Albero forato con calettatore Hollow shaft with shrink disc Holwelle mit Schrumpfscheibe				—
Sporgente Integrale Output shaft Holwelle mit Wellenende				—
Sporgente Scanalato Splined output shaft Abtriebswelle mit Keilende				—
Albero forato Scanalato Splined hollow shaft Verzähnte Holwelle				—
Flangia brocciata Broached flange Geräumtem Flansch				—

**08 IR- Rapporto di riduzione**

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

**IR - Reduction ratio**

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

**IR - Übersetzungsverhältnis**

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



## 1.2 Designazione

### 10 IS - Albero Entrata

Nella tab. sono riportate le grandezze motore accoppiabili (IEC) unitamente alle dimensioni albero/flangia motore standard

Legenda:

11/140 (B5): combinazioni albero/flangia standard

11/120 : combinazioni albero/flangia a richiesta

## 1.2 Designation

### IS - Input Shaft

In table the possible shaft/flange dimensions IEC standard are listed.

Key:

11/140 : standard shaft/flange combination

11/120 : shaft/flange combinations upon request

## 1.2 Bezeichnung

### IS - Antriebswelle

In Tabelle sind die möglichen Welle/Flansch-Abmessungen IEC-Standard aufgelistet.

Legende:

11/140 : Standardkombinationen Welle/Flansch

11/120 : Sonderkombinationen Welle/Flansch

### Possibili accoppiamenti con motori IEC - Possible couplings with IEC motors - Mögliche Verbindungen mit IEC-Motoren

	IEC	ir (Tutti / All / Alle )
PLR 25/3	80	19/200 (B5) - 19/120 (B14) 19/160 - 19/140 - 19/105 • - 19/90 •
	71	14/160 (B5) - 14/105 (B14) 14/140 - 14/120 - 14/90•
	63	11/140 (B5) - 11/90• (B14) 11/160 - 11/120 - 11/105
PLR25/4	63	11/140 (B5) - 11/90 (B14) 11/120 - 11/80•
	56	9/120 (B5) - 9/80• (B14) 9/140 - 9/90
PLR 45/3	112 <sup>(1)</sup>	28/250 (B5) - 28/160 (B14) 28/140
	100 <sup>(1)</sup>	28/250 (B5) - 28/160 (B14) 28/140
	90	24/200 (B5) - 24/140 (B14) - 24/250 - 24/160 - 24/120
	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140 - 19/105•
PLR 45/4	71	14/160 (B5) - 14/105• (B14) - 14/200 - 14/140 - 14/120
	80	19/200 (B5)
PLR 65	71	14/160 (B5)
	112	28/250• (B5) - 28/160• (B14)
	100	28/250• (B5) - 28/160• (B14)
	90	24/200• (B5) - 24/140• (B14) 24/160• - 24/120•
	80	19/200• (B5) - 19/120• (B14) 19/160• - 19/140•
	71	14/160• (B5) 14/200• - 14/140• - 14/120•
	63	11/140• (B5)
PLR 85	132	38/300• (B5) - 38/200• (B14) 38/250•
	112	28/250• (B5) - 28/160• (B14) 28/200• - 28/300•
	100	28/250• (B5) - 28/160• (B14) 28/200• - 28/300•
	90	24/200• (B5) - 24/140• (B14) 24/300• - 24/250• - 24/160• - 24/120•
	80	19/200• (B5) - 19/120• (B14) 19/160• - 19/140•
	71	14/160• (B5)
PLR 95	160	42/350• (B5) - 42/300• - 42/250•
	132	38/300• (B5) - 38/350• - 38/250•
	112	28/250• (B5) - 28/350• - 28/300•
	100	28/250• (B5) - 28/350• - 28/300•
	90	24/200• (B5)
	80	19/200• (B5)

	IEC	ir (Tutti / All / Alle )
PLR 105	160	42/350• (B5) - 42/300• - 42/250•
	132	38/300• (B5) - 38/350• - 38/250•
	112	28/250• (B5) - 28/350• - 28/300•
	100	28/250• (B5) - 28/350• - 28/300•
	90	24/200• (B5)
	80	19/200• (B5)
PLR 115	200*	55/400 (B5)
	180*	48/350 (B5)
	160*	42/350 (B5)
	132	38/300 (B5) - 38/200 (B14) - 38/250
	112	28/250 (B5) - 28/200 - 28/300
PLR 125	100	28/250 (B5) - 28/200 - 28/300
	225*	60/450 (B5)
	200*	55/400 (B5) - 55/450
	180*	48/350 (B5) - 48/450 - 48/400
	160*	42/350 (B5) - 42/450 - 42/400
	132	38/300 (B5) - 38/200 (B14) - 38/250 (! only ir > 57.2)
	112	28/250 (B5) - 28/200 - 28/300 (! only ir > 57.2)
	100	28/250 (B5) - 28/200 - 28/300 (! only ir > 57.2)
	250*	65/550 (B5)
	225*	60/450 (B5)
PLR 135	200*	55/400 (B5)
	180*	48/350 (B5)
	160*	42/350 (B5)
	132*	38/300 (B5)

<sup>(1)</sup> **ATTENZIONE!-WARNING!-ACHTUNG!** (Vedere paragrafo 1.12- Sezione A)/(Look at chapter 1.12-Section A)/(s. S. 1.12-Abschnitt A)

\* Tutti i PAM sono forniti con giunto ROTEX. Per i PAM segnati da asterisco vedere le prescrizioni (per prescrizioni di montaggio vedere sezione A paragrafo "Installazione" - 1.12)

\* All PAM configurations supplied with ROTEX coupling. Where PAM configuration is marked with an asterisk, see directions (for mounting directions, see section A, paragraph "Installation" - 1.12

\* Alle PAM werden sie mit Kupplung Typ ROTEX geliefert. Bei den mit einem Sternchen gekennzeichneten PAM siehe Vorgaben (hinsichtlich Montagegenauigkeit siehe Abschnitt A im Paragraph "Einbau" - 1.12).



**Posizione morsetti - Vedere - 13 - PMT - Pagina F6**  
**Terminal board position - Look - 13 - PMT - Page F6**  
**Lage des Klemmenkastens - Siehe - 13 - PMT - Auf Seite F6**

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

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

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

### 10 IS - Albero Entrata

— Nessuna indicazione = diametro standard;

### IS - Input Shaft

— No indications = standard diameter;

### IS - Antriebswelle

— Keine Angabe = Standard-durchmesser

PLR	65	85	95	105	115	125	135
	(Ø 16)	(Ø 19)	(Ø 24)	(Ø 24)	(Ø 28)	(Ø 38)	(Ø 48)

**1.2 Designazione****1.2 Designation****1.2 Bezeichnung****11 MP - Posizioni di montaggio**

**[M2, M3, M4, M5, M6]** Posizioni di montaggio con indicazione dei tappi di livello, carico e scarico; se non specificato si considera standard la posizione **M1** (vedi par. 1.4)

**MP - Mounting positions**

**[M2, M3, M4, M5, M6]** Mounting position with indication of breather level and drain plugs; if not specified, standard position is **M1** (see par. 1.4).

**MP - Einbaulagen**

Montageposition **[M2, M3, M4, M5, M6]** mit Angabe von - Entlüftung, Schaugläsern und Ablassschraube. Wenn nicht näher spezifiziert, wird die Standard - position **M1** zugrunde gelegt (s. Abschnitt 1.4).

**12 OPT-ACC. - Opzioni****OPT-ACC - Options****OPT-ACC. - Optionen**

vedi par. 1.9 see pa. 1.9 s. Abschnitt 1.9	<b>ACC1</b>	<b>AL</b>	Alberi lenti - AL	Output shafts - AL	Abtriebswellen - AL
		<b>PROT.</b>	Coperchio di protezione	Protection cover	Schutzvorrichtungdeckel
		<b>FF</b>	FF - Kit	FF - Kit	FF - Kit
		<b>RR</b>	Kit rosetta di montaggio	Mounting washer kit	Kit Montagescheibe
<b>ACC3</b>	<b>AV</b>	ANTIVIBRANTE VKL	RUBBER BUFFER VKL	GUMMIHÜLSE VKL	

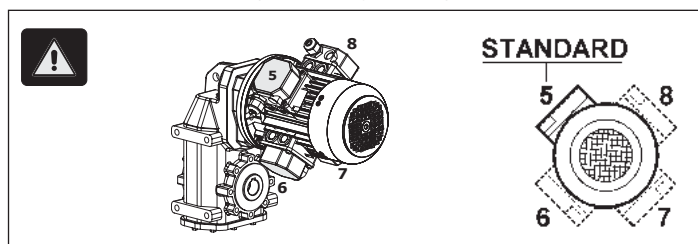
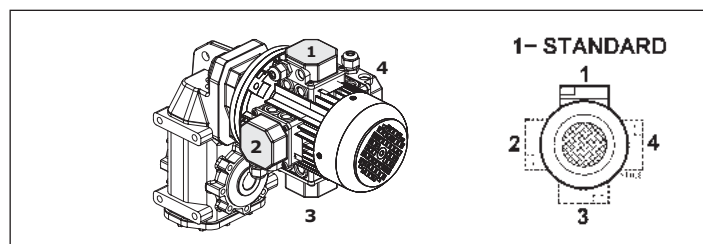
vedi Sezione A-1.12 see Section A-1.12 s. Abschnitt A-1.12	<b>OPT.</b>	<b>OPT</b>	Materiale degli anelli di tenuta	Materials of Seals	Dichtungstoffe
		<b>OPT1</b>	Stato fornitura olio	Scope of the supply - Options - OIL	Optionen - Lieferzustand - Optionen - Öl
		<b>OPT2</b>	Verniciatura	Painting and surface protection	Lackierung und Oberflächenschutz

**13 PMT - Posizioni della Morsettieria****PMT - Position Terminal Box****PMT - Montagposition Klemmenkasten****PLM - 25-45-115-125-135**

**[2, 3, 4]** Posizione della morsettieria del motore se diversa da quella standard (1).

**[2, 3, 4]** Position of the motor terminal box if different from the standard one (1).

Montageposition Klemmenkasten **[2, 3, 4]**, wenn abweichend von Standardposition **[1]** (für Motorgetriebe).



**N.B.**  
La configurazione standard della flangia attacco motore prevede 4 fori a 45°.

**Note.**  
The standard configuration for the 4 holes is 45° to the axles (like an x: see par 2.3).

**HINWEIS.**  
In der Standardkonfiguration sind die 4 Flanschbohrungen im 45°-Winkel zu den Achsen angeordnet

Per le flange contrassegnate con il simbolo (\*) (vedi pagina F5) i fori per il fissaggio al motore sono disposti in croce (esempio +). Pertanto è opportuno valutare l'ingombro della morsettieria del motore che verrà installato in quanto essa verrà a trovarsi orientata a 45° rispetto agli assi. Per la scelta della posizione della morsettieria rispetto agli assi fare riferimento allo schema seguente (in cui la posizione 5 è quella standard):

For the flanges marked with (\*) (see page F5) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please choose the terminal board position referring to the following sketch (in which n° 5 is the standard position):

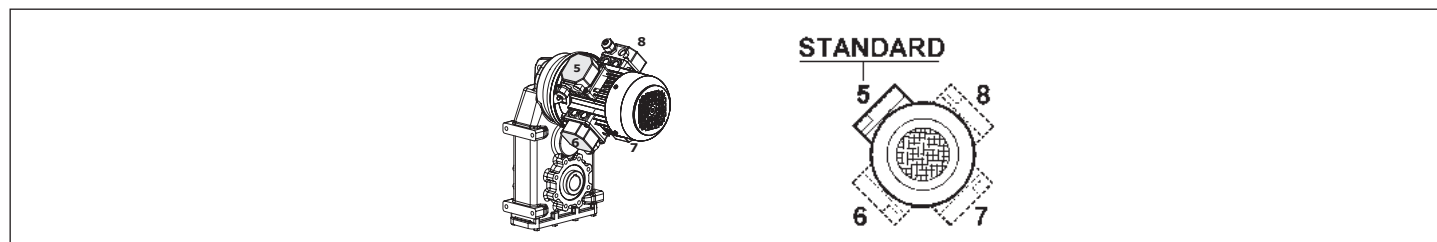
Bei Flanschen, die mit (\*) (Siehe auf Seite F5) gekennzeichnet sind, sind die Bohrungen auf den Achsen angeordnet (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird. Die Lage des Klemmenkastens des Motors wählen Sie bitte anhand der folgenden Skizze (Pos. 5 ist Standardposition):

**PLM - 65-85-95-105**

**[6, 7, 8]** Posizione della morsettieria del motore se diversa da quella standard (5).

**[6, 7, 8]** Position of the motor terminal box if different from the standard one (5).

Montageposition Klemmenkasten **[6, 7, 8]**, wenn abweichend von Standardposition **[5]** (für Motorgetriebe).



Per le flange contrassegnate con il simbolo (\*) (vedi pagina F5) i fori per il fissaggio al motore sono disposti in croce (esempio +). Pertanto è opportuno valutare l'ingombro della morsettieria del motore che verrà installato in quanto essa verrà a trovarsi orientata a 45° rispetto agli assi.

For the flanges marked with (\*) (see page F5) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles.

Bei Flanschen, die mit (\*) (Siehe auf Seite F5) gekennzeichnet sind, sind die Bohrungen auf den Achsen angeordnet (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird.



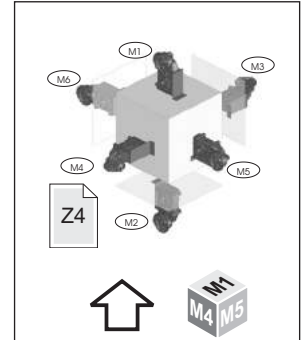
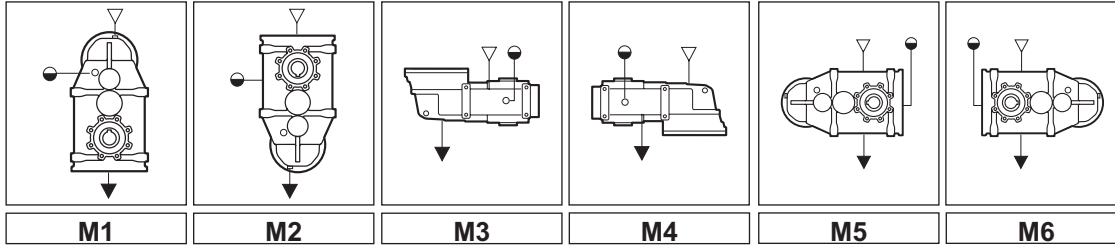
1.4 Lubrificazione

1.4 Lubrication

1.4 Schmierung



Posizioni di montaggio  
Mounting positions  
Montagepositionen



- ▽ Carico / Breather plug / Einfüll-u. Entlüftungsschraube
- Livello / Level plug / Schauglas
- ▼ Scarico / Drain plug / Ablasschraube

Posizioni di montaggio - Mounting positions - Montagepositionen		
	Posizioni Positions Positionen	Prescrizioni da indicare in fase d'ordine Ordering requirements Anforderungen bei der Bestellung
PLR PLM PLC	25	Necessaria Necessary Erforderlich
	45	
	65	
	85	
	95	
	105	
	115	
	125	
	135	

TARGHETTA - RIDUTTORE

NON NECESSARIA

Indicata sempre nella targhetta del riduttore la posizione di montaggio "M6".

NECESSARIA

La posizione richiesta è indicata nella targhetta del riduttore

Identification Plate - Gearbox

NOT NECESSARY

The mounting position is always indicated on the nameplate "M6".

NECESSARY

The indication it on the label of the gearbox

Typeschild - Getriebe

NICHT ERFORDERLICH

Die Einbaulage ist immer auf dem Typenschild angegeben "M6".

ERFORDERLICH

Findet man die angefragte Position auf dem Typenschild des Getriebe

Lub	Quantità di lubrificante - Lubricant Quantity - Schmiermittelmenge - [Kg]								OPT1	Tappi-Plug-Stopfen		
		M1	M2	M3	M4	M5	M6	N°		Diameter	Type	
PLR PLM PLC	25	0.700	0.600	0.600	0.600	0.500	0.500	INOIL_STD	1	1/4"		
	45	1.300	0.900	1.300	1.300	1.200	1.200		1	1/4"		
	65	1.850	1.350	1.550	1.550	1.400	1.400		1	3/8"		
		85	3.700	2.400	3.150	2.900	2.300	2.300	OUTOIL	5	3/8"	
		95	6.100	4.550	5.250	4.550	3.550	3.550		5	3/8"	
		105	12.00	7.200	9.200	8.500	6.600	6.600		5	1/2"	
		115	20.00	12.50	15.30	13.30	11.00	11.00		5	1/2"	
		125	31.00	19.00	24.00	22.00	16.00	16.00		5	1/2"	
		135	41.00	30.00	30.00	32.70	20.00	20.00		5	1/2"	



Quantità indicative; durante il riempimento attenersi alla spia di livello.

Indicative quantities, check the oil sight glass during filling.

Richtungsweisende Mengen, bei der Auffüllung auf das Füllstand-Kontrollfenster Bezug nehmen.



**Attenzione !:**  
Il tappo di sfiato è allegato solo nei riduttori che hanno più di un tappo olio

**Warning!:**  
A breather plug is supplied only with worm gearboxes that have more than one oil plug

**Achtung!:**  
Der Entlüftungstopfen ist lediglich bei den Getrieben vorhanden, die über mehr als einen Öfüllstopfen verfügen

**Nota:** Se in fase d'ordine la posizione di montaggio è omessa, il riduttore verrà fornito con i tappi predisposti per la posizione M6.

**Note:** If the mounting position is not specified in the order, the worm gearbox supplied will have plugs pre-arranged for position M6.

**Anmerkung:** Sollte in der Auftragsphase die Einbaulage nicht angegeben werden, wird das Getriebe mit Stopfen für die Einbaulage M6.

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

**The supply of gearboxes with different plug pre-arrangements has to be agreed with the manufacturer.**

**Lieferungen, die eine Auslegung hinsichtlich der Stopfen aufweisen, die von den Angaben in der Tabelle abweichen, müssen vorab vereinbart werden.**



### 1.5 Carichi radiali e assiali

Quando la trasmissione del moto avviene tramite meccanismi che generano carichi radiali sull'estremità dell'albero, è necessario verificare che i valori risultanti non eccedano quelli indicati nelle tabelle.

Nella Tab. 1.2 sono riportati i valori dei carichi radiali ammissibili per l'albero veloce ( $F_{r1}$ ). Come carico assiale ammissibile contemporaneo si ha:

$$F_{a1} = 0.2 \times F_{r1}$$

In Tab. 1.3 sono riportati i valori dei carichi radiali ammissibili per l'albero lento ( $F_{r2}$ ). Come carico assiale ammissibile contemporaneo si ha:

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

Tab. 1.2

$n_1$ [min <sup>-1</sup> ]	$F_{r1}$ [N]											
	PLR.											
	25/3	25/4	45/3	45/4	65/3	85/3	95/3	105/3	115/3	125/3	135/3	
2800					430	520	600	600	1000	1250	*	
1400					550	700	800	800	1200	1500	*	
900					600	800	920	920	1300	1600	*	
500					850	1100	1300	1300	1500	1800	*	

Tab. 1.3

$n_2$ [min <sup>-1</sup> ]	$F_{r2}$ [N]									
	PLM. - PLR. - PLC.									
	25	45	65	85	95	105	115	125	135	
160	1300	3550	5775	8000	14000	17500	22100	24800	32000	
125	1300	3750	6875	10000	16000	18000	22500	26000	33500	
90	1800	4000	7000	10000	16000	19000	23500	27000	35200	
60	1800	4500	7550	10600	18000	23000	27500	34200	44600	
40	1800	5000	8400	11800	20000	29000	34000	41000	53200	
25	2300	5000	8750	12500	20000	30000	40000	50000	60000	
16	2300	5000	8750	12500	20000	32500	43000	57000	65000	
10	2800	5000	8750	12500	20000	32500	43000	57000	65000	
5	3000	5000	8750	12500	20000	32500	43000	57000	65000	

\* Richiedere ad Ufficio Tecnico/ Request to our Technical Dept. / Bei der Technischen Abteilung anfordern

I carichi radiali indicati nelle tabelle si intendono applicati a metà della sporgenza dell'albero lento standard (vedi fig. 8.14) e sono riferiti ai riduttori operanti con fattore di servizio 1. Valori intermedi relativi a velocità non riportate possono essere ottenuti per interpolazione considerando però che  $F_{r1}$  a 500 min<sup>-1</sup> e  $F_{r2}$  a 5 min<sup>-1</sup> rappresentano i carichi massimi consentiti. Per i carichi non agenti sulla mezzeria dell'albero lento o veloce si ha:

- a 0.3 della sporgenza:  
 $F_{rx} = 1.25 \times F_{r1-2}$
- a 0.8 dalla sporgenza:  
 $F_{rx} = 0.8 \times F_{r1-2}$

### 1.5 Axial and overhung load

Should transmission movement determine radial loads on the angular shaft end, it is necessary to make sure that resulting values do not exceed the ones indicated in the tables.

In Table 1.2 permissible radial load for input shaft are listed ( $F_{r1}$ ). Contemporary permissible axial load is given by the following formula:

$$F_{a1} = 0.2 \times F_{r1}$$

In Table 1.3 permissible radial loads for output shaft are listed ( $F_{r2}$ ). Permissible axial load is given by the following formula:

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

### 1.5 Radiale und axiale Belastungen

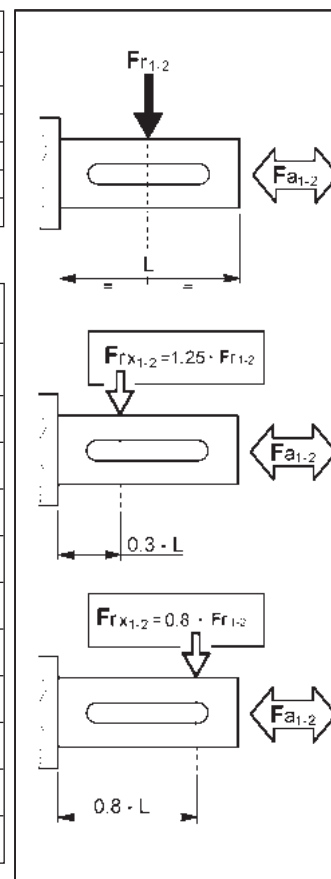
Wird das Wellenende auch durch Radialkräfte belastet, so muß sichergestellt werden, daß die resultierenden Werte die in der Tabelle angegebenen nicht überschreiten.

In Tabelle 1.2 sind die Werte der zulässigen Radialbelastungen für die Antriebswelle ( $F_{r1}$ ) angegeben. Die Axialbelastung beträgt dann:

$$F_{a1} = 0.2 \times F_{r1}$$

In Tabelle 1.3 sind die Werte der zulässigen Radialbelastungen für die Abtriebswelle ( $F_{r2}$ ) angegeben. Als zulässige Axialbelastung gilt:

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



The radial loads shown in the tables are applied on the middle of standard shaft extensions (see fig.8.14). Base of these values is a service factor 1.

Values for speeds that are not listed can be obtained through interpolation but it must be considered that  $F_{r1}$  at 500 min<sup>-1</sup> and  $F_{r2}$  at 5 min<sup>-1</sup> represent the maximum allowable loads.

For radial loads which are not applied on the middle of the shafts, the following values can be calculated:

- at 0.3 from extension:  
 $F_{rx} = 1.25 \times F_{r1-2}$
- at 0.8 from extension:  
 $F_{rx} = 0.8 \times F_{r1-2}$

Bei den in der Tabelle angegebenen Radialbelastungen wird eine Krafteinwirkung auf die Mitte der Standardwelle (s. A.8.14) angenommen; außerdem wird ein Betriebsfaktor 1 zugrunde gelegt. Zwischenwerte für nicht aufgeführte Drehzahlen können durch Interpolation ermittelt werden. Hierbei ist jedoch zu berücksichtigen, daß  $F_{r1}$  bei 500 min<sup>-1</sup> und für  $F_{r2max}$  bei 5 min<sup>-1</sup> die maximal zulässigen Belastungen repräsentieren.

Ist die Einwirkung der Radialkraft nicht in der Mitte der Welle, so können die zulässigen Radiallasten folgendermaßen ermittelt werden:

- 0.3 vom Wellenabsatz entfernt:  
 $F_{rx} = 1.25 \times F_{r1-2}$
- 0.8 vom Wellenabsatz entfernt:  
 $F_{rx} = 0.8 \times F_{r1-2}$



1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

PLR 25/3															Kg	4.6	IEC		
ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>						
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>				P	RD
min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%				
17,2	162,3	90	1,64	93	81,2	100	0,91	93	52,2	110	0,64	93	29,0	110	0,36	93			
20,4	137,5	90	1,39	93	68,8	100	0,77	93	44,2	110	0,54	93	24,6	110	0,30	93			
23,8	117,7	90	1,19	93	58,9	100	0,66	93	37,8	110	0,46	93	21,0	110	0,26	93			
27,4	102,2	90	1,04	93	51,1	100	0,58	93	32,8	110	0,40	93	18,2	110	0,23	93			
32,0	87,5	90	0,89	93	43,7	100	0,49	93	28,1	110	0,34	93	15,6	110	0,19	93			
36,9	75,8	90	0,77	93	37,9	100	0,43	93	24,4	110	0,30	93	13,5	110	0,17	93			
42,6	65,7	90	0,67	93	32,8	100	0,37	93	21,1	110	0,26	93	11,7	110	0,15	93			
54,8	51,1	90	0,52	93	25,6	100	0,29	93	16,4	110	0,20	93	9,1	110	0,11	93			
64,6	43,3	90	0,44	93	21,7	100	0,24	93	13,9	110	0,17	93	7,7	110	0,10	93			
75,5	37,1	90	0,38	93	18,5	100	0,21	93	11,9	110	0,15	93	6,6	110	0,08	93			
87,0	32,2	90	0,33	93	16,1	100	0,18	93	10,3	110	0,13	93	5,7	110	0,07	93			
101,6	27,5	90	0,28	93	13,8	100	0,16	93	8,9	110	0,11	93	4,9	110	0,06	93			
117,3	23,9	90	0,24	93	11,9	100	0,13	93	7,7	110	0,09	93	4,3	110	0,05	93			
135,3	20,7	90	0,21	93	10,3	100	0,12	93	6,7	110	0,08	93	3,7	110	0,05	93			
159,1	17,6	90	0,18	93	8,8	100	0,10	93	5,7	110	0,07	93	3,1	110	0,04	93			
187,8	14,9	90	0,15	93	7,5	100	0,08	93	4,8	110	0,06	93	2,7	110	0,03	93			
213,9	13,1	90	0,13	93	6,5	100	0,07	93	4,2	110	0,05	93	2,3	110	0,03	93			
254,1	11,0	90	0,11	93	5,5	100	0,06	93	3,5	110	0,04	93	2,0	110	0,02	93			

80  
(B5-B14)  
71  
(B5-B14)  
63  
(B5-B14)



PLR 25/4															Kg	4.6	IEC		
ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>						
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>				P	RD
min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%				
280,1	10,0	90	0,10	91	5,0	100	0,06	91	3,2	110	0,04	91	1,8	110	0,02	91			
327,1	8,6	90	0,09	91	4,3	100	0,05	91	2,8	110	0,03	91	1,5	110	0,02	91			
377,0	7,4	90	0,08	91	3,7	100	0,04	91	2,4	110	0,03	91	1,3	110	0,02	91			
440,4	6,4	90	0,07	91	3,2	100	0,04	91	2,0	110	0,03	91	1,1	110	0,01	91			
508,2	5,5	90	0,06	91	2,8	100	0,03	91	1,8	110	0,02	91	1,0	110	0,01	91			
586,4	4,8	90	0,05	91	2,4	100	0,03	91	1,5	110	0,02	91	0,85	110	0,01	91			
689,4	4,1	90	0,04	91	2,0	100	0,02	91	1,3	110	0,02	91	0,73	110	0,01	91			
813,8	3,4	90	0,04	91	1,7	100	0,02	91	1,1	110	0,01	91	0,61	110	0,01	91			
927,0	3,0	90	0,03	91	1,5	100	0,02	91	1,0	110	0,01	91	0,54	110	0,01	91			
1101	2,5	90	0,03	91	1,3	100	0,01	91	0,82	110	0,01	91	0,45	110	0,01	91			

63  
(B5-B14)  
56  
(B5-B14)

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	4.0



1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

**PLR 45/3**

**Kg** 12.1

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	
28,7	97,7	225	2,5	93	48,8	250	1,4	93	31,4	270	0,96	93	17,4	270	0,53	93	112 (B5-B14)  100 (B5-B14)  90 (B5-B14)  80 (B5-B14)  71 (B5-B14)
32,0	87,5	225	2,2	93	43,8	250	1,2	93	28,1	270	0,86	93	15,6	270	0,48	93	
40,9	68,4	225	1,7	93	34,2	250	0,96	93	22,0	270	0,67	93	12,2	270	0,37	93	
45,7	61,3	225	1,6	93	30,7	250	0,86	93	19,7	270	0,60	93	11,0	270	0,33	93	
52,8	53,0	225	1,3	93	26,5	250	0,75	93	17,0	270	0,52	93	9,5	270	0,29	93	
60,1	46,6	225	1,2	93	23,3	250	0,66	93	15,0	270	0,46	93	8,3	270	0,25	93	
70,6	39,7	225	1,0	93	19,8	250	0,56	93	12,7	270	0,39	93	7,1	270	0,22	93	
85,7	32,7	225	0,83	93	16,3	250	0,46	93	10,5	270	0,32	93	5,8	270	0,18	93	
100,7	27,8	225	0,70	93	13,9	250	0,39	93	8,9	270	0,27	93	5,0	270	0,15	93	
107,1	26,1	225	0,66	93	13,1	250	0,37	93	8,4	270	0,26	93	4,7	270	0,14	93	
132,7	21,1	225	0,53	93	10,6	250	0,30	93	6,8	270	0,21	93	3,8	270	0,11	93	
152,9	18,3	225	0,46	93	9,2	250	0,26	93	5,9	270	0,18	93	3,3	270	0,10	93	
188,9	14,8	225	0,38	93	7,4	250	0,21	93	4,8	270	0,15	93	2,6	270	0,08	93	
232,0	12,1	225	0,31	93	6,0	250	0,17	93	3,9	270	0,12	93	2,2	270	0,07	93	

**PLR 45/4**

**Kg** 12.5

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	
301,6	9,3	225	0,24	91	4,6	250	0,13	91	3,0	270	0,09	91	1,7	270	0,05	91	80 (B5)  71 (B5)
366,2	7,6	225	0,20	91	3,8	250	0,11	91	2,5	270	0,08	91	1,4	270	0,04	91	
430,4	6,5	225	0,17	91	3,3	250	0,09	91	2,1	270	0,07	91	1,2	270	0,04	91	
457,8	6,1	225	0,16	91	3,1	250	0,09	91	2,0	270	0,06	91	1,1	270	0,03	91	
566,8	4,9	225	0,13	91	2,5	250	0,07	91	1,6	270	0,05	91	0,88	270	0,03	91	
653,3	4,3	225	0,11	91	2,1	250	0,06	91	1,4	270	0,04	91	0,77	270	0,02	91	
807,0	3,5	225	0,09	91	1,7	250	0,05	91	1,1	270	0,03	91	0,62	270	0,02	91	
991,4	2,8	225	0,07	91	1,4	250	0,04	91	0,91	270	0,03	91	0,50	270	0,02	91	

Pt <sub>N</sub> [kW]	tutti i rapporti <i>all ratios</i> alle Untersetzungen
	6.5



1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

**PLR 65/3**



18

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	
26,4	106,2	540	6,5	93	53,1	600	3,6	93	34,1	650	2,5	93	19,0	650	1,4	93	112 (B5-B14) 100 (B5-B14) 90 (B5-B14) 80 (B5-B14) 71 B5 63 B5
32,3	86,7	540	5,3	93	43,3	600	2,9	93	27,9	650	2,0	93	15,5	650	1,1	93	
37,6	74,5	540	4,5	93	37,3	600	2,5	93	24,0	650	1,8	93	13,3	650	1,0	93	
46,0	60,8	540	3,7	93	30,4	600	2,1	93	19,6	650	1,4	93	10,9	650	0,79	93	
54,3	51,5	540	3,1	93	25,8	600	1,7	93	16,6	650	1,2	93	9,2	650	0,67	93	
64,4	43,4	540	2,6	93	21,7	600	1,5	93	14,0	650	1,0	93	7,8	650	0,57	93	
74,4	37,6	540	2,3	93	18,8	600	1,3	93	12,1	650	0,89	93	6,7	650	0,49	93	
85,4	32,8	540	2,0	93	16,4	600	1,1	93	10,5	650	0,77	93	5,9	650	0,43	93	
99,0	28,3	540	1,7	93	14,1	600	0,96	93	9,1	650	0,67	93	5,0	650	0,37	93	
116,2	24,1	540	1,5	93	12,0	600	0,81	93	7,7	650	0,57	93	4,3	650	0,31	93	
138,8	20,2	540	1,2	93	10,1	600	0,68	93	6,5	650	0,48	93	3,6	650	0,26	93	
152,8	18,3	540	1,1	93	9,2	600	0,62	93	5,9	650	0,43	93	3,3	650	0,24	93	
175,4	16,0	540	1,0	93	8,0	600	0,54	93	5,1	650	0,38	93	2,9	650	0,21	93	
197,9	14,1	540	0,86	93	7,1	600	0,48	93	4,5	650	0,33	93	2,5	650	0,18	93	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	8.0

F







1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

**PLR 85/3**



ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	
23,8	117,9	720	9,6	93	58,9	800	5,3	93	37,9	850	3,7	93	21,0	850	2,0	93	132 (B5-B14) 112 (B5-B14) 100 (B5-B14) 90 (B5-B14) 80 (B5-B14) 71 B5
27,5	101,7	855	9,8	93	50,8	950	5,4	93	32,7	1000	3,8	93	18,2	1000	2,0	93	
34,5	81,2	990	9,1	93	40,6	1100	5,0	93	26,1	1150	3,5	93	14,5	1150	1,9	93	
38,7	72,3	1080	8,8	93	36,1	1200	4,9	93	23,2	1300	3,4	93	12,9	1300	1,9	93	
43,7	64,1	1080	7,8	93	32,0	1200	4,3	93	20,6	1300	3,0	93	11,4	1300	1,7	93	
56,3	49,7	1080	6,0	93	24,9	1200	3,4	93	16,0	1300	2,4	93	8,9	1300	1,3	93	
63,9	43,8	1080	5,3	93	21,9	1200	3,0	93	14,1	1300	2,1	93	7,8	1300	1,1	93	
74,0	37,8	1080	4,6	93	18,9	1200	2,6	93	12,2	1300	1,8	93	6,8	1300	1,0	93	
84,9	33,0	1080	4,0	93	16,5	1200	2,2	93	10,6	1300	1,6	93	5,9	1300	0,86	93	
98,0	28,6	1080	3,5	93	14,3	1200	1,9	93	9,2	1300	1,4	93	5,1	1300	0,75	93	
113,5	24,7	1080	3,0	93	12,3	1200	1,7	93	7,9	1300	1,2	93	4,4	1300	0,64	93	
136,8	20,5	1080	2,5	93	10,2	1200	1,4	93	6,6	1300	0,97	93	3,7	1300	0,54	93	
160,0	17,5	1080	2,1	93	8,7	1200	1,2	93	5,6	1300	0,83	93	3,1	1300	0,46	93	
184,6	15,2	1080	1,8	93	7,6	1200	1,0	93	4,9	1300	0,72	93	2,7	1300	0,40	93	
204,1	13,7	1080	1,7	93	6,9	1200	0,93	93	4,4	1300	0,65	93	2,4	1300	0,36	93	
214,0	13,1	1080	1,6	93	6,5	1200	0,88	93	4,2	1300	0,62	93	2,3	1300	0,34	93	
234,0	12,0	1080	1,5	93	6,0	1200	0,81	93	3,8	1300	0,57	93	2,1	1300	0,31	93	
270,0	10,4	1080	1,3	93	5,2	1200	0,70	93	3,3	1300	0,49	93	1,9	1300	0,27	93	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	11.0



1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

PLR 95/3



55

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	
23,6	118,4	1440	19,2	93	59,2	1600	10,7	93	38,1	1742	7,5	93	21,2	1742	4,1	93	160 B5 132 B5 112 B5 100 B5 90 B5 80 B5
27,4	102,2	1620	18,6	93	51,1	1800	10,4	93	32,9	1960	7,2	93	18,3	1960	4,0	93	
32,9	85,1	1890	18,1	93	42,5	2100	10,1	93	27,3	2287	7,0	93	15,2	2287	3,9	93	
40,5	69,1	1890	14,7	93	34,6	2100	8,2	93	22,2	2287	5,7	93	12,3	2287	3,2	93	
46,9	59,7	1890	12,7	93	29,8	2100	7,1	93	19,2	2287	4,9	93	10,7	2287	2,7	93	
54,7	51,2	1890	10,9	93	25,6	2100	6,0	93	16,4	2287	4,2	93	9,1	2287	2,4	93	
65,4	42,8	1980	9,6	93	21,4	2200	5,3	93	13,8	2396	3,7	93	7,7	2396	2,1	93	
74,2	37,7	2100	9,2	93	18,9	2400	5,1	93	12,1	2400	3,6	93	6,7	2400	1,8	93	
86,0	32,5	2100	7,9	93	16,3	2400	4,4	93	10,5	2400	3,1	93	5,8	2400	1,6	93	
98,4	28,4	2100	6,9	93	14,2	2400	3,8	93	9,1	2400	2,7	93	5,1	2400	1,4	93	
116,0	24,1	2100	5,9	93	12,1	2400	3,3	93	7,8	2400	2,3	93	4,3	2400	1,2	93	
134,4	20,8	2100	5,1	93	10,4	2400	2,8	93	6,7	2400	2,0	93	3,7	2400	1,01	93	
158,9	17,6	2100	4,3	93	8,8	2400	2,4	93	5,7	2400	1,7	93	3,1	2400	0,85	93	
187,1	15,0	2100	3,6	93	7,5	2400	2,0	93	4,8	2400	1,4	93	2,7	2400	0,72	93	
199,5	14,0	2100	3,4	93	7,0	2400	1,9	93	4,5	2400	1,3	93	2,5	2400	0,68	93	
221,3	12,7	2100	3,1	93	6,3	2400	1,7	93	4,1	2400	1,2	93	2,3	2400	0,61	93	
243,2	11,5	2100	2,8	93	5,8	2400	1,6	93	3,7	2400	1,1	93	2,1	2400	0,56	93	
266,2	10,5	2100	2,6	93	5,3	2400	1,4	93	3,4	2400	1,0	93	1,9	2400	0,51	93	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	16.0

N.B.  
Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni

NOTE.  
Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our

HINWEIS.  
Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. par.A-1.5).

N.B.  
I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE.  
Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS.  
Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

PLR 105/3



ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	
20.6	136,2	2250	34,1	94	68,1	2500	19,0	94	43,8	2722	13,3	94	24,3	2722	7,4	94	160 B5 132 B5 112 B5 100 B5 90 B5 80 B5
22.5	124,4	2295	31,8	94	62,2	2550	17,7	94	40,0	2777	12,4	94	22,2	2777	6,9	94	
23.9	117,1	2295	29,9	94	58,6	2550	16,6	94	37,7	2777	11,6	94	20,9	2777	6,5	94	
28.6	97,8	2340	25,5	94	48,9	2600	14,2	94	31,4	2831	9,9	94	17,5	2831	5,5	94	
31.3	89,4	2520	25,1	94	44,7	2800	13,9	94	28,7	3049	9,8	94	16,0	3049	5,4	94	
35.2	79,5	2520	22,3	94	39,7	2800	12,4	94	25,5	3049	8,7	94	14,2	3049	4,8	94	
38.5	72,6	2520	20,4	94	36,3	2800	11,3	94	23,3	3049	7,9	94	13,0	3049	4,4	94	
44.9	62,3	2520	17,5	94	31,2	2800	9,7	94	20,0	3049	6,8	94	11,1	3049	3,8	94	
50.7	55,2	2520	15,5	94	27,6	2800	8,6	94	17,7	3049	6,0	94	9,9	3049	3,3	94	
55.0	50,9	2610	14,8	94	25,5	2900	8,2	94	16,4	3158	5,8	94	9,1	3158	3,2	94	
62.7	44,6	2610	13,0	94	22,3	2900	7,2	94	14,3	3158	5,0	94	8,0	3158	2,8	94	
70.7	39,6	2610	11,5	94	19,8	2900	6,4	94	12,7	3158	4,5	94	7,1	3158	2,49	94	
79.8	35,1	2700	10,5	94	17,5	3000	5,9	94	11,3	3267	4,1	94	6,3	3267	2,28	94	
87.4	32,0	2790	10,0	94	16,0	3100	5,5	94	10,3	3376	3,9	94	5,7	3376	2,15	94	
90.6	30,9	2880	9,9	94	15,5	3200	5,5	94	9,9	3484	3,9	94	5,5	3484	2,14	94	
100.4	27,9	2970	9,2	94	13,9	3300	5,1	94	9,0	3593	3,6	94	5,0	3593	1,99	94	
110.5	25,3	2970	8,4	94	12,7	3300	4,7	94	8,1	3593	3,3	94	4,5	3593	1,81	94	
126.1	22,2	3060	7,6	94	11,1	3400	4,2	94	7,1	3702	2,9	94	4,0	3702	1,64	94	
139.9	20,0	3060	6,8	94	10,0	3400	3,8	94	6,4	3702	2,7	94	3,6	3702	1,47	94	
153.9	18,2	3105	6,3	94	9,1	3450	3,5	94	5,8	3757	2,4	94	3,2	3757	1,36	94	
169.2	16,6	3150	5,8	94	8,3	3500	3,2	94	5,3	3811	2,3	94	3,0	3811	1,25	94	
185.2	15,1	3150	5,3	94	7,6	3500	2,9	94	4,9	3811	2,1	94	2,7	3811	1,15	94	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	22.0

N.B.  
Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni

NOTE.  
Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our

HINWEIS.  
Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. par.A-1.5).

N.B.  
I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE.  
Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS.  
Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

PLR 115/3



ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC	
	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %		
26.9	103,9	3780	43,8	94	52,0	4200	24,3	94	33,4	4573	17,0	94	18,6	4573	9,5	94	200 B5	
32.1	87,2	3960	38,5	94	43,6	4400	21,4	94	28,0	4791	15,0	94	15,6	4791	8,3	94		180 B5
37.9	73,9	3960	32,6	94	36,9	4400	18,1	94	23,7	4791	12,7	94	13,2	4791	7,0	94		
40.6	69,0	4500	34,6	94	34,5	5000	19,2	94	22,2	5444	13,5	94	12,3	5444	7,5	94		132 B5
45.5	61,5	4500	30,8	94	30,7	5000	17,1	94	19,8	5444	12,0	94	11,0	5444	6,7	94		
49.7	56,3	4320	27,1	94	28,2	4800	15,1	94	18,1	5227	10,5	94	10,1	5227	5,9	94		112 B5
54.3	51,6	4500	25,9	94	25,8	5000	14,4	94	16,6	5444	10,1	94	9,2	5444	5,6	94		
59.7	46,9	4500	23,5	94	23,4	5000	13,1	94	15,1	5444	9,1	94	8,4	5444	5,1	94		100 B5
64.1	43,7	4320	21,0	94	21,9	4800	11,7	94	14,1	5227	8,2	94	7,8	5227	4,5	94		
73.8	37,9	4500	19,0	94	19,0	5000	10,6	94	12,2	5444	7,4	94	6,8	5444	4,1	94		100 B5
81.3	34,5	4500	17,3	94	17,2	5000	9,6	94	11,1	5444	6,7	94	6,2	5444	3,7	94		
87.2	32,1	4410	15,8	94	16,1	4900	8,8	94	10,3	5336	6,1	94	5,7	5336	3,41	94		100 B5
103.9	27,0	4410	13,2	94	13,5	4900	7,4	94	8,7	5336	5,1	94	4,8	5336	2,86	94		
114.3	24,5	4500	12,3	94	12,2	5000	6,8	94	7,9	5444	4,8	94	4,4	5444	2,65	94		100 B5
121.2	23,1	4500	11,6	94	11,5	5000	6,4	94	7,4	5444	4,5	94	4,1	5444	2,50	94		
135.8	20,6	4500	10,3	94	10,3	5000	5,7	94	6,6	5444	4,0	94	3,7	5444	2,23	94		100 B5
148.2	18,9	4500	9,5	94	9,4	5000	5,3	94	6,1	5444	3,7	94	3,4	5444	2,05	94		
163.1	17,2	4500	8,6	94	8,6	5000	4,8	94	5,5	5444	3,3	94	3,1	5444	1,86	94		100 B5
190.3	14,7	4500	7,4	94	7,4	5000	4,1	94	4,7	5444	2,9	94	2,6	5444	1,59	94		
210.3	13,3	4500	6,7	94	6,7	5000	3,7	94	4,3	5444	2,6	94	2,4	5444	1,44	94		100 B5
229.4	12,2	4500	6,1	94	6,1	5000	3,4	94	3,9	5444	2,4	94	2,2	5444	1,32	94		
267.7	10,5	4500	5,2	94	5,2	5000	2,9	94	3,4	5444	2,0	94	1,9	5444	1,13	94		100 B5
290.0	9,7	4500	4,8	94	4,8	5000	2,7	94	3,1	5444	1,9	94	1,7	5444	1,05	94		



$P_{tN}$ [kW]	tutti i rapporti all ratios alle Untersetzungen
	26.0

N.B.  
Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni

NOTE.  
*Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our*

HINWEIS.  
Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. par.A-1.5).

N.B.  
I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE.  
*Listed weights are for reference only and can vary according to the gearbox version.*

HINWEIS.  
Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

PLR 125/3



267

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	$n_2$ min <sup>-1</sup>	$T_{2M}$ Nm	P kW	RD %	
22.4	125.0	6210	86.5	94	62.5	6900	48.0	94	40.2	7513	33.6	94	22.3	7513	18.7	94	225 B5 200 B5 180 B5 160 B5
23.9	117.0	6300	82.1	94	58.5	7000	45.6	94	37.6	7622	31.9	94	20.9	7622	17.7	94	
27.8	100.8	6480	72.8	94	50.4	7200	40.4	94	32.4	7840	28.3	94	18.0	7840	15.7	94	
30.4	92.2	6750	69.3	94	46.1	7500	38.5	94	29.6	8167	27.0	94	16.5	8167	15.0	94	
35.3	79.2	6750	59.6	94	39.6	7500	33.1	94	25.5	8167	23.2	94	14.1	8167	12.9	94	
40.2	69.6	6750	52.3	94	34.8	7500	29.1	94	22.4	8167	20.4	94	12.4	8167	11.3	94	
43.8	63.9	6750	48.1	94	32.0	7500	26.7	94	20.5	8167	18.7	94	11.4	8167	10.4	94	
51.3	54.6	6750	41.0	94	27.3	7500	22.8	94	17.5	8167	16.0	94	9.7	8167	8.9	94	
57.2	48.9	6750	36.8	94	24.5	7500	20.4	94	15.7	8167	14.3	94	8.7	8167	7.9	94	
63.5	44.1	6750	33.1	94	22.0	7500	18.4	94	14.2	8167	12.9	94	7.9	8167	7.2	94	
69.2	40.5	6750	30.4	94	20.2	7500	16.9	94	13.0	8167	11.8	94	7.2	8167	6.6	94	
75.7	37.0	6750	27.8	94	18.5	7500	15.5	94	11.9	8167	10.8	94	6.6	8167	6.01	94	
81.0	34.5	6750	26.0	94	17.3	7500	14.4	94	11.1	8167	10.1	94	6.2	8167	5.61	94	
88.3	31.7	6750	23.9	94	15.9	7500	13.3	94	10.2	8167	9.3	94	5.7	8167	5.15	94	
97.6	28.7	6750	21.6	94	14.4	7500	12.0	94	9.2	8167	8.4	94	5.1	8167	4.66	94	
106.2	26.4	6750	19.8	94	13.2	7500	11.0	94	8.5	8167	7.7	94	4.7	8167	4.28	94	
116.3	24.1	6750	18.1	94	12.0	7500	10.1	94	7.7	8167	7.0	94	4.3	8167	3.91	94	
127.9	21.9	6750	16.5	94	10.9	7500	9.1	94	7.0	8167	6.4	94	3.9	8167	3.56	94	
141.7	19.8	6750	14.9	94	9.9	7500	8.3	94	6.4	8167	5.8	94	3.5	8167	3.21	94	
155.1	18.1	6750	13.6	94	9.0	7500	7.5	94	5.8	8167	5.3	94	3.2	8167	2.93	94	
170.7	16.4	6750	12.3	94	8.2	7500	6.9	94	5.3	8167	4.8	94	2.9	8167	2.67	94	
189.1	14.8	6750	11.1	94	7.4	7500	6.2	94	4.8	8167	4.3	94	2.6	8167	2.41	94	
																	225 B5 200 B5 180 B5 160 B5
																	132 B5 132 B14 112 B5 100 B5

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	33.0

N.B.  
Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni

NOTE.  
Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our

HINWEIS.  
Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. par.A-1.5).

N.B.  
I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE.  
Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS.  
Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

PLR 135/3

340

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	n <sub>2</sub> min <sup>-1</sup>	T <sub>2M</sub> Nm	P kW	RD %	
19,1	146,8	8100	132,4	94	73,4	9000	73,6	94	47,2	9800	51,5	94	26,2	9800	28,6	94	250 B5
21,8	128,7	8550	122,5	94	64,3	9500	68,1	94	41,4	10344	47,7	94	23,0	10344	26,5	94	
25,9	108,3	8820	106,4	94	54,1	9800	59,1	94	34,8	10671	41,4	94	19,3	10671	23,0	94	
29,5	94,9	9000	95,2	94	47,5	10000	52,9	94	30,5	10889	37,0	94	16,9	10889	20,6	94	
32,1	87,2	9450	91,7	94	43,6	10500	51,0	94	28,0	11433	35,7	94	15,6	11433	19,8	94	
38,7	72,4	9000	72,6	94	36,2	10000	40,3	94	23,3	10889	28,2	94	12,9	10889	15,7	94	
42,8	65,3	9450	68,8	94	32,7	10500	38,2	94	21,0	11433	26,8	94	11,7	11433	14,9	94	
46,7	60,0	9450	63,2	94	30,0	10500	35,1	94	19,3	11433	24,6	94	10,7	11433	13,6	94	
50,7	55,3	9450	58,2	94	27,6	10500	32,3	94	17,8	11433	22,6	94	9,9	11433	12,6	94	
57,8	48,4	9450	51,0	94	24,2	10500	28,3	94	15,6	11433	19,8	94	8,6	11433	11,0	94	
65,1	43,0	9450	45,3	94	21,5	10500	25,1	94	13,8	11433	17,6	94	7,7	11433	9,8	94	
77,6	36,1	9450	38,0	94	18,0	10500	21,1	94	11,6	11433	14,8	94	6,4	11433	8,21	94	
84,0	33,3	9450	35,1	94	16,7	10500	19,5	94	10,7	11433	13,7	94	6,0	11433	7,58	94	
91,4	30,6	9450	32,2	94	15,3	10500	17,9	94	9,8	11433	12,5	94	5,5	11433	6,96	94	
100,1	28,0	9450	29,5	94	14,0	10500	16,4	94	9,0	11433	11,5	94	5,0	11433	6,36	94	
110,1	25,4	9450	26,8	94	12,7	10500	14,9	94	8,2	11433	10,4	94	4,5	11433	5,78	94	
121,8	23,0	9450	24,2	94	11,5	10500	13,4	94	7,4	11433	9,4	94	4,1	11433	5,23	94	
134,1	20,9	9450	22,0	94	10,4	10500	12,2	94	6,7	11433	8,5	94	3,7	11433	4,75	94	
140,1	20,0	9450	21,0	94	10,0	10500	11,7	94	6,4	11433	8,2	94	3,6	11433	4,55	94	
153,3	18,3	9450	19,2	94	9,1	10500	10,7	94	5,9	11433	7,5	94	3,3	11433	4,15	94	
168,7	16,6	9450	17,5	94	8,3	10500	9,7	94	5,3	11433	6,8	94	3,0	11433	3,78	94	
183,7	15,2	9450	16,0	94	7,6	10500	8,9	94	4,9	11433	6,2	94	2,7	11433	3,47	94	
201,0	13,9	9450	14,7	94	7,0	10500	8,1	94	4,5	11433	5,7	94	2,5	11433	3,17	94	
221,2	12,7	9450	13,3	94	6,3	10500	7,4	94	4,1	11433	5,2	94	2,3	11433	2,88	94	
245,1	11,4	9450	12,0	94	5,7	10500	6,7	94	3,7	11433	4,7	94	2,0	11433	2,60	94	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
	40.0

N.B.  
Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni

NOTE.  
*Pay attention please to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our*

HINWEIS.  
Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. par.A-1.5).

N.B.  
I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE.  
*Listed weights are for reference only and can vary according to the gearbox version.*

HINWEIS.  
Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



### 1.7 Prestazioni motoriduttori PLR

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>0.09 kW</b>	$n_1 = 860 \text{ min}^{-1}$	63B 6
----------------	------------------------------	-------

50.0	17.2	16	6.9	<b>25/4</b>	63B 6
42.2	20.4	19	5.8	<b>25/4</b>	63B 6
36.1	23.8	22	5.0	<b>25/4</b>	63B 6
31.4	27.4	25	4.3	<b>25/4</b>	63B 6
26.9	32	30	3.7	<b>25/4</b>	63B 6
23.3	36.9	34	3.2	<b>25/4</b>	63B 6
20.2	42.6	40	2.8	<b>25/4</b>	63B 6
15.7	54.8	51	2.2	<b>25/4</b>	63B 6
13.3	64.6	60	1.8	<b>25/4</b>	63B 6

<b>0.13 kW</b>	$n_1 = 1360 \text{ min}^{-1}$ $n_1 = 860 \text{ min}^{-1}$	63A 4 63C 6
----------------	---	----------------

79.1	17.2	15	6.8	<b>25/4</b>	63A 4
66.7	20.4	17	5.8	<b>25/4</b>	63A 4
57.1	23.8	20	4.9	<b>25/4</b>	63A 4
49.6	27.4	23	4.3	<b>25/4</b>	63A 4
42.5	32	27	3.7	<b>25/4</b>	63A 4
36.9	36.9	31	3.2	<b>25/4</b>	63A 4
31.9	42.6	36	2.8	<b>25/4</b>	63A 4
24.8	54.8	47	2.1	<b>25/4</b>	63A 4
21.1	64.6	55	1.8	<b>25/4</b>	63A 4
18.0	75.5	64	1.6	<b>25/4</b>	63A 4
15.6	87	74	1.4	<b>25/4</b>	63A 4
13.4	101.6	86	1.2	<b>25/4</b>	63A 4
11.6	117.3	100	1.0	<b>25/4</b>	63A 4
10.1	135.3	115	0.87	<b>25/4</b>	63A 4
9.8	138.8	118	5.1	<b>65/3</b>	63A 4
8.9	152.8	130	4.6	<b>65/3</b>	63A 4
7.8	175.4	149	4.0	<b>65/3</b>	63A 4
6.9	197.9	168	3.6	<b>65/3</b>	63A 4
11.4	75.5	101	1.1	<b>25/4</b>	63C 6
9.9	87	117	0.94	<b>25/4</b>	63C 6
8.5	101.6	136	0.81	<b>25/4</b>	63C 6
6.2	138.8	186	3.5	<b>65/3</b>	63C 6
5.6	152.8	205	3.2	<b>65/3</b>	63C 6
4.9	175.4	235	2.8	<b>65/3</b>	63C 6
4.3	197.9	266	2.4	<b>65/3</b>	63C 6

<b>0.18 kW</b>	$n_1 = 1370 \text{ min}^{-1}$ $n_1 = 870 \text{ min}^{-1}$	63B 4 71A 6
----------------	---	----------------

79.7	17.2	20	5.0	<b>25/4</b>	63B 4
67.2	20.4	24	4.2	<b>25/4</b>	63B 4
57.6	23.8	28	3.6	<b>25/4</b>	63B 4
50.0	27.4	32	3.1	<b>25/4</b>	63B 4
42.8	32	37	2.7	<b>25/4</b>	63B 4
37.1	36.9	43	2.3	<b>25/4</b>	63B 4
32.2	42.6	50	2.0	<b>25/4</b>	63B 4
25.0	54.8	64	1.6	<b>25/4</b>	63B 4
21.2	64.6	75	1.3	<b>25/4</b>	63B 4
18.1	75.5	88	1.1	<b>25/4</b>	63B 4
15.7	87	102	0.99	<b>25/4</b>	63B 4
13.5	101.6	119	0.84	<b>25/4</b>	63B 4
9.0	152.8	178	3.4	<b>65/3</b>	63B 4
7.8	175.4	205	2.9	<b>65/3</b>	63B 4
6.9	197.9	231	2.6	<b>65/3</b>	63B 4
6.6	132.7	244	1.1	<b>45/3</b>	71A 6
6.3	138.8	255	2.5	<b>65/3</b>	71A 6
5.7	152.8	281	2.3	<b>65/3</b>	71A 6
5.7	152.9	281	0.96	<b>45/3</b>	71A 6
5.0	175.4	322	2.0	<b>65/3</b>	71A 6
4.4	197.9	364	1.8	<b>65/3</b>	71A 6
4.3	204.1	375	3.5	<b>85/3</b>	71A 6
4.1	214	393	3.3	<b>85/3</b>	71A 6
3.7	234	430	3.0	<b>85/3</b>	71A 6
3.2	270	496	2.6	<b>85/3</b>	71A 6

### 1.7 Gearmotors performances

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>0.22 kW</b>	$n_1 = 1400 \text{ min}^{-1}$	63C 4
----------------	-------------------------------	-------

81.4	17.2	24	4.2	<b>25/4</b>	63C 4
68.6	20.4	28	3.5	<b>25/4</b>	63C 4
58.8	23.8	33	3.0	<b>25/4</b>	63C 4
51.1	27.4	38	2.6	<b>25/4</b>	63C 4
43.8	32	45	2.2	<b>25/4</b>	63C 4
37.9	36.9	52	1.9	<b>25/4</b>	63C 4
32.9	42.6	59	1.7	<b>25/4</b>	63C 4
25.5	54.8	76	1.3	<b>25/4</b>	63C 4
21.7	64.6	90	1.1	<b>25/4</b>	63C 4
18.5	75.5	105	0.95	<b>25/4</b>	63C 4
16.1	87	121	0.82	<b>25/4</b>	63C 4
14.1	99	138	4.3	<b>65/3</b>	63C 4
12.0	116.2	162	3.7	<b>65/3</b>	63C 4
10.1	138.8	194	3.1	<b>65/3</b>	63C 4
9.2	152.8	213	2.8	<b>65/3</b>	63C 4
8.0	175.4	245	2.5	<b>65/3</b>	63C 4
7.1	197.9	276	2.2	<b>65/3</b>	63C 4

<b>0.25 kW</b>	$n_1 = 1370 \text{ min}^{-1}$ $n_1 = 870 \text{ min}^{-1}$	71A 4 71B 6
----------------	---	----------------

79.7	17.2	28	3.6	<b>25/4</b>	71A 4
67.2	20.4	33	3.0	<b>25/4</b>	71A 4
57.6	23.8	39	2.6	<b>25/4</b>	71A 4
50.0	27.4	44	2.3	<b>25/4</b>	71A 4
42.8	32	52	1.9	<b>25/4</b>	71A 4
37.1	36.9	60	1.7	<b>25/4</b>	71A 4
32.2	42.6	69	1.4	<b>25/4</b>	71A 4
30.0	45.7	74	3.4	<b>45/3</b>	71A 4
25.9	52.8	86	2.9	<b>45/3</b>	71A 4
25.0	54.8	89	1.1	<b>25/4</b>	71A 4
22.8	60.1	97	2.6	<b>45/3</b>	71A 4
21.2	64.6	105	0.96	<b>25/4</b>	71A 4
19.4	70.6	114	2.2	<b>45/3</b>	71A 4
18.1	75.5	122	0.82	<b>25/4</b>	71A 4
16.0	85.7	139	1.8	<b>45/3</b>	71A 4
13.6	100.7	163	1.5	<b>45/3</b>	71A 4
12.8	107.1	174	1.4	<b>45/3</b>	71A 4
11.8	116.2	188	3.2	<b>65/3</b>	71A 4
10.3	132.7	215	1.2	<b>45/3</b>	71A 4
9.9	138.8	225	2.7	<b>65/3</b>	71A 4
9.0	152.8	248	2.4	<b>65/3</b>	71A 4
9.0	152.9	248	1.0	<b>45/3</b>	71A 4
8.6	160	259	4.6	<b>85/3</b>	71A 4
7.8	175.4	284	2.1	<b>65/3</b>	71A 4
7.3	188.9	306	0.82	<b>45/3</b>	71A 4
6.9	197.9	321	1.9	<b>65/3</b>	71A 4
6.7	204.1	331	3.6	<b>85/3</b>	71A 4
6.4	214	347	3.5	<b>85/3</b>	71A 4
5.9	234	379	3.2	<b>85/3</b>	71A 4
5.1	270	438	2.7	<b>85/3</b>	71A 4
5.0	175.4	448	1.5	<b>65/3</b>	71B 6
4.7	184.6	471	2.8	<b>85/3</b>	71B 6
4.4	197.9	505	1.3	<b>65/3</b>	71B 6
4.3	204.1	521	2.5	<b>85/3</b>	71B 6
4.1	214	546	2.4	<b>85/3</b>	71B 6
3.7	234	597	2.2	<b>85/3</b>	71B 6
3.2	270	689	1.9	<b>85/3</b>	71B 6

### 1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>0.37 kW</b>	$n_1 = 2790 \text{ min}^{-1}$ $n_1 = 1380 \text{ min}^{-1}$ $n_1 = 880 \text{ min}^{-1}$	63C 2 71B 4 71C 6
----------------	--	-------------------------

162.2	17.2	20	4.4	<b>25/4</b>	63C 2
136.8	20.4	24	3.7	<b>25/4</b>	63C 2
117.2	23.8	28	3.2	<b>25/4</b>	63C 2
101.8	27.4	32	2.8	<b>25/4</b>	63C 2
87.2	32	38	2.4	<b>25/4</b>	63C 2
80.2	36.9	41	2.4	<b>25/4</b>	71B 4
67.6	42.6	49	2.1	<b>25/4</b>	71B 4
58.0	54.8	57	1.8	<b>25/4</b>	71B 4
50.4	64.6	65	1.5	<b>25/4</b>	71B 4
43.1	75.5	76	1.3	<b>25/4</b>	71B 4
43.1	87	76	3.3	<b>45/3</b>	71B 4
37.4	99	88	1.1	<b>25/4</b>	71B 4
33.7	107.1	97	2.6	<b>45/3</b>	71B 4
32.4	116.2	101	0.99	<b>25/4</b>	71B 4
30.2	125.3	109	2.3	<b>45/3</b>	71B 4
26.1	138.8	126	2.0	<b>45/3</b>	71B 4
23.0	152.8	143	1.7	<b>45/3</b>	71B 4
19.5	167.3	168	1.5	<b>45/3</b>	71B 4
18.5	175.4	177	3.4	<b>65/3</b>	71B 4
16.2	184.6	203	3.0	<b>65/3</b>	71B 4
16.1	185.7	204	1.2	<b>45/3</b>	71B 4
13.9	197.9	236	2.5	<b>65/3</b>	71B 4
13.7	197.9	240	1.0	<b>45/3</b>	71B 4
12.9	197.9	255	0.98	<b>45/3</b>	71B 4
11.9	197.9	277	2.2	<b>65/3</b>	71B 4
9.9	197.9	331	1.8	<b>65/3</b>	71B 4
9.0	197.9	364	1.6	<b>65/3</b>	71B 4
8.6	160	381	3.1	<b>85/3</b>	71B 4
7.9	175.4	418	1.4	<b>65/3</b>	71B 4
7.5	184.6	440	2.7	<b>85/3</b>	71B 4
7.0	197.9	471	1.3	<b>65/3</b>	71B 4
6.8	204.1	486	2.5	<b>85/3</b>	71B 4
6.4	214	510	2.4	<b>85/3</b>	71B 4
5.9	234	557	2.2	<b>85/3</b>	71B 4
5.1	270	643	1.9	<b>85/3</b>	71B 4
5.0	175.4	655	0.99	<b>65/3</b>	71C 6
4.8	184.6	689	1.9	<b>85/3</b>	71C 6
4.4	197.9	739	0.88	<b>65/3</b>	71C 6
4.3	204.1	762	1.7	<b>85/3</b>	71C 6
4.1	214	799	1.6	<b>85/3</b>	71C 6
3.8	234	874	1.5	<b>85/3</b>	71C 6
3.3	270	1008	1.3	<b>85/3</b>	71C 6

<b>0.55 kW</b>	$n_1 = 2800 \text{ min}^{-1}$ $n_1 = 1380 \text{ min}^{-1}$ $n_1 = 910 \text{ min}^{-1}$	71B 2 71C 4 80B 6
----------------	--	-------------------------

162.8	17.2	30	3.0	<b>25/4</b>	71B 2
137.3	20.4	36	2.5	<b>25/4</b>	71B 2
117.6	23.8	42	2.2	<b>25/4</b>	71B 2
102.2	27.4	48	1.9	<b>25/4</b>	71B 2
87.5	32	56	1.6	<b>25/4</b>	71B 2
80.2	36.9	61	1.6	<b>25/4</b>	71C 4
67.6	42.6	72	1.4	<b>25/4</b>	71C 4
58.0	54.8	84	1.2	<b>25/4</b>	71C 4
50.4	64.6	97	1.0	<b>25/4</b>	71C 4
48.1	75.5	110	0.9	<b>25/4</b>	71C 4
43.1	87	126	0.8	<b>45/3</b>	71C 4
43.1	99	143	0.88	<b>25/4</b>	71C 4
43.1	116.2	163	2.2	<b>45/3</b>	71C 4
33.7	138.8	194	1.7	<b>45/3</b>	71C 4
30.2	152.8	225	1.5	<b>45/3</b>	71C 4
30.0	152.9	225	3.7	<b>65/3</b>	71C 4
26.1	175.4	266	1.3	<b>45/3</b>	71C 4
25.4	184.6	281	3.1	<b>6</b>	



1.7 Prestazioni motoriduttori PLR

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>0.55 kW</b>	$n_1 = 2800 \text{ min}^{-1}$	71B 2
	$n_1 = 1380 \text{ min}^{-1}$	71C 4
	$n_1 = 910 \text{ min}^{-1}$	80B 6

16.1	85.7	303	0.82	45/3	71C 4
14.1	98	347	3.5	85/3	71C 4
13.9	99	350	1.7	65/3	71C 4
12.2	113.5	402	3.0	85/3	71C 4
11.9	116.2	411	1.5	65/3	71C 4
10.1	136.8	484	2.5	85/3	71C 4
9.9	138.8	491	1.2	65/3	71C 4
9.0	152.8	541	1.1	65/3	71C 4
8.6	160	566	2.1	85/3	71C 4
7.9	175.4	621	0.97	65/3	71C 4
7.5	184.6	653	1.8	85/3	71C 4
7.0	197.9	701	0.86	65/3	71C 4
6.8	204.1	722	1.7	85/3	71C 4
6.4	214	758	1.6	85/3	71C 4
5.9	234	828	1.4	85/3	71C 4
5.1	270	956	1.3	85/3	71C 4
4.9	184.6	991	1.3	85/3	80B 6
4.9	187.1	1004	2.4	95/3	80B 6
4.6	199.5	1071	2.2	95/3	80B 6
4.5	204.1	1096	1.2	85/3	80B 6
4.3	214	1149	1.1	85/3	80B 6
4.1	221.3	1188	2.0	95/3	80B 6
3.9	234	1256	1.0	85/3	80B 6
3.7	243.2	1305	1.8	95/3	80B 6
3.4	266.2	1429	1.7	95/3	80B 6
3.4	270	1449	0.90	85/3	80B 6

<b>0.75 kW</b>	$n_1 = 2800 \text{ min}^{-1}$	71C 2
	$n_1 = 1390 \text{ min}^{-1}$	80B 4
	$n_1 = 910 \text{ min}^{-1}$	80C 6

162.8	17.2	41	2.2	25/4	71C 2
137.3	20.4	49	1.9	25/4	71C 2
117.6	23.8	57	1.6	25/4	71C 2
102.2	27.4	65	1.4	25/4	71C 2
97.6	28.7	68	3.3	45/3	71C 2
87.5	32	76	1.2	25/4	71C 2
87.5	32	76	3.0	45/3	71C 2
80.8	17.2	82	1.2	25/4	80B 4
68.1	20.4	98	1.0	25/4	80B 4
58.4	23.8	114	0.88	25/4	80B 4
48.4	28.7	138	1.8	45/3	80B 4
43.4	32	153	1.6	45/3	80B 4
37.0	37.6	180	3.3	65/3	80B 4
34.0	40.9	196	1.3	45/3	80B 4
30.4	45.7	219	1.1	45/3	80B 4
30.2	46	220	2.7	65/3	80B 4
26.3	52.8	253	0.99	45/3	80B 4
25.6	54.3	260	2.3	65/3	80B 4
23.1	60.1	288	0.87	45/3	80B 4
21.6	64.4	309	1.9	65/3	80B 4
18.8	74	355	3.4	85/3	80B 4
18.7	74.4	357	1.7	65/3	80B 4
16.4	84.9	407	2.9	85/3	80B 4
16.3	85.4	409	1.5	65/3	80B 4
14.2	98	470	2.6	85/3	80B 4
14.0	99	474	1.3	65/3	80B 4
12.2	113.5	544	2.2	85/3	80B 4
12.0	116.2	557	1.1	65/3	80B 4
10.2	136.8	656	1.8	85/3	80B 4
10.0	138.8	665	0.90	65/3	80B 4
9.1	152.8	732	0.82	65/3	80B 4
8.7	158.9	761	3.2	95/3	80B 4
8.7	160	767	1.6	85/3	80B 4
7.5	184.6	885	1.4	85/3	80B 4
7.4	187.1	897	2.7	95/3	80B 4
7.0	199.5	956	2.5	95/3	80B 4
6.8	204.1	978	1.2	85/3	80B 4
6.5	214	1026	1.2	85/3	80B 4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>0.75 kW</b>	$n_1 = 2800 \text{ min}^{-1}$	71C 2
	$n_1 = 1390 \text{ min}^{-1}$	80B 4
	$n_1 = 910 \text{ min}^{-1}$	80C 6

6.3	221.3	1061	2.3	95/3	80B 4
5.9	234	1121	1.1	85/3	80B 4
5.7	243.2	1165	2.1	95/3	80B 4
5.2	266.2	1276	1.9	95/3	80B 4
5.1	270	1294	0.93	85/3	80B 4
4.9	184.6	1351	0.96	85/3	80C 6
4.9	187.1	1370	1.8	95/3	80C 6
4.6	199.5	1460	1.6	95/3	80C 6
4.5	204.1	1494	0.87	85/3	80C 6
4.3	214	1566	0.83	85/3	80C 6
4.1	221.3	1620	1.5	95/3	80C 6
3.7	243.2	1780	1.3	95/3	80C 6
3.4	266.2	1949	1.2	95/3	80C 6

<b>0.88 kW</b>	$n_1 = 1350 \text{ min}^{-1}$	80C 4
----------------	-------------------------------	-------

78.5	17.2	100	1.0	25/4	80C 4
66.2	20.4	118	0.85	25/4	80C 4
47.0	28.7	166	1.5	45/3	80C 4
42.2	32	185	1.3	45/3	80C 4
41.8	32.3	187	3.2	65/3	80C 4
35.9	37.6	218	2.8	65/3	80C 4
33.0	40.9	237	1.1	45/3	80C 4
29.5	45.7	265	0.94	45/3	80C 4
29.3	46	266	2.3	65/3	80C 4
25.6	52.8	306	0.82	45/3	80C 4
24.9	54.3	314	1.9	65/3	80C 4
24.0	56.3	326	3.8	85/3	80C 4
21.1	63.9	370	3.2	85/3	80C 4
21.0	64.4	373	1.6	65/3	80C 4
18.2	74	428	2.8	85/3	80C 4
18.1	74.4	431	1.4	65/3	80C 4
15.9	84.9	492	2.4	85/3	80C 4
15.8	85.4	494	1.2	65/3	80C 4
13.8	98	567	2.1	85/3	80C 4
13.6	99	573	1.0	65/3	80C 4
11.9	113.5	657	1.8	85/3	80C 4
11.6	116	672	3.7	95/3	80C 4
11.6	116.2	673	0.89	65/3	80C 4
10.0	134.4	778	3.2	95/3	80C 4
9.9	136.8	792	1.5	85/3	80C 4
8.5	158.9	920	2.6	95/3	80C 4
8.4	160	926	1.3	85/3	80C 4
7.3	184.6	1069	1.1	85/3	80C 4
7.2	187.1	1083	2.2	95/3	80C 4
6.8	199.5	1155	2.1	95/3	80C 4
6.6	204.1	1182	1.0	85/3	80C 4
6.3	214	1239	0.97	85/3	80C 4
6.1	221.3	1281	1.9	95/3	80C 4
5.8	234	1355	0.89	85/3	80C 4
5.6	243.2	1408	1.7	95/3	80C 4
5.1	266.2	1541	1.6	95/3	80C 4

<b>1.1 kW</b>	$n_1 = 2830 \text{ min}^{-1}$	80B 2
	$n_1 = 1390 \text{ min}^{-1}$	80D 4
	$n_1 = 920 \text{ min}^{-1}$	90L 6

164.5	17.2	59	1.5	25/4	80B 2
138.7	20.4	70	1.3	25/4	80B 2
118.9	23.8	82	1.1	25/4	80B 2
103.3	27.4	95	0.95	25/4	80B 2
98.6	28.7	99	2.3	45/3	80B 2
88.4	32	110	0.81	25/4	80B 2
88.4	32	110	2	45/3	80B 2
80.8	17.2	121	0.83	25/4	80D 4
69.2	40.9	141	1.6	45/3	80B 2
52.7	26.4	186	3.2	65/3	80D 4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>1.1 kW</b>	$n_1 = 2830 \text{ min}^{-1}$	80B 2
	$n_1 = 1390 \text{ min}^{-1}$	80D 4
	$n_1 = 920 \text{ min}^{-1}$	90L 6

48.4	28.7	202	1.2	45/3	80D 4
43.4	32	225	1.1	45/3	80D 4
43	32.3	227	2.6	65/3	80D 4
37	37.6	264	2.3	65/3	80D 4
35.9	38.7	272	4.4	85/3	80D 4
34	40.9	287	0.87	45/3	80D 4
31.8	43.7	307	3.9	85/3	80D 4
30.2	46	323	1.9	65/3	80D 4
25.6	54.3	382	1.6	65/3	80D 4
24.7	56.3	396	3.1	85/3	80D 4
21.8	63.9	449	2.7	85/3	80D 4
21.6	64.4	453	1.3	65/3	80D 4
18.8	74	520	2.3	85/3	80D 4
18.7	74.4	523	1.1	65/3	80D 4
16.4	84.9	597	2	85/3	80D 4
16.3	85.4	600	1	65/3	80D 4
14.2	98	689	1.7	85/3	80D 4
14.1	98.4	692	3.5	95/3	80D 4
14	99	696	0.86	65/3	80D 4
12.6	110.5	785	4.2	105	80D 4
12.2	113.5	798	1.5	85/3	80D 4
12	116	815	3.0	95/3	80D 4
11.0	126.1	896	3.8	105	80D 4
10.3	134.4	945	2.6	95/3	80D 4
10.2	136.8	962	1.2	85/3	80D 4
9.9	139.9	994	3.4	105	80D 4
9.0	153.9	1093	3.2	105	80D 4
8.7	158.9	1117	2.1	95/3	80D 4
8.7	160	1125	1.1	85/3	80D 4
8.2	169.2	1202	2.9	105	80D 4
7.5	185.2	1315	2.7	105	80D 4
7.5	184.6	1297	0.92	85/3	80D 4
7.4	187.1	1315	1.8	95/3	80D 4
7.3	126.1	1354	2.7	105	90 L 6
7	199.5	1402	1.7	95/3	80D 4
6.8	204.1	1435	0.84	85/3	80D 4
6.6	139.9	1501	2.5	105	90 L 6
6.5	214	1504	0.8	85/3	80D 4
6.3	221.3	1555	1.5	95/3	80D 4
6.0	153.9	1652	2.3	105	90 L 6
5.7	243.2	1709	1.4	95/3	80D 4
5.4	169.2	1816	2.1	105	90 L 6
5.2	266.2	1871	1.3	95/3	80D 4
5.0	185.2	1987	1.9	105	90 L 6
4.9	187.1	1987	1.2	95/3	90L 6
4.6	199.5	2119	1.1	95/3	90L 6
4.2	221.3	2350	1	95/3	90L 6
3.8	243.2	2583	0.93	95/3	90L 6
3.5	266.2	2827	0.85	95/3	90L 6

<b>1.5 kW</b>	$n_1 = 2830 \text{ min}^{-1}$	80C 2
	$n_1 = 1400 \text{ min}^{-1}$	90L 4
	$n_1 = 925 \text{ min}^{-1}$	90LB 6

164.5	17.2	81	1.1	25/4	80C 2
138.7	20.4	96	0.94	25/4	80C 2
118.9	23.8	112	0.8	25/4	80C 2
98.6	28.7	135	1.7	45/3	80C 2
88.4	32	151	1.5	45/3	80C 2
75.3	37.6	177	3.1	65/3	





1.7 Prestazioni motoriduttori PLR

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>1.5 kW</b>	$n_1=2830\text{ min}^{-1}$ $n_1=1400\text{ min}^{-1}$ $n_1=925\text{ min}^{-1}$	80C 2 90L 4 90LB 6
---------------	---	--------------------------

30.4	46	438	1.4	65/3	90L 4
25.8	54.3	517	1.2	65/3	90L 4
24.9	56.3	536	2.2	85/3	90L 4
21.9	63.9	608	2	85/3	90L 4
21.7	64.4	613	0.98	65/3	90L 4
21.4	65.4	622	3.5	95/3	90L 4
18.9	74	704	1.7	85/3	90L 4
18.9	74.2	706	3.4	95/3	90L 4
18.8	74.4	708	0.85	65/3	90L 4
17.5	79.8	768	3.9	105	90 L 4
16.5	84.9	808	1.5	85/3	90L 4
16.3	86	818	2.9	95/3	90L 4
16.0	87.4	840	3.7	105	90 L 4
15.5	90.6	871	3.7	105	90 L 4
14.3	98	933	1.3	85/3	90L 4
14.2	98.4	936	2.6	95/3	90L 4
13.9	100.4	966	3.4	105	90 L 4
12.7	110.5	1063	3.1	105	90 L 4
12.3	113.5	1080	1.1	85/3	90L 4
12.1	116	1104	2.2	95/3	90L 4
11.1	126.1	1213	2.8	105	90 L 4
10.4	134.4	1279	1.9	95/3	90L 4
10.2	136.8	1302	0.92	85/3	90L 4
10.0	139.9	1345	2.5	105	90 L 4
9.1	153.9	1480	2.3	105	90 L 4
8.8	158.9	1512	1.6	95/3	90L 4
8.3	169.2	1627	2.2	105	90 L 4
7.6	185.2	1781	2.0	105	90 L 4
7.5	187.1	1780	1.3	95/3	90L 4
7.3	126.1	1836	2.0	105	90LB 6
7	199.5	1898	1.3	95/3	90L 4
6.6	139.9	2036	1.8	105	90LB 6
6.3	221.3	2106	1.1	95/3	90L 4
6.0	153.9	2241	1.7	105	90LB 6
5.8	243.2	2314	1	95/3	90L 4
5.5	169.2	2463	1.5	105	90LB 6
5.3	266.2	2533	0.95	95/3	90L 4
5.0	185.2	2695	1.4	105	90LB 6
4.9	187.1	2695	0.89	95/3	90LB 6
4.6	199.5	2873	0.84	95/3	90LB 6

<b>1.8 kW</b>	$n_1=2770\text{ min}^{-1}$ $n_1=1400\text{ min}^{-1}$ $n_1=940\text{ min}^{-1}$	80D 2 90L 4 100B 6
---------------	---	--------------------------

58.8	23.8	272	2.9	85/3	90LB 4
53	26.4	301	2	65/3	90LB 4
50.9	27.5	314	3.0	85/3	90LB 4
43.3	32.3	369	1.6	65/3	90LB 4
40.6	34.5	394	2.8	85/3	90LB 4
37.2	37.6	429	1.4	65/3	90LB 4
36.2	38.7	442	2.7	85/3	90LB 4
32	43.7	499	2.4	85/3	90LB 4
30.4	46	525	1.1	65/3	90LB 4
29.9	46.9	536	3.9	95/3	90LB 4
25.8	54.3	620	0.97	65/3	90LB 4
25.6	54.7	625	3.4	95/3	90LB 4
24.9	56.3	643	1.9	85/3	90LB 4
21.9	63.9	730	1.6	85/3	90LB 4
21.7	64.4	735	0.82	65/3	90LB 4
21.4	65.4	747	2.9	95/3	90LB 4
18.9	74	845	1.4	85/3	90LB 4
18.9	74.2	847	2.8	95/3	90LB 4
17.5	79.8	922	3.3	105	90LB 4
16.5	84.9	969	1.2	85/3	90LB 4
16.3	86	982	2.4	95/3	90LB 4
16.0	87.4	1008	3.1	105	90LB 4
15.5	90.6	1045	3.1	105	90LB 4
14.3	98	1119	1.1	85/3	90LB 4
14.2	98.4	1124	2.1	95/3	90LB 4
13.9	100.4	1159	2.8	105	90LB 4
12.7	110.5	1276	2.6	105	90LB 4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>1.8 kW</b>	$n_1=2770\text{ min}^{-1}$ $n_1=1400\text{ min}^{-1}$ $n_1=940\text{ min}^{-1}$	80D 2 90L 4 100B 6
---------------	---	--------------------------

12.3	113.5	1296	0.93	85/3	90LB 4
12.1	116	1325	1.8	95/3	90LB 4
11.1	126.1	1456	2.3	105	90LB 4
10.4	134.4	1535	1.5	95/3	90LB 4
10.0	139.9	1614	2.1	105	90LB 4
9.1	153.9	1777	1.9	105	90LB 4
8.8	158.9	1814	1.3	95/3	90LB 4
8.3	169.2	1952	1.8	105	90LB 4
7.6	185.2	2137	1.6	105	90LB 4
7.5	187.1	2137	1.1	95/3	90LB 4
7.5	126.1	2168	1.7	105	100B 6
7	199.5	2278	1.1	95/3	90LB 4
6.9	135.8	2335	2.3	115	100B 6
6.7	139.9	2404	1.5	105	100B 6
6.6	141.7	2436	3.4	125	100B 6
6.3	148.2	2547	2.1	115	100B 6
6.3	221.3	2527	0.95	95/3	90LB 4
6.1	153.9	2646	1.4	105	100B 6
6.1	155.1	2666	3.1	125	100B 6
5.8	243.2	2777	0.86	95/3	90LB 4
5.8	163.1	2804	1.9	115	100B 6
5.6	169.2	2908	1.3	105	100B 6
5.5	170.7	2934	2.8	125	100B 6
5.1	185.2	3183	1.2	105	100B 6
5.0	189.1	3250	2.5	125	100B 6
4.9	190.3	3271	1.7	115	100B 6
4.5	210.3	3614	1.5	115	100B 6
4.1	229.4	3944	1.4	115	100B 6
3.5	267.7	4602	1.2	115	100B 6
3.2	290.0	4985	1.1	115	100B 6

<b>2.2 kW</b>	$n_1=2840\text{ min}^{-1}$ $n_1=1410\text{ min}^{-1}$ $n_1=940\text{ min}^{-1}$	90L 2 100A 4 100BL 6
---------------	---	----------------------------

107.6	26.4	182	3	65/3	90L 2
99	28.7	197	1.1	45/3	90L 2
88.8	32	220	1	45/3	90L 2
87.9	32.3	222	2.4	65/3	90L 2
82.3	34.5	237	4.1	85/3	90L 2
75.5	37.6	259	2.1	65/3	90L 2
73.4	38.7	266	4.0	85/3	90L 2
69.4	40.9	281	0.8	45/3	90L 2
65	43.7	301	3.5	85/3	90L 2
61.7	46	316	1.7	65/3	90L 2
59.2	23.8	330	2.4	85/3	100A 4
53.4	26.4	366	1.6	65/3	100A 4
51.3	27.5	381	2.5	85/3	100A 4
43.7	32.3	448	1.3	65/3	100A 4
40.9	34.5	478	2.3	85/3	100A 4
37.5	37.6	521	1.2	65/3	100A 4
36.4	38.7	536	2.2	85/3	100A 4
34.8	40.5	561	3.7	95/3	100A 4
32.3	43.7	606	2.0	85/3	100A 4
30.7	46	637	0.94	65/3	100A 4
30.1	46.9	650	3.2	95/3	100A 4
26	54.3	752	0.8	65/3	100A 4
25.8	54.7	758	2.7	95/3	100A 4
25	56.3	780	1.5	85/3	100A 4
22	62.7	879	3.3	105	100A 4
22.1	63.9	886	1.4	85/3	100A 4
21.6	65.4	906	2.4	95/3	100A 4
20	70.7	990	2.9	105	100A 4
19.1	74	1025	1.2	85/3	100A 4
19	74.2	1028	2.3	95/3	100A 4
17.7	79.8	1118	2.7	105	100A 4
16.6	84.9	1177	1	85/3	100A 4
16.4	86	1192	2.0	95/3	100A 4
16.1	87.4	1224	2.5	105	100A 4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>2.2 kW</b>	$n_1=2840\text{ min}^{-1}$ $n_1=1410\text{ min}^{-1}$ $n_1=940\text{ min}^{-1}$	90L 2 100A 4 100BL 6
---------------	---	----------------------------

15.6	90.6	1268	2.5	105	100A 4
14.4	98	1358	0.88	85/3	100A 4
14.3	98.4	1364	1.7	95/3	100A 4
14.0	100.4	1407	2.3	105	100A 4
13.6	103.9	1455	3.4	115	100A 4
12.8	110.5	1548	2.1	105	100A 4
12.3	114.3	1601	3.1	115	100A 4
12.2	116	1607	1.5	95/3	100A 4
11.6	121.2	1698	2.9	115	100A 4
11.2	126.1	1766	1.9	105	100A 4
10.5	134.4	1862	1.3	95/3	100A 4
10.4	135.8	1902	2.6	115	100A 4
10.1	139.9	1959	1.7	105	100A 4
9.5	148.2	2076	2.4	115	100A 4
9.2	153.9	2156	1.6	105	100A 4
9.1	155.1	2172	3.5	125	100A 4
8.9	158.9	2202	1.1	95/3	100A 4
8.6	163.1	2284	2.2	115	100A 4
8.3	169.2	2369	1.5	105	100A 4
8.3	170.7	2390	3.1	125	100A 4
7.6	185.2	2593	1.3	105	100A 4
7.5	187.1	2593	0.93	95/3	100A 4
7.5	189.1	2649	2.8	125	100A 4
7.4	190.3	2665	1.9	115	100A 4
7.3	127.9	2688	3.0	125	100BL 6
7.1	199.5	2765	0.87	95/3	100A 4
6.7	210.3	2945	1.7	115	100A 4
6.6	141.7	2977	2.7	125	100BL 6
6.1	229.4	3213	1.6	115	100A 4
6.1	155.1	3258	2.5	125	100BL 6
5.5	170.7	3586	2.3	125	100BL 6
5.3	267.7	3749	1.3	115	100A 4
5.0	189.1	3973	2.1	125	100BL 6
4.9	290.0	4062	1.2	115	100A 4
4.5	210.3	4417	1.2	115	100BL 6
4.1	229.4	4820	1.1	115	100BL 6
3.5	267.7	5624	1.0	115	100BL 6
3.2	290.0	6093	0.9	115	100BL 6

<b>3 kW</b>	$n_1=2840\text{ min}^{-1}$ $n_1=1420\text{ min}^{-1}$ $n_1=940\text{ min}^{-1}$	90LB 2 100B 4 112B 6
-------------	---	----------------------------

119.3	23.8	223	3.2	85/3	90LB 2
107.6	26.4	248	2.2	65/3	90LB 2
103.3	27.5	258	3.3	85/3	90LB 2
99	28.7	269	0.84	45/3	90LB 2
87.9	32.3	303	1.8	65/3	90LB 2
82.3	34.5	324	3.0	85/3	90LB 2
75.5	37.6	353	1.5	65/3	90LB 2
73.4	38.7	363	2.9	85/3	90LB 2
65	43.7	410	2.6	85/3	90LB 2
61.7	46	432	1.3	65/3	90LB 2
60.2	23.6	443	3.6	95/3	100B 4
59.7	23.8	447	1.8	85/3	100B 4
53.8	26.4	495	1.2	65/3	100B 4
51.8	2				



1.7 Prestazioni motoriduttori PLR

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>3 kW</b>	$n_1 = 2840 \text{ min}^{-1}$ $n_1 = 1420 \text{ min}^{-1}$ $n_1 = 940 \text{ min}^{-1}$	90LB 2 100B 4 112B 6
-------------	--	----------------------------

25.2	56.3	1056	1.1	<b>85/3</b>	100B 4
23	62.7	1190	2.4	<b>105</b>	100B 4
22.2	63.9	1199	1	<b>85/3</b>	100B 4
21.7	65.4	1227	1.8	<b>95/3</b>	100B 4
20	70.7	1340	2.2	<b>105</b>	100B 4
19.2	73.8	1400	3.5	<b>115</b>	100B 4
19.2	74	1389	0.86	<b>85/3</b>	100B 4
19.1	74.2	1392	1.7	<b>95/3</b>	100B 4
17.8	79.8	1514	2.0	<b>105</b>	100B 4
17.5	81.3	1541	3.2	<b>115</b>	100B 4
16.5	86	1614	1.5	<b>95/3</b>	100B 4
16.3	87.2	1653	3.0	<b>115</b>	100B 4
16.3	87.4	1657	1.9	<b>105</b>	100B 4
15.7	90.6	1718	1.9	<b>105</b>	100B 4
14.4	98.4	1846	1.3	<b>95/3</b>	100B 4
14.1	100.4	1905	1.7	<b>105</b>	100B 4
13.7	103.9	1970	2.5	<b>115</b>	100B 4
12.8	110.5	2096	1.6	<b>105</b>	100B 4
12.4	114.3	2168	2.3	<b>115</b>	100B 4
12.2	116.3	2205	3.4	<b>125</b>	100B 4
12.2	116	2177	1.1	<b>95/3</b>	100B 4
11.7	121.2	2299	2.2	<b>115</b>	100B 4
11.3	126.1	2392	1.4	<b>105</b>	100B 4
11.1	127.9	2426	3.1	<b>125</b>	100B 4
10.6	134.4	2522	0.94	<b>95/3</b>	100B 4
10	135.8	2575.7	1.9	<b>115</b>	100B 4
10.2	139.9	2653	1.3	<b>105</b>	100B 4
10.0	141.7	2688	2.8	<b>125</b>	100B 4
10	148.2	2810.6	1.8	<b>115</b>	100B 4
9.2	153.9	2919	1.2	<b>105</b>	100B 4
9.2	155.1	2941	2.6	<b>125</b>	100B 4
8.9	158.9	2982	0.8	<b>95/3</b>	100B 4
9	163.1	3093.1	1.6	<b>115</b>	100B 4
8.4	169.2	3208	1.1	<b>105</b>	100B 4
8.3	170.7	3237	2.3	<b>125</b>	100B 4
8	185.2	3511.5	1.0	<b>105</b>	100B 4
7.5	189.1	3586	2.1	<b>125</b>	100B 4
7.5	190.3	3609	1.4	<b>115</b>	100B 4
7.3	127.9	3665	2.2	<b>125</b>	112B 6
7	210.3	3987.5	1.3	<b>115</b>	100B 4
6.6	141.7	4060	2.0	<b>125</b>	112B 6
6.2	229.4	4351	1.1	<b>115</b>	100B 4
6.1	155.1	4443	1.8	<b>125</b>	112B 6
5.5	170.7	4890	1.7	<b>125</b>	112B 6
5.3	267.7	5077	1.0	<b>115</b>	100B 4
5.0	189.1	5417	1.5	<b>125</b>	112B 6
5	290.0	5500.0	0.9	<b>115</b>	100B 4
4.5	210.3	6024	0.9	<b>115</b>	112B 6
4.1	229.4	6573	0.8	<b>115</b>	112B 6
3.5	267.7	7669	0.7	<b>115</b>	112B 6
3.2	290.0	8309	0.7	<b>115</b>	112B 6

<b>4 kW</b>	$n_1 = 2860 \text{ min}^{-1}$ $n_1 = 1410 \text{ min}^{-1}$	100B 2 100BL 4
-------------	--	-------------------

120.2	23.8	296	2.4	<b>85/3</b>	100B 2
108.3	26.4	328	1.6	<b>65/3</b>	100B 2
104	27.5	342	2.4	<b>85/3</b>	100B 2
88.5	32.3	401	1.3	<b>65/3</b>	100B 2
82.9	34.5	429	2.3	<b>85/3</b>	100B 2
76.1	37.6	467	1.2	<b>65/3</b>	100B 2
73.9	38.7	481	2.2	<b>85/3</b>	100B 2
70.6	40.5	503	3.7	<b>95/3</b>	100B 2
65.4	43.7	543	1.9	<b>85/3</b>	100B 2
62.2	46	571	0.95	<b>65/3</b>	100B 2
61	46.9	583	3.2	<b>95/3</b>	100B 2
59.7	23.6	595	2.7	<b>95/3</b>	100BL 4
59.2	23.8	600	1.3	<b>85/3</b>	100BL 4
56	50.7	637	3.9	<b>105</b>	100B 2
53.4	26.4	665	0.9	<b>65/3</b>	100BL 4

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>4 kW</b>	$n_1 = 2860 \text{ min}^{-1}$ $n_1 = 1410 \text{ min}^{-1}$	100B 2 100BL 4
-------------	--	-------------------

52	55.0	690	3.7	<b>105</b>	100B 2
51.5	27.4	690	2.6	<b>95/3</b>	100BL 4
51.3	27.5	693	1.4	<b>85/3</b>	100BL 4
46	62.7	788	2.5	<b>105</b>	100B 2
45.0	31.3	798	3.5	<b>105</b>	100BL 4
42.9	32.9	829	2.5	<b>95/3</b>	100BL 4
40.9	34.5	869	1.3	<b>85/3</b>	100BL 4
40.0	35.2	897	3.1	<b>105</b>	100BL 4
36.6	38.5	982	2.9	<b>105</b>	100BL 4
36.4	38.7	975	1.2	<b>85/3</b>	100BL 4
34.8	40.5	1020	2.0	<b>95/3</b>	100BL 4
32.3	43.7	1101	1.1	<b>85/3</b>	100BL 4
31.4	44.9	1145	2.4	<b>105</b>	100BL 4
30.1	46.9	1182	1.8	<b>95/3</b>	100BL 4
27.8	50.7	1292	2.2	<b>105</b>	100BL 4
26.0	54.3	1382	3.6	<b>115</b>	100BL 4
25.8	54.7	1378	1.5	<b>95/3</b>	100BL 4
25.7	55.0	1400	2.1	<b>105</b>	100BL 4
23.6	59.7	1521	3.3	<b>115</b>	100BL 4
22.5	62.7	1598	1.8	<b>105</b>	100BL 4
22.0	64.1	1631	2.9	<b>115</b>	100BL 4
21.6	65.4	1648	1.3	<b>95/3</b>	100BL 4
20.0	70.7	1800	1.6	<b>105</b>	100BL 4
19.1	73.8	1881	2.6	<b>115</b>	100BL 4
19	74.2	1870	1.3	<b>95/3</b>	100BL 4
17.7	79.8	2033	1.5	<b>105</b>	100BL 4
17.4	81.3	2070	2.4	<b>115</b>	100BL 4
16.4	86	2167	1.1	<b>95/3</b>	100BL 4
16.2	87.2	2220	2.2	<b>115</b>	100BL 4
16.1	87.4	2225	1.4	<b>105</b>	100BL 4
16.0	88.3	2248	3.3	<b>125</b>	100BL 4
15.6	90.6	2306	1.4	<b>105</b>	100BL 4
14.5	97.6	2484	3.0	<b>125</b>	100BL 4
14.3	98.4	2479	0.96	<b>95/3</b>	100BL 4
14.0	100.4	2558	1.3	<b>105</b>	100BL 4
13.6	103.9	2645	1.9	<b>115</b>	100BL 4
13.3	106.2	2705	2.8	<b>125</b>	100BL 4
12.8	110.5	2815	1.2	<b>105</b>	100BL 4
12.3	114.3	2911	1.7	<b>115</b>	100BL 4
12.1	116.3	2961	2.5	<b>125</b>	100BL 4
11.6	121.2	3087	1.6	<b>115</b>	100BL 4
11.2	126.1	3212	1.1	<b>105</b>	100BL 4
11.0	127.9	3258	2.3	<b>125</b>	100BL 4
10.4	135.8	3459	1.4	<b>115</b>	100BL 4
10.1	139.9	3562	1.0	<b>105</b>	100BL 4
9.9	141.7	3609	2.1	<b>125</b>	100BL 4
9.5	148.2	3774	1.3	<b>115</b>	100BL 4
9.2	153.9	3920	0.9	<b>105</b>	100BL 4
9.1	155.1	3949	1.9	<b>125</b>	100BL 4
8.6	163.1	4153	1.2	<b>115</b>	100BL 4
8.3	169.2	4308	0.8	<b>105</b>	100BL 4
8.3	170.7	4346	1.7	<b>125</b>	100BL 4
7.6	185.2	4715	0.7	<b>105</b>	100BL 4
7.5	189.1	4816	1.6	<b>125</b>	100BL 4
7.4	190.3	4846	1.0	<b>115</b>	100BL 4
6.7	210.3	5354	0.9	<b>115</b>	100BL 4
6.1	229.4	5843	0.9	<b>115</b>	100BL 4
5.3	267.7	6817	0.7	<b>115</b>	100BL 4
4.9	290.0	7385	0.7	<b>115</b>	100BL 4

<b>5.5 kW</b>	$n_1 = 2880 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$	112B 2 112BL 4
---------------	--	-------------------

122	23.6	400	3.5	<b>95/3</b>	112B 2
121	23.8	404	1.8	<b>85/3</b>	112B 2
109.1	26.4	448	1.2	<b>65/3</b>	112B 2
105.1	27.4	465	3.4	<b>95/3</b>	112B 2
104.7	27.5	466	1.8	<b>85/3</b>	112B 2
89.2	32.3	548	0.99	<b>65/3</b>	112B 2
87.5	32.9	558	3.3	<b>95/3</b>	112B 2

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>5.5 kW</b>	$n_1 = 2880 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$	112B 2 112BL 4
---------------	--	-------------------

83.5	34.5	585	1.6	<b>85/3</b>	112B 2
76.6	37.6	638	0.85	<b>65/3</b>	112B 2
74.4	38.7	656	1.7	<b>85/3</b>	112B 2
71.1	40.5	687	2.7	<b>95/3</b>	112B 2
68	20.6	725	3.4	<b>105</b>	112BL 4
65.9	43.7	741	1.4	<b>85/3</b>	112B 2
62	22.5	794	3.2	<b>105</b>	112BL 4
61.4	46.9	795	2.3	<b>95/3</b>	112B 2
59.3	23.6	823	1.9	<b>95/3</b>	112BL 4
58.8	23.8	830	0.96	<b>85/3</b>	112BL 4
59	23.9	843	3.0	<b>105</b>	112BL 4
51.1	27.4	956	1.9	<b>95/3</b>	112BL 4
50.9	27.5	960	1.0	<b>85/3</b>	112BL 4
49	28.6	1010	2.6	<b>105</b>	112BL 4
45	31.3	1105	2.5	<b>105</b>	112BL 4
42.6	32.9	1148	1.8	<b>95/3</b>	112BL 4
40	35.2	1242	2.31	<b>105</b>	112BL 4
37	37.9	1337	3.3	<b>115</b>	112BL 4
36	38.5	1359	2.1	<b>105</b>	112BL 4
34.6	40.5	1413	1.5	<b>95/3</b>	112BL 4
35	40.6	1431	3.1	<b>115</b>	112BL 4
31	44.9	1585	1.8	<b>105</b>	112BL 4
31	45.5	1606	2.9	<b>115</b>	112BL 4
29.9	46.9	1636	1.3	<b>95/3</b>	112BL 4
28	49.7	1753	2.7	<b>115</b>	112BL 4
28	50.7	1790	1.6	<b>105</b>	112BL 4
26	54.3	1914	2.6	<b>115</b>	112BL 4
25.6	54.7	1909	1.1	<b>95/3</b>	112BL 4
25	55.0	1939	1.5	<b>105</b>	112BL 4
24.5	57.2	2018	3.7	<b>125</b>	112BL 4
23	59.7	2106	2.4	<b>115</b>	112BL 4
22	62.7	2213	1.3	<b>105</b>	112BL 4
22.0	63.5	2240	3.3	<b>125</b>	112BL 4
22	64.1	2259	2.1	<b>115</b>	112BL 4
21.4	65.4	2282	0.96	<b>95/3</b>	112BL 4
20.2	69.2	2439	3.1	<b>125</b>	112BL 4
20	70.7	2492	1.2	<b>105</b>	112BL 4
19.0	73.8	2604	1.9	<b>115</b>	112BL 4
18.9	74.2	2589	0.93	<b>95/3</b>	112BL 4
18.5	75.7	2669	2.8	<b>125</b>	112BL 4
17.5	79.8	2816	1.1	<b>105</b>	112BL 4
17.3</					



1.7 Prestazioni motoriduttori PLR

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PLR-PLM	
-------------------------------------	----	----------------------	-----	---------	--

<b>7.5 kW</b>		n <sub>1</sub> = 2860 min <sup>-1</sup> n <sub>1</sub> = 1440 min <sup>-1</sup>	112BL 2 132M 4
---------------	--	--	-------------------

121.2	23.6	550	2.6	95/3	112BL 2
120.2	23.8	554	1.3	85/3	112BL 2
108.3	26.4	615	0.88	65/3	112BL 2
104.4	27.4	638	2.5	95/3	112BL 2
104	27.5	640	1.3	85/3	112BL 2
100	28.6	674	3.5	105	112BL 2
91	31.3	738	3.3	105	112BL 2
86.9	32.9	766	2.4	95/3	112BL 2
82.9	34.5	804	1.2	85/3	112BL 2
81	35.2	829	3.0	105	112BL 2
74	38.5	907	2.8	105	112BL 2
73.9	38.7	901	1.2	85/3	112BL 2
70.6	40.5	943	2.0	95/3	112BL 2
70	20.6	961	2.6	105	132M 4
65.4	43.7	1018	1.0	85/3	112BL 2
64	22.5	1052	2.4	105	132M 4
61	23.6	1092	1.4	95/3	132M 4
60	23.9	1118	2.3	105	132M 4
53	26.9	1260	3.3	115	132M 4
52.6	27.4	1267	1.4	95/3	132M 4
50	28.6	1339	1.9	105	132M 4
46	31.3	1465	1.9	105	132M 4
45	32.1	1501	2.8	115	132M 4
43.8	32.9	1522	1.3	95/3	132M 4
41	35.2	1647	1.7	105	132M 4
38	37.9	1772	2.5	115	132M 4
37	38.5	1802	1.6	105	132M 4
35.6	40.5	1873	1.1	95/3	132M 4
35.5	40.6	1897	2.3	115	132M 4
32.0	44.9	2101	1.3	105	132M 4
31.6	45.5	2129	2.2	115	132M 4
30.7	46.9	2169	0.94	95/3	132M 4
29.0	49.7	2324	2.1	115	132M 4
28.4	50.7	2373	1.2	105	132M 4
28.1	51.3	2400	3.1	125	132M 4
26.5	54.3	2537	1.9	115	132M 4
26.2	55.0	2570	1.1	105	132M 4
25.2	57.2	2676	2.8	125	132M 4
24.1	59.7	2792	1.7	115	132M 4
23.0	62.7	2934	1.0	105	132M 4
22.7	63.5	2970	2.5	125	132M 4
22.5	64.1	2995	1.6	115	132M 4
20.8	69.2	3234	2.3	125	132M 4
20.4	70.7	3304	0.9	105	132M 4
19.5	73.8	3453	1.4	115	132M 4
19.0	75.7	3539	2.1	125	132M 4
18.6	77.6	3628	2.9	135	132M 4
18.0	79.8	3733	0.8	105	132M 4
17.8	81.0	3789	2.0	125	132M 4
17.7	81.3	3800	1.3	115	132M 4
17.2	84.0	3926	2.7	135	132M 4
16.5	87.2	4076	1.2	115	132M 4
16.5	87.4	4085	0.8	105	132M 4
16.3	88.3	4126	1.8	125	132M 4
15.9	90.6	4234	0.8	105	132M 4
15.7	91.4	4275	2.5	135	132M 4
14.8	97.6	4561	1.6	125	132M 4
14.4	100.1	4678	2.2	135	132M 4
14.3	100.4	4696	0.7	105	132M 4
13.9	103.9	4857	1.0	115	132M 4
13.6	106.2	4967	1.5	125	132M 4
13.1	110.1	5148	2.0	135	132M 4
12.6	114.3	5345	0.9	115	132M 4
12.4	116.3	5435	1.4	125	132M 4
11.9	121.2	5667	0.9	115	132M 4
11.8	121.8	5696	1.8	135	132M 4
11.3	127.9	5982	1.3	125	132M 4
10.7	134.1	6269	1.7	135	132M 4
10.6	135.8	6350	0.8	115	132M 4
10.3	140.1	6549	1.6	135	132M 4
10.2	141.7	6626	1.1	125	132M 4
9.7	148.2	6929	0.7	115	132M 4
9.4	153.3	7167	1.5	135	132M 4

1.7 Gearmotors performances

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PLR-PLM	
-------------------------------------	----	----------------------	-----	---------	--

<b>7.5 kW</b>		n <sub>1</sub> = 2860 min <sup>-1</sup> n <sub>1</sub> = 1440 min <sup>-1</sup>	112BL 2 132M 4
---------------	--	--	-------------------

9.3	155.1	7251	1.0	125	132M 4
8.8	163.1	7625	0.7	115	132M 4
8.5	168.7	7887	1.3	135	132M 4
8.4	170.7	7980	0.9	125	132M 4
7.8	183.7	8589	1.2	135	132M 4
7.6	189.1	8841	0.8	125	132M 4
7.2	201.0	9399	1.1	135	132M 4
6.5	221.2	10344	1.0	135	132M 4
5.9	245.1	11461	0.9	135	132M 4

<b>9.2 kW</b>		n <sub>1</sub> = 1450 min <sup>-1</sup>	132ML 4
---------------	--	---	---------

70.5	20.6	1171	2.1	105	132ML 4
64.4	22.5	1282	2.0	105	132ML 4
61.4	23.6	1330	1.2	95/3	132ML 4
60.7	23.9	1362	1.9	105	132ML 4
53.8	26.9	1535	2.7	115	132ML 4
52.9	27.4	1544	1.1	95/3	132ML 4
50.6	28.6	1631	1.6	105	132ML 4
46.3	31.3	1785	1.5	105	132ML 4
45.2	32.1	1829	2.3	115	132ML 4
44.1	32.9	1854	1.1	95/3	132ML 4
41.2	35.2	2006	1.3	105	132ML 4
38.3	37.9	2159	2.0	115	132ML 4
37.6	38.5	2196	1.3	105	132ML 4
36.0	40.2	2291	3.3	125	132ML 4
35.7	40.6	2311	1.9	115	132ML 4
33.1	43.8	2495	3.0	125	132ML 4
32.3	44.9	2560	1.1	105	132ML 4
31.8	45.5	2593	1.8	115	132ML 4
29.2	49.7	2832	1.7	115	132ML 4
28.6	50.7	2890	1.0	105	132ML 4
28.3	51.3	2923	2.6	125	132ML 4
26.7	54.3	3090	1.6	115	132ML 4
26.4	55.0	3131	0.9	105	132ML 4
25.3	57.2	3260	2.3	125	132ML 4
25.1	57.8	3293	3.2	135	132ML 4
24.3	59.7	3401	1.4	115	132ML 4
23.1	62.7	3574	0.8	105	132ML 4
22.8	63.5	3617	2.1	125	132ML 4
22.6	64.1	3648	1.3	115	132ML 4
22.3	65.1	3709	2.8	135	132ML 4
21.0	69.2	3939	1.9	125	132ML 4
20.5	70.7	4025	0.7	105	132ML 4
19.6	73.8	4206	1.1	115	132ML 4
19.2	75.7	4311	1.7	125	132ML 4
18.7	77.6	4420	2.4	135	132ML 4
18.2	79.8	4548	0.7	105	132ML 4
17.9	81.0	4616	1.6	125	132ML 4
17.8	81.3	4629	1.1	115	132ML 4
17.3	84.0	4782	2.2	135	132ML 4
16.6	87.2	4965	1.0	115	132ML 4
16.4	88.3	5027	1.5	125	132ML 4
15.9	91.4	5208	2.0	135	132ML 4
14.9	97.6	5556	1.3	125	132ML 4
14.5	100.1	5699	1.8	135	132ML 4
14.0	103.9	5917	0.8	115	132ML 4
13.6	106.2	6051	1.2	125	132ML 4
13.2	110.1	6272	1.7	135	132ML 4
12.7	114.3	6511	0.8	115	132ML 4
12.5	116.3	6621	1.1	125	132ML 4
12.0	121.2	6904	0.7	115	132ML 4
11.9	121.8	6939	1.5	135	132ML 4
11.3	127.9	7287	1.0	125	132ML 4
10.8	134.1	7637	1.4	135	132ML 4
10.4	140.1	7978	1.3	135	132ML 4
10.2	141.7	8072	0.9	125	132ML 4
9.5	153.3	8731	1.2	135	132ML 4
9.4	155.1	8833	0.8	125	132ML 4
8.6	168.7	9608	1.1	135	132ML 4
8.5	170.7	9721	0.8	125	132ML 4

1.7 Leistungen der Getriebemotoren

n <sub>2</sub> min <sup>-1</sup>	ir	T <sub>2</sub> Nm	FS'	PLR-PLM	
-------------------------------------	----	----------------------	-----	---------	--

<b>9.2 kW</b>		n <sub>1</sub> = 1450 min <sup>-1</sup>	132ML 4
---------------	--	---	---------

7.9	183.7	10463	1.0	135	132ML 4
7.7	189.1	10770	0.7	125	132ML 4
7.2	201.0	11450	0.9	135	132ML 4
6.6	221.2	12601	0.8	135	132ML 4
5.9	245.1	13961	0.8	135	132ML 4

<b>11 kW</b>		n <sub>1</sub> = 2940 min <sup>-1</sup> n <sub>1</sub> = 1455 min <sup>-1</sup>	132M 2 160M 4
--------------	--	--	------------------

143.0	20.6	691	3.3	105	132M 2
130.6	22.5	756	3.0	105	132M 2
124.6	23.6	784	1.7	95/3	132M 2
123.5	23.8	791	0.91	85/3	132M 2
123.0	23.9	803	2.9	105	132M 2
107.3	27.4	911	1.7	95/3	132M 2
106.9	27.5	914	0.89	85/3	132M 2
102.7	28.6	962	2.4	105	132M 2
93.8	31.3	1053	2.3	105	132M 2
91.6	32.1	1079	3.5	115	132M 2
89.4	32.9	1093	1.6	95/3	132M 2
83.5	35.2	1183	2.0	105	132M 2
77.6	37.9	1273	3.1	115	132M 2
76.3	38.5	1295	1.9	105	132M 2
72.6	40.5	1346	1.3	95/3	132M 2
70.8	20.6	1396	1.8	105	160M 4
64.7	22.5	1527	1.7	105	160M 4
62.7	46.9	1558	1.2	95/3	132M 2
61.7	23.6	1585	0.97	95/3	160M 4
60.9	23.9	1622	1.6	105	160M 4
54.0	26.9	1829	2.3	115	160M 4
53.1	27.4	1840	0.94	95/3	160M 4
50.8	28.6	1943	1.3	105	160M 4
46.4	31.3	2127	1.3	105	160M 4
45.3	32.1	2179	1.9	115	160M 4
41.3	35.2	2391	1.1	105	160M 4
41.2	35.3	2398	3.1	125	160M 4
38.4	37.9	2573	1.7	115	160M 4
37.7	38.5	2616	1.1	105	160M 4
36.2	40.2	2730	2.7	125	160M 4
35.9	40.6	2753	1.6	115	160M 4
33.2	43.8	2973	2.5	125	160M 4
32.4	44.9	3050	0.9	105	160M 4
32.0	45.5	3090	1.5	115	160M 4
29.3	49.7	3374	1.4	115	160M 4
28.7	50.7	3444	0.8	105	160M 4
28.3	51.3	3483	2.2	125	160M 4
26.8	54.3	3682	1.3	115	160M 4
26.5	55.0	3730	0.8	105	160M 4



1.7 Prestazioni motoriduttori PLR

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>11 kW</b>			$n_1 = 2940 \text{ min}^{-1}$ $n_1 = 1455 \text{ min}^{-1}$	132M 2 160M 4
--------------	--	--	--	------------------

14.0	103.9	7050	0.7	115	160M 4
13.7	106.2	7210	1.0	125	160M 4
13.2	110.1	7473	1.4	135	160M 4
12.5	116.3	7890	1.0	125	160M 4
11.9	121.8	8268	1.3	135	160M 4
11.4	127.9	8683	0.9	125	160M 4
10.9	134.1	9099	1.2	135	160M 4
10.4	140.1	9506	1.1	135	160M 4
10.3	141.7	9618	0.8	125	160M 4
9.5	153.3	10403	1.0	135	160M 4
9.4	155.1	10525	0.7	125	160M 4
8.6	168.7	11449	0.9	135	160M 4
7.9	183.7	12467	0.8	135	160M 4
7.2	201.0	13643	0.8	135	160M 4
6.6	221.2	15015	0.7	135	160M 4

<b>15 kW</b>			$n_1 = 2900 \text{ min}^{-1}$ $n_1 = 1455 \text{ min}^{-1}$	132ML 2 160L 4
--------------	--	--	--	-------------------

141.0	20.6	955	2.4	105	132ML 2
128.9	22.5	1045	2.2	105	132ML 2
122.9	23.6	1084	1.3	95/3	132ML 2
121.3	23.9	1110	2.1	105	132ML 2
107.6	26.9	1251	3.0	115	132ML 2
105.8	27.4	1259	1.2	95/3	132ML 2
101.3	28.6	1330	1.8	105	132ML 2
92.5	31.3	1455	1.7	105	132ML 2
90.3	32.1	1491	2.6	115	132ML 2
88.1	32.9	1511	1.2	95/3	132ML 2
82.3	35.2	1636	1.5	105	132ML 2
76.5	37.9	1760	2.2	115	132ML 2
75.2	38.5	1790	1.4	105	132ML 2
71.6	40.5	1861	0.98	95/3	132ML 2
70.8	20.6	1903	1.3	105	160L 4
65.0	22.4	2073	3.3	125	160L 4
64.7	22.5	2083	1.2	105	160L 4
60.9	23.9	2212	1.2	105	160L 4
60.8	23.9	2216	3.2	125	160L 4
54.0	26.9	2494	1.7	115	160L 4
52.4	27.8	2570	2.8	125	160L 4
50.8	28.6	2650	1.0	105	160L 4
47.9	30.4	2810	2.7	125	160L 4
46.4	31.3	2900	0.93	105	160L 4
45.3	32.1	2972	1.4	115	160L 4
45.3	32.1	2973	3.5	135	160L 4
41.3	35.2	3260	0.83	105	160L 4
41.2	35.3	3271	2.3	125	160L 4
38.4	37.9	3508	1.3	115	160L 4
37.7	38.5	3567	0.8	105	160L 4
37.6	38.7	3581	2.8	135	160L 4
36.2	40.2	3723	2.0	125	160L 4
35.9	40.6	3754	1.2	115	160L 4
34.0	42.8	3965	2.6	135	160L 4
33.2	43.8	4054	1.9	125	160L 4
32.4	44.9	4159	0.7	105	160L 4
32.0	45.5	4214	1.1	115	160L 4
31.2	46.7	4318	2.4	135	160L 4
29.3	49.7	4601	1.0	115	160L 4
28.7	50.7	4690	2.2	135	160L 4
28.3	51.3	4750	1.6	125	160L 4
26.8	54.3	5021	1.0	115	160L 4
25.4	57.2	5297	1.4	125	160L 4
25.2	57.8	5350	2.0	135	160L 4
24.4	59.7	5526	0.9	115	160L 4
22.9	63.5	5878	1.3	125	160L 4
22.7	64.1	5928	0.8	115	160L 4
22.3	65.1	6026	1.7	135	160L 4
21.0	69.2	6401	1.2	125	160L 4
19.7	73.8	6834	0.7	115	160L 4
19.2	75.7	7004	1.1	125	160L 4
18.8	77.6	7182	1.5	135	160L 4

1.7 Gearmotors performances

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>15 kW</b>			$n_1 = 2900 \text{ min}^{-1}$ $n_1 = 1455 \text{ min}^{-1}$	132ML 2 160L 4
--------------	--	--	--	-------------------

18.0	81.0	7500	1.0	125	160L 4
17.9	81.3	7521	0.7	115	160L 4
17.3	84.0	7770	1.4	135	160L 4
16.5	88.3	8168	0.9	125	160L 4
15.9	91.4	8462	1.2	135	160L 4
14.9	97.6	9028	0.8	125	160L 4
14.5	100.1	9260	1.1	135	160L 4
13.7	106.2	9831	0.8	125	160L 4
13.2	110.1	10191	1.0	135	160L 4
12.5	116.3	10759	0.7	125	160L 4
11.9	121.8	11275	0.9	135	160L 4
10.9	134.1	12408	0.8	135	160L 4
10.4	140.1	12963	0.8	135	160L 4
9.5	153.3	14186	0.7	135	160L 4
8.6	168.7	15612	0.7	135	160L 4

<b>18.5 kW</b>			$n_1 = 2910 \text{ min}^{-1}$ $n_1 = 1460 \text{ min}^{-1}$ $n_1 = 970 \text{ min}^{-1}$	160L 2 180M 4 200L 6
----------------	--	--	--	----------------------------

152.5	19.1	1089	7.4	135	160L 2
141.5	20.6	1174	1.9	105	160L 2
129.3	22.5	1284	1.8	105	160L 2
121.7	23.9	1364	1.7	105	160L 2
108.0	26.9	1538	2.5	115	160L 2
101.6	28.6	1634	1.4	105	160L 2
92.9	31.3	1788	1.4	105	160L 2
90.6	32.1	1833	2.1	115	160L 2
82.6	35.2	2010	1.2	105	160L 2
82.3	35.3	2017	3.3	125	160L 2
76.8	37.9	2163	1.8	115	160L 2
75.5	38.5	2200	1.1	105	160L 2
72.3	40.2	2296	2.9	125	160L 2
71.7	40.6	2315	1.7	115	160L 2
65.2	22.4	2617	2.6	125	180M 4
61.0	23.9	2797	2.5	125	180M 4
56.5	25.9	3021	3.2	135	180M 4
54.2	26.9	3148	1.3	115	180M 4
52.6	27.8	3244	2.2	125	180M 4
49.5	29.5	3447	2.9	135	180M 4
48.1	30.4	3547	2.1	125	180M 4
45.5	32.1	3752	1.2	115	180M 4
45.4	32.1	3753	2.8	135	180M 4
41.3	35.3	4129	1.8	125	180M 4
38.5	37.9	4428	1.0	115	180M 4
37.7	38.7	4520	2.2	135	180M 4
36.3	40.2	4699	1.6	125	180M 4
36.0	40.6	4739	0.9	115	180M 4
34.1	42.8	5006	2.1	135	180M 4
33.3	43.8	5117	1.5	125	180M 4
32.1	45.5	5319	0.9	115	180M 4
31.3	46.7	5451	1.9	135	180M 4
29.4	49.7	5808	0.8	115	180M 4
28.8	50.7	5920	1.8	135	180M 4
28.4	51.3	5996	1.3	125	180M 4
26.9	54.3	6339	0.8	115	180M 4
25.5	57.2	6686	1.1	125	180M 4
25.3	57.8	6754	1.6	135	180M 4
24.5	59.7	6976	0.7	115	180M 4
23.0	63.5	7420	1.0	125	180M 4
22.4	65.1	7607	1.4	135	180M 4
21.1	69.2	8080	0.9	125	180M 4
19.3	75.7	8842	0.8	125	180M 4
18.8	77.6	9065	1.2	135	180M 4
18.0	81.0	9468	0.8	125	180M 4
17.4	84.0	9809	1.1	135	180M 4
16.5	88.3	10310	0.7	125	180M 4
16.0	91.4	10682	1.0	135	180M 4
15.0	97.6	11396	0.7	125	180M 4
14.6	100.1	11689	0.9	135	180M 4
13.3	110.1	12864	0.8	135	180M 4
12.0	121.8	14233	0.7	135	180M 4
10.9	134.1	15663	0.7	135	180M 4

1.7 Leistungen der Getriebemotoren

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

<b>22 kW</b>			$n_1 = 2925 \text{ min}^{-1}$ $n_1 = 1460 \text{ min}^{-1}$ $n_1 = 975 \text{ min}^{-1}$	180M 2 180L 4 200L 6
--------------	--	--	--	----------------------------

153.3	19.1	1288	6.3	135	180M 2
130.6	22.4	1512	4.1	125	180M 2
122.2	23.9	1616	3.9	125	180M 2
108.5	26.9	1819	2.1	115	180M 2
105.3	27.8	1875	3.5	125	180M 2
96.3	30.4	2050	3.3	125	180M 2
91.1	32.1	2168	1.7	115	180M 2
82.8	35.3	2386	2.8	125	180M 2
77.2	37.9	2559	1.5	115	180M 2
76.5	19.1	2581	3.5	135	180L 4
72.7	40.2	2716	2.5	125	180M 2
72.1	40.6	2739	1.4	115	180M 2
67.1	21.8	2944	3.2	135	180L 4
65.2	22.4	3030	2.3	125	180L 4
61.0	23.9	3238	2.2	125	180L 4
56.5	25.9	3498	2.8	135	180L 4
54.2	26.9	3645	1.2	115	180L 4
52.6	27.8	3756	1.9	125	180L 4
49.5	29.5	3991	2.5	135	180L 4
48.1	30.4	4107	1.8	125	180L 4
45.5	32.1	4344	1.0	115	180L 4
45.4	32.1	4346	2.4	135	180L 4
41.3	35.3	4780	1.6	125	180L 4
38.5	37.9	5128	0.9	115	180L 4
37.7	38.7	5234	1.9	135	180L 4
36.3	40.2	5441	1.4	125	180L 4
36.0	40.6	5487	0.8	115	180L 4
34.1	42.8	5796	1.8	135	180L 4
33.3	43.8	5925	1.3	125	180L 4
32.1	45.5	6159	0.7	115	180L 4
31.3	46.7	6312	1.7	135	180L 4
29.4	49.7	6725	0.7	115	180L 4
28.8	50.7	6855	1.5	135	180L 4
28.4	51.3	6943	1.1	125	180L 4
26.9	54.3	7340	0.7	115	180L 4
25.5	57.2	7742	1.0	125	180L 4
25.3	57.8	7820	1.3	135	180L 4
23.0	63.5	8591	0.9	125	180L 4
22.4	65.1	8808	1.2	135	180L 4
21.1	69.2	9356	0.8	125	180L 4
19.3	75.7	10238	0.7	125	180L 4
18.8	77.6	10497	1.0	135	180L 4
18.0	81.0	10963	0.7	125	180L 4
17.4	84.0	11357	0.9	135	180L 4
16.0	91.4	12368	0.8	135	180L 4
14.6	100.1	13534	0.8	135	180L 4
13.3	110.1	14895	0.7	135	180L 4

<b>30 kW</b>			$n_1 = $
--------------	--	--	----------



## 1.7 Prestazioni motoriduttori PLR

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

**30 kW** $n_1 = 2945 \text{ min}^{-1}$   
 $n_1 = 1465 \text{ min}^{-1}$ 200L 2  
200L 4

54.4	26.9	4954	0.8	115*	200L 4
52.8	27.8	5104	1.4	125	200L 4
49.7	29.5	5423	1.8	135	200L 4
48.2	30.4	5582	1.3	125	200L 4
45.6	32.1	5903	0.7	115*	200L 4
45.6	32.1	5906	1.8	135	200L 4
41.5	35.3	6497	1.2	125	200L 4
37.9	38.7	7113	1.4	135	200L 4
36.4	40.2	7394	1.0	125	200L 4
34.2	42.8	7877	1.3	135	200L 4
33.4	43.8	8052	0.9	125	200L 4
31.4	46.7	8578	1.2	135	200L 4
28.9	50.7	9316	1.1	135	200L 4
28.5	51.3	9435	0.8	125	200L 4
25.6	57.2	10521	0.7	125	200L 4
25.3	57.8	10627	1.0	135	200L 4
22.5	65.1	11971	0.9	135	200L 4
18.9	77.6	14265	0.7	135	200L 4
17.4	84.0	15435	0.7	135	200L 4

**37 kW** $n_1 = 2950 \text{ min}^{-1}$   
 $n_1 = 1475 \text{ min}^{-1}$ 200L 2  
225S 4

154.6	19.1	2148	3.8	135	200L 2
135.5	21.8	2450	3.5	135	200L 2
131.7	22.4	2522	2.5	125*	200L 2
123.2	23.9	2695	2.3	125*	200L 2
114.1	25.9	2912	3.0	135	200L 2
109.5	26.9	3034	1.2	115*	200L 2
106.3	27.8	3126	2.1	125*	200L 2
100.0	29.5	3322	2.7	135	200L 2
97.2	30.4	3419	2.0	125*	200L 2
91.9	32.1	3616	1.0	115*	200L 2
91.8	32.1	3617	2.6	135	200L 2
83.5	35.3	3979	1.7	125*	200L 2
77.8	37.9	4268	0.9	115*	200L 2
77.3	19.1	4296	2.1	135	225S 4
73.3	40.2	4529	1.5	125*	200L 2
72.7	40.6	4567	0.9	115*	200L 2
67.8	21.8	4901	1.9	135	225S 4
65.8	22.4	5044	1.4	125*	225S 4
61.6	23.9	5391	1.3	125*	225S 4
57.0	25.9	5824	1.7	135	225S 4
53.1	27.8	6252	1.2	125*	225S 4
50.0	29.5	6643	1.5	135	225S 4
48.6	30.4	6838	1.1	125*	225S 4
45.9	32.1	7235	1.5	135	225S 4
41.7	35.3	7958	0.9	125*	225S 4
38.1	38.7	8713	1.1	135	225S 4
36.7	40.2	9058	0.8	125*	225S 4
34.4	42.8	9649	1.1	135	225S 4
33.7	43.8	9864	0.8	125*	225S 4
31.6	46.7	10507	1.0	135	225S 4
29.1	50.7	11412	0.9	135	225S 4
25.5	57.8	13018	0.8	135	225S 4
22.7	65.1	14664	0.7	135	225S 4

N.B.

Tutte le potenze indicate si riferiscono alla potenza meccanica dei riduttori.

Per i riduttori contrassegnati con (\*) è opportuno effettuare la verifica della potenza limite termico secondo le indicazioni riportate nel par. A-1.5.

## 1.7 Gearmotors performances

$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

**45 kW** $n_1 = 2945 \text{ min}^{-1}$   
 $n_1 = 1475 \text{ min}^{-1}$ 225M 2  
225M 4

154.4	19.1	2617	3.1	135*	225M 2
135.3	21.8	2985	2.9	135*	225M 2
131.5	22.4	3073	2.0	125*	225M 2
123.0	23.9	3284	1.9	125*	225M 2
113.9	25.9	3547	2.5	135*	225M 2
106.1	27.8	3808	1.7	125*	225M 2
99.8	29.5	4047	2.2	135*	225M 2
97.0	30.4	4165	1.6	125*	225M 2
91.7	32.1	4407	2.1	135*	225M 2
83.3	35.3	4848	1.4	125*	225M 2
77.3	19.1	5225	1.7	135*	225M 4
73.2	40.2	5518	1.2	125*	225M 2
67.8	21.8	5961	1.6	135*	225M 4
65.8	22.4	6135	1.1	125*	225M 4
61.6	23.9	6557	1.1	125*	225M 4
57.0	25.9	7083	1.4	135*	225M 4
53.1	27.8	7604	0.9	125*	225M 4
50.0	29.5	8080	1.2	135*	225M 4
48.6	30.4	8316	0.9	125*	225M 4
45.9	32.1	8799	1.2	135*	225M 4
41.7	35.3	9679	0.8	125*	225M 4
38.1	38.7	10596	0.9	135*	225M 4
36.7	40.2	11016	0.7	125*	225M 4
34.4	42.8	11735	0.9	135*	225M 4
31.6	46.7	12779	0.8	135*	225M 4
29.1	50.7	13879	0.8	135*	225M 4
25.5	57.8	15832	0.7	135*	225M 4

**55 kW** $n_1 = 2950 \text{ min}^{-1}$   
 $n_1 = 1475 \text{ min}^{-1}$ 250M 2  
250M 4

154.6	19.1	3193	2.5	135*	250M 2
135.5	21.8	3643	2.3	135*	250M 2
114.1	25.9	4328	2.0	135*	250M 2
100.0	29.5	4938	1.8	135*	250M 2
91.8	32.1	5377	1.8	135*	250M 2
77.3	19.1	6386	1.4	135*	250M 4
67.8	21.8	7285	1.3	135*	250M 4
57.0	25.9	8657	1.1	135*	250M 4
50.0	29.5	9875	1.0	135*	250M 4
45.9	32.1	10754	1.0	135*	250M 4
38.1	38.7	12951	0.8	135*	250M 4
34.4	42.8	14343	0.7	135*	250M 4
31.6	46.7	15619	0.7	135*	250M 4

NOTE.

The power indicated is based on the mechanical capacities of the gearboxes. For the gearboxes marked with (\*) it is also necessary to obey the thermal capacity like shown on chapter A-1.5.

## 1.7 Leistungen der Getriebemotoren

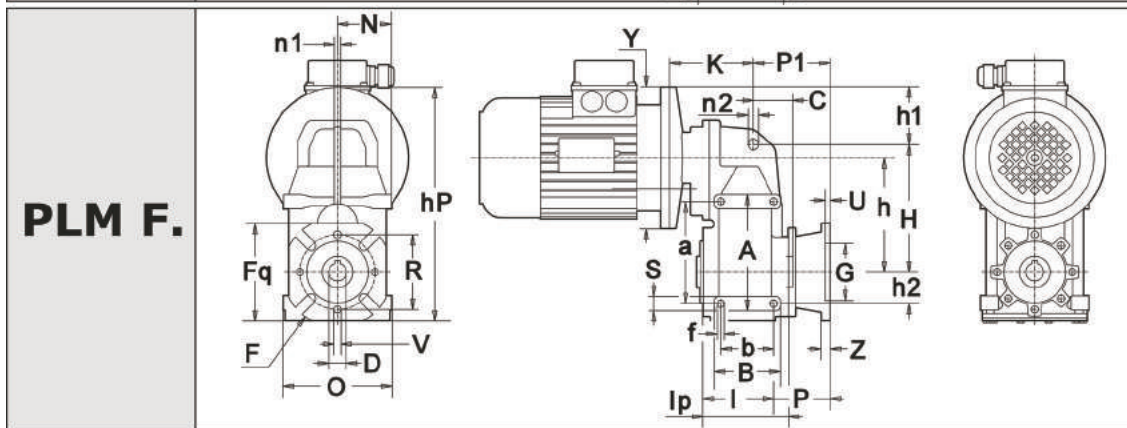
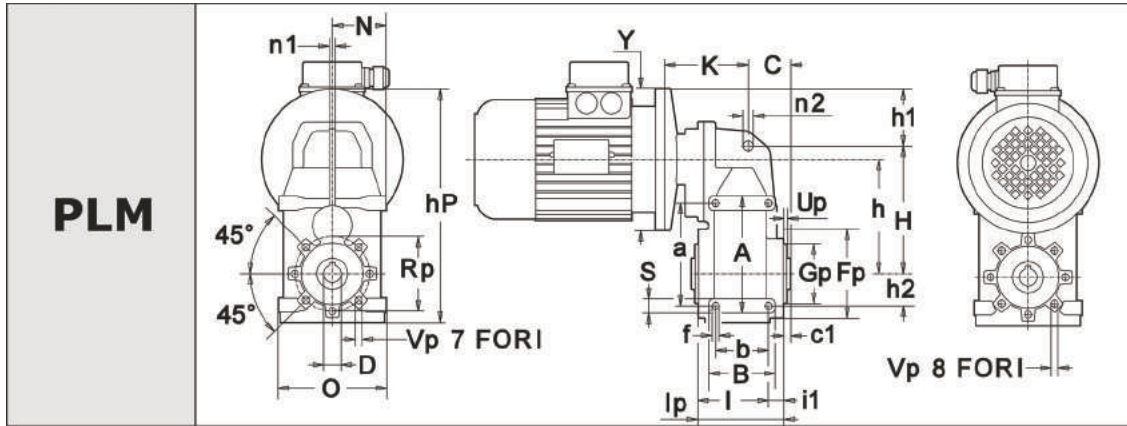
$n_2$ min <sup>-1</sup>	ir	T2 Nm	FS'	PLR-PLM	
----------------------------	----	----------	-----	---------	--

HINWEIS.

Die Leistungsangaben beziehen sich auf die mechanische Belasbarkeit der Getriebe. Bei den mit (\*) gekennzeichneten Getrieben ist außerdem die thermische Leistungsgrenze zu beachten (s. Kap



# PL. 25 - 45



	a	A	b	B	C	c1	D H7	f	h	hP	H	h1	h2	l	l1	lp	N	n1	n2	S
25	115	131	60	75	44.5	4.5	20 (19) (24)	M8 X12	/3 125 /4 135	225	145	22	35	79.5	17	96.5	61	7	12	16
45	130	150	70	95	46	6	30 (25)	M10 X15	/3 155 /4 167.5	276	175	34.5	40	97.5	20.5	118	77	9	15	20

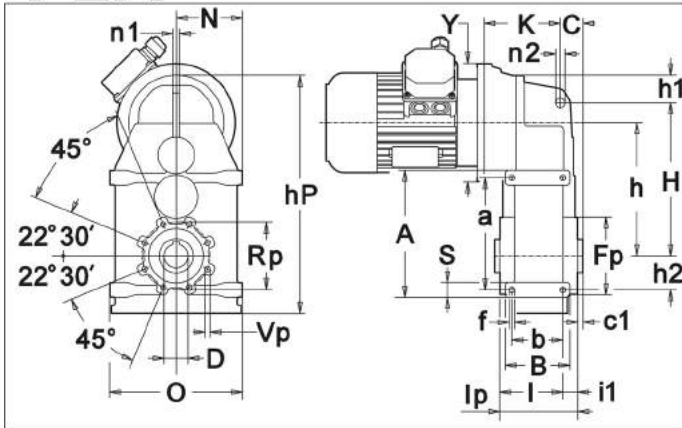
	Fp	Gp	O	P1	Rp	Up	Vp	F	Fq	G F8	P	R	U	V	Z
25	100	70	122	FA 86.5 FB 116.5	85	2.5	M8 X 10	FA 125 FB 110	110	70	63.5 93.5	85	5	11	9
45	110	80	154	FA 69 FB 99	95	3	M8 X 10	FA 180 FB 142	142	115	49.5 79.5	150	5	11	10

	IEC	25		45		25	45
		Y	K	Y	K	K (PLC)	
PLM / 3	B5	—	—	160	133.5	—	—
		140	95	200 (iec 80)	133.5		
		160	95	200 (iec 90)	144		
		200	104.5	250	146		
	B14	90•	95	105•	133.5		
		105•	95	120	133.5		
PLM / 4	B5	—	—	160	146		
		120	104.5	140	144		
		—	—	160	146		
	B14	120	112.5	—	—		
		140	112.5	160	150		
		—	—	200	150		
B14	80•	112.5	—	—			
	90	112.5	—	—			

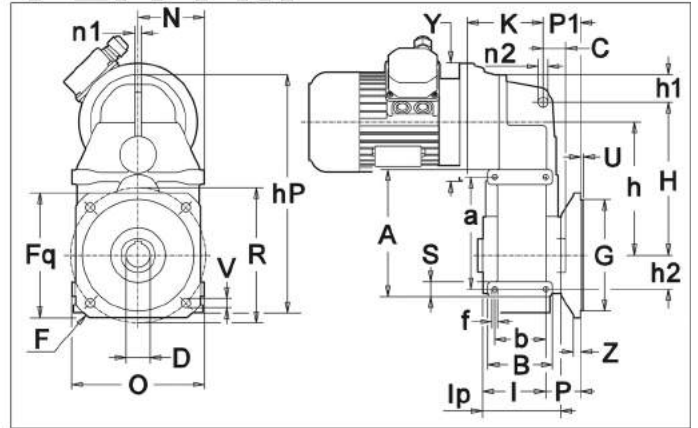


# PL. 65

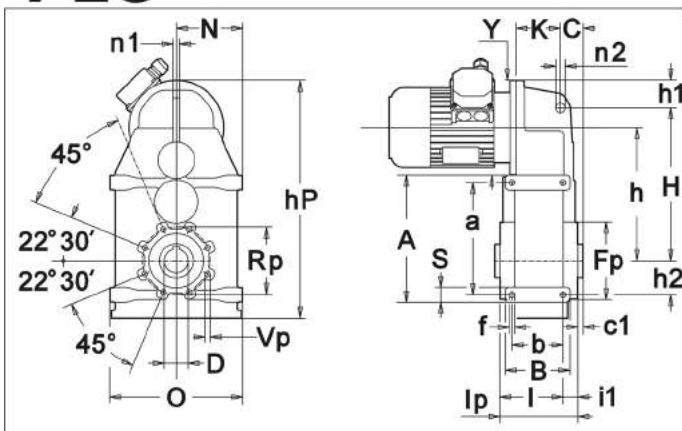
## PLM



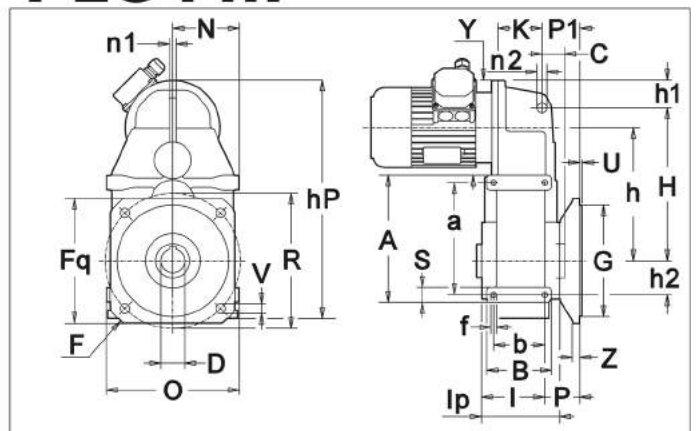
## PLM F...



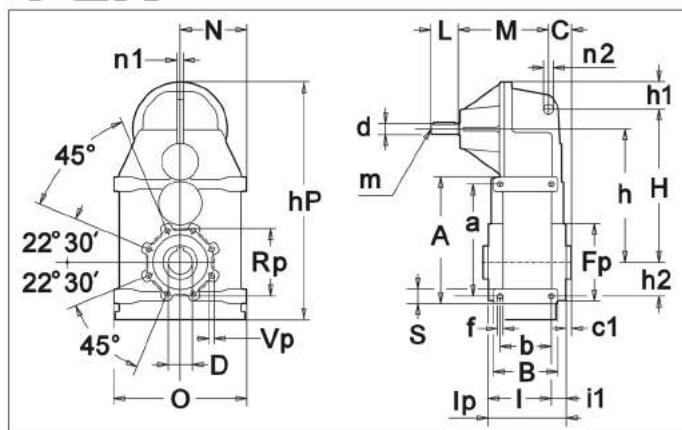
## PLC



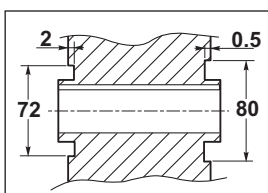
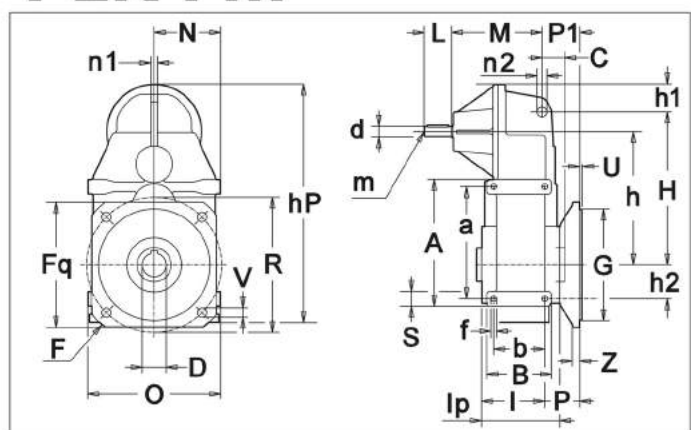
## PLC F...



## PLR



## PLR F...



Dettaglio centraggio flangia pendolare.  
Quota "G<sub>p</sub>".  
Flange centering detail.  
"G<sub>p</sub>" quota.  
Zentrierung des Aufsteckflanschs.  
Maß "G<sub>p</sub>".



1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

PL..	a	A	b	B	C	c1	d h6	D H7	f	h	hP	H	h1	h2	I	i1	lp	L	N	m	M	n1	n2	S
65	165	187	75	95	33.5	7.5	16	35 (30)	M8 X 16	196	355	225	41	50	93	22	115	40	98	M6	133.5	10	14	22

PL..	Fp	Gp	O	P1	Rp	Up	Vp		F	Fq	G F8	P	R	U	V	Z
65	120	72 80	196	47.5	100	2	M8 X 16	F1	250	200	180 g6	43.5	215	4	14	11

	IEC	65		65
		Y	K	
PLM /3	B5	140	104.5	K (PLC)
		160	104.5	
		200	124.5	
		250	134.5	
	B14	120	124.5	
		140	124.5	
		160	134.5	

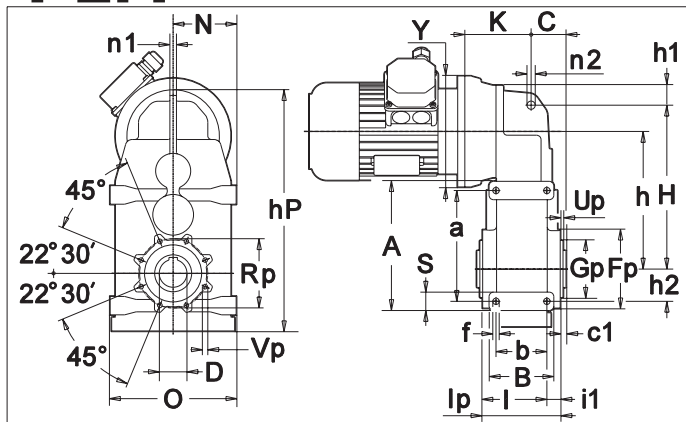




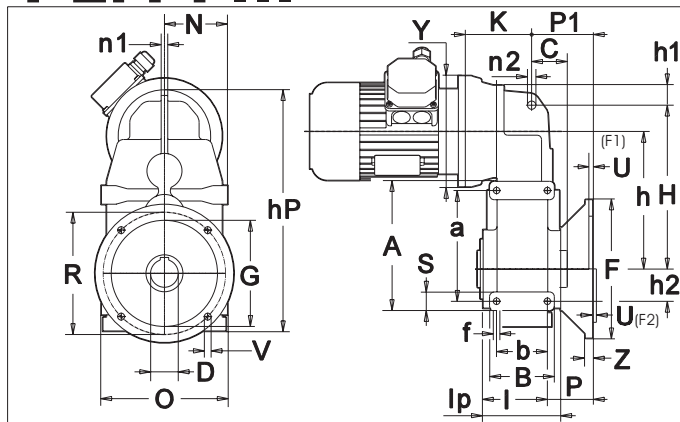


# PL. 85-95

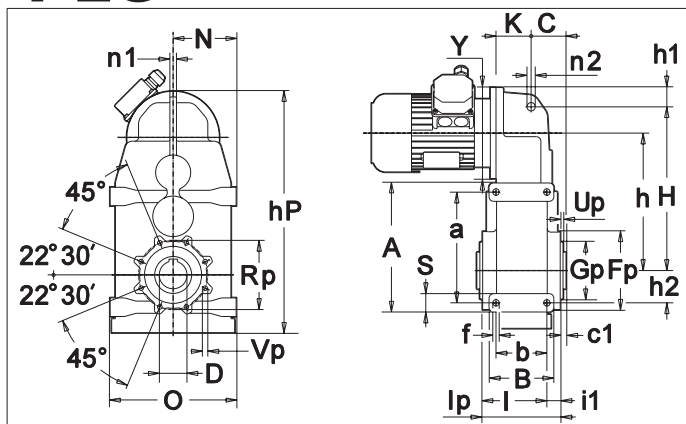
## PLM



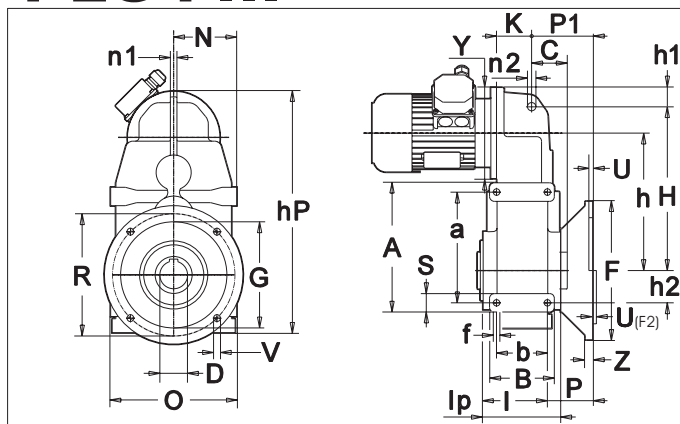
## PLM F...



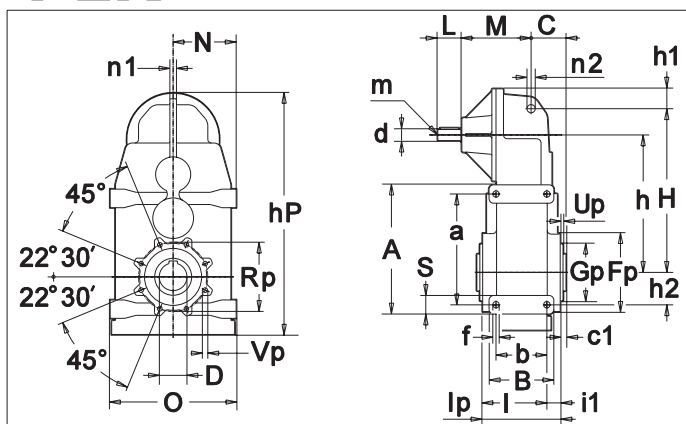
## PLC



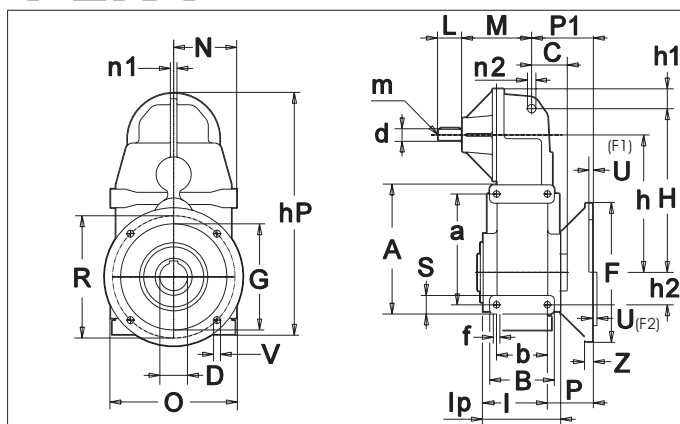
## PLC F...



## PLR



## PLR F...





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

	a	A	b	B	C	c1	d h6	D H7	f	h	hP	H	h1	h2	I	i1	Ip	L	N	m	M	n1	n2	S
<b>85</b>	190	220	95	120	42	7.5	19	45 (50) (40)	M12	237	422	260	57	60	115	25	140	40	111.5	M6	155	12	14	30
<b>95</b>	240	275	110	140	52	8.5	24	55 (60) (50)	M14	298	528	325	73	70	136.5	26.5	163	50	136.5	M8	170.5	16	14	35

	Fp	Gp	O	P1	Rp	Up	Vp		F	G F8	P	R	U	V	Z
<b>85</b>	150	110	223	89	125	4.5	M8 X 12	<b>F1</b>	250	180	80.5	215	5	n°4 fori Ø13	14
<b>95</b>	200	140	273	72.5	165	6	M12	<b>F1</b>	300	230	55.5	265	6	n°8 fori Ø14	16
				112.5				<b>F2</b>	350	250 (g6)	95.5	300	5	n°4 fori Ø18	18

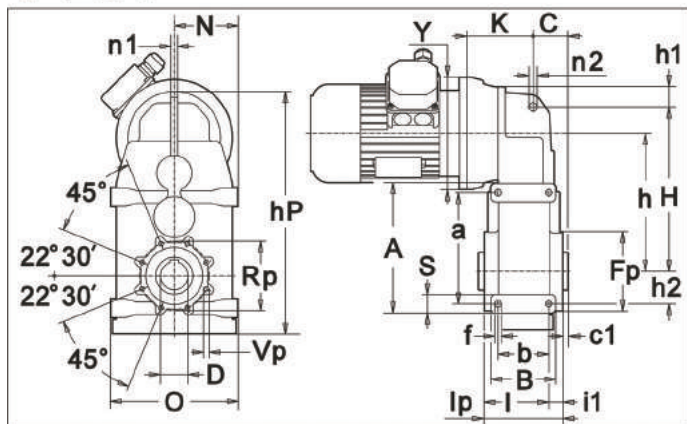
	IEC	85		95			85		95	
		Y	K	Y	K		K (PLC)			
<b>PLM /3</b>	<b>B5</b>	160	121	200	151.5	74	76			
		200	136	250	161.5					
		250	146	300	182.5					
		300	170	350	212.5					
	<b>B14</b>	120	136							
		140	136							
		160	146							
		200	170							



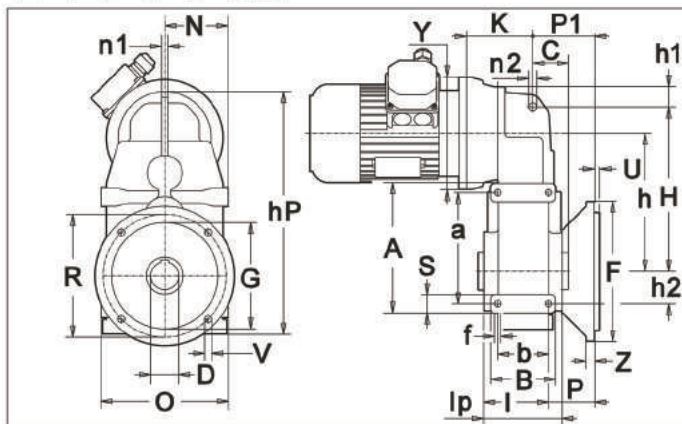


# PL. 105

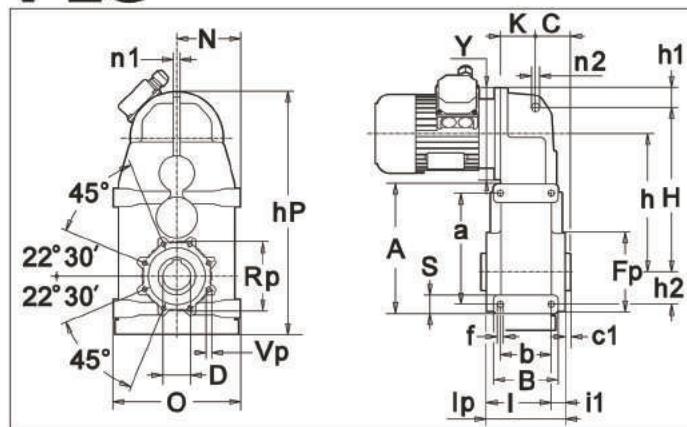
## PLM



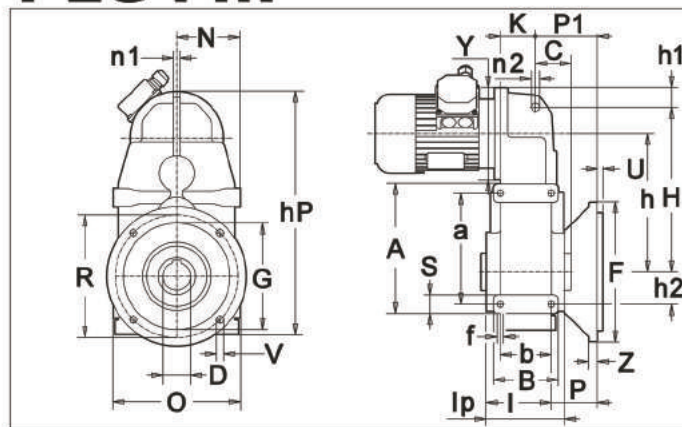
## PLM F...



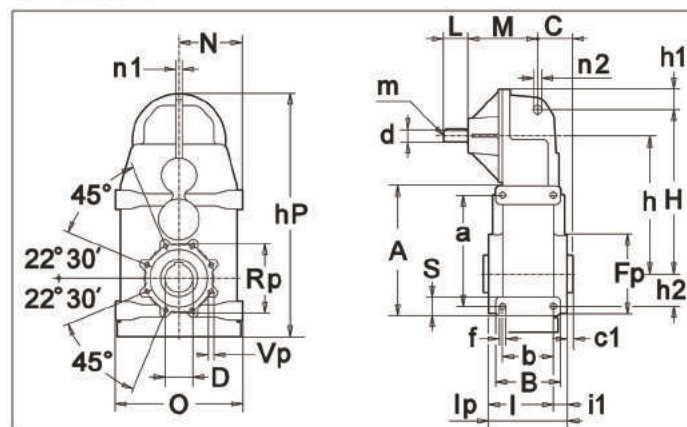
## PLC



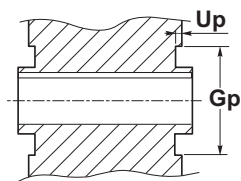
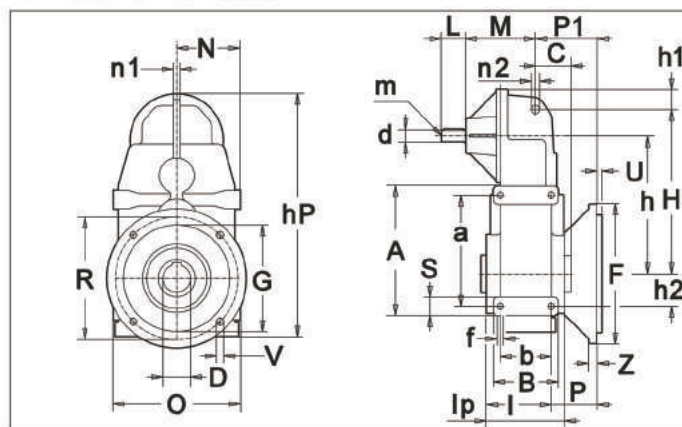
## PLC F...



## PLR



## PLR F...



Dettaglio centraggio flangia pendolare.  
Quota "G<sub>p</sub>".  
Flange centering detail.  
"G<sub>p</sub>" quota.  
Zentrierung des Aufsteckflanschs.  
Maß "G<sub>p</sub>".



1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

PL..	a	A	b	B	C	c1	d h6	D H7	f	h	hP	H	h1	h2	I	i1	lp	L	N	m	M	n1	n2	S
105	260	300	140	180	85.5	1	24	60 (70)	M16 x30	311	554	375	36	70	190	50	240	50	152.5	M8	171	20	22	40

PL..	Fp	Gp	O	P1	Rp	Up	Vp		F	Fq	G g6	P	R	U	V	Z
105	210	140	305	124.5	175	5	M12x24	F1	350	-	250	90	300	5	n°8 fori Ø18	17

	IEC	105		105
		Y	K	K (PLC)
PLM	B5	200	152	95
		250	162	
		300	183	
		350	213	

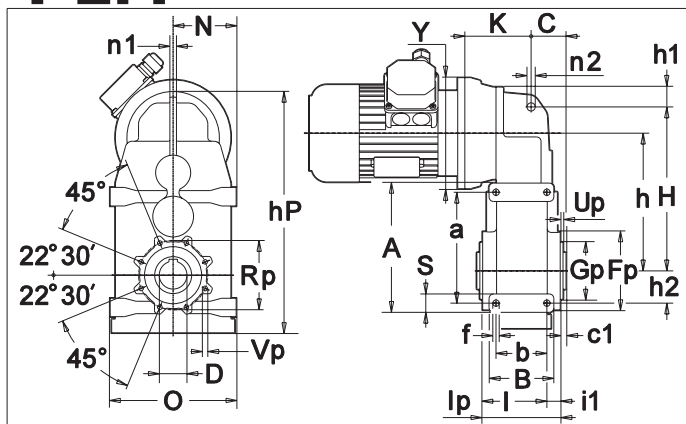
F



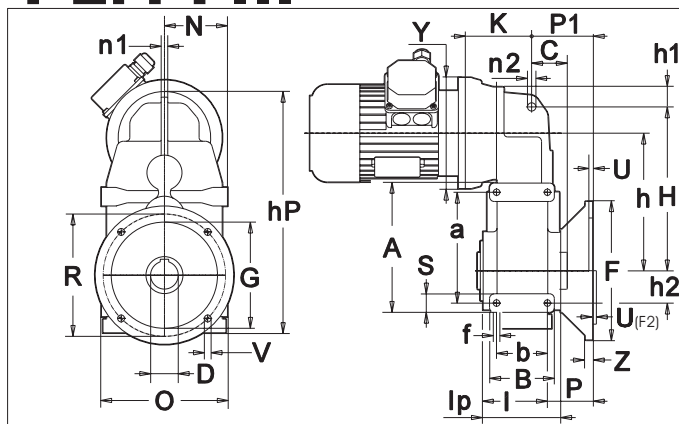


# PL. 115-125-135

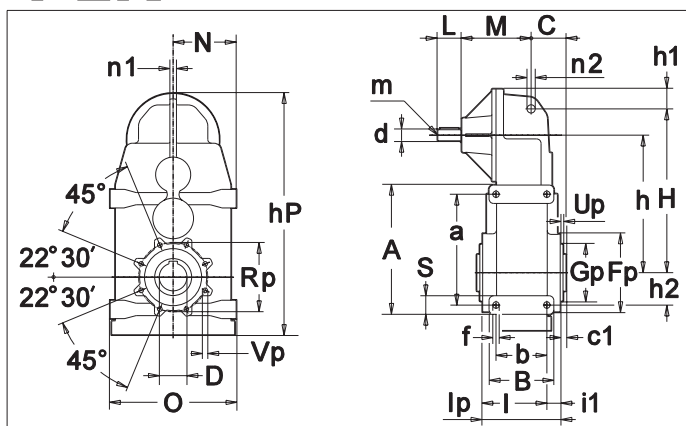
## PLM



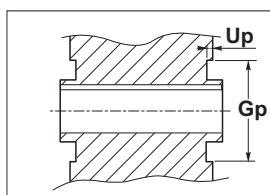
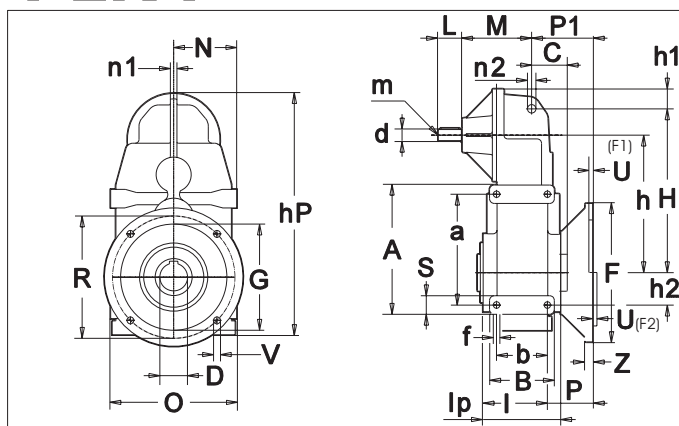
## PLM F...



## PLR



## PLR F...



Dettaglio centraggio flangia pendolare.  
 Quota "G<sub>p</sub>".  
 Flange centering detail.  
 "G<sub>p</sub>" quota.  
 Zentrierung des Aufsteckflanschs.  
 Maß "G<sub>p</sub>".



1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

PL..	a	A	b	B	C	c 1	d h6	D H7	f	h	hP	H	h1	h2	l	i1	lp	L	N	m	M	n1	n2	S
115	285	333	190	230	83.5	4.5	28 h6	70 (80)	M16x 30	372	666	450	47	80	227.5	37.5	265	60	172.5	M8	245	20	22	48
125	330	390	230	282	74	6	38 h6	90	M20x 35	432	793	550	57	90	260	30	290	80	205.5	M10	339.5	28	26	60
135	400	470	270	325	85.5	5	48 k6	100	M30x 50	485	886	595	65	100	300	30	330	110	230	M10	320	32	32	70

PL..	Fp	Gp	O	P1	Rp	Up	Vp		F	Fq	G g6	P	R	U	V	Z	x
115	240	160	345	121	200	5	M14x28	F1	400	-	300	79.5	350	5	n°4 fori Ø18	18	-
								F2	450	-	350	79.5	400	5	n°8 fori Ø19	18	-
125	275	180	411	107	225	5	M16x32	F1	400	-	300	68.5	350	5	n°4 fori Ø18	18	-
								F2	450	-	350	68.5	400	5	n°8 fori Ø18	25	-
135	310	200	460	136.5	250	5	M18x36	F1	550	-	450	86	500	5	n°8 fori Ø18	25	n°2 fori spina Ø18

	IEC	115		125		135	
		Y	K	Y	K	Y	K
PLM	B5	250	197	250	287.5	300	326.75
		300	197	300	287.5	350	335.75
		350	261	350	331	400	340.75
		400	266	400	336	450	380.75
		-		450	345	550	380.75
	B14	200	197	200	287.5		-

F





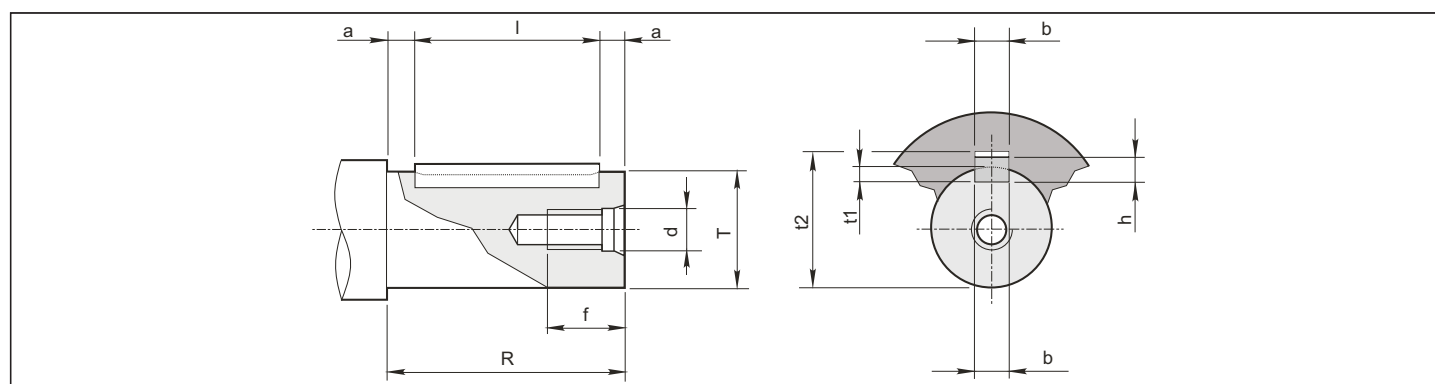
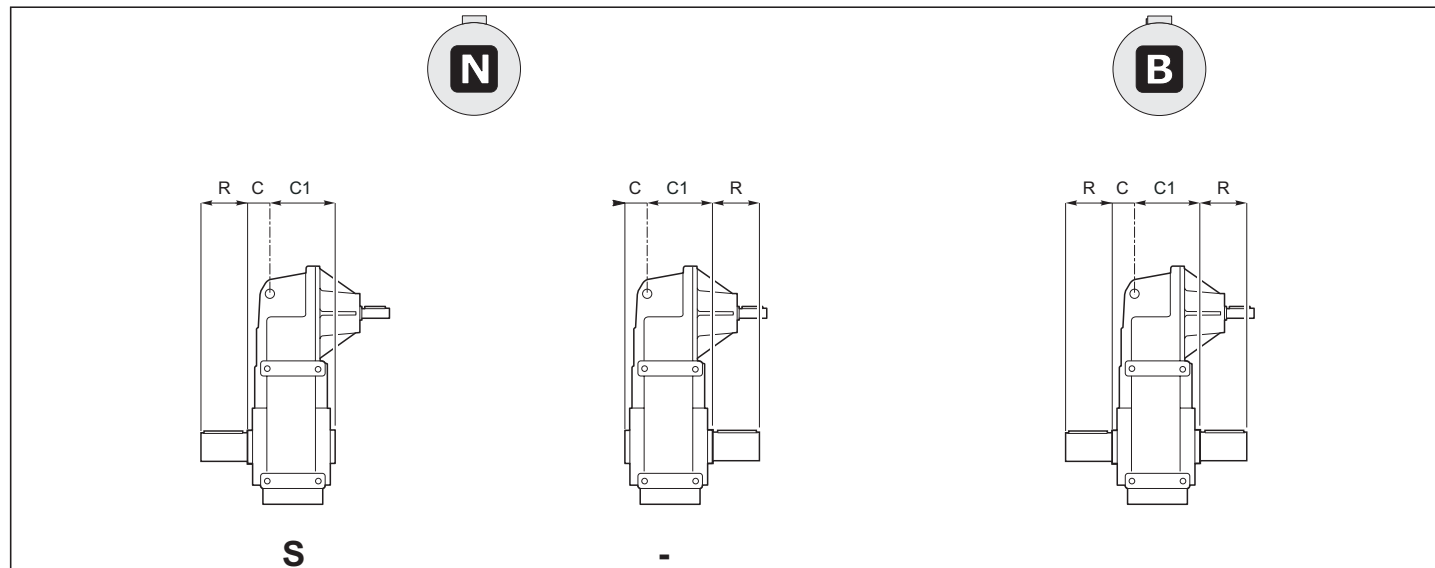
**ESTREMITÀ USCITA - Accessori - Opzioni**  
**OUTPUT CONFIGURATIONS - Accessories - Options**  
**ENDEN DER AUSGANGSWELLEN - Zubehör - Optionen**

STIM  
team

STIM  
team

		Output shaft Double integral output shaft	<b>F35</b>
		Hollow shaft with keyway	<b>F36</b>
		Quick Locking Adjustment "Quick Locking"	<b>F38</b>
		Hollow shaft with shrink disk	<b>F40</b>
		Splined hollow shaft	<b>F42</b>
		Splined output shaft Double splined shaft	<b>F44</b>
		Broached flange Double broached flange	<b>F46</b>
		OPT - ACC. - Accessories - Options	<b>F48</b>

25-45-65-85-95-105-115-125-135

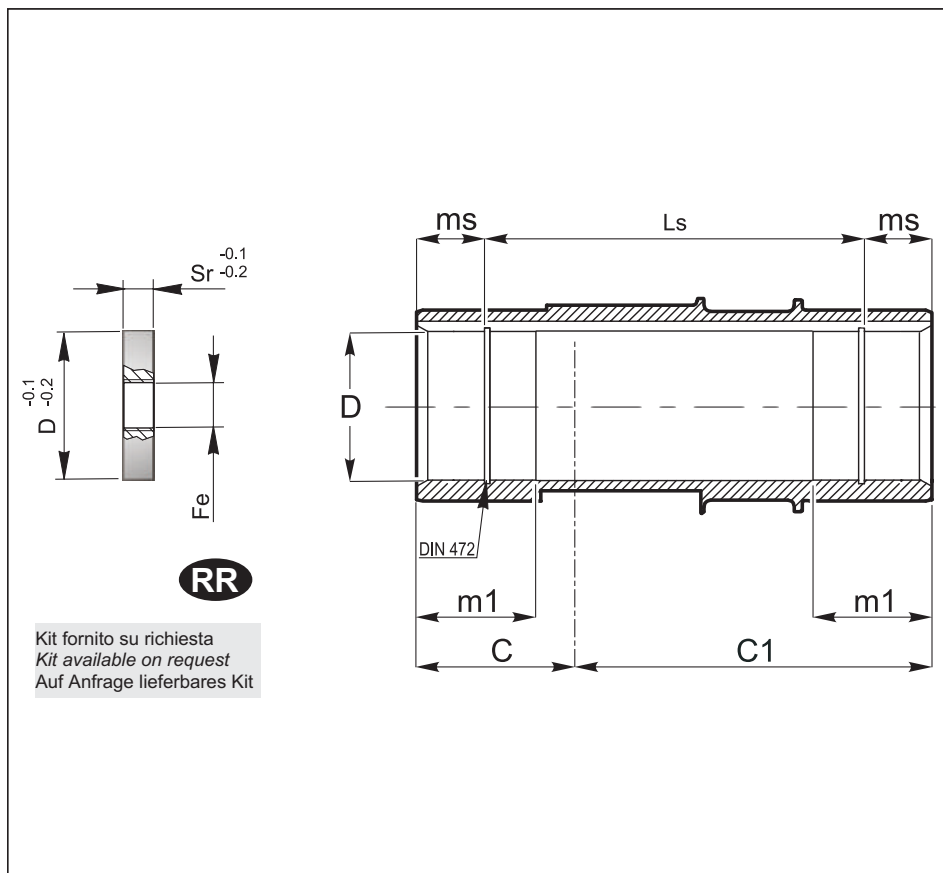
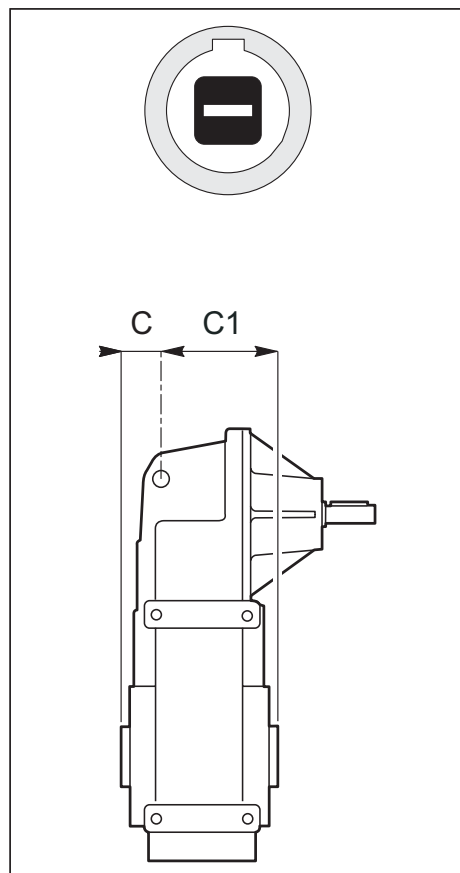


	Ø Albero Ø Shaft Ø Welle			Foro fil. testa Tapped hole Gewindebohrung Kopfi		Cava Keyway Nut			Estremità d'albero Shaft end Wellenende		Linguetta Key Federkeil
	T	C	C1	d	f	b	t1	t2	R	a	bxhxl
<b>25</b>	20 g6	44.5	60.5	M 6	15	6	3.5	22.8	40	8	6x6x25
<b>45</b>	30 g6	46	84	M 10	25	8	4	33.3	60	5	8x7x50
<b>65</b>	35 g6	33.5	96.5	M 10	25	10	5	38.3	70	5	10x8x60
<b>85</b>	45 g6	42	113	M 10	25	14	5.5	48.8	90	5	14x9x80
<b>95</b>	55 g6	52	128	M 12	32	16	6	59.3	110	5	16x10x100
<b>105</b>	60 m6	85.5	156.5	M 12	35	18	7	64.4	112	6	18x11x100
	70 m6			M 16	39	20	7.5	74.9	125	7.5	20x12x110
<b>115</b>	70 m6	83.5	190.5	M 16	39	20	7.5	74.9	125	7.5	20x12x110
	80 m6			M 16	39	22	9	85.4	140	7.5	22x14x125
<b>125</b>	90 m6	74.3	227.8	M 16	39	25	9	95.4	160	10	25x14x140
<b>135</b>	100 m6	85.50	254.5	M 20	46	28	10	106.4	180	10	28x16x160





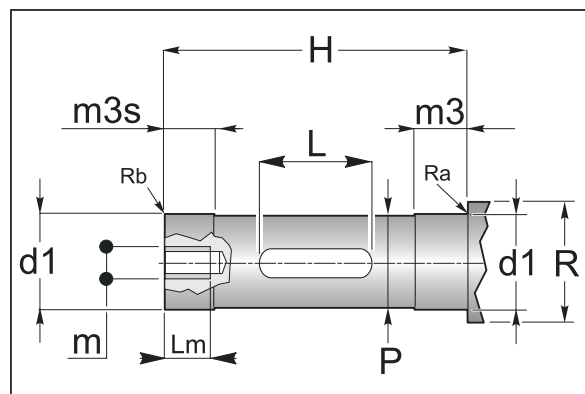
25-45-65-85-95

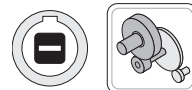


	25	45	65	85	95
C	44.5	46	33.5	42	52
C1	60.5	84	96.5	113	128
D H7	20 (24) (19)	30 (25)	35 (30)	45 (50) (40)	55 (60) (50)
m1	25.5	40	35	42.5	55
ms	-	20	-	15	17.5
Ls	-	90	-	125	145

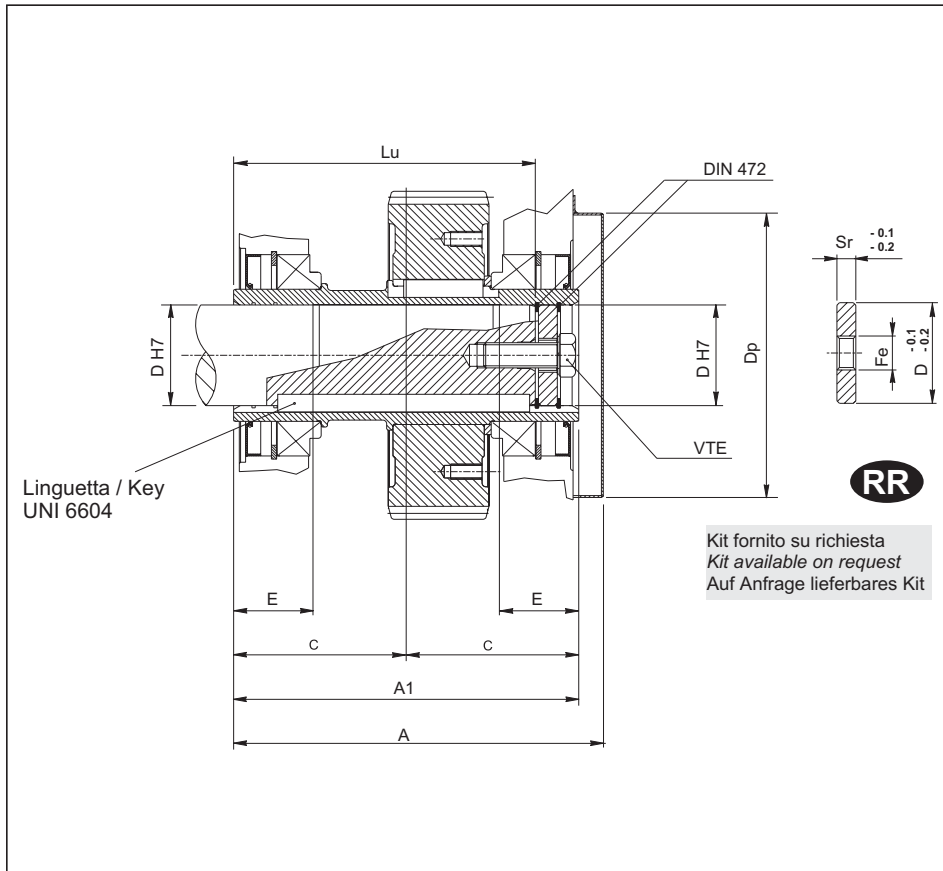
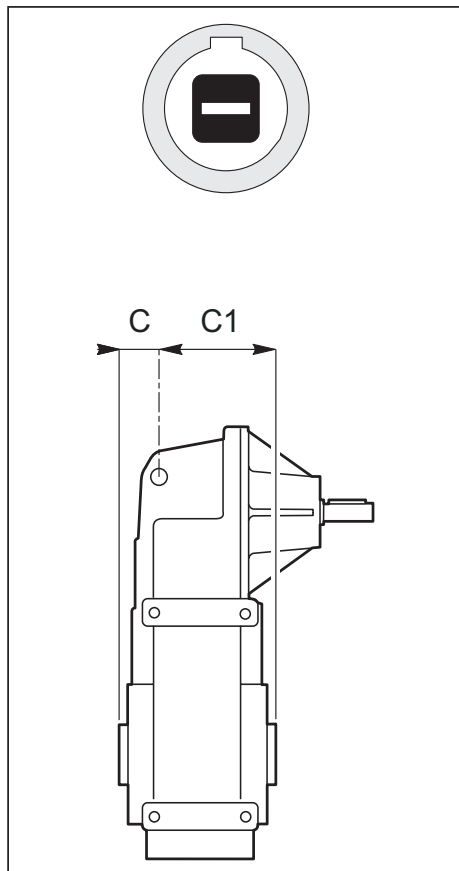
Perno macchina / Customer shaft / Maschinachse

	d1 h6	m3	m3s	Lm	m	H	L mi n	P	R	Ra	Rb	Sr	Fe
25	20 (24) (19)	30	30	15 (25) (15)	M 6 (M 8) (M 6)	103	40	19.8 (23.8) (18.8)	30			-	-
45	30 (25)	45	8	25 (25)	M 10 (M 8)	98	50	29.8 (24.8)	40			8	M12
65	35 (30)	40	40	25	M 10	128	60	34.8 (29.8)	45			-	-
85	45 (50) (40)	45	15	25 (32) (25)	M 10 (M 12) (M 10)	125	80	44.8 (49.8) (39.8)	55 (60) (50)			10	M14
95	55 (60) (50)	60	20	32	M 12	142	110	54.8 (59.8) (49.8)	65 (70) (60)			15	M14





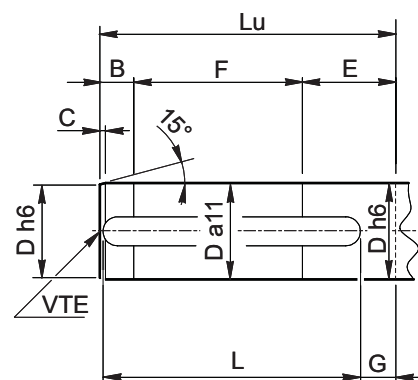
105-115-125-135

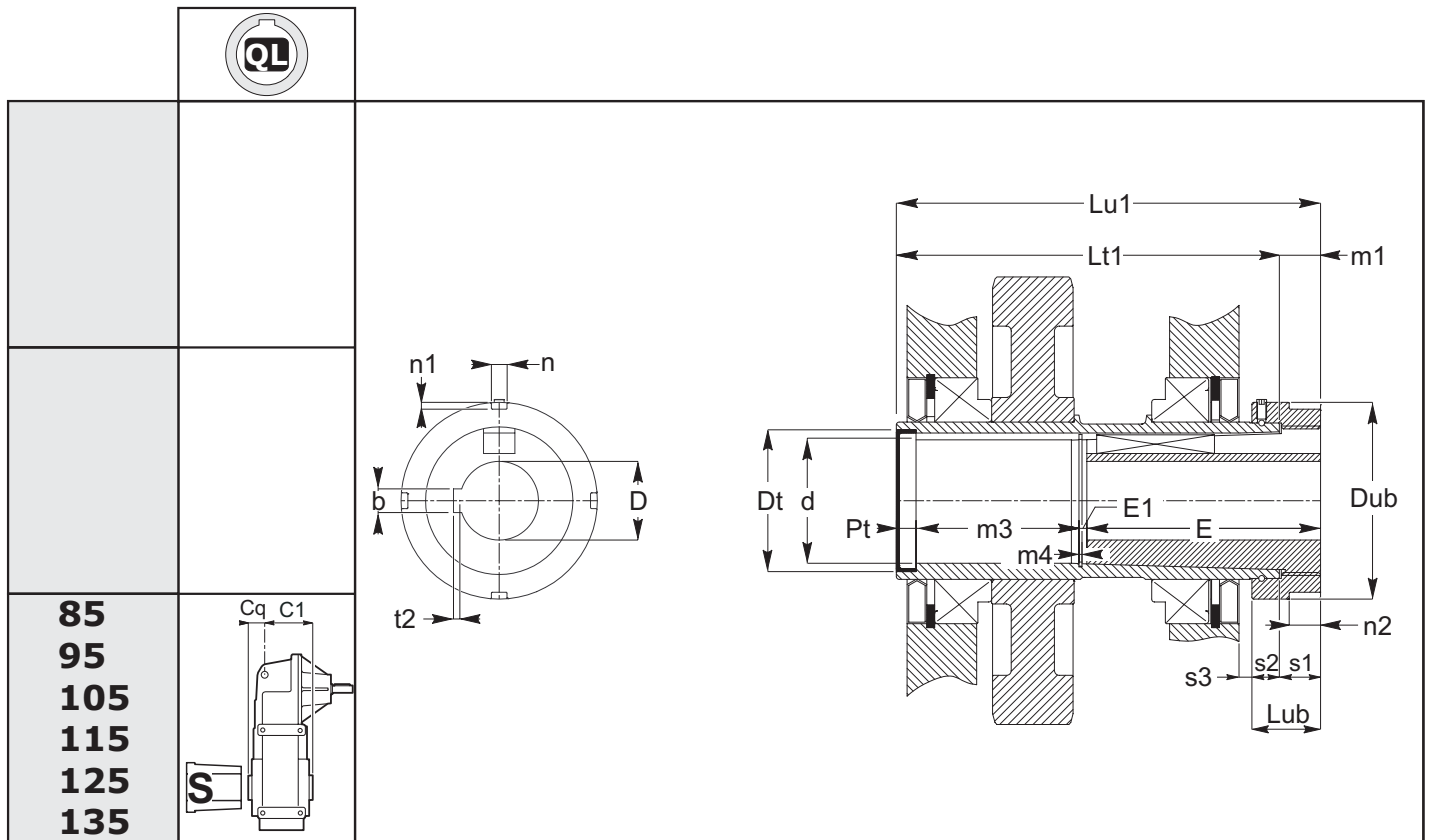


	105	115	125	135
A	269	302	332	379
A1	242	274	302	340
C	85.5	83.5	74.3	85.5
C1	156.5	190.5	227.8	254.5
D	60 (70)	70 (80)	90	100
Dp	183	226	226	260
E	56	63	70	80
Lu	207.5	239.5	261	299
Sr	15	15	18	18
Fe	M27	M27	M30	M30
VTE	M20x60	M20x60	M24x75	M24x75

Albero Macchina / Machine shaft / Machine Shaft

	B	C	D	E	F	G	L	Lu	VTE
105	26.5	4	60 (70)	61	120	25	180	207.5	M20
115	33.5	4.5	70 (80)	68	138	36	200	239.5	M20
125	36	5	90	77	148	37	220	261	M24
135	44	5.5	100	85	170	43	250	299	M24





	85	95	105	115	125	135
C1	113	128	156.5	190.5	227.8	-
Cq	78	88	121.5	119.5	110.2	-
d	49.2	60.2	70.2	80.2	90.2	100.2
dt	62	72	85	100	110	120
Dub	85	100	105	120	135	145
E	121	131	141	161	181	201
E1	3.5	3.5	4.2	4.2	4.2	5.2
Lt1	170	195	257	289	317	355
Lu1	191	216	278	310	338	376
Lub	35	35	35	35	35	35
m1	21	21	21	21	21	21
m3	58.5	71.5	120.8	132.8	140.8	157.8
m4	1.7	1.7	2.2	2.2	2.2	2.7
n2	15.5	16	16	17	17	17
s1	21	21	21	21	21	21
s2	14	14	14	14	14	14
s3	5	6.5	10	13	17	15
D	25 30 35 38 40 42 45 48	35 40 45 48 50 55	40 45 50 55 60 65	45 50 55 60 65 70 75	55 60 65 70 75 80	70 75 80 85 90
n	7	8	8	10	10	10
n1	3	3.5	3.5	4	4	4
b	UNI 6604					
t2	UNI 6604					

1.8.1 - ALBERI LENTI

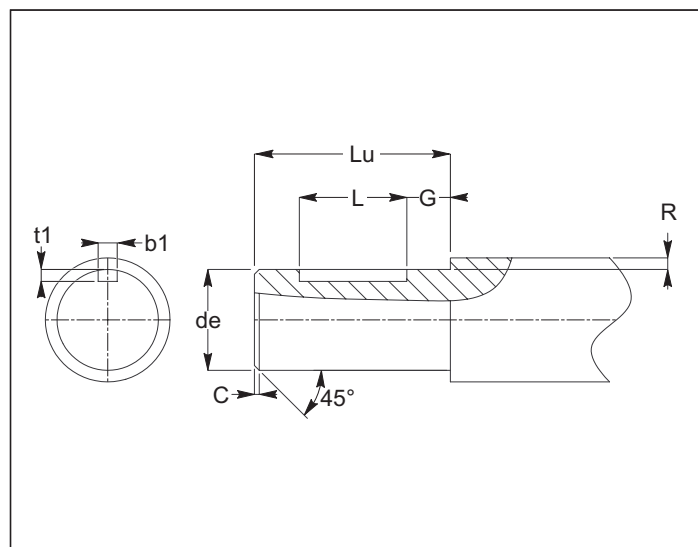
1.8.1 - OUTPUT SHAFT

1.8.1 - ABTRIEBSWELLEN

Perno macchina / Customer shaft / Maschinachse

	C	de h6	G	L	Lu	R	b1	t1
85	1.5	(25)	10	50	120	5		
		(30)	10	60				
		(35)	10	70				
		(38)	10	70				
		(40)	5	80				
		(42)	5	80				
		(45)	5	90				
(48)	5	90						
95	1.5	(35)	10	70	130	5		
		(40)	10	80				
		(45)	10	90				
		(48)	10	90				
		(50)	5	100				
(55)	5	100						
105	1.5	(40)	10	80	140	7.5		
		(45)	10	90				
		(50)	10	100				
		(55)	5	100				
		(60)	5	120				
(65)	5	120						
115	2	(45)	10	90	160	7.5		
		(50)	10	100				
		(55)	10	100				
		(60)	5	120				
		(65)	5	120				
		(70)	5	120				
(75)	5	140						
125	2	(55)	10	100	180	7.5		
		(60)	10	120				
		(65)	10	120				
		(70)	5	120				
		(75)	5	150				
(80)	5	150						
135	2	(70)	10	120	200	10		
		(75)	10	150				
		(80)	10	150				
		(85)	5	170				
(90)	5	170						

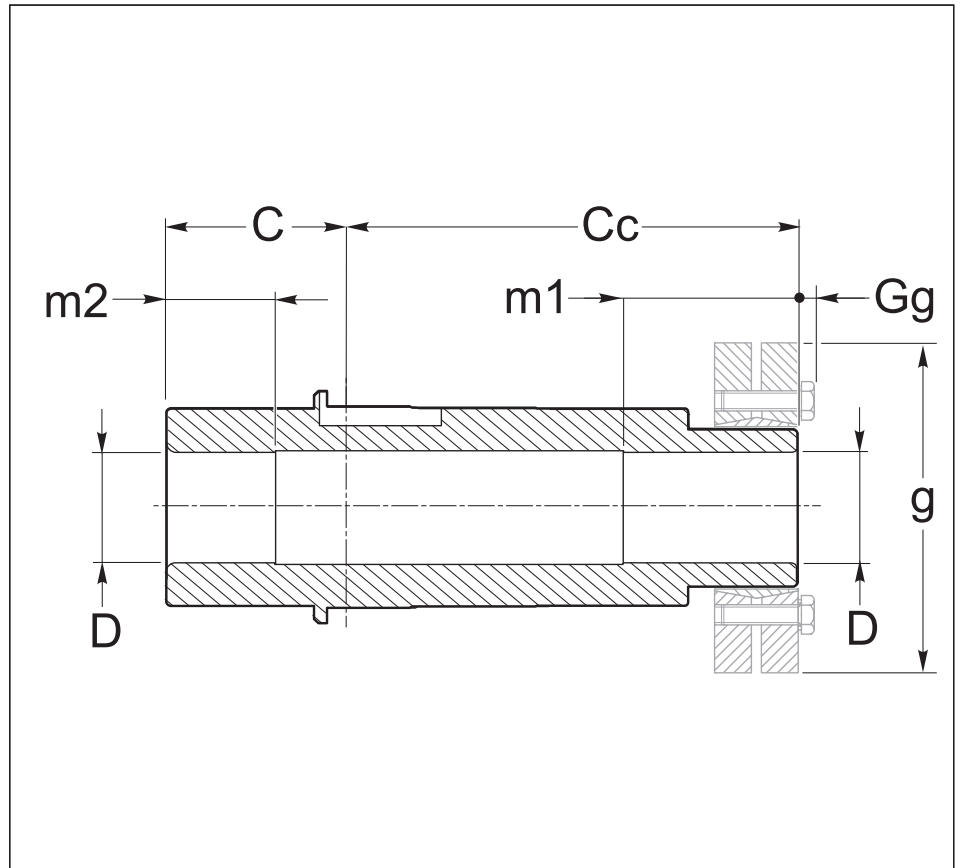
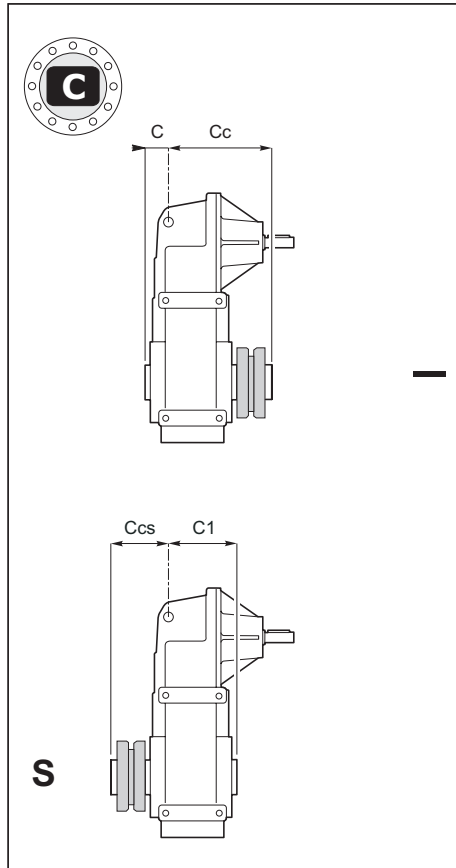
UNI 6604



F

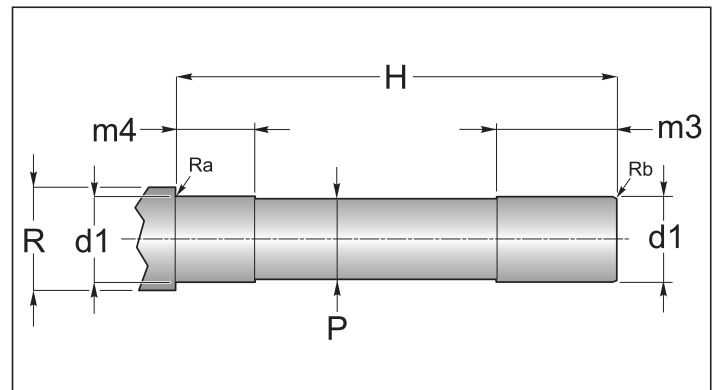


25-45-65-85-95



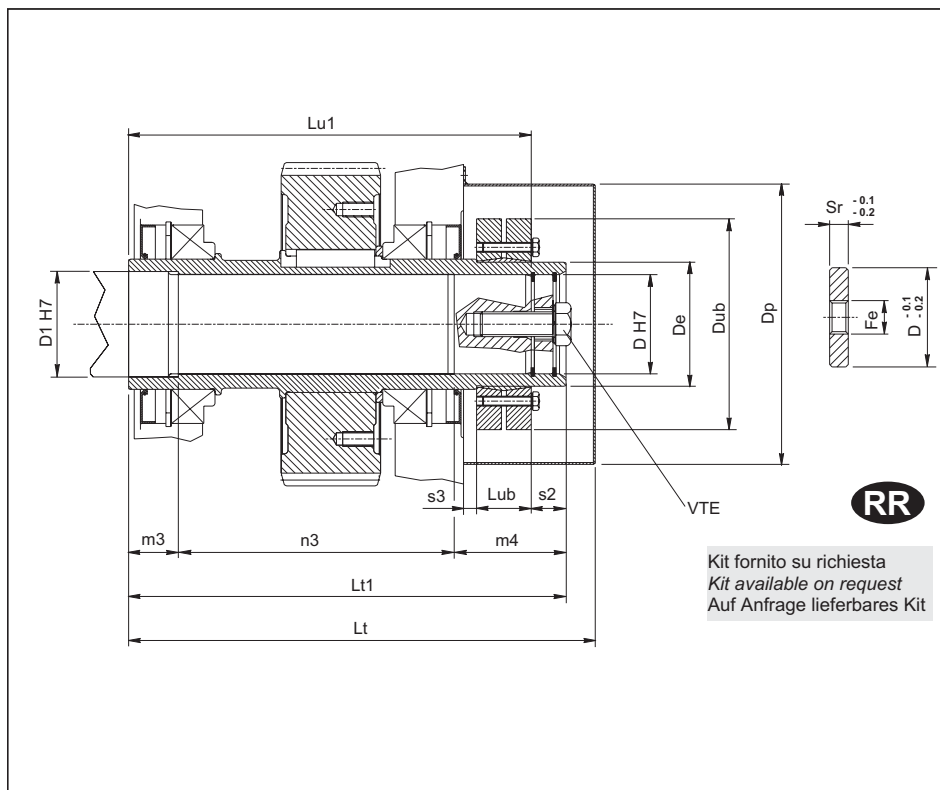
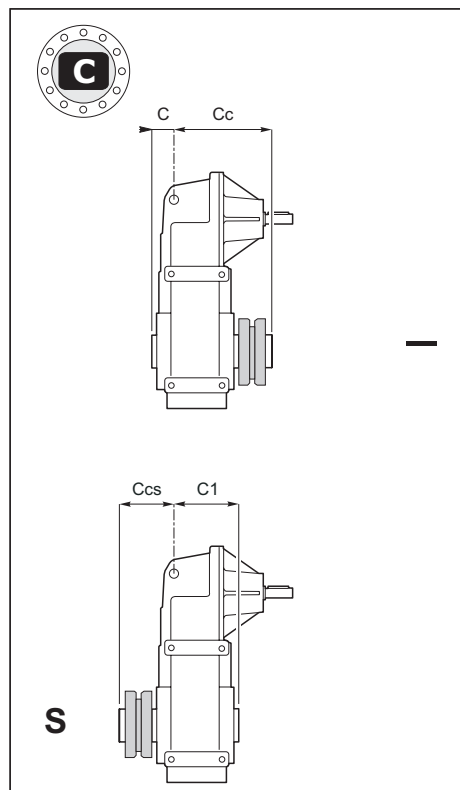
	25	45	65	85	95
<b>C</b>	44.5	46	33.5	42	52
<b>Cc</b>	82.5	109	124.5	143	163
<b>C1</b>	60.5	84	96.5	113	128
<b>Ccs</b>	66.5	71	61.5	72	87
<b>D</b> H7	20	30	35	45	55
<b>m1</b>	35	35	40	50	60
<b>m2</b>	25.5	30	30	30	50
<b>g</b>	50	72	80	100	115
<b>Gg</b>	3.5	4	4	4	4

	d1 h6	H	m3	m4	P	R	Ra	Rb
25	20	127	40	30	18.8	30		
45	30	155	40	35	29.8	40		
65	35	158	45	35	34.8	45		
85	45	185	55	35	44.8	55		
95	55	215	65	55	54.8	65		





105-115-125-135

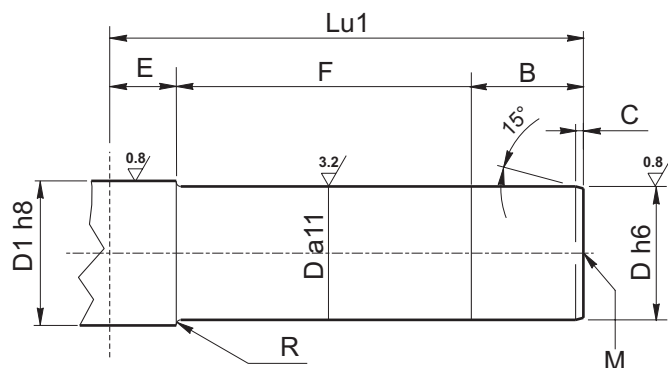


Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit

	105		115		125		135	
Lt	334.5		375.5		405.5		452.5	
Lt1	313		352		397		436	
m3	35		40		45		50	
n3	198		222		252		276	
m4	80		90		100		110	
Lu1	286		324		364		402	
Dp	183		226		226		260	
Dub	145	155	155	170	215	215	215	215
Lub	32.5	39	39	44	54	54	54	54
s2	30	27	30	28	33	33	34	34
C	85.5		83.5		74.3		85.5	
C1	156.5		190.5		227.8		254.5	
Cc	227.5		268.5		322.8		350.5	
Ccs	156.5		161.5		169.3		181.5	
D	60	70 (opz)	70	80 (opz)	90	90	100	100
D1	65	75	75	85	95	95	110	110
De	80	90	90	100	120	120	130	130
Sr	15		15		18		18	
Fe	M27		M27		M30		M30	
VTE	M20x60		M20x60		M24x75		M24x75	

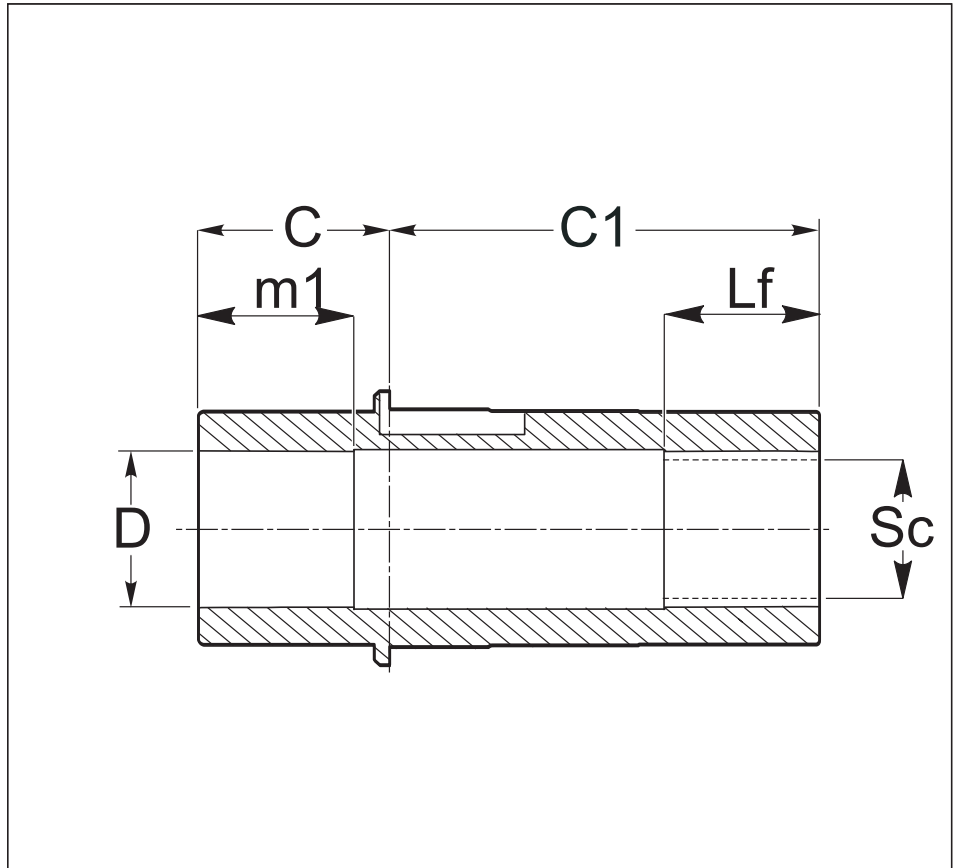
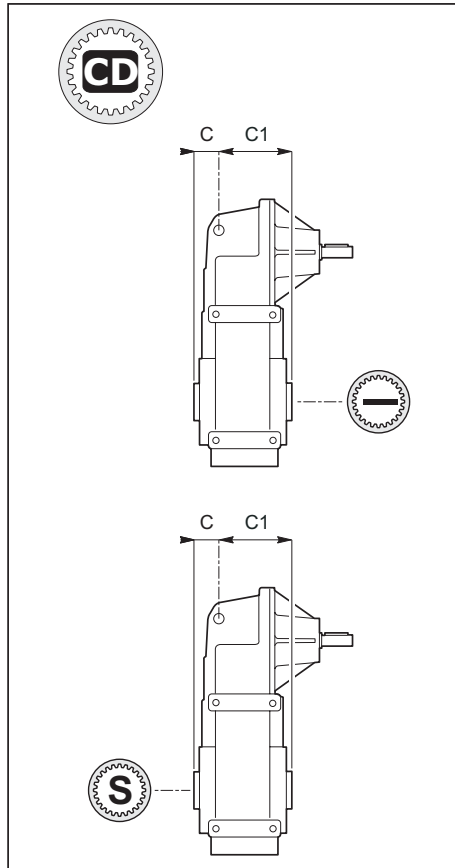
Perno macchina / Customer shaft / Maschinachse

	105	115	125	135
B	58	67	72	81
C	4	4.5	5	5.5
D	60 (70)	70 (80)	90	100
D1	65 (75)	75 (85)	95	110
E	30	32	35	40
F	198	225	257	281
Lu1	286	324	364	402
M	M20	M20	M24	M24
R	2.2	2.5	2.5	3





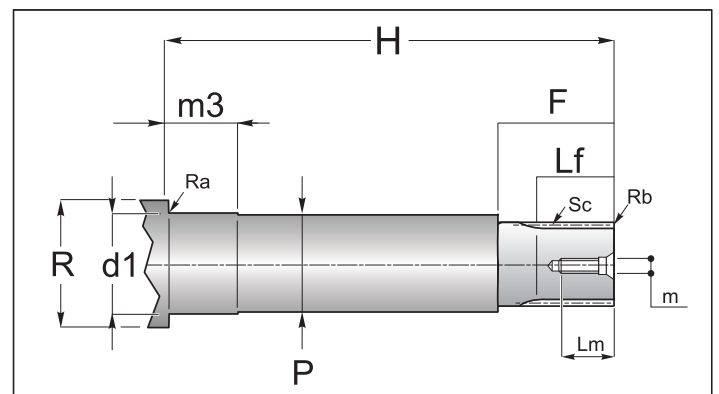
## 25-45-65-85-95-105-115-125-135



	45	65	85	95	105	115	125	135
C	46	33.5	42	52	85.5	83.5	74.3	85.5
C1	84	96.5	113	128	156.5	190.5	227.8	254.5
D H7	30	37	47	57	72	82	92	102
m1	30	40	55	60	70	90	90	110
Lf	30	40	55	60	70	90	90	110
Sc	28 x 25 DIN 5482	35 x 31 DIN 5482	45 x 41 DIN 5482	55 x 50 DIN 5482	70 x 64 DIN 5482	80 x 74 DIN 5482	90 x 84 DIN 5482	100 x 94 DIN 5482

Perno macchina / Customer shaft / Maschinachse

	d1 h6	m3	H	P	R	Ra	Rb	Sc	F	Lf	Lm	m
45	30	25	126	29	40	1	1x45°	40	30	25	M10	
65	37	35	126	36	45	1	1x45°	50	40	25	M10	
85	47	50	155	46	60	1	1.5x45°	65	55	25	M10	
95	57	55	175	56	75	1	1.5x45°	70	60	35	M12	
105	72	65	238	71	85	2	1.5x45°	80	70	39	M16	
115	82	85	270	81	100	3	2x45°	100	90	39	M16	
125	92	85	299	91	115	2	2x45°	100	90	39	M16	
135	102	105	337	101	125	2	2x45°	120	110	39	M16	





**Pagina bianca  
Leerseite  
Blank page**

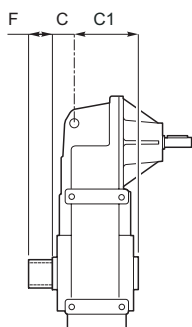
**F**



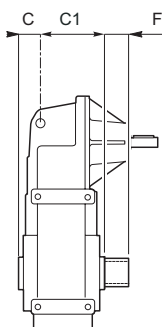




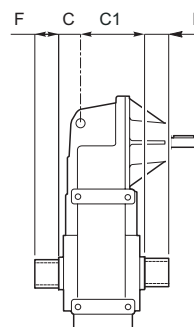
## 25-45-65-85-95-105-115-125-135



S

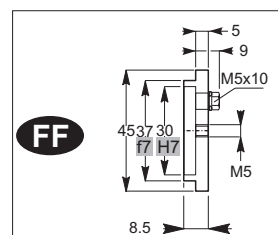
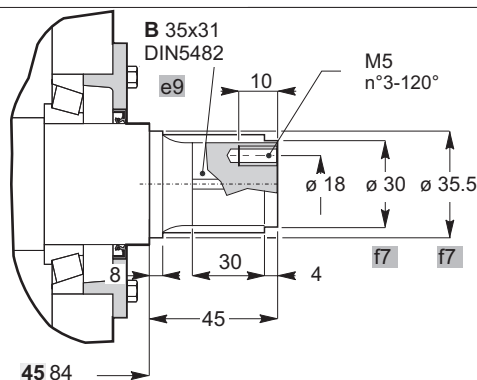


-



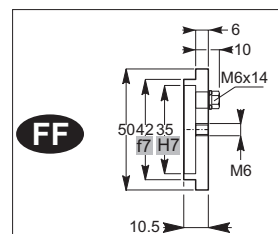
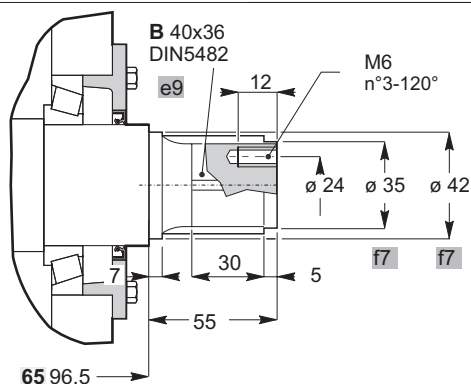
	C	C1	de (h10)	F	Profilo scanalato / Splined profile / Keilprofil				dc (f7)	Sp
					Sc	Z	mn	$\alpha$		
45	46	84	Look Drawing			DIN 5482				
65	33.5	96.5				35 x 31				
85	42	113				DIN 5482				
95	52	128				40 x 36				
105	85.5	156.5	69.3	70	FIAT 70	26	2.58	30°	70	25
115	83.5	190.5	79.3	70	FIAT 80	27	2.82	30°	80	20
125	74.3	227.8	94.3	75	FIAT 95	31	2.97	30°	95	25
135	85.5	254.5	104.4	80	D. 105 DIN 5480	34	3	30°	106	25

45



**FF** - Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit

65



**FF** - Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit



1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

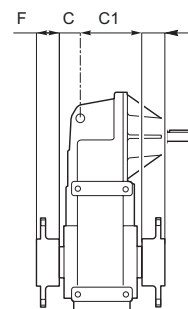
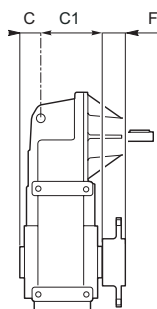
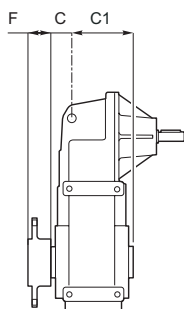
1.8.1 - ABTRIEBSWELLEN

<p><b>85</b></p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p><b>95</b></p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p><b>105-115</b> <b>125-135</b></p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>





## 25-45-65-85-95-105-115-125-135



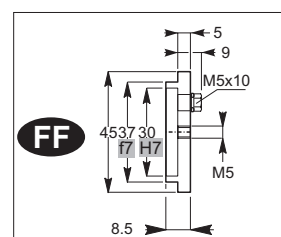
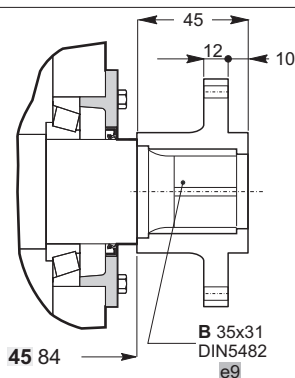
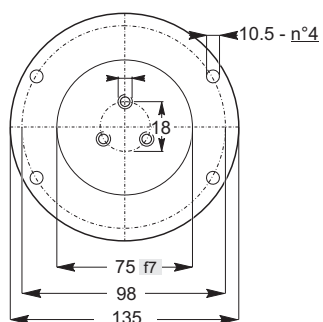
S

-

## Dimensioni generali / General dimensions / Allgemeine Abmessungen

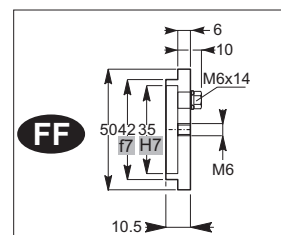
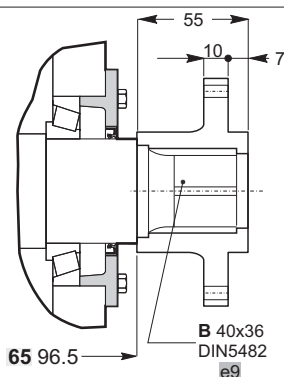
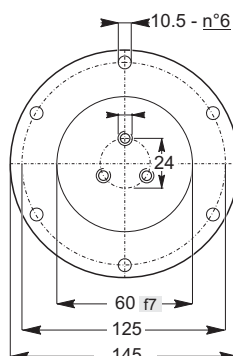
	de	∅ A	∅ B	C	C1	∅ Ce f8	N° Fori holes Anzahl der Bohrungen	∅ D	E	F	G	H	I	N h9
<b>45</b>	Look Drawing			46	84	Look Drawing								
<b>65</b>				33.5	96.5									
<b>85</b>				42	113									
<b>95</b>				52	128									
<b>105</b>	69.3	200	160	85.5	156.5	100	4	17.5	M10	70	43	11	16	180
<b>115</b>	79.3	220	180	83.5	190.5	110	4	19.5	M10	70	40	12	18	200
<b>125</b>	94.3	240	190	74.3	227.8	130	8	19.5	M10	75	40	15	20	220
<b>135</b>	104.4	250	200	85.5	254.5	145	8	21.5	M12	80	40	20	20	230

45



**FF** - Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit

65



**FF** - Kit fornito su richiesta  
Kit available on request  
Auf Anfrage lieferbares Kit



1.8.1 - ALBERI LENTI

1.8.1 - OUTPUT SHAFT

1.8.1 - ABTRIEBSWELLEN

<p><b>85</b></p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p><b>95</b></p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p><b>105-115</b></p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request</p>
<p><b>125-135</b></p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request</p>





**AV** ANTIVIBRANTE VKL

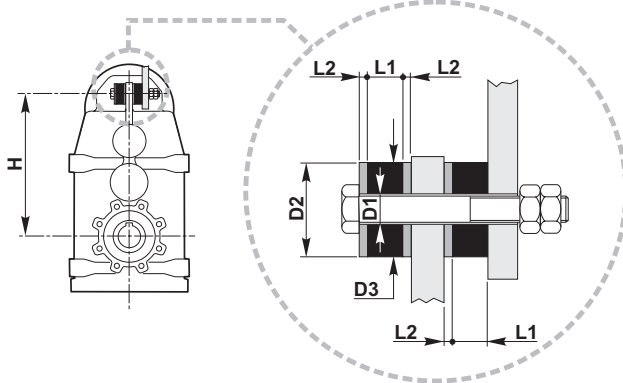
Per riduttori e motoriduttori pendolari.

**RUBBER BUFFER VKL**

For shaft mounted gearboxes and geared motors.

**GUMMIHÜLSE VKL**

Für aufsteckgetriebe und aufsteckgetriebe-motoren.



PL..	D1	D2	D3	L1	L2	H
25	12	25	25	16	4	145
45	12.5	40	40	16	4	175
65	12.5	25	25	16	4	225
85	12.5	40	40	16	4	260
95	12.5	40	40	16	4	325
105	22	60	60	22	8	375
115	22	60	60	22	8	450
125	25	70	70	25	10	550
135	32	90	90	32	12	595

**AL** AL - ALBERO LENTO SPORGENTE

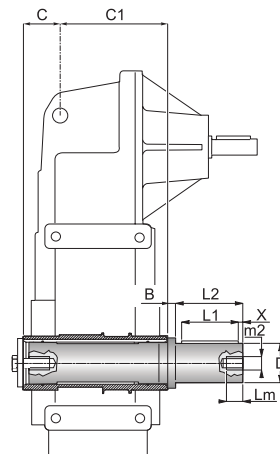
Tutti i riduttori sono forniti con albero lento cavo. A richiesta, possono essere forniti kit di montaggio per alberi sporgenti comprensivi di linguette, rondelle e viti di fissaggio. Le dimensioni delle linguette sono conformi alle norme UNI 6604-69.

**AL - SINGLE OUTPUT SHAFTS**

All gearboxes are supplied with hollow output shaft. On request there are available also assembly kits including output shafts, keys, washers and assembly screws. The dimensions of the keys are conform with UNI 6604-69.

**AL - EINSEITIGE ABTRIEBSWELLEN**

Alle Getriebe werden mit Abtriebshohlwelle geliefert. Auf Anfrage sind auch Montagekits inklusive Abtriebswellen, Paßfedern, Unterlegscheiben und Montageschrauben erhältlich. Die Abmessungen der Paßfedern sind konform mit der UNI 6604-69.



	B	C	C1	D g6	m <sub>2</sub>	L <sub>1</sub>	L <sub>2</sub>	L <sub>m</sub>	X
25*	10	44.5	60.5	20	M 8	25	40	20	7
45*	16	46	84	30	M 10	50	60	25	5
65*	15	33.5	96.5	35	M 10	60	70	25	5
85*	21	42	113	45	M 10	80	90	25	5
95*	26	52	128	55	M 12	100	110	32	5

**\* ATTENZIONE**

L'albero lento sporgente è fornito per essere installato sulla versione del riduttore con albero CAVO con diametro STANDARD.

**\*ATTENTION**

The output shaft is available only for standard hollow shaft diameter.

**Achtung:**

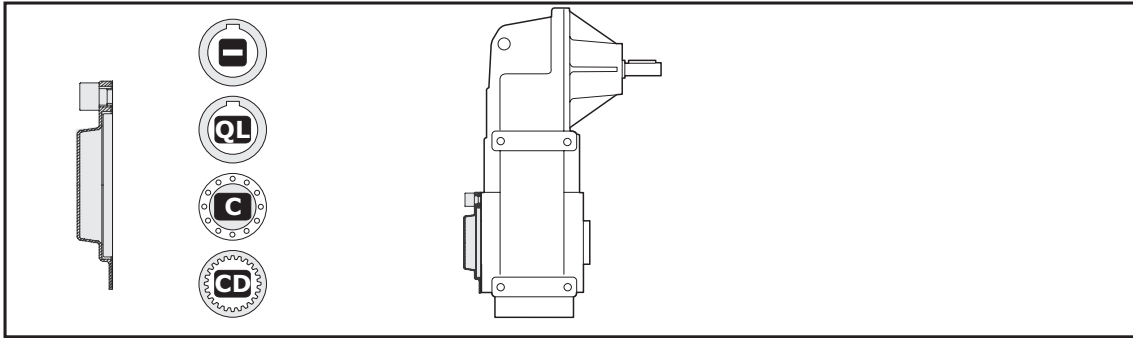
Die Einseitige Abtriebswelle wird fuer die Montage bei Getrieben mit Standart Hohlwelle geliefert.



**PROT** PROT. - Coperchio di protezione

**PROT.** - Protection cover

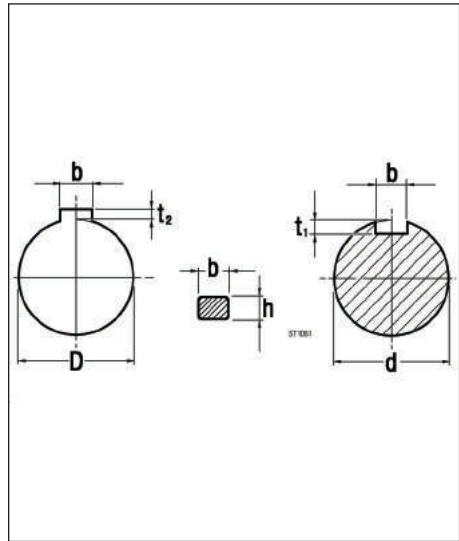
**PROT** - Schutzvorrichtungdeckel



1.9 Linguette

1.9 Keys

1.9 Paßfedern



Albero entrata  
Input shaft  
Antriebswelle

Albero uscita  
Output shaft  
Abtriebswelle

Tab. 4.17

d	bxh	t1	
16	5x5	3	0/ +0.1
19	6x6	3.5	
24	8x7	4	0/ +0.2

D	bxh	t2	
19	6x6	2.8	0/ +0.1
20	8x7	2.8	
24	8x7	3.3	0/ +0.2
25	8x7	3.3	
28	8x7	3.3	
30	8x7	3.3	
32	10x8	3.3	
35	10x8	3.3	
40	12x8	3.3	
42	12x8	3.3	
45	14x9	3.8	
48	14x9	3.8	
50	14x9	3.8	0/ +0.3
55	16x10	4.3	
60	18x11	4.4	
70	20x12	4.9	
80	22x14	5.4	
90	25x14	5.4	
100	28x16	6.4	







1.0 Riduttori paralleli - pendolari PT  
 1.0 Shaft gearboxes - shaft mounted gearboxes PT  
 1.0 Flach- und Aufsteckgetriebe PT

**PT**

1.1	Caratteristiche tecniche	Technical characteristics	Technische Eigenschaften	<b>G1</b>
1.2	Designazione	Designation	Bezeichnungen	<b>G2</b>
1.4	Lubrificazione	Lubrication	Schmierung	<b>G9</b>
1.3	Carichi radiali e assiali	Axial and overhung loads	Radiale und Axiale Belastungen	<b>G13</b>
1.4	Prestazioni riduttori	Gearboxes performances	Leistungen der G etriebe	<b>G14</b>
1.5	Dimensioni	Dimensions	Abmessungen	<b>G22</b>
1.6	Accessori	Accessories	Zubehör	<b>G44</b>

	<b>PTF</b>	<b>PTF</b>	<b>PTP</b>
<b>1</b>			
<b>2</b>			
	<b>80-100</b> <b>125-140</b>	<b>132-150</b> <b>170-190</b>	



**1.1 Caratteristiche tecniche**

I robusti riduttori pendolari della serie PT, sono particolarmente adatti nell'azionamento di nastri trasportatori, soprattutto nelle installazioni all'aperto e nell'industria mineraria, dove l'affidabilità e la ridotta manutenzione sono elementi essenziali.

- Una novità esclusiva è la cassa monolitica con coperchio di ispezione! In opzione, sono sempre disponibili:
- il dispositivo antiretro, che impedisce l'inversione del moto per effetto del carico.
  - il calettatore, per fissaggi rigidi e precisi anche con molte inversioni di moto.
  - le bussole coniche, che uniscono ampia intercambiabilità con facilità di smontaggio.

**1.1 Technical characteristics**

*The sturdy PT series has ideal for the material handling industry, especially for the quarry and mine applications where absolute reliability and low maintenance are key factors.*

*An exclusive innovation is the monolithic casing with inspection cover!*

- Also appreciated options are:*
- the backstop device that prevents backdriving in case of incline conveyors.
  - the shrink disk for rigid and accurate mounting also with a lot start-up/hour.
  - the taper bushing join interchangeable with easy dismounting

**1.1 Technische Eigenschaften**

Die robusten Pendlergetriebe der PT-Serie sind besonders geeignet für den Antrieb von Förderbändern, vor allem bei Outdoor-Installationen und im Bergbau, wo Zuverlässigkeit und geringer Wartungsaufwand unerlässlich sind eine außerordentliche.

Neuheit ist das monolithische Gehäuse mit Inspektionsdeckel!

- Als Option stehen jederzeit zur Verfügung:
- die Rücklaufsperr, die eine Richtungsänderung des Motors bei Beladung verhindert.
  - die Klemmen, für starre und präzise Befestigungen auch bei vielen Umkehrbewegungen
  - die konischen Buchsen, die sowohl eine allseitige Austauschbarkeit als auch eine leichte Demontage ermöglichen.



1.2 Designazione

1.2 Designation

1.2 Bezeichnung

Maschine	Output Version	Size	N° of reductions	Basic shaft Arrangement	Input double extension	Output double extension	Reduction ratio	Input Version Main	Input Version Secondary	Backstop	Output Shaft	Shaft Diameter	Output flange	Mounting positions
00 M	01 OV	02 SIZE	03 NOR	04 BSA	05 BE	06 BU	07 IR	08 IVM	09 IVS	10 BSTOP	11 OS	13 SD	14 OF	15 MP
<b>PT</b>	<b>P</b> <b>F</b>	80	1	<b>AUD</b>	—	—	Vedi tabelle prestazioni See performance tables Siehe Leistungstabellen	—	—	<b>AR</b> <b>ARB</b> <b>ARN</b>	<b>D</b>	— Nessuna indicazione diametro standard	<b>F</b>	<b>M1</b> <b>M2</b> <b>M3</b> <b>M4</b> <b>M5</b> <b>M6</b>
		100									<b>N</b>			
		125									<b>FD</b>	No indications standard diameter		
		132									<b>UB</b>	Keine Angabe Standard-durchmesser		
		140									<b>B</b>			
		150									<b>CD</b>	∅... Diametro foro opzionale		
		170									<b>C</b>			
190	<b>QL</b>	Optional hollow shaft diameter												
											<b>L</b>	Optionaler Hohlwellendurchmesser		

WEB: Reference Designation

CODE: Example of Order

PTF 100/1  
C2 7.4 M1

00 M - Macchina

M - Maschine

M - Getriebe

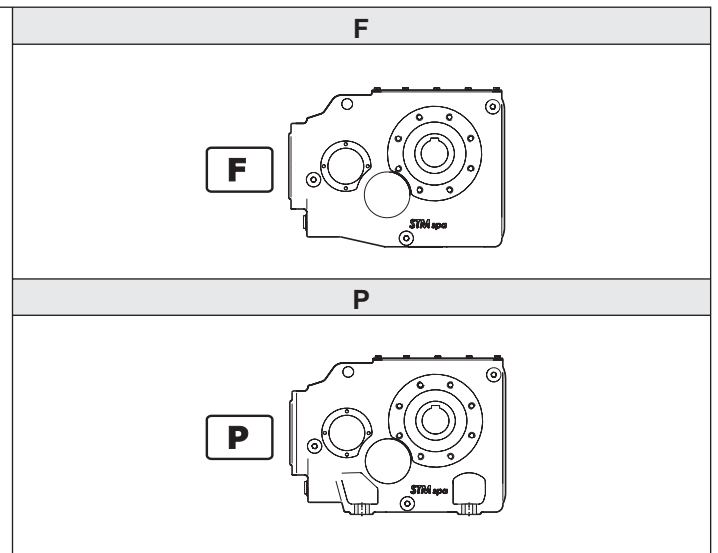
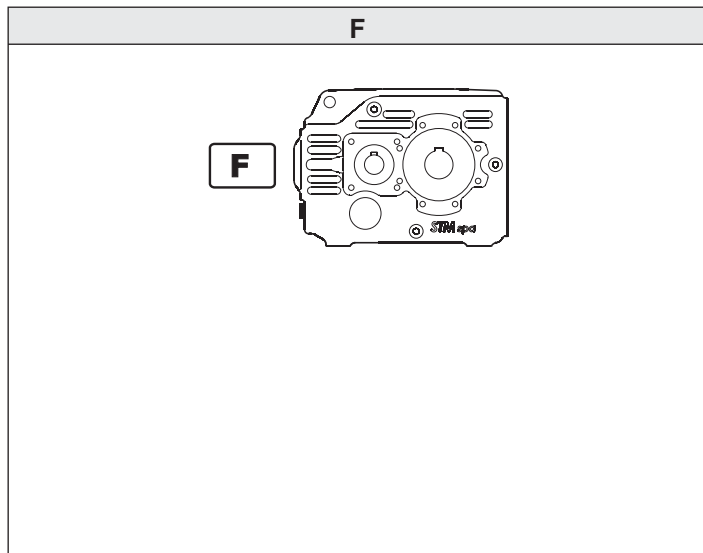


PT

01 OV - Versione Uscita

OV - Output Version

OV - Abtriebsausführung



**80-100-125-140**

**132-150-170-190**

02 SIZE - Grandezza

SIZE - Size

SIZE - Größe

80	100	125	132	140	150	170	190
----	-----	-----	-----	-----	-----	-----	-----

1.2 Designazione

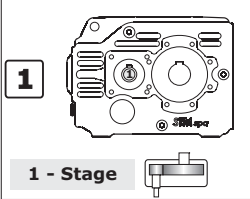
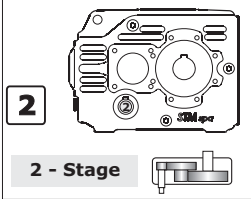
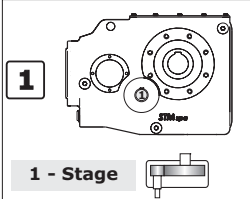
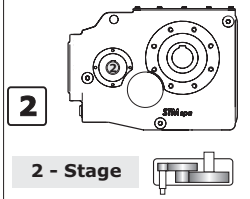
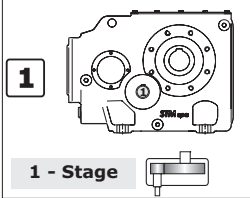
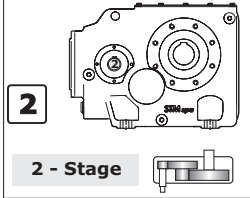
1.2 Designation

1.2 Bezeichnung

03 NOR - N° Stadi

NOR - N° of reductions

NOR - N° Anzahl der stufen

<b>1</b>	<b>2</b>	<b>1</b>	<b>2</b>
 <p><b>1</b></p> <p>1 - Stage</p>	 <p><b>2</b></p> <p>2 - Stage</p>	 <p><b>1</b></p> <p>1 - Stage</p>	 <p><b>2</b></p> <p>2 - Stage</p>
		<b>1</b>	<b>2</b>
		 <p><b>1</b></p> <p>1 - Stage</p>	 <p><b>2</b></p> <p>2 - Stage</p>

**80-100-125-140**

**132-150-170-190**



1.2 Designazione

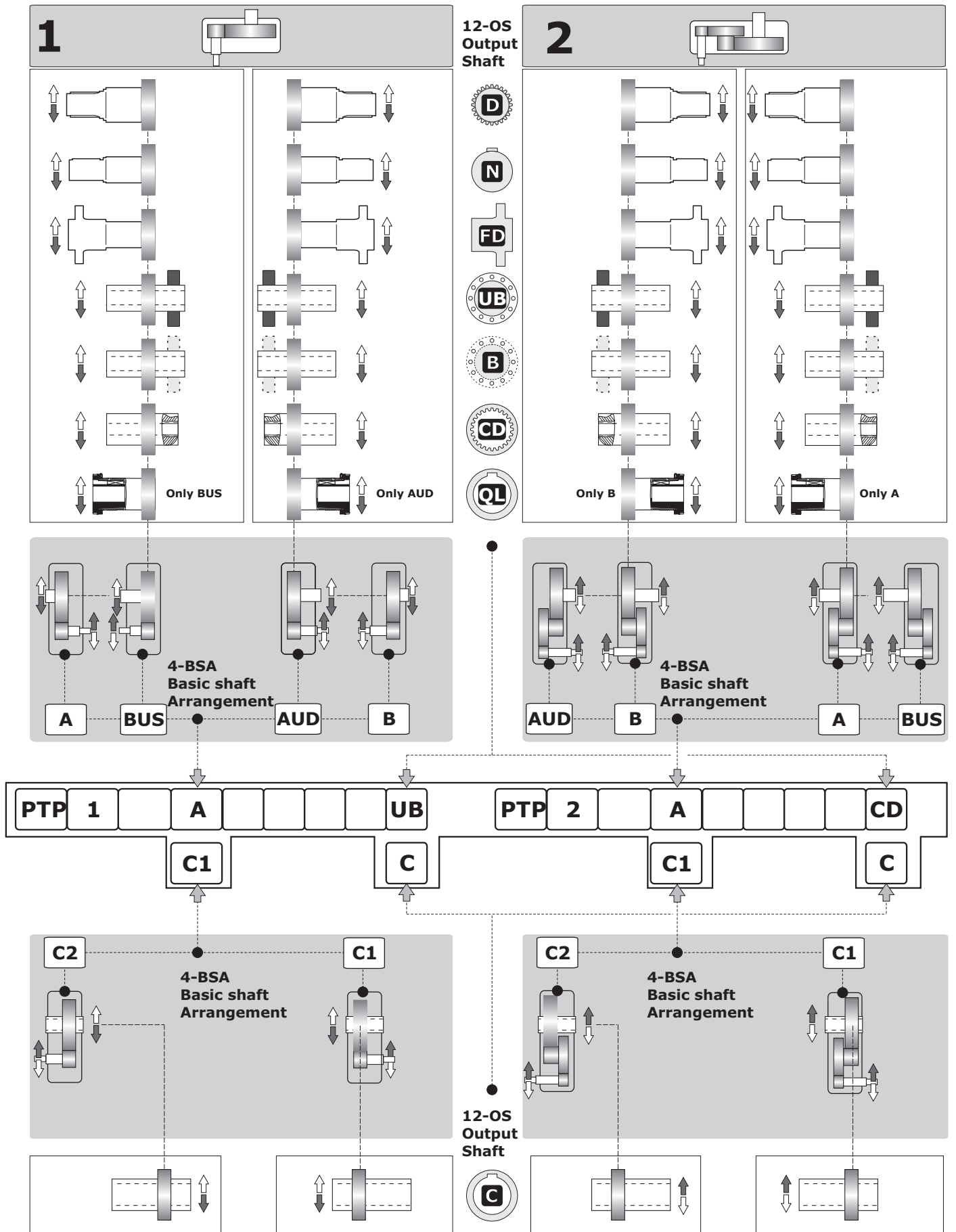
1.2 Designation

1.2 Bezeichnung

04 BSA - Esecuzione Grafica Base

BSA - Basic shaft Arrangement

BSA - Basic shaft Arrangement



**1.2 Designazione**

**05 BE - Bisporgenza Entrata**

— Nessuna indicazione: Senza bisporgenza

**BE**  
Bisporgenza in entrata.

Note  
Per il tipo di estremità disponibile vedere punto [8-IVM].

**06 BU - Bisporgenza Uscita**

— Nessuna indicazione: Senza bisporgenza

**BU**  
Bisporgenza in uscita.

Note  
Applicabile per le esecuzioni grafiche **A,B**.  
Per il tipo di estremità disponibile vedere punto [9-IVS].

**07 IR - Rapporto di riduzione**

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

**08 IVM - Versione Entrata - Principale**

— Nessuna indicazione = diametro standard;

**1.2 Designation**

**BE - Input double extension**

— No indication: without double extension

**BE:**  
Input double extension

Notes  
For types of configurations, see [8-IVM].

**BU - Output double extension**

— No indication: without double extension

**BU**  
Output double extension

Note  
Can be applied for graphic execution **A,B**.  
For types of configurations, see [9-IVS].

**IR - Reduction ratio**

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

**IVM - Input Version - Main**

— No indications = standard diameter;

**1.2 Bezeichnung**

**BE - Doppelte vorstehende Antriebswelle**

— Keine Angaben: Keine doppelte vorstehende Welle

**BE**  
Doppelt vorstehende Antriebswelle.

Hinweis  
Bezüglich des Wellenendtyps verweisen wir auf Punkt [8-IVM].

**BU - Doppelte vorstehende Abtriebswelle**

— Keine Angaben: Keine doppelte vorstehende Welle

**BU**  
Doppelt vorstehende Abtriebswelle.


Hinweis  
An den grafischen Applikationen **A,B** applizierbar.  
Bezüglich des verfügbaren Wellenendtyps verweisen wir auf Punkt [9-IVS].

**IR - Übersetzungsverhältnis**

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

**IVM - Hauptantriebsausführung**


— Keine Angabe = Standard-durchmesser

	<b>— (ECE)</b>	Entrata con albero pieno	Solid input shaft	Antrieb mit Vollwelle
---	----------------	--------------------------	-------------------	-----------------------

<b>PT/1</b>	<b>80</b>	<b>100</b>	<b>125</b>	<b>132</b>	<b>140</b>	<b>150</b>	<b>170</b>	<b>190</b>
	(∅ 24)	(∅ 28)	(∅ 38)	(∅ 50)	(∅ 48)	(∅ 55)	(∅ 60)	(∅ 65)

<b>PT/2</b>	<b>80</b>	<b>100</b>	<b>125</b>	<b>132</b>	<b>140</b>	<b>150</b>	<b>170</b>	<b>190</b>
	(∅ 19)	(∅ 24)	(∅ 28)	(∅ 35)	(∅ 38)	(∅ 45)	(∅ 50)	(∅ 55)

**09 IVS - Versione Entrata - Secondaria**

	<b>— (ECE)</b>	Entrata con albero pieno	Solid input shaft	Antrieb mit Vollwelle
---	----------------	--------------------------	-------------------	-----------------------

**IVS - Input Version - Secondary**

**IVS - Nebenantriebsausführung**

**1.2 Designazione**

**1.2 Designation**

**1.2 Bezeichnung**

**10** BSTOP - Antiretro

**BSTOP - Backstop**

**BSTOP - Rücklaufsperr**

		80-100-125-140		132-150-170-190	
		Versioni Versions Ausführungen	Esecuzione grafica Shaft arrangement Grafische Ausführung	Versioni Versions Ausführungen	Esecuzione grafica Shaft arrangement Grafische Ausführung
<b>PT</b>	<b>1</b>	AR ARB ARN	B-BUS-C2	Non è possibile montare antiretro It is not possible to assemble back stop Rücklaufsperr kann nicht montiert werden	
	<b>2</b>	AR ARB ARN	A-AUD-C1	AR ARB ARN	tutte all alles

**AR**

Riduttore è predisposto con antiretro.

Gearbox is Adjustment with backstop.

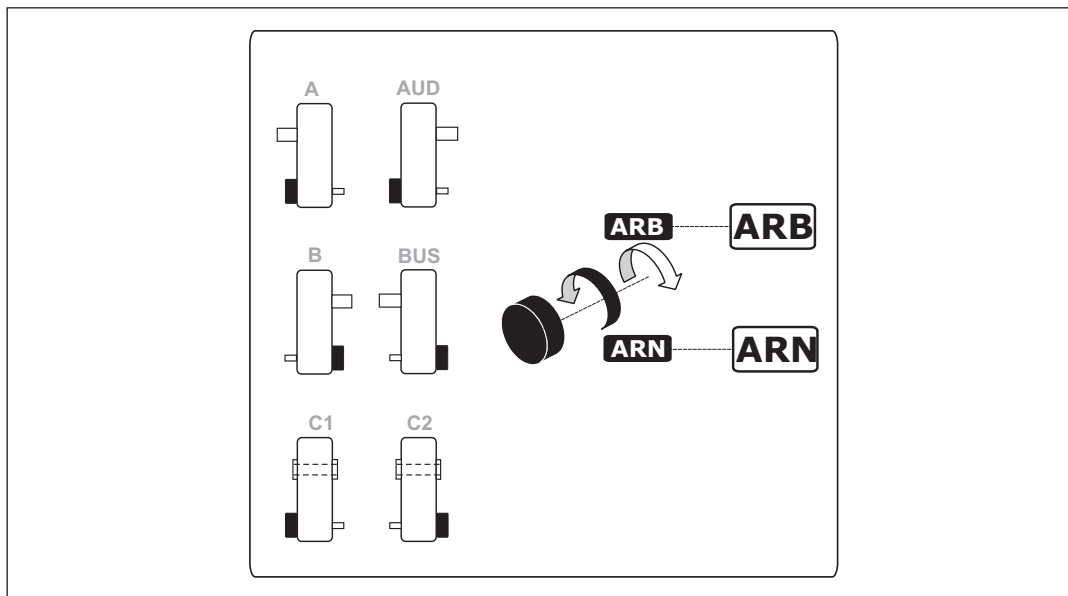
Der Getriebe wird mit der Rücklaufsperr  
Vorbereitet.

**ARB-ARN**

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

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

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



**ARB**  
Rotazione libera freccia bianca (B)  
Free rotation - white arrow (B)  
Freie Drehung - weißer Pfeil (B)

**ARN**  
Rotazione libera freccia nera (N)  
Free rotation - black arrow (N)  
Freie Drehung - schwarzer Pfeil (N)

1.2 Designazione

1.2 Designation

1.2 Bezeichnung

11 OS - Estremità uscita

OS - Output shaft

OS - Wellenende - Abtrieb



C = albero forato;  
 UB-B = albero forato con calettatore  
 N = Sporgente Integrale  
 D = Sporgente Scanalato  
 CD = Albero forato Scanalato  
 FD = Flangia brocciata  
 QL = Quick Locking  
 L = Predisposizione "Quick Locking "

C = shaft with keyway;  
 UB-B = hollow shaft with shrink disk  
 N = Output shaft  
 D = Splined output shaft  
 CD = Splined hollow shaft  
 FD = Broached flange  
 QL = Quick Locking  
 L = Adjustment "Quick Locking "

C= Hohlwelle mit Paßfedernut  
 UB-B = Hohlwelle mit Schrumpfscheibe  
 N = Holwelle mit Wellenende  
 D = Abtriebswelle mit Keilende  
 CD = Verzahnte Hohlwelle  
 FD = Geräumtem Flansch  
 QL = Quick Locking  
 L = Vorbereitung "Quick Locking "

13 SD - Diametro albero

SD - Shaft diameter

SD - Durchmesser Abtriebswelle

— Nessuna indicazione = diametro standard;  
 diametro opzionale = vedi tabella.

— No indications = standard diameter;  
 optional diameter = see table.

— Keine Angabe = Standard-durchmesser  
 Optionaler durchmesser = siehe Tabelle.

	Standard	Optional	Standard	Optional	Standard Optional	Standard.	Standard	Standard
	—	∅...	—	∅...	— (standard) ∅... (Optional)	—	—	—
<b>80</b>	(∅ 32)	∅ 30 ∅ 35	(∅ 35)	not available	(∅ 32 Standard)	(DIN 5482 40 x 36)	(DIN 5482 35 x 31)	(DIN 5482 40 x 36)
<b>100</b>	(∅ 45)	∅ 40 ∅ 50	(∅ 45)		(∅ 45 Standard)	(DIN 5482 58 x 53)	(DIN 5482 45 x 41)	(DIN 5482 58 x 53)
<b>125</b>	(∅ 55)	∅ 50 ∅ 60	(∅ 55)		(∅ 55 Standard)	(DIN 5482 70 x 64)	(DIN 5482 55 x 50)	(DIN 5482 70 x 64)
<b>132</b>	(∅ 60)	∅ 70	(∅ 60)	∅70	(∅ 60 Standard) ∅70 (Optional)	(FIAT 70)	(DIN 5482 70 x 64)	(FIAT 70)
<b>140</b>	(∅ 70)	∅ 60	(∅ 70)	not available	(∅ 70 Standard)	(FIAT 70)	(DIN 5482 70 x 64)	(FIAT 70)
<b>150</b>	(∅ 70)	∅ 80	(∅ 70)	∅80	(∅ 70 Standard) ∅80 (Optional)	(FIAT 80)	(DIN 5482 80 x 74)	(FIAT 80)
<b>170</b>	(∅ 90)	not available	(∅ 90)	not available	(∅ 90 Standard)	(FIAT 95)	(DIN 5482 90 x 84)	(FIAT 95)
<b>190</b>	(∅ 100)	not available	(∅ 100)		(∅ 100 Standard)	(DIN 5480 105 x 80)	(DIN 5482 100 x 94)	(DIN 5480 105 x 80)

	"Quick Locking "	Predisposizione "Quick Locking " Adjustement "Quick Locking " Vorbereitung "Quick Locking "
<b>80</b>	∅ 20 - ∅ 25 - ∅ 30	Contattare nostro ufficio tecnico commerciale Please, contact our technical sales dept. Bitte setzen Sie sich mit unserer technischen Abteilung in Verbindung
<b>100</b>	∅ 25 - ∅ 30 - ∅ 35 - ∅ 38 - ∅ 40- ∅ 42 - ∅ 45- ∅ 48	
<b>125</b>	∅ 35 - ∅ 40 - ∅ 45 - ∅ 48 - ∅ 50 - ∅ 55	
<b>132</b>	∅ 40 - ∅ 45 - ∅ 50 - ∅ 55 - ∅ 60 - ∅ 65	
<b>140</b>		
<b>150</b>	∅ 45 - ∅ 50 - ∅ 55 - ∅ 60 - ∅ 65 - ∅ 70 - ∅ 75	
<b>170</b>	∅ 55 - ∅ 60 - ∅ 65 - ∅ 70 - ∅ 75 - ∅ 80	
<b>190</b>	∅ 70 - ∅ 75 - ∅ 80 - ∅ 85 - ∅ 90	

**1.2 Designazione**

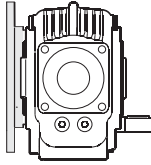
**1.2 Designation**

**1.2 Bezeichnung**

**14 OF - Flangia Uscita**

**OF - Output Flange**

**OF - Flansche am Abtrieb**

—	<b>F</b>		
	Flangia Uscita F. / Output Flange F./ Flansche am Abtrieb F.		
Senza Flangia Without Flange Ohne Flansche			
	Flangia in uscita: Fornita SEMPRE opposta a configurazione presente in entrata.	Output flange: Provided always opposed in this configuration entry.	Abtriebsflansch: Vorausgesetzt, immer gegen in dieser Konfiguration Eintrag.

Attenzione  
Non è possibile montare la flangia con le  
versioni **AR-ARB-ARN**

Warning  
It is not possible to assemble the flange  
with back stop-device (version  
**AR-ARB-ARN**).

Achtung  
Der Abtriebsflansch kann nicht zusammen  
Rücklaufsperr (Ausführungen  
**AR-ARB-ARN**) montiert werden

**15 MP - Posizioni di montaggio**

**MP - Mounting positions**

**MP - Einbaulagen**

**[M2, M3, M4, M5, M6]** Posizioni di  
montaggio con indicazione dei tappi di  
livello, carico e scarico; se non specificato  
si considera standard la posizione **M1** (vedi  
par. 1.4)

**[M2, M3, M4, M5, M6]** Mounting position  
with indication of breather level and drain  
plugs; if not specified, standard position is  
**M1** (see par. 1.4).

Montageposition **[M2, M3, M4, M5, M6]** mit  
Angabe von . Entlüftung, Schaugläsern und  
Ablaßschraube. Wenn nicht näher  
spezifiziert, wird die Standard - position **M1**  
zugrunde gelegt (s. Abschnitt 1.4).

**16 OPT-ACC. - Opzioni**

**OPT-ACC - Options**

**OPT-ACC. - Optionen**

vedi par. 1.9 see pa. 1.9 s. Abschnitt 1.9	<b>ACC1</b>	<b>PROT.</b>	Coperchio di protezione	Protection cover	Schultzvorrichtungdeckel
		<b>FF</b>	FF - Kit	FF - Kit	FF - Kit
		<b>RR</b>	Kit rosetta di montaggio	Mounting washer kit	Kit Montagescheibe
	<b>ACC3</b>	<b>TEN</b>	Tenditore	Tension Arm	Spannvorrichtung

vedi Sezione A-1.12 see Section A-1.12 s. Abschnitt A-1.12	<b>OPT.</b>	<b>OPT</b>	Materiale degli anelli di tenuta	Materials of Seals	Dichtungsstoffe
		<b>OPT1</b>	Stato fornitura olio	Scope of the supply - Options - OIL	Optionen - Lieferzustand - Optionen - Öl
		<b>OPT2</b>	Verniciatura	Painting and surface protection	Lackierung und Oberflächenschutz

1.4 Lubrificazione

1.4 Lubrication

1.4 Schmierung



Posizioni di montaggio  
Mounting positions  
Montagepositionen

PT-1

**PT-1** **A** **AUD** **C1** **80-100-125-140**  
**132-150-170-190**

<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>M4</b>	<b>M5</b>	<b>M6</b>

**PT-1**

**PT-1**

**PT-1** **B** **BUS** **C2** **80-100-125-140**  
**132-150-170-190**

<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>M4</b>	<b>M5</b>	<b>M6</b>

**PT-1**

**PT-1**

- Carico / Breather plug / Nachfüllen - Entlüftung
- Livello / Level plug / Pegel
- Scarico / Drain plug / Auslauf



**1.4 Lubrificazione**

**1.4 Lubrication**

**1.4 Schmierung**

Posizioni di montaggio - Mounting positions - Montagepositionen		
PT		Posizioni Positions Positionen
	80	M1-M2 M3-M4 M5-M6
	100	
	125	
	132	
	140	
	150	
	170	
190		

Prescrizioni da indicare in fase d'ordine  
Ordering requirements  
Anforderungen bei der Bestellung

Necessaria  
Necessary  
Erforderlich

**TARGHETTA - RIDUTTORE**

**NON NECESSARIA**

Indicata sempre nella targhetta del riduttore la posizione di montaggio "M1".

**NECESSARIA**

La posizione richiesta è indicata nella targhetta del riduttore

**Identification Plate - Gearbox**

**NOT NECESSARY**

The mounting position is always indicated on the nameplate "M1".

**NECESSARY**

The indication it on the label of the gearbox


**Typeschild - Getriebe**

**NICHT ERFORDERLICH**

Die Einbaulage ist immer auf dem Typenschild angegeben "M1".

**ERFORDERLICH**

Findet man die angefragte Position auf dem Typenschild des Getriebe

Lub	Quantità di lubrificante - Lubricant Quantity - Schmiermittelmenge - [Kg]							OPT1	Tappi-Plug-Stopfen		
	M1	M2	M3	M4	M5	M6	N°		Diameter	Type	
PT	80	1,000	1,000	1,400	1,200	1,000	1,300	OUTOIL	8	1/4"	
	100	2,100	2,100	2,500	2,500	2,100	2,600		8	1/4"	
	125	4,000	4,000	4,400	4,400	4,000	4,500		8	3/8"	
	132	7.100	7.800	8.000	8.000	7.100	9.800		8	1/2"	
	140	9.000	9.000	10.00	10.30	11.00	13.30		8	1/2"	
	150	11.40	12.50	13.00	13.00	11.40	15.50		8	1/2"	
	170	16.00	17.50	18.00	18.00	16.00	21.00		8	1/2"	
	190	23.30	25.40	26.00	26.00	23.30	32.00		8	1/2"	



Quantità indicative; durante il riempimento attenersi alla spia di livello.

Indicative quantities, check the oil sight glass during filling.

Richtungsweisende Mengen, bei der Auffüllung auf das Füllstand-Kontrollfenster Bezug nehmen.



**Attensione !:**  
Il tappo di sfiato è allegato solo nei riduttori che hanno più di un tappo olio

**Warning!:**  
A breather plug is supplied only with worm gearboxes that have more than one oil plug

**Achtung!:**  
Der Entlüftungsstopfen ist lediglich bei den Getrieben vorhanden, die über mehr als einen Ölfüllstopfen verfügen

**Nota:** Se in fase d'ordine la posizione di montaggio è omessa, il riduttore verrà fornito con i tappi predisposti per la posizione M1.

**Note:** If the mounting position is not specified in the order, the worm gearbox supplied will have plugs pre-arranged for position M1.

**Anmerkung:** Sollte in der Auftragsphase die Einbaulage nicht angegeben werden, wird das Getriebe mit Stopfen für die Einbaulage M1.

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

*The supply of gearboxes with different plug pre-arrangements has to be agreed with the manufacturer.*

Lieferungen, die eine Auslegung hinsichtlich der Stopfen aufweisen, die von den Angaben in der Tabelle abweichen, müssen vorab vereinbart werden..

1.4 Lubrificazione

1.4 Lubrication

1.4 Schmierung



Posizioni di montaggio  
Mounting positions  
Montagepositionen

PT-2

**PT-2** **A** **AUD** **C1** **80-100-125-140**  
**132-150-170-190**

<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>M4</b>	<b>M5</b>	<b>M6</b>

**PT-2**

**PT-2**

**PT-2** **B** **BUS** **C2** **80-100-125-140**  
**132-150-170-190**

<b>M1</b>	<b>M2</b>	<b>M3</b>	<b>M4</b>	<b>M5</b>	<b>M6</b>

**PT-2**

**PT-2**

- Carico / Breather plug / Nachfüllen - Entlüftung
- Livello / Level plug / Pegel
- Scarico / Drain plug / Auslauf

**1.4 Lubrificazione**

**1.4 Lubrication**

**1.4 Schmierung**

Posizioni di montaggio - Mounting positions - Montagepositionen			
PT		Posizioni Positions Positionen	Prescrizioni da indicare in fase d'ordine Ordering requirements Anforderungen bei der Bestellung
	80	M1-M2 M3-M4 M5-M6	Necessaria Necessary Erforderlich
	100		
	125		
	132		
	140		
	150		
	170		
190			

**TARGHETTA - RIDUTTORE**

**NON NECESSARIA**

Indicata sempre nella targhetta del riduttore la posizione di montaggio "M1".

**NECESSARIA**

La posizione richiesta è indicata nella targhetta del riduttore

**Identification Plate - Gearbox**

**NOT NECESSARY**

The mounting position is always indicated on the nameplate "M1".

**NECESSARY**

The indication it on the label of the gearbox


**Typeschild - Getriebe**

**NICHT ERFORDERLICH**

Die Einbaulage ist immer auf dem Typenschild angegeben "M1".

**ERFORDERLICH**

Findet man die angefragte Position auf dem Typenschild des Getriebe

Lub	Quantità di lubrificante - Lubricant Quantity - Schmiermittelmenge - [Kg]							OPT1	Tappi-Plug-Stopfen		
		M1	M2	M3	M4	M5	M6		N°	Diameter	Type
PT	80	1.100	1.100	1.400	1.400	1.200	1.200	OUTOIL	8	1/4"	
	100	2.200	2.200	2.500	2.500	2.600	2.600		8	1/4"	
	125	3.700	3.700	4.500	4.500	4.800	4.800		8	3/8"	
	132	7.100	7.800	12.00	8.000	9.800	9.800		8	1/2"	
	140	8.700	8.700	12.20	12.40	13.30	13.30		8	1/2"	
	150	11.40	12.50	20.00	13.00	15.50	15.50		8	1/2"	
	170	16.00	17.50	27.00	18.00	22.00	21.00		8	1/2"	
	190	23.30	25.40	40.00	26.00	32.00	32.00		8	1/2"	



Quantità indicative; riempimento attenersi al livello.

durante il riempimento attenersi alla spia di livello.

Indicative quantities, check the oil sight glass during filling.

Richtungsweisende Mengen, bei der Auffüllung auf das Füllstand-Kontrollfenster Bezug nehmen.



**Attentione !:**

Il tappo di sfiato è allegato solo nei riduttori che hanno più di un tappo olio

**Warning!:**

A breather plug is supplied only with worm gearboxes that have more than one oil plug

**Achtung!:**

Der Entlüftungsstopfen ist lediglich bei den Getrieben vorhanden, die über mehr als einen Ölfüllstopfen verfügen

**Nota:** Se in fase d'ordine la posizione di montaggio è omessa. il riduttore verrà fornito con i tappi predisposti per la posizione M1.

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

**Note:** If the mounting position is not specified in the order, the worm gearbox supplied will have plugs pre-arranged for position M1.

*The supply of gearboxes with different plug pre-arrangements has to be agreed with the manufacturer.*

**Anmerkung:** Sollte in der Auftragsphase die Einbaulage nicht angegeben werden, wird das Getriebe mit Stopfen für die Einbaulage M1.

Lieferungen, die eine Auslegung hinsichtlich der Stopfen aufweisen, die von den Angaben in der Tabelle abweichen, müssen vorab vereinbart werden..

### 1.5 Carichi radiali e assiali

Quando la trasmissione del moto avviene tramite meccanismi che generano carichi radiali sull'estremità dell'albero, è necessario verificare che i valori risultanti non eccedano quelli indicati nelle tabelle.

Nella Tab. 3.4 sono riportati i valori dei carichi radiali ammissibili per l'albero veloce ( $Fr_1$ ). Come carico assiale ammissibile contemporaneo si ha:

$$Fa_1 = 0.2 \times Fr_1$$

PT	Tab. 3.4 $Fr_1$ [N]							
	80	100	125	132	140	150	170	190
PT/1 (n1 - 1400 rpm)	800	1600	2200	2500	4000	3500	4500	5500
PT/2 (n1 - 1400 rpm)	880	1450	2200	4500	4000	6500	7800	10000

In Tab. 3.5 sono riportati i valori dei carichi radiali ammissibili per l'albero lento ( $Fr_2$ ). Come carico assiale ammissibile contemporaneo si ha:

$$Fa_2 = 0.2 \times Fr_2$$

Tab. 3.5 $n_2$ [min <sup>-1</sup> ]	$Fr_2$ [N]							
	80	100	125	132	140	150	170	190
500	4000	7000	8200	10762	12500	13951	15466	20089
400	5000	8000	9300	12054	13000	15625	17321	22500
320	5500	9000	10000	13000	14000	17500	19400	25200
250	6000	10000	11500	15000	16000	19200	21100	27800
200	6000	10000	13000	16000	18000	20500	23300	29500
160	6000	10000	16000	17000	18500	22100	24800	32000
112	6000	10000	16000	19000	20000	23500	27000	35200
63	7100	10600	17000	23000	28000	27500	34200	44600
36	7500	11800	19000	29000	30000	34000	41000	53200
<12.5	8000	12500	20000	32500	35000	43000	57000	65000

I carichi radiali indicati nelle tabelle si intendono applicati a metà della sporgenza dell'albero lento standard (vedi fig. 2.6) e sono riferiti ai riduttori operanti con fattore di servizio 1. Valori intermedi relativi a velocità non riportate possono essere ottenuti per interpolazione considerando però che  $Fr_1$  a 500 min<sup>-1</sup> e  $Fr_2$  a 5 min<sup>-1</sup> rappresentano i carichi massimi consentiti. Per i carichi non agenti sulla mezzera dell'albero lento o veloce si ha:

a 0.3 della sporgenza:

$$Fr_x = 1.25 \times Fr_{1-2}$$

a 0.8 dalla sporgenza:

$$Fr_x = 0.8 \times Fr_{1-2}$$

### 1.5 Axial and overhung load

Should transmission movement determine radial loads on the angular shaft end, it is necessary to make sure that resulting values do not exceed the ones indicated in the tables.

In Table 3.4 permissible radial load for input shaft are listed ( $Fr_1$ ). Contemporary permissible axial load is given by the following formula:

$$Fa_1 = 0.2 \times Fr_1$$

In Table 3.5 permissible radial loads for output shaft are listed ( $Fr_2$ ). Permissible axial load is given by the following formula:

$$Fa_2 = 0.2 \times Fr_2$$

### 1.5 Radiale und axiale Belastungen

Wird das Wellenende auch durch Radialkräfte belastet, so muß sichergestellt werden, daß die resultierenden Werte die in der Tabelle angegebenen nicht überschreiten.

In Tabelle 3.4 sind die Werte der zulässigen Radialbelastungen für die Antriebswelle ( $Fr_1$ ) angegeben. Die Axialbelastung beträgt dann:

$$Fa_1 = 0.2 \times Fr_1$$

In Tabelle 3.5 sind die Werte der zulässigen Radialbelastungen für die Abtriebswelle ( $Fr_2$ ) angegeben. Als zulässige Axialbelastung gilt:

$$Fa_2 = 0.2 \times Fr_2$$

The radial loads shown in the tables are applied on the middle of standard shaft extensions (see fig. 2.6). Base of these values is a service factor 1. Values for speeds that are not listed can be obtained through interpolation but it must be considered that  $Fr_1$  at 500 min<sup>-1</sup> and  $Fr_2$  at 5 min<sup>-1</sup> represent the maximum allowable loads. For radial loads which are not applied on the middle of the shafts, the following values can be calculated:

at 0.3 from extension:

$$Fr_x = 1.25 \times Fr_{1-2}$$

at 0.8 from extension:

$$Fr_x = 0.8 \times Fr_{1-2}$$

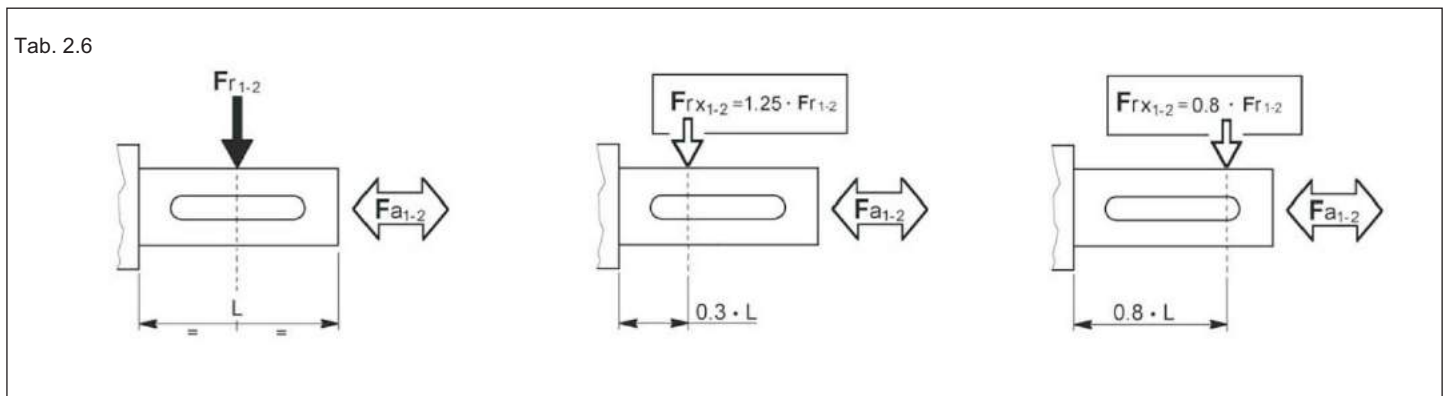
Bei den in der Tabelle angegebenen Radialbelastungen wird eine Kraffteinwirkung auf die Mitte der Standardwelle (s. A. 2.6) angenommen; außerdem wird ein Betriebsfaktor 1 zugrunde gelegt. Zwischenwerte für nicht aufgeführte Drehzahlen können durch Interpolation ermittelt werden. Hierbei ist jedoch zu berücksichtigen, daß  $Fr_1$  bei 500 min<sup>-1</sup> und für  $Fr_{2max}$  bei 5 min<sup>-1</sup> die maximal zulässigen Belastungen repräsentieren. Ist die Einwirkung der Radialkraft nicht in der Mitte der Welle, so können die zulässigen Radiallasten folgendermaßen ermittelt werden:

0.3 vom Wellenabsatz entfernt:

$$Fr_x = 1.25 \times Fr_{1-2}$$

0.8 vom Wellenabsatz entfernt:

$$Fr_x = 0.8 \times Fr_{1-2}$$



PT 80/1



18

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
5.1	550,0	360,0	21,2	98,0	275,0	400,0	11,8	98,0	176,8	406,0	7,7	98,0	98,2	406,0	4,3	98,0	-
5.8	482,8	342,0	17,6	98,0	241,4	380,0	9,8	98,0	155,2	385,7	6,4	98,0	86,2	385,7	3,6	98,0	
7.4	376,1	324,0	13,0	98,0	188,1	360,0	7,2	98,0	120,9	365,4	4,7	98,0	67,2	365,4	2,6	98,0	

PT 80/2



20

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
10.6	264,0	450,0	13,0	96,0	132,0	500,0	7,2	96,0	84,9	507,5	4,7	96,0	47,1	507,5	2,6	96,0	-
12.1	231,7	450,0	11,4	96,0	115,9	500,0	6,3	96,0	74,5	507,5	4,1	96,0	41,4	507,5	2,3	96,0	
15.5	180,5	450,0	8,9	96,0	90,3	500,0	4,9	96,0	58,0	507,5	3,2	96,0	32,2	507,5	1,8	96,0	
18.5	151,7	486,0	8,0	96,0	75,9	540,0	4,5	96,0	48,8	548,1	2,9	96,0	27,1	548,1	1,6	96,0	
21.0	133,2	504,0	7,3	96,0	66,6	560,0	4,1	96,0	42,8	568,4	2,7	96,0	23,8	568,4	1,5	96,0	
23.9	117,2	522,0	6,7	96,0	58,6	580,0	3,7	96,0	37,7	588,7	2,4	96,0	20,9	588,7	1,3	96,0	
27.2	102,9	504,0	5,7	96,0	51,4	560,0	3,1	96,0	33,1	568,4	2,1	96,0	18,4	568,4	1,1	96,0	
34.9	80,2	468,0	4,1	96,0	40,1	520,0	2,3	96,0	25,8	527,8	1,5	96,0	14,3	527,8	0,8	96,0	
44.1	63,5	450,0	3,1	96,0	31,8	500,0	1,7	96,0	20,4	507,5	1,1	96,0	11,3	507,5	0,6	96,0	
50.9	55,0	450,0	2,7	96,0	27,5	500,0	1,5	96,0	17,7	507,5	1,0	96,0	9,8	507,5	0,5	96,0	
58.8	47,6	450,0	2,3	96,0	23,8	500,0	1,3	96,0	15,3	507,5	0,8	96,0	8,5	507,5	0,5	96,0	

P <sub>tN</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
PT/1	15.0
PT/2	7.5

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.

PT 100/1



29

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
5.1	550,0	720,0	42,3	98,0	275,0	800,0	23,5	98,0	176,8	812,0	15,3	98,0	98,2	812,0	8,5	98,0	-
5.9	474,6	720,0	36,5	98,0	237,3	800,0	20,3	98,0	152,5	812,0	13,2	98,0	84,7	812,0	7,4	98,0	
7.4	376,1	720,0	28,9	98,0	188,1	800,0	16,1	98,0	120,9	812,0	10,5	98,0	67,2	812,0	5,8	98,0	

PT 100/2



32

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
10.7	261,3	846,0	24,1	96,0	130,6	940,0	13,4	96,0	84,0	954,1	8,7	96,0	46,7	954,1	4,9	96,0	-
12.4	225,4	864,0	21,2	96,0	112,7	960,0	11,8	96,0	72,5	974,4	7,7	96,0	40,3	974,4	4,3	96,0	
15.7	178,7	882,0	17,2	96,0	89,3	980,0	9,5	96,0	57,4	994,7	6,2	96,0	31,9	994,7	3,5	96,0	
21.1	132,4	900,0	13,0	96,0	66,2	1000,0	7,2	96,0	42,6	1015,0	4,7	96,0	23,6	1015,0	2,6	96,0	
25.9	108,0	945,0	11,1	96,0	54,0	1050,0	6,2	96,0	34,7	1065,8	4,0	96,0	19,3	1065,8	2,2	96,0	
30.9	90,5	990,0	9,8	96,0	45,3	1100,0	5,4	96,0	29,1	1116,5	3,5	96,0	16,2	1116,5	2,0	96,0	
37.9	73,9	990,0	8,0	96,0	36,9	1100,0	4,4	96,0	23,7	1116,5	2,9	96,0	13,2	1116,5	1,6	96,0	
43.2	64,8	1035,0	7,3	96,0	32,4	1150,0	4,1	96,0	20,8	1167,3	2,7	96,0	11,6	1167,3	1,5	96,0	
58.1	48,2	990,0	5,2	96,0	24,1	1100,0	2,9	96,0	15,5	1116,5	1,9	96,0	8,6	1116,5	1,0	96,0	

$P_{tN}$ [kW]	tutti i rapporti all ratios alle Untersetzungen
PT/1	22.0
PT/2	11.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.

PT 125/1



50

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
5.1	550,0	1350,0	79,3	98,0	275,0	1500,0	44,1	98,0	176,8	1624,0	30,7	98,0	98,2	1624,0	17,0	98,0	-
5.9	474,6	1305,0	66,2	98,0	237,3	1450,0	36,8	98,0	152,5	1522,5	24,8	98,0	84,7	1522,5	13,8	98,0	
7.7	365,2	1260,0	49,2	98,0	182,6	1400,0	27,3	98,0	117,4	1522,5	19,1	98,0	65,2	1522,5	10,6	98,0	

PT 125/2



56

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
8.7	323,6	1620,0	57,2	96,0	161,8	1800,0	31,8	96,0	104,0	1827,0	20,7	96,0	57,8	1827,0	11,5	96,0	-
10.4	268,9	1665,0	48,8	96,0	134,4	1850,0	27,1	96,0	86,4	1877,8	17,7	96,0	48,0	1877,8	9,8	96,0	
12.1	232,0	1755,0	44,4	96,0	116,0	1950,0	24,7	96,0	74,6	1979,3	16,1	96,0	41,4	1979,3	8,9	96,0	
15.7	178,6	1755,0	34,2	96,0	89,3	1950,0	19,0	96,0	57,4	1979,3	12,4	96,0	31,9	1979,3	6,9	96,0	
21.5	130,0	1890,0	26,8	96,0	65,0	2100,0	14,9	96,0	41,8	2131,5	9,7	96,0	23,2	2131,5	5,4	96,0	
25.9	108,0	1935,0	22,8	96,0	54,0	2150,0	12,7	96,0	34,7	2182,3	8,3	96,0	19,3	2182,3	4,6	96,0	
30.0	93,2	2025,0	20,6	96,0	46,6	2250,0	11,4	96,0	30,0	2283,8	7,5	96,0	16,6	2283,8	4,1	96,0	
34.8	80,4	1980,0	17,4	96,0	40,2	2200,0	9,7	96,0	25,9	2233,0	6,3	96,0	14,4	2233,0	3,5	96,0	
39.0	71,7	1935,0	15,1	96,0	35,9	2150,0	8,4	96,0	23,1	2182,3	5,5	96,0	12,8	2182,3	3,0	96,0	
45.2	61,9	1890,0	12,8	96,0	31,0	2100,0	7,1	96,0	19,9	2131,5	4,6	96,0	11,1	2131,5	2,6	96,0	
57.1	49,1	1890,0	10,1	96,0	24,5	2100,0	5,6	96,0	15,8	2131,5	3,7	96,0	8,8	2131,5	2,0	96,0	

P <sub>tN</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
PT/1	36.0
PT/2	18.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.

PT 132/1



65

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
2.80	1000,0	2070,0	221,2	98,0	500,0	2300	122,9	98,0	321,4	2335	80,2	98,0	178,6	2335	44,5	98,0	-
3.00	933,3	2160,0	215,4	98,0	466,7	2400	119,7	98,0	300,0	2436	83,8	98,0	166,7	2436	43,4	98,0	
3.47	806,8	2250,0	194,0	98,0	403,4	2500	107,8	98,0	259,3	2538	75,4	98,0	144,1	2538	39,1	98,0	
4.07	688,5	2250,0	165,5	98,0	344,3	2500	92,0	98,0	221,3	2538	64,4	98,0	123,0	2538	33,3	98,0	
4.43	632,3	2250,0	152,0	98,0	316,1	2500	84,4	98,0	203,2	2538	59,1	98,0	112,9	2538	30,6	98,0	
4.85	577,8	2250,0	138,9	98,0	288,9	2500	77,2	98,0	185,7	2538	54,0	98,0	103,2	2538	28,0	98,0	
5.33	525,0	2160,0	121,2	98,0	262,5	2400	67,3	98,0	168,8	2538	47,1	98,0	93,8	2538	25,4	98,0	

PT 132/2



70

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
6.2	448,7	2250	110,1	96,0	224,4	2500	61,2	96,0	144,2	2538	39,9	96,0	80,1	2538	22,2	96,0	-
8.0	350,0	2340	89,3	96,0	175,0	2600	49,6	96,0	112,5	2639	32,4	96,0	62,5	2639	18,0	96,0	
9.8	284,7	2430	75,5	96,0	142,4	2700	41,9	96,0	91,5	2741	27,4	96,0	50,8	2741	15,2	96,0	
11.6	241,6	2520	66,4	96,0	120,8	2800	36,9	96,0	77,7	2842	24,1	96,0	43,1	2842	13,4	96,0	
13.3	210,1	2610	59,8	96,0	105,0	2900	33,2	96,0	67,5	2944	21,7	96,0	37,5	2944	12,0	96,0	
15.9	176,3	2700	51,9	96,0	88,1	3000	28,8	96,0	56,7	3045	18,8	96,0	31,5	3045	10,5	96,0	
18.3	153,0	2700	45,1	96,0	76,5	3000	25,0	96,0	49,2	3045	16,3	96,0	27,3	3045	9,1	96,0	
21.8	128,4	2880	40,3	96,0	64,2	3200	22,4	96,0	41,3	3248	14,6	96,0	22,9	3248	8,1	96,0	
24.0	116,7	2880	36,6	96,0	58,3	3200	20,4	96,0	37,5	3248	13,3	96,0	20,8	3248	7,4	96,0	
26.3	106,6	2880	33,5	96,0	53,3	3200	18,6	96,0	34,3	3248	12,1	96,0	19,0	3248	6,7	96,0	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
PT/1	50.0
PT/2	25.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.



PT 140/1



100

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
4.8	577,8	2880,0	177,8	98,0	288,9	3200,0	98,8	98,0	185,7	3250,0	64,5	98,0	103,2	3250,0	35,8	98,0	-
5.9	473,8	2700,0	136,7	98,0	236,9	3000,0	75,9	98,0	152,3	3050,0	49,6	98,0	84,6	3050,0	27,6	98,0	
7.4	376,1	2700,0	108,5	98,0	188,1	3000,0	60,3	98,0	120,9	3050,0	39,4	98,0	67,2	3050,0	21,9	98,0	

PT 140/2



110

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
10.5	265,7	3600,0	104,4	96,0	132,9	4000,0	58,0	96,0	85,4	4060,0	37,8	96,0	47,5	4060,0	21,0	96,0	-
12.6	223,0	3690,0	89,8	96,0	111,5	4100,0	49,9	96,0	71,7	4161,5	32,5	96,0	39,8	4161,5	18,1	96,0	
15.3	182,9	3780,0	75,4	96,0	91,4	4200,0	41,9	96,0	58,8	4263,0	27,3	96,0	32,7	4263,0	15,2	96,0	
19.1	146,7	4050,0	64,8	96,0	73,4	4500,0	36,0	96,0	47,2	4567,5	23,5	96,0	26,2	4567,5	13,1	96,0	
23.3	120,3	4050,0	53,2	96,0	60,2	4500,0	29,5	96,0	38,7	4567,5	19,3	96,0	21,5	4567,5	10,7	96,0	
30.0	93,5	4320,0	44,0	96,0	46,7	4800,0	24,5	96,0	30,0	4872,0	16,0	96,0	16,7	4872,0	8,9	96,0	
36.5	76,7	4320,0	36,1	96,0	38,3	4800,0	20,1	96,0	24,6	4872,0	13,1	96,0	13,7	4872,0	7,3	96,0	
46.0	60,8	3780,0	25,1	96,0	30,4	4200,0	13,9	96,0	19,6	4263,0	9,1	96,0	10,9	4263,0	5,1	96,0	
57.9	48,4	3780,0	19,9	96,0	24,2	4200,0	11,1	96,0	15,5	4263,0	7,2	96,0	8,6	4263,0	4,0	96,0	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
PT/1	54.0
PT/2	27.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.

PT 150/1



110

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
2.80	1000,0	3060,0	327,0	98,0	500,0	3400	181,6	98,0	321,4	3451	118,5	98,0	178,6	3451	65,8	98,0	-
3.00	933,3	3105,0	309,6	98,0	466,7	3450	172,0	98,0	300,0	3502	112,2	98,0	166,7	3502	62,4	98,0	
3.47	806,8	3150,0	271,5	98,0	403,4	3500	150,9	98,0	259,3	3553	98,4	98,0	144,1	3553	54,7	98,0	
4.07	688,5	3150,0	231,7	98,0	344,3	3500	128,7	98,0	221,3	3553	84,0	98,0	123,0	3553	46,7	98,0	
4.43	632,3	3240,0	218,9	98,0	316,1	3600	121,6	98,0	203,2	3654	79,3	98,0	112,9	3654	44,1	98,0	
4.85	577,8	3240,0	200,0	98,0	288,9	3600	111,1	98,0	185,7	3654	72,5	98,0	103,2	3654	40,3	98,0	
5.33	525,0	3150,0	176,7	98,0	262,5	3500	98,2	98,0	168,8	3553	64,1	98,0	93,8	3553	35,6	98,0	

PT 150/2



120

ir	n <sub>1</sub> = 2800 min <sup>-1</sup>				n <sub>1</sub> = 1400 min <sup>-1</sup>				n <sub>1</sub> = 900 min <sup>-1</sup>				n <sub>1</sub> = 500 min <sup>-1</sup>				IEC
	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	n <sub>2</sub>	T <sub>2M</sub>	P	RD	
	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	min <sup>-1</sup>	Nm	kW	%	
6.3	442,9	3330,0	160,9	96,0	221,5	3700,0	89,4	96,0	142,4	3755,5	58,3	96,0	79,1	3755,5	32,4	96,0	-
8.0	352,0	3510,0	134,8	96,0	176,0	3900,0	74,9	96,0	113,2	3958,5	48,9	96,0	62,9	3958,5	27,1	96,0	
10.2	273,5	3645,0	108,7	96,0	136,7	4050,0	60,4	96,0	87,9	4110,8	39,4	96,0	48,8	4110,8	21,9	96,0	
12.0	233,4	3780,0	96,2	96,0	116,7	4200,0	53,5	96,0	75,0	4263,0	34,9	96,0	41,7	4263,0	19,4	96,0	
13.7	204,9	3870,0	86,5	96,0	102,4	4300,0	48,1	96,0	65,9	4364,5	31,4	96,0	36,6	4364,5	17,4	96,0	
16.0	174,9	4050,0	77,2	96,0	87,4	4500,0	42,9	96,0	56,2	4567,5	28,0	96,0	31,2	4567,5	15,6	96,0	
18.9	148,3	4050,0	65,5	96,0	74,1	4500,0	36,4	96,0	47,7	4567,5	23,7	96,0	26,5	4567,5	13,2	96,0	
22.7	123,3	4140,0	55,7	96,0	61,7	4600,0	30,9	96,0	39,6	4669,0	20,2	96,0	22,0	4669,0	11,2	96,0	
24.8	113,1	4140,0	51,1	96,0	56,5	4600,0	28,4	96,0	36,3	4669,0	18,5	96,0	20,2	4669,0	10,3	96,0	
29.8	94,0	4140,0	42,5	96,0	47,0	4600,0	23,6	96,0	30,2	4669,0	15,4	96,0	16,8	4669,0	8,6	96,0	

Pt <sub>N</sub> [kW]	tutti i rapporti all ratios alle Untersetzungen
PT/1	60.0
PT/2	30.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.

PT 170/1



174

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
2.62	1069,1	3960,0	452,4	98,0	534,5	4400	251,3	98,0	343,6	4466	164,0	98,0	190,9	4466	91,1	98,0	
3.00	933,3	4050,0	403,9	98,0	466,7	4500	224,4	98,0	300,0	4568	146,4	98,0	166,7	4568	81,3	98,0	
3.22	869,0	4140,0	384,4	98,0	434,5	4600	213,6	98,0	279,3	4669	139,3	98,0	155,2	4669	77,4	98,0	
3.75	746,7	4320,0	344,7	98,0	373,3	4800	191,5	98,0	240,0	4872	124,9	98,0	133,3	4872	69,4	98,0	
4.07	688,5	4410,0	324,4	98,0	344,3	4900	180,2	98,0	221,3	4974	117,6	98,0	123,0	4974	65,3	98,0	
4.43	632,3	4590,0	310,1	98,0	316,1	5100	172,3	98,0	203,2	5177	112,4	98,0	112,9	5177	62,4	98,0	
4.85	577,8	4590,0	283,4	98,0	288,9	5100	157,4	98,0	185,7	5177	102,7	98,0	103,2	5177	57,1	98,0	
5.33	525,0	4500,0	252,4	98,0	262,5	5000	140,2	98,0	168,8	5075	91,5	98,0	93,8	5075	50,8	98,0	

PT 170/2



184

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
6.1	457,5	4590,0	229,1	96,0	228,8	5100	127,3	96,0	147,1	5177	83,0	96,0	81,7	5177	46,1	96,0	
8.4	333,3	4860,0	176,7	96,0	166,7	5400	98,2	96,0	107,1	5481	64,1	96,0	59,5	5481	35,6	96,0	
10.4	268,9	5040,0	147,8	96,0	134,5	5600	82,1	96,0	86,4	5684	53,6	96,0	48,0	5684	29,8	96,0	
12.2	229,5	5220,0	130,7	96,0	114,8	5800	72,6	96,0	73,8	5887	47,4	96,0	41,0	5887	26,3	96,0	
14.1	198,4	5490,0	118,8	96,0	99,2	6100	66,0	96,0	63,8	6192	43,1	96,0	35,4	6192	23,9	96,0	
15.4	182,2	5670,0	112,7	96,0	91,1	6300	62,6	96,0	58,6	6395	40,8	96,0	32,5	6395	22,7	96,0	
18.0	155,5	5760,0	97,7	96,0	77,7	6400	54,3	96,0	50,0	6496	35,4	96,0	27,8	6496	19,7	96,0	
21.5	130,5	6030,0	85,8	96,0	65,2	6700	47,7	96,0	41,9	6801	31,1	96,0	23,3	6801	17,3	96,0	
25.8	108,3	6030,0	71,3	96,0	54,2	6700	39,6	96,0	34,8	6801	25,8	96,0	19,3	6801	14,3	96,0	
28.4	98,4	6030,0	64,7	96,0	49,2	6700	36,0	96,0	31,6	6801	23,5	96,0	17,6	6801	13,0	96,0	

$Pt_N$ [kW]	tutti i rapporti all ratios alle Untersetzungen
PT/1	74.0
PT/2	37.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.

PT 190/1



240

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
2.62	1068,7	5400,0	616,6	98.0	534,4	6000	342,6	98.0	343,5	6090	223,5	98.0	190.8	6090	124.2	98.0	-
3.00	933,3	5670,0	565,4	98.0	466,7	6300	314,1	98.0	300,0	6395	205,0	98.0	166.7	6395	113.9	98.0	
3.22	869,6	5760,0	535,2	98.0	434,8	6400	297,3	98.0	279,5	6496	194,0	98.0	155.3	6496	107.8	98.0	
3.47	806,9	5850,0	504,4	98.0	403,5	6500	280,2	98.0	259,4	6598	182,8	98.0	144.1	6598	101.6	98.0	
4.07	688,0	6030,0	443,3	98.0	344,0	6700	246,3	98.0	221,1	6801	160,7	98.0	122.9	6801	89.3	98.0	
4.43	632,1	6120,0	413,3	98.0	316,0	6800	229,6	98.0	203,2	6902	149,8	98.0	112.9	6902	83.2	98.0	
4.85	577,3	6210,0	383,1	98.0	288,7	6900	212,8	98.0	185,6	7004	138,9	98.0	103.1	7004	77.1	98.0	
5.33	525,3	6030,0	338,5	98.0	262,7	6700	188,0	98.0	168,9	6801	122,7	98.0	93.8	6801	68.2	98.0	

PT 190/2



250

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	$n_2$	$T_{2M}$	P	RD	
	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	$\text{min}^{-1}$	Nm	kW	%	
6.1	457,5	7020,0	350,3	96.0	228,8	7800	194,6	96.0	147,1	7917	127,0	96.0	81.7	7917	70.6	96.0	-
8.4	333,3	7560,0	274,9	96.0	166,7	8400	152,7	96.0	107,1	8526	99,6	96.0	59.5	8526	55.4	96.0	
10.4	268,9	7920,0	232,3	96.0	134,5	8800	129,1	96.0	86,4	8932	84,2	96.0	48.0	8932	46.8	96.0	
12.2	229,5	8100,0	202,8	96.0	114,8	9000	112,7	96.0	73,8	9135	73,5	96.0	41.0	9135	40.8	96.0	
14.1	198,4	8190,0	177,2	96.0	99,2	9100	98,5	96.0	63,8	9237	64,2	96.0	35.4	9237	35.7	96.0	
15.4	182,2	8370,0	166,3	96.0	91,1	9300	92,4	96.0	58,6	9440	60,3	96.0	32.5	9440	33.5	96.0	
18.0	155,5	8550,0	145,0	96.0	77,7	9500	80,6	96.0	50,0	9643	52,6	96.0	27.8	9643	29.2	96.0	
21.5	130,5	8820,0	125,5	96.0	65,2	9800	69,7	96.0	41,9	9947	45,5	96.0	23.3	9947	25.3	96.0	
25.8	108,3	8820,0	104,2	96.0	54,2	9800	57,9	96.0	34,8	9947	37,8	96.0	19.3	9947	21.0	96.0	

$Pt_N$ [kW]	tutti i rapporti all ratios alle Untersetzungen
PT/1	100.0
PT/2	50.0

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come indicato nel par. A-1.5). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. par. A-1.5). For details please contact our technical department).  
For details please contact our technical

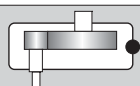
HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. Kapitel A-1.5). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

N.B. I pesi riportati sono indicativi e possono variare in funzione della versione del riduttore.

NOTE. Listed weights are for reference only and can vary according to the gearbox version.

HINWEIS. Die angegebenen Gewichtsmaße sind Richtwerte und können je nach Getriebeversion variieren.

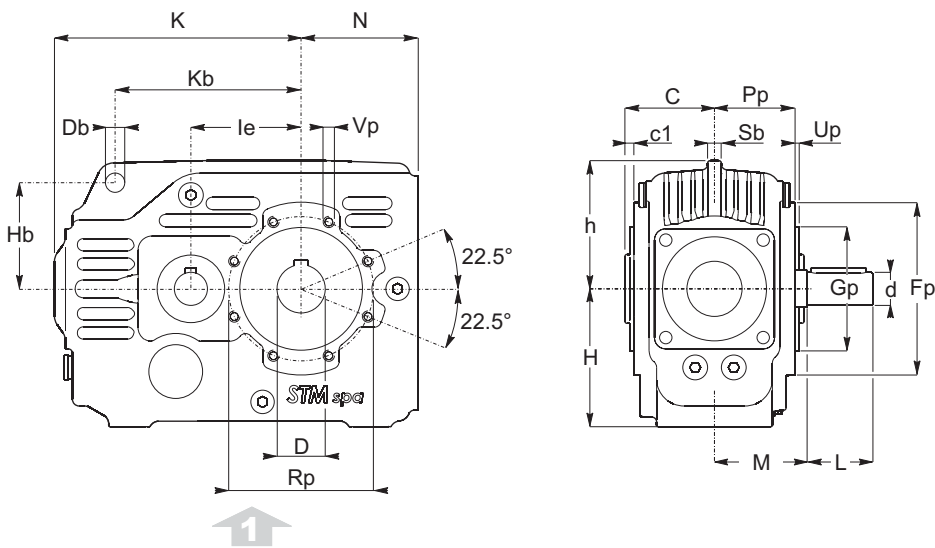
**PT-1**



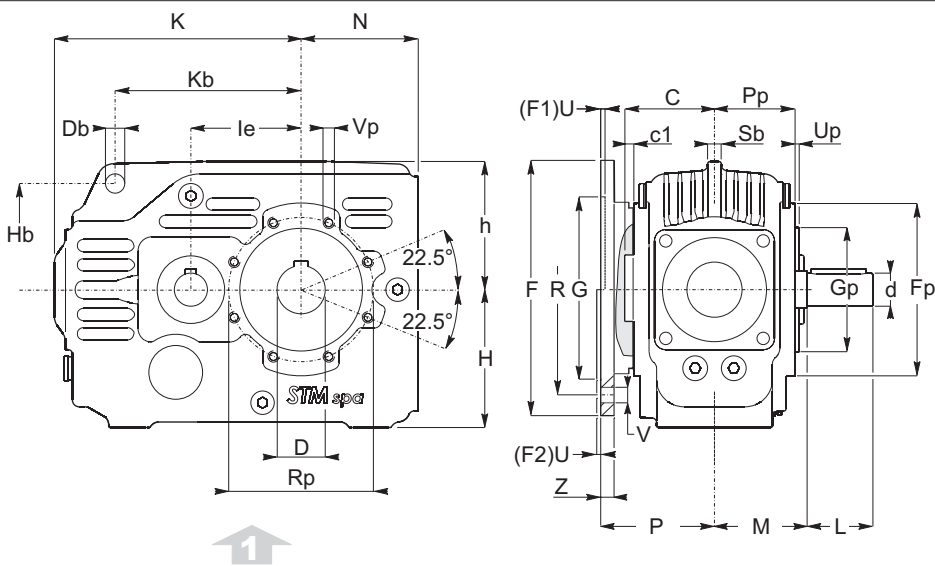
**A AUD C1**

**80-100-125-140**

**PTF-1**



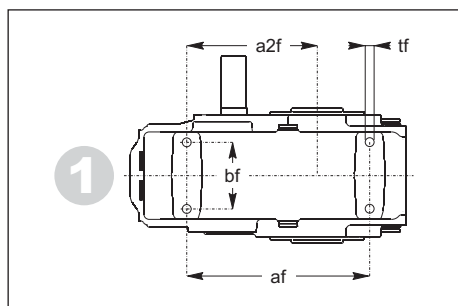
**PTF-1  
F1-F2**



**PARTICOLARE CORPO - 1**

**DETAIL OF THE FLANGED - 1**

**DETAIL DES GEHÄUSES - 1**



OM	af	a2f	bf	tf
<b>80</b>	175	125	64	M10
<b>100</b>	230	159	73	M12
<b>125</b>	300	210	88	M14
<b>140</b>	390	270	130	M18

1.5 Dimensioni

1.5 Dimensions

1.5 Abmessungen

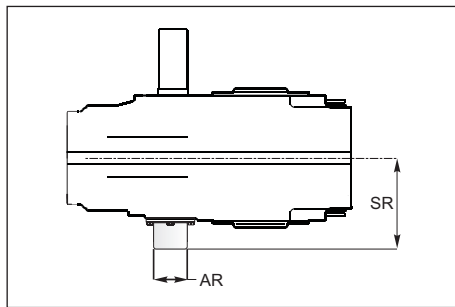
	C	c1	D H7	h	H	K	N	d	L	M	I <sub>e</sub>		D <sub>b</sub>	K <sub>b</sub>	H <sub>b</sub>	S <sub>b</sub>
<b>80</b>	65	6,5	32 (30) (35)	93	100	179	85,5	24 j6	50	65	80		13	135	77	10
<b>100</b>	77,5	7,0	45 (40) (50)	113	120	221	105,5	28 j6	60	77,5	100		13	170	95	13
<b>125</b>	90	9,0	55 (50) (60)	140	145	276	140,5	38 k6	80	90	127		16	215	118	15
<b>140</b>	110	6,5	70 (60)	182	190	349	175,5	48 k6	80	110	160		26	275	150	18

OM	Gp	Fp	Pp	Rp	Up	Vp	F		G F8	P	R	U	V	Z
<b>80</b>	90 - g6	125	58,5	105	3	M8	F1	200	130	100	165	4,5	N°4 ø11	11
<b>100</b>	110 - g6	150	70,5	125	3	M8	F1	250	180	125	215	5	N°4 ø13	14
<b>125</b>	135 - g6	180	81,0	150	3	M10	F1	300	230	150	265	5	N°4 ø15	16
<b>140</b>	170 - g6	230	103,5	200	4	M12	F2	350	250 (g6)	150	300	5	N°4 ø18	18
							F1	350	250	180	300	6	N°4 ø17	25

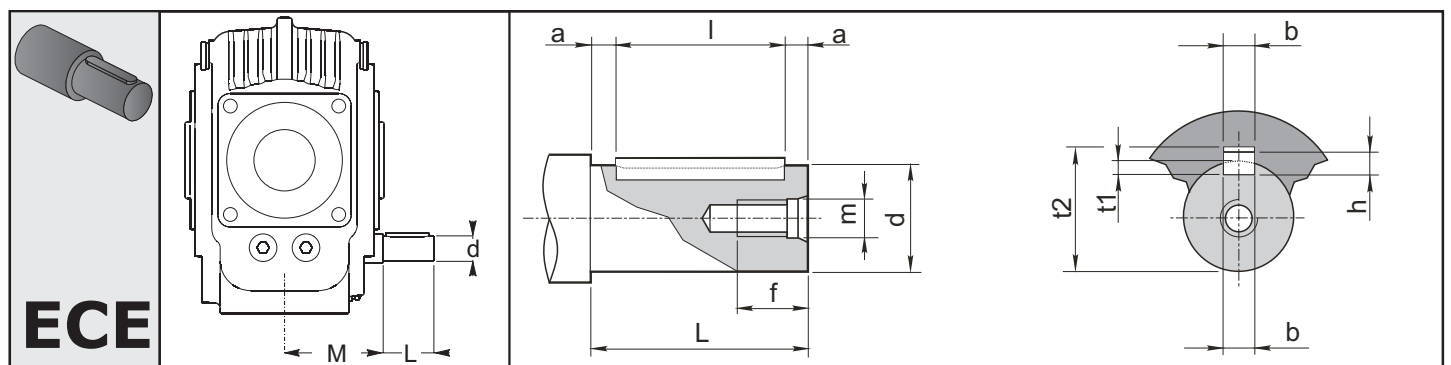
Antiretro:

backstop device:

Rücklaufsperre:

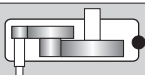


	AR	SR
<b>80</b>	50	72
<b>100</b>	55	93,5
<b>125</b>	60	110
<b>140</b>	80	124,5



PT / 1				Foro fil. testa Tapped hole Gewindebohrung Kopf		Cava / Keyway / Nut			Estremità d'albero Shaft end Wellenende		Linguetta Key Federkeil
SIZE	d	L	M	d	f	b	t <sub>1</sub>	t <sub>2</sub>	L a11	a	bxhxl
<b>80</b>	<b>24 j6</b>	50	65	M8	20	8	4	27.3	50	5	8X7X40
<b>100</b>	<b>28 j6</b>	60	77.5	M8	20	8	4	31.3	60	5	8X7X50
<b>125</b>	<b>38 k6</b>	80	90	M10	27	10	5	41.3	80	5	10X8X70
<b>140</b>	<b>48 k6</b>	80	110	M10	27	10	5.5	51.8	80	5	14X9X70

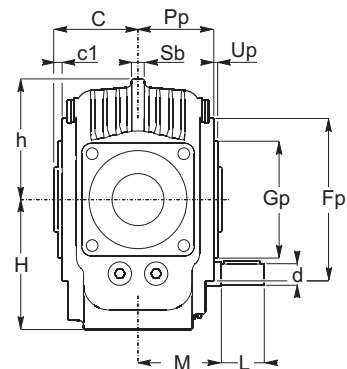
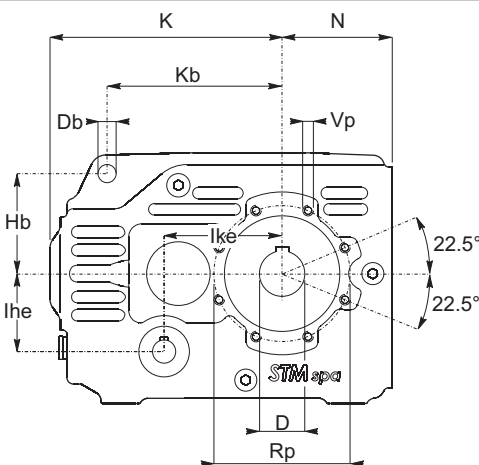
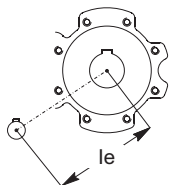
**PT-2**



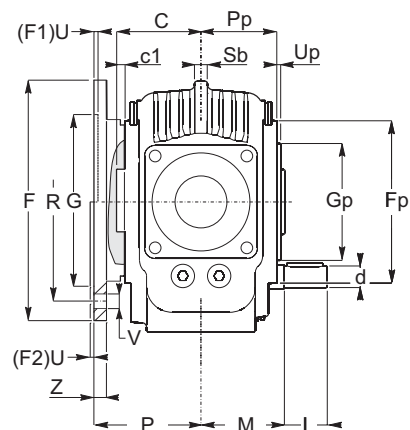
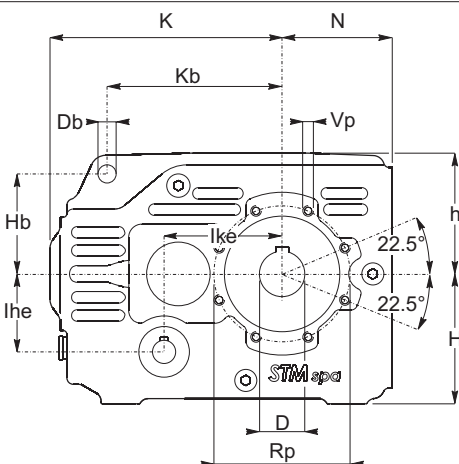
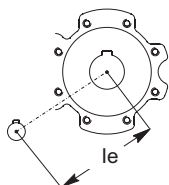
**A** **AUD** **C1**

**80-100-125-140**

**PTF-2**



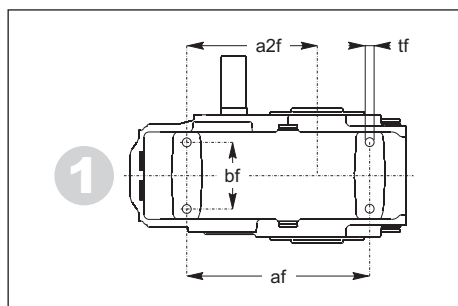
**PTF-2**  
**F1-F2**



**PARTICOLARE CORPO**

**DETAIL OF THE FLANGED**

**DETAIL DES GEHÄUSES**



OM	af	a2f	bf	tf
<b>80</b>	175	125	64	M10
<b>100</b>	230	159	73	M12
<b>125</b>	300	210	88	M14
<b>140</b>	390	270	130	M18

1.5 Dimensioni

1.5 Dimensions

1.5 Abmessungen

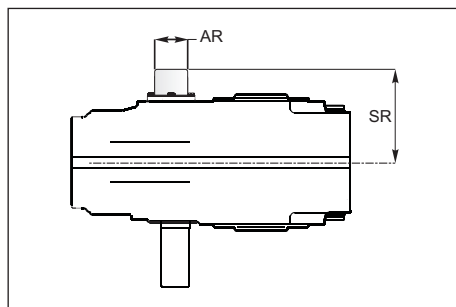
	C	c1	D H7	h	H	K	N	d	L	M	I <sub>e</sub>	Ih <sub>e</sub>	Ike		D <sub>b</sub>	K <sub>b</sub>	H <sub>b</sub>	S <sub>b</sub>
<b>80</b>	65	6,5	32 (30) (35)	93	100	179	85,5	19 j6	40	65	109	60	91		13	135	77	10
<b>100</b>	77,5	7,0	45 (40) (50)	113	120	221	105,5	24 j6	50	77,5	148.2	75	127.8		13	170	95	13
<b>125</b>	90	9,0	55 (50) (60)	140	145	276	140,5	28 j6	60	90	190	92	166.2		16	215	118	15
<b>140</b>	110	6,5	70 (60)	182	190	349	175,5	38 k6	80	110	238.5	115	209		26	275	150	18

OM	Gp	Fp	Pp	Rp	Up	Vp	F		G F8	P	R	U	V	Z
<b>80</b>	90 - g6	125	58,5	105	3	M8	F1	200	130	100	165	4,5	N°4 ø11	11
<b>100</b>	110 - g6	150	70,5	125	3	M8	F1	250	180	125	215	5	N°4 ø13	14
<b>125</b>	135 - g6	180	81,0	150	3	M10	F1	300	230	150	265	5	N°4 ø15	16
<b>140</b>	170 - g6	230	103,5	200	4	M12	F2	350	250 (g6)	150	300	5	N°4 ø18	18
							F1	350	250	180	300	6	N°4 ø17	25

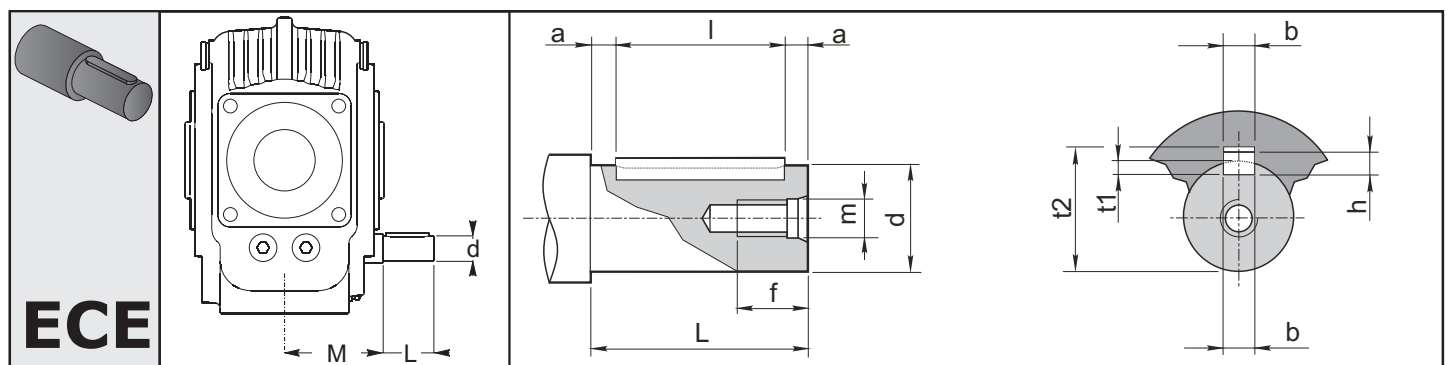
Antiretro:

backstop device:

Rücklaufsperre:



	AR	SR
<b>80</b>	65	70
<b>100</b>	76	86,5
<b>125</b>	85	105
<b>140</b>	105	128

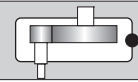


**ECE**

PT / 2				Foro fil. testa Tapped hole Gewindebohrung Kopf		Cava / Keyway / Nut			Estremità d'albero Shaft end Wellenende		Linguetta Key Federkeil
SIZE	d	L	M	d	f	b	t <sub>1</sub>	t <sub>2</sub>	L <sub>a11</sub>	a	bxhxl
<b>80</b>	<b>19 j6</b>	40	65	M6	15	6	3.5	21.8	40	5	6X6X30
<b>100</b>	<b>24 j6</b>	50	77.5	M8	20	8	4	27.3	50	5	8X7X40
<b>125</b>	<b>28 j6</b>	60	90	M8	20	8	4	31.3	60	5	8X7X50
<b>140</b>	<b>38 k6</b>	80	110	M10	27	10	5	41.3	80	5	10X8X70



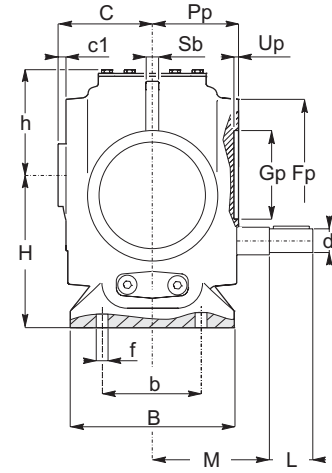
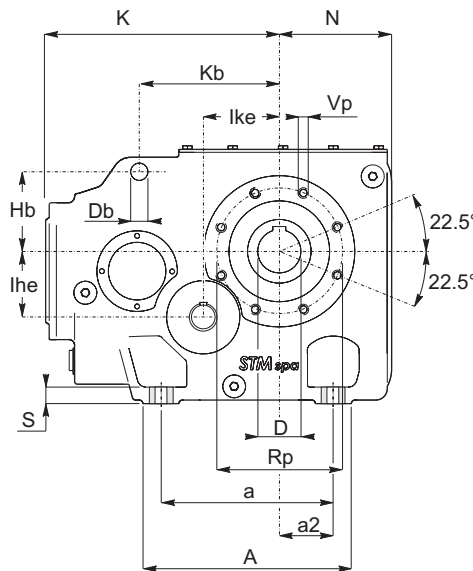
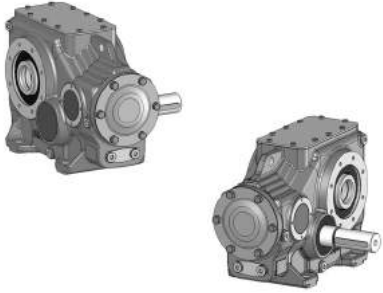
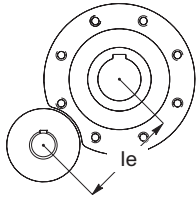
**PT-1**



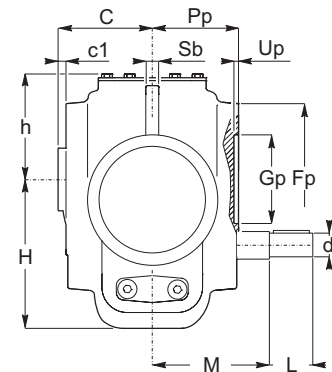
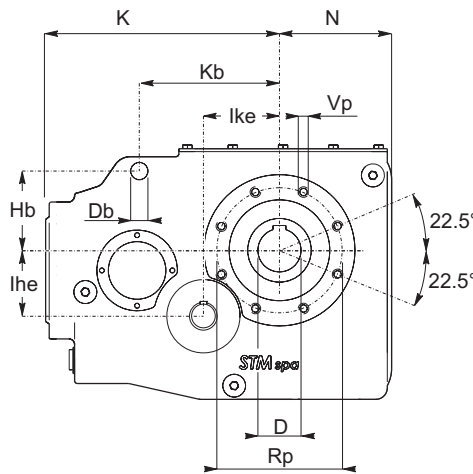
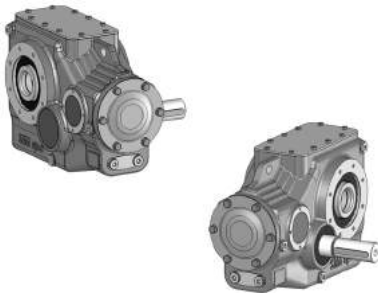
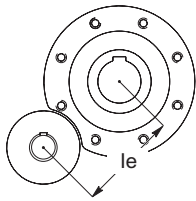
A AUD C1

**132-150-170-190**

**PTP-1**

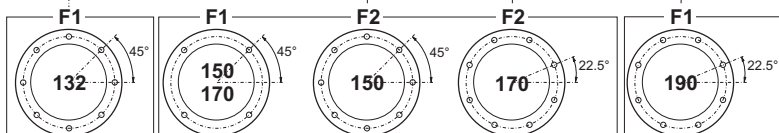
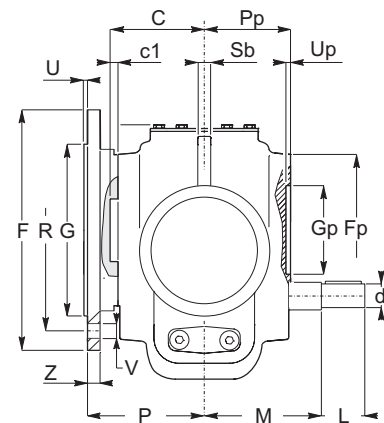
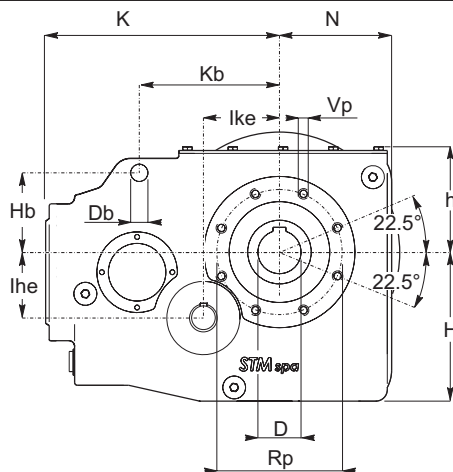
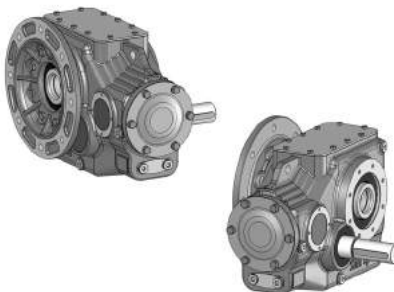
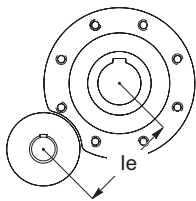


**PTF-1**



**PTF-1**

**F1-F2**



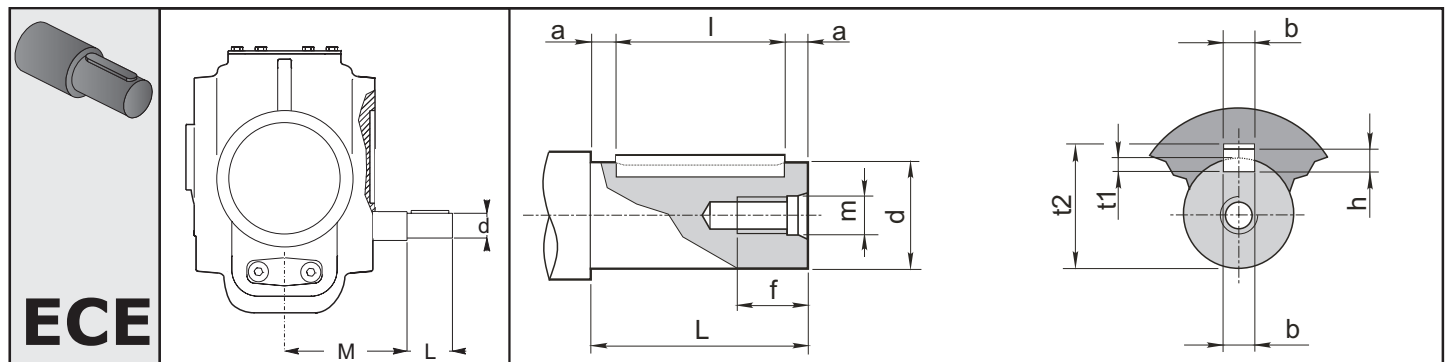
1.5 Dimensioni

1.5 Dimensions

1.5 Abmessungen

	a	A	a <sub>2</sub>	b	B	C	c <sub>1</sub>	D H7	f	h	H		K	N	S	d	L	M	I <sub>e</sub>	I <sub>h<sub>e</sub></sub>	I <sub>k<sub>e</sub></sub>	D <sub>b</sub>	K <sub>b</sub>	H <sub>b</sub>	S <sub>b</sub>
											PT P	PT F													
<b>132</b>	240	290	75	190	228	121	1	60 (70)	22	147	212	207	332.5	156	23	50	112	153.5	140	91.62	105.86	24	195	138	18
<b>150</b>	270	325	90	210	255	137	4.5	70 (80)	22	170	245	240	362.5	183	27	55	125	174	160	103.58	121.94	26	220	155	22
<b>170</b>	315	375	110	240	280	151	6	90	22	188	275	270	391.5	210	30	60	140	198	180	118.70	135.31	32	240	175	25
<b>190</b>	355	425	125	270	320	170	5	100	26	208. 5	315	308	437	236	35	65	140	224	200	133,4	150	38	270	155	30

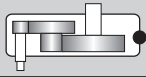
	G <sub>p</sub> H7	F <sub>p</sub>	P <sub>p</sub>	R <sub>p</sub>	U <sub>p</sub>	V <sub>p</sub>	F		G g6	P	R	U	V	Z
							F1	F2						
<b>132</b>	140	210	120	175	7	N° 8 M12 x 24	F1	350	250	160	300	5	N° 8 φ 18	17
<b>150</b>	160	240	132.5	200	7	N° 8 M14 x 28	F1	400	300	174.5	350	5	N°4 φ 18	18
							F2	450	350	174.5	400	5	N°8 φ 19	18
<b>170</b>	180	275	145	225	7	N°8 M16 x 32	F1	400	300	183.5	350	5	N°4 φ 18	18
							F2	450	350	183.5	400	5	N°8 φ 18	25
<b>190</b>	200	310	165	250	7	N°8 M18 x 36	F1	550	450	221	500	5	N°8 φ 18	25



PT / 1				Foro fil. testa Tapped hole Gewindebohrung Kopf			Cava / Keyway / Nut			Estremità d'albero Shaft end Wellenende		Linguetta Key Federkeil
SIZE	d	L	M	d	f	b	t <sub>1</sub>	t <sub>2</sub>	L <sub>a11</sub>	a	bxhxl	
<b>132</b>	<b>50 k6</b>	112	153.5	M12	35	14	5.5	53.8	112	6	14x9x100	
<b>150</b>	<b>55 m6</b>	125	174	M12	35	16	6	59.3	125	7.5	16x10x110	
<b>170</b>	<b>60 m6</b>	140	198	M12	35	18	7	64.4	140	7.5	18x11x125	
<b>190</b>	<b>65 m6</b>	140	224	M16	39	18	7	69.4	140	7.5	18x11x125	



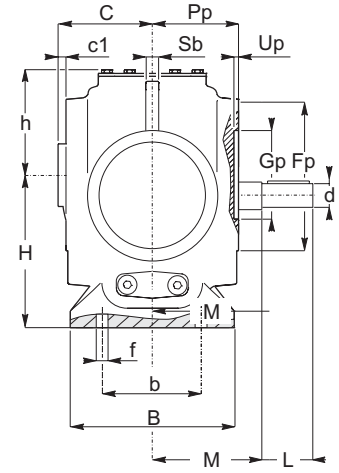
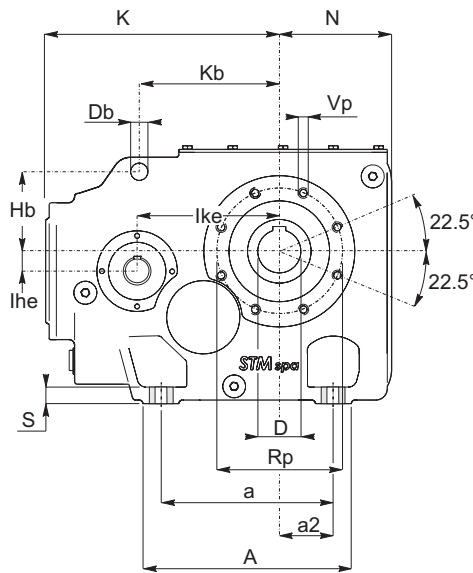
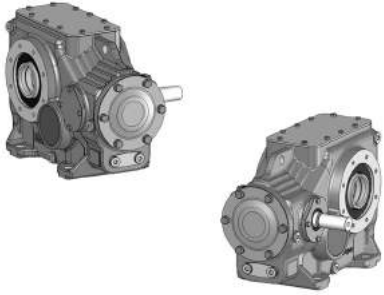
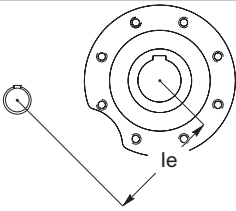
**PT-2**



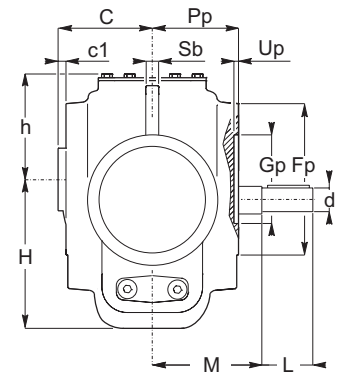
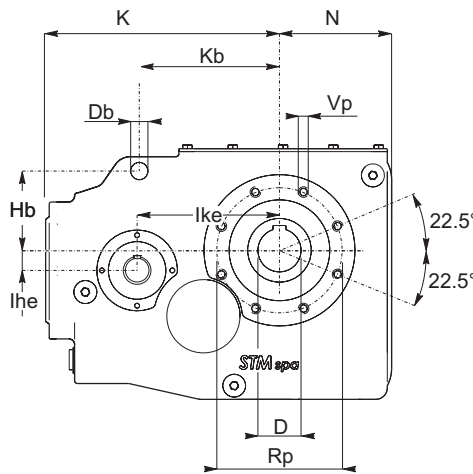
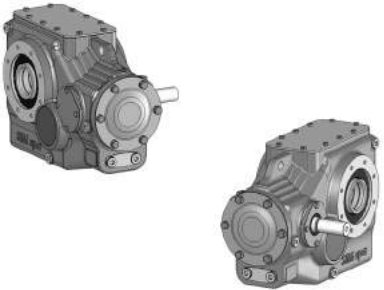
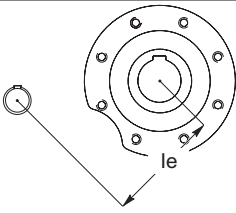
**A** **AUD** **C1**

**132-150-170-190**

**PTP-2**

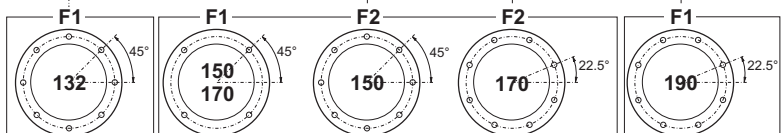
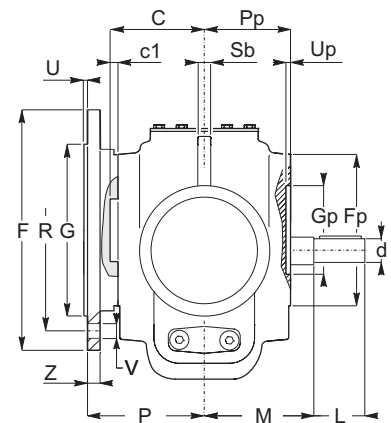
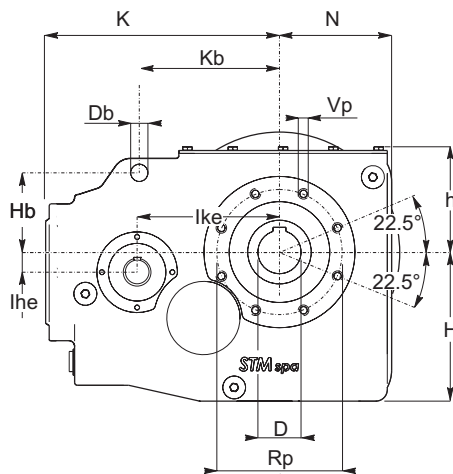
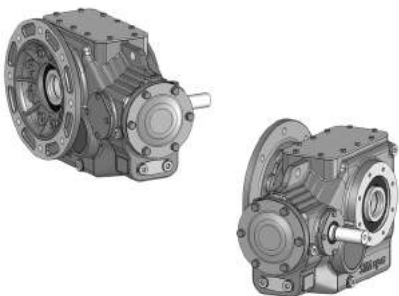
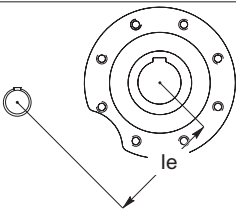


**PTF-2**



**PTF-1**

**F1-F2**



1.5 Dimensioni

1.5 Dimensions

1.5 Abmessungen

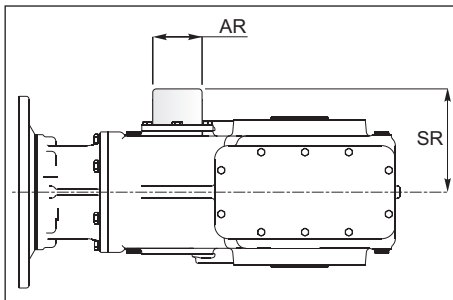
	a	A	a <sub>2</sub>	b	B	C	c <sub>1</sub>	D H7	f	h	H		K	N	S	d	L	M	I <sub>e</sub>	I <sub>h<sub>e</sub></sub>	I <sub>k<sub>e</sub></sub>	D <sub>b</sub>	K <sub>b</sub>	H <sub>b</sub>	S <sub>b</sub>
											PT P	PT F													
<b>132</b>	240	290	75	190	228	121	1	60 (70)	22	147	212	207	332.5	156	23	35	80	121.5	200	28	198	24	195	138	18
<b>150</b>	270	325	90	210	255	137	4.5	70 (80)	22	170	245	240	362.5	183	27	45	112	137.5	225	30	223	26	220	155	22
<b>170</b>	315	375	110	240	280	151	6	90	22	188	275	270	391.5	210	30	50	112	151.0	250	35	247.5	32	240	175	25
<b>190</b>	355	425	125	270	320	170	5	100	26	208.5	315	308	437	236	35	55	125	170.0	280	38	277.4	38	270	155	30

	G <sub>p</sub> H7	F <sub>p</sub>	P <sub>p</sub>	R <sub>p</sub>	U <sub>p</sub>	V <sub>p</sub>	F		G	P	R	U	V	Z
							F1	F2	g6					
<b>132</b>	140	210	120	175	7	N° 8 M12 x 24	F1	350	250	160	300	5	N° 8 φ 18	17
<b>150</b>	160	240	132.5	200	7	N° 8 M14 x 28	F1	400	300	174.5	350	5	N° 4 φ 18	18
							F2	450	350	174.5	400	5	N° 8 φ 19	18
<b>170</b>	180	275	145	225	7	N° 8 M16 x 32	F1	400	300	183.5	350	5	N° 4 φ 18	18
							F2	450	350	183.5	400	5	N° 8 φ 18	25
<b>190</b>	200	310	165	250	7	N° 8 M18 x 36	F1	550	450	221	500	5	N° 8 φ 18	25

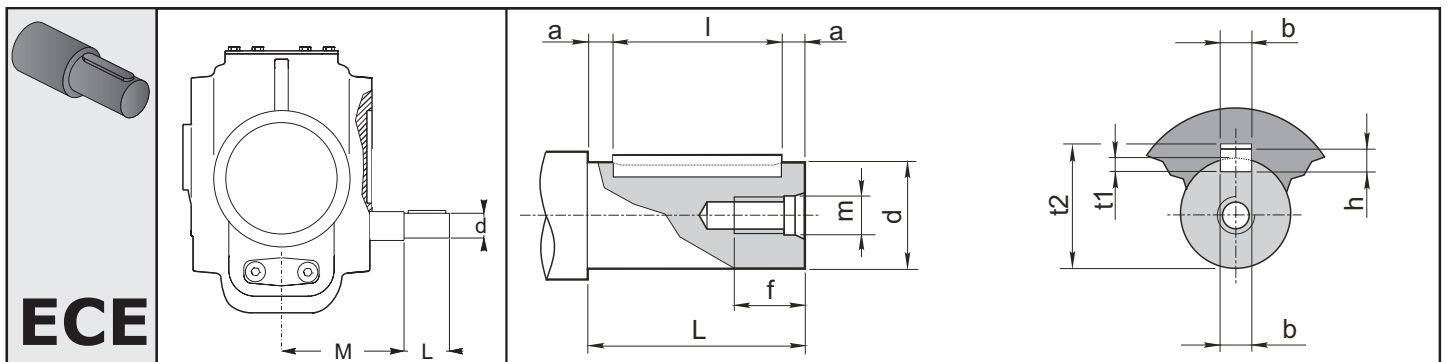
Antiretro:

backstop device:

Rücklaufsperre:



	AR	SR
<b>132</b>	80	155
<b>150</b>	90	178.5
<b>170</b>	100	181.75
<b>190</b>	110	199



**ECE**

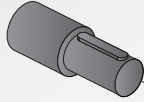

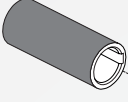

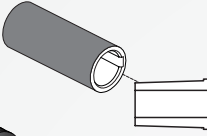

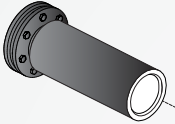



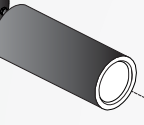

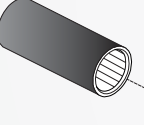

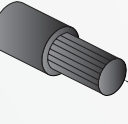

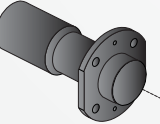


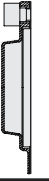


PT / 2				Foro fil. testa Tapped hole Gewindebohrung Kopf			Cava / Keyway / Nut			Estremità d'albero Shaft end Wellenende		Linguetta Key Federkeil
SIZE	d	L	M	d	f	b	t <sub>1</sub>	t <sub>2</sub>	L <sub>a11</sub>	a	bxhxl	
<b>132</b>	<b>35 k6</b>	80	121.5	M10	27	10	5	38.3	80	5	10x8x70	
<b>150</b>	<b>45 k6</b>	112	137.5	M10	27	14	5.5	48.8	112	6	14x9x100	
<b>170</b>	<b>50 k6</b>	112	151.0	M12	35	14	5.5	53.8	112	6	14x9x100	
<b>190</b>	<b>55 m6</b>	125	170.0	M12	35	16	6	59.3	125	7.5	16x10x110	



ESTREMITA USCITA - Accessori - Opzioni  
 OUTPUT CONFIGURATIONS - Accessories - Options  
 ENDEN DER AUSGANGSWELLEN - Zubehör - Optionen

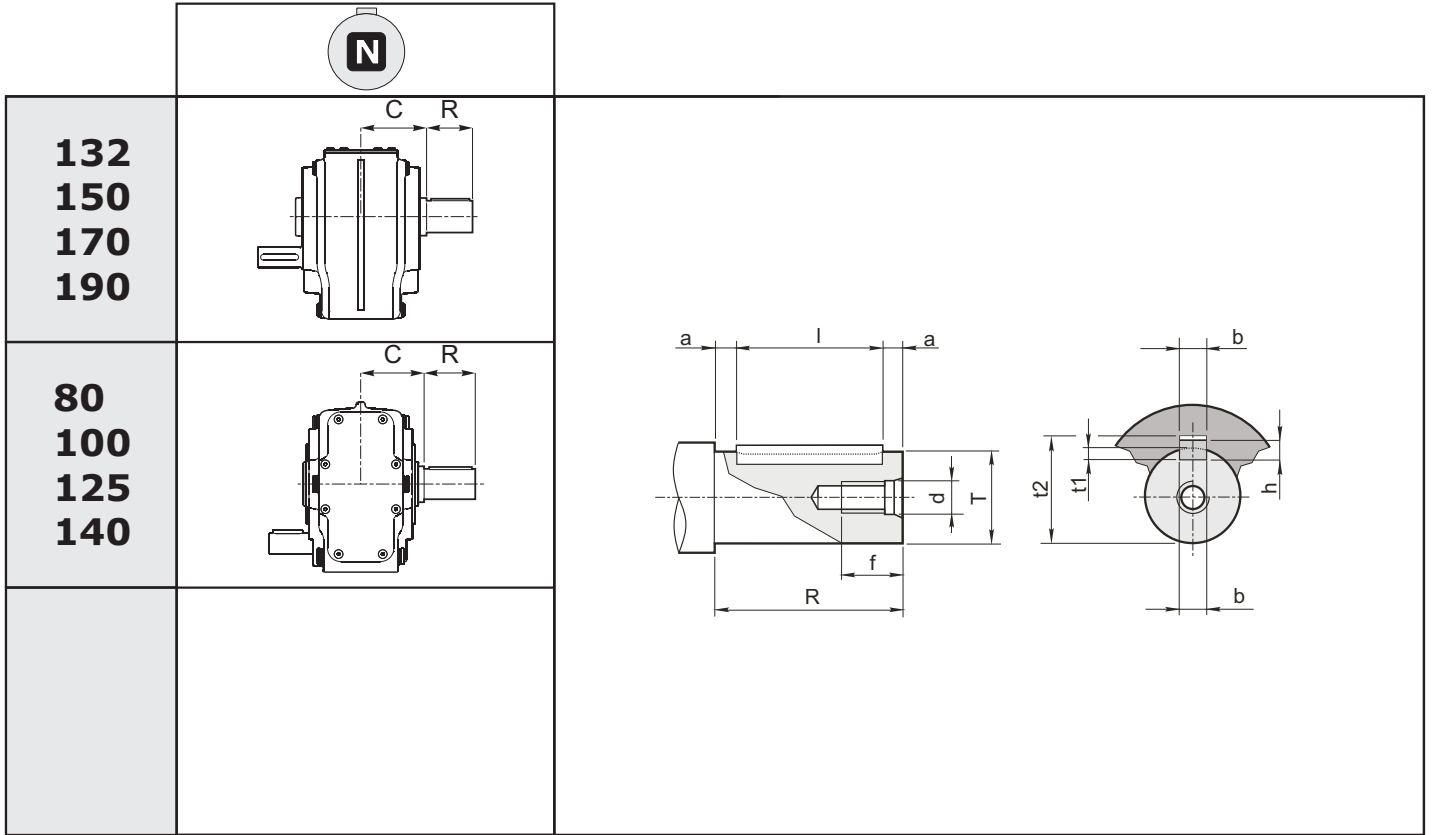
STIM  
team

STIM  
team

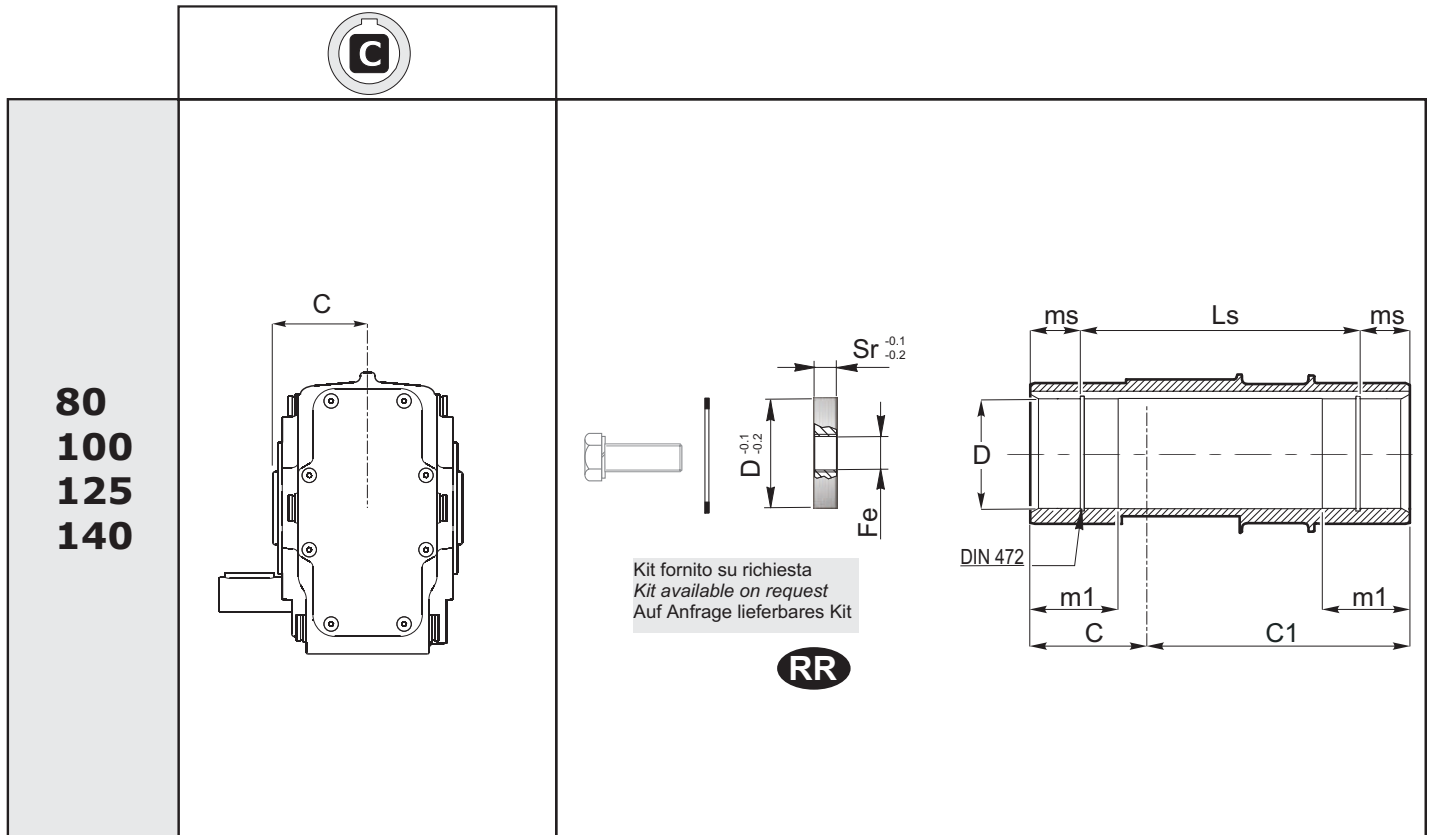
		Output shaft	G32		
		Hollow shaft with keyway	G33		
		Quick Locking Adjustment "Quick Locking"	G35		
					
		Hollow shaft with shrink disk	G37		
		Hollow shaft with shrink disk	G37		
		Splined hollow shaft	G39		
		Splined output shaft	G40		
		Broached flange	G42		
				OPT - ACC. - Accessories - Options	G44
TEN	PROT	RR	FF		

G





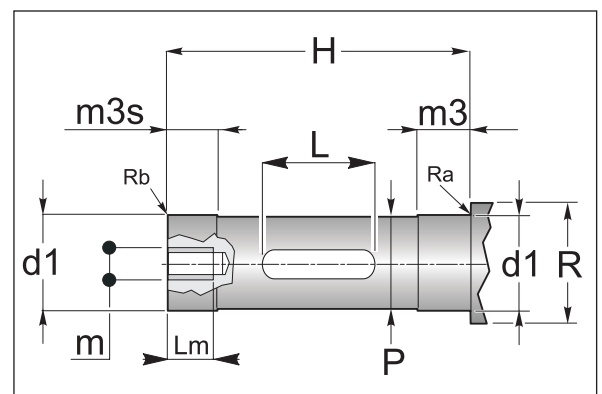
	Ø Albero Ø Shaft Ø Welle		Foro fil. testa Tapped hole Gewindebohrung Kopfi		Cava Keyway Nut			Estremità d'albero Shaft end Wellenende		Linguetta Key Federkeil
	T	C	d	f	b	t1	t2	R	a	bxhxl
<b>80</b>	32 k6	71	M8	22	10	5	35.3	60	5	10x8x50
<b>100</b>	45 g6	77.5	M 10	25	14	5.5	48.8	90	5	14x9x80
<b>125</b>	55 g6	90	M 12	32	16	6	59.3	110	5	16x10x100
<b>132</b>	60 m6	121	M 12	35	18	7	64.4	112	6	18x11x100
	70 m6		M 16	39	20	7.5	74.9	125	7.5	20x12x110
<b>140</b>	70 m6	122	M16	39	20	7.5	74.9	125	7.5	20x12x110
<b>150</b>	70 m6	137	M 16	39	20	7.5	74.9	125	7.5	20x12x110
	80 m6		M 16	39	22	9	85.4	140	7.5	22x14x125
<b>170</b>	90 m6	151	M 16	39	25	9	95.4	160	10	25x14x140
<b>190</b>	100 m6	170	M 20	46	28	10	106.4	180	10	28x16x160



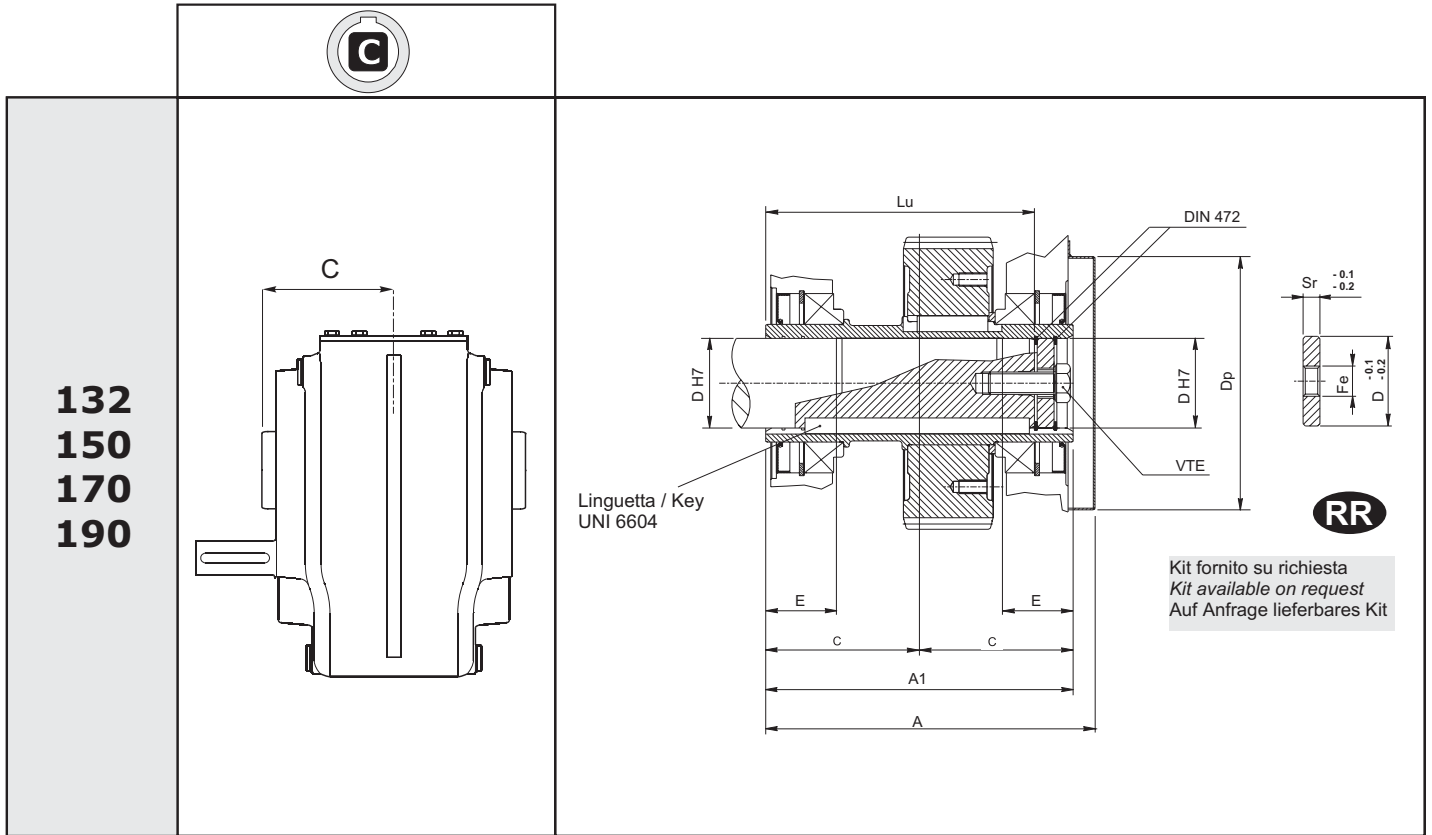
	80	100	125	140
C	65	77,5	90	110
D	32	45	55	70
H7	(30)	(40)	(50)	(60)
	(35)	(50)	(60)	
m1	35	42.5	55	60
ms	15	15	17.5	17.5
Ls	100	125	145	185

Perno macchina / Customer shaft / Maschinachse

	d1 h6	m3	m3s	Lm	m	H	L min	P	R	Ra	Rb	Sr	Fe
80	32 (30) (35)	30	30	25	M10	119	70	31.8 (29.8) (34.8)	42 (40) (45)			-	-
100	45 (50) (40)	45	15	25 (32) (25)	M 10 (M 12) (M 10)	125	80	44.8 (49.8) (39.8)	55 (60) (50)			10	M14
125	55 (60) (50)	60	20	32	M 12	142	110	54.8 (59.8) (49.8)	65 (70) (60)			15	M14
140	70 (60)	40	40	40 (35)	M20 (M12)	198	150	69.8 (59.8)	80 (70)			-	-



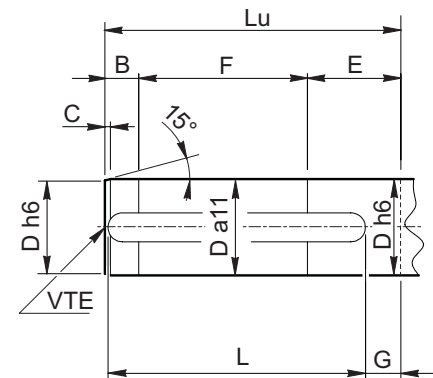


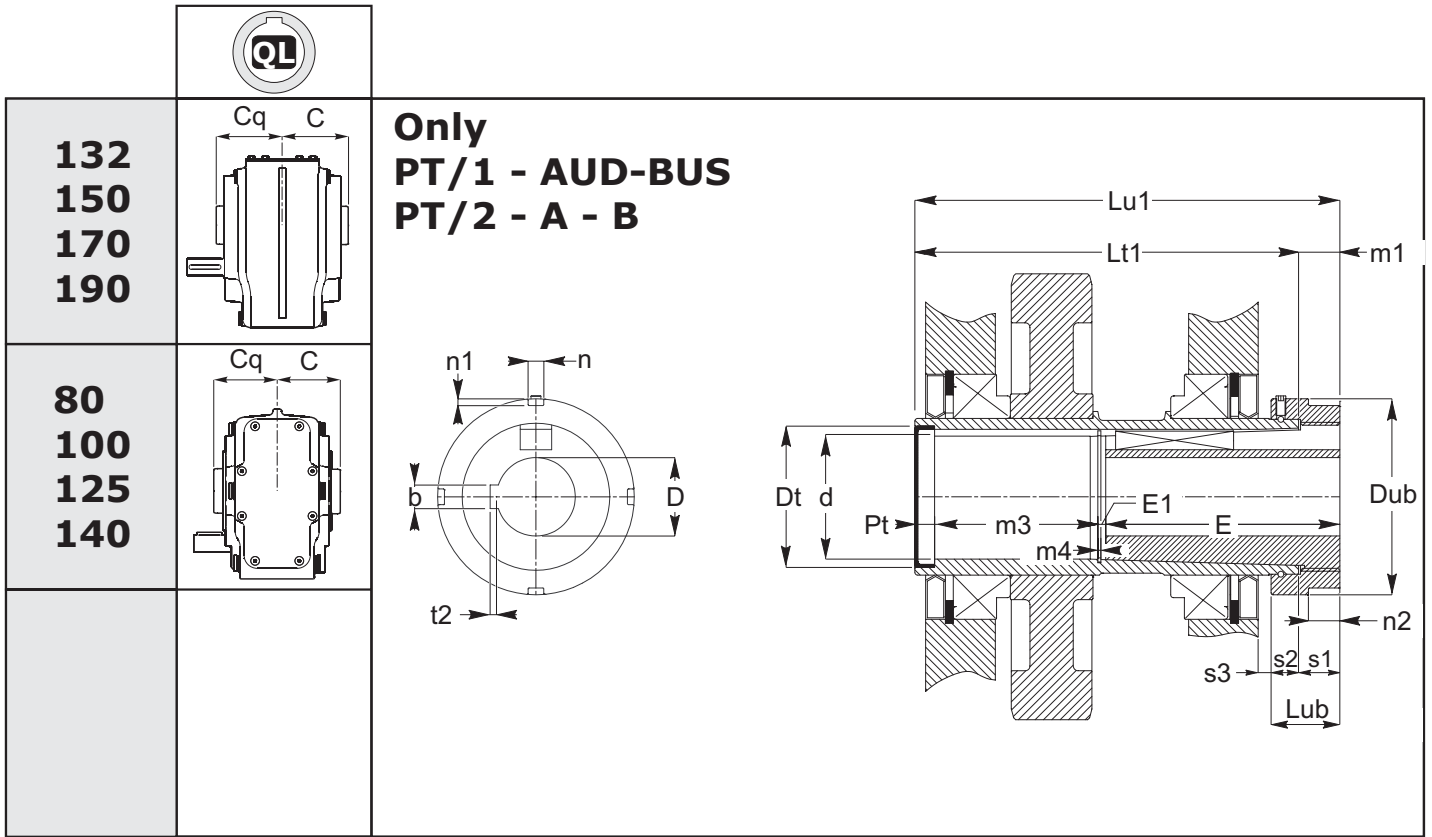


	132	150	170	190
A	269	302	332	379
A1	242	274	302	340
C	121	137	151	170
D	60 (70)	70 (80)	90	100
Dp	183	226	226	260
E	56	63	70	80
Lu	207.5	239.5	261	299
Sr	15	15	18	18
Fe	M27	M27	M30	M30
VTE	M20x60	M20x60	M24x75	M24x75

Albero Macchina / Machine shaft / Machine Shaft

	B	C	D	E	F	G	L	Lu	VTE
132	26.5	4	60 (70)	61	120	25	180	207.5	M20
150	33.5	4.5	70 (80)	68	138	36	200	239.5	M20
170	36	5	90	77	148	37	220	261	M24
190	44	5.5	100	85	170	43	250	299	M24



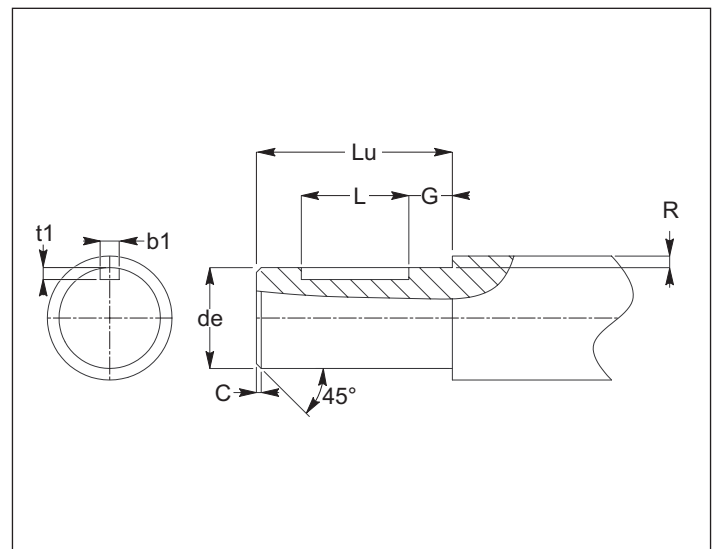


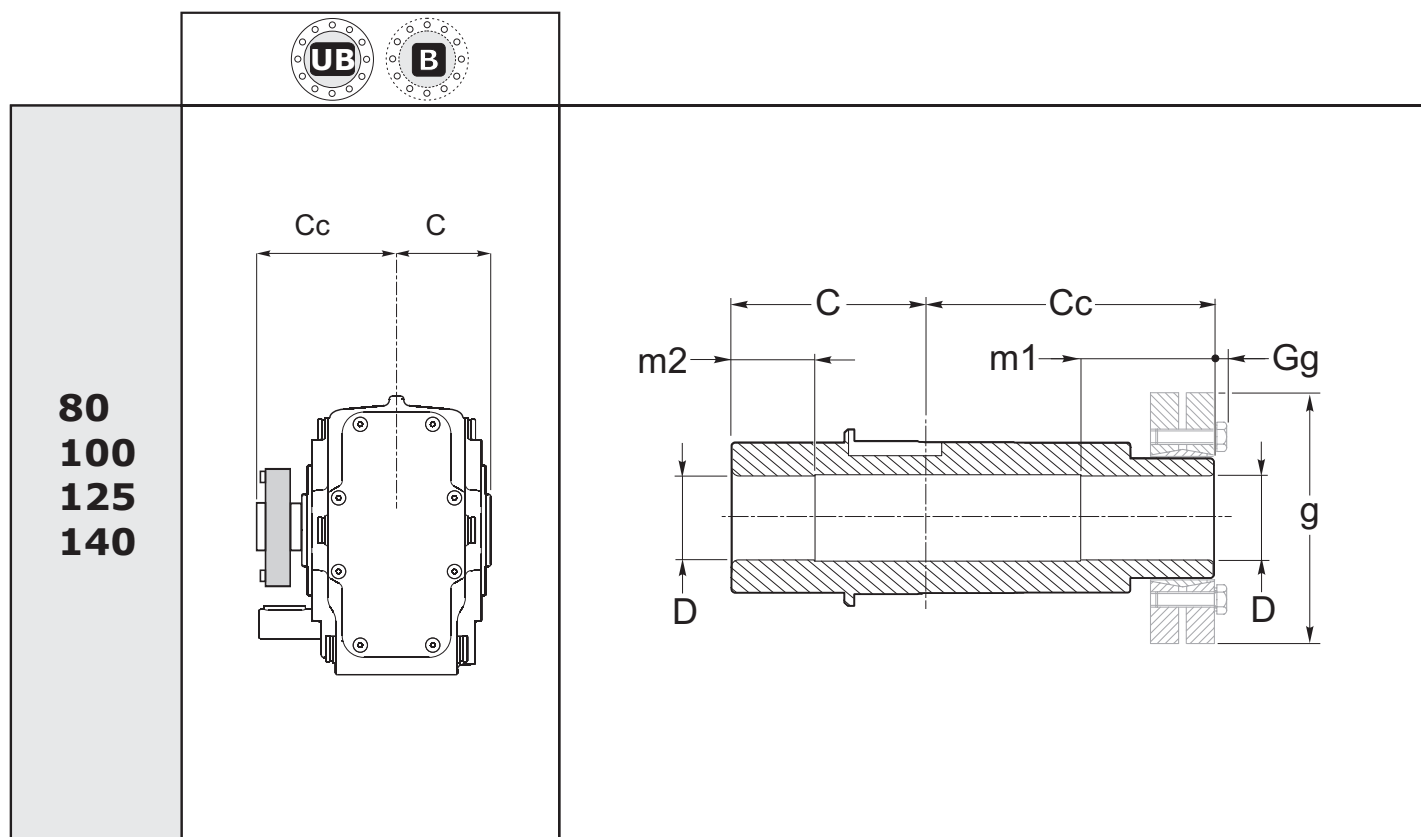
	80	100	125	132	140	150	170	190
<b>C</b>	65	77,5	90	121	110	137	151	170
<b>Cq</b>	101	113.5	126	157	146	173	187	206
<b>d</b>	35.2	49.2	60.2	70.2	69.2	80.2	90.2	100.2
<b>dt</b>	47	62	72	85	85	100	110	120
<b>Dub</b>	70	85	100	105	115	120	135	145
<b>E</b>	91	121	131	141	141	161	181	201
<b>E1</b>	3.5	3.5	3.5	4.2	4.2	4.2	4.2	5.2
<b>Lt1</b>	145	170	195	257	235	289	317	355
<b>Lu1</b>	166	191	216	278	256	310	338	376
<b>Lub</b>	35	35	35	35	35	35	35	35
<b>m1</b>	21	21	21	21	21	21	21	21
<b>m3</b>	64.5	58.5	71.5	120.8	98.8	132.8	140.8	157.8
<b>m4</b>	1.7	1.7	1.7	2.2	2.2	2.2	2.2	2.7
<b>n2</b>	15	15.5	16	16	16	17	17	17
<b>s1</b>	21	21	21	21	21	21	21	21
<b>s2</b>	14	14	14	14	14	14	14	14
<b>s3</b>	4.5	5	6.5	10	6	13	17	15
<b>b</b>	6 8 8	8 8 10 12 14	10 12 14 14 16	12 14 14 16 18	12 14 14 16 18	14 14 16 18 18 20	16 18 18 20 20 22	20 20 22 22 25
<b>D</b> <b>H7</b>	20 25 30	25 30 35 38 40 42 45 48	35 40 45 48 50 55	40 45 50 55 60 65	40 45 50 55 60 65	45 50 55 60 65 70 75	55 60 65 70 75 80	70 75 80 85 90
<b>n</b>	6	7	8	8	8	10	10	10
<b>n1</b>	2.5	3	3.5	3.5	3.5	4	4	4
<b>t2</b>	UNI 6604							



Perno macchina / Customer shaft / Maschinachse

	<b>C</b>	<b>de h6</b>	<b>G</b>	<b>L</b>	<b>Lu</b>	<b>R</b>	<b>b1</b>	<b>t1</b>
<b>80</b>	1	(20)	10	40	90	5		
		(25)	10	50				
		(30)	10	60				
<b>100</b>	1.5	(25)	10	50	120	5		
		(30)	10	60				
		(35)	10	70				
		(38)	10	70				
		(40)	5	80				
		(42)	5	80				
		(45)	5	90				
(48)	5	90						
<b>125</b>	1.5	(35)	10	70	130	5		
		(40)	10	80				
		(45)	10	90				
		(48)	10	90				
		(50)	5	100				
		(55)	5	100				
<b>132</b>	1.5	(40)	10	80	140	7.5		
		(45)	10	90				
		(50)	10	100				
		(55)	5	100				
		(60)	5	120				
		(65)	5	120				
<b>140</b>	1.5	(40)	10	80	140	7.5		
		(45)	10	90				
		(50)	10	100				
		(55)	5	100				
		(60)	5	120				
		(65)	5	120				
<b>150</b>	2	(45)	10	90	160	7.5		
		(50)	10	100				
		(55)	10	100				
		(60)	5	120				
		(65)	5	120				
		(70)	5	120				
<b>170</b>	2	(75)	5	140	180	7.5		
		(55)	10	100				
		(60)	10	120				
		(65)	10	120				
		(70)	5	120				
<b>190</b>	2	(75)	5	150	200	10		
		(80)	5	150				
		(85)	5	170				
		(90)	5	170				
		(70)	10	120				

UNI  
6604

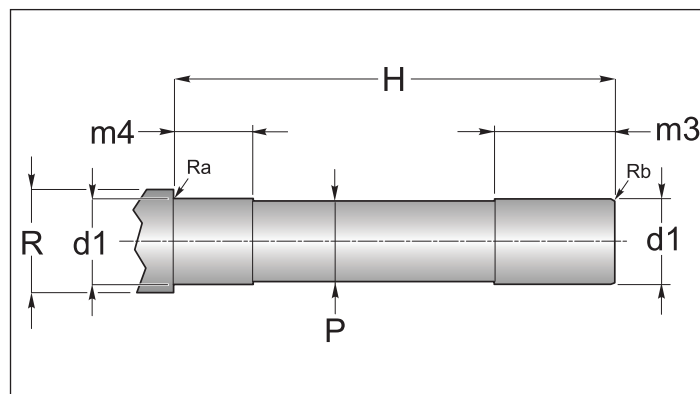


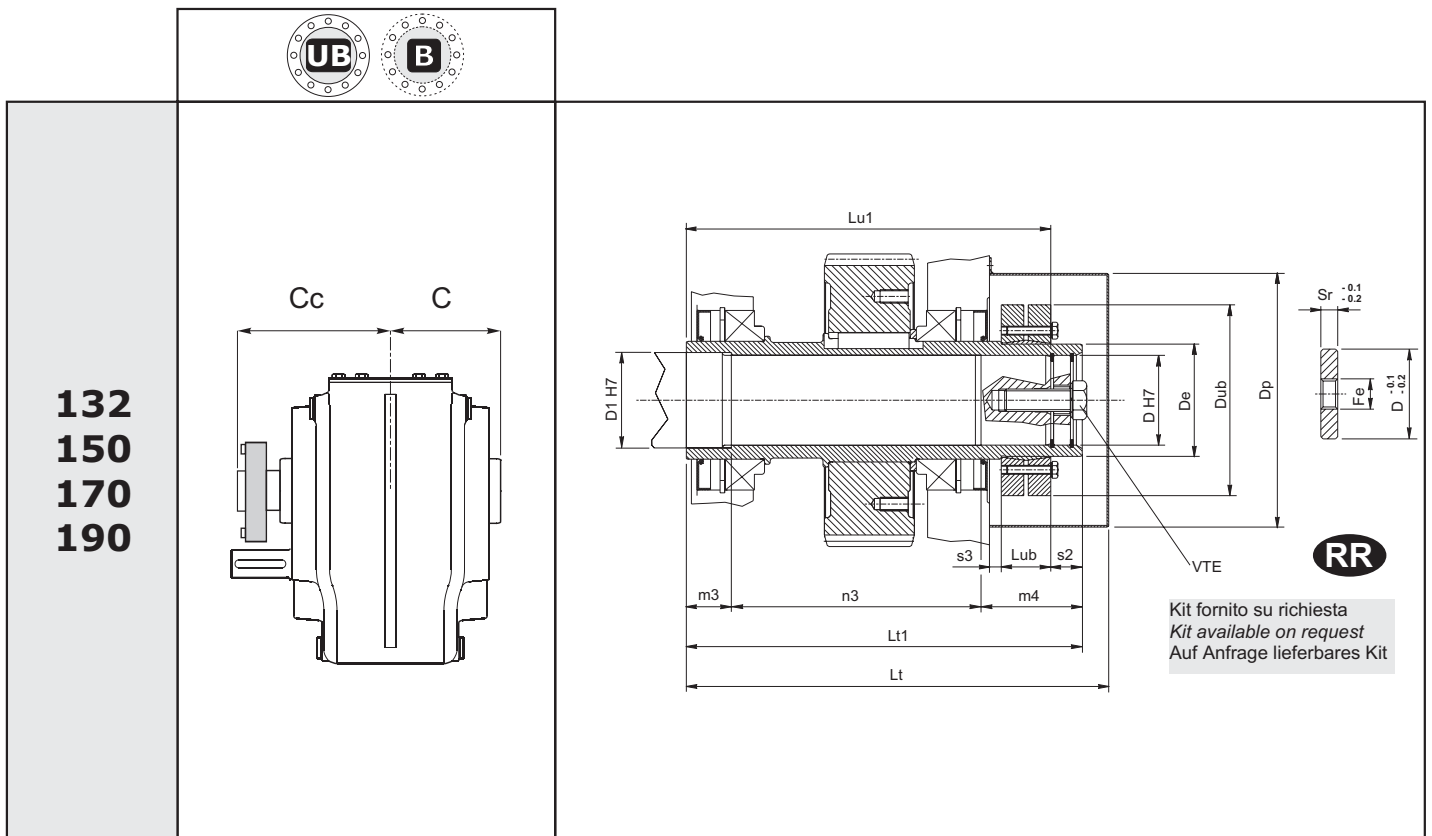
80  
100  
125  
140

	80	100	125	140
<b>C</b>	65	77,5	90	110
<b>Cc</b>	95	107.5	125	154
<b>D</b> <b>H7</b>	35	45	55	70
<b>m1</b>	40	50	60	70
<b>m2</b>	30	30	50	60
<b>g</b>	80	100	115	155
<b>Gg</b>	-	4	4	-

Perno macchina / Customer shaft / Maschinachse

	d1 h6	H	m3	m4	P	R	Ra	Rb
80	35	160	45	35	34.8	45	0.5	0.5
100	45	190	55	35	44.8	55	0.5	1.0
125	55	215	65	55	54.8	65	0.5	1.0
140	70	264	80	60	69.8	80	0.5	1.0

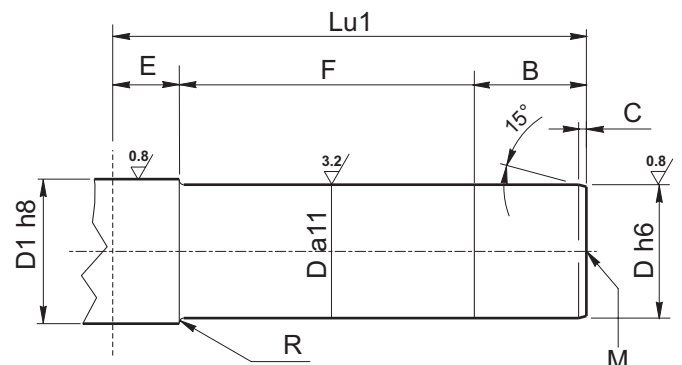


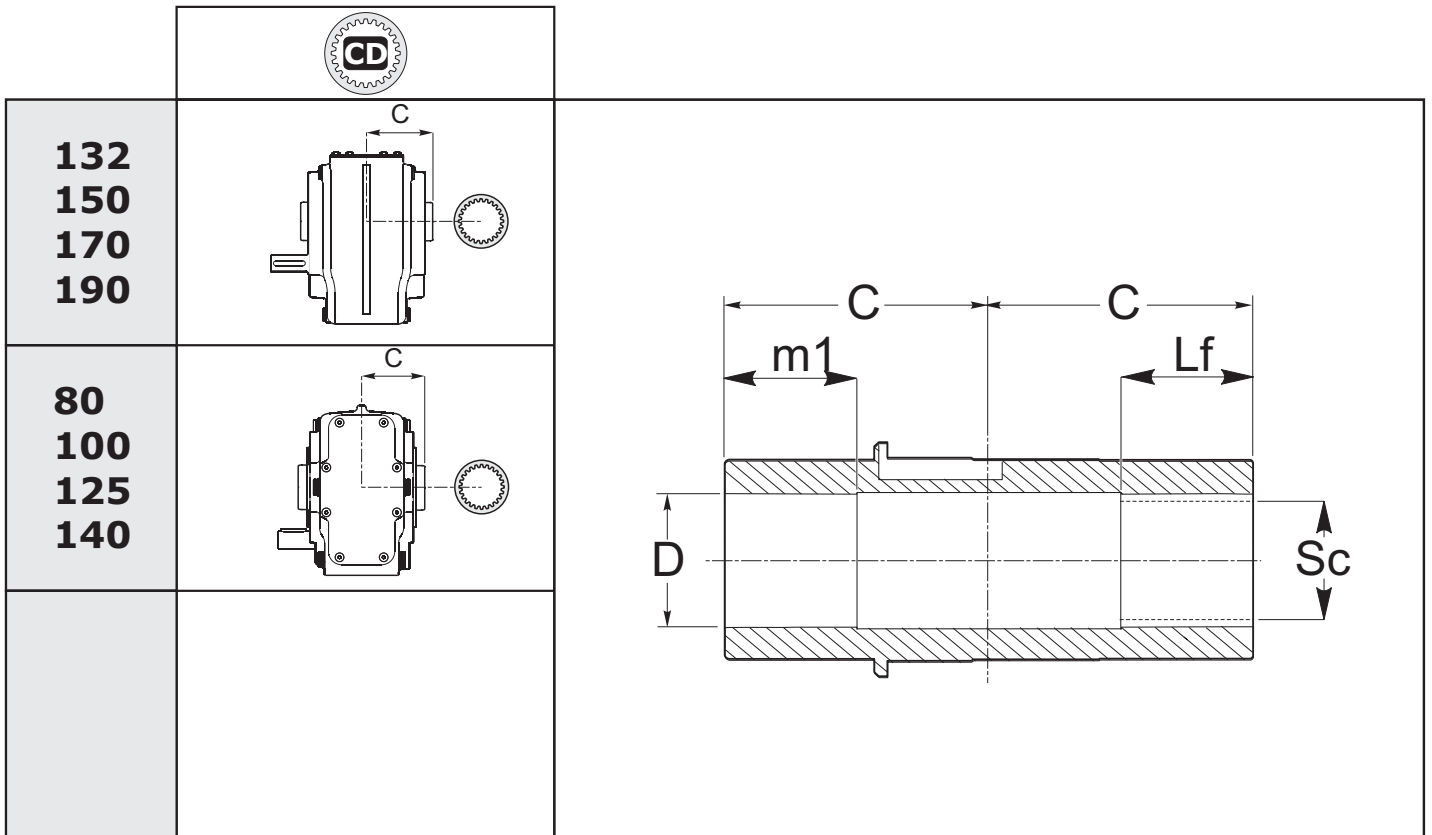


	<b>132</b>		<b>150</b>		<b>170</b>		<b>190</b>	
Lt	334.5		375.5		405.5		452.5	
Lt1	313		352		397		436	
m3	35		40		45		50	
n3	198		222		252		276	
m4	80		90		100		110	
Lu1	286		324		364		402	
Dp	183		226		226		260	
Dub	145	155	155	170	215	215	215	215
Lub	32.5	39	39	44	54	54	54	54
s2	30	27	30	28	33	33	34	34
C	121		137		151		170	
Cc	192		215		246		266	
D	60	70 (opz)	70	80 (opz)	90	100	100	100
D1	65	75	75	85	95	110	110	110
De	80	90	90	100	120	130	130	130
Sr	15		15		18		18	
Fe	M27		M27		M30		M30	
VTE	M20x60		M20x60		M24x75		M24x75	

Perno macchina / Customer shaft / Maschinachse

	<b>132</b>	<b>150</b>	<b>170</b>	<b>190</b>
B	58	67	72	81
C	4	4.5	5	5.5
D	60 (70)	70 (80)	90	100
D1	65 (75)	75 (85)	95	110
E	30	32	35	40
F	198	225	257	281
Lu1	286	324	364	402
M	M20	M20	M24	M24
R	2.2	2.5	2.5	3

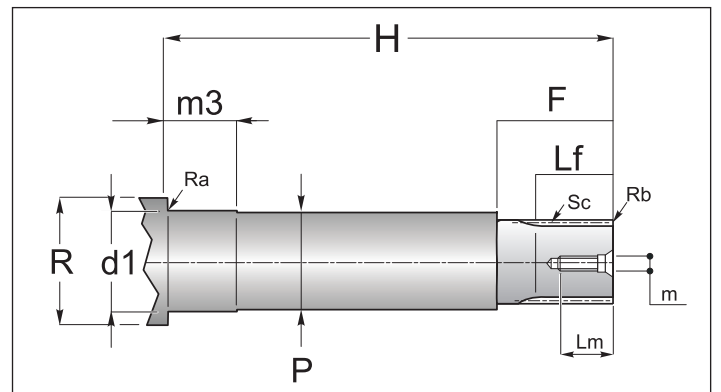





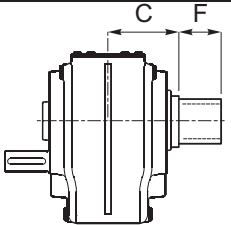

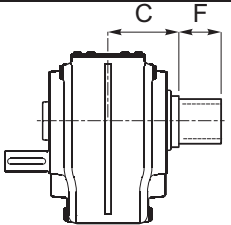

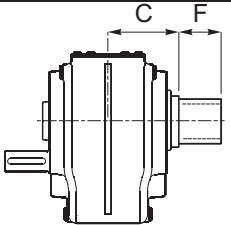
	80	100	125	132	140	150	170	190
<b>C</b>	65	77.5	90	121	110	137	151	170
<b>D H7</b>	37	47	57	72	72	82	92	102
<b>m1</b>	40	55	60	70	70	90	90	110
<b>Lf</b>	40	55	60	70	70	90	90	110
<b>Sc</b>	35 x 31 DIN 5482	45 x 41 DIN 5482	55 x 50 DIN 5482	70 x 64 DIN 5482	70 x 64 DIN 5482	80 x 74 DIN 5482	90 x 84 DIN 5482	100 x 94 DIN 5482

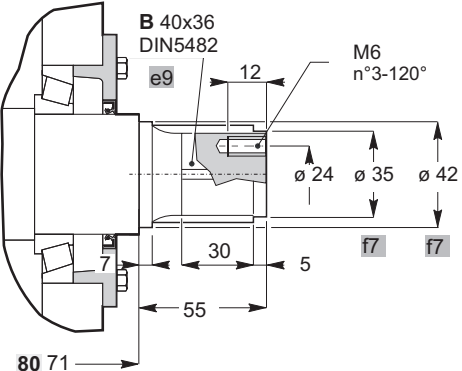
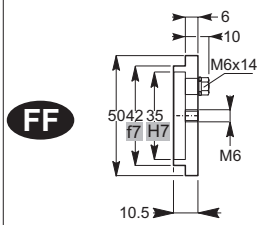
Perno macchina / Customer shaft / Maschinachse

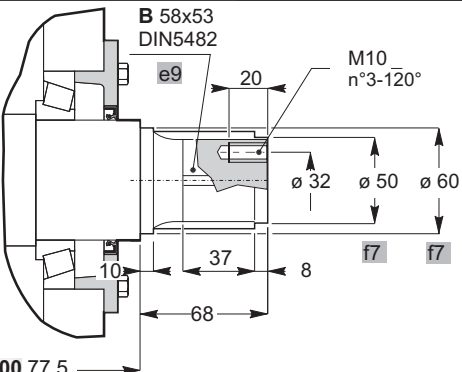
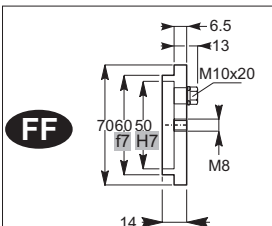
	d1 h6	m 3	H	P	R	Ra	Rb	Sc	F	Lf	L m	m
<b>80</b>	37	35	127	36	48	0.5	1x45°	50	40	25	M10	
<b>100</b>	47	50	155	46	60	1	1.5x45°	65	55	25	M10	
<b>125</b>	57	55	175	56	75	1	1.5x45°	70	60	35	M12	
<b>132</b>	72	65	238	71	85	2	1.5x45°	80	70	39	M16	
<b>140</b>	72	65	217	71	85	2	1.5x45°	80	70	39	M16	
<b>150</b>	82	85	270	81	100	3	2x45°	100	90	39	M16	
<b>170</b>	92	85	299	91	115	2	2x45°	100	90	39	M16	
<b>190</b>	102	105	337	101	125	2	2x45°	120	110	39	M16	





			C	de (h10)	F	Profilo scanalato Splined profile Keilprofil						
						Sc	Z	mn	$\alpha$	dc (f7)	Sp	
<b>132</b> <b>150</b> <b>170</b> <b>190</b>			80	71	Look Drawing	40 x 36 DIN 5482			Look Drawing			
			100	77.5		58 x 53 DIN 5482						
			125	90		70 x 64 DIN 5482						
<b>80</b> <b>100</b> <b>125</b> <b>140</b> <b>190</b>			132	121	69.3	69	FIAT 70	26	2.58	30°	70	25
			140	122	69.3	69	FIAT 70	26	2.58	30°	70	25
			150	137	79.3	69	FIAT 80	27	2.82	30°	80	20
			170	151	94.3	74	FIAT 95	31	2.97	30°	95	25
			190	170	104.4	79	D. 105 DIN 5480	34	3	30°	106	25

<b>80</b>		 <p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
-----------	--	--

<b>100</b>		 <p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
------------	--	--

<p style="text-align: center; font-size: 24pt; font-weight: bold;">125</p>	<p style="text-align: center;">125 90</p>	<p style="text-align: center; font-size: 24pt; font-weight: bold;">FF</p> <p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p style="text-align: center; font-size: 24pt; font-weight: bold;">132-140-150 170-190</p>		<p style="text-align: center; font-size: 24pt; font-weight: bold;">FF</p> <p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>



		Dimensioni generali General dimensions Allgemeine Abmessungen																								
		de	∅ A	∅ B	C	∅ Ce f8	N° Fori holes Anzahl der Bohrungen	∅ D	E	F	G	H	I	N h9												
<b>132</b> <b>150</b> <b>170</b> <b>190</b>		Look Drawing																								
														80	71											
														100	77.5											
<b>80</b> <b>100</b> <b>125</b> <b>140</b>		125	90																							
		132	69.3	200	160	121	100	4	17.5	M10	70	43	11	16	180											
		140	69.3	200	160	122	100	4	17.5	M10	70	43	11	16	180											
		150	79.3	220	180	137	110	4	19.5	M10	70	40	12	18	200											
		170	94.3	240	190	151	130	8	19.5	M10	75	40	15	20	220											
		190	104.4	250	200	170	145	8	21.5	M12	80	40	20	20	230											

<b>80</b>			
	<b>FF - Kit fornito su richiesta</b> Kit available on request Auf Anfrage lieferbares Kit		

<b>100</b>			
	<b>FF - Kit fornito su richiesta</b> Kit available on request Auf Anfrage lieferbares Kit		

<p style="text-align: center; font-size: 24pt; font-weight: bold;">125</p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p style="text-align: center; font-size: 24pt; font-weight: bold;">132-140-150</p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p style="text-align: center; font-size: 24pt; font-weight: bold;">170-190</p>		<p><b>FF</b> - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>



1.6 OPT - ACC. - Accessori - Opzioni

1.6 OPT - ACC. - Accessories - Options

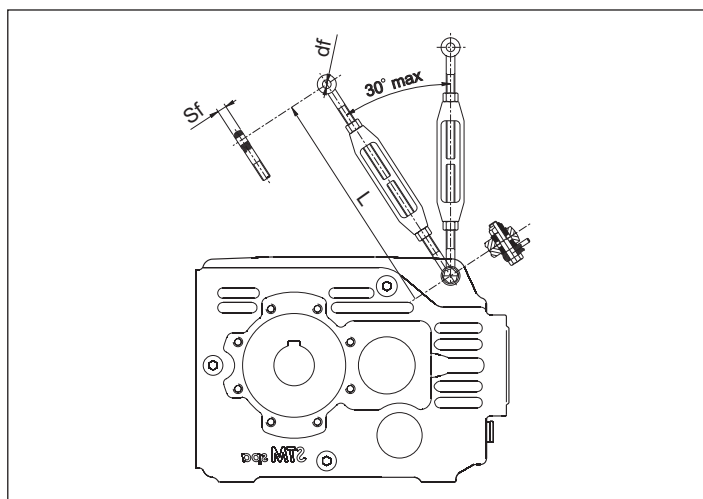
1.6 OPT-ACC.Zubehör-Optionen

**TEN**

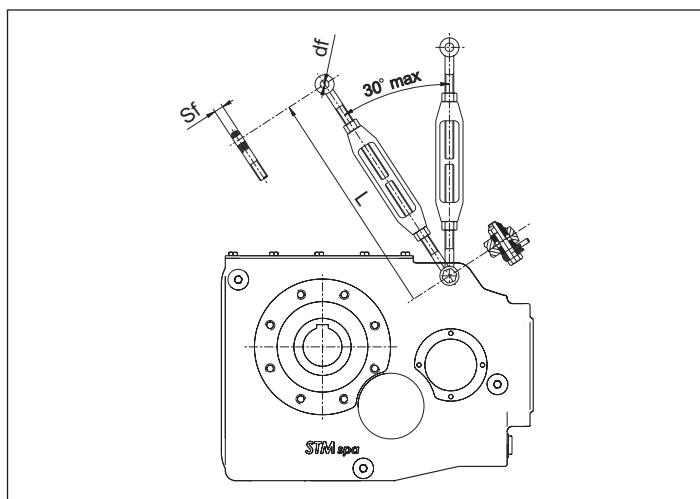
TEN - TENDITORE

TEN - TENSION ARM

TEN - SPANNVORRICHTUNG



**80-100-125-140**



**132-150-170-190**

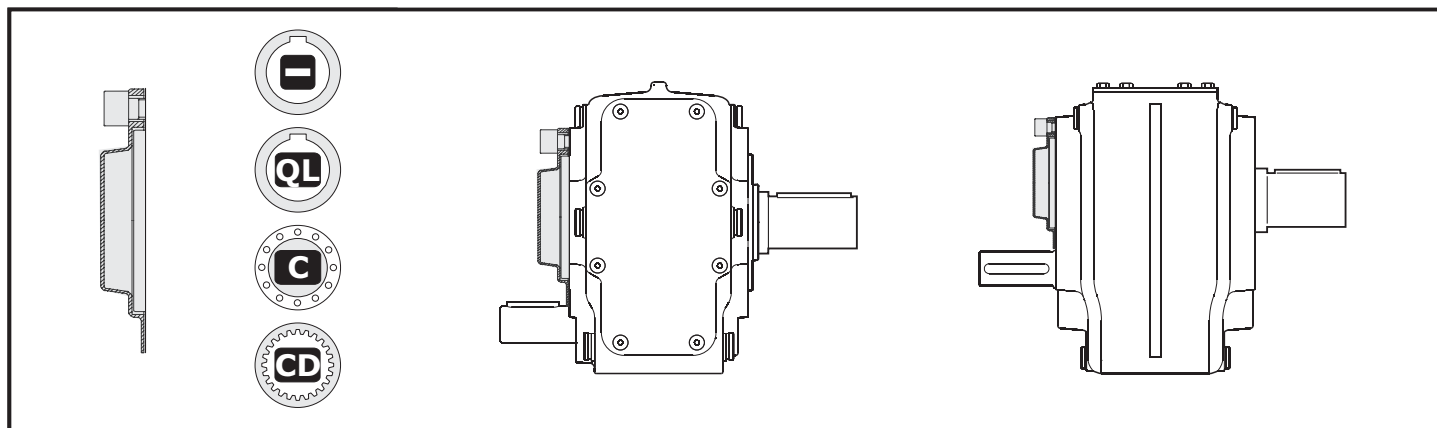
	<b>df</b>	<b>sf</b>	<b>L</b>
<b>80</b>	14	10	213 - 310
<b>100</b>	17	12	250 - 356
<b>125</b>	18	14	299 - 429
<b>132</b>	28	18	382 - 536
<b>140</b>	28	18	382 - 536
<b>150</b>	28	20	382 - 546
<b>170</b>	34	22	433 - 612
<b>190</b>	38	27	492 - 694

**PROT**

PROT. - Coperchio di protezione

PROT. - Protection cover

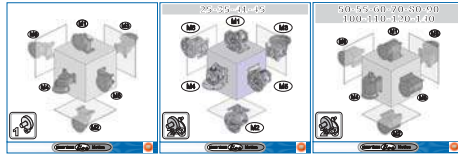
PROT - Schutzvorrichtungdeckel



**Posizioni di montaggio - Lubrificazione**  
**Mounting positions - Lubrication**  
**Einbaulagen - Schmierung**

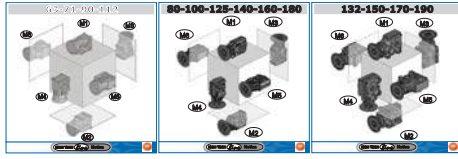


**A**



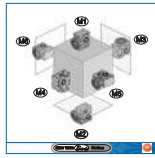
**Z2**

**O**



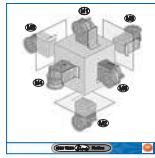
**Z3**

**S**



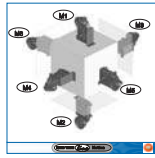
**Z4**

**P**



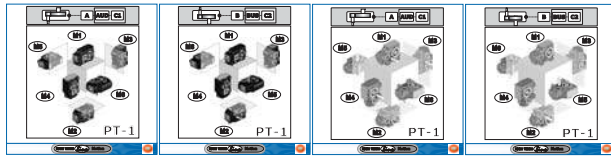
**Z5**

**PL**

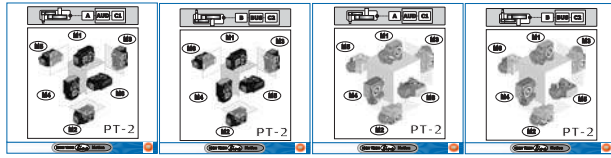


**Z5**

**PT**



**Z6**



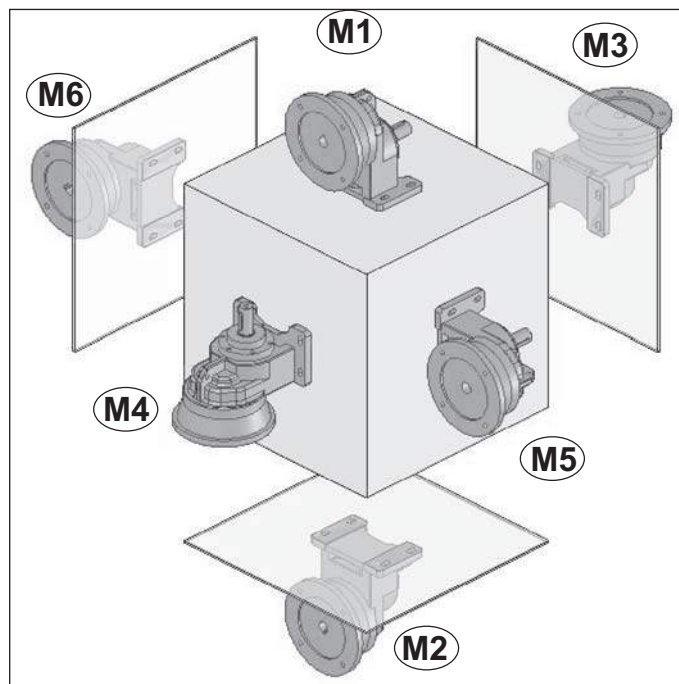
**Z7**





Posizioni di montaggio  
Mounting positions  
Einbaulagen

# AM/1 - AC/1 - AR/1

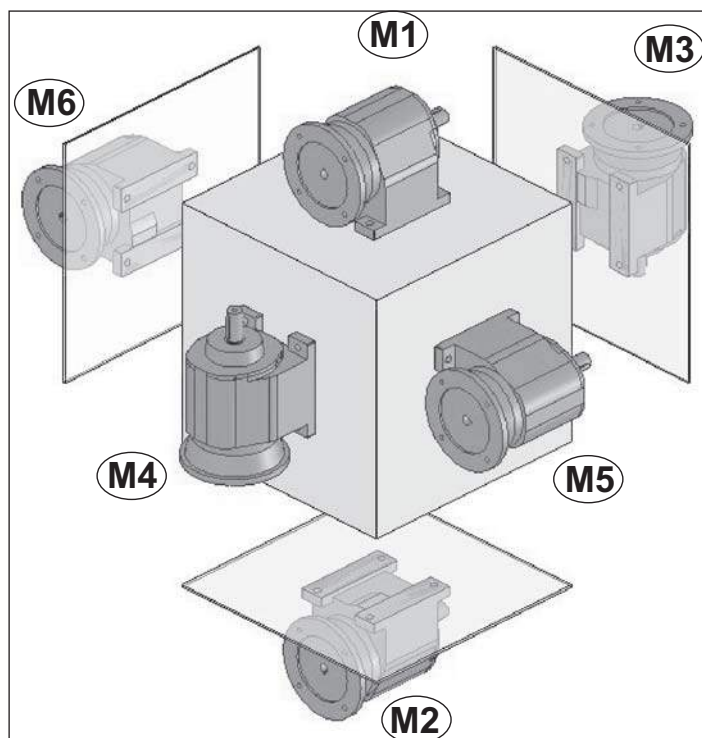
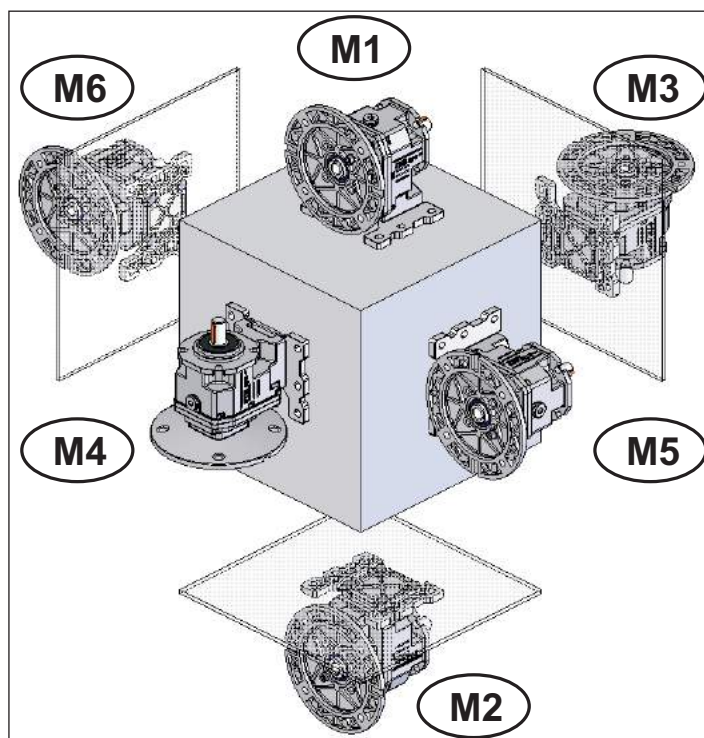


Posizioni di montaggio  
Mounting positions  
Einbaulagen

# AM/2-3 - AC/2-3 - AR/2-3

25-35-41-45

50-55-60-70-80  
90-100-120-140

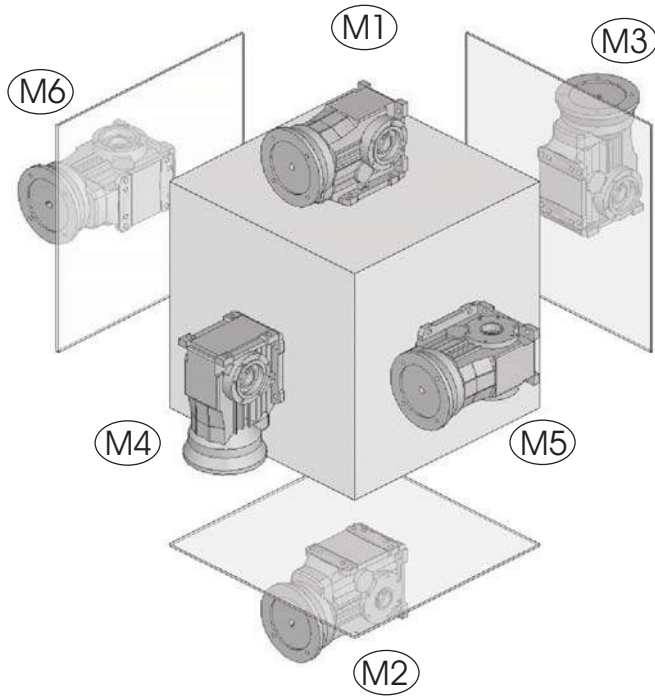




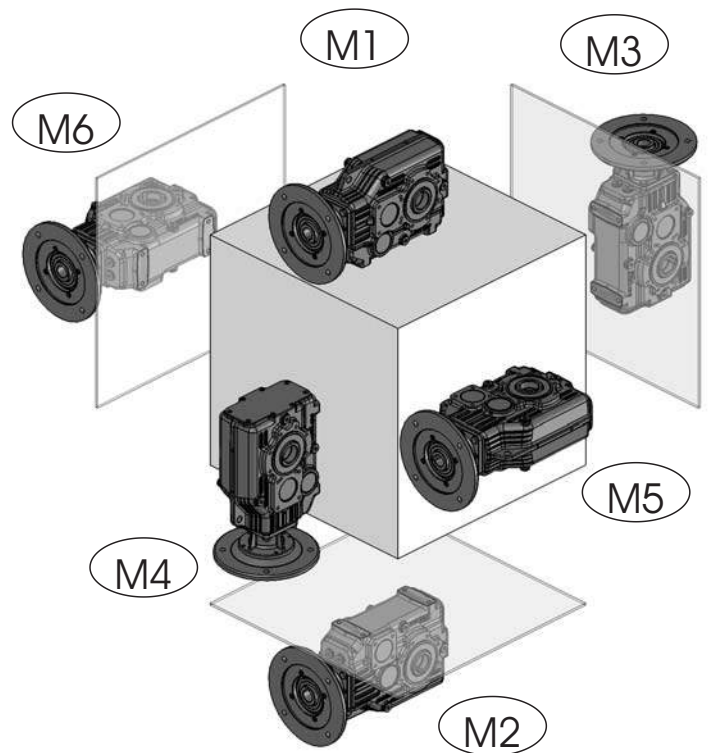
Posizioni di montaggio  
Mounting positions  
Einbaulagen

# OM-OC-OR

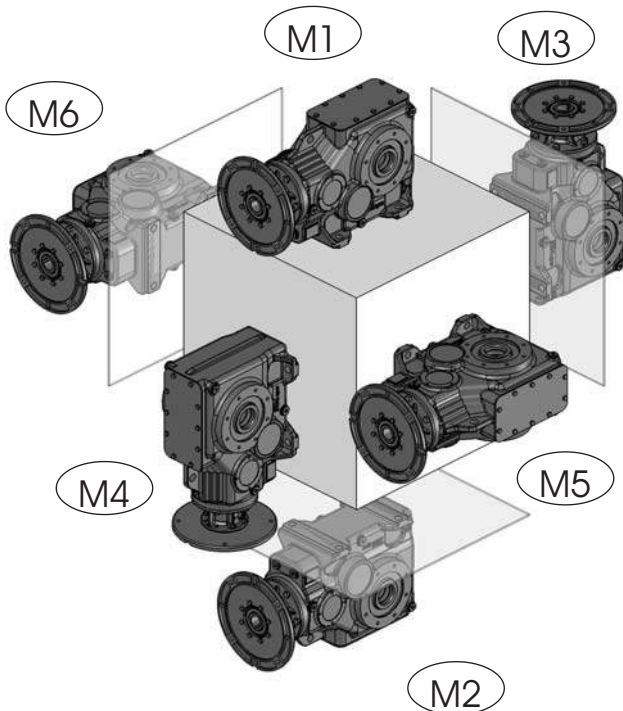
## 63-71-90-112



## 80-100-125-140-160-180



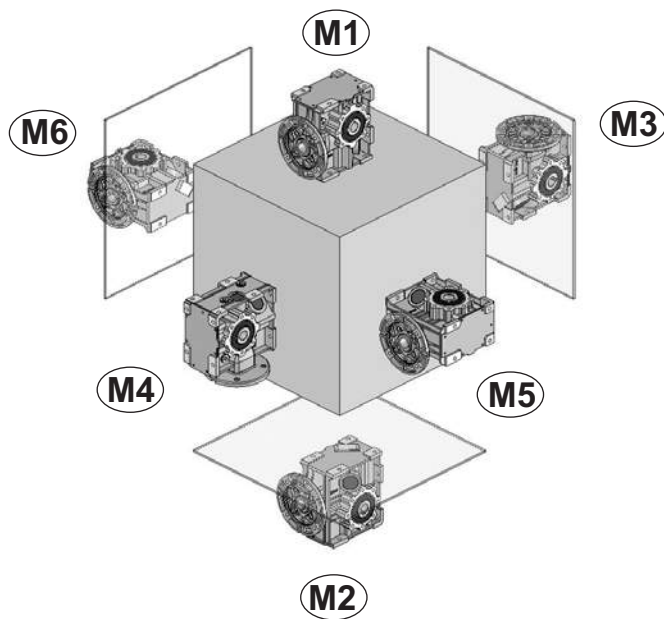
## 132-150-170-190





Posizioni di montaggio  
Mounting positions  
Einbaulagen

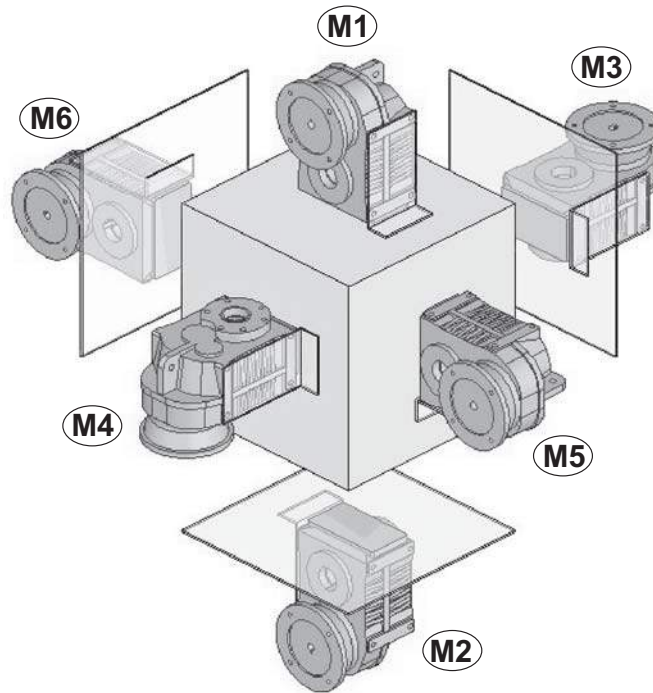
SM





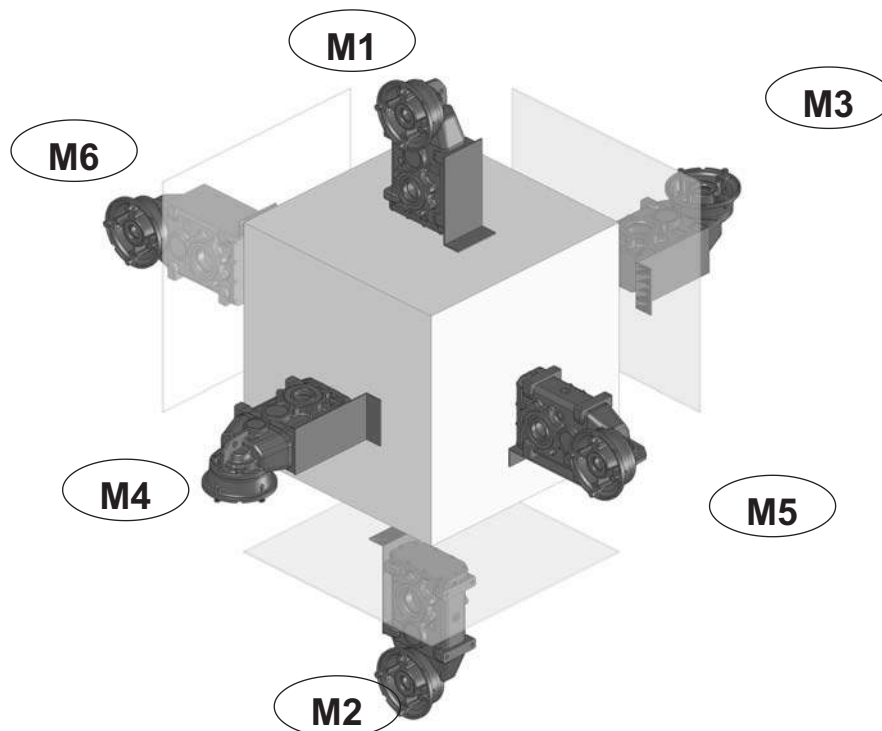
Posizioni di montaggio  
 Mounting positions  
 Einbaulagen

## PM - PC - PR



Posizioni di montaggio  
 Mounting positions  
 Einbaulagen

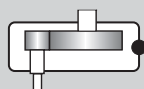
## PLM - PLC - PLR







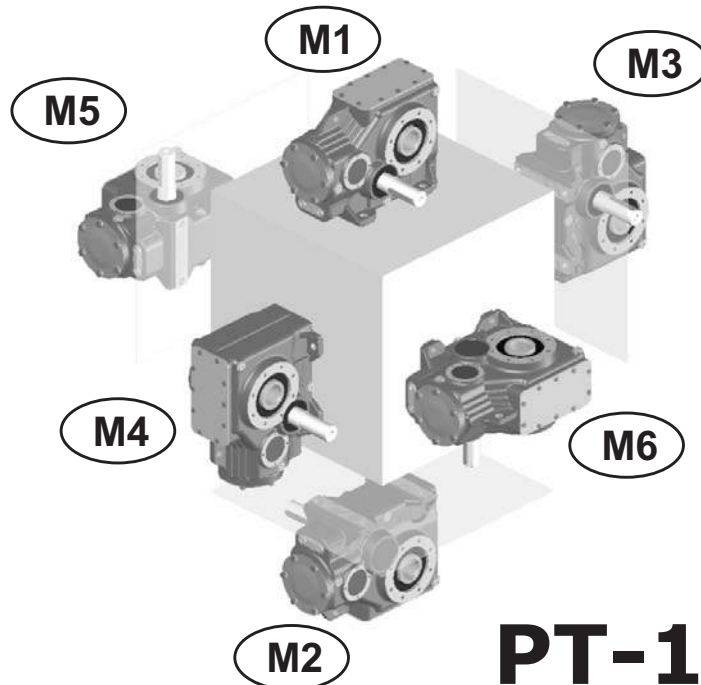
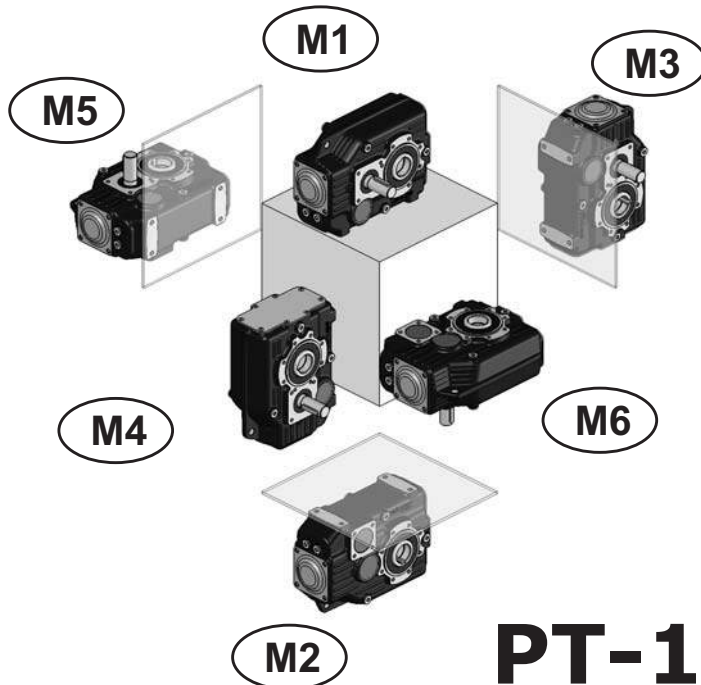
# PT-1



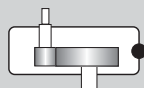
A AUD C1

Posizioni di montaggio  
Mounting positions  
Einbaulagen

80-100-125-140  
132-150-170-190



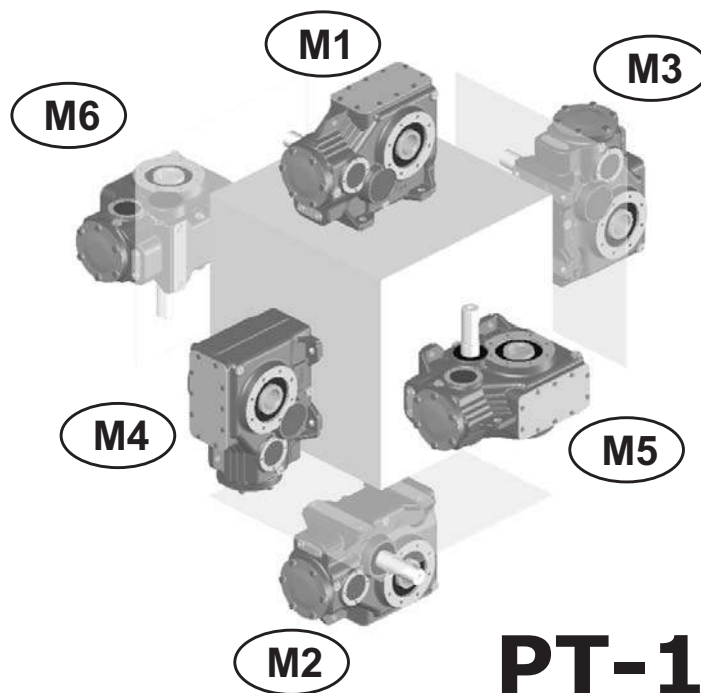
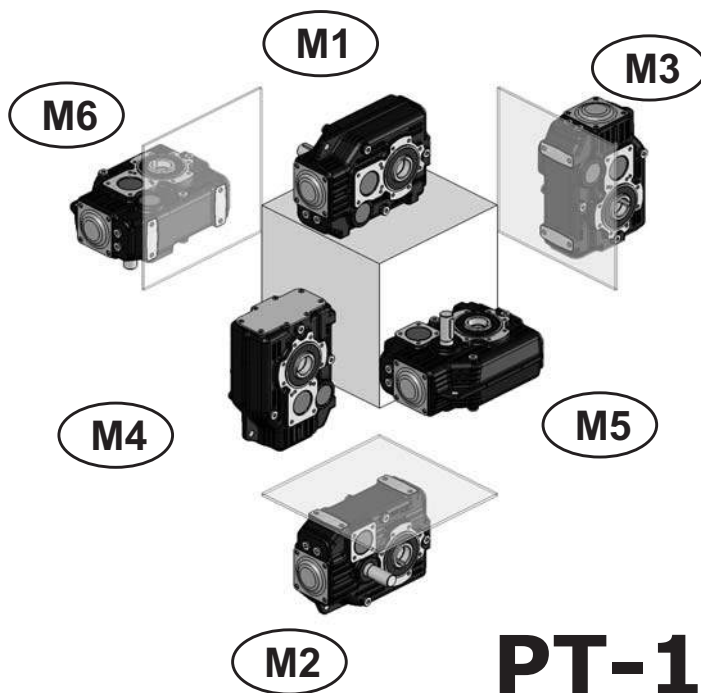
# PT-1



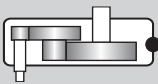
B BUS C2

Posizioni di montaggio  
Mounting positions  
Einbaulagen

80-100-125-140  
132-150-170-190



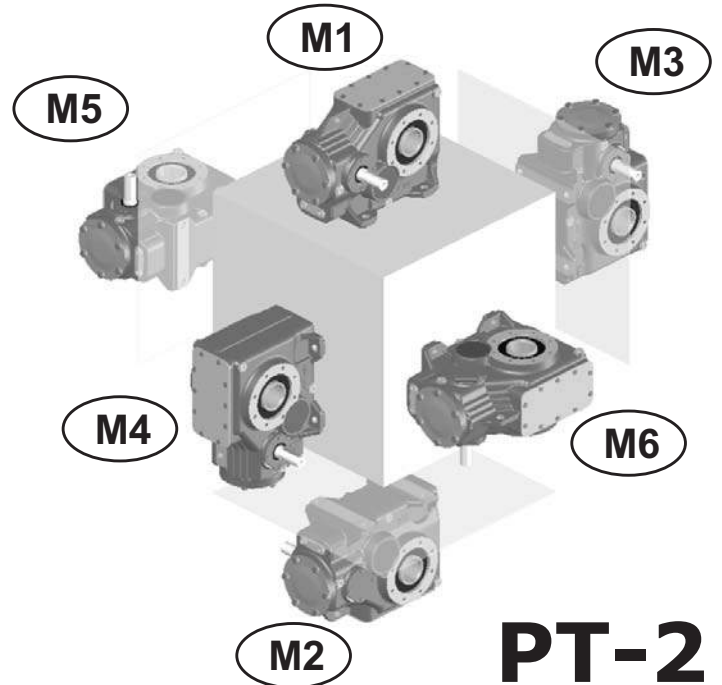
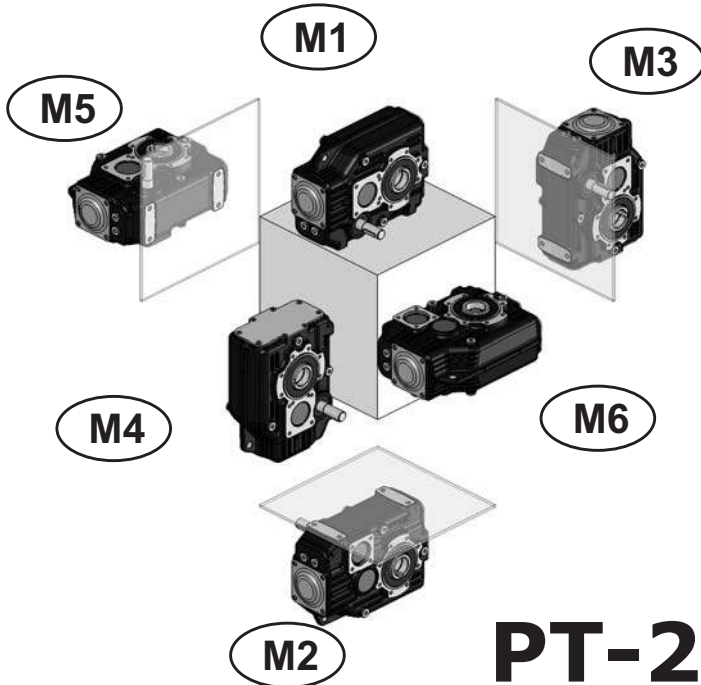
# PT-2



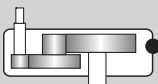
A AUD C1

Posizioni di montaggio  
Mounting positions  
Einbaulagen

80-100-125-140  
132-150-170-190



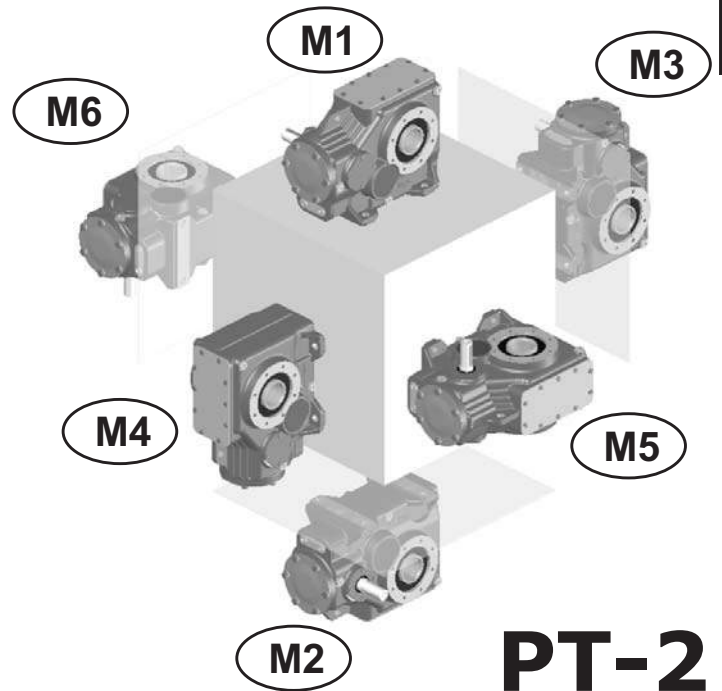
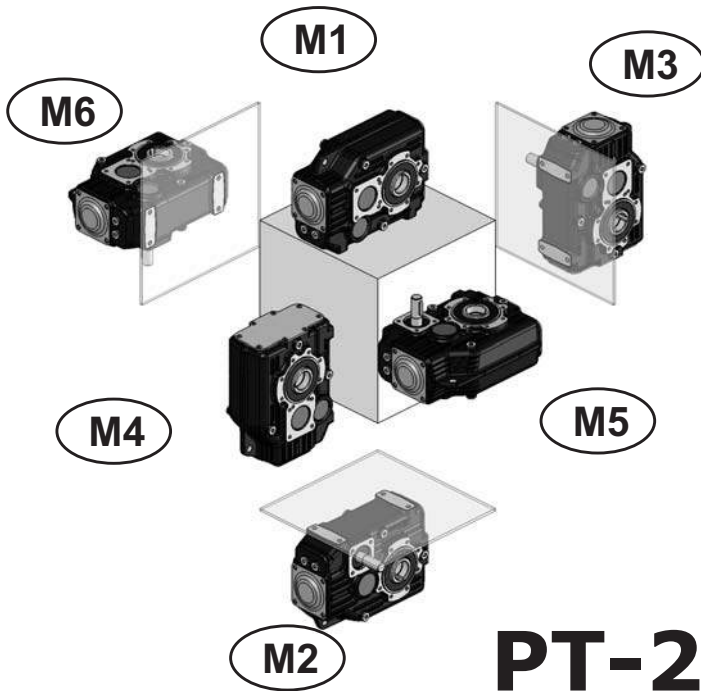
# PT-2



B BUS C2

Posizioni di montaggio  
Mounting positions  
Einbaulagen

80-100-125-140  
132-150-170-190





**Gestione Revisioni Cataloghi STM**

**Managing STM Catalog Revisions**

**Management Wiederholt Kataloge STM**

**Codice Catalogo**

**Catalog Code**

**Katalogcode**

	<b>CT17</b>	<b>I</b>	<b>GB</b>	<b>D</b>	<b>3.0</b>		
	N° Identificativo Identification Number Kennummer	Identificativo Lingua - <i>Language</i> - Sprache  I - Italiano – <i>Italian</i> - Italienisch GB – Inglese – <i>English</i> - Englisch D – Tedesco – <i>German</i> - Deutsch				Indice di Revisione Review Bericht	

1) Ogni catalogo STM in distribuzione e' provvisto di un codice che lo identifica che è riportato nell'ultima pagina dei cataloghi e a piè pagina di tutte le pagine del catalogo stesso. Per verificare la revisione attualmente in vostro possesso è necessario guardare l'ultima cifra che compone il codice del catalogo:

2) Il catalogo che contiene gli ultimi aggiornamenti è reperibile sul sito internet STM. Le modifiche riportate sono visibili consultando la tabella degli aggiornamenti che è allegata a questo documento. Sulle pagine che sono oggetto della modifica è riportato l'indice di revisione cambiato.

3) Guardare con attenzione il simbolo inserito nella colonna "Classificazione Modifica".

In questa colonna sarà inserito un simbolo che determina una classificazione delle modifiche apportate.

Questo consente di identificare con estrema rapidità l'importanza della modifica apportata;

1) *Each STM Catalog in distribution is provided with a code that identifies it. This code can be found on the last page of the catalogs and at the bottom of all the pages in that catalog. In order to verify that your revision is necessary look at the last number of the catalog code*

2) *The catalog that contains the latest update is available on the STM website. The modifications are listed in the update table that is attached to this document. The pages that have been modified are listed in the revision index.*

1) Jeder STM-Katalog im Umlauf ist mit einem Identifikationscode versehen, der auf der letzten Seite und in den Fußnoten jeder einzelnen Seite aufgeführt ist. Um die Revision zu überprüfen, die Sie im Augenblick in Ihrem Besitz haben, ist es nötig die letzte Ziffer zu sichten, die den Kode des Kataloges darstellt.

2) Der Katalog der die letzten Neuerungen enthält kann auf der Internetseite der STM heruntergeladen werden.

Die aufgeführten Neuerungen sind werden deutlich sichtbar, indem man sich die Tabelle Nr. 1 der Neuerungen anschaut, die diesem Dokument anhängt. Auf den Seiten auf denen Änderungen durchgeführt wurden, ist der geänderte Revisionscode aufgeführt.

<b>Classificazione Classification Klasse</b>	<b>Definizione Specificante gli elementi di modifica Definition Change identifier Erklärende Definition der Änderungselemente</b>	<b>Simbolo Identificativo Symbol Identifikationssymbol</b>
Chiave Key Schlüssel	Uscita e immissione di un prodotto <i>Product issuance and marketing</i> Ausgabe und Einführung eines Produkts	
Importante Major Wichtig	Modifica che influenza gli ingombri/stato fornitura/installazione del prodotto <i>Change affecting overall dimensions/delivery condition/product installation</i> Änderung, die sich auf die Abmessungen/Lieferzustand/Produktinstallation auswirkt	
Secondaria Minor Sekundär	Modifica che riguarda traduzioni/impaginazioni/inserimento descrizioni <i>Change to translations/layout/captions</i> Änderung, die Übersetzungen/den Umbruch/eingefügte Beschreibungen betrifft	—

4) Qualora risultasse una diversità di quote tra disegno **2D** – **3D** scaricato dal sito internet e tabella del catalogo è necessario consultare il nostro servizio tecnico.

4) In the event the dimensions in the 2D – 3D drawing downloaded from our site differ from those indicated in the catalogue table, contact our Engineering.

4) Diese ermöglicht ein schnelles Erfassen der Wichtigkeit der angesetzten Änderung.

Attenzione  
Verificare la revisione in vostro possesso e la tabella degli aggiornamenti apportati nelle nuova revisione

Attention  
Verify the revisions that you have on hand and the update table included in the new revision.

Achtung  
Überprüfen Sie die Revision, die sich in Ihren Händen befindet und die Tabelle mit der dort aufgeführten Aktualisierung in der neuen Revision.




Z





		Aggiornamenti apportati Updates made					
Codice Code	Indice Revision e Revision Index – Updates OLD	Sezione N° Section N°	Pagina Page OLD	Descrizione Description	Indice Revision Index – Updates NEW	Pagina Page NEW	Classificazione Modifica Update classification
CT 17 I GB D	2.0	A	A4	Aggiunti i valori del rendimento dei PLR - OR 132-150-170-190	2.1	A4	
CT 17 I GB D	2.1	A	A7	Aggiunta Pt0 OR 190	2.2	A7	
CT 17 I GB D	2.0	A	A7	Aggiunti valori di potenza al limite termico dei riduttori: PLR25-45-65-85-95 e A41-45 OR132-150-170-190	2.1	A7	
CT 17 I GB D	2.0	A	A10	Nuovo paragrafo "Verifiche".	2.1	?	
CT 17 I GB D	2.0	A	A11	Nuovo paragrafo "Verifiche".	2.1	?	
CT 17 I GB D	2.0	A	A12	Nuovo paragrafo "Verifiche".	2.1	?	
CT 17 I GB D	2.0	A	A13	Aggiunte note sullo stato di fornitura dei riduttori ed eliminate le informazioni sull' Uso e Manutenzione del Prodotto.	2.1	-	
CT 17 I GB D	2.0	A	A14	Aggiunte note sullo stato di fornitura dei riduttori ed eliminate le informazioni sull' Uso e Manutenzione del Prodotto.	2.1	-	
CT 17 I GB D	2.0	A	A15	Aggiunte note sullo stato di fornitura dei riduttori ed eliminate le informazioni sull' Uso e Manutenzione del Prodotto.	2.1	-	
CT 17 I GB D	2.0	A	A16	Aggiunte Note sulle Normative.	2.1	?	
CT 17 I GB D	2.0	A	A17	Aggiunte Note sulle Normative.	2.1	?	
CT 17 I GB D	2.0	A	A18	Aggiunte Note sulle Normative.	2.1	?	
CT 17 I GB D	2.0	A	A13	Specifiche Verniciatura OM 132-150-170-190	2.1	-	
CT 17 I GB D	2.2	A	A2	Aggiunte Velocità ingresso PT/1 e PT/2 123-150-170-190	2.3	A2	
CT 17 I GB D	2.2	A	A1	Aggiornato Indice Con PT	2.3	A1	
CT 17 I GB D	2.2	A	A2-A 7-A8	Cambiata la Pt0 in PtN	2.3	A2-A 7-A8	
CT 17 I GB D	2.2	A	A4-A 5-A6	Shell ha cambiato Designazione ai seguenti lubrificanti: Shell Tivela in Shell OMALA S4 WE; Shell OMALA in Shell OMALA S2 G; Shell DONAX TM in Shell SPIRAX S1 ATF TASA; Shell DONAX TA in Shell SPIRAX S2 ATF D2	2.3	A4-A 5-A6	
CT 17 I GB D	2.2	A	A4	Aggiunti rendimenti PT/1 e PT/2	2.3	A4	
CT 17 I GB D	2.2	A	A7	Aggiunte potenze termiche PT/1 e PT/2	2.3	A7	
CT 17 I GB D	2.2	A	A7	Aggiunte potenze termiche PL 105-115-125-135	2.3	A7	
CT 17 I GB D	2.2	A	A7	Modificate le Pto dei riduttori O: O132 da 27 a 23; O150 da 35 a 27; O170 da 44 a 34; O190 da 54 a 43	2.3	A7	
CT 17 I GB D	2.2	A	A10	Aggiunte Coppie Slittamento riduttori O 132-150-170-190; PT/1 e PT/2 132-150-170-190; PL 105-115-125-135	2.3	A11	
CT 17 I GB D	2.2	A	A11	Aggiunta tabella antiretro PT/2 132-150-170-190	2.3	A12	
CT 17 I GB D	2.2	A	A13	Specifiche Verniciatura PT/1 e PT/2 132-150-170-190	2.3	A14	
CT 17 I GB D	2.2	A	A13	Specifiche Verniciatura PL 105-115-125-135	2.3	A14	
CT 17 I GB D	2.2	A	A18	Materiali Costruttivi PT/1 e PT/2 132-150-170-190	2.3	A19	
CT 17 I GB D	2.2	A	A18	Materiali Costruttivi PL 105-115-125-135	2.3	A19	
CT 17 I GB D	2.1	B	B13	A50/3 Aggiunto rapporto 181.5	2.3	B13	
CT 17 I GB D	2.1	B	B14	A60/3 Aggiunto rapporto 185.2	2.3	B14	
CT 17 I GB D	2.1	B	B15	A80/3 Aggiunto rapporto 197,5	2.3	B15	
CT 17 I GB D	2.1	B	B16	A100/3 Aggiunto rapporto 177,1	2.3	B16	
CT 17 I GB D	2.1	B	B16	A100/1 e A100/2 Aggiunti IEC 132 B14 e 100-112 B5	2.3	B16	
CT 17 I GB D	2.1	B	B18	A100/1 e A100/2 Aggiunti IEC 132 B14 38/250 e 100-112 B5 - 28/200 - 28/300	2.3	B18	
CT 17 I GB D	2.1	B	B18	A120/2 Aggiunto PAM 38/250	2.3	B18	
CT 17 I GB D	2.1	B	B31-B33	A100/1 - PAM 132 B5 - cMP cambiata da 291.5 a 236	2.3	B33-B35	
CT 17 I GB D	2.1	B	B31-B33	A100/1 - PAM 100 B5 - cMP Aggiunta quota 236	2.3	B33-B35	
CT 17 I GB D	2.1	B	B35-B37-B41	A100/2 - PAM 132 B5 - cMP cambiata da 402.4 a 347.4	2.3	B43-B45-B49	
CT 17 I GB D	2.1	B	B35-B37-B41	A100/2 - PAM 100 B5 - cMP Aggiunta quota 347.4	2.3	B43-B45-B49	
CT 17 I GB D	2.0	B	B2-B 3	Aggiornata designazione e suddivisa la tabella delle versioni tra riduttori con forma costruttiva differente: 1-25-35-41-45 a due e tre stadi; 2-50-60-80-100-120 a due tre stadi	2.1	B2-B 3-B4	
CT 17 I GB D	2.0	B	B4	Aggiunta Quantità olio AM 100 /1	2.1	B5	
CT 17 I GB D	2.0	B	B5	Aggiunta Quantità olio AM41	2.1	B6	
CT 17 I GB D	2.0	B	B5	Aggiunta Quantità olio AM45	2.1	B6	
CT 17 I GB D	2.0	B	B6-B 7	Aggiunto Carichi radiali	2.1	B7-B 8	
CT 17 I GB D	2.0	B	B10	Aggiunti rapporti e prestazioni A41	2.1	B11	
CT 17 I GB D	2.0	B	-	Aggiunti rapporti e prestazioni A45	2.1	B12	
CT 17 I GB D	2.0	B	B10	Aggiunto peso riduttore A 41	2.1	B11	
CT 17 I GB D	2.0	B	-	Aggiunto peso riduttore A 45	2.1	B12	
CT 17 I GB D	2.0	B	B13	Sbagliato peso A80/2 e /3 - OLD 30 Kg - New 42 Kg	2.1	B15	
CT 17 I GB D	2.0	B	B14	Aggiunto peso riduttore A100/1	2.1	B16	
CT 17 I GB D	2.0	B	B16	Aggiornata Tabella degli IEC disponibile	2.1	B18	
CT 17 I GB D	2.0	B	Da B17 a B29	Aggiornare le tabelle delle prestazioni dei motoriduttori	2.1	Da B19 a B31	
CT 17 I GB D	2.0	B	B34 B36 B38 B40	Suddivisi i disegni e tabelle con seguente logica: 25 un disegno specifico - 35-41-45 un disegno specifico - 50 - 60 - 80 - 100 - 120 un disegno specifico	2.1	Non mette re in errata corrige	
CT 17 I GB D	2.0	B	0	La tolleranza dell'albero A25 è j6 e non h6	2.1	B37-B39-B41	

			Aggiornamenti apportati Updates made				
Codice Code	Indice Revision e Revision Index – Updates OLD	Sezione N° Section N°	Pagina Page OLD	Descrizione Description	Indice Revisione Index – Updates NEW	Pagina Page NEW	Classificazione Modifica Update classification
CT 17 I GB D	2.0	C	All	Aggiunte grandezze 132-150-170-190	2.1	All	
CT 17 I GB D	2.0	C	C3	Punto [*4] aggiunta figura della posizione del calettatore.	2.1	C3	
CT 17 I GB D	2.0	C	C3	Aggiunta nota: E' possibile montare il braccio di reazione solo sulle versioni flangiate	2.1	C3	
CT 17 I GB D	2.0	C	C6	Quantità olio OM 90 senza antiretro: M3: old 3.900 - New 3.850.	2.1	C6	
CT 17 I GB D	2.0	C	Da C13 a C28	Aggiunte grandezze 132-150-170-190	2.1	Da C13 a C28	
CT 17 I GB D	2.0	C	C30-C32-C34	Aggiunta quote Gp e Up nelle versioni O.P 63 e O.F 71-90-112	2.1	C30-C32-C34	
CT 17 I GB D	2.0	C	C33	Errore quote a2:Old 430 mm – New 30 mm	2.1	C33	
CT 17 I GB D	2.0	C	C3	Aggiunti alberi N,D,DB,CD,FD,FDB	2.1	C3	
CT 17 I GB D	2.0	C	Da C39 a C43	Aggiornati i disegni degli alberi uscita .	2.1	Da C39 a C43	
CT 17 I GB D	2.0	C	C42	Braccio Reazione O: Aggiunta quota "D2"	2.1	C42	
CT 17 I GB D	2.1	C	C8	Aggiunti Carichi Radiali OR 132-190	2.2	C8	
CT 17 I GB D	2.1	C	C16	Aggiunte Prestazioni OR 190	2.2	C16	
CT 17 I GB D	2.1	C	New C37-C38	Aggiunte due pagine per inserimento versioni OR.Pertanto tutte le rimanenti da questa revisione in avanti dovranno essere aumentate di due unità.	2.2	New C37-C38	
CT 17 I GB D	2.1	C	Da C35 a C48	Completato inserimento O 190	2.2	Da C35 a C48	
CT 17 I GB D	2.2	C	C38	Nei disegni rappresentata la flangia PAM.	2.3	C38	
CT 17 I GB D	2.2	C	C39	Aggiornata la tabella che indicata le quote specifiche OR 132-150-170-190	2.3	C39	
CT 17 I GB D	2.2	C	C37-C39	La tolleranza di accoppiamento non è g6 ma H7	2.3	C37-C39	
CT 17 I GB D	2.2	C	C37-C39	Errore quota Db nella grandezza 170:Non è OLD 34 mm ma NEW 32	2.3	C37-C39	
CT 17 I GB D	2.2	C	C37-C39	Aggiornata la tabella degli antiretro - AR	2.3	C37-C39	
CT 17 I GB D	2.2	C	C45	Aggiornata tabella per alberi calettatori standard e opzionale per le grandezze 132-150.	2.3	C45	
CT 17 I GB D	2.2	C	C18-C29	Da aggiungere le Prestazioni dei Motoriduttori O 132-150-170-190	2.3	C19-C30	
CT 17 I GB D	2.2	C	C11	Per maggiore chiarezza è stata spostata la taglia O 71 nella pagina successiva	2.3	C12	
CT 17 I GB D	2.2	C	C11	Errore nelle Pt0 dei riduttori delle taglie 0132-150-170-190	2.3	C12	
CT 17 I GB D	2.0	D	D3 - D11	Gli alberi bisporgenti dei riduttori SM25 e SM35 saranno fatti in modo integrale: SM 25: ø 19 ; SM 35: ø 25	2.1	D3 - D11	
CT 17 I GB D	2.0	D	D3	Albero Calettatore del SM è 19	2.1	D3	
CT 17 I GB D	2.0	D	-	Inserite le tabelle delle prestazioni dei motoriduttori	2.1	D10-D11-D12-D13	
CT 17 I GB D	2.0	D	D10	Errore nella flangia FL del riduttore SM25: Old F=200; New=180 Old G=130; New=115 Old P=103.5; New=108.5 Old R=165; New=150 Old V=13; New=11	2.1	D14	
CT 17 I GB D	2.0	D	D10	Errore tratteggio flangia DX. Aggiunta Quota Fq: SM 25: Fq=110 SM 35: Fq=142	2.1	D14	
CT 17 I GB D	2.0	D	-	Aggiornati alberi lenti disegni e tabelle.	2.1	D15-D16-D17-D18	
CT 17 I GB D	2.0	D	-	Aggiunti alberi N,D,DB,CD,FD,FDB	2.1	D15-D16-D17-D18	



		Aggiornamenti apportati Updates made					
Codice Code	Indice Revision e Revision Index – Updates OLD	Sezione N° Section N°	Pagina Page OLD	Descrizione Description	Indice Revisione Revision Index – Updates NEW	Pagina Page NEW	Classificazione Modifica Update classification
CT 17 I GB D	2.0	<b>E</b>	E3	Punto [*3] aggiunta figura della posizione del calettatore.	2.1	E3	
CT 17 I GB D	2.0	<b>E</b>	E4 - E18	Aggiunta Designazione Alberi	2.1	E4 - E19	
CT 17 I GB D	2.0	<b>E</b>	E27 - E29	Aggiunti alberi N,D,DB,CD,FD,FDB	2.1	E27 - E34	
CT 17 I GB D	2.0	<b>new</b>	-	Aggiunta Quantità olio PLR	2.1	F6	
CT 17 I GB D	2.0	<b>new</b>	-	Aggiunti Pesì	2.1	F8-F11	
CT 17 I GB D	2.0	<b>new</b>	-	Aggiunti rapporti e prestazioni	2.1	F8	
CT 17 I GB D	2.0	<b>new</b>	-	Aggiornata Tabella degli IEC disponibile	2.1	F12	
CT 17 I GB D	2.0	<b>new</b>	-	Aggiornare le tabelle delle prestazioni dei motoriduttori	2.1	F13	
CT 17 I GB D	2.0	<b>new</b>	-	Aggiunti alberi N,D,DB,CD,FD,FDB	2.1	F24-F29	
CT 17 I GB D	2.1	<b>F</b>	F2	Nuove taglie 105-115-125-135	2.3	F2	
CT 17 I GB D	2.1	<b>F</b>	F3	Aggiunti Alberi Uscita 105-115-125-135	2.3	F3	
CT 17 I GB D	2.1	<b>F</b>	F4-F5-F12	Sistemata Posizione Morsettiera	2.3	F4-F5-F16	
CT 17 I GB D	2.1	<b>F</b>	F4	Spostato putno [*3] in questa pagina	2.3	F4	
CT 17 I GB D	2.1	<b>F</b>	F5	Aggiunte Versioni 105-115-125-135	2.3	F5	
CT 17 I GB D	2.1	<b>F</b>	F6	Aggiunte Posizioni Montaggio 105-115-125-135	2.3	F6	
CT 17 I GB D	2.1	<b>F</b>	F7	Aggiunti Carichi Radiali 105-115-125-135	2.3	F7	
CT 17 I GB D	2.1	<b>F</b>	F13-F16	Le prestazioni Motoriduttore NON SONO aggiornate con le grandezze 105-115-125-135	2.3	F17-F20	
CT 17 I GB D	2.1	<b>F</b>	F12	Aggiornata Tabella degli IEC disponibile 105-115-125	2.3	F16	
CT 17 I GB D	2.1	<b>F</b>	-	Aggiunti rapporti e prestazioni	2.3	F13-14-15	
CT 17 I GB D	2.1	<b>F</b>	-	Aggiunte Dimensioni 105-115-125	2.3	F28-F29-F30-F31	
CT 17 I GB D	2.1	<b>F</b>	-	Aggiunti alberi N,D,DB,CD,FD,FDB	2.3	F32-F39	
CT 17 I GB D	2.1	<b>F</b>	F26	Aggiunte Quote PL 25-45-65-85-95	2.3	F35	
CT 17 I GB D	2.1	<b>F</b>	F30	Inserite quote antivibrante delle grandezze 25-45-65-105-115-125.	2.3	F40	
CT 17 I GB D	2.2	<b>G</b>	tutte	PT/1 e PT/2 132-150-170-190 completamento 1 - Designazione 2- Posizioni Montaggio 3-Dimensioni 4 - Alberi Uscita	2.3	tutte	
CT 17 I GB D	2.2	<b>Z</b>	-	Aggiunte Posizioni Montaggio 3D riduttori PT/1 e PT/2 132-150-170-190.	2.3	Z4-Z5	
CT 17 I GB D	2.2	<b>Z</b>	-	Aggiunta Rete Vendita	2.3	Z14-Z15	

## From Updates 0.0 to 2.0

			Aggiornamenti apportati	Updates made	Classificazione Modifica	
Paragrafo Paragraph Paragraph	Pagina Page Seite	Indice Revisione Revision Index – Updates Inhalt Revision Aktualisierung	Descrizione	Description		
	4	1.1	A4	Riduttori SM con olio per lubrificazione a "vita".	SM gearbox factory-filled with fill-for-life oil.	
	5	2.0	A5	Aggiornata Tab.1.4 e aggiunta tabella olio alimentare Olio con cui sono forniti i riduttori con lubrificante è del tipo SHELL TIVELA S 320 cSt.	Updated Tab.1.4; added food-grade oil table Factory-filled gearboxes come with SHELL TIVELA S 320 cSt oil.	
	6	1.1	A6	Aggiunta Potenza Termica SM 25 - 35	Added Thermal Power of SM 25 - 35	
	6	1.1		Sistemato tabelle delle Pto AM120/2 e PMP112	Revised Pto tables of AM120/2 and PMP112	
	Tutte All	2.0		Nuova impaginazione catalogo e divisione catalogo in sezioni Sezione A Introduzione Sezione B AM Sezione C OM Sezione D NUOVA sezione SM Sezione E PM Sezione F Errata Corrigge – posizione Montaggio	Revised catalogue layout and catalogue sections Section A Introduction Section B AM Section C OM Section D NEW SM section Section E PM Section F Errata – Mounting position	—
	nuova new	2.0		Inseriti nel catalogo i riduttori SM con creazione nuova sezione D.	New section D covering SM gearboxes added to catalogue.	↔
	9	1.1	A9	Aggiunta grandezza SM 25 - 35	Added size SM 25 - 35	
	nuova new	2.0	A10	Prescrizioni di montaggio giunti tipo ROTEX.	Mounting directions for ROTEX couplings.	—
	15	1.1	B3	Riferimento Tra pagina 14 e 15	Cross reference between page 14 and 15	
	28	1.1	B16	AM 60/1 e AM60/2 Aggiunti PAM 24/160, 24/120, 19/160,19/140 AM60/3 Aggiunti PAM 24/160, 24/120, 19/160,19/140, 14/200, 14/140, 14/120	AM 60/1 and AM60/2 Added PAM 24/160, 24/120, 19/160 and 19/140 AM60/3 Added PAM 24/160, 24/120, 19/160, 19/140, 14/200, 14/140 and 14/120	▼
	28	2.0	B16	Aggiunta nota sui riduttori AM: AM100/1 e AM100/2: Da PAM 132 a PAM 200 Forniti Con giunto. (per prescrizioni di montaggio vedere sezione A paragrafo "installazione"); AM120/2: Da PAM 132 a PAM 225 Forniti Con giunto. (per prescrizioni di montaggio vedere sezione A paragrafo "installazione");	Added note concerning AM gearboxes: AM100/1 and AM100/2: PAM 132 through PAM 200 come with coupling. (for mounting directions, see section A paragraph "Installation"); AM120/2: PAM 132 through PAM 225 come with coupling. (for mounting directions, see section A, paragraph "Installation");	▼
	28	2.0	B16	Aggiunto PAM 140/19 sul riduttore AM35/2.	Added PAM 140/19 for gearbox AM35/2.	
	31	2.0	B19	Motore 0.37kW è sbagliato il motore 63A 4.	0.37kW motor, 63A 4 motor is wrong.	—
	42	2.0	B30	Aggiunte le quote F <sub>M</sub> ; G <sub>M</sub> ; L <sub>M</sub> ; R <sub>M</sub> ; V <sub>M</sub> ; U <sub>M</sub> sui riduttori AM/1.	Added dimensions F <sub>M</sub> ; G <sub>M</sub> ; L <sub>M</sub> ; R <sub>M</sub> ; V <sub>M</sub> ; U <sub>M</sub> for AM/1 gearboxes.	—
	43-45	1.2	B31 B33	ARP-ACP-AMP - ARF - ACF - AMF 100/1 Quota A la quota è 173 e non 180. Quota cRP la quota è 284.5 non 294. Quota cRF la quota è 284.5 non 294. Quota i la quota è 129 non 130. Quota cMP Y=300 la quota è 291.5 e non 301. Quota cMP Y=350 la quota è 300.5 e non 310. Quota cMP Y=400 la quota è 305.5 e non 315. ARP-ACP-AMP - ARF - ACF - AMF 80/1 Quota cMP Y=250 la quota è 209.5 e non 211.	ARP-ACP-AMP - ARF - ACF - AMF 100/1 Dimension A: dimension 180 should read 173. Dimension cRP: dimension 294 should read 284.5. Dimension cRF: dimension 294 should read 284.5. Dimension i: dimension 130 should read 129. Dimension cMP Y=300: dimension 301 should read 291.5. Dimension cMP Y=350: dimension 310 should read 300.5. Dimension cMP Y=400: dimension 315 should read 305.5. ARP-ACP-AMP - ARF - ACF - AMF 80/1 Dimension cMP Y=250: dimension 211 should read 209.5.	▼
	47	1.1	B35	AMP 100/2 B5 Quota cMP Y=300 la quota è 402.4 e non 402. Quota cMP Y=350 la quota è 411.4 e non 411. Quota cMP Y=400 la quota è 416.4 e non 416. AMP 100/3 B5 Quota cMP Y=200 la quota è 340.4 e non 350. Quota cMP Y=250 la quota è 350.4 e non 350. Quota cMP Y=300 la quota è 370.4 e non 370. AMP 120/2 B5 Quota cMP Y=300 la quota è 442.5 e non 443. Quota cMP Y=350 la quota è 451.5 e non 452. Quota cMP Y=400 la quota è 456.5 e non 457. Quota cMP Y=450 la quota è 465.5 e non 466.	AMP 100/2 B5 Dimension cMP Y=300: dimension 402 should read 402.4. Dimension cMP Y=350: dimension 411 should read 411.4. Dimension cMP Y=400: dimension 416 should read 416.4. AMP 100/3 B5 Dimension cMP Y=200: dimension 350 should read 340.4. Dimension cMP Y=250: dimension 350 should read 350.4. Dimension cMP Y=300: dimension 370 should read 370.4. AMP 120/2 B5 Dimension cMP Y=300: dimension 443 should read 442.5. Dimension cMP Y=350: dimension 452 should read 451.5. Dimension cMP Y=400: dimension 457 should read 456.5. Dimension cMP Y=450: dimension 466 should read 465.5.	▼
	49	1.1	B37	AM35: Aggiunta F3 (Non è possibile fare AMP/F3 35)	AM35: Added F3 (AMP/F3 35 is not feasible)	↔
	49 51 53	1.1	B37 B39 B41	AM...40/2 B5 Quota cMF Y=140 la quota è 170.5 e non 171 Quota cMF Y=160 la quota è 170.5 e non 171 Quota cMF Y= 200 la quota è 190.5 e non 191 Quota cMF Y= 250 la quota è 200.5 e non 201 AM...40/2 B14 Quota cMF Y=120 la quota è 190.5 e non 191 Quota cMF Y=140 la quota è 190.5 e non 191. Quota cMF Y= 160 la quota è 200.5 e non 201 AM...80/2 B5 Quota cMF Y=250 la quota è 308 e non 310 AM...100/2 B5 Quota cMF Y=300 la quota è 402.4 e non 402 Quota cMF Y=350 la quota è 411.4 e non 411 Quota cMF Y=400 la quota è 416.4 e non 416 AM...100/3 B5 Quota cMP Y=200 la quota è 340.4 e non 440. Quota cMP Y=250 la quota è 350.4 e non 450. Quota cMP Y=300 la quota è 370.4 e non 470 AM...120/2 B5 Quota cMF Y=300 la quota è 473.5 e non 423 Quota cMF Y=350 la quota è 482.5 e non 432 Quota cMF Y=400 la quota è 487.5 e non 437 Quota cMF Y=450 la quota è 496.5 e non 446 AM...120/3 B5 Quota cMF Y=200 la quota è 423 e non 372. Quota cMF Y=250 la quota è 445 e non 490. Quota cMF Y=300 la quota è 452 e non 401.	AM...40/2 B5 Dimension cMF Y=140: dimension 171 should read 170.5 Dimension cMF Y=160: dimension 171 should read 170.5 Dimension cMF Y= 200: dimension 191 should read 190.5 Dimension cMF Y= 250: dimension 201 should read 200.5 AM...40/2 B14 Dimension cMF Y=120: dimension 191 should read 190.5 Dimension cMF Y=140: dimension 191 should read 190.5. Dimension cMF Y= 160: dimension 201 should read 200.5 AM...80/2 B5 Dimension cMF Y=250: dimension 310 should read 308 AM...100/2 B5 Dimension cMF Y=300: dimension 402 should read 402.4 Dimension cMF Y=350: dimension 411 should read 411.4 Dimension cMF Y=400: dimension 416 should read 416.4 AM...100/3 B5 Dimension cMP Y=200: dimension 440 should read 340.4. Dimension cMP Y=250: dimension 450 should read 350.4. Dimension cMP Y=300: dimension 470 should read 370.4 AM...120/2 B5 Dimension cMF Y=300: dimension 423 should read 473.5 Dimension cMF Y=350: dimension 432 should read 482.5 Dimension cMF Y=400: dimension 437 should read 487.5 Dimension cMF Y=450: dimension 446 should read 496.5 AM...120/3 B5 Dimension cMF Y=200: dimension 372 should read 423. Dimension cMF Y=250: dimension 490 should read 445. Dimension cMF Y=300: dimension 401 should read 452.	▼





## From Updates 0.0 to 2.0

			Aggiornamenti apportati	Updates made	Classificazione Modifica	
Paragrafo Paragraph Paragraph	Pagina Page Seite	Indice Revisione Revision Index – Updates Inhalt Revision Aktualisierung	Descrizione	Description		
	49-53	2.0	B37 B41	Le flange F1 e F2 del riduttore AM35 sono quadrate.	Flanges F1 and F2 of gearbox AM35 are square.	▼
	51-53	1.1	B39 B41	Quota i (AMP/F ... – ACP/F... – ARP/F...) AR 40: 80 (80) (90) AR 50: 83 (83) (93) AR 60: 101 (101) (111) AR 80: 123 (123) AR 120: 191	Dimension i (AMP/F ... – ACP/F... – ARP/F...) AR 40: 80 (80) (90) AR 50: 83 (83) (93) AR 60: 101 (101) (111) AR 80: 123 (123) AR 120: 191	▼
	58	1.1	C4	Inserita dedignzone alberi UA, UB, UD	Added UA, UB, UD shaft designations	—
	60	1.1	C6	OR 71: Fornito completo d'olio e con un solo tappo.	OR 71: Factory-filled with oil, supplied with one plug.	
	61	1.1	C7	Aggiornati disegni 2D delle posizioni di montaggio Modificate le posizioni M5 e M6.	Updated 2D drawings of mounting positions Modified positions M5 and M6.	▼
	72	1.1	C18	OR90 Aggiunti PAM 24/160, 24/120, 19/160, 19/140	OR90 Added PAM 24/160, 24/120, 19/160 and 19/140	▼
	72	2.0	C18	Aggiunta nota sui riduttori ROC: Tutti i PAM sono forniti con Giunto. Per i PAM segnati da asterisco vedere le prescrizioni (per prescrizioni di montaggio vedere sezione A paragrafo "installazione"). Aggiunto PAM 180 sul riduttore ROC3. 180	Added note concerning ROC gearboxes: All PAM configurations supplied with Coupling. Where PAM configuration is marked with an asterisk, see directions (for mounting directions, see section A, paragraph "Installation"). Added PAM 180 for gearbox ROC3. 180	↔
	85-87-89	1.1	C31 C33 C35	OR112: Vp lunghezza del filetto 18 mm (no 23mm).	OR112: Vp thread length should read 18 mm (not 23 mm).	
	89	2.0	C35	Modificate quota M del riduttore OR63; old 170, new 222.5	Changed dimension M of gearbox OR63; old 170, new 222.5	
	96	1.1	C42	Tab 3.22 ROC 140; Lv: Old 410 New 350 ROC 160; dv: Old 25 new 35 ROC 180 dv: 180 old 30 new 35 sv: Old 40 New 35 Lv: Old 425 New 450 ROC 200 dv: old 30 new 35 sv: Old 40 New 35	Tab 3.22 ROC 140; Lv: Old 410 New 350 ROC 160; dv: Old 25 new 35 ROC 180 dv: 180 old 30 new 35 sv: Old 40 New 35 Lv: Old 425 New 450 ROC 200 dv: old 30 new 35 sv: Old 40 New 35	—
	105	1.1	D5	PR 71: Fornito completo d'olio e con un solo tappo.	PR 71: Factory-filled with oil, supplied with one plug.	
	111	1.1	D11	PR90/3 Aggiunti PAM 24/160, 24/120, 19/160, 19/140 14/200, 14/140, 14/120	PR90/3 Added PAM 24/160, 24/120, 19/160, 19/140/14/200, 14/140 and 14/120	↔
	128	2.0	E28	Modificato disegno Antivibrante VKL. Inserita quota D1, D2, D3 nel disegno poiché mancante. Modificate quote L1, L2 del riduttore PR 112: L1: old 20 – new 22; L2: old 10 – new 8.	Modified drawing of VKL vibration mount. Added dimensions D1, D2, D3 to drawing (missing in previous version). Changed dimensions L1, L2 of gearbox PR 112: L1: old 20 – new 22; L2: old 10 – new 8.	—
	134	1.1	Z1	Invertita posizione M5 e M6 dei riduttori ROC	Inverted M5 and M6 positions of ROC gearboxes	
	131-137	1.2	Z6 Z8	Cambio revisione	Changed revision number	—

**Potenza richiesta / Required power / Benötigte Leistung**

- $$P = \frac{m \cdot g \cdot v}{6 \cdot 10^4}$$

Sollevamento  
*Lifting*  
Heben
- $$P = \frac{M \cdot n}{9550}$$

Rotazione  
*Rotation*  
Drehung
- $$P = \frac{F \cdot v}{6 \cdot 10^4}$$

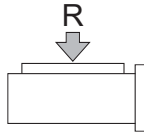
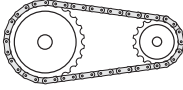
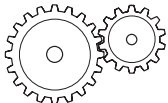
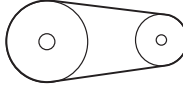
Traslazione  
*Linear movement*  
Linearbewegung
- $$M = \frac{9550 \cdot P}{n}$$

Coppia  
*Torque*  
Drehmoment
- $$F = 1000 \cdot \frac{M}{r}$$

Forza  
*Force*  
Kraft
- $$v = \frac{2r \cdot \pi \cdot n}{1000}$$

Velocità lineare  
*Linear speed*  
Lineargeschwindigkeit

**Carichi radiali / Radial load / Radialkräfte**

$$R = \frac{2000 \cdot T \cdot Kr}{d}$$

**R (N)**  
Carico radiale  
*Radial load*  
Radialkraft

**T (Nm)**  
Coppia sull'albero  
*Torque*  
Drehmoment

**d (mm)**  
Diametro della ruota  
*Diameter*  
Durchmesser

**Kr = 1**  
Ruota per catena  
*Chain-wheel*  
Kettenrad

**Kr = 1.06**  
Ingranaggio  
*Gear*  
Zahnrad

**Kr = 1.5-2.5-3.5**

1.5 - Cinghie dentate/Toothed belts/Zahnriemen
2.5 - Cinghie trapezoidali/V belt drives/Keilriemen
3.5 - Ruote di frizione (gomma su metallo) Friction wheel drive (rubber on metal) Kupplungsräder (Gummi auf Metall)

**Momento d'inerzia**

**Moment of inertia**

**Trägheitsmoment**

$J = 98.p.l.D^4$  Cilindro pieno / *Solid cylinder* / Vollzylinder  
 $J = 98.p.l.(D^4-d^4)$  Cilindro cavo / *Hollow cylinder* / Hohlzylinder

Conversione di una massa in movimento lineare in un momento d'inerzia riferito all'albero del motore

*Conversion of a mass having a linear movement into a moment of inertia related to the motor shaft.*

Umwandlung einer Masse mit Linearbewegung in ein Trägheitsmoment, das auf die Motorwelle bezogen ist.

$$J = 91.2 \cdot m \cdot \frac{v^2}{n^2}$$


















Conversione di diversi momenti d'inerzia di massa a velocità diverse in un momento d'inerzia riferito all'albero motore.

*Conversion of various mass moments of inertia having different speeds into a moment of inertia related to the motor shaft.*

Umwandlung von verschiedenen Trägheitsmomenten mit unterschiedlichen Geschwindigkeiten in ein Trägheitsmoment, das auf die Motorwelle bezogen ist.

$$J_a = \frac{J_2 \cdot n_2^2 + J_3 \cdot n_3^2 \dots}{n_1^2}$$

P	= Potenza motore	<i>Rated power</i>	Motorleistung	[kW]
m	= Massa	<i>Mass</i>	Masse	[kg]
v	= Velocità lineare	<i>Linear speed</i>	Lineargeschwindigkeit	[m/min]
F	= Forza	<i>Force</i>	Kraft	[N]
n	= Velocità di rotaz.	<i>Rotation speed</i>	Drehzahl	[min-1]
g	= 9.81	<i>9.81</i>	9.81	[m/sec]
M	= Coppia del motore	<i>Motor torque</i>	Motor-Drehmoment	[Nm]
r	= Raggio	<i>Radius</i>	Radius	[mm]
J	= Inerzia	<i>Moment of inertia</i>	Trägheitsmoment	[kgm2]
l	= Lunghezza	<i>Length</i>	Länge	[mm]
d	= Diametro interno	<i>Inner diameter</i>	Innendurchmesser	[mm]
D	= Diametro esterno	<i>Outer diameter</i>	Außendurchmesser	[mm]
p	= Peso specifico	<i>Specific weight</i>	Spezifisches Gewicht	[kg/dm3]












	 <b>PIEMONTE</b> Strada del Cascinotto, 139/43B 10156 TORINO <b>T:</b> +39/011/22.38.463 <b>F:</b> +39/011/22.38.463 <b>E-MAIL:</b> info@labet.it	 <b>LOMBARDIA</b> Via Velleia, 1 20052 Monza (Mi) <b>T:</b> +39/039/83.79.41 <b>F:</b> +39/039/83.79.490 <b>E-MAIL:</b> sef@sefmotoriduttori.com
 <b>SUD</b> Via Ottaviano, 298/300 80040 San Gennaro Vesuviano (Na) <b>T:</b> +39/081/52.86.802 <b>F:</b> +39/081/52.86.803 <b>E-MAIL:</b> info@stmsud.it	 <b>VENETO</b> Via Manfredini, 54 45100 Loc. Granzette ROVIGO <b>T:</b> +39/0425/48.61.58 <b>F:</b> +39/0425/93.20.68 <b>E-MAIL:</b> stmveneto@stmspa.com	 <b>SERVICE</b> Via Enrico Fermi, 35 00044 Frascati (RM) <b>T:</b> +39/06/97.60.85.44 <b>F:</b> +39/06/97.60.85.45 <b>E-MAIL:</b> info@tecnodrivesrl.it
	 <b>UKRAINE</b> Belaia Tzerkov Yaroslava Mudrogo, ST66/13 09107 Region of Kiev <b>T:</b> +38/04463519369 <b>F:</b> +38/0446391037 <b>E-MAIL:</b> stm@stm.com.ua	 <b>RUS</b> Bolshaya Pochtovaya st. 30 105082 Mosca <b>T:</b> +74/957836809 <b>F:</b> +74/952672073 <b>E-MAIL:</b> ars@ttaars.ru
 <b>AANDRIJFTECHNIEK NL</b> Jan Vrijmanstraat, 12 1087MC, Amsterdam - The Netherlands <b>T:</b> + 31/20 3586361 <b>F:</b> +31/20 3586361 <b>E-MAIL:</b> stmaandrijftechnik@stmspa.com	 <b>SWEDEN</b> Stathogavagen, 48 60223 Norrkoping <b>T:</b> +46/11158340 <b>F:</b> +46/11158349 <b>E-MAIL:</b> info@stmSweden.se	 <b>FINLAND</b> Luoteisrinne, 5 02270 Espoo <b>T:</b> +35/8440674519 <b>F:</b> +35/8104256805 <b>E-MAIL:</b> info@stmfinland.fi
 <b>DEUTSCHLAND</b> Gewerbepark Markfeld 7a 83043 BAD AIBLING <b>T:</b> +49/8061/937680 <b>F:</b> +49/8061/9376829 <b>E-MAIL:</b> stmdeutschland@stmspa.com	 <b>POWER TRANSMISSION UK</b> UNIT 1 OASIS BUSINESS PARK ROAD ONE, WINSFORD Industrial Est - CW7 3RY - WINSFORD <b>T:</b> +44/1606/557200 <b>F:</b> +44/1606/557396 <b>E-MAIL:</b> info@stmuk.co.uk	 <b>IBERIA</b> Contrada Nacional 121, km 39,400 31390 Olite Navarra <b>T:</b> +34/948712017 <b>F:</b> +34/948712153 <b>E-MAIL:</b> martinena@martinenasl.es
 <b>SCHWEIZ</b> Bösch 27 6331 Hünenberg SVIZZERA <b>T:</b> 0041 41 7832970 <b>F:</b> 0041 41 7832971 <b>E-MAIL:</b> info@eurodrives.ch	 <b>TURKIYE</b> 10026 - IZMIR Str. No: 54 AOSB CIGLI <b>T:</b> 0090.232.328 36 39 <b>F:</b> 0090.232.328 36 40 <b>E-MAIL:</b> info@novaguc.com	



Vi invitiamo pertanto a contattare il ns ufficio commerciale per qualsiasi ulteriore informazione al fine di comunicarvi il riferimento più idoneo e vicino alla Vs sede.

*Please contact our Sales dept. for information about the nearest distributor to your premises.*

Bitte setzen Sie sich mit unserer Verkaufsabteilung in Verbindung um Informationen bezüglich eines Haendler der sich in Ihrer Naehة befindet zu bekommen.

	 Rua Padre Raposo, 1293 Mooca (SP) <b>T:</b> +55/11/2605.1144 <b>F:</b> +55/11/2601.1559 <b>E-MAIL:</b> stmdobrasil@stmdobrasil.com	 Langeri, 3525 (Santos Lugares) 1676 Buenos Aires <b>T:</b> +54/11/41.15.63.85 <b>F:</b> +54/11/47.57.05.12 <b>E-MAIL:</b> comercial@stmteam.com.ar
 STM INDIA <b>T:</b> +91 99 42 559285 <b>E-MAIL:</b> k.saravanan@stmspa.com	 13/97 Bayfield Road East Bayswater - VIC 3153 <b>T:</b> +61/397617355 <b>F:</b> +61/397617222 <b>E-MAIL:</b> pbeveridge@hmaqgroup.com.au	 <b>STM-AP (ASIA PACIFIC) PTE LTD</b> 6 Penjuru Place #01-32 Penjuru Tech Hub, Singapore 608781 <b>T:</b> 65-6266 2022 <b>F:</b> 65-6266 5955 <b>E-MAIL:</b> stm@stmap.com
 STM Korea #104-216, 41, Yutongdanji 1-ro, Gangseo-gu, Busan, 618-899 Rep. of KOREA <b>T:</b> +82-01-8536-6469 - +82-70-8730-1238 <b>F:</b> +82-51-955-2250 <b>E-MAIL:</b> stmapkorea@gmail.com	 Rm306, Blk A, Jingjiang Building, #35, Bagou Nan Rd, Haidian Dist. Beijing 100089, China <b>T:</b> 0086 10 8256 5319 <b>F:</b> 0086 10 8255 1142 <b>E-MAIL:</b> stm@stmchina.cn	 22 Lorna Rd, Anderbolt, Boksburg North PO Box 6300, Dunswart, 1508 <b>Tel:</b> +27 10 010 6879 <b>F:</b> +27 86 461 5898 <b>E-MAIL:</b> anthony@stmsa.co.za
<b>Standard Line</b> <b>CT 17 IGBD3.1</b> <b>07/15</b>	 STM RIDOTTORI MEXICO S.A. DE C.V <b>T:</b> +52 33 36150087 <b>E-MAIL:</b> info@stmexico.com.mx	 3060 PLAZA DR. #107 19061 - GARNET VALLEY - PA <b>T:</b> 0016105580760 <b>F:</b> 0016505580762 <b>E-MAIL:</b> Info@youngpowertech.com

Questo catalogo annulla e sostituisce ogni precedente edizione o revisione. I dati esposti nel catalogo non sono impegnativi e ci riserviamo il diritto di apportare eventuali modifiche senza darne preavviso, nell'ottica di un miglioramento continuo del prodotto.

Qualora questo catalogo non Vi sia giunto in distribuzione controllata, l'aggiornamento dei dati ivi contenuto non è assicurato.

In tal caso la versione più aggiornata è disponibile sul ns. sito internet:  
[www.stmspa.com](http://www.stmspa.com)

*This catalogue cancels and replaces any preceding issue or revision. The data provided in the catalogue are not binding; in line with our commitment to on-going product improvement, we reserve the right to make changes without prior notice.*

*If you obtained this catalogue other than through controlled distribution channels, no warranty is made as to whether the data contained herein is up-to-date.*

*When in doubt, you are welcome to download the latest up-to-date version available on our web site:  
[www.stmspa.com](http://www.stmspa.com)*

Dieser Katalog annulliert und ersetzt jede vorausgehende Ausgabe oder Revision. Die im vorliegenden Katalog enthaltenen Daten sind nicht verpflichtend. Wir behalten uns diesbezüglich das Recht vor, ohne entsprechende Vorankündigungen und im Sinne einer kontinuierlichen Produktverbesserung eventuelle Änderungen antragen zu können.

Sollten Sie diesen Katalog nicht im Zuge eines kontrollierten Vertriebs erhalten haben, kann die Aktualisierung der darin enthaltenen Daten nicht gewährleistet werden.

In diesem Fall finden Sie die aktuellste Version unter der Website:  
[www.stmspa.com](http://www.stmspa.com)



Vi invitiamo pertanto a contattare il ns ufficio commerciale per qualsiasi ulteriore informazione al fine di comunicarvi il riferimento più idoneo e vicino alla Vs sede.

Please contact our Sales dept. for information about the nearest distributor to your premises. Bitte setzen Sie sich mit unserer Verkaufsabteilung in Verbindung um Informationen bezüglich eines Haendler der sich in Ihrer Naehle befindet zu bekommen.



**STM S.p.A.**  
Headquarter

Via del Maccabreccia, 39  
40012 Lippo di Calderara di Reno (BO)  
Tel. +39 051 37 65 711  
Fax +39 051 64 66 178  
[www.stmspa.com](http://www.stmspa.com) - [info@stmspa.com](mailto:info@stmspa.com)



**GSM S.p.A.**

Via Malavolti, 48  
41122 Modena - Italy  
Tel. +39 051 37 65 711  
Fax +39 051 64 66 178  
[www.stmspa.com](http://www.stmspa.com) - [info@stmspa.com](mailto:info@stmspa.com)

