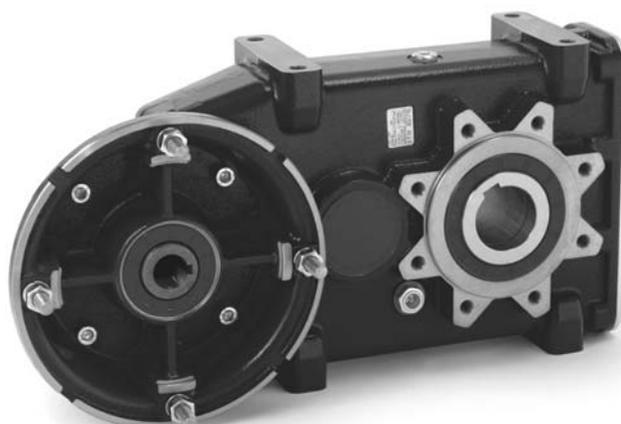




1.0 Riduttori - motoriduttori paralleli - pendolari Lunghi PL
1.0 Shaft gearboxes - shaft mounted gearboxes Long version PL
1.0 Flach-und Aufsteckgetriebe und-Getriebemotoren PL

PL

1.1	Caratteristiche tecniche	<i>Technical characteristics</i>	Technische Eigenschaften	F1
1.2	Designazione	<i>Designation</i>	Bezeichnungen	F2
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1.5	Carichi radiali e assiali	<i>Axial and overhung loads</i>	Radiale und Axiale Belastungen	F8
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1.8	Dimensioni	<i>Dimensions</i>	Abmessungen	F25
1.9	Accessori	<i>Accessories</i>	Zubehör	F48
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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

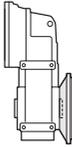
1.2 Designation

1.2 Bezeichnung

03 OF - Flangia Uscita

OF - Output Flange

OF - Flansche am Abtrieb

—	F.
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 = hollow 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** = Geräumtem 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

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	Standard	Standard	Standard	Standard
	Standard	Optional	Standard	Optional							
	—	∅...	—	∅..							
25	(∅ 20)	∅ 24 ∅ 19	(∅ 20)		(∅ 20 Standard)		-	-	-		
45	(∅ 30)	∅ 25	(∅ 30)		(∅ 30 Standard)		(DIN 5482 35 x 31)	(DIN 5482 28 x 25)	(DIN 5482 35 x 31)		
65	(∅ 35)	∅ 30	(∅ 35)	not available	(∅ 35 Standard)		(DIN 5482 40 x 36)	(DIN 5482 35 x 31)	(DIN 5482 40 x 36)		
85	(∅ 45)	∅ 50 ∅ 40	(∅ 45)		(∅ 45 Standard)		(DIN 5482 58 x 53)	(DIN 5482 45 x 41)	(DIN 5482 58 x 53)		
95	(∅ 55)	∅ 60 ∅ 50	(∅ 55)		(∅ 55 Standard)		(DIN 5482 70 x 64)	(DIN 5482 55 x 50)	(DIN 5482 70 x 64)		
105	(∅ 60)	∅ 70	(∅ 60)	∅ 70	(∅ 60 Standard) ∅ 70 (Optional)		(FIAT 70)	(DIN 5482 70 x 64)	(FIAT 70)		
115	(∅ 70)	∅ 80	(∅ 70)	∅ 80	(∅ 70 Standard) ∅ 80 (Optional)		(FIAT 80)	(DIN 5482 80 x 74)	(FIAT 80)		
125	(∅ 90)	not available	(∅ 90)	not available	(∅ 90 Standard)		(FIAT 95)	(DIN 5482 90 x 84)	(FIAT 95)		
135	(∅ 100)		(∅ 100)		(∅ 100 Standard)		(DIN 5480 105 x 80)	(DIN 5482 100 x 94)	(DIN 5480 105 x 80)		



1.2 Designazione

1.2 Designation

1.2 Bezeichnung

06 SD - Diametro albero

SD - Shaft diameter

SD - Durchmesser Abtriebswelle

diametro = vedi tabella.

diameter = see table.

Durchmesser = siehe Tabelle.

Grandezza Size Größe		
85	∅ 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
95	∅ 35 - ∅ 40 - ∅ 45 - ∅ 48 - ∅ 50 - ∅ 55	
105	∅ 40 - ∅ 45 - ∅ 50 - ∅ 55 - ∅ 60 - ∅ 65	
115	∅ 45 - ∅ 50 - ∅ 55 - ∅ 60 - ∅ 65 - ∅ 70 - ∅ 75	
125	∅ 55 - ∅ 60 - ∅ 65 - ∅ 70 - ∅ 75 - ∅ 80	
135	∅ 70 - ∅ 75 - ∅ 80 - ∅ 85 - ∅ 90	

						135	221.2 245.1
Nei rapporti contrassegnati non è disponibile la versione uscita con albero cavo "-"- "C"- "CD"- "QL-L" / Hollow output shaft "-"- "C"- "CD"- "QL-L" not available for ratios / Bei den gekennzeichneten Übersetzungsverhältnissen ist die Version „Abtrieb mit Hohlwelle "-"- "C"- "CD"- "QL-L" nicht verfügbar							

07 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				—
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				—

08 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

10 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

↓		PLM	
	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 ⁽¹⁾	28/250 (B5) - 28/160 (B14)	28/140
	100 ⁽¹⁾	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)	
	63	11/140• (B5)	
	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•
PLR 95	71	14/160• (B5)	
	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•	
	80	19/200• (B5)	

↓		PLM	
	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)	
PLR 115	80	19/200• (B5)	
	200*	55/400 (B5)	
	180*	48/350 (B5)	
	160*	42/350 (B5)	
	132	38/300 (B5) - 38/200 (B14)	- 38/250
PLR 125	112	28/250 (B5) - 28/200 - 28/300	
	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	
PLR 135	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)		
200*	55/400 (B5)		
180*	48/350 (B5)		
160*	42/350 (B5)		
132*	38/300 (B5)		

(1) 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 morsettiere - 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".
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10 IS - Albero Entrata

IS - Input Shaft

IS - Antriebswelle

— Nessuna indicazione = diametro standard;

— No indications = standard diameter;

— Keine Angabe = Standard-durchmesser

PLR		65	85	95	105	115	125	135
		(∅ 16)	(∅ 19)	(∅ 24)	(∅ 24)	(∅ 28)	(∅ 38)	(∅ 48)

**1.2 Designazione****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)

12 OPT-ACC. - Opzioni

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
		FF	FF - Kit	FF - Kit	FF - Kit
		RR	Kit rosetta di montaggio	Mounting washer kit	Kit Montagescheibe
	ACC3	AV	ANTIVIBRANTE VKL	RUBBER BUFFER VKL	GUMMIHÜLSE VKL

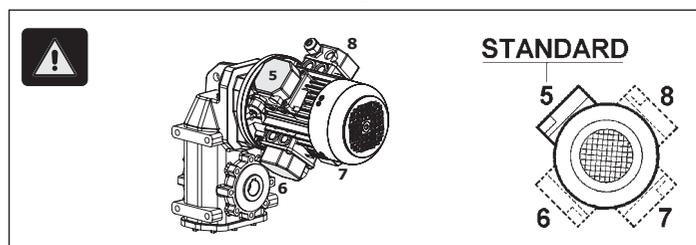
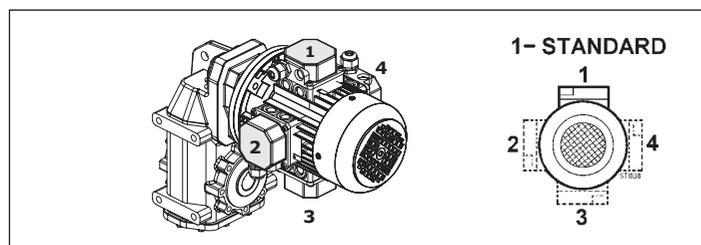
vedi Sezione A-1.12 see Section A-1.12 s. Abschnitt A-1.12	OPT.	OPT	Materiale degli anelli di tenuta	Materials of Seals	Dichtungstoffe
		OPT1	Stato fornitura olio	Scope of the supply - Options - OIL	Optionen - Lieferzustand - Optionen - Öl
		OPT2	Verniciatura	Painting and surface protection	Lackierung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

13 PMT - Posizioni della Morsettiera**PMT - Position Terminal Box****PMT - Montageposition Klemmenkasten****PLM - 25-45-115-125-135**

[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 Motortriebe).



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 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 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):

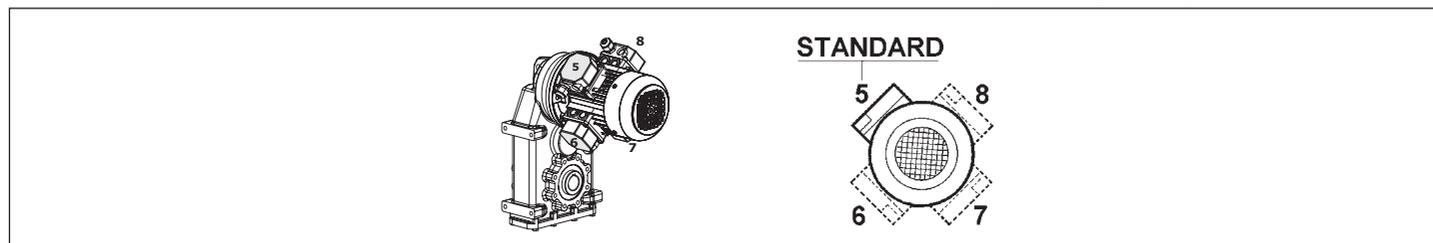
Bei Flanschen, die mit (*) (Siehe auf Seite F5) gekennzeichnet sind, sind die Bohrungen auf den Achsen angeordnet (wie ein +). Es sollte deshalb der Platzbedarf des Motorklemmenkastens beachtet werden, da er sich in 45°-Position zu den Achsen befinden wird. Die Lage des Klemmenkastens des Motors wählen Sie bitte anhand der folgenden Skizze (Pos. 5 ist Standardposition):

PLM - 65-85-95-105

[6, 7, 8] Posizione della morsettiera 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 Motortriebe).



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 morsettiera 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.



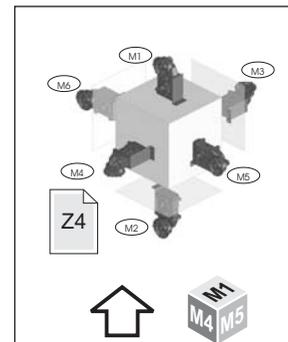
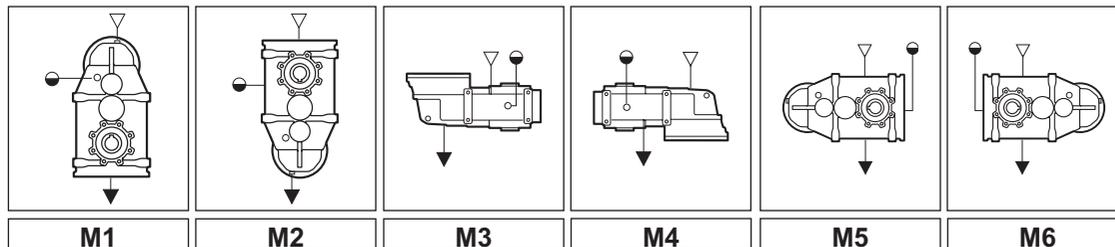
1.4 Lubrificazione

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 / Abflaßschraube

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 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 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 eccedono quelli indicati nelle tabelle.

Nella Tab. 1.2 sono riportati i valori dei carichi radiali ammissibili per l'albero veloce (Fr_1). Come carico assiale ammissibile contemporaneo si ha:

$$Fa_1 = 0.2 \times Fr_1$$

In Tab. 1.3 sono riportati i valori dei carichi radiali ammissibili per l'albero lento (Fr_2). Come carico assiale ammissibile contemporaneo si ha:

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 (Fr_1). Contemporary permissible axial load is given by the following formula:

$$Fa_1 = 0.2 \times Fr_1$$

In Table 1.3 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 1.2 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 1.3 sind die Werte der zulässigen Radialbelastungen für die Abtriebswelle (Fr_2) angegeben. Als zulässige Axialbelastung gilt:

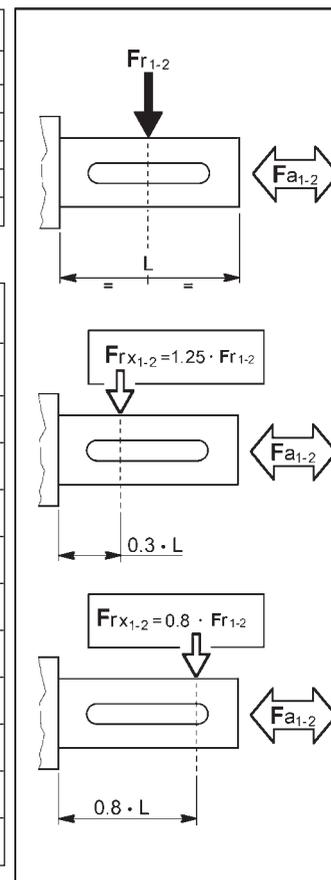
$$Fa_2 = 0.2 \times Fr_2$$

Tab. 1.2

n_1 [min ⁻¹]	Fr_1 [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 ⁻¹]	Fr_2 [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 Fr_1 a 500 min⁻¹ e Fr_2 a 5 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 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 Fr_1 at 500 min⁻¹ and Fr_2 at 5 min⁻¹ 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 angegeben 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 Fr_1 bei 500 min⁻¹ und für Fr_{2max} bei 5 min⁻¹ 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:
 $Fr_x = 0.8 \times Fr_{1-2}$



1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

PLR 25/3															Kg	4.6			
ir	n ₁ = 2800 min ⁻¹				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 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
	min ⁻¹	Nm	kW	%	min ⁻¹	Nm	kW	%	min ⁻¹	Nm	kW	%	min ⁻¹	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	80 (B5-B14) 71 (B5-B14) 63 (B5-B14)		
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			



PLR 25/4															Kg	4.6			
ir	n ₁ = 2800 min ⁻¹				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 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
	min ⁻¹	Nm	kW	%	min ⁻¹	Nm	kW	%	min ⁻¹	Nm	kW	%	min ⁻¹	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	63 (B5-B14) 56 (B5-B14)		
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			

Pt _N [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																	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 <small>min⁻¹</small>	T_{2M} <small>Nm</small>	P <small>kW</small>	RD <small>%</small>													
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																	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 <small>min⁻¹</small>	T_{2M} <small>Nm</small>	P <small>kW</small>	RD <small>%</small>													
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_N [kW]	tutti i rapporti <i>all ratios</i> alle Untersetzungen 6.5
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1.6 Prestazioni riduttori PLR

1.6 PLR gearboxes performances

1.6 Leistungen der PLR-Getriebe

PLR 65/3



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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 ⁻¹	T_{2M} Nm	P kW	RD %	n_2 min ⁻¹	T_{2M} Nm	P kW	RD %	n_2 min ⁻¹	T_{2M} Nm	P kW	RD %	n_2 min ⁻¹	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 _N [kW]	tutti i rapporti all ratios alle Untersetzungen
	8.0





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 ⁻¹	T_{2M} Nm	P kW	RD %	n_2 min ⁻¹	T_{2M} Nm	P kW	RD %	n_2 min ⁻¹	T_{2M} Nm	P kW	RD %	n_2 min ⁻¹	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 _N [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



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ir	n ₁ = 2800 min ⁻¹				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 min ⁻¹				IEC
	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} 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 _N [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 min ⁻¹				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 min ⁻¹				IEC
	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	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	

P_{tN} [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



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ir	n ₁ = 2800 min ⁻¹				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 min ⁻¹				IEC
	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	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 180 B5 160 B5 132 B5 132 B14 112 B5 100 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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	
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	

Pt _N [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 min ⁻¹				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 min ⁻¹				IEC
	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	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	

P_{tN} [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



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ir	n ₁ = 2800 min ⁻¹				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 min ⁻¹				IEC
	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	n ₂ min ⁻¹	T _{2M} 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 _N [kW]	tutti i rapporti all ratios alle Untersetzungen
	40.0

* Nei rapporti contrassegnati non è disponibile la versione uscita con albero cavo "-"- "C"- "CD"- "QL-L".

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

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

* *Hollow output shaft* "-"- "C"- "CD"- "QL-L" not available for ratios marked with this symbol.

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

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

* Bei den gekennzeichneten Übersetzungsverhältnissen ist die Version "Abtrieb mit Hohlwelle" "-"- "C"- "CD"- "QL-L" nicht verfügbar.

HINWEIS.
Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. par.A-1.5).

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



1.7 Prestazioni motoriduttori PLR

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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0.09 kW $n_1 = 860 \text{ min}^{-1}$

63B 6

50.0	17.2	16	6.9	25/4	63B 6
42.2	20.4	19	5.8	25/4	63B 6
36.1	23.8	22	5.0	25/4	63B 6
31.4	27.4	25	4.3	25/4	63B 6
26.9	32	30	3.7	25/4	63B 6
23.3	36.9	34	3.2	25/4	63B 6
20.2	42.6	40	2.8	25/4	63B 6
15.7	54.8	51	2.2	25/4	63B 6
13.3	64.6	60	1.8	25/4	63B 6

0.13 kW $n_1 = 1360 \text{ min}^{-1}$
 $n_1 = 860 \text{ min}^{-1}$ 63A 4
63C 6

79.1	17.2	15	6.8	25/4	63A 4
66.7	20.4	17	5.8	25/4	63A 4
57.1	23.8	20	4.9	25/4	63A 4
49.6	27.4	23	4.3	25/4	63A 4
42.5	32	27	3.7	25/4	63A 4
36.9	36.9	31	3.2	25/4	63A 4
31.9	42.6	36	2.8	25/4	63A 4
24.8	54.8	47	2.1	25/4	63A 4
21.1	64.6	55	1.8	25/4	63A 4
18.0	75.5	64	1.6	25/4	63A 4
15.6	87	74	1.4	25/4	63A 4
13.4	101.6	86	1.2	25/4	63A 4
11.6	117.3	100	1.0	25/4	63A 4
10.1	135.3	115	0.87	25/4	63A 4
9.8	138.8	118	5.1	65/3	63A 4
8.9	152.8	130	4.6	65/3	63A 4
7.8	175.4	149	4.0	65/3	63A 4
6.9	197.9	168	3.6	65/3	63A 4
11.4	75.5	101	1.1	25/4	63C 6
9.9	87	117	0.94	25/4	63C 6
8.5	101.6	136	0.81	25/4	63C 6
6.2	138.8	186	3.5	65/3	63C 6
5.6	152.8	205	3.2	65/3	63C 6
4.9	175.4	235	2.8	65/3	63C 6
4.3	197.9	266	2.4	65/3	63C 6

0.18 kW $n_1 = 1370 \text{ min}^{-1}$
 $n_1 = 870 \text{ min}^{-1}$ 63B 4
71A 6

79.7	17.2	20	5.0	25/4	63B 4
67.2	20.4	24	4.2	25/4	63B 4
57.6	23.8	28	3.6	25/4	63B 4
50.0	27.4	32	3.1	25/4	63B 4
42.8	32	37	2.7	25/4	63B 4
37.1	36.9	43	2.3	25/4	63B 4
32.2	42.6	50	2.0	25/4	63B 4
25.0	54.8	64	1.6	25/4	63B 4
21.2	64.6	75	1.3	25/4	63B 4
18.1	75.5	88	1.1	25/4	63B 4
15.7	87	102	0.99	25/4	63B 4
13.5	101.6	119	0.84	25/4	63B 4
9.0	152.8	178	3.4	65/3	63B 4
7.8	175.4	205	2.9	65/3	63B 4
6.9	197.9	231	2.6	65/3	63B 4
6.6	132.7	244	1.1	45/3	71A 6
6.3	138.8	255	2.5	65/3	71A 6
5.7	152.8	281	2.3	65/3	71A 6
5.7	152.9	281	0.96	45/3	71A 6
5.0	175.4	322	2.0	65/3	71A 6
4.4	197.9	364	1.8	65/3	71A 6
4.3	204.1	375	3.5	85/3	71A 6
4.1	214	393	3.3	85/3	71A 6
3.7	234	430	3.0	85/3	71A 6
3.2	270	496	2.6	85/3	71A 6

1.7 Gearmotors performances

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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0.22 kW $n_1 = 1400 \text{ min}^{-1}$

63C 4

81.4	17.2	24	4.2	25/4	63C 4
68.6	20.4	28	3.5	25/4	63C 4
58.8	23.8	33	3.0	25/4	63C 4
51.1	27.4	38	2.6	25/4	63C 4
43.8	32	45	2.2	25/4	63C 4
37.9	36.9	52	1.9	25/4	63C 4
32.9	42.6	59	1.7	25/4	63C 4
25.5	54.8	76	1.3	25/4	63C 4
21.7	64.6	90	1.1	25/4	63C 4
18.5	75.5	105	0.95	25/4	63C 4
16.1	87	121	0.82	25/4	63C 4
14.1	99	138	4.3	65/3	63C 4
12.0	116.2	162	3.7	65/3	63C 4
10.1	138.8	194	3.1	65/3	63C 4
9.2	152.8	213	2.8	65/3	63C 4
8.0	175.4	245	2.5	65/3	63C 4
7.1	197.9	276	2.2	65/3	63C 4

0.25 kW $n_1 = 1370 \text{ min}^{-1}$
 $n_1 = 870 \text{ min}^{-1}$ 71A 4
71B 6

79.7	17.2	28	3.6	25/4	71A 4
67.2	20.4	33	3.0	25/4	71A 4
57.6	23.8	39	2.6	25/4	71A 4
50.0	27.4	44	2.3	25/4	71A 4
42.8	32	52	1.9	25/4	71A 4
37.1	36.9	60	1.7	25/4	71A 4
32.2	42.6	69	1.4	25/4	71A 4
30.0	45.7	74	3.4	45/3	71A 4
25.9	52.8	86	2.9	45/3	71A 4
25.0	54.8	89	1.1	25/4	71A 4
22.8	60.1	97	2.6	45/3	71A 4
21.2	64.6	105	0.96	25/4	71A 4
19.4	70.6	114	2.2	45/3	71A 4
18.1	75.5	122	0.82	25/4	71A 4
16.0	85.7	139	1.8	45/3	71A 4
13.6	100.7	163	1.5	45/3	71A 4
12.8	107.1	174	1.4	45/3	71A 4
11.8	116.2	188	3.2	65/3	71A 4
10.3	132.7	215	1.2	45/3	71A 4
9.9	138.8	225	2.7	65/3	71A 4
9.0	152.8	248	2.4	65/3	71A 4
9.0	152.9	248	1.0	45/3	71A 4
8.6	160	259	4.6	85/3	71A 4
7.8	175.4	284	2.1	65/3	71A 4
7.3	188.9	306	0.82	45/3	71A 4
6.9	197.9	321	1.9	65/3	71A 4
6.7	204.1	331	3.6	85/3	71A 4
6.4	214	347	3.5	85/3	71A 4
5.9	234	379	3.2	85/3	71A 4
5.1	270	438	2.7	85/3	71A 4
5.0	175.4	448	1.5	65/3	71B 6
4.7	184.6	471	2.8	85/3	71B 6
4.4	197.9	505	1.3	65/3	71B 6
4.3	204.1	521	2.5	85/3	71B 6
4.1	214	546	2.4	85/3	71B 6
3.7	234	597	2.2	85/3	71B 6
3.2	270	689	1.9	85/3	71B 6

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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0.37 kW $n_1 = 2790 \text{ min}^{-1}$
 $n_1 = 1380 \text{ min}^{-1}$
 $n_1 = 880 \text{ min}^{-1}$ 63C 2
71B 4
71C 6

162.2	17.2	20	4.4	25/4	63C 2
136.8	20.4	24	3.7	25/4	63C 2
117.2	23.8	28	3.2	25/4	63C 2
101.8	27.4	32	2.8	25/4	63C 2
87.2	32	38	2.4	25/4	63C 2
80.2	36.9	41	2.4	25/4	71B 4
67.6	42.6	49	2.1	25/4	71B 4
58.0	54.8	57	1.8	25/4	71B 4
50.4	64.6	65	1.5	25/4	71B 4
43.1	75.5	76	1.3	25/4	71B 4
43.1	87	86	3.3	45/3	71B 4
37.4	99	97	1.1	25/4	71B 4
33.7	116.2	109	2.6	45/3	71B 4
32.4	122.8	126	0.99	25/4	71B 4
30.2	138.8	149	2.3	45/3	71B 4
26.1	152.8	174	2.0	45/3	71B 4
23.0	166.2	201	1.7	45/3	71B 4
19.5	180.2	231	1.5	45/3	71B 4
18.5	184.6	236	3.4	65/3	71B 4
16.2	200.7	270	3.0	65/3	71B 4
16.1	204.1	276	1.2	45/3	71B 4
13.9	228.8	315	2.5	65/3	71B 4
13.7	234	330	1.0	45/3	71B 4
12.9	240.1	345	0.98	45/3	71B 4
11.9	252.2	372	2.2	65/3	71B 4
9.9	288.8	441	1.8	65/3	71B 4
9.0	302.8	486	1.6	65/3	71B 4
8.6	318	513	3.1	85/3	71B 4
7.9	342	558	1.4	65/3	71B 4
7.5	354	600	2.7	85/3	71B 4
7.0	372	648	1.3	65/3	71B 4
6.8	384	696	2.5	85/3	71B 4
6.4	408	756	2.4	85/3	71B 4
5.9	432	810	2.2	85/3	71B 4
5.1	474	918	1.9	85/3	71B 4
5.0	486	972	0.99	65/3	71C 6
4.8	504	1044	1.9	85/3	71C 6
4.4	540	1134	0.88	65/3	71C 6
4.3	558	1188	1.7	85/3	71C 6
4.1	576	1260	1.6	85/3	71C 6
3.8	612	1368	1.5	85/3	71C 6
3.3	678	1500	1.3	85/3	71C 6

0.55 kW $n_1 = 2800 \text{ min}^{-1}$
 $n_1 = 1380 \text{ min}^{-1}$
 $n_1 = 910 \text{ min}^{-1}$ 71B 2
71C 4
80B 6

162.8	17.2	30	3.0	25/4	71B 2
137.3	20.4	36	2.5	25/4	71B 2
117.6	23.8	42	2.2	25/4	71B 2
102.2	27.4	48	1.9	25/4	71B 2
87.5	32	56	1.6	25/4	71B 2
80.2	36.9	61	1.6	25/4	71C 4
67.6	42.6	72	1.4	25/4	71C 4
58.0	54.8	84	1.2	25/4	71C 4
50.4	64.6	97	1.0	25/4	71C 4
48.1	69.6	102	2.5	45/3	71C 4
43.1	75.5	113	0.88	25/4	71C 4
43.1	87	126	2.2	45/3	71C 4
33.7	101.6	145	1.7	45/3	71C 4
30.2	116.2	162	1.5	45/3	71C 4
30.0	116.2	163	3.7	65/3	71C 4
26.1	122.8	181	1.3	45/3	71C 4
25.4	138.8	192	3.1	65/3	71C 4
23.0	152.8	213	1.2	45/3	71C 4
21.4	166.2	228	2.6	65/3	71C 4
19.5	180.2	250	1.0	45/3	71C 4
18.5	184.6	263	2.3	65/3	71C 4
16.2	200.7	302	2.0	65/3	71C 4



1.7 Prestazioni motoriduttori PLR

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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0.55 kW	$n_1 = 2800 \text{ min}^{-1}$	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

0.75 kW	$n_1 = 2800 \text{ min}^{-1}$	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

1.7 Gearmotors performances

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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0.75 kW	$n_1 = 2800 \text{ min}^{-1}$	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

0.88 kW	$n_1 = 1350 \text{ min}^{-1}$	80C 4
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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

1.1 kW	$n_1 = 2830 \text{ min}^{-1}$	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

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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1.1 kW	$n_1 = 2830 \text{ min}^{-1}$	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 L6
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 L6
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 L6
5.7	243.2	1709	1.4	95/3	80D 4
5.4	169.2	1816	2.1	105	90 L6
5.2	266.2	1871	1.3	95/3	80D 4
5.0	185.2	1987	1.9	105	90 L6
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

1.5 kW	$n_1 = 2830 \text{ min}^{-1}$	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

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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1.5 kW
 $n_1 = 2830 \text{ min}^{-1}$
 $n_1 = 1400 \text{ min}^{-1}$
 $n_1 = 925 \text{ min}^{-1}$
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

1.8 kW
 $n_1 = 2770 \text{ min}^{-1}$
 $n_1 = 1400 \text{ min}^{-1}$
 $n_1 = 940 \text{ min}^{-1}$
80D 2
90LB 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

1.7 Gearmotors performances

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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1.8 kW
 $n_1 = 2770 \text{ min}^{-1}$
 $n_1 = 1400 \text{ min}^{-1}$
 $n_1 = 940 \text{ min}^{-1}$
80D 2
90LB 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	90L 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

2.2 kW
 $n_1 = 2840 \text{ min}^{-1}$
 $n_1 = 1410 \text{ min}^{-1}$
 $n_1 = 940 \text{ min}^{-1}$
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

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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2.2 kW
 $n_1 = 2840 \text{ min}^{-1}$
 $n_1 = 1410 \text{ min}^{-1}$
 $n_1 = 940 \text{ min}^{-1}$
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	129.9	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

3 kW
 $n_1 = 2840 \text{ min}^{-1}$
 $n_1 = 1420 \text{ min}^{-1}$
 $n_1 = 940 \text{ min}^{-1}$
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				



1.7 Prestazioni motoriduttori PLR

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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3 kW	$n_1 = 2840 \text{ min}^{-1}$	90LB 2
	$n_1 = 1420 \text{ min}^{-1}$	100B 4
	$n_1 = 940 \text{ min}^{-1}$	112B 6

25.2	56.3	1056	1.1	85/3	100B 4
23	62.7	1190	2.4	105	100B 4
22.2	63.9	1199	1	85/3	100B 4
21.7	65.4	1227	1.8	95/3	100B 4
20	70.7	1340	2.2	105	100B 4
19.2	73.8	1400	3.5	115	100B 4
19.2	74	1389	0.86	85/3	100B 4
19.1	74.2	1392	1.7	95/3	100B 4
17.8	79.8	1514	2.0	105	100B 4
17.5	81.3	1541	3.2	115	100B 4
16.5	86	1614	1.5	95/3	100B 4
16.3	87.2	1653	3.0	115	100B 4
16.3	87.4	1657	1.9	105	100B 4
15.7	90.6	1718	1.9	105	100B 4
14.4	98.4	1846	1.3	95/3	100B 4
14.1	100.4	1905	1.7	105	100B 4
13.7	103.9	1970	2.5	115	100B 4
12.8	110.5	2096	1.6	105	100B 4
12.4	114.3	2168	2.3	115	100B 4
12.2	116.3	2205	3.4	125	100B 4
12.2	116	2177	1.1	95/3	100B 4
11.7	121.2	2299	2.2	115	100B 4
11.3	126.1	2392	1.4	105	100B 4
11.1	127.9	2426	3.1	125	100B 4
10.6	134.4	2522	0.94	95/3	100B 4
10	135.8	2575.7	1.9	115	100B 4
10.2	139.9	2653	1.3	105	100B 4
10.0	141.7	2688	2.8	125	100B 4
10	148.2	2810.6	1.8	115	100B 4
9.2	153.9	2919	1.2	105	100B 4
9.2	155.1	2941	2.6	125	100B 4
8.9	158.9	2982	0.8	95/3	100B 4
9	163.1	3093.1	1.6	115	100B 4
8.4	169.2	3208	1.1	105	100B 4
8.3	170.7	3237	2.3	125	100B 4
8	185.2	3511.5	1.0	105	100B 4
7.5	189.1	3586	2.1	125	100B 4
7.5	190.3	3609	1.4	115	100B 4
7.3	127.9	3665	2.2	125	112B 6
7	210.3	3987.5	1.3	115	100B 4
6.6	141.7	4060	2.0	125	112B 6
6.2	229.4	4351	1.1	115	100B 4
6.1	155.1	4443	1.8	125	112B 6
5.5	170.7	4890	1.7	125	112B 6
5.3	267.7	5077	1.0	115	100B 4
5.0	189.1	5417	1.5	125	112B 6
5	290.0	5500.0	0.9	115	100B 4
4.5	210.3	6024	0.9	115	112B 6
4.1	229.4	6573	0.8	115	112B 6
3.5	267.7	7669	0.7	115	112B 6
3.2	290.0	8309	0.7	115	112B 6

4 kW	$n_1 = 2860 \text{ min}^{-1}$	100B 2
	$n_1 = 1410 \text{ min}^{-1}$	100BL 4

120.2	23.8	296	2.4	85/3	100B 2
108.3	26.4	328	1.6	65/3	100B 2
104	27.5	342	2.4	85/3	100B 2
88.5	32.3	401	1.3	65/3	100B 2
82.9	34.5	429	2.3	85/3	100B 2
76.1	37.6	467	1.2	65/3	100B 2
73.9	38.7	481	2.2	85/3	100B 2
70.6	40.5	503	3.7	95/3	100B 2
65.4	43.7	543	1.9	85/3	100B 2
62.2	46	571	0.95	65/3	100B 2
61	46.9	583	3.2	95/3	100B 2
59.7	23.6	595	2.7	95/3	100BL 4
59.2	23.8	600	1.3	85/3	100BL 4
56	50.7	637	3.9	105	100B 2
53.4	26.4	665	0.9	65/3	100BL 4

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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4 kW	$n_1 = 2860 \text{ min}^{-1}$	100B 2
	$n_1 = 1410 \text{ min}^{-1}$	100BL 4

52	55.0	690	3.7	105	100B 2
51.5	27.4	690	2.6	95/3	100BL 4
51.3	27.5	693	1.4	85/3	100BL 4
46	62.7	788	2.5	105	100B 2
45.0	31.3	798	3.5	105	100BL 4
42.9	32.9	829	2.5	95/3	100BL 4
40.9	34.5	869	1.3	85/3	100BL 4
40.0	35.2	897	3.1	105	100BL 4
36.6	38.5	982	2.9	105	100BL 4
36.4	38.7	975	1.2	85/3	100BL 4
34.8	40.5	1020	2.0	95/3	100BL 4
32.3	43.7	1101	1.1	85/3	100BL 4
31.4	44.9	1145	2.4	105	100BL 4
30.1	46.9	1182	1.8	95/3	100BL 4
27.8	50.7	1292	2.2	105	100BL 4
26.0	54.3	1382	3.6	115	100BL 4
25.8	54.7	1378	1.5	95/3	100BL 4
25.7	55.0	1400	2.1	105	100BL 4
23.6	59.7	1521	3.3	115	100BL 4
22.5	62.7	1598	1.8	105	100BL 4
22.0	64.1	1631	2.9	115	100BL 4
21.6	65.4	1648	1.3	95/3	100BL 4
20.0	70.7	1800	1.6	105	100BL 4
19.1	73.8	1881	2.6	115	100BL 4
19	74.2	1870	1.3	95/3	100BL 4
17.7	79.8	2033	1.5	105	100BL 4
17.4	81.3	2070	2.4	115	100BL 4
16.4	86	2167	1.1	95/3	100BL 4
16.2	87.2	2220	2.2	115	100BL 4
16.1	87.4	2225	1.4	105	100BL 4
16.0	88.3	2248	3.3	125	100BL 4
15.6	90.6	2306	1.4	105	100BL 4
14.5	97.6	2484	3.0	125	100BL 4
14.3	98.4	2479	0.96	95/3	100BL 4
14.0	100.4	2558	1.3	105	100BL 4
13.6	103.9	2645	1.9	115	100BL 4
13.3	106.2	2705	2.8	125	100BL 4
12.8	110.5	2815	1.2	105	100BL 4
12.3	114.3	2911	1.7	115	100BL 4
12.1	116.3	2961	2.5	125	100BL 4
11.6	121.2	3087	1.6	115	100BL 4
11.2	126.1	3212	1.1	105	100BL 4
11.0	127.9	3258	2.3	125	100BL 4
10.4	135.8	3459	1.4	115	100BL 4
10.1	139.9	3562	1.0	105	100BL 4
9.9	141.7	3609	2.1	125	100BL 4
9.5	148.2	3774	1.3	115	100BL 4
9.2	153.9	3920	0.9	105	100BL 4
9.1	155.1	3949	1.9	125	100BL 4
8.6	163.1	4153	1.2	115	100BL 4
8.3	169.2	4308	0.8	105	100BL 4
8.3	170.7	4346	1.7	125	100BL 4
7.6	185.2	4715	0.7	105	100BL 4
7.5	189.1	4816	1.6	125	100BL 4
7.4	190.3	4846	1.0	115	100BL 4
6.7	210.3	5354	0.9	115	100BL 4
6.1	229.4	5843	0.9	115	100BL 4
5.3	267.7	6817	0.7	115	100BL 4
4.9	290.0	7385	0.7	115	100BL 4

5.5 kW	$n_1 = 2880 \text{ min}^{-1}$	112B 2
	$n_1 = 1400 \text{ min}^{-1}$	112BL 4

122	23.6	400	3.5	95/3	112B 2
121	23.8	404	1.8	85/3	112B 2
109.1	26.4	448	1.2	65/3	112B 2
105.1	27.4	465	3.4	95/3	112B 2
104.7	27.5	466	1.8	85/3	112B 2
89.2	32.3	548	0.99	65/3	112B 2
87.5	32.9	558	3.3	95/3	112B 2

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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5.5 kW	$n_1 = 2880 \text{ min}^{-1}$	112B 2
	$n_1 = 1400 \text{ min}^{-1}$	112BL 4

83.5	34.5	585	1.6	85/3	112B 2
76.6	37.6	638	0.85	65/3	112B 2
74.4	38.7	656	1.7	85/3	112B 2
71.1	40.5	687	2.7	95/3	112B 2
68	20.6	725	3.4	105	112BL 4
65.9	43.7	741	1.4	85/3	112B 2
62	22.5	794	3.2	105	112BL 4
61.4	46.9	795	2.3	95/3	112B 2
59.3	23.6	823	1.9	95/3	112BL 4
58.8	23.8	830	0.96	85/3	112BL 4
59	23.9	843	3.0	105	112BL 4
51.1	27.4	956	1.9	95/3	112BL 4
50.9	27.5	960	1.0	85/3	112BL 4
49	28.6	1010	2.6	105	112BL 4
45	31.3	1105	2.5	105	112BL 4
42.6	32.9	1148	1.8	95/3	112BL 4
40	35.2	1242	2.31	105	112BL 4
37	37.9	1337	3.3	115	112BL 4
36	38.5	1359	2.1	105	112BL 4
34.6	40.5	1413	1.5	95/3	112BL 4
35	40.6	1431	3.1	115	112BL 4
31	44.9	1585	1.8	105	112BL 4
31	45.5	1606	2.9	115	112BL 4
29.9	46.9	1636	1.3	95/3	112BL 4
28	49.7	1753	2.7	115	112BL 4
28	50.7	1790	1.6	105	112BL 4
26	54.3	1914	2.6	115	112BL 4
25.6	54.7	1909	1.1	95/3	112BL 4
25	55.0	1939	1.5	105	112BL 4
24.5	57.2	2018	3.7	125	112BL 4
23	59.7	2106	2.4	115	112BL 4
22	62.7	2213	1.3	105	112BL 4
22.0	63.5	2240	3.3	125	112BL 4
22	64.1	2259	2.1	115	112BL 4
21.4	65.4	2282	0.96	95/3	112BL 4
20.2	69.2	2439	3.1	125	112BL 4
20	70.7	2492	1.2	105	112BL 4
19.0	73.8	2604	1.9	115	112BL 4
18.9	74.2	2589	0.93	95/3	112BL 4
18.5	75.7	2669	2.8		



1.7 Prestazioni motoriduttori PLR

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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7.5 kW $n_1 = 2860 \text{ min}^{-1}$
 $n_1 = 1440 \text{ min}^{-1}$ 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_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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7.5 kW $n_1 = 2860 \text{ min}^{-1}$
 $n_1 = 1440 \text{ min}^{-1}$ 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

9.2 kW $n_1 = 1450 \text{ min}^{-1}$

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_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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9.2 kW $n_1 = 1450 \text{ min}^{-1}$

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

11 kW $n_1 = 2940 \text{ min}^{-1}$
 $n_1 = 1455 \text{ min}^{-1}$ 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					



1.7 Prestazioni motoriduttori PLR

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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11 kW	$n_1 = 2940 \text{ min}^{-1}$ $n_1 = 1455 \text{ min}^{-1}$	132M 2 160M 4
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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

15 kW	$n_1 = 2900 \text{ min}^{-1}$ $n_1 = 1455 \text{ min}^{-1}$	132ML 2 160L 4
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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 ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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15 kW	$n_1 = 2900 \text{ min}^{-1}$ $n_1 = 1455 \text{ min}^{-1}$	132ML 2 160L 4
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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

18.5 kW	$n_1 = 2910 \text{ min}^{-1}$ $n_1 = 1460 \text{ min}^{-1}$ $n_1 = 970 \text{ min}^{-1}$	160L 2 180M 4 200L 6
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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 ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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22 kW	$n_1 = 2925 \text{ min}^{-1}$ $n_1 = 1460 \text{ min}^{-1}$ $n_1 = 975 \text{ min}^{-1}$	180M 2 180L 4 200L 6
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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	38.5	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	42.8	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



1.7 Prestazioni motoriduttori PLR

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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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 ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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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.

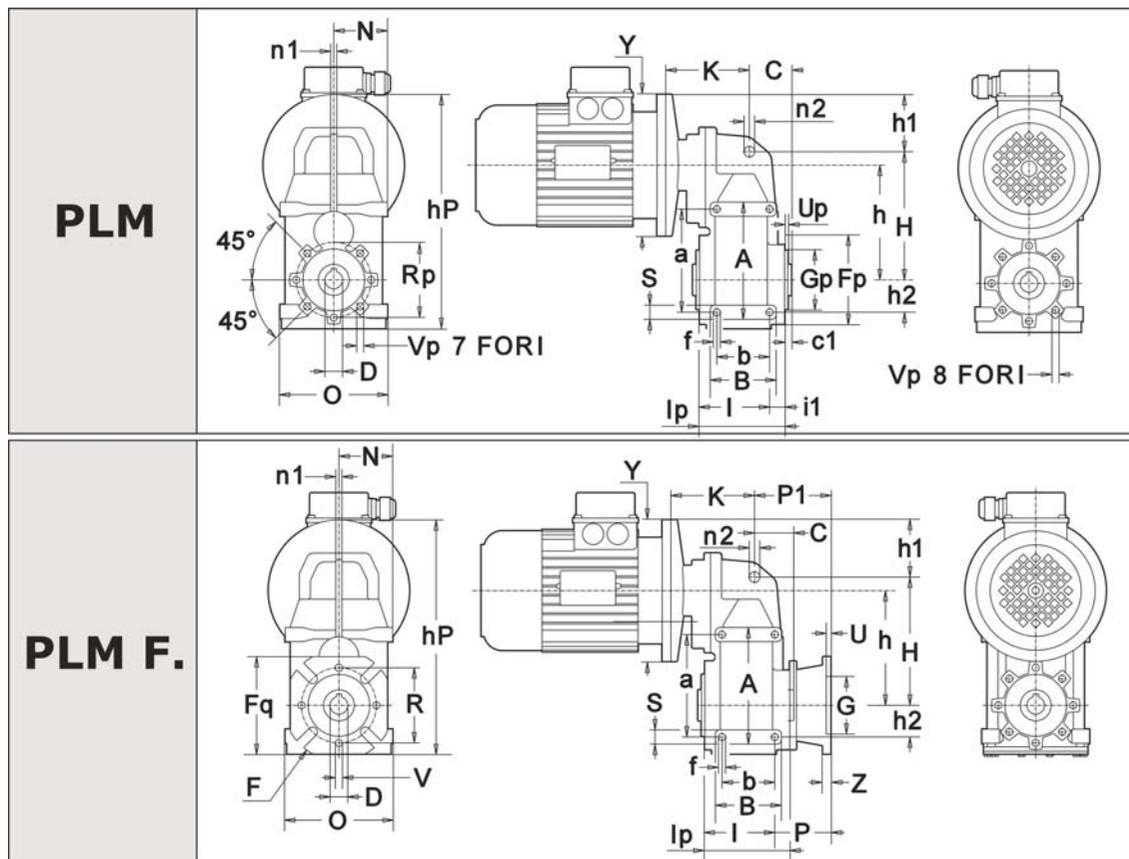
1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'	PLR-PLM	
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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

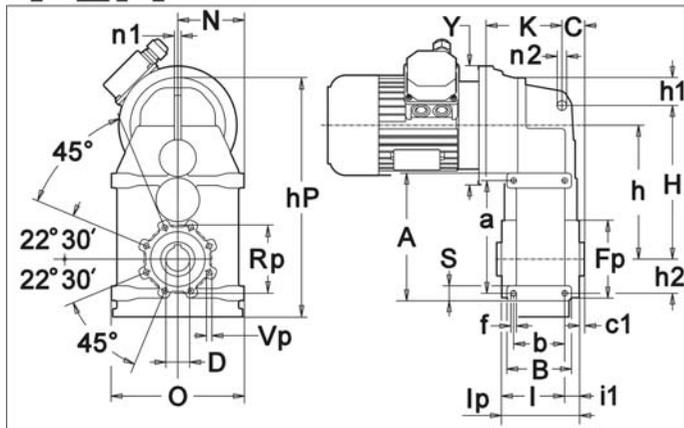
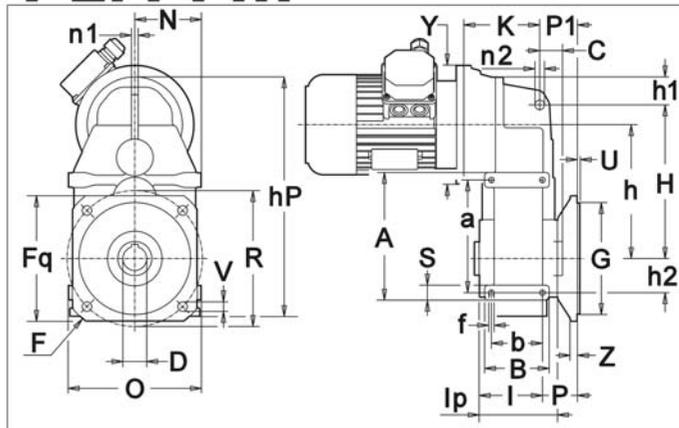
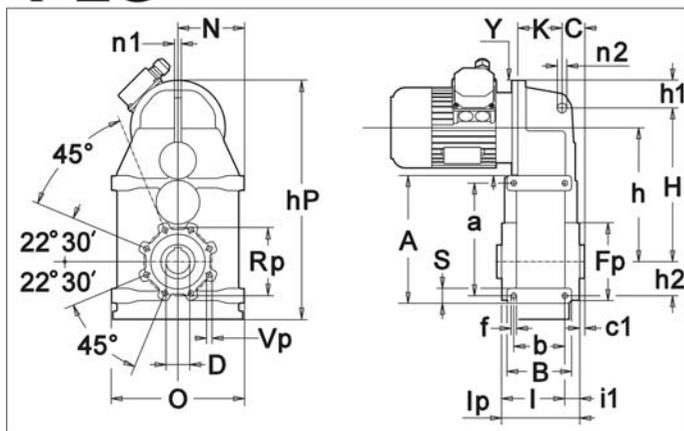
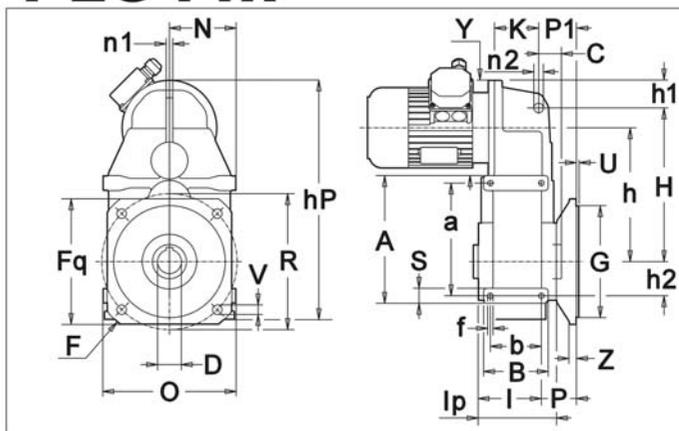
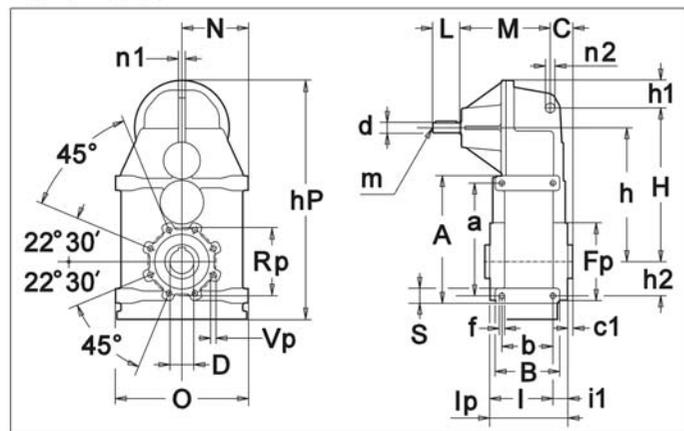
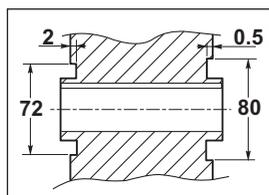
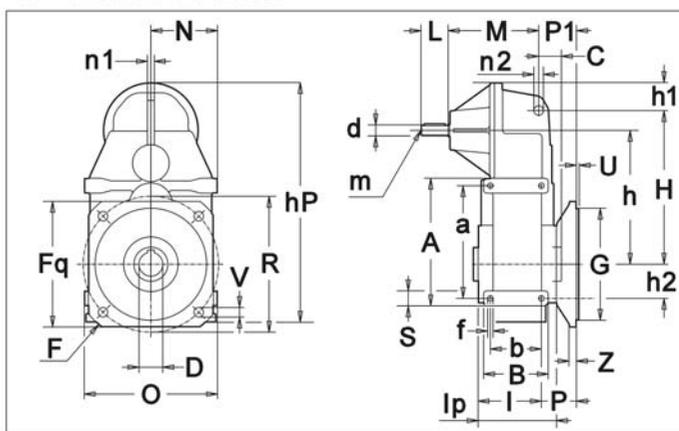


	a	A	b	B	C	c1	D H7	f	h	hP	H	h1	h2	l	l1	lp	N	n1	n2	S
25	115	131	60	75	44.5	4.5	20 (19) (24)	M8 X12	/3 125 /4 135	225	145	22	35	79.5	17	96.5	61	7	12	16
45	130	150	70	95	46	6	30 (25)	M10 X15	/3 155 /4 167.5	276	175	34.5	40	97.5	20.5	118	77	9	15	20

	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 125	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 180	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	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_p".
Flange centering detail.
"G_p" quota.
Zentrierung des Aufsteckflanschs.
Maß "G_p".



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

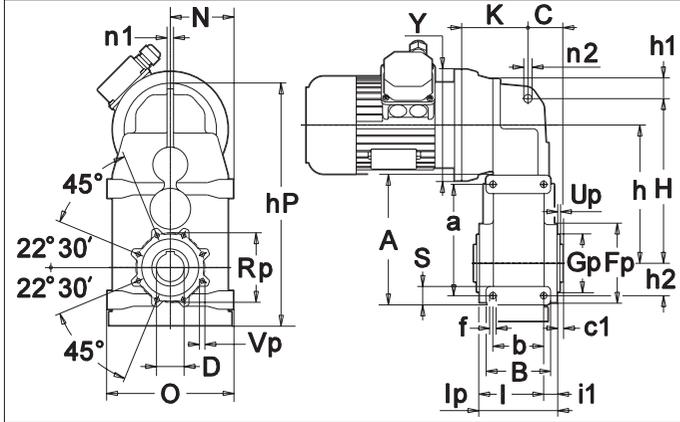
	IEC	65		65 K (PLC)
		Y	K	
PLM /3	B5	140	104.5	65
		160	104.5	
		200	124.5	
		250	134.5	
	B14	120	124.5	
		140	124.5	
		160	134.5	



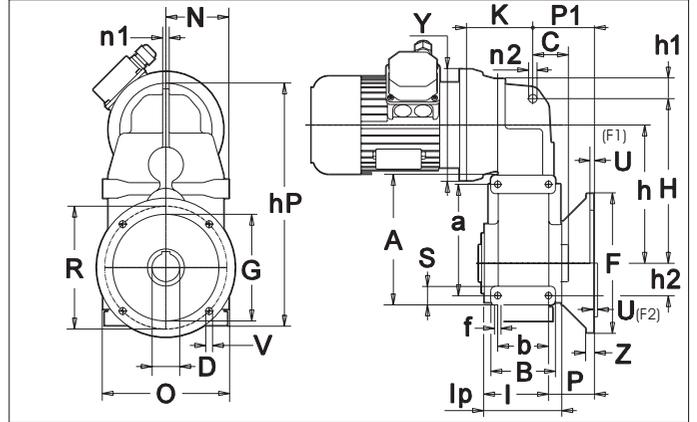


PL. 85-95

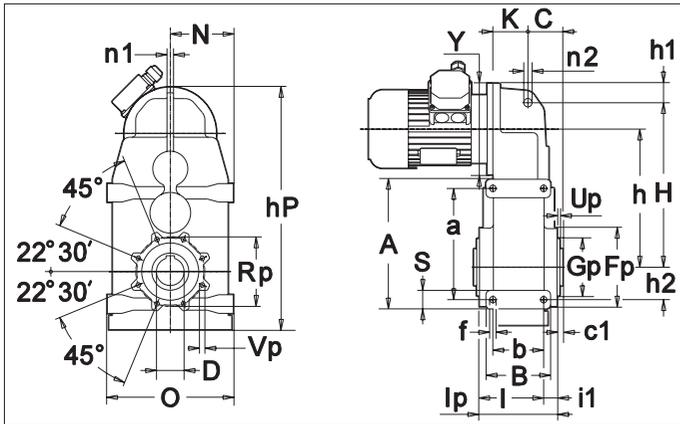
PLM



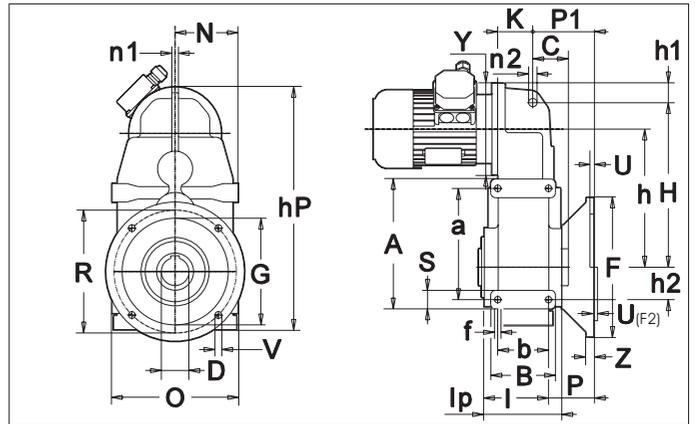
PLM F...



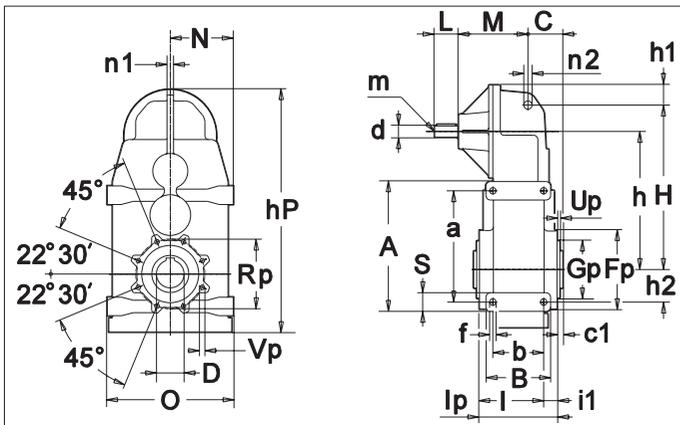
PLC



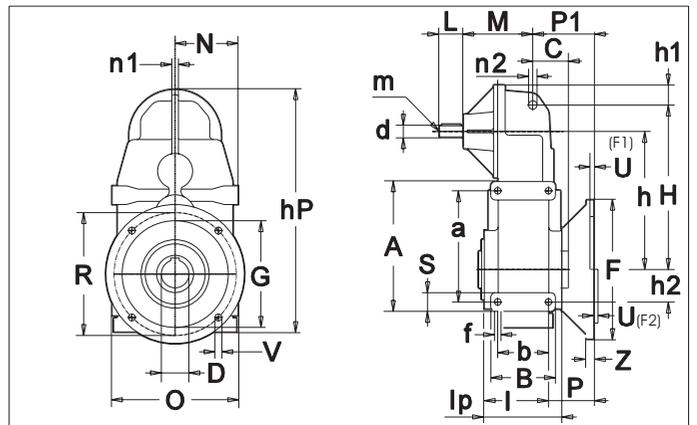
PLC F...



PLR



PLR F...





1.8 Dimensioni

1.8 Dimensions

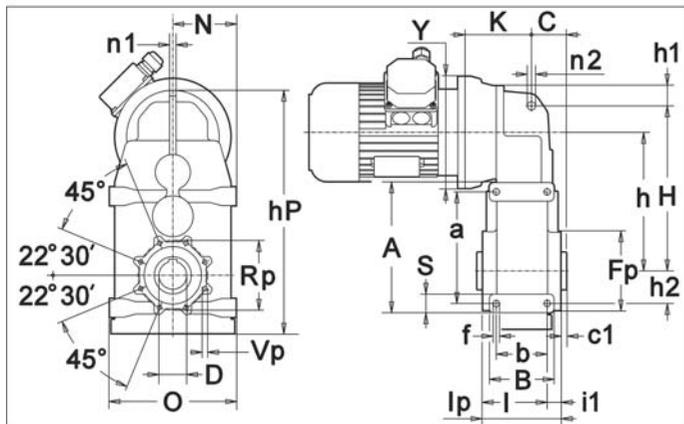
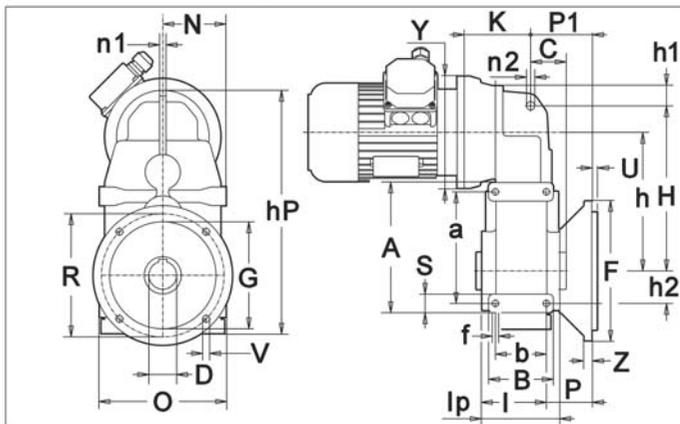
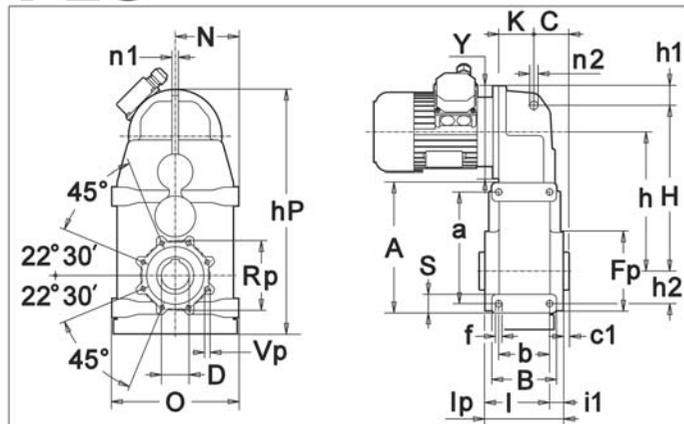
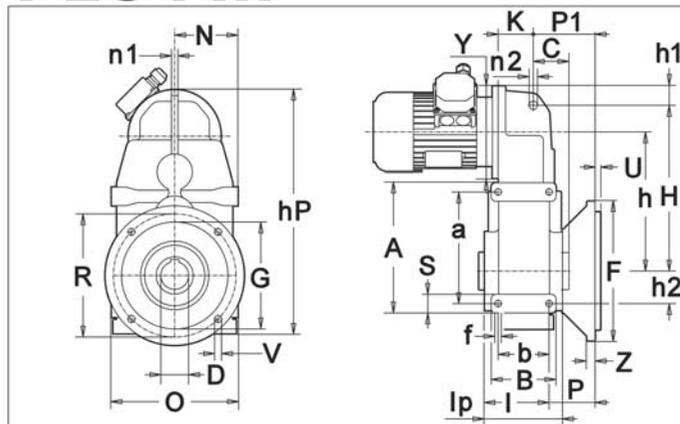
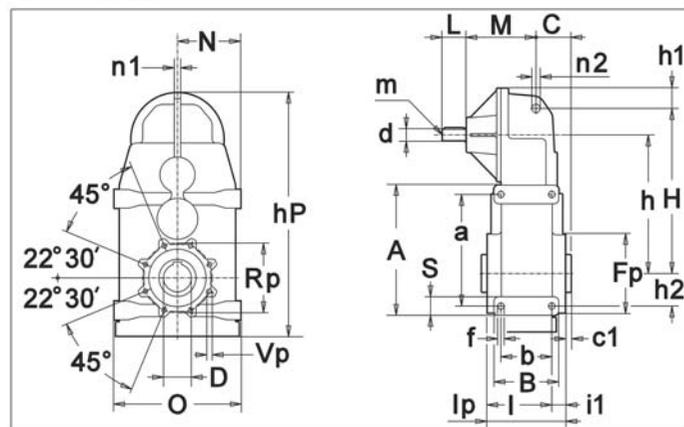
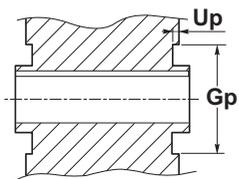
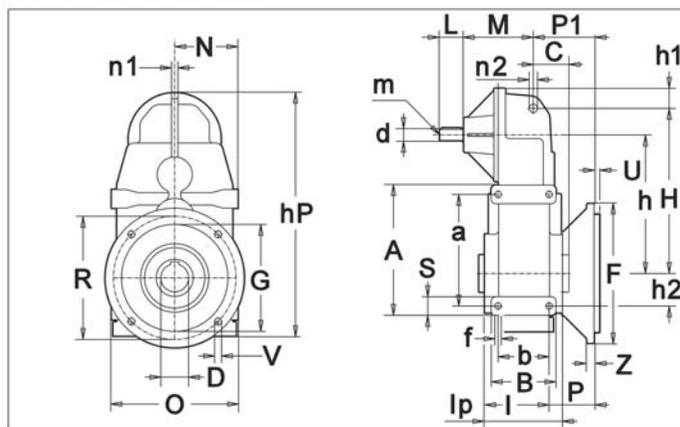
1.8 Abmessungen

	a	A	b	B	C	c1	d h6	D H7	f	h	hP	H	h1	h2	l	i1	lp	L	N	m	M	n1	n2	S
85	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
95	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
85	150	110	223	89	125	4.5	M8 X 12	F1	250	180	80.5	215	5	n°4 fori Ø13	14
95	200	140	273	72.5	165	6	M12	F1	300	230	55.5	265	6	n°8 fori Ø14	16
				112.5				F2	350	250 (g6)	95.5	300	5	n°4 fori Ø18	18

	IEC	85		95		85		95	
		Y	K	Y	K	K (PLC)			
PLM /3	B5	160	121	200	151.5	74	76		
		200	136	250	161.5				
		250	146	300	182.5				
		300	170	350	212.5				
	B14	120	136						
		140	136						
		160	146						
		180	156						
		200	170						



**PL. 105****PLM****PLM F...****PLC****PLC F...****PLR****PLR F...**

Dettaglio centraggio flangia pendolare.
Quota "G_p".
Flange centering detail.
"G_p" quota.
Zentrierung des Aufsteckflanschs.
Maß "G_p".



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

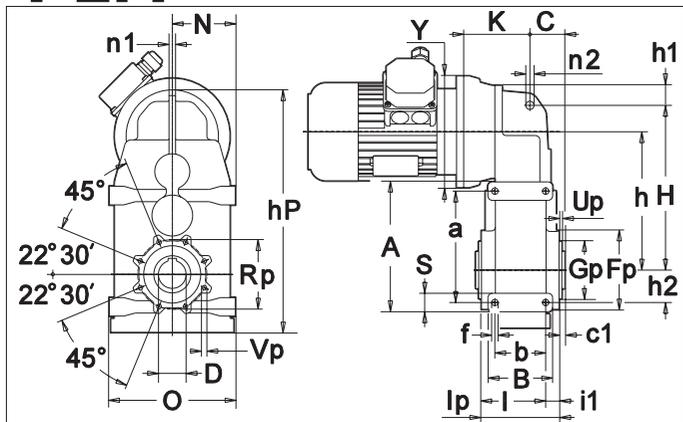
	IEC	105			105	
		Y	K		K (PLC)	
PLM	B5	200	152	95		
		250	162			
		300	183			
		350	213			



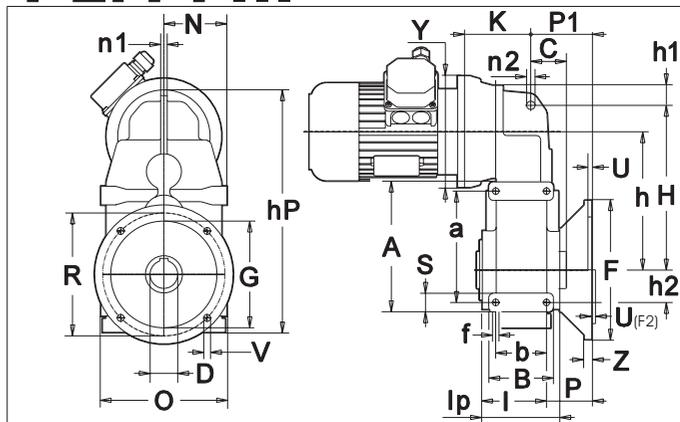


PL. 115-125-135

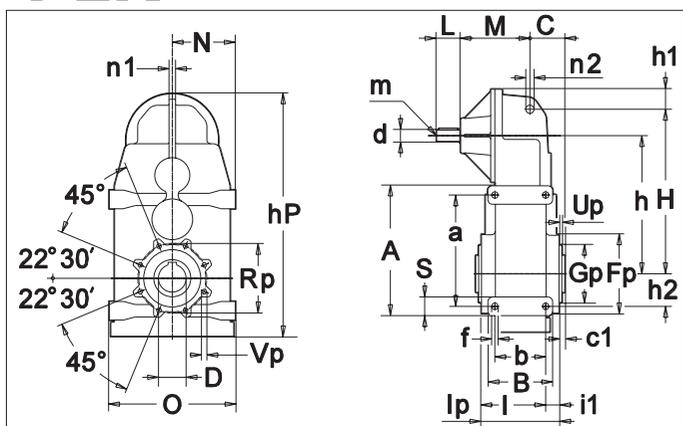
PLM



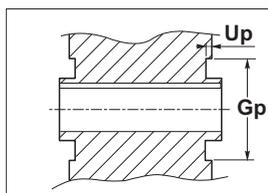
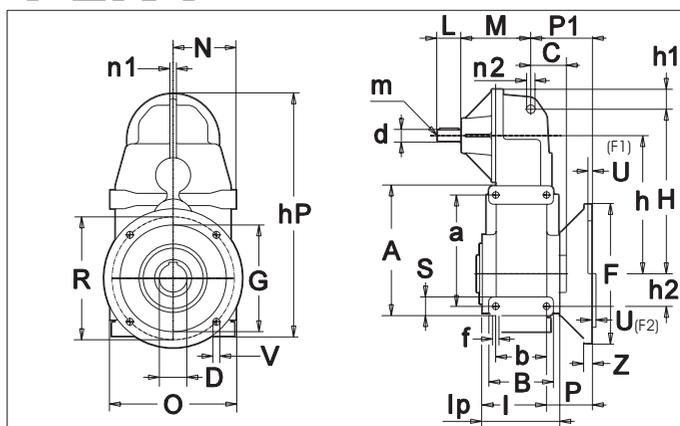
PLM F...



PLR



PLR F...



Dettaglio centraggio flangia pendolare.
 Quota "G_p".
 Flange centering detail.
 "G_p" quota.
 Zentrierung des Aufsteckflanschs.
 Maß "G_p".



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	-	-

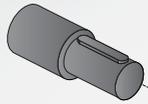
F



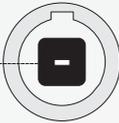
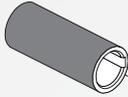


ESTREMITÀ USCITA - Accessori - Opzioni
OUTPUT CONFIGURATIONS - Accessories - Options
ENDEN DER AUSGANGSWELLEN - Zubehör - Optionen

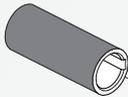
STM
team



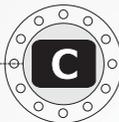
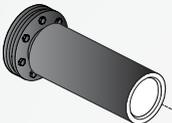
Output shaft
Double integral output shaft **F35**



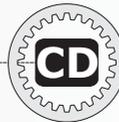
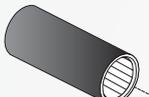
Hollow shaft with keyway **F36**



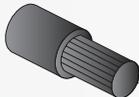
Quick Locking
Adjustement "Quick Locking" **F38**



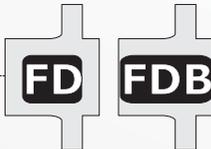
Hollow shaft with shrink disk **F40**



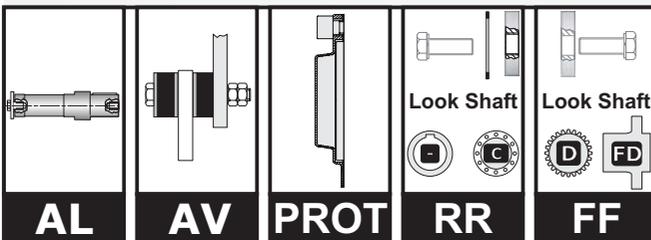
Splined hollow shaft **F42**



Splined output shaft
Double splined shaft **F44**



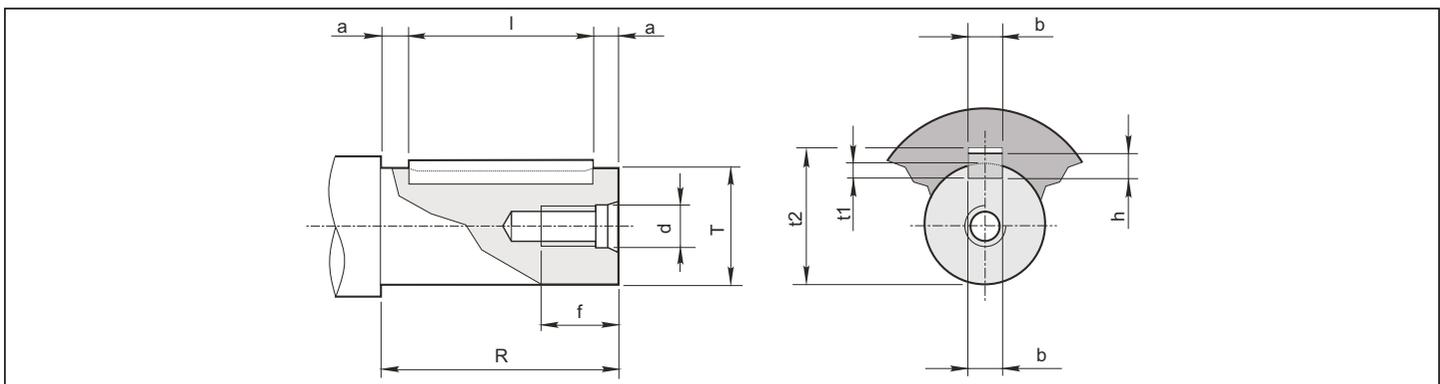
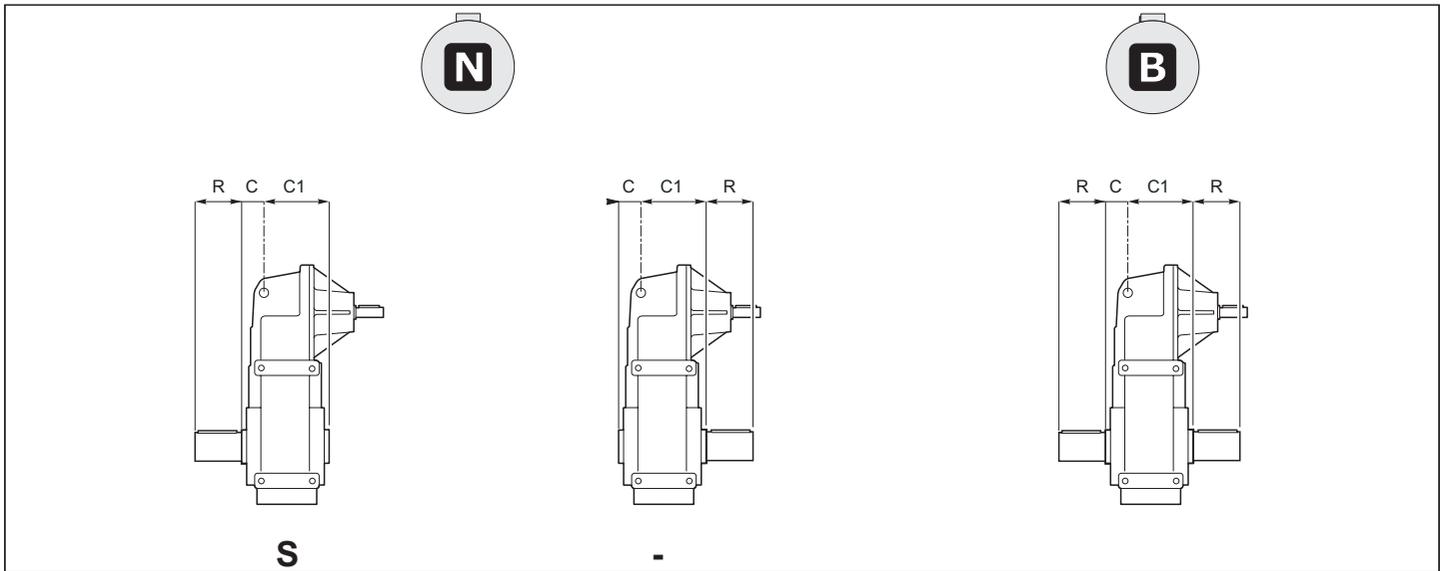
Broached flange
Double broached flange **F46**



OPT - ACC. -
Accessories - Options **F48**

STM
team

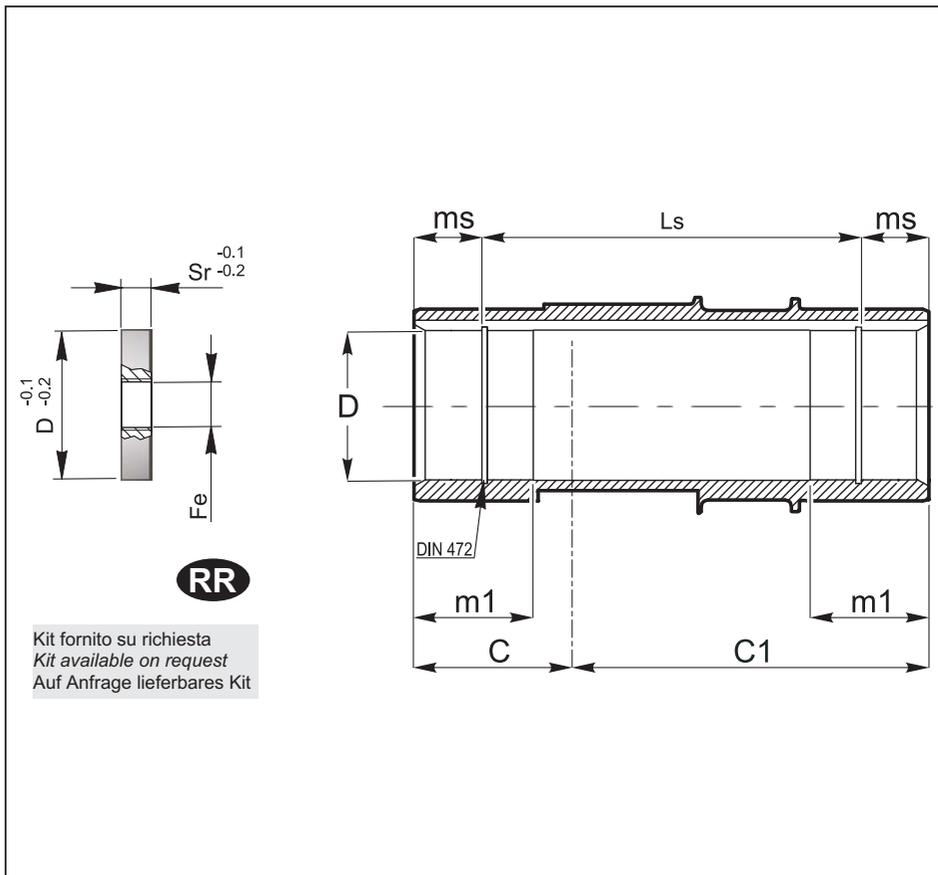
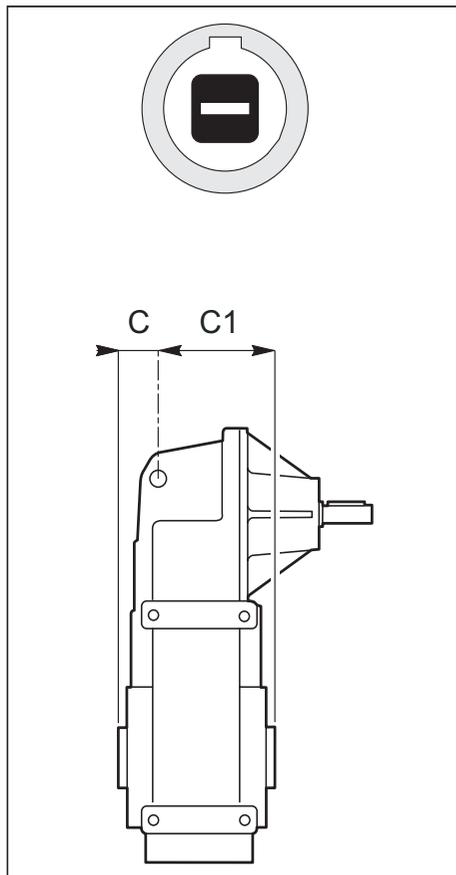
25-45-65-85-95-105-115-125-135



	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
25	20 g6	44.5	60.5	M 6	15	6	3.5	22.8	40	8	6x6x25
45	30 g6	46	84	M 10	25	8	4	33.3	60	5	8x7x50
65	35 g6	33.5	96.5	M 10	25	10	5	38.3	70	5	10x8x60
85	45 g6	42	113	M 10	25	14	5.5	48.8	90	5	14x9x80
95	55 g6	52	128	M 12	32	16	6	59.3	110	5	16x10x100
105	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
115	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
125	90 m6	74.3	227.8	M 16	39	25	9	95.4	160	10	25x14x140
135	100 m6	85.50	254.5	M 20	46	28	10	106.4	180	10	28x16x160



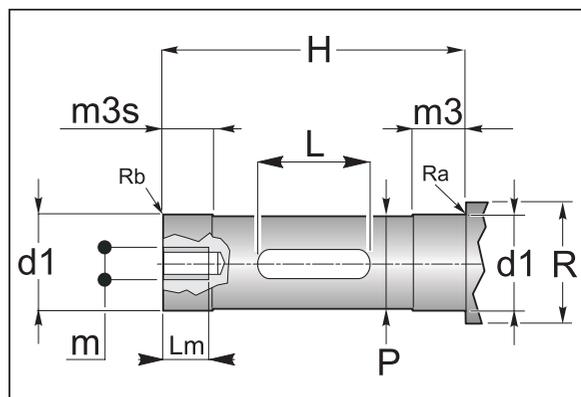
25-45-65-85-95

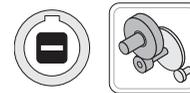


	25	45	65	85	95
C	44.5	46	33.5	42	52
C1	60.5	84	96.5	113	128
D H7	20 (24) (19)	30 (25)	35 (30)	45 (50) (40)	55 (60) (50)
m1	25.5	40	35	42.5	55
ms	-	20	-	15	17.5
Ls	-	90	-	125	145

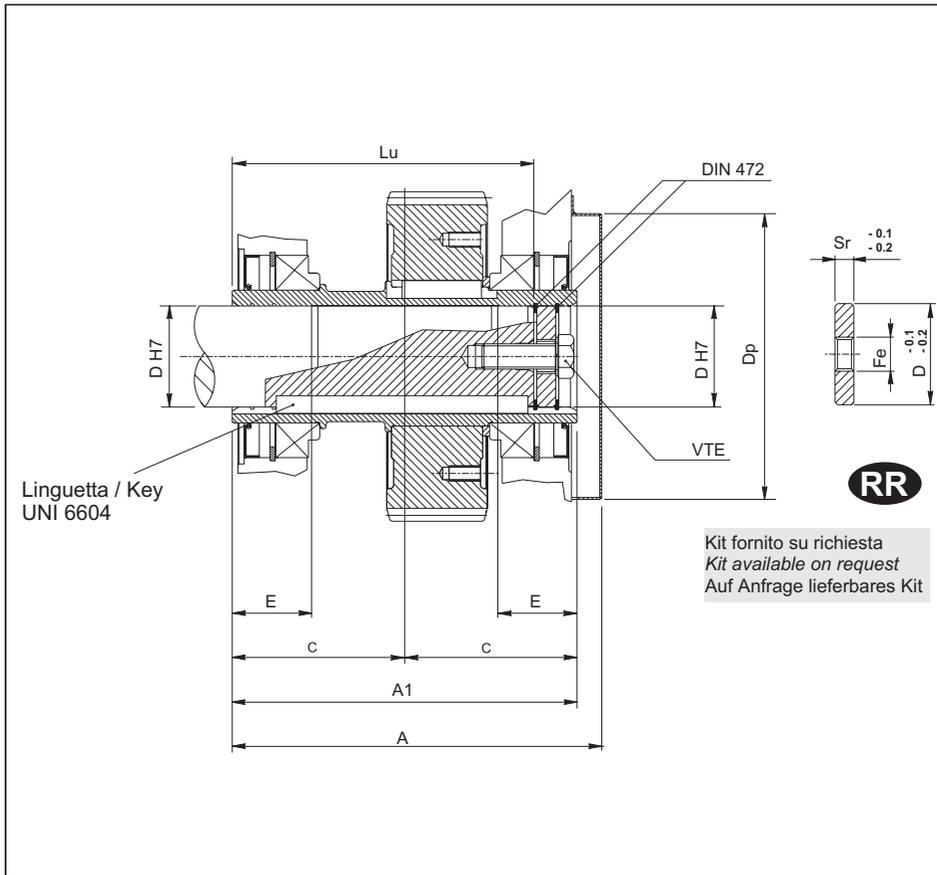
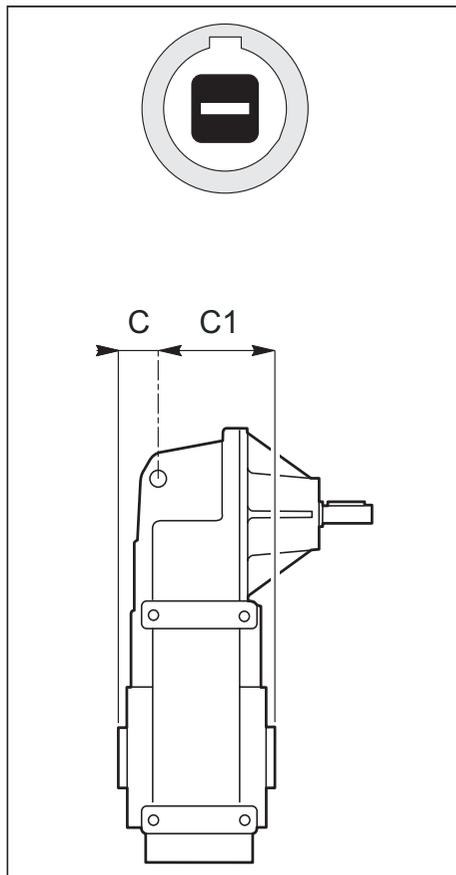
Perno macchina / Customer shaft / Maschinachse

	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





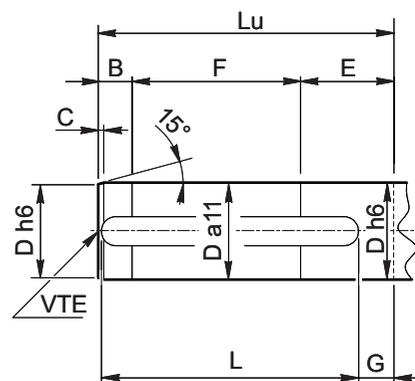
105-115-125-135

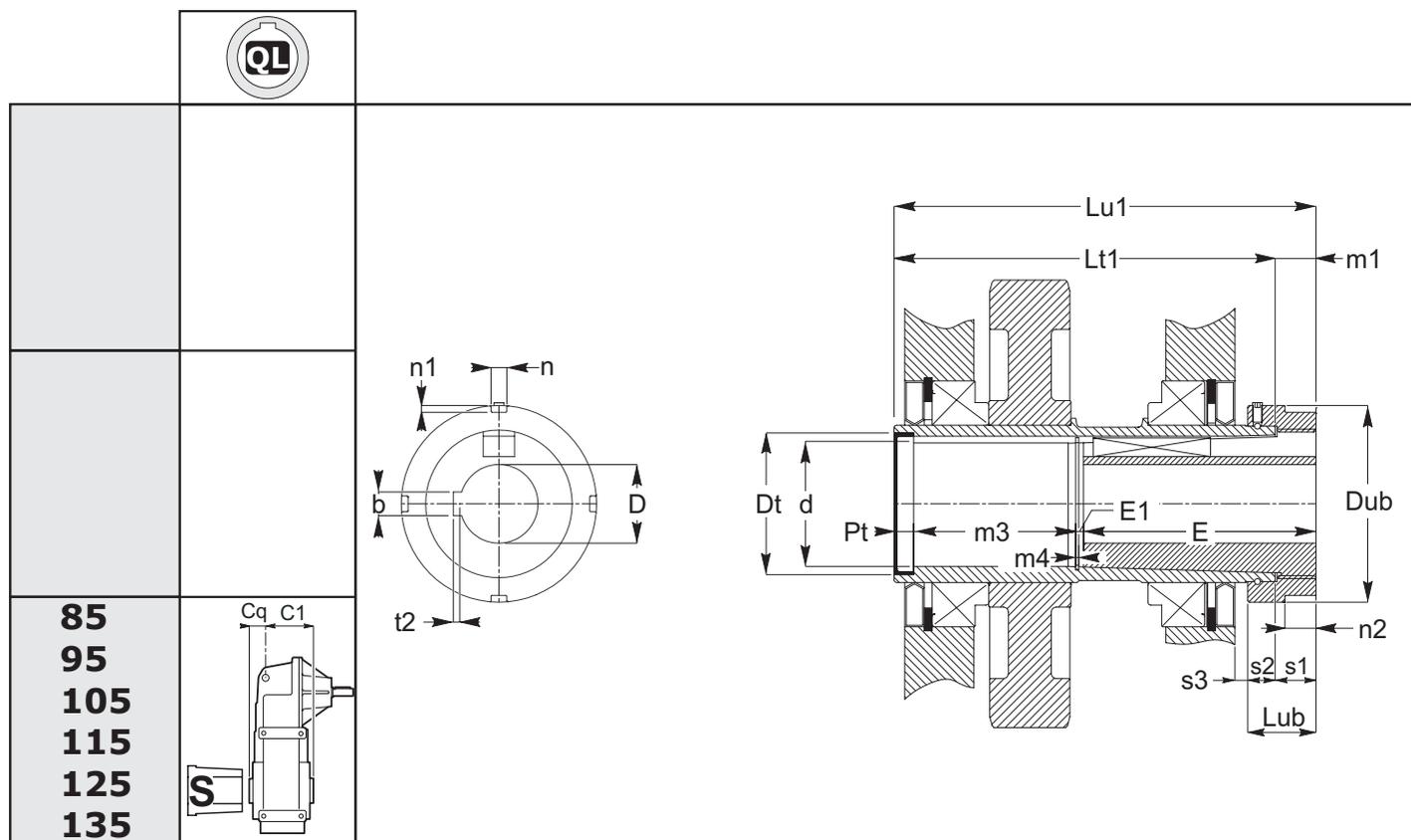


	105	115	125	135
A	269	302	332	379
A1	242	274	302	340
C	85.5	83.5	74.3	85.5
C1	156.5	190.5	227.8	254.5
D	60 (70)	70 (80)	90	100
Dp	183	226	226	260
E	56	63	70	80
Lu	207.5	239.5	261	299
Sr	15	15	18	18
Fe	M27	M27	M30	M30
VTE	M20x60	M20x60	M24x75	M24x75

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



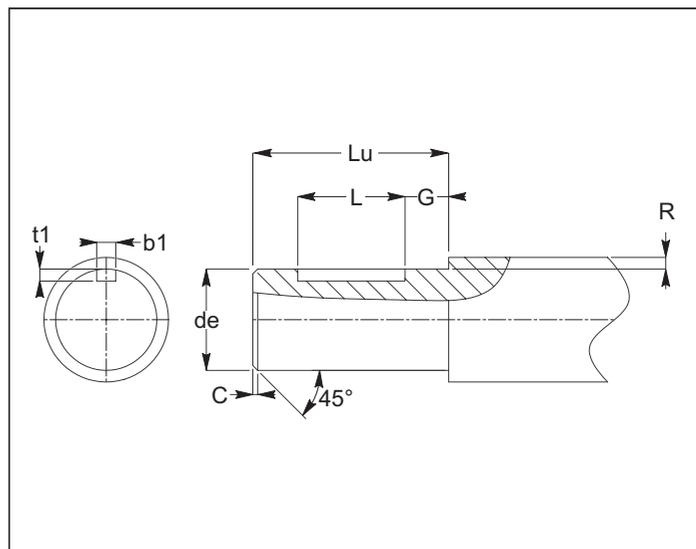


	85	95	105	115	125	135
C1	113	128	156.5	190.5	227.8	-
Cq	78	88	121.5	119.5	110.2	-
d	49.2	60.2	70.2	80.2	90.2	100.2
dt	62	72	85	100	110	120
Dub	85	100	105	120	135	145
E	121	131	141	161	181	201
E1	3.5	3.5	4.2	4.2	4.2	5.2
Lt1	170	195	257	289	317	355
Lu1	191	216	278	310	338	376
Lub	35	35	35	35	35	35
m1	21	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					
H7	30	35	40	45	55	70
	35	40	45	50	60	75
	38	45	50	55	65	80
	40	48	55	60	70	85
	42	50	60	70	75	90
	45	55	65	75	80	
	48					
n	7	8	8	10	10	10
n1	3	3.5	3.5	4	4	4
b	UNI 6604					
t2	UNI 6604					

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

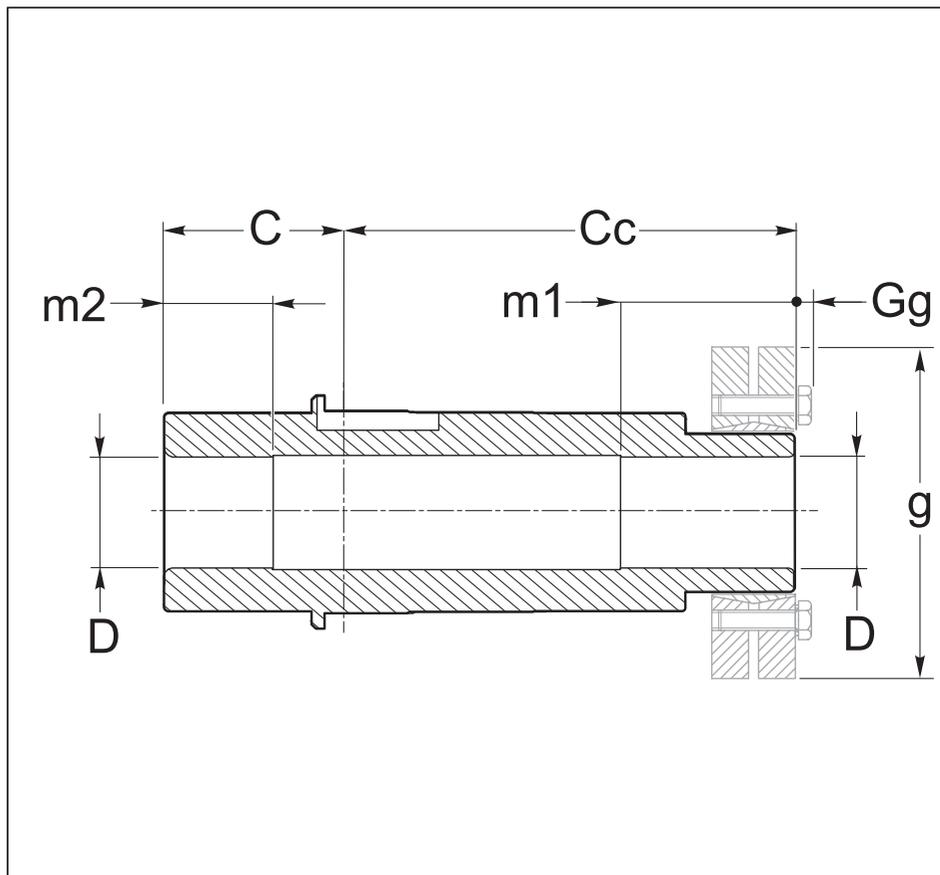
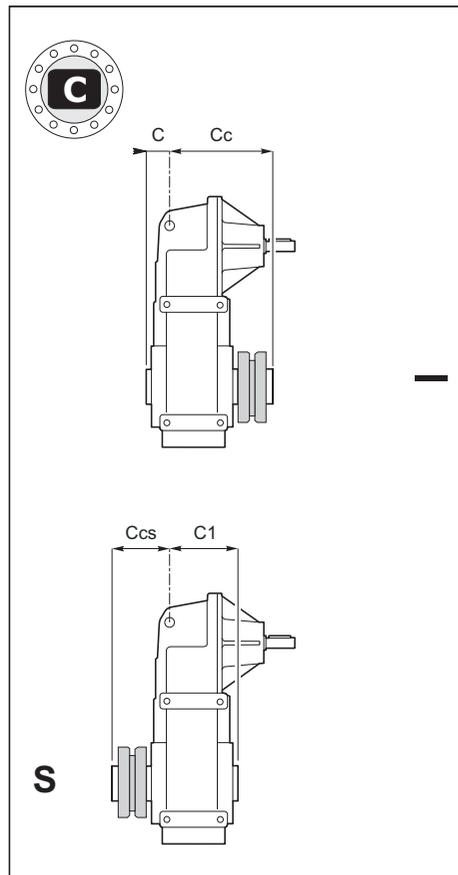


F



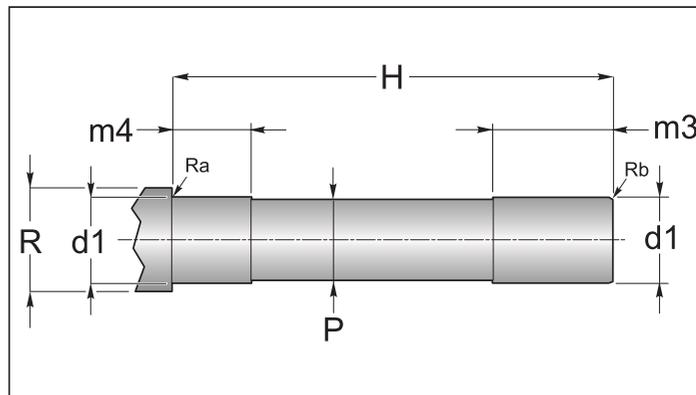


25-45-65-85-95



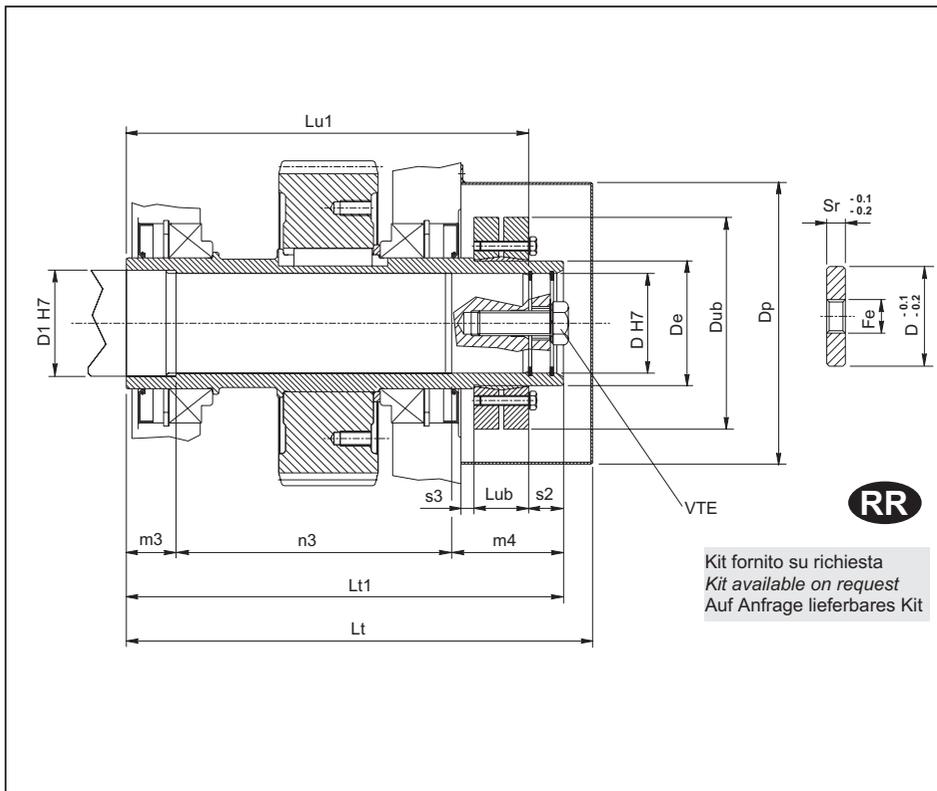
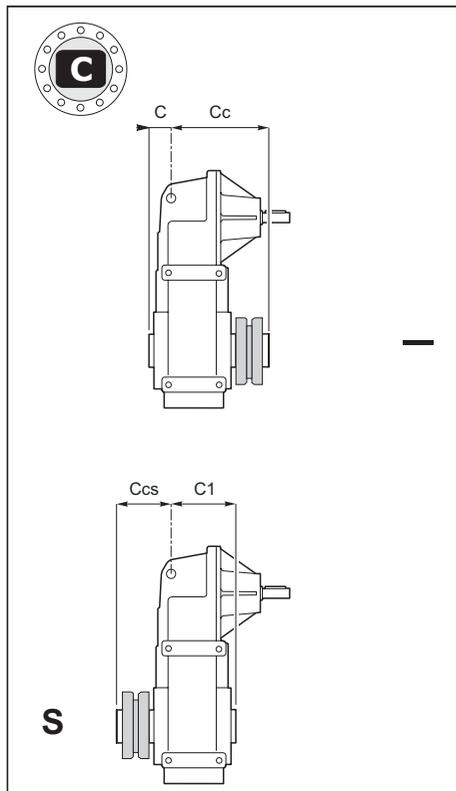
	25	45	65	85	95
C	44.5	46	33.5	42	52
Cc	82.5	109	124.5	143	163
C1	60.5	84	96.5	113	128
Ccs	66.5	71	61.5	72	87
D H7	20	30	35	45	55
m1	35	35	40	50	60
m2	25.5	30	30	30	50
g	50	72	80	100	115
Gg	3.5	4	4	4	4

	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		





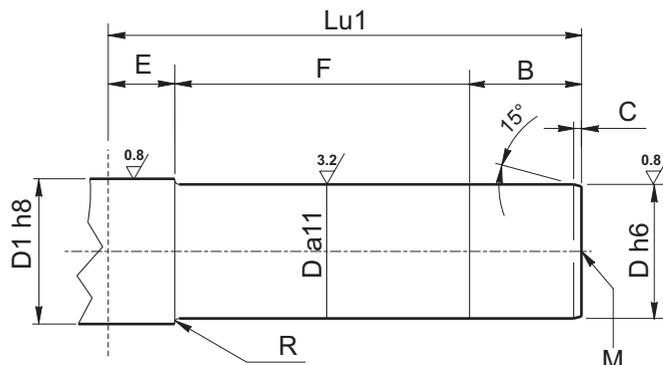
105-115-125-135



	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	100		
D1	65	75	75	85	95	110		
De	80	90	90	100	120	130		
Sr	15		15		18		18	
Fe	M27		M27		M30		M30	
VTE	M20x60		M20x60		M24x75		M24x75	

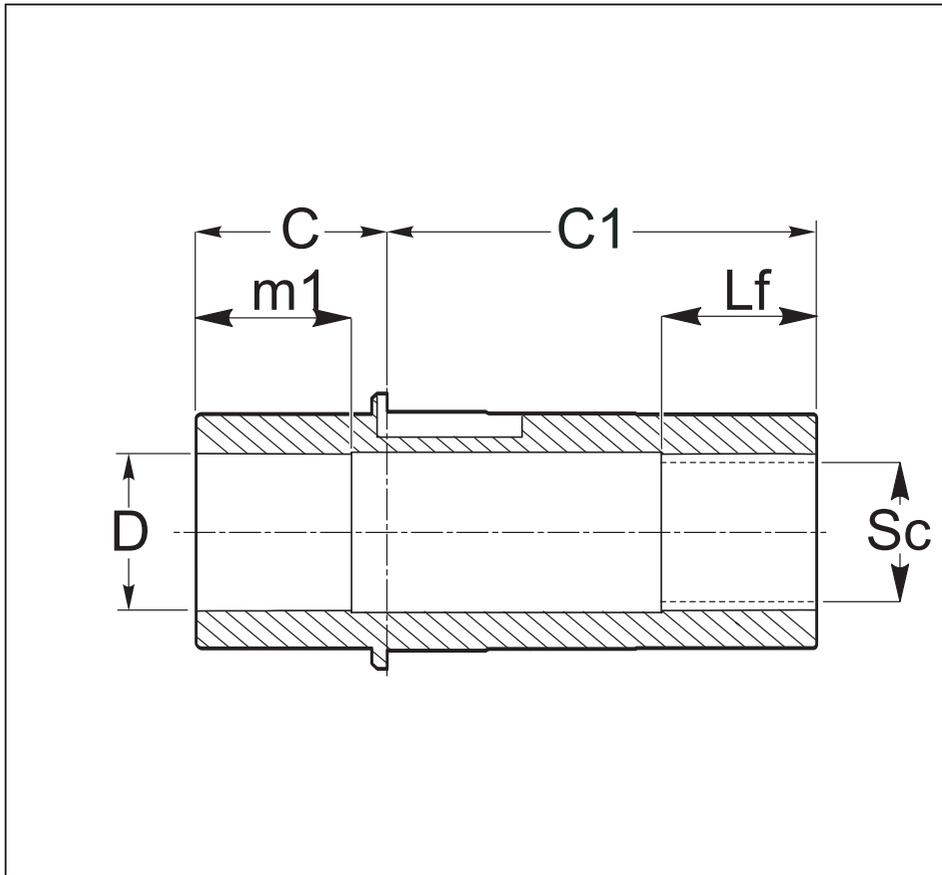
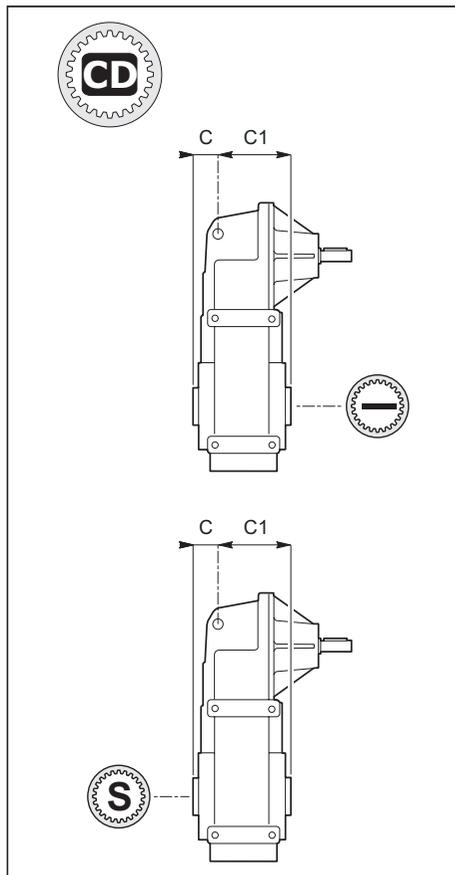
Perno macchina / Customer shaft / Maschinachse

	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





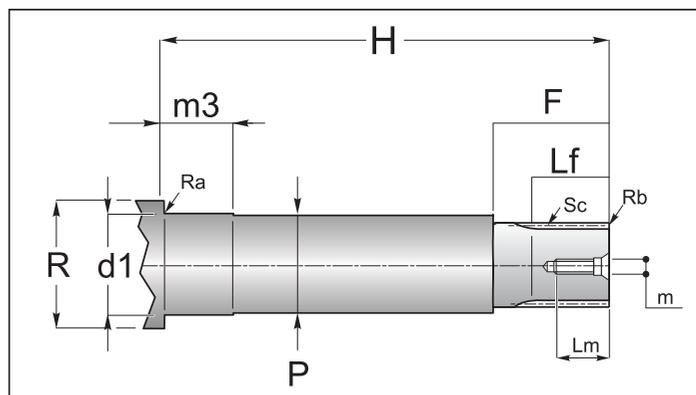
25-45-65-85-95-105-115-125-135



	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	





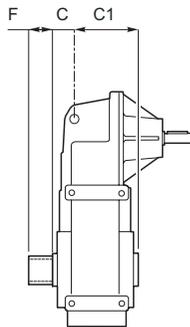
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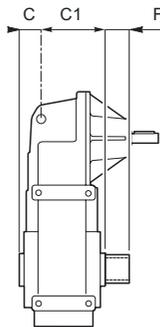




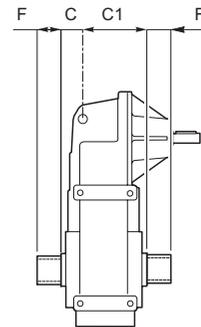
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S

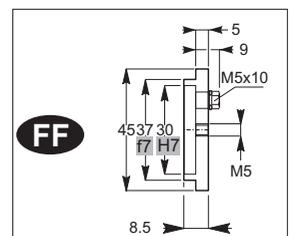
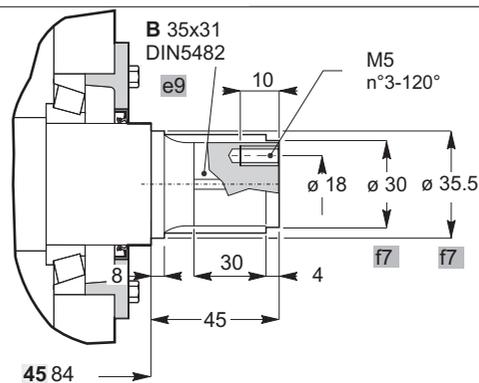


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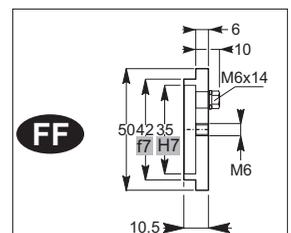
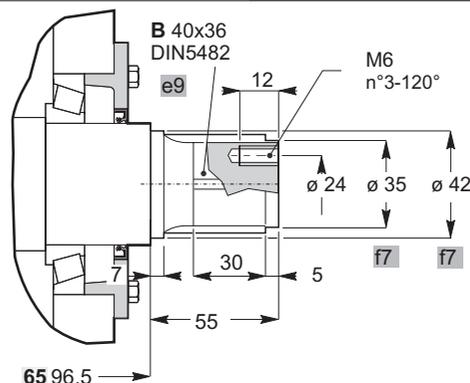
	C	C1	de (h10)	F	Profilo scanalato / Spined profile / Keilprofil					
					Sc	Z	mn	α	dc (f7)	Sp
45	46	84	Look Drawing			DIN 5482				Look Drawing
65	33.5	96.5				DIN 5482				
85	42	113				DIN 5482				
95	52	128				DIN 5482				
105	85.5	156.5	69.3	70	FIAT 70	26	2.58	30°	70	25
115	83.5	190.5	79.3	70	FIAT 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

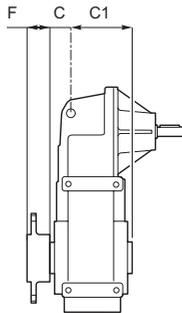
1.8.1 - ABTRIEBSWELLEN

<p>85</p>		<p>FF - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p>95</p>		<p>FF - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p>105-115 125-135</p>		<p>FF - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>

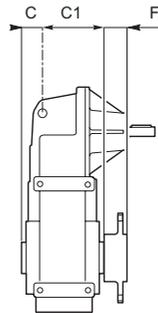




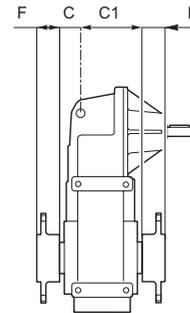
25-45-65-85-95-105-115-125-135



S



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	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		
45	Look Drawing			46	84	Look Drawing									
65				33.5	96.5										
85				42	113										
95				52	128										
105	69.3	200	160	85.5	156.5	100	4	17.5	M10	70	43	11	16	180	
115	79.3	220	180	83.5	190.5	110	4	19.5	M10	70	40	12	18	200	
125	94.3	240	190	74.3	227.8	130	8	19.5	M10	75	40	15	20	220	
135	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>85</p>		<p>FF - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p>95</p>		<p>FF - Kit fornito su richiesta Kit available on request Auf Anfrage lieferbares Kit</p>
<p>105-115</p>		<p>FF - Kit fornito su richiesta Kit available on request</p>
<p>125-135</p>		<p>FF - Kit fornito su richiesta Kit available on request</p>





AV

ANTIVIBRANTE VKL

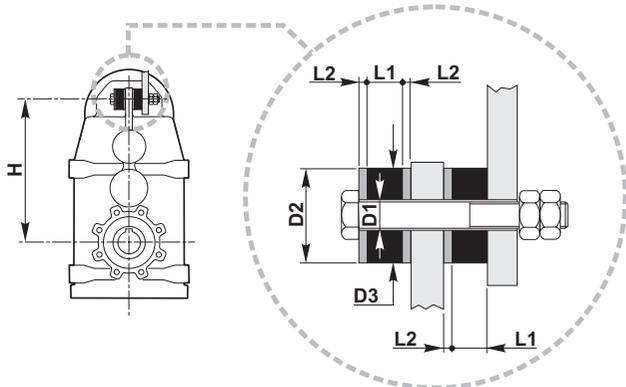
Per riduttori e motoriduttori pendolari.

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

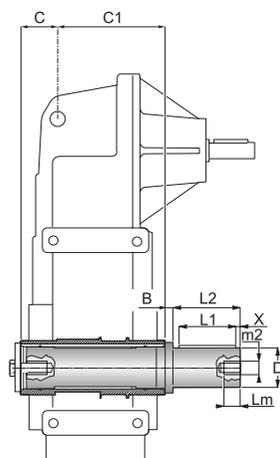
Tutti i riduttori sono forniti con albero lento cavo. A richiesta, possono essere forniti kit di montaggio per alberi sporgenti comprensivi di linguette, rondelle e viti di fissaggio. Le dimensioni delle linguette sono conformi alle norme UNI 6604-69.

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 ₂	L ₁	L ₂	L _m	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:

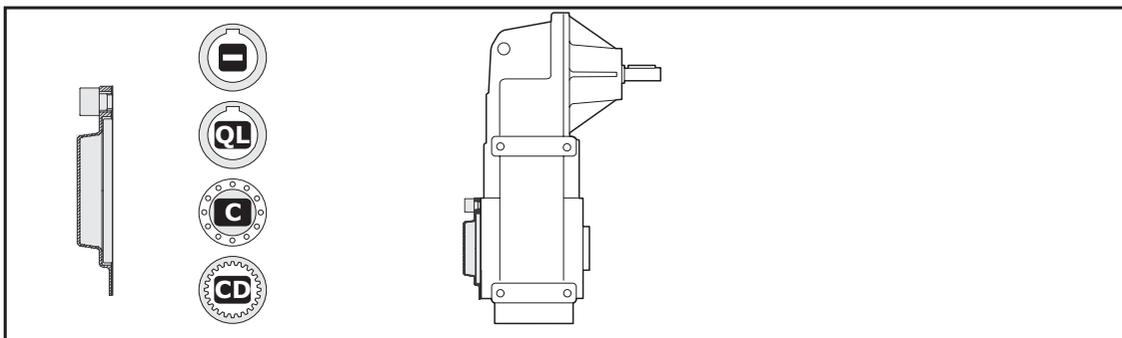
Die Einseitige Abtriebswelle wird fuer die Montage bei Getrieben mit Standart Hohlwelle geliefert.



PROT PROT. - Coperchio di protezione

PROT. - Protection cover

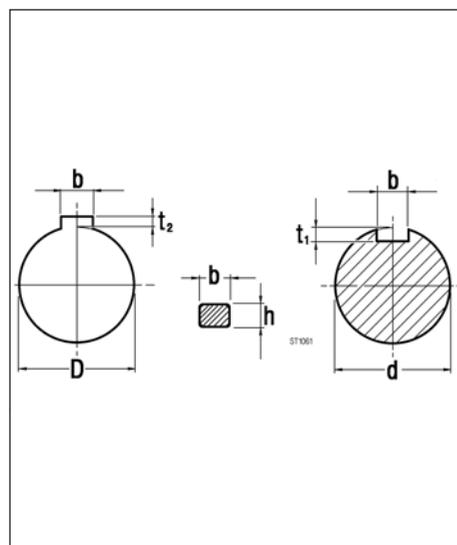
PROT - Schutzvorrichtungdeckel



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	



