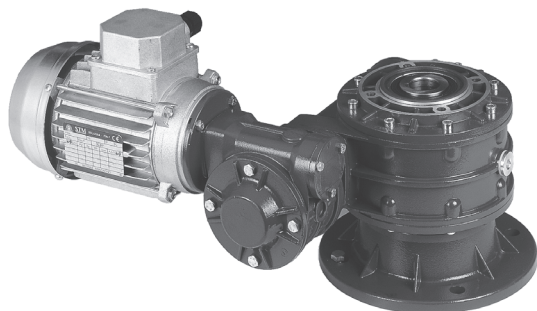
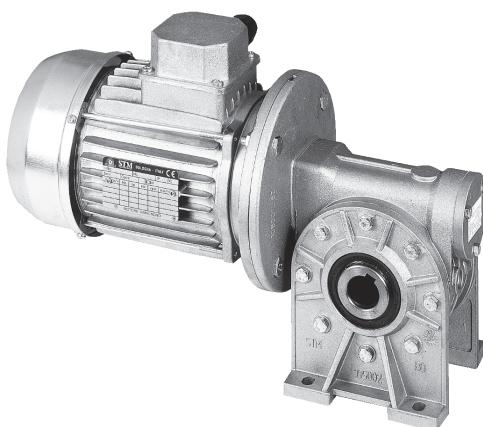




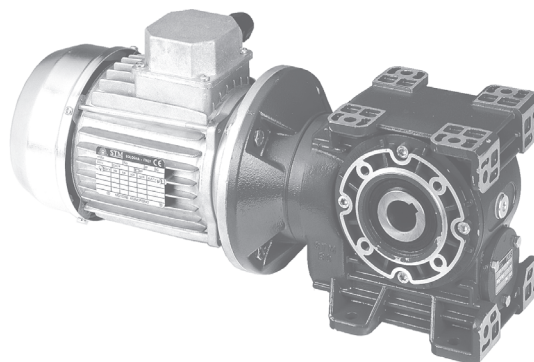
1.0 RIDUTTORI A VITE SENZA FINE WORM GEARBOXES SCHNECKENGETRIEBE

				Pag. Page Seite
1.1	Caratteristiche tecniche	<i>Technical characteristics</i>	Technische Eigenschaften	B2
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1.5	Carichi radiali e assiali	<i>Axial and overhung loads</i>	Radiale und Axiale Belastungen	B15
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1.8	Dimensioni	<i>Dimensions</i>	Abmessungen	B40
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RI
RMI
RMI..G..



CRI
CRMI
CRMI..G..



CR
CB



1.1 Caratteristiche tecniche

I nostri riduttori a vite senza fine vengono realizzati seguendo il criterio della massima affidabilità nel tempo, risultato ottenuto utilizzando ottimi materiali e moderni criteri di progettazione.

Le viti senza fine sono realizzate in acciaio e vengono cementate, temprate e rettificcate. La rettifica sul filetto, nei rapporti di riduzione per i quali il valore del modulo lo consente, viene eseguita con profilo ZI migliorando così i contatti tra le superfici dentate e, conseguentemente, il rendimento e la silenziosità di funzionamento.

Giunto:

1 - ACCIAIO:

- RMI - UMI 50 Ø19
- RMI - UMI 63 Ø24
- RMI - UMI 75 Ø19, Ø24, Ø28
- RMI - UMI 90 Ø19, Ø24, Ø28
- RMI - UMI 110 Ø24, Ø28, Ø38

2 - Tecnopolimero:

- RMI - UMI 40 Ø9, Ø11, Ø14
- RMI - UMI 50 Ø11, Ø14
- RMI - UMI 63 Ø14, Ø19

Sono utilizzati cuscinetti a rulli conici o radiali a sfere di qualità per garantire una lunga durata.

Il programma di fabbricazione prevede anche, l'applicazione di un limitatore di coppia con allarme di arresto e l'assemblaggio con variatore.

1.1 Technical characteristics

Our gearboxes are manufactured with high quality material and modern design in order to guarantee the maximum reliability and duration.

Wormshafts are made of steel and are casehardened, hardened and ground.

The thread grinding in the gear ratios that the module value permits is carried out with ZI-Profile. This improves the contact between the toothed surfaces and therefore performance and reduces operating noise.

Coupling:

1 - STEEL:

- RMI - UMI 50 Ø19
- RMI - UMI 63 Ø24
- RMI - UMI 75 Ø19, Ø24, Ø28
- RMI - UMI 90 Ø19, Ø24, Ø28
- RMI - UMI 110 Ø24, Ø28, Ø38

2 - Technopolymer:

- RMI - UMI 40 Ø9, Ø11, Ø14
- RMI - UMI 50 Ø11, Ø14
- RMI - UMI 63 Ø14, Ø19

To guarantee a long life, taper roller bearing or radial ball bearings are used.

Our range also provides possible application of torque limiters equipped with stop devices and assembly on to variators.

1.1 Technische Eigenschaften

Unsere Untersetzungsgetriebe werden unter Verwendung von besten Materialien und mit modernsten Herstellungsmethoden hergestellt, um eine maximale Zuverlässigkeit sowie eine lange Lebensdauer zu garantieren.

Die Schnecken sind aus einsatzgehärtetem, gehärtetem und geschliffenem Stahl. Das Gewindeschleifen erfolgt in den vom Modulwert zulässigen Übersetzungsverhältnissen mit ZI-Profil, wodurch die Kontakte zwischen den verzahnten Oberflächen und folglich die Leistung und der geräuscharme Betrieb verbessert werden.

Kupplung:

1 - STAHL:

- RMI - UMI 50 Ø19
- RMI - UMI 63 Ø24
- RMI - UMI 75 Ø19, Ø24, Ø28
- RMI - UMI 90 Ø19, Ø24, Ø28
- RMI - UMI 110 Ø24, Ø28, Ø38

2 - Technischer Kunststoff:

- RMI - UMI 40 Ø9, Ø11, Ø14
- RMI - UMI 50 Ø11, Ø14
- RMI - UMI 63 Ø14, Ø19

Um eine lange Lebensdauer zu gewährleisten, werden Kegelrollenlager oder Radialkugellager von hoher Qualität verwendet. Die Getriebe können mit einer Rutschkupplung, einem einstellbaren Drehmomentbegrenzer und mit einem Drehzahlregler ausgerüstet werden.

1.1 Caratteristiche tecniche

CARATTERISTICHE PECULIARI:

- Ingombri **Ridotti**;
- Semplicità di connessione;
- **NO** Fretting;
- **NO** Vibrazioni;
- Progettato per garantire efficienza e affidabilità con servizi gravosi in presenza di urti e con numerosi avviamenti.

MATERIALE:

Tecnopolimero;
Acciaio.

MANUTENZIONE:

- Facilità di Montaggio motore;
- Facilità di Smontaggio

MODULARITÀ:

-Possibilità di utilizzare il giunto sulle serie "U" - "RMI...G..." - "CRMI...G"- "S".

TEMPI DI CONSEGNA:

- Maggiore modularità del prodotto;
- Stock a magazzino del prodotto assemblato.

1.1 Technical characteristics

SPECIAL FEATURES:

- Reduced** Sizes
- Simplified connections*
- No fretting**
- No vibrations**
- Designed in order to warrant efficiency and reliability with heavy duty in case of bumps and frequent start-ups***Simplified connections**

MATERIAL:

Technopolymer;
Steel.

MAINTENANCE:

- Easy motor assembly;*
- Easy disassembly.*

MODULARITY:

Possibility of coupling's using specially those of "U", RMI...G", - "CRMI...G" - "S" series.

DELIVERY DATES

- Higher product's modularity*
- Stock warehouse finished product.*

1.1 Technische Eigenschaften

SONDERMERKMALE:

- Verringerter Platzbedarf;
- Einfacher Anschluss;
- Keine Abnutzung;
- Keine Vibrationen;
- Gewährleistet Effizienz und Zuverlässigkeit bei hoher Belastung, Stossbeeinträchtigung und zahlreichen Maschinen-Starts.

MATERIAL:

Technischer Kunststoff;
Stahl.

WARTUNG:

- Einfacher Motoreinbau;
- Einfacher Ausbau.

MODULARITÄT

Die Kupplung kann in den Serien „U“ – „RMI...G...“ – „CRMI...G“ und „S“ verwendet werden.

LIEFERZEITEN:

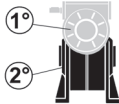
- Größere Modularität des Produktes;
- Montiertes Produkt im Lagerbestand

- **[*1] Bisporgenza Vite:**
1)RI-RMI CR-CB
 Nessuna indicazione = vite senza bisporgenza;
B = vite con bisporgenza.

2)CRI-CRMI

Nessuna indicazione = vite senza bisporgenza;
B:Ex-CRI28/50..B-Bisporgenza 2°
...B:Ex-CRI28/50..28B-Bisporgenza 1°

B.. B:Ex-CRI28/50..B28 B - Bisporgenza 1° e 2°.



N.B.

Per le grandezze 40, 50, 63 sono possibili solo queste configurazioni:
RMI: La bisporgenza è realizzata solo con giunto;
CRMI: La bisporgenza sul 1° è realizzata solo con giunto;

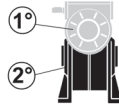
- **[*2] Cuscinetti Conici Uscita:**
 Nessuna indicazione = Cuscinetti Uscita del tipo radiale a una corona di sfere;
C = Cuscinetti conici in uscita.
N.B. Per Le versioni con limitatore di coppia questa opzione non è disponibile.
- **[*3] [*4] [*5] [*6] :**Limitatore di Coppia:
 Vedere Capitolo 4.0 del presente catalogo.
- **[*7] Diametro albero:**
 Nessuna indicazione = diametro foro standard;
diametro foro opzionale = (vedi tabella).

- **[*1] Double Extended Input Shaft**
1)RI-RMI CR-CB
 No indications = input shaft without double extension;
B = double extended input shaft.

2)CRI-CRMI

No indications = input shaft without doubleextension;
B:Ex-CRI28/50..B-Double Extension 2°
..B:Ex-CRI28/50..28B-Double Extension 1°

B..B:Ex-CRI28/50..B28 B-Double Extension 1° and 2°.



N.B.

These are the only configurations possible for sizes 40, 50, 63:
RMI: The double extension is made by using a couplingt;
CRMI: The double extension on 1° is made by using a coupling;

- **[*2] Tapered Output Bearings:**No indications = Output Radial Ball Bearing
C = Tapered output bearings.
- **N.B.** For the versions using limiters
- **[*3] [*4] [*5] [*6] :**Torque Limiters:
 See Chapter 4.0 in this catalog.
- **[*7] Shaft Diameter:**
 No indications = standard hole diameter;
optional hole diameter = (see table).

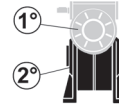
- **[*1] Doppelseitige Schneckenwelle**
1)RI-RMI CR-CB

Keine Angabe = Schnecken ohne doppeltes Wellenende
B = Schnecke mit doppeltem Wellenende

2)CRI-CRMI

Keine Angabe = Schnecke ohne doppeltes Wellenende
B: Ex- CRI28/50..B 2°
...B:Ex-CRI28/50..28B 1°

B.. B:Ex-CRI28/50..B28 B 1° und 2°



Hinweis

Für die Größen 40, 50, 63 sind nur diese Konfigurationen möglich
RMI: Das doppelte Wellenende wurde nur mit Kupplung hergestellt;
CRMI: Das doppelte Wellenende auf 1° wurde nur mit Kupplung hergestellt;

- **[*2] Abtriebskegellager:**
 Keine Angabe = Abtriebslager vom Typ Radial-Kugellager;
C = Ausgangskegellager.
Hinweis: Für die Ausführung mit Drehzahlbegrenzer
- **[*3] [*4] [*5] [*6] :**Rutschkupplung:
 Siehe Kapitel 4 dieses Katalogs.
- **[*7] Wellendurchmesser:**
 Keine Angabe = Standard-Bohrungsdurchmesser
Optionaler Bohrungsdurchmesser = (siehe Tabelle).

		Grandezza - Size - Größe									
RI - RMI		28	40	50	63	70	85	110	130	150	180
CRI - CRMI		28/28	28/40 40/40	28/50 40/50	28/63 40/63	28/70 40/70 50/70 63/70	40/85 50/85 63/85 70/85	50/110 63/110 70/110 85/110	63/130 70/130 85/130	85/150 110/150	85/180 110/180 130/180
CR - CB		—	40	50	—	70	85	110	—	—	—
D H7	Standard	14	19	24	25	28	32	42	48	55	65
	Optional	-	(18)	(25)	-	-	(35)	-	-	-	-

- **[*8] Lato flangia uscita:**
 Nessuna indicazione = flangia uscita con montaggio destro (flange dal lato come indicato nelle figure del catalogo);
SIN = flange uscita con montaggio sinistro (flange dal lato opposto alle figure indicate a catalogo).

- **[*8] Mounting position output side:**
 No indication (standard) = output flange on right side (like indicated in the figures);
SIN = output flange on left side (flanges on the opposite side like indicated in figures).

- **[*8] Montageseite Abtriebsflansch:**
 Keine Angabe (Standard) = Abtriebsflansch rechts (wie in den Abbildungen dargestellt)
SIN = Abtriebsflansch links (gegenüber der Position in den Katalogabbildungen).

ALTRE SPECIFICHE:

- posizione della morsettiera del motore se diversa da quella standard (1)
- lubrificante (non per i tipi 28,40,50,63, 70,85 già lubrificati a vita)
- elica della vite sinistra (esecuzione speciale)
- posizione di montaggio con indicazione tappi di livello e sfiato;se non specificato si considerano standard le posizioni M1

FURTHER SPECIFICATION:

- terminal board box position if different from standard (1)
- lubrication (except for size 28,40,50,63, 70,85 lubricated for life)
- left helix (special version)
- mounting position. Indications must be given regarding level and breather plugs. If not specified positions 01 are considered standard

WEITERE SPEZIFIKATIONEN:

- Stellung des Klemmenkastens des Motors, falls diese von der Standard- Ausführung abweicht (1)
- Schmiermittelfüllung (außer bei den wartungsfreien Typen 28,40,50,63,70,85)
- Linksgängige Schraubenlinie der Schnecke (Spezialausführung)
- Montagestellung mit Angabe der Ölpegel und Entlüfterstöpsel. Falls nicht anders angegeben, gelten die Pos. 01 als Standard.

ACCESSORI

- alberi lenti
- braccio di reazione

ACCESSORIES

- output shafts
- Torque arm

ZUBEHÖR

- Abtriebswellen
- Drehmomentstütze

1.3 Versioni

1.3 Versions

1.3 Ausführungen

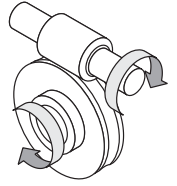
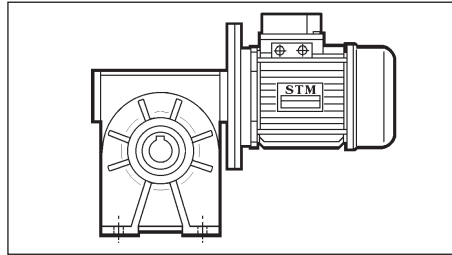
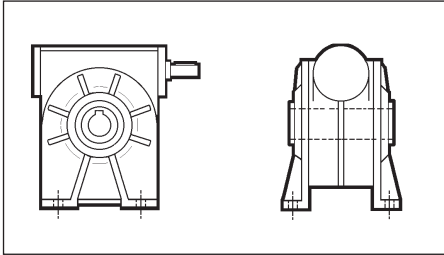
RI

RMI

Senso di rotazione standard
Standard direction of rotation
Drehrichtung Standard

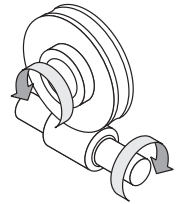
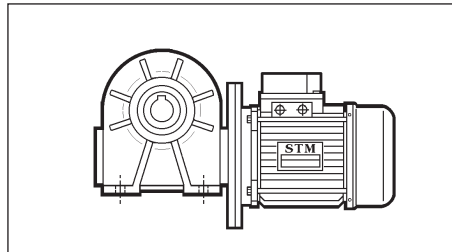
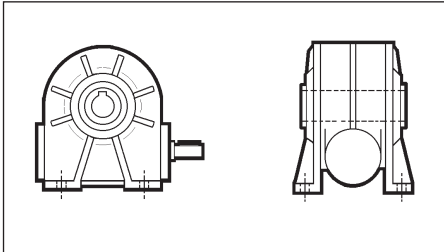
S

28 - 180



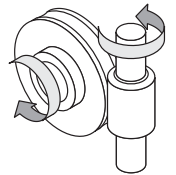
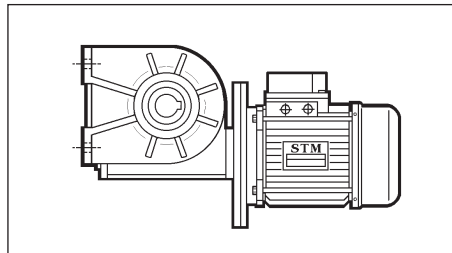
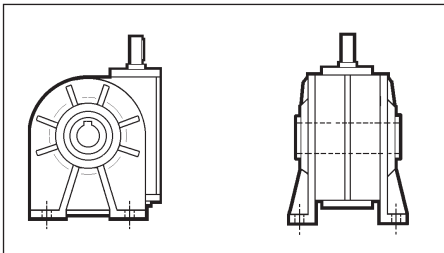
I

28 - 180



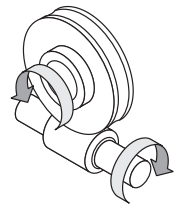
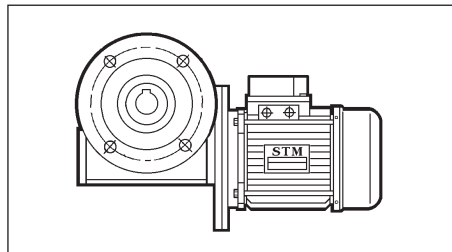
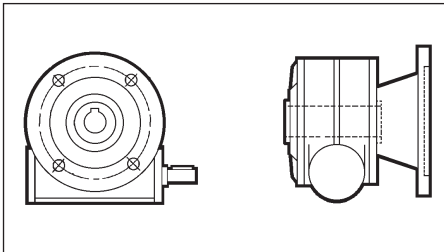
D

28 - 180



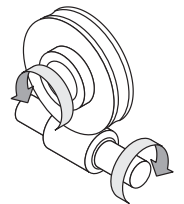
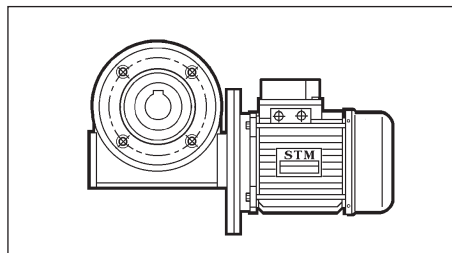
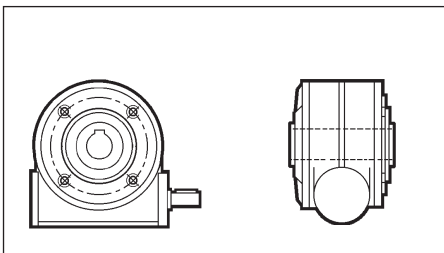
FL

(F1, F2, F3, F4)
28 - 180



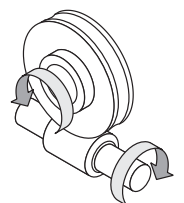
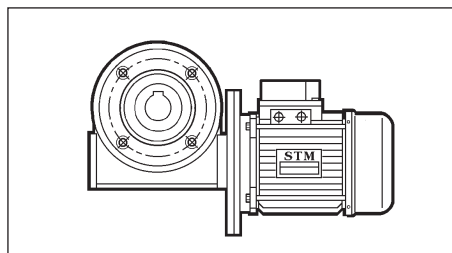
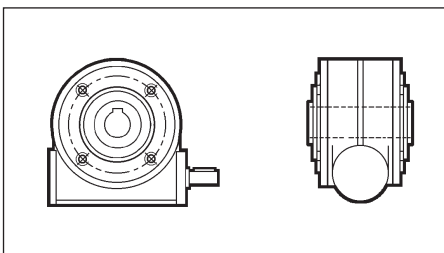
P

28, 85 - 180

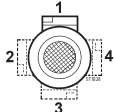


PP

40 - 70



STANDARD



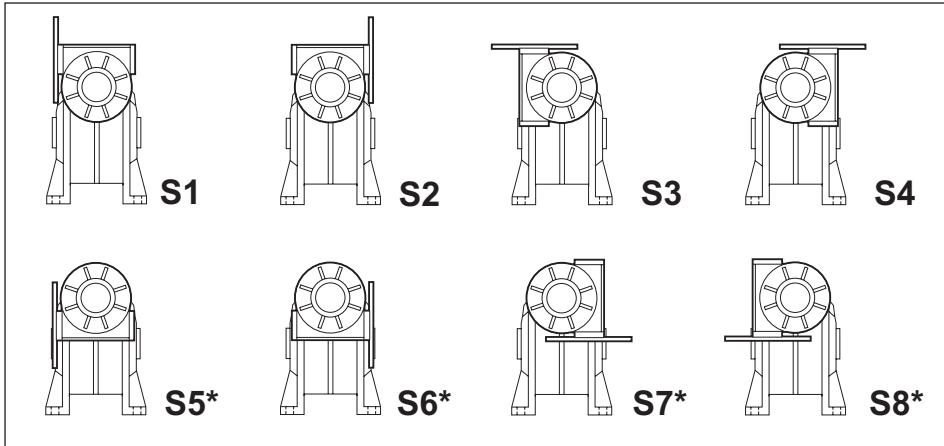
Posizione morsetti
Terminal board position
Lage des Klemmenkastens

Il senso dell'elica è destro
The helix is right-handed
Die Schnecke ist rechtsgängig

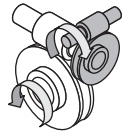
CRI - CRMI Versione di montaggio / *Mounting version* Montageausführungen

Senso di rotazione standard
Standard direction of rotation
Drehrichtung Standard

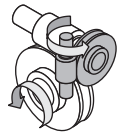
S
28 - 180



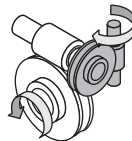
S1
S2



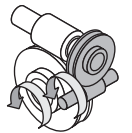
S3
S8



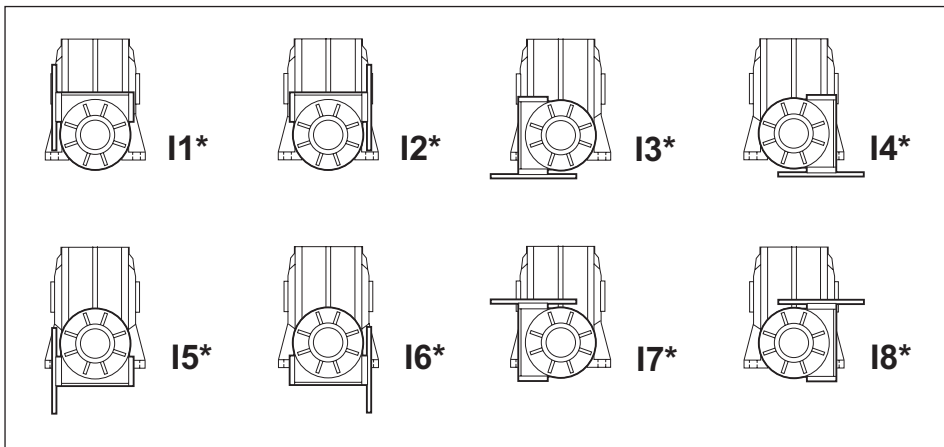
S4
S7



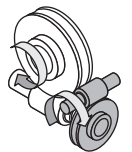
S5
S6



I
28 - 180



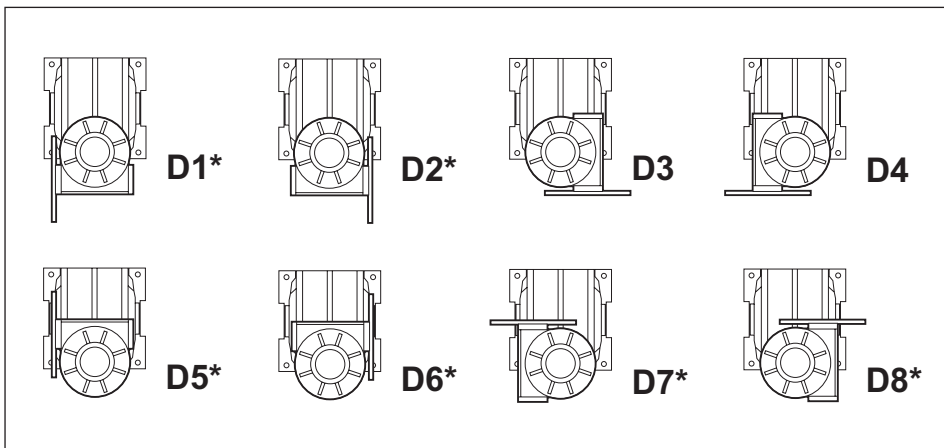
I1
I2
D5
D6



I3
I7
D4
D7



D
28 - 180



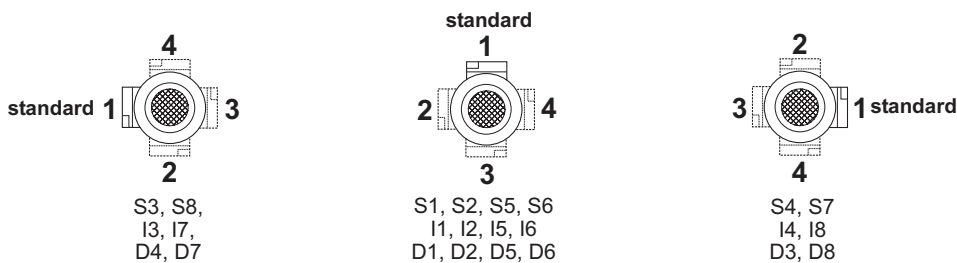
I4
I8
D3
D8



I5
I6
D1
D2



Posizione morsettiera / *Terminal board position* / Lage des Klemmenkastens



Il senso dell'elica è destro
The helix is right-handed
Die Schnecke ist rechtsgängig

N.B.
Per l'utilizzo di riduttori PAM o motoriduttori, per le versioni contrassegnate con (*) chiedere l'applicabilità delle flange B5 e B14 al ns. Servizio tecnico.

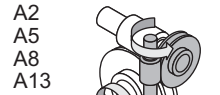
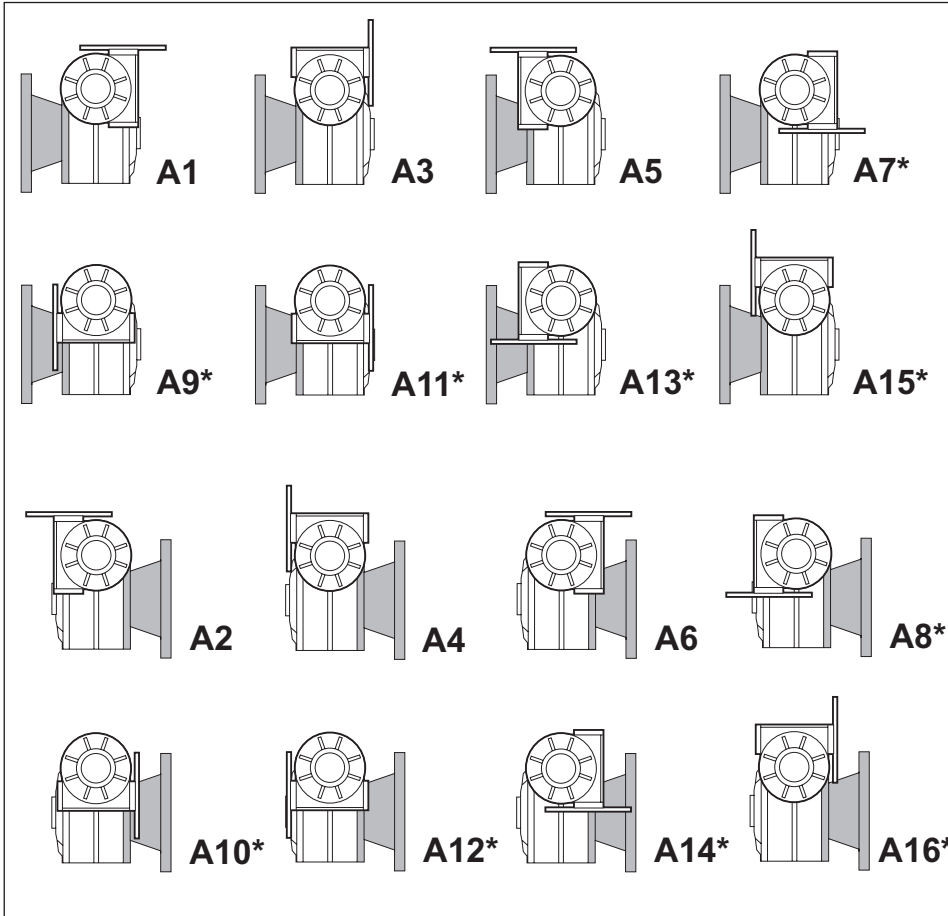
NOTE:
When selecting motorised or PAM (motorflange pre-arranged) gearboxes please ask our technicians availability of B5 and B14 flanges on the version marked (*).

HINWEIS:
Während der Auswahl (der motorisierte oder PAM Getriebe – mit Motorflansch aufgebaut) bitte unsere Techniker die Möglichkeit B5/B14 Flansch auf der benötigte Ausführung befragen.

CRI - CRMI Versione di montaggio / *Mounting version* Montageausführungen

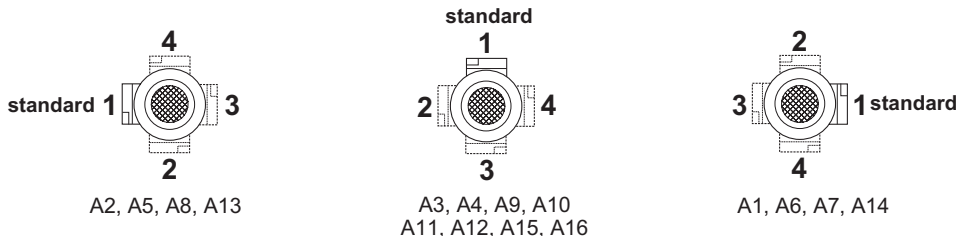
Senso di rotazione standard
Standard direction of rotation
Drehrichtung Standard

A
(FL, F1
F2, F3, F4)
28 - 180



Il senso dell'elica è destro
The helix is right-handed
Die Schnecke ist rechtsgängig

Posizione morsetteria / Terminal board position / Lage des Klemmenkastens



N.B.
Per l'utilizzo di riduttori PAM o motoriduttori, per le versioni contrassegnate con (*) chiedere l'applicabilità delle flange B5 e B14 al ns. Servizio tecnico.

NOTE:
When selecting motorised or PAM (motorflange pre-arranged) gearboxes please ask our technicians availability of B5 and B14 flanges on the version marked (*).

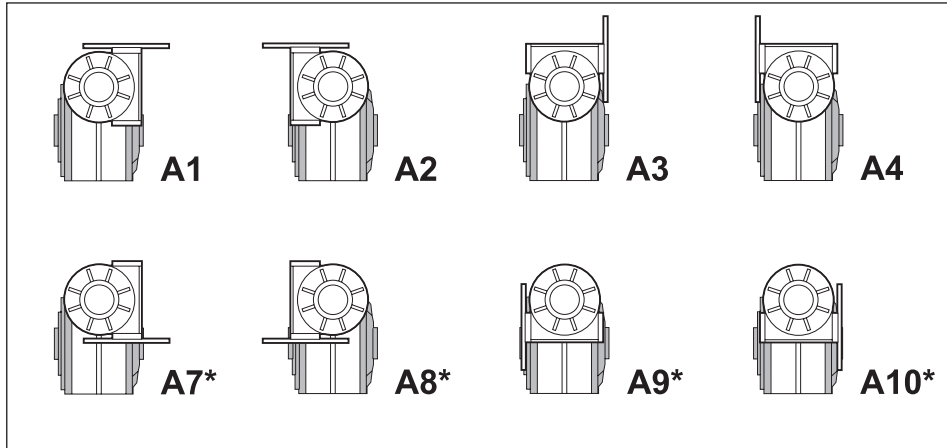
HINWEIS:
Während der Auswahl (der motorisierte oder PAM Getriebe – mit Motorflansch aufgebaut) bitte unsere Techniker die Möglichkeit B5/B14 Flansch auf der benötigte Ausführung befragen.

CRI - CRMI

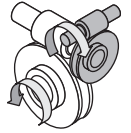
Versione di montaggio / Mounting version Montageausführungen

Senso di rotazione standard
Standard direction of rotation
Drehrichtung Standard

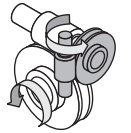
A
(PP)
40 - 70



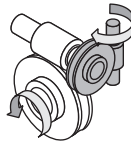
A3
A4
A15
A16



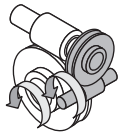
A2
A5
A8
A13



A1
A6
A7
A14



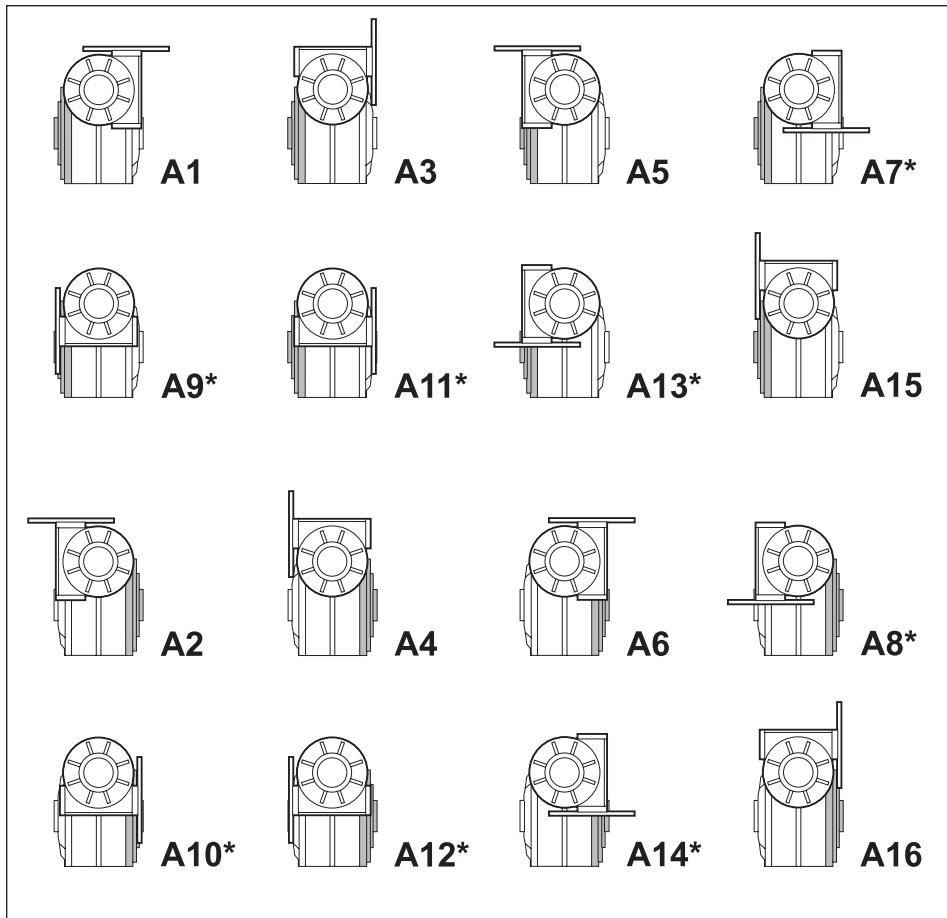
A9
A10
A11
A12



B

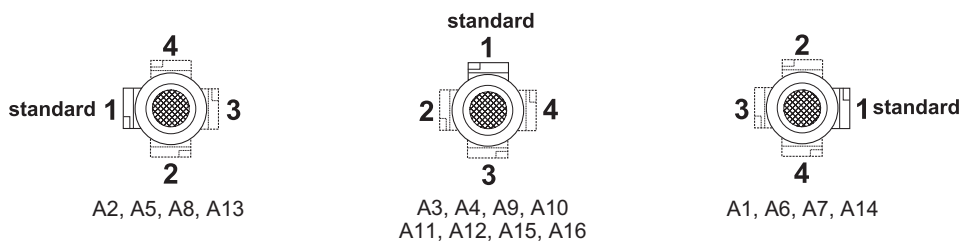


A
(P)
28,
85 - 180



Il senso dell'elica è destro
The helix is right-handed
Die Schnecke ist rechtsgängig

Posizione morsettiere / Terminal board position / Lage des Klemmenkastens



N.B.
Per l'utilizzo di riduttori PAM o motoriduttori, per le versioni contrassegnate con (*) chiedere l'applicabilità delle flange B5 e B14 al ns. Servizio tecnico.

NOTE:
When selecting motorised or PAM (motorflange pre-arranged) gearboxes please ask our technicians availability of B5 and B14 flanges on the version marked (*).

HINWEIS:
Während der Auswahl (der motorisierte oder PAM Getriebe – mit Motorflansch aufgebaut) bitte unsere Techniker die Möglichkeit B5/B14 Flansch auf der benötigte Ausführung befragen.



1.3 Versioni

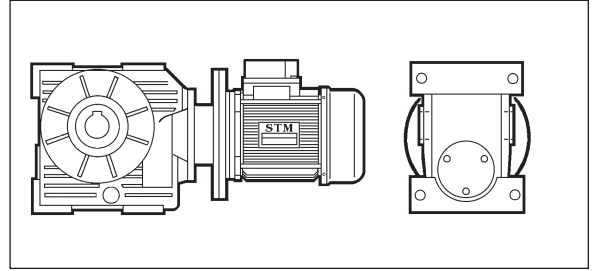
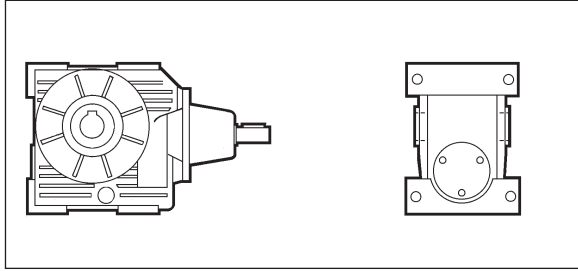
1.3 Versions

1.3 Ausführungen

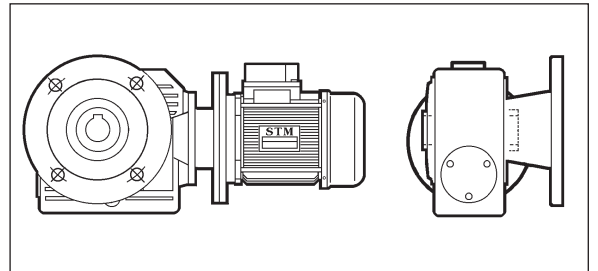
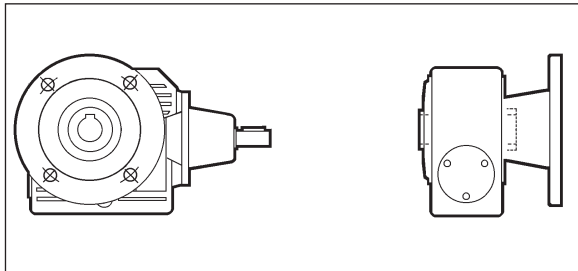
CR

CB

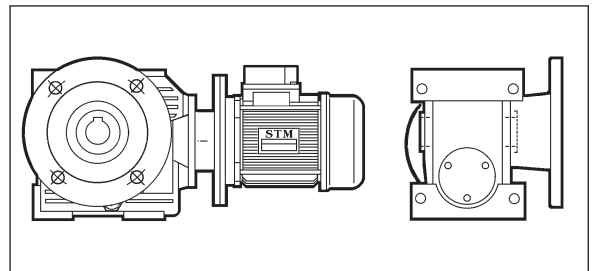
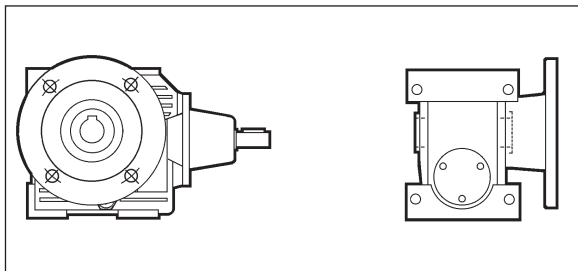
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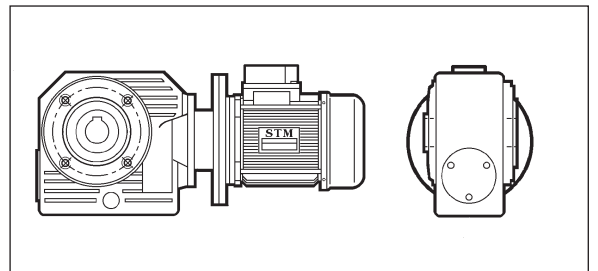
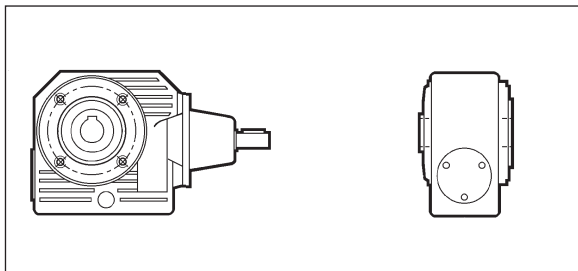
F, F1,
F2, F3, F4



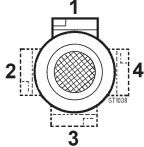
/F, /F1,
/F2, /F3, /F4



P

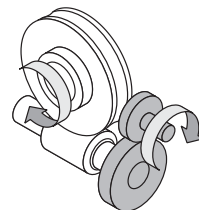


STANDARD



Posizione morsetti
Terminal board position
Lage des Klemmenkastens

Senso di rotazione standard
Standard direction of rotation
Drehrichtung Standard



Il senso dell'elica è destro
The helix is right-handed
Die Schnecke ist rechtsgängig



1.4 Lubrificazione

1.4 Lubrication

1.4 Schmierung



Lubrificazione riduttori
Gearboxes lubrication
Schmierung Getriebes

RI - RMI

Generalità

Si consiglia l'uso di oli a base sintetica. Vedere a tale proposito le indicazioni riportate nel capitolo A, paragrafo 1.6 e 1.2.. Nella tab. 2.2 sono riportati i quantitativi di olio necessari per il corretto funzionamento dei riduttori.

Prescrizioni in fase di ordine e stato di fornitura

I riduttori delle grandezze 28, 40, 50, 63, 70, 85 sono forniti completi di olio sintetico di viscosità ISO 320. Per questi riduttori **non è necessario** specificare la posizione di montaggio.

I riduttori delle grandezze 110, 130, 150, 180 sono forniti predisposti per lubrificazione ad olio ma privi di lubrificante il quale potrà essere fornito a richiesta. Per questi riduttori **è necessario** specificare la posizione di montaggio.

General information

The use of synthetic oil is recommended. (see details in Chapter A, paragraph 1.6 and 1.2). Tab. 2.2 shows the quantities of oil required for correct worm gearbox performance.

Ordering phase requirements and state of supply

Worm gearboxes sizes 28, 40, 50, 63, 70, and 85 come supplied with ISO 320 viscosity synthetic oil.

It is not necessary to specify mounting positions with these worm gearboxes.

Size 110, 130, 150, 180 worm gearboxes require oil lubrication but are supplied without lubricant that can be requested separately. It is necessary to specify the mounting position for these worm gearboxes.

Allgemeines

Der Einsatz von synthetischem Öl wird empfohlen. (Siehe diesbezüglich die Hinweise im Kapitel A, abschnitt 1.6 und 1.2.

In der Tabelle Tab. 2.2 werden die erforderlichen Öfüllmengen für einen störungsfreien Betrieb der Getriebe aufgeführt.

Vorgaben für die bestellung und den lieferzustand

Die Getriebe in den Baugrößen 28, 40, 50, 63, 70 und 85 werden komplett mit Synthetiköl mit einer Viskosität ISO 320 geliefert.

Für diese Getriebe **muss** die Einbaulage **nicht** angegeben werden.

Die Getriebe in den Baugrößen 110, 130, 150, 180 sind bei der Lieferung für die Ölschmierung vorbereitet, enthalten jedoch kein Schmiermittel. Dieses kann auf Anfrage geliefert werden. Für diese Getriebe **muss** die Einbaulage verbindlich angegeben werden.

Posizioni di montaggio RI-RMI

Mounting positions RI-RMI

Montagepositionen RI-RMI

	M1	M2	M3	M4	M5	M6

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

* Disponibile su richiesta / Available on request / Erbältheb auf Anfrage



Tab. 2.2

Quantità di lubrificante / Lubricant Quantity / Schmiermittelmenge (kg)									
RI - RMI	Posizioni di montaggio Mounting Positions Montagepositionen (S,I,D,F)						Stato di fornitura State of supply Lieferzustand	n°. tappi olio No. of plugs Anzahl Schrauben	Posizione di montaggio Mounting position Montageposition
	M1	M2	M3	M4	M5	M6			
28	0.045						Riduttori forniti completi di lubrificante sintetico Gearboxes supplied with synthetic oil Getriebe werden mit synthetischem Öl geliefert	1	Non necessaria Not necessary Nicht erforderlich
RI - 40	0.100							1	
RI - 50	0.190							1	
RI - 63	0.450							1	
70	0.600							1	
85	1.100							1	
110	2.6	2.1 ⁽¹⁾				Riduttori predisposti per lubrificazione ad olio Gearboxes supplied ready for oil lubrication Getriebe sind für Ölschmierung vorgerüstet	3 (S,I,D) 4 (FL,F1,F2,F3)	Necessaria Necessary Erforderlich	
130	4.1	2.9 ⁽¹⁾					3 (S,I,D) 4 (FL)		
150	6.0	5.0 ⁽¹⁾					3 (S,I,D) 4 (FL)		
180	11.0	9.0 ⁽¹⁾					3 (S,I,D) 4 (FL,F1)		
RMI...G	Posizioni di montaggio Mounting Positions Montagepositionen (S,I,D,F)						Stato di fornitura State of supply Lieferzustand	n°. tappi olio No. of plugs Anzahl Schrauben	Posizione di montaggio Mounting position Montageposition
	M1	M2	M3	M4	M5	M6			
40	0.100						Riduttori forniti completi di lubrificante sintetico Gearboxes supplied with synthetic oil Getriebe werden mit synthetischem Öl geliefert	1	Non necessaria Not necessary Nicht erforderlich
50	0.150							1	
63	0.300							1	

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

(1) Indicative quantities, check the oil sight glass during filling.

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

A) Nei riduttori nelle grandezze 110, 130, 150, 180 è necessario in fase d'ordine indicare la posizione di montaggio sia se i riduttori sono richiesti con olio sia privi di lubrificante. Particolare attenzione va posta per i riduttori montati nelle posizioni M3 e M4 che sono forniti con il cuscinetto schermato.

A) When ordering size 110, 130, 150, 180 worm gearboxes it is necessary to indicate the mounting position whether the worm gearbox is requested with oil or without lubricant. Particular attention should be paid to worm gearboxes with a shielded bearing mounted in positions M3 and M4.

A) Für die Getriebe in den Baugrößen 110, 130, 150 und 180 muss in der Auftragsphase die Einbaulage verbindlich angegeben werden. Dies gilt sowohl für die Bestellung von mit Öl gefüllten Getrieben als auch für Getriebe ohne Ölfüllung. Besondere Aufmerksamkeit sollte den Getrieben zukommen, die in den Einbaulagen M3 und M4 montiert werden und mit abgeschirmtem Lager geliefert werden.

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

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

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

B) Per i riduttori delle grandezze 110, 130, 150, 180 nelle posizioni M1 non fare riferimento alla spia di livello ma attenersi ai quantitativi indicati.

B) For size 110, 130, 150, 180 worm gear-boxes in position M1 do not refer to the oil level sight glass during filling but keep to the quantities indicated by the manufacturer.

B) Bei den Getrieben der Baugrößen 110, 130, 150, 180 in den Einbaulagen M1 ist nicht auf das Füllstand- Kontrollfenster, sondern auf die angegebenen Mengen Bezug zu nehmen.

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

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

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

D) Nei riduttori dove è necessario specificare la posizione di montaggio, la posizione richiesta è indicata nella targhetta del riduttore.

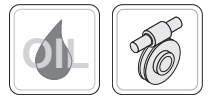
D) The gearboxes that need a specific assembling position have the indication of it on the label of the gearbox.

D) In den Getrieben in dem man die Montage Position angeben soll, findet man die angefragte Position auf dem Typenschild des Getriebes.

N.B.: Per i riduttori RMI e CRMI che rientrano nelle condizioni indicate dalla nota 3 a pag. B28, si sconsigliano le posizioni di montaggio M3 e M4.

NOTE: RMI and CRMI gearboxes as per definition 3 at page B28 should not be assembled in mounting positions M3 and M4.

HINWEIS: RMI und CRMI Getriebe in der Seite B28 note 3 beschrieben müssen nicht gem. Einbaulage M3 und M4 gebaut werden.



Lubrificazione riduttori Gearboxes lubrication Schmierung Getriebes

CRI - CRMI

Generalità

Si consiglia l'uso di oli a base sintetica. (Vedere a tale proposito le indicazioni riportate nel capitolo A, paragrafo 1.6 e 1.2.)

Prescrizioni in fase d'ordine e stato di fornitura

I riduttori delle grandezze 28/28, 28/40, 40/40, 28/50, 40/50, 28/63, 40/63, 28/70, 40/70, 63/70, 40/85, 50/85, 63/85, 70/85, 50/110, 63/110, 70/110, 63/130, 70/130 sono forniti completi di olio sintetico di viscosità ISO 320.

Per questi riduttori **non è necessario** indicare la posizione di montaggio

I riduttori nelle grandezze 85/110, 85/130, 85/150, 110/150, 85/180, 110/180, 130/180 sono forniti predisposti per lubrificazione ad olio ma privi di lubrificante.

Per i riduttori 85/110, 85/130, 85/150, 85/180 **non è necessario** specificare la posizione di montaggio.

Per i riduttori 110/150, 110/180, 130/180, è **necessario** specificare la posizione di montaggio dei riduttori 110 e 130 facendo riferimento allo schema dei riduttori RMI (pag. B11).

General information

The use of synthetic oil is recommended (see details in Chapter A, paragraph 1.6 and 1.2).

Ordering phase requirements and state of supply

Combined gearboxes sizes 28/28, 28/40, 40/40, 28/50, 40/50, 28/63, 40/63, 28/70, 40/70, 63/70, 40/85, 50/85, 63/85, 70/85, 50/110, 63/110, 70/110, 63/130, 70/130 come supplied with ISO It is not necessary to specify mounting positions with these worm gearboxes.

Combined gearboxes sizes 85/110, 85/130, 85/150, 110/150, 85/180, 110/180, 130/180 are pre-arranged for oil lubrication but supplied without lubricant.

For 85/110, 85/130, 85/150, 85/180 it is not necessary to specify mounting positions.

For 110/150, 110/180, 130/180, gearboxes it is necessary to specify the mounting position of the gearboxes 110 and 130 referring to the RMI gearbox diagram (page B11).

Allgemeines

Der Einsatz von synthetischem Öl wird empfohlen. (Siehe diesbezüglich die Hinweise im Kapitel A, Abschnitt 1.6 und 1.2.)

Vorgaben für die bestellung und den lieferzustand

Die Getriebe in den Baugrößen 28/28, 28/40, 40/40, 28/50, 40/50, 28/63, 40/63, 28/70, 40/70, 63/70, 40/85, 50/85, 63/85, 70/85, 50/110, 63/110, 70/110, 63/130, 70/130 werden komplett mit Synthetiköl mit einer Viskosität ISO 320 geliefert.

Für diese Getriebe muss die Einbaulage nicht angegeben werden.

Die Getriebe in den Baugrößen 85/110, 85/130, 85/150, 110/150, 85/180, 110/180, 130/180 sind bei der Lieferung für die Ölschmierung vorbereitet, enthalten jedoch kein Schmiermittel Für die Getriebe 110/150, 110/180, 130/180, **muss** die Einbaulage des Getriebes 110 und 130 verbindlich angegeben werden.

Dabei ist auf den Anschlussplan der Getriebe RMI Bezug zu nehmen (Seite B11).

Tab. 2.3

CRI - CRMI	Stato di fornitura State Of Supply Lieferzustand	Posizione di montaggio Mounting position Montageposition	Quantità di lubrificante Lubricant Quantity Schmiermittelmenge (kg)
28/28, 28/40, 40/40, 28/50, 40/50, 28/63, 40/63, 28/70, 40/70, 50/70, 63/70, 40/85, 50/85, 63/85, 70/85	Riduttori forniti completi di lubrificante sintetico Gearboxes supplied with synthetic oil Getriebe werden mit synthetischem Öl geliefert	Non necessaria Not necessary Nicht erforderlich	1° Riduttore e 2° Riduttore Tabella Tab. 2.2 a pag. B12. 1° Gearbox and 2° Gearbox Tab 2.2 to page B12 1° Getriebe und 2° Getriebe Siehe Tab. 2.2 seite B12
50/110, 63/110, 70/110, 63/130, 70/130		Non necessaria Not necessary Nicht erforderlich	1° Riduttore: Tabella Tab. 2.2 a pag. B12 2° Riduttore: quantitativo M1 Tabella Tab. 2.2 a pag. B12
85/110, 85/130, 85/150, 85/180		Non necessaria Not necessary Nicht erforderlich	1° Gearbox: Tab. 2.2 to page B12 2° Gearbox: Look at Lubrificant quantity M1 Tab. 2.2 . to page B12 1° Getriebe: Siehe Tab. 2.2 seite B12 2° Getriebe: Siehe Menge M1 Tab. 2.2 seite B12
110/150, 110/180, 130/180	Riduttori predisposti per lubrificazione ad olio Gearboxes supplied ready for oil lubrication Getriebe sind für Ölschmierung vorgesehen	Necessaria Necessary Erforderlich	1° Riduttore: vedere posizione di montaggio indicata in targhetta e riempire con quantitativo secondo Tab.2.2 a pag. B12 2° Riduttore: quantitativo M1 tabella Tab. 2.2 a pag. B12 1° Gearbox: Look at Mounting Position on the label of the gearbox and filling keep with lubricant quantity Tab. 2.2 to page B12 2° Gearbox: Look at Lubrificant quantity M1 Tab. 2.2 to page B12 1° Getriebe: Siehe Aufbau auf dem typenschild gezeichnet und abfüllen gem menge Tab. 2.2 seite B12 2° Getriebe: Siehe Menge M1 Tab. 2.2 seite B12



Lubrificazione riduttori Gearboxes lubrication Schmierung Getriebes

CR - CB

Generalità

Questi riduttori sono composti da un cinematismo misto costituito da una precoppia ad ingranaggi anteposta ad una coppia vite senza fine - corona.

Si consiglia l'uso di oli a base sintetica. (Vedere a tale proposito le indicazioni riportate nel capitolo A, paragrafo 1.6 e 1.2).

Nella tabella Tab. 2.4 sono riportati i quantitativi di olio necessari per il corretto funzionamento dei riduttori.

General information

These gear units are composed of a mixed kinematic motion made up of a geared pre-torque unit placed before a dual-crown worm screw.

The use of synthetic oil is recommended (see details in Chapter A, paragraph 1.6 and 1.2).

Tab. 2.4 shows the quantities of oil required for correct gear unit performance.

Allgemeines

Diese Getriebe bestehen aus einem Hybridgetriebe, mit einem Vorstadium mit Zahnradern vor einem Schnecken-Kranz-Stadium. Der Einsatz von synthetischem Öl wird empfohlen. (Siehe diesbezüglich die Hinweise im Kapitel A, Abschnitt 1.6 und 1.2).

In der Tabelle Tab 2.4 werden die erforderlichen Ölfüllmengen für einen störungsfreien Betrieb der Getriebe aufgeführt.



Prescrizioni in fase d'ordine e stato di fornitura

I riduttori delle grandezze 40,50,70 sono forniti completi di olio sintetico di viscosità ISO 320.

Per questi riduttori ad esclusione della grandezza 40 è **necessario** specificare la posizione di montaggio.

I riduttori nelle grandezze 85-110 sono forniti predisposti per lubrificazione ad olio ma privi di lubrificante il quale potrà essere fornito a richiesta.

Per questi riduttori è **necessario** specificare la posizione di montaggio.

Ordering phase requirements and state of supply

Gear unit sizes 40, 50, 70 come supplied with ISO 320 viscosity synthetic oil

It is necessary to specify mounting positions for these gear units with the exception of size 40.

Size 85 and 110 gear units are supplied dry but pre-arranged to be oil-lubricated. The required lubricant can be separately requested.

It is necessary to specify the mounting position with these gear units.

Vorgaben für die bestellung und den lieferzustand

Die Getriebe in den Baugrößen 40, 50 und 70 werden komplett mit Synthetiköl mit einer Viskosität ISO 320 geliefert.

Für diese Getriebe **muss**, mit Ausnahme der Baugröße 40, die Einbaulage verbindlich angegeben werden.

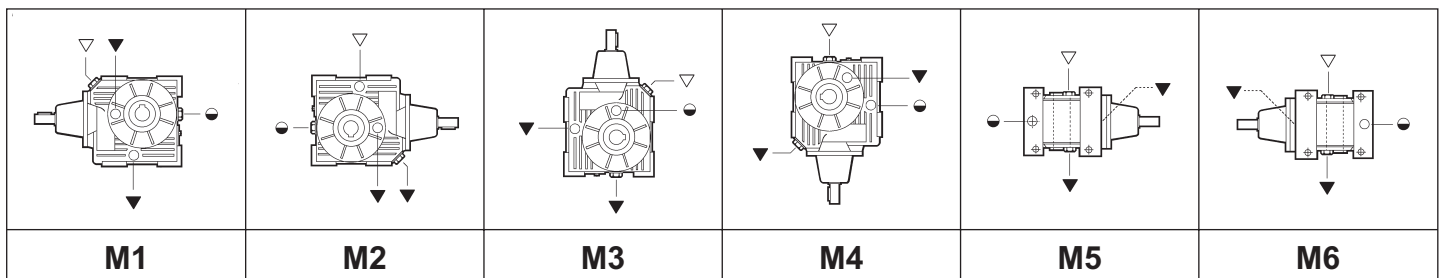
Die Getriebe in den Baugrößen 85-110 sind bei der Lieferung für die Ölschmierung vorbereitet, enthalten jedoch kein Schmiermittel. Dieses kann auf Anfrage geliefert werden.

Für diese Getriebe **muss** die Einbaulage verbindlich angegeben werden.

Posizioni di montaggio CR-CB

Mounting positions CR-CB

Montagepositionen CR-CB



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



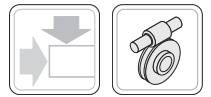
Tab. 2.4

Quantità di lubrificante / Lubricant Quantity / Schmiermittelmenge (Kg)					
CR - CB	Posizioni di montaggio / Mounting Positions / Montagepositionen		Stato di fornitura / State Of Supply / Lieferzustand	n°. tappi olio / No. of plugs / Anzahl Schrauben	Posizione di montaggio / Mounting position / Montageposition
	M1 - M5 - M6	M2 - M3 - M4			
40	0.260		Riduttori forniti completi di lubrificante sintetico <i>Gearboxes supplied with synthetic oil</i> Getriebe werden mit synthetischem Öl geliefert	1	Non necessaria <i>Not necessary</i> Nicht erforderlich
50	0.440	0.600		1	Necessaria <i>Necessary</i> Erforderlich
70	0.950	1.3		1	
85	1.55	2.8	Riduttori predisposti per lubrificazione ad olio <i>Gearboxes supplied ready for oil lubrication</i> Getriebe sind für Ölschmierung vorbereitet	4	Necessaria <i>Necessary</i> Erforderlich
110	3.6	6.0		4	

- A) **E' necessario** indicare in fase d'ordine la posizione di montaggio. Se omessa, il riduttore verrà fornito con i tappi predisposti per la posizione M1.
- B) Durante il riempimento attenersi ai quantitativi poiché in alcuni casi il livello del lubrificante oltrepassa la spia di livello.
- C) Il tappo di sfiato è allegato solo nei riduttori che hanno più di un tappo olio.
- D) Nei riduttori dove è necessario specificare la posizione di montaggio, la posizione richiesta è indicata nella targhetta del riduttore.

- A) **It is necessary** to specify the mounting position when ordering. If the mounting position is not specified in the ordering phase, the gear unit supplied will have plugs pre-arranged for position M1.
- B) During filling keep to the required quantities as in some cases the level of the lubricant exceeds the level shown by the indicator.
- C) A breather plug is enclosed only with gear units that have more than one oil plug.
- D) The gearboxes that need a specific assembling position have the indication of it on the label of the gearbox.

- A) In der Auftragsphase **muss** die Einbaulage verbindlich angegeben werden. Sollte dies nicht erfolgen, wird das Getriebe mit Stopfen für die Einbaulage M1.
- B) Für die Auffüllung sind die angegebenen Mengen zu beachten, da in einigen Fällen der Füllstand des Schmiermittels das Füllstands-Kontrollfenster übersteigt.
- C) Der Entlüftungstopfen ist lediglich bei den Getrieben vorhanden, die über mehr als einen Ölfüllstopfen verfügen.
- D) In den Getrieben in dem man die Montage Position angeben soll, findet man die angefragte Position auf dem Typenschild des Getriebes.



1.5 Carichi radiali e assiali

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

Nella Tab. 2.5 - 2.6 sono riportati i valori dei carichi radiali ammissibili per l'albero veloce (Fr_1). Come carico assiale ammissibile contemporaneo si ha:

$$Fa_1 = 0.2 \times Fr_1$$

Tab. 2.5



RI



CRI

n_1 min^{-1}	Fr_1 (N)									
	RI - CRI									
	28	40	50	63	70	85	110	130	150	180
2800	51	187	272	357	425	595	850	1360	1870	2125
1400	60	220	320	420	500	700	1000	1600	2200	2500
900	60	250	350	460	530	800	1200	1800	2350	2700
700	70	280	400	500	570	900	1300	2000	2500	3000
500	70	310	450	530	600	1000	1450	2200	2700	3200

Tab. 2.6



CR

n_1 min^{-1}	Fr_1 (N)				
	CR				
	40	50	70	85	110
2800	468	510	723	808	1275
1400	550	600	850	950	1500
900	605	660	935	1045	1650

In Tab. 2.7 - 2.8 sono riportati i valori dei carichi radiali ammissibili per l'albero lento (Fr_2). Come carico assiale ammissibile contemporaneo si ha:

$$Fa_2 = 0.2 \times Fr_2$$

Tab. 2.7

RI
RMICRI
CRMI

n_2 min^{-1}	Fr_2 (N)									
	RI - RMI - CRI - CRMI									
	28	40	50	63	70	85	110	130	150	180
400	506	686	925	946	1279	1626	2168	2890	4263	4516
280	595	808	1088	1114	1505	1913	2550	3400	5015	5313
200	700	950	1280	1310	1770	2250	3000	4000	5900	6250
140	750	1050	1450	1680	2350	2400	3150	4250	6700	6900
93	800	1200	1620	1740	2700	2500	3600	4800	7500	7500
70	900	1350	1850	1930	3100	2650	4150	5300	8400	8500
50	950	1500	2100	2150	3300	3560	4850	6600	9400	10300
35	1000	1600	2230	2300	3700	3850	5700	7500	10100	11500
29	1070	1700	2400	2500	3900	4400	6200	8200	11100	12500
25	1130	1800	2580	2700	4100	4620	6600	8750	12000	13400
20	1200	1950	2700	2900	4300	5150	7200	9600	12700	15200
18	1280	2100	2850	3100	4450	5500	7800	10300	14000	16300
14	1430	2300	3200	3300	4700	5800	8250	10700	15000	17000

Nei riduttori CRI-CRMI utilizzare i carichi a 14 min^{-1} (ovviamente i valori indicati in tabella si riferiscono al secondo riduttore).

1.5 Axial and overhung loads

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

In Table 2.5 - 2.6 permissible radial load for input shaft are listed (Fr_1). Contemporary permissible axial load is given by the following formula:

$$Fa_1 = 0.2 \times Fr_1$$

1.5 Radiale und Axiale Belastungen

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

In Tabelle 2.5 - 2.6 sind die Werte der zulässigen Radialbelastungen für die Antriebswelle (Fr_1) angegeben. Die Axialbelastung beträgt dann:

$$Fa_1 = 0.2 \times Fr_1$$

In Table 2.6 - 2.8 permissible radial loads for output shaft are listed (Fr_2).

Permissible axial load is given by the following formula:

$$Fa_2 = 0.2 \times Fr_2$$

In Tabelle 2.6 - 2.8 sind die Werte der zulässigen Radialbelastungen für die Abtriebswelle angegeben.

Als zulässige Axialbelastung gilt:

$$Fa_2 = 0.2 \times Fr_2$$

Use 14 min^{-1} loads in the CRI-CRMI gearboxes (obviously the values in the table refer to the second gearbox).

Bei den Getrieben CRI-CRMI sind Lasten mit 14 min^{-1} zu verwenden (die in der Tabelle angegebenen Werte beziehen sich natürlich auf das zweite Getriebe).



Tab. 2.8



**CR
CB**

n_2 min ⁻¹	Fr₂ (N)				
	CR - CB				
	40	50	70	85	110
30	1800	2160	3030	3390	4020
27	1880	2290	3140	3590	4170
23	1970	2400	3340	3690	4560
20	1970	2890	3580	3890	4800
16	2010	2930	3960	4490	6000
13	2010	2930	3960	4620	6230
10	2010	2930	3960	4620	6230

A richiesta possono essere fornite versioni rinforzate con cuscinetti a rulli conici sulla corona in grado di sopportare carichi superiori a quelli ammessi dalle versioni normali.

Si veda a tal proposito la tabella 2.9 - 2.10, in cui sono riportati i valori dei carichi radiali e assiali ammissibili sull'albero uscita nel caso di cuscinetti conici sulla corona. Si consiglia, in questi casi, di adottare versioni flangiate, verificando che il carico assiale venga interamente assorbito dal cuscinetto alloggiato nella flangia di fissaggio.

Si sconsiglia, invece (nei riduttori RI-RMI, CRI-CRMI) la versione a piede, in quanto la resistenza meccanica della struttura non è sufficiente a garantire la necessaria sicurezza sia statica sia dinamica (urti e sovraccarichi).

Tale soluzione non è prevista sulla grandezza 28.

In order to increase the load capacity of the gearboxes it is possible to fit taper roller bearings on to the output shaft. Such reinforced versions are available upon request.

With regard to this reinforced version, let see output radial and axial load values shown on tab. 2.9 - 2.10. It's advisable to use flange mounted versions and to make sure that the axial load is absorbed by the bearing, housed in the fixing flange.

The foot mounted version is not recommended, because the structural safety is very reduced, with regard both to static and dynamic conditions.

Please note that this solution is not available for size 28.

Für größere Belastungen stehen auf Wunsch auch verstärkte Ausführungen mit Kegellagerrollen für die Schneckenwelle zur Verfügung.

Tabelle 2.9 - 2.10 listet die zulässigen Radial- und Axiallasten bei Verwendung von Kegellagerrollen auf. Es wird in diesen Fällen empfohlen, Flanschausführungen zu verwenden und sicherzustellen, daß die axiale Last vollständig vom Lager, das sich im Befestigungsflansch befindet, aufgenommen wird. Die Fußversion empfiehlt sich in diesem Falle nicht, da deren Festigkeit nicht ausreicht, um die erforderliche Sicherheit gegen Stöße und Überlasten sowohl in statischer wie in dynamischer Hinsicht zu gewährleisten.

Hinweis:

Für die Baugröße 28 ist diese Lösung nicht vorgesehen.

Tab. 2.9



**RI
RMI**

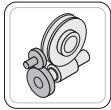


**CRI
CRMI**

CARICHI RADIALI - ASSIALI CON CUSCINETTI CONICI SULLA CORONA AXIAL AND OVERHUNG LOADS WITH TAPER ROLLER BEARINGS ON WORMWHEEL RADIALE UND AXIALE BELASTUNGEN MIT KEGELROLLENLAGERN AUF DEM SCHNECKENRAD [N]																		
n_2 (rpm)	RI - RMI																	
	40		50		63		70		85		110		130		150		180	
	Fr ₂	Fa ₂	Fr ₂	Fa ₂	Fr ₂	Fa ₂	Fr ₂	Fa ₂	Fr ₂	Fa ₂	Fr ₂	Fa ₂	Fr ₂	Fa ₂	Fr ₂	Fa ₂	Fr ₂	Fa ₂
400	2076	2708	4603	5325	4693	5415	5415	6588	5415	7220	7671	9837	7491	10559	14440	18772	17148	22382
280	2185	2850	4845	5605	4940	5700	5700	6935	5700	7600	8075	10355	7885	11115	15200	19760	18050	23560
200	2300	3000	5100	5900	5200	6000	6000	7300	6000	8000	8500	10900	8300	11700	16000	20800	19000	24800
140	2300	3000	5600	6500	5750	6650	6700	8200	6600	8800	9200	11800	8400	11850	17500	22700	20000	26000
93	2300	3000	6300	7300	6500	7550	7500	9150	7600	10100	9200	11800	9000	12700	18500	24000	21000	27400
70	2300	3000	6550	7600	6200	7200	7600	9300	6500	8650	9200	11800	9500	13400	19200	25000	22000	28700
50	2300	3000	6900	8000	6900	8000	8700	10600	7900	10500	10600	13600	10000	14100	20000	26000	23000	30000
35	2300	3000	6900	8000	6900	8000	9000	11000	9000	12000	13900	17800	12600	17750	20000	26000	23000	30000
29	2300	3000	6900	8000	6900	8000	9000	11000	9000	12000	14800	19000	13600	19200	20000	26000	23000	30000
25	2300	3000	6900	8000	6900	8000	9000	11000	9000	12000	14800	19000	14600	20600	20000	26000	23000	30000
20	2300	3000	6900	8000	6900	8000	9000	11000	9000	12000	14800	19000	15600	22000	20000	26000	23000	30000
18	2300	3000	6900	8000	6900	8000	9000	11000	9000	12000	14800	19000	15600	22000	20000	26000	23000	30000



Tab. 2.10



CR
CB

CARICHI RADIALI - ASSIALI CON CUSCINETTI CONICI SULLA CORONA AXIAL AND OVERHUNG LOADS WITH TAPER ROLLER BEARINGS ON WORMWHEEL RADIALE UND AXIALE BELASTUNGEN MIT KEGELROLLENLAGERN AUF DEM SCHNECKENRAD										
n_2 (min^{-1})	CR - CB									
	40		50		70		85		110	
	Fr_2	Fa_2	Fr_2	Fa_2	Fr_2	Fa_2	Fr_2	Fa_2	Fr_2	Fa_2
60	2300	3000	6900	8000	8600	10500	8600	11500	12200	15600
50	2300	3000	6900	8000	9000	11000	9000	12000	12800	16400
40	2300	3000	6900	8000	9000	11000	9000	12000	13700	17600
30	2300	3000	6900	8000	9000	11000	9000	12000	14400	18500
25	2300	3000	6900	8000	9000	11000	9000	12000	14800	19000
20	2300	3000	6900	8000	9000	11000	9000	12000	14800	19000
15	2300	3000	6900	8000	9000	11000	9000	12000	14800	19000
10	2300	3000	6900	8000	9000	11000	9000	12000	14800	19000
5	2300	3000	6900	8000	9000	11000	9000	12000	14800	19000

I carichi radiali indicati nelle tabelle si intendono applicati a metà della sporgenza dell'albero 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 14 min^{-1} rappresentano i carichi massimi consentiti.

Per i carichi non agenti sulla mezzeria dell'albero lento o veloce si ha:

a 0.3 della sporgenza:

$$Fr_x = 1.25 \times Fr_{1-2}$$

a 0.8 dalla sporgenza:

$$Fr_x = 0.8 \times Fr_{1-2}$$

The radial loads shown in the tables are applied on the centre line of the shaft extension and are related to gearboxes working with service factor 1.

Intermediate values of 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 14 min^{-1} represent the maximum allowable loads.

For loads which are not applied on the centre line of the output or input shaft, following values will be obtained:

at 0.3 from extension:

$$Fr_x = 1.25 \times Fr_{1-2}$$

at 0.8 from extension:

$$Fr_x = 0.8 \times Fr_{1-2}$$

Bei den in der Tabelle angegebenen Radialbelastungen wird eine Kräfteinwirkung auf die Mitte des Wellenendes zugrunde gelegt; außerdem arbeiten die Getriebe mit Betriebsfaktor 1. Zwischenwerte für nicht aufgeführte Drehzahlen können durch Interpolation ermittelt werden. Hierbei ist jedoch zu berücksichtigen, daß die Werte von Fr_1 bei 500 min^{-1} und von Fr_2 bei 14 min^{-1} die Maximalbelastungen repräsentieren. Bei Lasten, die nicht auf die Mitte der Ab- bzw. Antriebswellen wirken, legt man folgende Werte zugrunde:

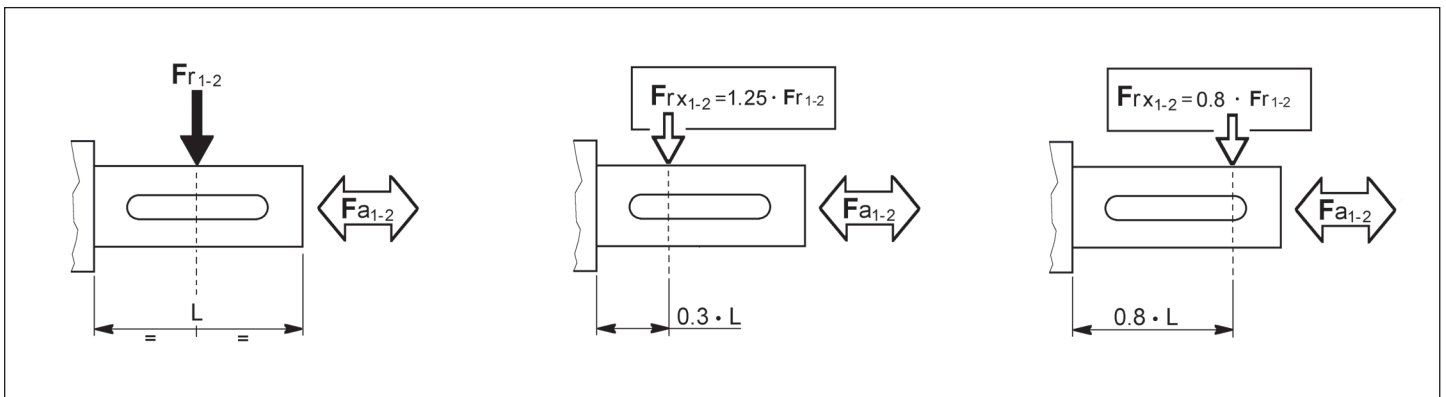
0.3 vom Wellenabsatz:

$$Fr_x = 1.25 \times Fr_{1-2}$$

0.8 vom Wellenabsatz:

$$Fr_x = 0.8 \times Fr_{1-2}$$

Tab. 2.11





1.6 Prestazioni riduttori RI

1.6 RI Gearboxes performances

1.6 Leistungen der RI-Getriebe

RI 28



1.4

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				RMI	RMI...G
	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 %	IEC	
7	400	11	0.56	83	200	15	0.39	81	129	18	0.31	79	71	22	0.21	78	63-56	-
10	280	13	0.47	81	140	17	0.32	79	90	20	0.24	77	50	24	0.17	76		
15	187	14	0.35	78	93	18	0.23	75	60	20	0.17	73	33	24	0.12	71		
20	140	12	0.23	75	70	15	0.15	72	45	18	0.12	69	25	21	0.08	67		
28	100	15	0.23	69	50	19	0.16	64	32	21	0.12	61	17.9	25	0.08	58		
40	70	13	0.15	64	35	16	0.10	59	23	18	0.08	56	12.5	21	0.05	53		
49	57	12	0.12	61	29	15	0.08	56	18.4	17	0.06	52	10.2	20	0.04	49		
56	50	12	0.11	59	25	15	0.07	54	16.1	17	0.06	52	8.9	19	0.04	47		
70	40	11	0.08	55	20	13	0.06	49	12.9	15	0.04	46	7.1	17	0.03	43		
80	35	10	0.07	50	17.5	12	0.05	45	11.3	13	0.04	41	6.3	15	0.03	38		
100	28	9	0.06	47	14.0	10	0.04	41	9.0	10	0.02	38	5.0	11	0.02	35		

RI 40



2.1

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				RMI	RMI...G
	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 %	IEC	
7	400	27	1.3	84	200	37	0.93	83	129	44	0.73	81	71	54	0.50	80	71-63-56	71-63-56
10	280	31	1.1	83	140	42	0.76	81	90	49	0.58	79	50	59	0.40	78		
15	187	32	0.78	80	93	42	0.53	77	60	49	0.41	75	33	59	0.28	73		
20	140	29	0.56	76	70	37	0.37	73	45	43	0.29	70	25	51	0.20	67		
28	100	34	0.50	71	50	43	0.34	67	32	50	0.26	64	17.9	59	0.18	61		
40	70	32	0.36	65	35	40	0.24	60	23	45	0.19	56	12.5	53	0.13	53		
49	57	30	0.29	62	29	38	0.20	57	18.4	43	0.16	53	10.2	50	0.11	49		
56	50	28	0.24	60	25	36	0.17	54	16.1	40	0.13	51	8.9	47	0.09	47		
70	40	23	0.18	53	20	28	0.12	47	12.9	32	0.10	44	7.1	37	0.07	39		
80	35	21	0.15	50	17.5	26	0.11	44	11.3	29	0.09	40	6.3	34	0.06	36		
100	28	23	0.13	51	14.0	28	0.09	45	9.0	30	0.07	41	5.0	31	0.04	38		

RI 50



3.8

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				RMI	RMI...G
	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 %	IEC	
7	400	50	2.5	85	200	68	1.7	84	129	81	1.3	83	71	100	0.91	82	80-71	80-71-63
10	280	55	1.9	84	140	73	1.3	82	90	86	1.0	81	50	105	0.70	79		
15	187	58	1.4	82	93	76	0.93	80	60	89	0.71	79	33	106	0.48	77		
20	140	57	1.1	79	70	74	0.71	76	45	86	0.55	74	25	102	0.38	71		
28	100	62	0.88	74	50	80	0.60	70	32	92	0.46	67	17.9	109	0.32	64		
40	70	64	0.67	70	35	81	0.45	66	23	92	0.34	63	12.5	108	0.24	59		
49	57	57	0.51	67	29	72	0.34	63	18.4	82	0.27	59	10.2	96	0.19	55		
56	50	55	0.44	65	25	69	0.30	60	16.1	78	0.23	56	8.9	91	0.16	53		
70	40	52	0.36	61	20	64	0.24	56	12.9	72	0.19	52	7.1	84	0.13	48		
80	35	47	0.30	57	17.5	58	0.21	51	11.3	66	0.17	47	6.3	75	0.11	43		
100	28	42	0.23	54	14.0	52	0.16	48	9.0	59	0.13	44	5.0	60	0.08	40		

RI 63



6.0

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				RMI	RMI...G
	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 %	IEC	
7	400	84	4.1	86	200	115	2.9	84	129	137	2.2	84	71	169	1.5	83	90-80-71	90-80-71
10	280	93	3.2	84	140	126	2.2	83	90	149	1.7	81	50	182	1.2	80		
15	187	98	2.3	82	93	131	1.6	80	60	153	1.2	78	33	184	0.85	76		
20	140	104	1.9	80	70	136	1.3	77	45	158	0.99	75	25	189	0.69	72		
28	100	105	1.5	75	50	135	1.0	71	32	156	0.77	68	17.9	186	0.54	65		
40	70	113	1.2	71	35	145	0.79	67	23	166	0.61	64	12.5	195	0.43	60		
49	57	98	0.85	69	29	125	0.58	64	18.4	142	0.45	61	10.2	166	0.31	57		
56	50	101	0.79	67	25	127	0.54	62	16.1	145	0.42	58	8.9	169	0.29	54		
70	40	94	0.62	63	20	117	0.42	58	12.9	133	0.33	54	7.1	154	0.23	50		
80	35	88	0.53	61	17.5	110	0.37	55	11.3	124	0.29	51	6.3	144	0.20	47		
100	28	80	0.41	57	14.0	99	0.28	51	9.0	112	0.22	47	5.0	125	0.15	43		



1.6 Prestazioni riduttori RI

1.6 RI Gearboxes performances

1.6 Leistungen der RI-Getriebe

RI 70



7.5

ir	n ₁ = 2800 min ⁻¹ ⚠				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 min ⁻¹				RMI	RMI...G
	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 %	IEC	
7	400	95	4.6	86	200	132	3.3	85	129	158	2.5	84	71	195	1.8	83	112-100 90-80	-
10	280	105	3.7	84	140	142	2.5	83	90	168	1.9	82	50	205	1.3	80		
15	187	109	2.6	82	93	145	1.8	80	60	170	1.4	78	33	205	0.94	76		
20	140	115	2.1	80	70	151	1.4	77	45	175	1.1	75	25	210	0.76	72		
28	100	113	1.6	74	50	147	1.1	71	32	170	0.84	68	17.9	202	0.59	64		
40	70	126	1.3	71	35	162	0.89	67	23	186	0.68	64	12.5	219	0.48	60		
49	57	131	1.2	68	29	166	0.78	64	18.4	190	0.61	60	10.2	223	0.43	56		
56	50	132	1.0	67	25	167	0.71	62	16.1	191	0.55	58	8.9	223	0.39	54		
70	40	120	0.81	62	20	149	0.55	57	12.9	169	0.42	54	7.1	197	0.30	49		
80	35	113	0.69	60	17.5	141	0.48	54	11.3	160	0.38	50	6.3	185	0.26	46		
100	28	103	0.52	58	14.0	128	0.37	51	9.0	144	0.29	47	5.0	166	0.20	43		

RI 85



14

ir	n ₁ = 2800 min ⁻¹ ⚠				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 min ⁻¹				RMI	RMI...G
	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 %	IEC	
7	400	177	8.6	86	200	247	6.1	85	129	297	4.8	84	71	369	3.3	83	112-100 90	-
10	280	205	7.1	85	140	280	4.9	84	90	332	3.8	83	50	407	2.6	81		
15	187	211	5.0	82	93	283	3.4	81	60	333	2.6	79	33	403	1.8	77		
20	140	236	4.3	81	70	310	2.9	79	45	362	2.2	77	25	434	1.5	74		
28	100	210	2.9	75	50	275	2.0	72	32	319	1.6	69	17.9	381	1.1	65		
40	70	242	2.5	72	35	312	1.7	69	23	359	1.3	66	12.5	424	0.90	62		
49	57	225	1.9	70	29	287	1.3	65	18.4	329	1.0	62	10.2	387	0.71	58		
56	50	223	1.7	70	25	283	1.1	66	16.1	322	0.87	62	8.9	377	0.61	58		
70	40	208	1.3	66	20	261	0.90	61	12.9	297	0.70	57	7.1	346	0.49	53		
80	35	194	1.1	63	17.5	243	0.77	58	11.3	276	0.60	54	6.3	320	0.42	50		
100	28	172	0.85	59	14.0	217	0.60	53	9.0	243	0.46	50	5.0	281	0.33	44		

RI 110



38

ir	n ₁ = 2800 min ⁻¹ ⚠				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 min ⁻¹				RMI	RMI...G
	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 %	IEC	
7	400	341	16.6	86	200	478	11.6	86	129	577	9.1	85	71	720	6.4	84	132-112 100	-
10	280	391	13.5	85	140	537	9.3	85	90	640	7.2	84	50	788	5.0	82		
15	187	396	9.3	83	93	535	6.4	82	60	632	5.0	80	33	769	3.4	78		
20	140	465	8.3	82	70	617	5.6	81	45	722	4.3	79	25	869	3.0	76		
28	100	433	5.9	77	50	570	4.0	75	32	665	3.1	72	17.9	796	2.2	69		
40	70	493	4.9	74	35	638	3.2	72	23	737	2.6	68	12.5	873	1.8	65		
49	57	452	3.8	72	29	581	2.5	69	18.4	667	1.9	66	10.2	786	1.4	62		
56	50	364	2.7	71	25	465	1.8	69	16.1	532	1.4	64	8.9	624	0.97	60		
70	40	381	2.3	68	20	483	1.6	64	12.9	551	1.2	60	7.1	644	0.88	55		
80	35	390	2.2	66	17.5	491	1.5	62	11.3	559	1.1	58	6.3	651	0.80	53		
100	28	355	1.7	62	14.0	444	1.1	57	9.0	503	0.89	53	5.0	583	0.62	49		

RI 130



48

ir	n ₁ = 2800 min ⁻¹ ⚠				n ₁ = 1400 min ⁻¹				n ₁ = 900 min ⁻¹				n ₁ = 500 min ⁻¹				RMI	RMI...G
	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 %	IEC	
7	400	501	24	88	200	706	16.8	88	129	855	13.2	87	71	1070	9.5	84	132-112 100	-
10	280	574	19.3	87	140	791	13.3	87	90	946	10.5	85	50	1167	7.4	83		
15	187	622	14.5	84	93	840	9.8	84	60	993	7.5	83	33	1210	5.3	80		
20	140	686	12.1	83	70	915	8.1	83	45	1073	6.2	82	25	1296	4.4	77		
28	100	607	8.4	76	50	805	5.5	76	32	941	4.2	75	17.9	1131	3.1	69		
40	70	693	6.9	74	35	903	4.5	73	23	1045	3.5	71	12.5	1243	2.5	65		
49	57	681	5.7	72	29	880	3.8	70	18.4	1014	2.8	69	10.2	1200	2.0	63		
56	50	636	4.6	72	25	814	3.1	69	16.1	935	2.3	68	8.9	1100	1.7	62		
70	40	639	3.9	69	20	812	2.5	67	12.9	928	2.0	62	7.1	1086	1.4	58		
80	35	616	3.3	68	17.5	778	2.2	64	11.3	886	1.7	60	6.3	1034	1.2	56		
100	28	551	2.5	64	14.0	691	1.7	59	9.0	785	1.3	55	5.0	913	0.94	51		



RI 150



77

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				RMI	RMI...G
	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 %	IEC	
7	400	754	36	88	200	1070	25	88	129	1300	20	87	71	1630	14.2	86	160-132 112-100	-
10	280	850	29	87	140	1180	19.9	87	90	1420	15.6	86	50	1755	10.9	84		
15	187	935	22	85	93	1270	14.6	85	60	1500	11.4	83	33	1830	7.9	81		
20	140	1070	18.7	84	70	1430	12.5	84	45	1680	9.7	82	25	2040	6.8	79		
28	100	965	13.1	77	50	1280	8.8	76	32	1500	6.8	74	17.9	1810	4.8	71		
40	70	1070	10.3	76	35	1400	6.8	75	23	1630	5.3	73	12.5	1950	3.8	67		
49	57	1020	8.2	74	29	1320	5.6	71	18.4	1530	4.3	69	10.2	1800	3.0	65		
56	50	1018	7.2	74	25	1306	4.7	73	16.1	1500	3.7	68	8.9	1768	2.6	64		
70	40	927	5.5	70	20	1183	3.7	67	12.9	1355	2.9	63	7.1	1591	2.0	59		
80	35	896	4.8	69	17.5	1136	3.2	66	11.3	1297	2.5	62	6.3	1518	1.7	57		
100	28	818	3.6	66	14.0	1029	2.4	62	9.0	1169	1.9	58	5.0	1361	1.3	54		

RI 180



130

ir	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				RMI	RMI...G
	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 %	IEC	
7	400	1015	48	89	200	1510	36	89	129	1840	28	88	71	2320	20	86	180-160 132	-
10	280	1190	40	88	140	1650	27	88	90	1990	22	87	50	2470	15.2	85		
15	187	1315	30	86	93	1800	20	86	60	2140	15.8	85	33	2620	11.2	82		
20	140	1515	26	84	70	2037	17.8	84	45	2400	13.6	83	25	2910	9.5	80		
28	100	1400	18.3	80	50	1870	12.4	79	32	2200	9.6	77	17.9	2660	6.8	73		
40	70	1525	14.9	75	35	2000	9.8	75	23	2330	7.5	73	12.5	2790	5.3	69		
49	57	1600	12.9	74	29	2080	8.4	74	18.4	2415	6.5	72	10.2	2870	4.6	66		
56	50	1630	11.5	74	25	2103	7.5	73	16.1	2423	5.7	71	8.9	2864	4.1	66		
70	40	1482	8.6	72	20	1900	5.9	68	12.9	2182	4.5	66	7.1	2570	3.2	61		
80	35	1424	7.6	69	17.5	1816	5.0	67	11.3	2079	3.8	65	6.3	2440	2.7	59		
100	28	1281	5.8	65	14.0	1622	3.8	63	9.0	1850	2.9	61	5.0	2163	2.1	54		

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

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

Die angegebenen Gewichte sind Richtwerte und können je nach Getriebeversion etwas variieren.

N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come nel par. 1.7-A). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. chapter 1.7-A). For details please contact our technical department.

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. S. 1.7-A). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.

ATTENZIONE!

Per situazioni con velocità di ingresso particolari attenersi alla tabella sotto riportata che evidenzia situazioni critiche per ogni riduttore.

WARNING!

If in presence of non standard input speed please attain to the chart below considering extreme usage conditions for each gearbox.

ACHTUNG!

Mit unstandardisierte Antriebsgeschwindigkeit bitte auf folgende Liste Bezug nehmen in Betrachtung der schwierigen Arbeitsbedingungen fuer jede Getriebe.

	UI - RI											
	28	40	50	63	70	75	85	90	110	130	150	180
1500 < n_1 < 3000	OK	OK	OK									
$n_1 > 3000$	Contattare il ns. servizio tecnico Contact our technical dept Wenden Sie sich an unseren technischen Service											

1.6 Prestazioni riduttori CRI

1.6 CRI gearboxes performances

1.6 Leistungen der CRI-Getriebe

CRI 28/28



2.8

ir	i ₁ Xi ₂	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %		
140	7x20	10.0	27	0.05	52	63 - 56	—
200	10x20	7.0	27	0.04	49		
280	10x28	5.0	27	0.03	42		
400	20x20	3.5	27	0.02	44		
600	15x40	2.3	27	0.02	35		
980	49x20	1.4	27	0.01	34		
1372	49x28	1.0	27	0.01	28	56	—
1960	49x40	0.71	27	0.01	25		
2800	70x40	0.50	27	0.01	21		
4000	100x40	0.35	27	0.01	17		
5600	100x56	0.25	27	0.01	15		
7000	100x70	0.20	20	0.01	13		
8000	100x80	0.18	16	0.01	11		
10000	100x100	0.14	12	0.01	10		

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3.5

ir	i ₁ Xi ₂	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %		
140	7x20	10.0	64	0.13	51	63 - 56	—
200	10x20	7.0	70	0.10	49		
280	10x28	5.0	70	0.08	43		
400	20x20	3.5	70	0.06	43		
600	15x40	2.3	70	0.05	33		
980	49x20	1.4	70	0.03	32		
1372	49x28	1.0	70	0.03	29	56	—
1960	49x40	0.71	70	0.02	24		
2800	70x40	0.50	70	0.02	20		
4000	100x40	0.35	70	0.02	16		
5600	100x56	0.25	65	0.01	14		
7000	100x70	0.20	50	0.01	11		
8000	100x80	0.18	45	0.01	10		
10000	100x100	0.14	35	0.01	11		

CRI 40/40



4.2

ir	i ₁ Xi ₂	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %		
140	7x20	10.0	64	0.13	52	71-63-56	—
200	10x20	7.0	70	0.10	50		
280	10x28	5.0	70	0.08	45		
400	20x20	3.5	70	0.06	44		
600	15x40	2.3	70	0.05	34		
980	49x20	1.4	70	0.03	33		
1372	49x28	1.0	70	0.03	29	63-56	71-63-56
1960	49x40	0.71	70	0.02	24		
2800	70x40	0.50	70	0.02	19		
4000	100x40	0.35	70	0.01	18		
5600	100x56	0.25	65	0.01	15		
7000	100x70	0.20	50	0.01	12		
8000	100x80	0.18	45	0.01	11		
10000	100x100	0.14	35	0.01	12		

CRI 28/50



5.2

ir	i ₁ Xi ₂	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %		
140	7x20	10.0	110	0.21	54	63 - 56	—
200	10x20	7.0	110	0.15	52		
280	10x28	5.0	110	0.13	46		
400	20x20	3.5	110	0.09	46		
600	15x40	2.3	110	0.07	38		
980	49x20	1.4	110	0.05	35		
1372	49x28	1.0	110	0.04	30	56	—
1960	49x40	0.71	110	0.03	27		
2800	70x40	0.50	110	0.02	24		
4000	100x40	0.35	110	0.02	19		
5600	100x56	0.25	110	0.02	16		
7000	100x70	0.20	110	0.02	15		
8000	100x80	0.18	75	0.01	12		
10000	100x100	0.14	60	0.01	11		

CRI 40/50



5.9

ir	i ₁ Xi ₂	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %		
140	7x20	10.0	110	0.21	56	71-63-56	—
200	10x20	7.0	110	0.15	53		
280	10x28	5.0	110	0.12	47		
400	20x20	3.5	110	0.09	47		
600	15x40	2.3	110	0.07	39		
980	49x20	1.4	110	0.05	36		
1372	49x28	1.0	110	0.04	30	63 - 56	71-63-56
1960	49x40	0.71	110	0.03	28		
2800	70x40	0.50	110	0.03	23		
4000	100x40	0.35	110	0.02	21		
5600	100x56	0.25	110	0.02	18		
7000	100x70	0.20	110	0.01	16		
8000	100x80	0.18	75	0.01	14		
10000	100x100	0.14	60	0.01	13		

CRI 28/63



7.4

ir	i ₁ Xi ₂	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %		
140	7x20	10.0	207	0.34	56	63 - 56	—
200	10x20	7.0	228	0.31	53		
280	10x28	5.0	250	0.29	46		
400	20x20	3.5	192	0.20	46		
600	15x40	2.3	250	0.16	38		
980	49x20	1.4	189	0.11	35		
1372	49x28	1.0	223	0.07	30	56	—
1960	49x40	0.71	223	0.06	27		
2800	70x40	0.50	244	0.06	23		
4000	100x40	0.35	188	0.04	19		
5600	100x56	0.25	230	0.04	16		
7000	100x70	0.20	220	0.03	15		
8000	100x80	0.18	200	0.03	14		
10000	100x100	0.14	140	0.02	12		



1.6 Prestazioni riduttori CRI

1.6 CRI gearboxes performances

1.6 Leistungen der CRI-Getriebe

CRI 40/63



8.1

ir	$i_1 X_{i2}$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		n_2 min^{-1}	T_{2M} Nm	P kW	RD %		
140	7x20	10.0	238	0.44	57	71 - 63 - 56	IEC
200	10x20	7.0	250	0.34	54		
280	10x28	5.0	250	0.28	47		
400	20x20	3.5	250	0.20	47		
600	15x40	2.3	250	0.16	39		
980	49x20	1.4	250	0.10	36	71 - 63 56	
1372	49x28	1.0	250	0.09	30		
1960	49x40	0.71	250	0.07	27		
2800	70x40	0.50	250	0.06	22		
4000	100x40	0.35	250	0.04	21		
5600	100x56	0.25	250	0.04	18	63 - 56	
7000	100x70	0.20	220	0.03	16		
8000	100x80	0.18	200	0.02	15		
10000	100x100	0.14	140	0.02	13		

CRI 28/70



14.4

ir	$i_1 X_{i2}$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		n_2 min^{-1}	T_{2M} Nm	P kW	RD %		
140	7x20	10.0	207	0.34	55	63 - 56	IEC
200	10x20	7.0	228	0.30	53		
280	10x28	5.0	271	0.28	45		
400	20x20	3.5	192	0.20	46		
600	15x40	2.3	316	0.20	38		
980	49x20	1.4	189	0.11	35	—	
1372	49x28	1.0	223	0.08	29		
1960	49x40	0.71	288	0.08	27		
2800	70x40	0.50	244	0.04	25		
4000	100x40	0.35	188	0.04	18		
5600	100x56	0.25	230	0.05	16	56	
7000	100x70	0.20	245	0.03	14		
8000	100x80	0.18	256	0.04	13		
10000	100x100	0.14	190	0.02	12		

CRI 40/70



16.1

ir	$i_1 X_{i2}$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		n_2 min^{-1}	T_{2M} Nm	P kW	RD %		
140	7x20	10.0	266	0.49	56	71 - 63 - 56	IEC
200	10x20	7.0	290	0.39	54		
280	10x28	5.0	290	0.33	46		
400	20x20	3.5	320	0.25	47		
600	15x40	2.3	316	0.20	39		
980	49x20	1.4	320	0.14	35	71 - 63 56	
1372	49x28	1.0	320	0.12	30		
1960	49x40	0.71	320	0.09	27		
2800	70x40	0.50	320	0.08	22		
4000	100x40	0.35	320	0.06	20		
5600	100x56	0.25	300	0.04	18	63 - 56	
7000	100x70	0.20	290	0.04	15		
8000	100x80	0.18	270	0.04	14		
10000	100x100	0.14	190	0.02	13		

CRI 50/70



16.8

ir	$i_1 X_{i2}$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		n_2 min^{-1}	T_{2M} Nm	P kW	RD %		
140	7x20	10.0	266	0.49	57	80 - 71	IEC
200	10x20	7.0	290	0.39	55		
280	10x28	5.0	290	0.32	47		
400	20x20	3.5	320	0.24	49		
600	15x40	2.3	316	0.19	41		
980	49x20	1.4	320	0.12	39	80 - 71 63	
1372	49x28	1.0	320	0.10	33		
1960	49x40	0.71	320	0.08	30		
2800	70x40	0.50	320	0.06	26		
4000	100x40	0.35	320	0.05	22		
5600	100x56	0.25	300	0.04	19	71 - 63	
7000	100x70	0.20	290	0.04	16		
8000	100x80	0.18	270	0.03	15		
10000	100x100	0.14	190	0.02	14		

CRI 63/70



19.0

ir	$i_1 X_{i2}$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		n_2 min^{-1}	T_{2M} Nm	P kW	RD %		
140	7x20	10.0	266	0.49	57	90 - 80 - 71	IEC
200	10x20	7.0	290	0.38	56		
280	10x28	5.0	290	0.32	47		
400	20x20	3.5	320	0.25	47		
600	15x40	2.3	316	0.19	41		
980	49x20	1.4	320	0.12	40	90 - 80 71	
1372	49x28	1.0	320	0.10	33		
1960	49x40	0.71	320	0.08	31		
2800	70x40	0.50	320	0.06	27		
4000	100x40	0.35	320	0.05	23		
5600	100x56	0.25	300	0.04	20	80 - 71	
7000	100x70	0.20	290	0.04	17		
8000	100x80	0.18	270	0.03	16		
10000	100x100	0.14	190	0.02	15		

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20

ir	$i_1 X_{i2}$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		n_2 min^{-1}	T_{2M} Nm	P kW	RD %		
140	7x20	10.0	500	0.89	59	71 - 63 - 56	IEC
200	10x20	7.0	500	0.66	56		
280	10x28	5.0	500	0.57	46		
400	20x20	3.5	500	0.37	49		
600	15x40	2.3	500	0.31	40		
980	49x20	1.4	500	0.20	37	71 - 63 56	
1372	49x28	1.0	500	0.18	29		
1960	49x40	0.71	500	0.14	27		
2800	70x40	0.50	500	0.12	22		
4000	100x40	0.35	500	0.09	21		
5600	100x56	0.25	500	0.07	19	63 - 56	
7000	100x70	0.20	460	0.06	17		
8000	100x80	0.18	460	0.05	16		
10000	100x100	0.14	350	0.04	14		



1.6 Prestazioni riduttori CRI

1.6 CRI gearboxes performances

1.6 Leistungen der CRI-Getriebe

CRI 50/85 22							
ir	i ₁ x _{i2}	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	IEC	
140	7x20	10.0	500	0.88	60	80 - 71	80 - 71 63
200	10x20	7.0	500	0.65	57		
280	10x28	5.0	500	0.56	47		
400	20x20	3.5	500	0.36	51		
600	15x40	2.3	500	0.29	42		
980	49x20	1.4	500	0.18	41	71 - 63	
1372	49x28	1.0	500	0.17	32		
1960	49x40	0.71	500	0.12	30		
2800	70x40	0.50	500	0.10	26		
4000	100x40	0.35	500	0.08	22		
5600	100x56	0.25	500	0.06	21		
7000	100x70	0.20	460	0.05	18		
8000	100x80	0.18	460	0.05	17		
10000	100x100	0.14	350	0.04	14		

CRI 63/85 24							
ir	i ₁ x _{i2}	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	IEC	
140	7x20	10.0	500	0.88	60	90 - 80 - 71	90 - 80 71
200	10x20	7.0	500	0.64	57		
280	10x28	5.0	500	0.55	47		
400	20x20	3.5	500	0.35	52		
600	15x40	2.3	500	0.29	42		
980	49x20	1.4	500	0.18	42	71 - 80	
1372	49x28	1.0	500	0.16	33		
1960	49x40	0.71	500	0.12	31		
2800	70x40	0.50	500	0.10	27		
4000	100x40	0.35	500	0.08	23		
5600	100x56	0.25	500	0.06	22		
7000	100x70	0.20	460	0.05	19		
8000	100x80	0.18	460	0.05	18		
10000	100x100	0.14	350	0.03	15		

CRI 70/85 31							
ir	i ₁ x _{i2}	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	IEC	
140	7x20	10.0	500	0.87	60	100-90-80	—
200	10x20	7.0	500	0.64	57		
280	10x28	5.0	500	0.55	47		
400	20x20	3.5	500	0.36	52		
600	15x40	2.3	500	0.29	42		
980	49x20	1.4	500	0.18	42	80 - 71	
1372	49x28	1.0	500	0.16	33		
1960	49x40	0.71	500	0.12	31		
2800	70x40	0.50	500	0.10	27		
4000	100x40	0.35	500	0.08	23		
5600	100x56	0.25	500	0.06	22		
7000	100x70	0.20	460	0.05	19		
8000	100x80	0.18	460	0.05	18		
10000	100x100	0.14	350	0.03	15		

CRI 50/110 42							
ir	i ₁ x _{i2}	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	IEC	
140	7x20	10.0	1000	1.7	60	80 - 71	80 - 71 - 63
200	10x20	7.0	1000	1.3	58		
280	10x28	5.0	1000	1.0	50		
400	20x20	3.5	1000	0.71	52		
600	15x40	2.3	1000	0.56	44		
980	49x20	1.4	1000	0.37	41	71 - 63	
1372	49x28	1.0	1000	0.31	34		
1960	49x40	0.71	1000	0.24	32		
2800	70x40	0.50	1000	0.19	27		
4000	100x40	0.35	1000	0.16	23		
5600	100x56	0.25	1000	0.12	21		
7000	100x70	0.20	960	0.11	19		
8000	100x80	0.18	860	0.09	18		
10000	100x100	0.14	700	0.06	16		

CRI 63/110 44							
ir	i ₁ x _{i2}	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	IEC	
140	7x20	10.0	1000	1.7	60	90 - 80 - 71	90 - 80 71
200	10x20	7.0	1000	1.2	59		
280	10x28	5.0	1000	1.0	51		
400	20x20	3.5	1000	0.70	52		
600	15x40	2.3	1000	0.56	44		
980	49x20	1.4	1000	0.36	42	80 - 71	
1372	49x28	1.0	1000	0.31	35		
1960	49x40	0.71	1000	0.23	32		
2800	70x40	0.50	1000	0.18	28		
4000	100x40	0.35	1000	0.15	24		
5600	100x56	0.25	1000	0.12	22		
7000	100x70	0.20	960	0.10	20		
8000	100x80	0.18	860	0.08	19		
10000	100x100	0.14	700	0.06	17		

CRI 70/110 51							
ir	i ₁ x _{i2}	n ₁ = 1400 min ⁻¹				CRMI	CRMI...G
		n ₂ min ⁻¹	T _{2M} Nm	P kW	RD %	IEC	
140	7x20	10.0	1000	1.7	61	100-90-80	—
200	10x20	7.0	1000	1.2	59		
280	10x28	5.0	1000	1.0	51		
400	20x20	3.5	1000	0.70	52		
600	15x40	2.3	1000	0.56	44		
980	49x20	1.4	1000	0.36	42	80 - 71	
1372	49x28	1.0	1000	0.31	35		
1960	49x40	0.71	1000	0.23	32		
2800	70x40	0.50	1000	0.19	28		
4000	100x40	0.35	1000	0.15	24		
5600	100x56	0.25	1000	0.12	22		
7000	100x70	0.20	960	0.10	20		
8000	100x80	0.18	860	0.08	19		
10000	100x100	0.14	700	0.06	17		



1.6 Prestazioni riduttori CRI

1.6 CRI gearboxes performances

1.6 Leistungen der CRI-Getriebe

CRI 85/110



56

ir	$i_1 \times i_2$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		$n_2 \text{ min}^{-1}$	$T_{2M} \text{ Nm}$	P kW	RD %		
140	7x20	10.0	1000	1.7	61	112-100 90	-
200	10x20	7.0	1000	1.2	60		
280	10x28	5.0	1000	1.0	51		
400	20x20	3.5	1000	0.68	54		
600	15x40	2.3	1000	0.55	45		
980	49x20	1.4	1000	0.35	42		
1372	49x28	1.0	1000	0.30	35		
1960	49x40	0.71	1000	0.23	33		
2800	70x40	0.50	1000	0.18	30		
4000	100x40	0.35	1000	0.14	25		
5600	100x56	0.25	1000	0.11	23	90 - 80	-
7000	100x70	0.20	960	0.10	21		
8000	100x80	0.18	860	0.08	20		
10000	100x100	0.14	700	0.06	17		

CRI 63/130



54

ir	$i_1 \times i_2$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		$n_2 \text{ min}^{-1}$	$T_{2M} \text{ Nm}$	P kW	RD %		
140	7x20	10.0	1660	2.8	61	90 - 80 - 71	-
200	10x20	7.0	1800	2.2	59		
280	10x28	5.0	1600	1.7	51		
400	20x20	3.5	1800	1.3	51		
600	15x40	2.3	1800	1.0	43		
980	49x20	1.4	1800	0.64	42		
1372	49x28	1.0	1800	0.56	35		
1960	49x40	0.71	1800	0.42	32		
2800	70x40	0.50	1800	0.34	28		
4000	100x40	0.35	1800	0.28	24		
5600	100x56	0.25	1700	0.19	23		
7000	100x70	0.20	1700	0.17	20		
8000	100x80	0.18	1600	0.15	20		
10000	100x100	0.14	1250	0.11	17		

CRI 70/130



61

ir	$i_1 \times i_2$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		$n_2 \text{ min}^{-1}$	$T_{2M} \text{ Nm}$	P kW	RD %		
140	7x20	10.0	1660	2.8	62	100-90-80	-
200	10x20	7.0	1800	2.2	59		
280	10x28	5.0	1600	1.7	51		
400	20x20	3.5	1800	1.2	53		
600	15x40	2.3	1800	1.0	43		
980	49x20	1.4	1800	0.64	42		
1372	49x28	1.0	1800	0.56	35		
1960	49x40	0.71	1800	0.42	32		
2800	70x40	0.50	1800	0.34	27		
4000	100x40	0.35	1800	0.28	24		
5600	100x56	0.25	1700	0.19	23		
7000	100x70	0.20	1700	0.17	20		
8000	100x80	0.18	1600	0.15	20		
10000	100x100	0.14	1250	0.11	17		

CRI 85/130



66

ir	$i_1 \times i_2$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		$n_2 \text{ min}^{-1}$	$T_{2M} \text{ Nm}$	P kW	RD %		
140	7x20	10.0	1660	2.8	62	112-100 90	-
200	10x20	7.0	1800	2.2	60		
280	10x28	5.0	1600	1.6	51		
400	20x20	3.5	1800	1.2	55		
600	15x40	2.3	1800	1.0	44		
980	49x20	1.4	1800	0.63	43		
1372	49x28	1.0	1800	0.55	35		
1960	49x40	0.71	1800	0.41	33		
2800	70x40	0.50	1800	0.32	29		
4000	100x40	0.35	1800	0.26	25		
5600	100x56	0.25	1700	0.19	24		
7000	100x70	0.20	1700	0.17	21		
8000	100x80	0.18	1600	0.14	21		
10000	100x100	0.14	1250	0.10	18		

CRI 85/150



95

ir	$i_1 \times i_2$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		$n_2 \text{ min}^{-1}$	$T_{2M} \text{ Nm}$	P kW	RD %		
140	7x20	10.0	2620	4.3	64	112-100 90	-
200	10x20	7.0	2850	3.4	61		
280	10x28	5.0	2510	2.5	53		
400	20x20	3.5	2900	1.9	55		
600	15x40	2.3	2880	1.6	45		
980	49x20	1.4	2900	0.98	44		
1372	49x28	1.0	2900	0.84	37		
1960	49x40	0.71	2900	0.64	34		
2800	70x40	0.50	2900	0.50	31		
4000	100x40	0.35	2900	0.42	25		
5600	100x56	0.25	2900	0.30	25		
7000	100x70	0.20	2600	0.25	22		
8000	100x80	0.18	2600	0.23	21		
10000	100x100	0.14	1950	0.15	19		

CRI 110/150



115

ir	$i_1 \times i_2$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		$n_2 \text{ min}^{-1}$	$T_{2M} \text{ Nm}$	P kW	RD %		
140	7x20	10.0	2620	4.3	65	132-112-100	-
200	10x20	7.0	2850	3.4	62		
280	10x28	5.0	2510	2.5	54		
400	20x20	3.5	2900	1.9	57		
600	15x40	2.3	2880	1.5	46		
980	49x20	1.4	2900	0.92	47		
1372	49x28	1.0	2900	0.79	39		
1960	49x40	0.71	2900	0.60	36		
2800	70x40	0.50	2900	0.47	32		
4000	100x40	0.35	2900	0.39	27		
5600	100x56	0.25	2900	0.28	27		
7000	100x70	0.20	2600	0.23	23		
8000	100x80	0.18	2600	0.21	22		
10000	100x100	0.14	1950	0.14	21		



1.6 Prestazioni riduttori CRI

1.6 CRI gearboxes performances

1.6 Leistungen der CRI-Getriebe

CRI 85/180



148

ir	$i_1 \times i_2$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		n_2 min^{-1}	T_{2M} Nm	P kW	RD %		
140	7x20	10.0	3750	6.1	65	112-100 90	-
200	10x20	7.0	4095	4.8	62		
280	10x28	5.0	3700	3.5	55		
400	20x20	3.5	4400	3.0	56		
600	15x40	2.3	4160	2.2	46		
980	49x20	1.4	3850	1.6	44		
1372	49x28	1.0	4600	1.3	38		
1960	49x40	0.71	4600	1.0	34		
2800	70x40	0.50	4600	0.79	31		
4000	100x40	0.35	4250	0.62	26		
5600	100x56	0.25	4600	0.48	25	90 - 80	-
7000	100x70	0.20	4600	0.44	22		
8000	100x80	0.18	4200	0.37	21		
10000	100x100	0.14	3300	0.26	19		

CRI 110/180



168

ir	$i_1 \times i_2$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		n_2 min^{-1}	T_{2M} Nm	P kW	RD %		
140	7x20	10.0	3750	6.0	65	132-112-100	-
200	10x20	7.0	4095	4.8	63		
280	10x28	5.0	3700	3.5	55		
400	20x20	3.5	4600	2.9	58		
600	15x40	2.3	4160	2.2	47		
980	49x20	1.4	4600	1.5	47		
1372	49x28	1.0	4600	1.2	40		
1960	49x40	0.71	4600	0.96	36		
2800	70x40	0.50	4600	0.75	32		
4000	100x40	0.35	4600	0.60	28		
5600	100x56	0.25	4600	0.45	27	112-100-90	-
7000	100x70	0.20	4600	0.41	23		
8000	100x80	0.18	4200	0.35	22		
10000	100x100	0.14	3300	0.24	20		

CRI 130/180



178

ir	$i_1 \times i_2$	$n_1 = 1400 \text{ min}^{-1}$				CRMI	CRMI...G
		n_2 min^{-1}	T_{2M} Nm	P kW	RD %		
140	7x20	10.0	3750	5.9	67	132-112-100	-
200	10x20	7.0	4095	4.7	64		
280	10x28	5.0	3700	3.4	57		
400	20x20	3.5	4600	2.9	59		
600	15x40	2.3	4160	2.1	48		
980	49x20	1.4	4600	1.4	48		
1372	49x28	1.0	4600	1.2	41		
1960	49x40	0.71	4600	0.95	36		
2800	70x40	0.50	4600	0.72	34		
4000	100x40	0.35	4600	0.58	29		
5600	100x56	0.25	4600	0.43	28	112-100	-
7000	100x70	0.20	4600	0.40	24		
8000	100x80	0.18	4200	0.33	23		
10000	100x100	0.14	3300	0.23	21		

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

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

Die angegebenen Gewichte sind Richtwerte und können sich je nach Getriebeversion ändern.



1.6 Prestazioni riduttori CR

1.6 CR gearboxes performances

1.6 Leistungen der CR-Getriebe

CR 40



3.5

ir	$i_1 \times i_2$	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
		n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	
		min^{-1}	Nm	kW	%	min^{-1}	Nm	kW	%	min^{-1}	Nm	kW	%	min^{-1}	Nm	kW	%	
44.3	2.9x15	63	49	0.43	75	32	59	0.27	73	20	65	0.19	71	11.3	70	0.12	69	63-56
50.5	3.4X15	55	49	0.38	75	28	59	0.23	73	17.8	65	0.17	71	9.9	70	0.11	68	
58.2	3.9X15	48	52	0.35	75	24	65	0.23	71	15.5	70	0.16	69	8.6	70	0.09	68	
68.0	4.5X15	41	56	0.32	74	21	65	0.20	71	13.2	70	0.14	69	7.4	70	0.08	66	
82.7	3.0X28	34	50	0.28	64	16.9	59	0.17	61	10.9	65	0.13	59	6.0	70	0.08	56	
108.7	3.9X28	26	52	0.22	63	12.9	65	0.15	59	8.3	70	0.11	56	4.6	70	0.06	55	
126.9	4.5X28	22	56	0.21	62	11.0	65	0.13	59	7.1	70	0.09	56	3.9	70	0.06	52	
165.1	3.4X49	17.0	43	0.14	53	8.5	50	0.09	49	5.5	56	0.07	45	3.0	65	0.05	43	
222.1	4.5X49	12.6	48	0.12	51	6.3	56	0.08	47	4.1	61	0.06	44	2.3	70	0.04	41	
295.2	3.0X100	9.5	30	0.07	41	4.7	31	0.04	38	3.0	33	0.03	36	1.7	34	0.02	34	
336.8	3.4X100	8.3	30	0.06	41	4.2	31	0.04	38	2.7	33	0.03	35	1.5	35	0.02	33	
388.2	3.9X100	7.2	30	0.06	41	3.6	33	0.03	36	2.3	34	0.02	34	1.3	35	0.01	33	
453.0	4.5X100	6.2	31	0.05	40	3.1	33	0.03	36	2.0	34	0.02	33	1.1	35	0.01	31	

CR 50



5

ir	$i_1 \times i_2$	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
		n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	
		min^{-1}	Nm	kW	%	min^{-1}	Nm	kW	%	min^{-1}	Nm	kW	%	min^{-1}	Nm	kW	%	
48.3	3.2x15	58	89	0.68	79	29	106	0.42	77	18.6	108	0.28	75	10.4	110	0.16	73	71-63-56
52.1	3.5X15	54	94	0.67	79	27	108	0.40	76	17.3	110	0.27	74	9.6	110	0.15	73	
61.0	4.1X15	46	94	0.57	79	23	108	0.34	76	14.8	110	0.23	74	8.2	110	0.13	73	
73.3	2.6X28	38	92	0.55	67	19.1	109	0.34	64	12.3	110	0.23	62	6.8	110	0.13	59	
90.2	3.2X28	31	92	0.45	67	15.5	109	0.28	64	10.0	110	0.19	59	5.5	110	0.11	58	
97.2	3.5X28	29	97	0.44	66	14.4	110	0.27	62	9.3	110	0.18	59	5.1	110	0.10	58	
113.9	4.1X28	25	97	0.38	66	12.3	110	0.23	62	7.9	110	0.15	59	4.4	110	0.09	58	
170.1	3.5X49	16.5	86	0.26	58	8.2	103	0.17	53	5.3	110	0.12	50	2.9	110	0.07	49	
199.3	4.1X49	14.0	86	0.22	58	7.0	103	0.14	53	4.5	110	0.10	50	2.5	110	0.06	49	
261.9	2.6X100	10.7	59	0.15	44	5.3	60	0.08	40	3.4	60	0.06	38	1.9	60	0.03	35	
289.5	5.9x49	9.7	96	0.21	47	4.8	110	0.11	50	3.1	110	0.07	49	1.7	110	0.04	47	
347.0	3.5X100	8.1	60	0.12	43	4.0	60	0.07	38	2.6	60	0.05	35	1.4	60	0.03	34	
406.7	4.1X100	6.9	60	0.10	43	3.4	60	0.06	38	2.2	60	0.04	35	1.2	60	0.02	34	
590.9	5.9x100	4.7	60	0.07	40	2.4	60	0.04	35	1.5	60	0.03	34	0.8	60	0.02	32	

CR 70



16

ir	$i_1 \times i_2$	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
		n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	
		min^{-1}	Nm	kW	%	min^{-1}	Nm	kW	%	min^{-1}	Nm	kW	%	min^{-1}	Nm	kW	%	
44.3	2.95x15	63	170	1.4	78	32	205	0.89	76	20	234	0.67	74	11.3	263	0.43	72	90-80-71-63
50.8	3.4X15	55	170	1.3	78	28	205	0.78	76	17.7	234	0.59	73	9.8	290	0.43	70	
59.1	3.9X15	47	181	1.2	78	24	234	0.78	74	15.2	263	0.58	72	8.5	290	0.37	70	
69.6	4.6X15	40	193	1.1	77	20	234	0.67	74	12.9	263	0.49	72	7.2	312	0.34	69	
82.6	2.95X28	34	170	0.89	68	16.9	202	0.56	64	10.9	228	0.42	62	6.1	254	0.27	59	
110.3	3.9X28	25	180	0.71	67	12.7	228	0.49	62	8.2	254	0.37	59	4.5	290	0.24	57	
130.0	4.6X28	22	191	0.66	66	10.8	228	0.42	62	6.9	254	0.31	59	3.8	298	0.22	55	
166.1	3.4X49	16.9	190	0.56	60	8.4	223	0.35	56	5.4	250	0.28	51	3.0	290	0.19	48	
227.5	4.6X49	12.3	212	0.48	57	6.2	250	0.30	53	4.0	276	0.23	50	2.2	320	0.16	46	
295.0	2.95x100	9.5	144	0.30	47	4.7	166	0.19	43	3.1	175	0.14	40	1.7	183	0.09	37	
302.9	6.2X49	9.2	223	0.42	51	4.6	276	0.27	49	3.0	290	0.19	47	1.7	320	0.12	46	
338.9	3.4X100	8.3	144	0.27	47	4.1	166	0.17	43	2.7	175	0.13	38	1.5	188	0.08	36	
393.8	3.9X100	7.1	151	0.24	46	3.6	175	0.16	40	2.3	183	0.12	37	1.3	188	0.07	36	
464.3	4.6X100	6.3	159	0.23	45	3.1	175	0.14	40	2.0	183	0.10	37	1.1	190	0.07	34	
618.2	6.2x100	4.5	166	0.18	43	2.3	183	0.12	36	1.5	188	0.08	35	0.8	190	0.05	34	



1.6 Prestazioni riduttori CR

16 CR gearboxes performances

1.6 Leistungen der CR-Getriebe

CR 85



36

ir	$i_1 \times i_2$	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
		n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	
		min ⁻¹	Nm	kW	%	min ⁻¹	Nm	kW	%	min ⁻¹	Nm	kW	%	min ⁻¹	Nm	kW	%	
43.0	2.9x15	65	333	2.9	79	33	403	1.8	77	21	452	1.3	75	11.6	500	0.83	73	90-80-71-63
51.3	3.4x15	55	333	2.4	79	27	403	1.5	77	17.5	500	1.3	73	9.7	500	0.72	71	
59.1	3.9x15	47	354	2.2	79	24	452	1.5	75	15.2	500	1.1	73	8.5	500	0.62	71	
69.0	4.6x15	41	379	2.1	78	20	452	1.3	75	13.0	500	0.94	73	7.2	500	0.55	69	
80.2	2.9x28	35	319	1.7	69	17.5	381	1.1	65	11.2	431	0.82	62	6.2	480	0.53	59	
110.4	3.9x28	25	338	1.3	68	12.7	431	0.92	62	8.2	480	0.69	59	4.5	500	0.42	57	
128.8	4.6x28	22	360	1.2	67	10.9	431	0.79	62	7.0	480	0.60	59	3.9	500	0.37	55	
167.6	3.4x49	16.7	329	0.93	62	8.4	387	0.58	58	5.4	480	0.52	52	3.0	500	0.31	50	
225.4	4.6x49	12.4	347	0.69	60	6.2	434	0.51	55	4.0	480	0.39	52	2.2	500	0.24	48	
286.4	2.9x100	9.8	243	0.50	50	4.9	281	0.33	44	3.1	304	0.24	42	1.7	327	0.15	39	
342.1	3.4x100	8.2	243	0.42	50	4.1	281	0.27	44	2.6	327	0.23	39	1.5	337	0.14	37	
394.1	3.9x100	7.1	255	0.40	48	3.6	304	0.27	42	2.3	327	0.20	39	1.3	337	0.12	37	
460.0	4.6x100	6.1	268	0.37	46	3.0	304	0.23	42	2.0	327	0.17	39	1.1	350	0.11	35	

CR 110



50

ir	$i_1 \times i_2$	$n_1 = 2800 \text{ min}^{-1}$				$n_1 = 1400 \text{ min}^{-1}$				$n_1 = 900 \text{ min}^{-1}$				$n_1 = 500 \text{ min}^{-1}$				IEC
		n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	n_2	T_{2M}	P	RD	
		min ⁻¹	Nm	kW	%	min ⁻¹	Nm	kW	%	min ⁻¹	Nm	kW	%	min ⁻¹	Nm	kW	%	
43.0	2.9x15	65	632	5.4	80	33	769	3.4	78	21	880	2.5	76	11.6	990	1.6	74	112-100-90-80
51.3	3.4x15	55	632	4.5	80	27	769	2.8	78	17.5	990	2.5	74	9.7	1000	1.4	72	
59.1	3.9x15	47	674	4.2	80	24	880	2.9	76	15.2	990	2.1	74	8.5	1000	1.2	72	
69.0	4.6x15	41	722	3.9	79	20	880	2.5	76	13.0	990	1.8	74	7.2	1000	1.1	70	
80.2	2.9x28	35	665	3.4	72	17.5	796	2.1	69	11.2	898	1.6	66	6.2	1000	1.0	63	
110.4	3.9x28	25	705	2.6	72	12.7	898	1.8	66	8.2	1000	1.4	63	4.5	1000	0.78	61	
128.8	4.6x28	22	751	2.4	71	10.9	898	1.5	66	7.0	1000	1.2	63	3.9	1000	0.70	58	
167.6	3.4x49	16.7	667	1.8	66	8.4	786	1.1	62	5.4	976	0.98	56	3.0	1000	0.59	53	
225.4	4.6x49	12.4	745	1.5	64	6.2	881	0.97	59	4.0	976	0.73	56	2.2	1000	0.46	51	
286.4	2.9x100	9.8	503	0.97	53	4.9	583	0.61	49	3.1	617	0.42	48	1.7	650	0.28	42	
342.1	3.4x100	8.2	503	0.81	53	4.1	583	0.51	49	2.6	650	0.43	42	1.5	670	0.26	40	
394.1	3.9x100	7.1	528	0.76	52	3.6	617	0.48	48	2.3	650	0.37	42	1.3	670	0.22	40	
460.0	4.6x100	6.1	556	0.70	51	3.0	617	0.42	47	2.0	650	0.32	42	1.1	700	0.21	38	

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

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

Die angegebenen Gewichte sind Richtwerte und können je nach Getriebeversion etwas variieren.

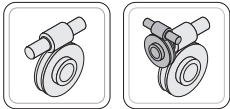
N.B. Per i riduttori evidenziati dal doppio bordo nella colonna delle potenze è necessario verificare lo scambio termico del riduttore (come nel par. 1.7-A). Per maggiori informazioni contattare l'ufficio tecnico STM.

NOTE. Please pay attention to the frame around the input power value: for this gearboxes it's important to check the thermal capacity (comp. chapter 1.7-A). For details please contact our technical department.

HINWEIS. Sind in den Tabellen Nennleistungen eingerahmt, so ist die thermische Leistungsgrenze der Getriebe zu beachten (s. S. 1.7-A). Für weitere Informationen wenden Sie sich bitte an unser technisches Büro.



STANDARD



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

RMI - CRMI

Tab. 2.12

	IEC	ir											
		7	10	15	20	28	40	49	56	70	80	100	
RMI 28 CRMI 28..	63	11/90 (B14)											
	56	9/120 (B5) - 9/80• (B14)											
RMI..G 40 CRMI..G 40...	71 ⁽⁴⁾	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											
	56	9/120 (B5) - 9/160 - 9/140 - 9/105 - 9/90•											
RMI..G 50 CRMI..G 50..	80 ⁽⁴⁾	19/120 (B14) - 19/200 (B5) - 19/160 - 19/140 - 19/105• - 19/90•											
	71	14/160 (B5) - 14/105• (B14) - 14/200 - 14/140 - 14/120 - 14/90•											
	63	11/140 (B5) - 11/90• (B14) - 11/200 - 11/160 - 11/120 - 11/105•											
RMI..G 63 CRMI..G 63..	90 ⁽⁴⁾	24/200 (B5) - 24/140 (B14) - 24/160 - 24/120 - 24/105•											
	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140 - 19/105•											
	71	14/160 (B5) - 14/105• (B14) - 14/200 - 14/140 - 14/120											
RMI 70 CRMI 70..	100 ⁽³⁾	28/160 (B14)											
	90	24/200 (B5) - 24/140 (B14) - 24/160 - 24/120 - 24/105•											
	80	19/200 (B5) - 19/120 (B14) - 19/160 - 19/140 - 19/105•											
	71 ⁽¹⁾						14/160 (B5) - 14/105• (B14) - 14/200 - 14/140 - 14/120						
RMI 85 CRMI 85..	100	28/250 (B5) - 28/160 (B14) - 28/200											
	90	24/200 (B5) - 24/140 (B14) - 24/250 - 24/160 - 24/120											
	80 ⁽¹⁾						19/200 (B5) - 19/120• (B14) - 19/250 - 19/160 - 19/140						
RMI 110 CRMI 110..	132 ⁽²⁾⁽⁴⁾	38/300 (B5)											
	112	28/250 (B5) - 28/160 (B14) - 28/200											
	100	28/250 (B5) - 28/160 (B14) - 28/200											
	90 ⁽¹⁾						24/200 (B5) - 24/250 - 24/160						
RMI 130 CRMI 130..	132	38/300 (B5)											
	112	28/250 (B5) - 28/200											
	100	28/250 (B5) - 28/200											
RMI 150	160	42/350 (B5)											
	132	38/300 (B5) - 38/350 - 38/250 - 38/200											
	112 ⁽¹⁾	28/250 (B5) - 28/350 - 28/300 - 28/200											
	100 ⁽¹⁾	28/250 (B5) - 28/350 - 28/300 - 28/200											
RMI 180	180	48/350 (B5)											
	160	42/350 (B5) - 42/300 - 42/250											
	132	38/300 (B5) - 38/350 - 38/250											

⁽¹⁾ I riduttori RMI e CRMI con vite bisporgente vengono realizzati con boccia di riduzione in acciaio (es. per RMI 110 boccia riduzione ø 28/24).

N.B.
Per le grandezze 40, 50, 63 sono possibili solo queste configurazioni:
RMI: La bisporgenza è realizzata solo con giunto;
CRMI: La bisporgenza sul 1° è realizzata solo con giunto;
Per IEC Vedi pag. B29.

⁽²⁾ Non disponibile in versione F2

⁽³⁾ Si sconsiglia di montare i riduttori nelle posizioni di montaggio 03 e 04.

⁽⁴⁾ **ATTENZIONE!**
(Vedere Paragrafo 1.11-A).

⁽¹⁾ The RMI and CRMI worm gearboxes with double extended input shaft have a steel axle box (e.g. for RMI 110 axle box ø 28/24).

N.B.
These are the only configurations possible for sizes 40, 50, 63
RMI: The double extension is made by using a coupling;
CRMI: The double extension on 1° is made by using a coupling;
IEC Look at pag. B29.

⁽²⁾ Version F2 not available.

⁽³⁾ We advise you to mount the speed reducer in the positions 03 or 04.

⁽⁴⁾ **WARNING!**
(Look at chapter 1.11-A).

⁽¹⁾ RMI und CRMI-Getriebe mit beidseitiger Antriebswelle haben eine Stahl-Reduziermuffe (z.B. RMI 110 Muffe 28/24)

Hinweis:
Für die Größen 40, 50, 63 sind nur diese Konfigurationen möglich:
RMI: Das doppelte Wellenende wurde nur mit Kupplung hergestellt;
CRMI: Das doppelte Wellenende auf 1° wurde nur mit Kupplung hergestellt;
IEC siehe B29.

⁽²⁾ Nicht erhältlich in Ausuerung F2

⁽³⁾ Wir abraten die Getriebe in position Nummer 03 oder 04 zu montieren.

⁽⁴⁾ **ACHTUNG!**
(s. S. 1.11-A).



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

CB

Tab. 2.13

	Possibili accoppiamenti con motori IEC <i>Possible couplings with IEC motor</i> Mögliche Verbindungen mit IEC-Motoren		
	IEC	ir	
		Tutti / All / Alle	
CB 40	63	11/140 (B5) - 11/90 (B14)	11/120 - 11/80
	56	9/120 (B5) - 9/80 (B14)	9/140
CB 50	71	14/160 (B5)	14/140
	63	11/140 (B5) - 11/90 (B14)	11/160
	56	9/120 (B5) - 9/80 • (B14)	9/160 - 9/140
CB 70	90	24/200 (B5)	
	80	19/200 (B5)	19/160
	71	14/160 (B5)	14/140
	63	11/140 (B5)	11/160

	Possibili accoppiamenti con motori IEC <i>Possible couplings with IEC motor</i> Mögliche Verbindungen mit IEC-Motoren		
	IEC	ir	
		Tutti / All / Alle	
CB 85	90	24/200 (B5)	24/160
	80	19/200 (B5)	19/160
	71	14/160 (B5)	14/140
	63	11/140 (B5)	11/160
CB 110	112	28/250 (B5)	
	100	28/250 (B5)	
	90	24/200 (B5)	
	80	19/200 (B5)	

Legenda:

11/140 (B5)

11/120

11/140 : combinazioni albero/flangia standard (B5) : forma costruttiva motore IEC
11/120 : combinazioni albero/flangia a richiesta

Key:

11/140 (B5)

11/120

11/140 : standard shaft/flange combination (B5) : IEC motor constructive shape
11/120 : shaft/flange combinations upon request

Legende:

11/140 (B5)

11/120

11/140 : Standardkombinationen Welle/Flansch (B5) : Konstruktionsform IEC-Motor
11/120 : Sonderkombinationen Welle/Flansch

N.B.

La configurazione standard della flangia attacco motore prevede 4 fori a 45° (esempio x: vedi par. 1.3).

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

Note.

The standard configuration for the 4 holes is 45° to the axles (like an x: see par. 1.3).

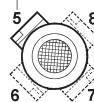
For the B14 flanges marked with (•) the holes to fit the motor are on the axles (like a +). Therefore we suggest to check the dimensions of the terminal board of the motor as it will be at 45° to the axles. Please, choose the terminal board position referring to the following sketch (in which N° 5 is the standard position):

HINWEIS.

In der Standardkonfiguration sind die 4 Flanschbohrungen im 45°-Winkel zu den Achsen angeordnet (wie ein x: siehe kapitel 1.3).

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

STANDARD





1.7 Prestazioni motoriduttori

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.09 kW					
				$n_1= 2740 \text{ min}^{-1}$ $n_1= 1360 \text{ min}^{-1}$ $n_1= 860 \text{ min}^{-1}$	56A 2 56B 4 63B 6

391	7	2	6.0	RMI 28	56A 2
274	10	3	5.1	RMI 28	56A 2
194	7	4	4.2	RMI 28	56B 4
136	10	5	3.4	RMI 28	56B 4
123	7	6	3.3	RMI 28	63B 6
91	15	7	2.5	RMI 28	56B 4
68	20	9	1.6	RMI 28	56B 4
57	15	11	1.8	RMI 28	63B 6
49	28	12	3.6	RMI 40	56B 4
49	28	11	1.7	RMI 28	56B 4
43	20	14	3.1	RMI 40	63B 6
43	20	14	1.3	RMI 28	63B 6
34	40	15	2.6	RMI 40	56B 4
34	40	15	1.1	RMI 28	56B 4
31	28	18	2.8	RMI 40	63B 6
31	28	17	1.2	RMI 28	63B 6
28	49	18	2.2	RMI 40	56B 4
28	49	17	0.9	RMI 28	56B 4
27	50.5	23	2.5	CB 40	56B 4
24	56	19	1.9	RMI 40	56B 4
23	58.2	26	2.5	CB 40	56B 4
22	40	22	0.8	RMI 28	63B 6
20	68.0	31	2.1	CB 40	56B 4
19.4	70	21	1.3	RMI 40	56B 4
17.0	80	22	1.2	RMI 40	56B 4
16.4	82.7	32	1.9	CB 40	56B 4
15.4	56	29	1.4	RMI 40	63B 6
14.8	58.2	40	1.7	CB 40	63B 6
13.6	100	28	1.0	RMI 40	56B 4
12.5	108.7	40	1.6	CB 40	56B 4
12.3	70	31	1.0	RMI 40	63B 6
11.9	113.9	44	2.5	CB 50	56B 4
10.7	126.9	47	1.4	CB 40	56B 4
9.7	140	48	2.3	CRMI 28/50	56B 4
9.7	140	45	1.4	CRMI 28/40	56B 4
8.2	165.1	51	1.0	CB 40	56B 4
8.0	170.1	56	1.8	CB 50	56B 4
6.8	200	66	1.7	CRMI 28/50	56B 4
6.8	200	62	1.1	CRMI 28/40	56B 4
6.1	222.1	65	0.9	CB 40	56B 4
5.1	170.1	85	1.3	CB 50	63B 6
4.9	280	81	1.4	CRMI 28/50	56B 4
4.9	280	77	0.9	CRMI 28/40	56B 4
3.4	400	116	2.1	CRMI 28/63	56B 4
3.4	400	116	0.9	CRMI 28/50	56B 4
2.3	600	149	2.1	CRMI 40/70	56B 4
2.3	600	145	1.7	CRMI 28/63	56B 4
1.4	980	219	1.5	CRMI 40/70	56B 4
1.4	980	219	1.1	CRMI 28/63	56B 4
0.99	1372	257	1.2	CRMI 40/70	56B 4
0.99	1372	252	0.9	CRMI 28/70	56B 4
0.69	1960	339	1.5	CRMI 40/85	56B 4
0.69	1960	333	0.9	CRMI 28/70	56B 4
0.49	2800	391	1.3	CRMI 40/85	56B 4

1.7 Gearmotors performances

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.09 kW					
				$n_1= 2740 \text{ min}^{-1}$ $n_1= 1360 \text{ min}^{-1}$ $n_1= 860 \text{ min}^{-1}$	56A 2 56B 4 63B 6

0.49	2800	391	0.8	CRMI 40/70	56B 4
0.34	4000	523	1.0	CRMI 40/85	56B 4
0.24	5600	500	—	CRMI 40/85	56B 4
0.19	7000	460	—	CRMI 40/85	56B 4
0.17	8000	460	—	CRMI 40/85	56B 4
0.14	10000	350	—	CRMI 40/85	56B 4

0.11 kW					
				$n_1= 1360 \text{ min}^{-1}$	56C 4

194	7	4	3.4	RMI 28	56C 4
136	10	6	2.8	RMI 28	56C 4
91	15	9	2.1	RMI 28	56C 4
68	20	11	3.3	RMI 40	56C 4
68	20	11	1.3	RMI 28	56C 4
49	28	14	3.0	RMI 40	56C 4
49	28	14	1.4	RMI 28	56C 4
34	40	19	2.2	RMI 40	56C 4
34	40	18	0.9	RMI 28	56C 4
28	49	22	1.8	RMI 40	56C 4
27	50.5	28	2.1	CB 40	56C 4
24	56	23	1.5	RMI 40	56C 4
23	58.2	32	2.0	CB 40	56C 4
20	68.0	37	1.7	CB 40	56C 4
19.4	70	25	1.1	RMI 40	56C 4
17.0	80	27	1.0	RMI 40	56C 4
16.4	82.7	39	1.5	CB 40	56C 4
13.6	100	35	0.8	RMI 40	56C 4
12.5	108.7	49	1.3	CB 40	56C 4
11.9	113.9	54	2.0	CB 50	56C 4
10.7	126.9	57	1.1	CB 40	56C 4
9.7	140	59	1.9	CRMI 28/50	56C 4
9.7	140	55	1.2	CRMI 28/40	56C 4
8.2	165.1	62	0.8	CB 40	56C 4
8.0	170.1	69	1.5	CB 50	56C 4
6.8	200	81	1.4	CRMI 28/50	56C 4
6.8	200	76	0.9	CRMI 28/40	56C 4
4.9	280	99	2.5	CRMI 28/63	56C 4
4.9	280	99	1.1	CRMI 28/50	56C 4
4.7	289.5	112	1.0	CB 50	56C 4
3.4	400	142	1.8	CRMI 28/63	56C 4
2.3	600	186	2.7	CRMI 40/85	56C 4
2.3	600	177	1.4	CRMI 28/63	56C 4
1.4	980	280	1.8	CRMI 40/85	56C 4
1.4	980	267	0.9	CRMI 28/63	56C 4
0.99	1372	308	1.6	CRMI 40/85	56C 4
0.69	1960	414	1.2	CRMI 40/85	56C 4
0.49	2800	478	1.0	CRMI 40/85	56C 4
0.24	5600	500	—	CRMI 40/85	56C 4
0.19	7000	460	—	CRMI 40/85	56C 4
0.17	8000	460	—	CRMI 40/85	56C 4
0.14	10000	350	—	CRMI 40/85	56C 4

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.13 kW					
				$n_1= 2750 \text{ min}^{-1}$ $n_1= 1360 \text{ min}^{-1}$ $n_1= 860 \text{ min}^{-1}$	56B 2 63A 4 63C 6

393	7	3	10.2	RMI 40	56B 2
393	7	3	9.8	RMI 40	56B 2
393	7	3	4.2	RMI 28	56B 2
393	7	3	4.0	RMI 28	56B 2
275	10	4	8.3	RMI 40	56B 2
275	10	4	8.0	RMI 40	56B 2
275	10	4	3.6	RMI 28	56B 2
275	10	4	3.4	RMI 28	56B 2
194	7	5	7.0	RMI 40	63A 4
194	7	5	2.9	RMI 28	63A 4
136	10	7	5.7	RMI 40	63A 4
136	10	7	2.4	RMI 28	63A 4
91	15	11	4.0	RMI 40	63A 4
91	15	10	1.8	RMI 28	63A 4
68	20	13	2.8	RMI 40	63A 4
68	20	13	1.1	RMI 28	63A 4
56	49	14	2.2	RMI 40	56B 2
56	49	14	2.1	RMI 40	56B 2
56	49	13	0.9	RMI 28	56B 2
56	49	14	0.9	RMI 28	56B 2
54	50.5	17	2.9	CB 40	56B 2
54	50.5	18	2.8	CB 40	56B 2
49	28	17	2.5	RMI 40	63A 4
49	28	16	1.2	RMI 28	63A 4
43	20	20	0.9	RMI 28	63C 6
34	40	24	3.4	RMI 50	63A 4
34	40	22	1.8	RMI 40	63A 4
31	28	25	0.9	RMI 28	63C 6
28	49	28	2.6	RMI 50	63A 4
28	49	25	1.5	RMI 40	63A 4
27	50.5	34	1.8	CB 40	63A 4
24	56	31	2.2	RMI 50	63A 4
24	56	28	1.3	RMI 40	63A 4
23	58.2	38	1.7	CB 40	63A 4
22	40	36	2.5	RMI 50	63C 6
22	40	32	1.4	RMI 40	63C 6
20	68.0	44	1.5	CB 40	63A 4
19.4	70	36	1.8	RMI 50	63A 4
19.4	70	30	0.9	RMI 40	63A 4
18.6	73.3	43	2.5	CB 50	63A 4
17.0	80	37	1.6	RMI 50	63A 4
17.0	80	32	0.8	RMI 40	63A 4
16.4	82.7	46	1.3	CB 40	63A 4
15.1	90.2	53	2.1	CB 50	63A 4
14.0	97.2	55	2.0	CB 50	63A 4
13.6	100	44	1.2	RMI 50	63A 4
12.5	108.7	58	1.1	CB 40	63A 4
12.3	70	53	1.4	RMI 50	63C 6
11.9	113.9	64	1.7	CB 50	63A 4
10.7	126.9	68	1.0	CB 40	63A 4
10.5	130.0	73	3.1	CB 70	63A 4
9.7	140	71	2.6	CRMI 28/63	63A 4
9.7	140	69	1.6	CRMI 28/50	63A 4
9.7	140	65	1.0	CRMI 28/40	63A 4



1.7 Prestazioni motoriduttori

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.13 kW				$n_1= 2750 \text{ min}^{-1}$ $n_1= 1360 \text{ min}^{-1}$ $n_1= 860 \text{ min}^{-1}$	56B 2 63A 4 63C 6

8.6	100	64	0.9	RMI 50	63C 6
8.0	170.1	82	1.3	CB 50	63A 4
7.9	108.7	88	0.8	CB 40	63C 6
7.8	110.3	94	2.7	CB 70	63C 6
6.8	199.3	96	1.1	CB 50	63A 4
6.8	200	97	2.3	CRMI 28/70	63A 4
6.8	200	95	1.2	CRMI 28/50	63A 4
6.0	227.5	110	2.3	CB 70	63A 4
4.9	280	117	2.1	CRMI 28/63	63A 4
4.9	280	117	0.9	CRMI 28/50	63A 4
4.7	289.5	132	0.8	CB 50	63A 4
4.5	302.9	138	2.0	CB 70	63A 4
3.5	393.8	144	1.2	CB 70	63A 4
3.4	400	171	1.9	CRMI 40/70	63A 4
3.4	400	168	1.5	CRMI 28/63	63A 4
3.0	446.3	163	1.1	CB 70	63A 4
3.0	460.0	174	1.7	CB 85	63A 4
2.3	600	215	1.5	CRMI 40/70	63A 4
2.3	600	210	1.2	CRMI 28/63	63A 4
2.2	618.2	209	0.9	CB 70	63A 4
1.4	980	366	2.7	CRMI 50/110	63A 4
1.4	980	331	1.5	CRMI 40/85	63A 4
0.99	1372	426	2.3	CRMI 50/110	63A 4
0.99	1372	364	1.4	CRMI 40/85	63A 4
0.99	1372	371	0.9	CRMI 40/70	63A 4
0.69	1960	564	1.8	CRMI 50/110	63A 4
0.69	1960	490	1.0	CRMI 40/85	63A 4
0.49	2800	701	1.4	CRMI 50/110	63A 4
0.49	2800	565	0.9	CRMI 40/85	63A 4
0.34	4000	841	1.2	CRMI 50/110	63A 4
0.24	5600	1080	0.9	CRMI 50/110	63A 4
0.19	7000	1196	0.8	CRMI 50/110	63A 4
0.17	8000	860	—	CRMI 50/110	63A 4
0.14	10000	700	—	CRMI 50/110	63A 4

0.18 kW				$n_1= 2760 \text{ min}^{-1}$ $n_1= 1370 \text{ min}^{-1}$ $n_1= 870 \text{ min}^{-1}$	63A 2 63B 4 71A 6
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394	7	4	7.4	RMI 40	63A 2
394	7	4	3.0	RMI 28	63A 2
276	10	5	6.0	RMI 40	63A 2
276	10	5	2.6	RMI 28	63A 2
196	7	7	5.1	RMI 40	63B 4
196	7	7	2.1	RMI 28	63B 4
137	10	10	4.1	RMI 40	63B 4
137	10	10	1.7	RMI 28	63B 4
124	7	11	3.9	RMI 40	71A 6
91	15	14	2.9	RMI 40	63B 4
91	15	14	1.3	RMI 28	63B 4
69	20	18	2.0	RMI 40	63B 4
69	20	18	0.8	RMI 28	63B 4
62	44.3	21	2.4	CB 40	63A 2

1.7 Gearmotors performances

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.18 kW				$n_1= 2760 \text{ min}^{-1}$ $n_1= 1370 \text{ min}^{-1}$ $n_1= 870 \text{ min}^{-1}$	63A 2 63B 4 71A 6

58	15	22	2.2	RMI 40	71A 6
49	28	25	3.3	RMI 50	63B 4
49	28	24	1.8	RMI 40	63B 4
49	28	22	0.8	RMI 28	63B 4
44	20	29	2.9	RMI 50	71A 6
44	20	28	1.6	RMI 40	71A 6
34	40	33	2.4	RMI 50	63B 4
34	40	30	1.3	RMI 40	63B 4
31	44.3	41	1.5	CB 40	63B 4
28	48.3	47	2.3	CB 50	63B 4
28	49	39	1.9	RMI 50	63B 4
28	49	35	1.1	RMI 40	63B 4
27	50.5	46	1.3	CB 40	63B 4
26	52.1	49	2.2	CB 50	63B 4
24	56	42	1.6	RMI 50	63B 4
24	56	38	0.9	RMI 40	63B 4
24	58.2	52	1.2	CB 40	63B 4
22	61.0	58	1.9	CB 50	63B 4
20	68.0	61	1.1	CB 40	63B 4
19.6	70	49	1.3	RMI 50	63B 4
18.7	73.3	59	1.9	CB 50	63B 4
17.1	80	51	1.1	RMI 50	63B 4
16.6	82.6	66	3.0	CB 70	63B 4
16.6	82.7	63	0.9	CB 40	63B 4
15.5	56	64	2.3	RMI 63	71A 6
15.5	56	62	1.3	RMI 50	71A 6
15.2	90.2	72	1.5	CB 50	63B 4
14.1	97.2	75	1.5	CB 50	63B 4
13.7	100	60	0.9	RMI 50	63B 4
12.6	108.7	80	0.8	CB 40	63B 4
12.4	70	75	1.8	RMI 63	71A 6
12.4	70	72	1.0	RMI 50	71A 6
12.4	110.3	85	2.7	CB 70	63B 4
12.0	113.9	88	1.2	CB 50	63B 4
10.9	80	81	1.5	RMI 63	71A 6
10.9	80	74	0.9	RMI 50	71A 6
10.5	130.0	100	2.3	CB 70	63B 4
9.8	140	101	2.4	CRMI 40/63	63B 4
9.8	140	98	1.9	CRMI 28/63	63B 4
9.8	140	95	1.2	CRMI 28/50	63B 4
9.6	90.2	110	1.0	CB 50	71A 6
9.0	97.2	113	1.0	CB 50	71A 6
8.7	100	93	1.6	RMI 70	71A 6
8.7	100	93	1.2	RMI 63	71A 6
8.1	170.1	112	0.9	CB 50	63B 4
7.9	110.3	129	2.0	CB 70	71A 6
6.9	199.3	131	0.78	CB 50	63B 4
6.9	200	136	1.8	CRMI 40/63	63B 4
6.9	200	133	1.7	CRMI 28/63	63B 4
6.9	200	131	0.8	CRMI 28/50	63B 4
6.1	225.4	156	2.8	CB 85	63B 4
6.0	227.5	151	1.6	CB 70	63B 4
4.9	280	162	3.1	CRMI 40/85	63B 4
4.9	280	161	1.6	CRMI 28/63	63B 4

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.18 kW				$n_1= 2760 \text{ min}^{-1}$ $n_1= 1370 \text{ min}^{-1}$ $n_1= 870 \text{ min}^{-1}$	63A 2 63B 4 71A 6

4.5	302.9	190	1.5	CB 70	63B 4
4.0	338.9	183	0.9	CB 70	63B 4
4.0	342.1	189	1.5	CB 85	63B 4
3.5	393.8	198	0.9	CB 70	63B 4
3.4	400	245	2.0	CRMI 40/85	63B 4
3.4	400	234	1.4	CRMI 40/70	63B 4
3.4	400	231	1.1	CRMI 28/63	63B 4
3.0	460.0	240	1.3	CB 85	63B 4
2.9	302.9	287	1.0	CB 70	71A 6
2.3	600	301	1.7	CRMI 40/85	63B 4
2.3	600	288	0.9	CRMI 28/63	63B 4
2.2	394.1	304	1.1	CB 85	71A 6
1.4	980	504	2.0	CRMI 50/110	63B 4
1.4	980	456	1.1	CRMI 40/85	63B 4
1.0	1372	586	1.7	CRMI 50/110	63B 4
1.0	1372	500	1.0	CRMI 40/85	63B 4
0.70	1960	775	1.3	CRMI 50/110	63B 4
0.49	2800	964	1.0	CRMI 50/110	63B 4
0.34	4000	1156	0.9	CRMI 50/110	63B 4
0.24	5600	1000	—	CRMI 50/110	63B 4
0.20	7000	960	—	CRMI 50/110	63B 4
0.17	8000	860	—	CRMI 50/110	63B 4
0.14	10000	700	—	CRMI 50/110	63B 4

0.22 kW				$n_1= 1400 \text{ min}^{-1}$	63C 4
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200	7	9	4.2	RMI 40	63C 4
200	7	9	1.8	RMI 28	63C 4
140	10	12	3.5	RMI 40	63C 4
140	10	12	1.4	RMI 28	63C 4
93	15	17	2.4	RMI 40	63C 4
93	15	17	1.1	RMI 28	63C 4
70	20	22	1.7	RMI 40	63C 4
50	28	29	2.7	RMI 50	63C 4
50	28	28	1.5	RMI 40	63C 4
35	40	40	2.0	RMI 50	63C 4
35	40	36	1.1	RMI 40	63C 4
32	44.3	49	1.2	CB 40	63C 4
29	49	46	1.6	RMI 50	63C 4
29	49	42	0.9	RMI 40	63C 4
28	50.5	55	1.1	CB 40	63C 4
25	56	50	1.4	RMI 50	63C 4
24	58.2	62	1.0	CB 40	63C 4
23	61.0	69	1.6	CB 50	63C 4
21	68.0	72	0.9	CB 40	63C 4
20	70	59	1.1	RMI 50	63C 4
19.1	73.3	70	1.5	CB 50	63C 4
17.5	80	61	0.9	RMI 50	63C 4
15.5	90.2	87	1.3	CB 50	63C 4
12.7	110.3	102	2.2	CB 70	63C 4



1.7 Prestazioni motoriduttori

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.22 kW			$n_1 = 1400 \text{ min}^{-1}$	63C 4	

12.3	113.9	105	1.0	CB 50	63C 4
10.8	130.0	120	1.9	CB 70	63C 4
10.0	140	117	1.6	CRMI 28/63	63C 4
10.0	140	114	1.0	CRMI 28/50	63C 4
8.4	166.1	140	1.6	CB 70	63C 4
7.0	200	163	1.8	CRMI 40/70	63C 4
7.0	200	159	1.4	CRMI 28/63	63C 4
6.2	225.4	186	2.3	CB 85	63C 4
6.2	227.5	181	1.4	CB 70	63C 4
5.0	280	194	1.5	CRMI 40/70	63C 4
5.0	280	193	1.3	CRMI 28/63	63C 4
4.9	286.4	189	1.5	CB 85	63C 4
3.5	400	280	1.1	CRMI 40/70	63C 4
3.0	460	286	1.1	CB 85	63C 4
2.3	600	361	1.4	CRMI 40/85	63C 4
1.4	980	602	1.7	CRMI 50/110	63C 4
1.4	980	545	0.9	CRMI 40/85	63C 4
1.0	1372	700	1.4	CRMI 50/110	63C 4
1.0	1372	599	0.8	CRMI 40/85	63C 4
0.71	1960	927	1.1	CRMI 50/110	63C 4
0.50	2800	1153	0.9	CRMI 50/110	63C 4
0.35	4000	1000	—	CRMI 50/110	63C 4
0.25	5600	1000	—	CRMI 50/110	63C 4
0.20	7000	960	—	CRMI 50/110	63C 4
0.18	8000	860	—	CRMI 50/110	63C 4
0.14	10000	700	—	CRMI 50/110	63C 4

0.25 kW			$n_1 = 2790 \text{ min}^{-1}$ $n_1 = 1370 \text{ min}^{-1}$ $n_1 = 870 \text{ min}^{-1}$	63B 2 71A 4 71B 6	
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399	7	5	5.4	RMI 40	63B 2
399	7	5	2.2	RMI 28	63B 2
279	10	7	4.4	RMI 40	63B 2
279	10	7	1.9	RMI 28	63B 2
196	7	10	6.6	RMI 50	71A 4
196	7	10	3.7	RMI 40	71A 4
137	10	14	5.1	RMI 50	71A 4
137	10	14	3.0	RMI 40	71A 4
124	7	16	5.1	RMI 50	71B 6
124	7	16	2.8	RMI 40	71B 6
91	15	21	3.6	RMI 50	71A 4
91	15	20	2.1	RMI 40	71A 4
69	20	26	2.8	RMI 50	71A 4
69	20	25	1.5	RMI 40	71A 4
58	15	33	2.7	RMI 50	71B 6
58	15	31	1.6	RMI 40	71B 6
49	28	34	2.3	RMI 50	71A 4
49	28	33	1.3	RMI 40	71A 4
44	20	41	2.1	RMI 50	71B 6
44	20	38	1.1	RMI 40	71B 6
34	40	47	3.1	RMI 63	71A 4
34	40	46	1.8	RMI 50	71A 4
31	28	52	3.0	RMI 63	71B 6

1.7 Gearmotors performances

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.25 kW			$n_1 = 2790 \text{ min}^{-1}$ $n_1 = 1370 \text{ min}^{-1}$ $n_1 = 870 \text{ min}^{-1}$	63B 2 71A 4 71B 6	

31	28	51	1.8	RMI 50	71B 6
31	28	49	1.0	RMI 40	71B 6
28	48.3	65	1.6	CB 50	71A 4
28	49	55	3.0	RMI 70	71A 4
28	49	55	2.3	RMI 63	71A 4
28	49	54	1.3	RMI 50	71A 4
26	52.1	69	1.6	CB 50	71A 4
24	56	61	2.8	RMI 70	71A 4
24	56	61	2.1	RMI 63	71A 4
24	56	59	1.2	RMI 50	71A 4
23	59.1	76	3.1	CB 70	71A 4
22	61.0	80	1.3	CB 50	71A 4
22	40	70	2.4	RMI 63	71B 6
22	40	69	1.3	RMI 50	71B 6
19.7	69.6	90	2.6	CB 70	71A 4
19.6	70	70	2.1	RMI 70	71A 4
19.6	70	71	1.7	RMI 63	71A 4
19.6	70	68	0.9	RMI 50	71A 4
18.7	73.3	82	1.3	CB 50	71A 4
17.1	80	75	1.9	RMI 70	71A 4
17.1	80	77	1.4	RMI 63	71A 4
17.1	80	71	0.8	RMI 50	71A 4
16.7	52.1	106	1.0	CB 50	71B 6
16.6	82.6	92	2.2	CB 70	71A 4
15.5	56	89	2.1	RMI 70	71B 6
15.5	56	89	1.6	RMI 63	71B 6
15.5	56	86	0.9	RMI 50	71B 6
15.2	90.2	101	1.1	CB 50	71A 4
14.1	97.2	104	1.1	CB 50	71A 4
13.7	100	89	1.4	RMI 70	71A 4
13.7	100	89	1.1	RMI 63	71A 4
12.4	70	104	1.6	RMI 70	71B 6
12.4	70	104	1.3	RMI 63	71B 6
12.4	110.3	118	1.9	CB 70	71A 4
12.0	113.9	122	0.9	CB 50	71A 4
10.9	80	110	1.5	RMI 70	71B 6
10.9	80	112	1.1	RMI 63	71B 6
10.5	130.0	139	1.6	CB 70	71A 4
9.8	140	144	3.5	CRMI 40/85	71A 4
9.8	140	140	1.7	CRMI 40/63	71A 4
9.8	140	136	0.8	CRMI 40/50	71A 4
8.2	166.1	162	1.4	CB 70	71A 4
8.2	167.6	169	2.3	CB 85	71A 4
6.9	200	195	2.6	CRMI 40/85	71A 4
6.9	200	189	1.3	CRMI 40/63	71A 4
6.1	225.4	216	2.0	CB 85	71A 4
6.0	227.5	210	1.2	CB 70	71A 4
4.9	280	225	2.2	CRMI 40/85	71A 4
4.9	280	229	1.1	CRMI 40/63	71A 4
4.8	286.4	220	1.3	CB 85	71A 4
4.5	302.9	264	1.0	CB 70	71A 4
4.0	342.1	262	1.1	CB 85	71A 4
3.4	400	360	2.8	CRMI 50/110	71A 4
3.4	400	341	1.5	CRMI 40/85	71A 4

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.25 kW			$n_1 = 2790 \text{ min}^{-1}$ $n_1 = 1370 \text{ min}^{-1}$ $n_1 = 870 \text{ min}^{-1}$	63B 2 71A 4 71B 6	

3.0	286.4	326	0.9	CB 85	71B 6
2.3	600	460	2.2	CRMI 50/110	71A 4
2.3	600	419	1.2	CRMI 40/85	71A 4
1.4	980	721	2.5	CRMI 63/130	71A 4
1.4	980	699	1.4	CRMI 50/110	71A 4
1.0	1372	826	2.2	CRMI 63/130	71A 4
1.0	1372	813	1.2	CRMI 50/110	71A 4
0.70	1960	1093	1.6	CRMI 63/130	71A 4
0.70	1960	1076	0.9	CRMI 50/110	71A 4
0.49	2800	1358	1.3	CRMI 63/130	71A 4
0.34	4000	1671	1.1	CRMI 63/130	71A 4
0.20	7000	1700	—	CRMI 63/130	71A 4
0.17	8000	1600	—	CRMI 63/130	71A 4
0.14	10000	1250	—	CRMI 63/130	71A 4

0.37 kW			$n_1 = 2790 \text{ min}^{-1}$ $n_1 = 2790 \text{ min}^{-1}$ $n_1 = 1380 \text{ min}^{-1}$ $n_1 = 910 \text{ min}^{-1}$	63C 2 71A 2 71B 4 80A 6	
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399	7	7	3.6	RMI 40	71A 2
399	7	7	3.6	RMI 40	63C 2
399	7	7	1.5	RMI 28	63C 2
279	10	11	2.9	RMI 40	71A 2
279	10	11	2.9	RMI 40	63C 2
279	10	10	1.3	RMI 28	63C 2
197	7	15	4.5	RMI 50	71B 4
197	7	15	2.5	RMI 40	71B 4
186	15	16	3.7	RMI 50	71A 2
186	15	15	2.1	RMI 40	71A 2
186	15	15	2.1	RMI 40	63C 2
140	20	20	2.8	RMI 50	71A 2
140	20	19	1.5	RMI 40	71A 2
140	20	19	1.5	RMI 40	63C 2
138	10	21	3.5	RMI 50	71B 4
138	10	21	2.0	RMI 40	71B 4
92	15	31	2.5	RMI 50	71B 4
92	15	30	1.4	RMI 40	71B 4
69	20	39	3.4	RMI 63	71B 4
69	20	39	1.9	RMI 50	71B 4
69	20	37	1.0	RMI 40	71B 4
49	28	51	2.7	RMI 63	71B 4
49	28	50	1.6	RMI 50	71B 4
49	28	48	0.9	RMI 40	71B 4
38	73.3	62	1.5	CB 50	71A 2
35	40	69	2.1	RMI 63	71B 4
35	40	68	1.2	RMI 50	71B 4
31	44.3	86	2.4	CB 70	71B 4
29	48.3	95	1.1	CB 50	71B 4
28	49	80	2.1	RMI 70	71B 4
28	49	80	1.6	RMI 63	71B 4
28	49	79	0.9	RMI 50	71B 4



1.7 Prestazioni motoriduttori

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.37 kW					
				$n_1= 2790 \text{ min}^{-1}$ $n_1= 2790 \text{ min}^{-1}$ $n_1= 1380 \text{ min}^{-1}$ $n_1= 910 \text{ min}^{-1}$	63C 2 71A 2 71B 4 80A 6

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.37 kW					
				$n_1= 2790 \text{ min}^{-1}$ $n_1= 2790 \text{ min}^{-1}$ $n_1= 1380 \text{ min}^{-1}$ $n_1= 910 \text{ min}^{-1}$	63C 2 71A 2 71B 4 80A 6

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.55 kW					
				$n_1= 2800 \text{ min}^{-1}$ $n_1= 1380 \text{ min}^{-1}$ $n_1= 1390 \text{ min}^{-1}$ $n_1= 910 \text{ min}^{-1}$	71B 2 71C 4 80A 4 80B 6

27	50.8	99	2.1	CB 70	71B 4
26	52.1	101	1.1	CB 50	71B 4
25	56	89	1.9	RMI 70	71B 4
25	56	89	1.4	RMI 63	71B 4
25	56	86	0.8	RMI 50	71B 4
23	59.1	112	2.1	CB 70	71B 4
23	61.0	118	0.9	CB 50	71B 4
19.8	69.6	132	1.8	CB 70	71B 4
19.7	70	102	1.5	RMI 70	71B 4
19.7	70	104	1.1	RMI 63	71B 4
18.8	73.3	120	0.9	CB 50	71B 4
17.3	80	111	1.3	RMI 70	71B 4
17.3	80	113	1.0	RMI 63	71B 4
17.2	80.2	133	2.9	CB 85	71B 4
16.7	82.6	135	1.5	CB 70	71B 4
15.4	59.1	168	3.0	CB 85	80A 6
15.4	59.1	165	1.6	CB 70	80A 6
13.8	100	131	1.0	RMI 70	71B 4
12.5	110.3	174	1.3	CB 70	71B 4
12.5	110.4	175	2.5	CB 85	71B 4
11.4	80	168	1.6	RMI 85	80A 6
11.4	80	155	1.0	RMI 70	80A 6
10.7	128.8	204	2.1	CB 85	71B 4
10.6	130.0	205	1.1	CB 70	71B 4
9.9	140	211	2.4	CRMI 40/85	71B 4
9.9	140	205	1.2	CRMI 40/63	71B 4
9.1	100	194	1.3	RMI 85	80A 6
8.3	166.1	238	0.9	CB 70	71B 4
8.2	167.6	249	1.6	CB 85	71B 4
7.1	128.8	295	1.6	CB 85	80A 6
7.0	130.0	298	0.9	CB 70	80A 6
6.9	200	298	3.4	CRMI 50/110	71B 4
6.9	200	286	1.7	CRMI 40/85	71B 4
6.9	200	278	0.9	CRMI 40/63	71B 4
6.1	225.4	317	1.4	CB 85	71B 4
6.1	227.5	309	0.8	CB 70	71B 4
5.4	167.6	364	2.7	CB 110	80A 6
4.9	280	359	2.8	CRMI 50/110	71B 4
4.9	280	331	1.5	CRMI 40/85	71B 4
4.9	280	331	0.9	CRMI 40/70	71B 4
4.8	286.4	323	0.9	CB 85	71B 4
4.0	225.4	490	2.0	CB 110	80A 6
4.0	225.4	455	1.1	CB 85	80A 6
3.5	400	529	1.9	CRMI 50/110	71B 4
3.5	400	501	1.0	CRMI 40/85	71B 4
3.2	286.4	506	1.2	CB 110	80A 6
2.3	394.1	643	1.0	CB 110	80A 6
2.3	600	664	2.7	CRMI 63/130	71B 4
2.3	600	676	1.5	CRMI 50/110	71B 4
2.3	600	615	0.8	CRMI 40/85	71B 4
2.0	460.0	750	0.9	CB 110	80A 6
1.4	980	1060	1.7	CRMI 63/130	71B 4
1.4	980	1028	1.0	CRMI 50/110	71B 4
1.0	1372	1214	1.5	CRMI 63/130	71B 4

1.0	1372	1195	0.8	CRMI 50/110	71B 4
0.70	1960	1606	1.1	CRMI 63/130	71B 4
0.49	2800	1996	0.9	CRMI 63/130	71B 4
0.35	4000	1800	—	CRMI 63/130	71B 4
0.25	5600	1700	—	CRMI 63/130	71B 4
0.20	7000	1700	—	CRMI 63/130	71B 4
0.17	8000	1600	—	CRMI 63/130	71B 4
0.14	10000	1250	—	CRMI 63/130	71B 4

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.55 kW					
				$n_1= 2800 \text{ min}^{-1}$ $n_1= 1380 \text{ min}^{-1}$ $n_1= 1390 \text{ min}^{-1}$ $n_1= 910 \text{ min}^{-1}$	71B 2 71C 4 80A 4 80B 6

400	7	11	4.5	RMI 50	71B 2
400	7	11	2.4	RMI 40	71B 2
280	10	16	3.5	RMI 50	71B 2
280	10	16	2.0	RMI 40	71B 2
199	7	22	3.1	RMI 50	80A 4
197	7	22	3.0	RMI 50	71C 4
197	7	22	1.7	RMI 40	71C 4
187	15	23	1.4	RMI 40	71B 2
140	20	29	1.0	RMI 40	71B 2
139	10	31	2.4	RMI 50	80A 4
138	10	31	2.3	RMI 50	71C 4
138	10	31	1.4	RMI 40	71C 4
130	7	34	2.4	RMI 50	80B 6
100	28	39	2.7	RMI 63	71B 2
100	28	39	1.6	RMI 50	71B 2
93	15	45	3.2	RMI 70	80A 4
93	15	45	2.9	RMI 63	80A 4
93	15	45	1.7	RMI 50	80A 4
92	15	46	1.7	RMI 50	71C 4
92	15	44	1.0	RMI 40	71C 4
70	20	58	2.6	RMI 70	80A 4
70	20	58	2.3	RMI 63	80A 4
70	20	57	1.3	RMI 50	80A 4
69	20	58	1.3	RMI 50	71C 4
63	44.3	65	2.6	CB 70	71B 2
58	48.3	72	1.2	CB 50	71B 2
54	52.1	77	1.2	CB 50	71B 2
50	28	75	2.0	RMI 70	80A 4
50	28	75	1.8	RMI 63	80A 4
50	28	74	1.1	RMI 50	80A 4
49	28	76	1.8	RMI 63	71C 4
49	28	75	1.1	RMI 50	71C 4
46	61.0	90	1.0	CB 50	71B 2
46	20	87	2.0	RMI 70	80B 6
46	20	87	1.8	RMI 63	80B 6
46	20	85	1.0	RMI 50	80B 6
40	69.6	101	1.9	CB 70	71B 2
38	73.3	92	1.0	CB 50	71B 2
35	40	101	1.6	RMI 70	80A 4
35	40	101	1.4	RMI 63	80A 4

35	40	102	1.4	RMI 63	71C 4
35	40	100	0.8	RMI 50	71C 4
31	44.3	127	1.6	CB 70	80A 4
31	44.3	128	1.6	CB 70	71C 4
31	90.2	113	0.8	CB 50	71B 2
28	49	120	2.4	RMI 85	80A 4
28	49	119	1.4	RMI 70	80A 4
28	49	119	1.1	RMI 63	80A 4
28	49	119	1.4	RMI 70	71C 4
28	49	119	1.0	RMI 63	71C 4
27	50.8	146	1.4	CB 70	80A 4
27	50.8	147	1.4	CB 70	71C 4
27	51.3	149	2.7	CB 85	80A 4
25	56	140	2.0	RMI 85	80A 4
25	56	131	1.3	RMI 70	80A 4
25	56	131	1.0	RMI 63	80A 4
25	56	132	1.3	RMI 70	71C 4
25	56	132	1.0	RMI 63	71C 4
24	59.1	167	2.7	CB 85	80A 4
24	59.1	165	1.4	CB 70	80A 4
23	59.1	169	2.7	CB 85	71C 4
23	59.1	166	1.4	CB 70	71C 4
20	69.0	196	2.3	CB 85	80A 4
20	69.0	197	2.3	CB 85	71C 4
20	69.6	195	1.2	CB 70	80A 4
19.9	70	161	1.6	RMI 85	80A 4
19.9	70	151	1.0	RMI 70	80A 4
19.8	69.6	196	1.2	CB 70	71C 4
19.7	70	152	1.0	RMI 70	71C 4
17.4	80	175	1.4	RMI 85	80A 4
17.4	80	163	0.9	RMI 70	80A 4
17.3	80.2	197	1.9	CB 85	80A 4
17.3	80	164	0.9	RMI 70	71C 4
17.2	80.2	198	1.9	CB 85	71C 4
16.8	82.6	200	1.0	CB 70	80A 4
16.7	82.6	201	1.0	CB 70	71C 4
16.3	56	187	1.0	RMI 70	80B 6
15.4	59.1	246	1.1	CB 70	80B 6
13.9	100	200	1.1	RMI 85	80A 4
13.0	70	230	1.3	RMI 85	80B 6
12.6	110.3	256	0.9	CB 70	80A 4
12.6	110.4	275	3.3	CB 110	80A 4
12.6	110.4	259	1.7	CB 85	80A 4
12.5	110.3	258	0.9	CB 70	71C 4
12.5	110.4	261	1.7	CB 85	71C 4
10.8	128.8	321	2.8	CB 110	80A 4
10.8	128.8	302	1.4	CB 85	80A 4
10.7	128.8	304	1.4	CB 85	71C 4
9.9	140	320	3.1	CRMI 50/110	80A 4
9.9	140	316	1.6	CRMI 50/85	80A 4
9.9	140	302	0.9	CRMI 50/70	80A 4
9.9	140	318	1.6	CRMI 50/85	71C 4
9.9	140	304	0.9	CRMI 50/70	71C 4
8.3	167.6	393	2.0	CB 110	80A 4



1.7 Prestazioni motoriduttori

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.55 kW					
				$n_1=2800\text{ min}^{-1}$	71B 2
				$n_1=1380\text{ min}^{-1}$	71C 4
				$n_1=1390\text{ min}^{-1}$	80A 4
				$n_1=910\text{ min}^{-1}$	80B 6

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.75 kW					
				$n_1=2820\text{ min}^{-1}$	71C 2
				$n_1=2820\text{ min}^{-1}$	80A 2
				$n_1=1390\text{ min}^{-1}$	80B 4
				$n_1=910\text{ min}^{-1}$	80C 6
				$n_1=920\text{ min}^{-1}$	90S 6

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.75 kW					
				$n_1=2820\text{ min}^{-1}$	71C 2
				$n_1=2820\text{ min}^{-1}$	80A 2
				$n_1=1390\text{ min}^{-1}$	80B 4
				$n_1=910\text{ min}^{-1}$	80C 6
				$n_1=920\text{ min}^{-1}$	90S 6

8.3	167.6	367	1.1	CB 85	80A 4
8.2	167.6	370	1.0	CB 85	71C 4
7.1	128.8	468	2.1	CB 110	80B 6
7.1	128.8	439	1.1	CB 85	80B 6
7.0	200	440	2.3	CRMI 50/110	80A 4
7.0	200	428	1.2	CRMI 50/85	80A 4
6.9	200	443	2.3	CRMI 50/110	71C 4
6.9	200	431	1.2	CRMI 50/85	71C 4
6.2	225.4	503	1.8	CB 110	80A 4
6.2	225.4	468	0.9	CB 85	80A 4
6.1	225.4	472	0.9	CB 85	71C 4
5.0	280	536	3.0	CRMI 63/130	80A 4
5.0	280	529	1.9	CRMI 50/110	80A 4
5.0	280	495	1.0	CRMI 50/85	80A 4
4.9	280	540	3.0	CRMI 63/130	71C 4
4.9	280	533	1.9	CRMI 50/110	71C 4
4.9	280	492	1.0	CRMI 40/85	71C 4
4.9	286.4	530	1.1	CB 110	80A 4
3.5	394.1	678	0.9	CB 110	80A 4
3.5	400	771	2.3	CRMI 63/130	80A 4
3.5	400	907	2.0	CRMI 63/130	80A 4
3.5	400	781	1.3	CRMI 50/110	80A 4
2.3	600	979	1.8	CRMI 63/130	80A 4
2.3	600	998	1.0	CRMI 50/110	80A 4
2.3	600	987	1.8	CRMI 63/130	71C 4
2.3	600	1005	1.0	CRMI 50/110	71C 4
1.4	980	1637	2.8	CRMI 85/180	80A 4
1.4	980	1637	1.8	CRMI 85/150	80A 4
1.4	980	1564	1.2	CRMI 63/130	80A 4
1.4	980	1576	1.1	CRMI 63/130	71C 4
1.0	1372	1955	2.4	CRMI 85/180	80A 4
1.0	1372	1921	1.5	CRMI 85/150	80A 4
1.0	1372	1792	1.0	CRMI 63/130	80A 4
1.0	1372	1805	1.0	CRMI 63/130	71C 4
0.71	1960	2503	1.8	CRMI 85/180	80A 4
0.71	1960	2503	1.2	CRMI 85/150	80A 4
0.50	2800	3227	1.2	CRMI 85/180	80A 4
0.50	2800	3227	0.9	CRMI 85/150	80A 4
0.35	4000	3925	1.1	CRMI 85/180	80A 4
0.25	5600	5271	0.9	CRMI 85/180	80A 4
0.20	7000	5748	0.8	CRMI 85/180	80A 4
0.17	8000	4200	—	CRMI 85/180	80A 4
0.14	10000	3300	—	CRMI 85/180	80A 4

403	7	15	3.3	RMI 50	80A 2
400	7	15	3.3	RMI 50	71C 2
282	10	21	2.6	RMI 50	80A 2
280	10	21	2.6	RMI 50	71C 2
199	7	30	3.8	RMI 63	80B 4
199	7	30	2.2	RMI 50	80B 4
139	10	43	3.3	RMI 70	80B 4
139	10	43	2.9	RMI 63	80B 4
139	10	42	1.7	RMI 50	80B 4
131	7	46	3.5	RMI 70	90S 6
131	7	46	3.0	RMI 63	90S 6
101	28	53	2.0	RMI 63	80A 2
101	28	53	1.2	RMI 50	80A 2
100	28	54	2.0	RMI 63	71C 2
100	28	53	1.2	RMI 50	71C 2
93	15	62	2.3	RMI 70	80B 4
93	15	62	2.1	RMI 63	80B 4
93	15	62	1.2	RMI 50	80B 4
70	20	79	1.9	RMI 70	80B 4
70	20	79	1.7	RMI 63	80B 4
70	20	78	0.9	RMI 50	80B 4
56	50.8	101	1.7	CB 70	80A 2
50	28	102	1.4	RMI 70	80B 4
50	28	102	1.3	RMI 63	80B 4
41	69.6	136	1.4	CB 70	80A 2
40	69.6	137	1.4	CB 70	71C 2
35	40	138	1.2	RMI 70	80B 4
35	40	138	1.0	RMI 63	80B 4
34	82.6	143	1.2	CB 70	80A 2
34	82.6	144	1.2	CB 70	71C 2
31	44.3	173	1.2	CB 70	80B 4
28	49	164	1.7	RMI 85	80B 4
28	49	162	1.0	RMI 70	80B 4
27	50.8	199	1.0	CB 70	80B 4
27	51.3	204	2.0	CB 85	80B 4
25	56	190	1.5	RMI 85	80B 4
25	56	179	0.9	RMI 70	80B 4
24	59.1	228	2.0	CB 85	80B 4
24	59.1	225	1.0	CB 70	80B 4
20	69.0	270	3.3	CB 110	80B 4
20	69.0	267	1.7	CB 85	80B 4
20	69.6	265	0.9	CB 70	80B 4
19.9	70	220	1.2	RMI 85	80B 4
17.4	80	239	1.0	RMI 85	80B 4
17.3	80.2	285	2.8	CB 110	80B 4
17.3	80.2	269	1.4	CB 85	80B 4
16.4	56	279	1.9	RMI 110	90S 6
16.4	56	270	1.2	RMI 85	90S 6
13.1	70	327	1.7	RMI 110	90S 6
13.1	70	311	1.0	RMI 85	90S 6
12.6	110.4	375	2.4	CB 110	80B 4
12.6	110.4	353	1.2	CB 85	80B 4
11.5	80	361	1.5	RMI 110	90S 6
11.5	80	336	0.8	RMI 85	90S 6

10.8	128.8	438	2.1	CB 110	80B 4
10.8	128.8	411	1.0	CB 85	80B 4
9.9	140	436	2.3	CRMI 50/110	80B 4
9.9	140	430	1.2	CRMI 50/85	80B 4
8.3	167.6	535	1.5	CB 110	80B 4
7.1	128.8	632	1.6	CB 110	90S 6
7.1	128.8	592	0.8	CB 85	90S 6
7.1	128.8	639	1.6	CB 110	80C 6
7.1	128.8	598	0.8	CB 85	80C 6
7.0	200	607	3.0	CRMI 63/130	80B 4
7.0	200	600	1.7	CRMI 50/110	80B 4
7.0	200	583	0.9	CRMI 50/85	80B 4
6.2	225.4	685	1.3	CB 110	80B 4
5.0	280	730	2.2	CRMI 63/130	80B 4
5.0	280	722	1.4	CRMI 50/110	80B 4
4.9	286.4	723	0.8	CB 110	80B 4
4.1	225.4	983	1.0	CB 110	90S 6
4.0	225.4	993	1.0	CB 110	80C 6
3.5	400	1051	1.7	CRMI 63/130	80B 4
3.5	400	1237	1.5	CRMI 63/130	80B 4
3.5	400	1065	0.9	CRMI 50/110	80B 4
2.3	600	1336	1.3	CRMI 63/130	80B 4
1.4	980	2232	2.1	CRMI 85/180	80B 4
1.4	980	2232	1.3	CRMI 85/150	80B 4
1.4	980	2133	0.8	CRMI 63/130	80B 4
1.0	1372	2665	1.7	CRMI 85/180	80B 4
1.0	1372	2619	1.1	CRMI 85/150	80B 4
0.71	1960	3414	1.3	CRMI 85/180	80B 4
0.71	1960	3414	0.8	CRMI 85/150	80B 4
0.50	2800	4401	0.9	CRMI 85/180	80B 4
0.35	4000	5353	0.8	CRMI 85/180	80B 4
0.25	5600	4600	—	CRMI 85/180	80B 4
0.20	7000	4600	—	CRMI 85/180	80B 4
0.17	8000	4200	—	CRMI 85/180	80B 4
0.14	10000	3300	—	CRMI 85/180	80B 4

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

193	7	37	3.1	RMI 63	80C 4
193	7	37	1.9	RMI 50	80C 4
135	10	52	2.7	RMI 70	80C 4
135	10	52	2.4	RMI 63	80C 4
135	10	51	1.4	RMI 50	80C 4
90	15	75	1.9	RMI 70	80C 4
90	15	75	1.8	RMI 63	80C 4
90	15	75	1.0	RMI 50	80C 4
68	20	96	1.6	RMI 70	80C 4
68	20	96	1.4	RMI 63	80C 4
48	28	124	1.2	RMI 70	80C 4
48	28	124	1.1	RMI 63	80C 4



1.7 Prestazioni motoriduttori

1.7 Gearmotors performances

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'		
0.88 kW			$n_1 = 1350 \text{ min}^{-1}$	80C 4	

n_2 min ⁻¹	ir	T2 Nm	FS'		
1.1 kW			$n_1 = 2830 \text{ min}^{-1}$ $n_1 = 1390 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$ $n_1 = 920 \text{ min}^{-1}$	80B 2 80D 4 90S 4 90L 6	

n_2 min ⁻¹	ir	T2 Nm	FS'		
1.1 kW			$n_1 = 2830 \text{ min}^{-1}$ $n_1 = 1390 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$ $n_1 = 920 \text{ min}^{-1}$	80B 2 80D 4 90S 4 90L 6	

34	40	172	1.8	RMI 85	80C 4
34	40	167	1.0	RMI 70	80C 4
34	40	167	0.9	RMI 63	80C 4
31	43.0	206	2.0	CB 85	80C 4
30	44.3	210	1.0	CB 70	80C 4
28	49	198	1.4	RMI 85	80C 4
28	49	195	0.9	RMI 70	80C 4
27	50.8	240	0.9	CB 70	80C 4
26	51.3	246	1.6	CB 85	80C 4
24	56	230	1.2	RMI 85	80C 4
23	59.1	276	1.6	CB 85	80C 4
23	59.1	272	0.9	CB 70	80C 4
19.6	69.0	322	1.4	CB 85	80C 4
19.3	70	266	1.0	RMI 85	80C 4
16.9	80	289	0.8	RMI 85	80C 4
16.8	80.2	344	2.3	CB 110	80C 4
16.8	80.2	325	1.2	CB 85	80C 4
12.2	110.4	454	2.0	CB 110	80C 4
12.2	110.4	426	1.0	CB 85	80C 4
10.5	128.8	529	1.7	CB 110	80C 4
10.5	128.8	497	0.9	CB 85	80C 4
9.6	140	527	1.9	CRMI 50/110	80C 4
9.6	140	520	1.0	CRMI 50/85	80C 4
8.1	167.6	647	1.2	CB 110	80C 4
6.8	200	734	2.5	CRMI 63/130	80C 4
6.8	200	725	1.4	CRMI 50/110	80C 4
6.0	225.4	828	1.1	CB 110	80C 4
4.8	280	883	1.8	CRMI 63/130	80C 4
4.8	280	872	1.1	CRMI 50/110	80C 4
3.4	400	1270	1.4	CRMI 63/130	80C 4
2.3	600	1614	1.1	CRMI 63/130	80C 4
1.4	980	2697	1.7	CRMI 85/180	80C 4
1.4	980	2697	1.1	CRMI 85/150	80C 4
0.98	1372	3220	1.4	CRMI 85/180	80C 4
0.98	1372	3164	0.9	CRMI 85/150	80C 4
0.69	1960	4124	1.1	CRMI 85/180	80C 4
0.48	2800	3900	—	CRMI 85/180	80C 4
0.34	4000	4400	—	CRMI 85/180	80C 4
0.24	5600	4600	—	CRMI 85/180	80C 4
0.19	7000	4600	—	CRMI 85/180	80C 4
0.17	8000	4200	—	CRMI 85/180	80C 4
0.14	10000	3300	—	CRMI 85/180	80C 4

1.1 kW			$n_1 = 2830 \text{ min}^{-1}$ $n_1 = 1390 \text{ min}^{-1}$ $n_1 = 1400 \text{ min}^{-1}$ $n_1 = 920 \text{ min}^{-1}$	80B 2 80D 4 90S 4 90L 6	
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404	7	22	3.8	RMI 63	80B 2
404	7	22	2.3	RMI 50	80B 2
283	10	31	3.0	RMI 63	80B 2
283	10	31	1.8	RMI 50	80B 2
200	7	45	3.0	RMI 70	90S 4
200	7	44	2.6	RMI 63	90S 4
199	7	45	2.9	RMI 70	80D 4

199	7	44	2.6	RMI 63	80D 4
189	15	46	2.4	RMI 70	80B 2
189	15	46	2.1	RMI 63	80B 2
189	15	46	1.3	RMI 50	80B 2
142	20	59	1.0	RMI 50*	80B 2
140	10	63	4.4	RMI 85	90S 4
140	10	62	2.3	RMI 70	90S 4
140	10	62	2.0	RMI 63	90S 4
139	10	63	2.3	RMI 70	80D 4
139	10	63	2.0	RMI 63	80D 4
139	10	62	1.2	RMI 50	80D 4
131	7	67	2.4	RMI 70	90L 6
131	7	67	2.0	RMI 63	90L 6
93	15	91	3.1	RMI 85	90S 4
93	15	90	1.6	RMI 70	90S 4
93	15	90	1.5	RMI 63	90S 4
93	15	91	1.6	RMI 70	80D 4
93	15	91	1.4	RMI 63	80D 4
93	15	91	0.8	RMI 50	80D 4
70	20	119	2.6	RMI 85	90S 4
70	20	116	1.3	RMI 70	90S 4
70	20	116	1.2	RMI 63	90S 4
70	20	116	1.3	RMI 70	80D 4
70	20	116	1.2	RMI 63	80D 4
64	44.3	128	1.3	CB 70	80B 2
61	15	135	2.5	RMI 85	90L 6
61	15	134	1.3	RMI 70	90L 6
61	15	134	1.1	RMI 63	90L 6
56	50.8	147	1.2	CB 70	80B 2
55	51.3	150	2.2	CB 85	80B 2
50	28	151	1.8	RMI 85	90S 4
50	28	149	1.0	RMI 70	90S 4
50	28	149	0.9	RMI 63	90S 4
50	28	150	1.0	RMI 70	80D 4
50	28	150	0.9	RMI 63	80D 4
46	20	176	2.1	RMI 85	90L 6
46	20	171	1.0	RMI 70	90L 6
46	20	171	0.9	RMI 63	90L 6
41	69.0	200	1.9	CB 85	80B 2
41	69.6	199	1.0	CB 70	80B 2
35	40	216	3.0	RMI 110	90S 4
35	40	207	1.5	RMI 85	90S 4
35	40	201	0.8	RMI 70	90S 4
35	40	209	1.5	RMI 85	80D 4
35	40	203	0.80	RMI 70	80D 4
34	82.6	208	0.8	CB 70	80B 2
33	43.0	252	3.1	CB 110	90S 4
33	43.0	248	1.6	CB 85	90S 4
32	43.0	253	3.0	CB 110	80D 4
32	43.0	250	1.6	CB 85	80D 4
32	44.3	253	0.8	CB 70	90S 4
31	44.3	254	0.8	CB 70	80D 4
29	49	254	2.3	RMI 110	90S 4
29	49	239	1.2	RMI 85	90S 4

28	49	241	1.2	RMI 85	80D 4
27	51.3	300	2.6	CB 110	90S 4
27	51.3	296	1.4	CB 85	90S 4
27	51.3	302	2.5	CB 110	80D 4
27	51.3	299	1.3	CB 85	80D 4
25	56	290	1.6	RMI 110	90S 4
25	56	277	1.0	RMI 85	90S 4
25	56	279	1.0	RMI 85	80D 4
24	59.1	337	2.6	CB 110	90S 4
24	59.1	333	1.4	CB 85	90S 4
24	59.1	339	2.6	CB 110	80D 4
24	59.1	335	1.3	CB 85	80D 4
20	69.0	393	2.2	CB 110	90S 4
20	69.0	388	1.2	CB 85	90S 4
20	69.0	396	2.2	CB 110	80D 4
20	69.0	391	1.2	CB 85	80D 4
20	70	336	1.4	RMI 110	90S 4
20	70	320	0.8	RMI 85	90S 4
19.9	70	323	0.8	RMI 85	80D 4
17.5	80	372	1.3	RMI 110	90S 4
17.5	80.2	415	1.9	CB 110	90S 4
17.5	80.2	391	1.0	CB 85	90S 4
17.3	80.2	418	1.9	CB 110	80D 4
17.3	80.2	394	1.0	CB 85	80D 4
16.4	56	396	0.8	RMI 85	90L 6
15.6	59.1	499	2.0	CB 110	90L 6
15.6	59.1	493	1.0	CB 85	90L 6
14.0	100	428	1.0	RMI 110	90S 4
12.7	110.4	547	1.6	CB 110	90S 4
12.7	110.4	514	0.8	CB 85	90S 4
12.6	110.4	551	1.6	CB 110	80D 4
11.5	80	530	1.1	RMI 110	90L 6
10.9	128.8	638	1.4	CB 110	90S 4
10.8	128.8	642	1.4	CB 110	80D 4
10.0	140	644	2.6	CRMI 63/130	90S 4
10.0	140	635	1.6	CRMI 63/110	90S 4
10.0	140	627	0.80	CRMI 63/85	90S 4
9.9	140	649	2.6	CRMI 63/130	80D 4
9.9	140	640	1.6	CRMI 63/110	80D 4
9.2	100	605	0.8	RMI 110	90L 6
8.4	167.6	780	1.0	CB 110	90S 4
8.3	167.6	785	1.0	CB 110	80D 4
7.0	200	920	3.1	CRMI 85/150	90S 4
7.0	200	884	2.0	CRMI 63/130	90S 4
7.0	200	884	1.1	CRMI 63/110	90S 4
7.0	200	891	2.0	CRMI 63/130	80D 4
7.0	200	891	1.1	CRMI 63/110	80D 4
6.2	225.4	998	0.9	CB 110	90S 4
6.2	225.4	1005	0.9	CB 110	80D 4
5.0	280	1147	3.2	CRMI 85/180	90S 4
5.0	280	1112	2.3	CRMI 85/150	90S 4
5.0	280	1064	1.5	CRMI 63/130	90S 4
5.0	280	1064	0.9	CRMI 63/110	90S 4



1.7 Prestazioni motoriduttori

n_2 min ⁻¹	ir	T2 Nm	FS'		
1.1 kW					
				$n_1=2830\text{ min}^{-1}$ $n_1=1390\text{ min}^{-1}$ $n_1=1400\text{ min}^{-1}$ $n_1=920\text{ min}^{-1}$	80B 2 80D 4 90S 4 90L 6

5.0	280	1071	1.5	CRMI 63/130	80D 4
5.0	280	1071	0.9	CRMI 63/110	80D 4
3.5	400	1684	2.7	CRMI 85/180	90S 4
3.5	400	1660	1.7	CRMI 85/150	90S 4
3.5	400	1531	1.2	CRMI 63/130	90S 4
3.5	400	1542	1.2	CRMI 63/130	80D 4
2.3	600	2079	2.0	CRMI 85/180	90S 4
2.3	600	2042	1.4	CRMI 85/150	90S 4
2.3	600	1945	0.9	CRMI 63/130	90S 4
2.3	600	1959	0.9	CRMI 63/130	80D 4
1.4	980	3250	1.4	CRMI 85/180	90S 4
1.4	980	3250	0.9	CRMI 85/150	90S 4
1.4	980	3274	1.4	CRMI 85/180	80D 4
1.4	980	3274	0.9	CRMI 85/150	80D 4
1.0	1372	3881	1.2	CRMI 85/180	90S 4
1.0	1372	3909	1.2	CRMI 85/180	80D 4
0.71	1960	4971	0.9	CRMI 85/180	90S 4
0.71	1960	5007	0.9	CRMI 85/180	80D 4
0.50	2800	3900	—	CRMI 85/180	90S 4
0.50	2800	3900	—	CRMI 85/180	80D 4
0.35	4000	4400	—	CRMI 85/180	90S 4
0.35	4000	4400	—	CRMI 85/180	80D 4
0.25	5600	4600	—	CRMI 85/180	90S 4
0.25	5600	4600	—	CRMI 85/180	80D 4
0.20	7000	4600	—	CRMI 85/180	90S 4
0.20	7000	4600	—	CRMI 85/180	80D 4
0.18	8000	4200	—	CRMI 85/180	90S 4
0.17	8000	4200	—	CRMI 85/180	80D 4
0.14	10000	3300	—	CRMI 85/180	90S 4
0.14	10000	3300	—	CRMI 85/180	80D 4

1.5 kW					
				$n_1=2830\text{ min}^{-1}$ $n_1=2830\text{ min}^{-1}$ $n_1=1400\text{ min}^{-1}$ $n_1=925\text{ min}^{-1}$ $n_1=940\text{ min}^{-1}$	80C 2 90S 2 90L 4 90LB 6 100A 6
404	7	30	3.1	RMI 70	90S 2
404	7	30	3.1	RMI 70	80C 2
404	7	30	2.8	RMI 63	90S 2
404	7	30	2.8	RMI 63	80C 2
283	10	43	2.5	RMI 70	90S 2
283	10	43	2.5	RMI 70	80C 2
283	10	43	2.2	RMI 63	90S 2
283	10	43	2.2	RMI 63	80C 2
200	7	61	2.2	RMI 70	90L 4
200	7	60	1.9	RMI 63	90L 4
189	15	62	3.4	RMI 85	90S 2
189	15	62	1.8	RMI 70	90S 2
189	15	62	1.8	RMI 70	80C 2
189	15	62	1.6	RMI 63	90S 2
189	15	62	1.6	RMI 63	80C 2
140	10	86	3.3	RMI 85	90L 4
140	10	85	1.7	RMI 70	90L 4
140	10	85	1.5	RMI 63	90L 4

1.7 Gearmotors performances

n_2 min ⁻¹	ir	T2 Nm	FS'		
1.5 kW					
				$n_1=2830\text{ min}^{-1}$ $n_1=2830\text{ min}^{-1}$ $n_1=1400\text{ min}^{-1}$ $n_1=925\text{ min}^{-1}$ $n_1=940\text{ min}^{-1}$	80C 2 90S 2 90L 4 90LB 6 100A 6

134	7	90	3.3	RMI 85	100A 6
134	7	90	1.8	RMI 70	100A 6
132	7	91	3.3	RMI 85	90LB 6
101	28	106	2.0	RMI 85	90S 2
93	15	124	2.3	RMI 85	90L 4
93	15	123	1.2	RMI 70	90L 4
93	15	123	1.1	RMI 63	90L 4
70	20	162	1.9	RMI 85	90L 4
70	20	158	1.0	RMI 70	90L 4
70	20	158	0.9	RMI 63	90L 4
63	15	183	3.5	RMI 110	100A 6
63	15	181	1.8	RMI 85	100A 6
63	15	178	1.0	RMI 70	100A 6
62	15	184	1.8	RMI 85	90LB 6
62	15	181	0.9	RMI 70	90LB 6
56	50.8	201	0.8	CB 70	90S 2
56	50.8	201	0.8	CB 70	80C 2
55	51.3	205	1.6	CB 85	90S 2
55	51.3	205	1.6	CB 85	80C 2
50	28	206	1.3	RMI 85	90L 4
48	59.1	236	1.5	CB 85	90S 2
48	59.1	236	1.5	CB 85	80C 2
47	20	241	3.0	RMI 110	100A 6
41	69.0	276	2.6	CB 110	90S 2
41	69.0	272	1.4	CB 85	90S 2
35	80.2	280	1.1	CB 85	90S 2
35	80.2	280	1.1	CB 85	80C 2
35	40	295	2.2	RMI 110	90L 4
35	40	282	1.1	RMI 85	90L 4
33	43.0	343	2.2	CB 110	90L 4
33	43.0	339	1.2	CB 85	90L 4
29	49	346	1.7	RMI 110	90L 4
29	49	326	0.9	RMI 85*	90L 4
27	51.3	409	1.9	CB 110	90L 4
27	51.3	404	1.0	CB 85	90L 4
25	56	395	1.2	RMI 110	90L 4
24	59.1	460	1.9	CB 110	90L 4
24	59.1	454	1.0	CB 85	90L 4
23	40	409	0.9	RMI 85	90LB 6
20	69.0	537	1.6	CB 110	90L 4
20	69.0	530	0.9	CB 85	90L 4
20	70	458	1.1	RMI 110	90L 4
17.5	80	508	1.0	RMI 110	90L 4
17.5	80.2	566	1.4	CB 110	90L 4
16.8	56	580	1.6	RMI 130	100A 6
16.8	56	546	1.0	RMI 110	100A 6
16.5	56	555	1.0	RMI 110	90LB 6
15.9	59.1	666	1.5	CB 110	100A 6
15.7	59.1	677	1.5	CB 110	90LB 6
13.4	70	672	2.0	RMI 150	100A 6
13.4	70	661	1.4	RMI 130	100A 6
13.4	70	640	0.9	RMI 110	100A 6
13.2	70	650	0.8	RMI 110	90LB 6
12.7	110.4	746	1.2	CB 110	90L 4

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'		
1.5 kW					
				$n_1=2830\text{ min}^{-1}$ $n_1=2830\text{ min}^{-1}$ $n_1=1400\text{ min}^{-1}$ $n_1=925\text{ min}^{-1}$ $n_1=940\text{ min}^{-1}$	80C 2 90S 2 90L 4 90LB 6 100A 6

11.8	80	756	1.7	RMI 150	100A 6
11.8	80	731	1.2	RMI 130	100A 6
10.9	128.8	870	1.0	CB 110	90L 4
10.0	140	913	2.9	CRMI 85/150	90L 4
10.0	140	878	1.9	CRMI 63/130	90L 4
10.0	140	866	1.2	CRMI 63/110	90L 4
9.4	100	884	1.3	RMI 150	100A 6
9.4	100	838	0.9	RMI 130	100A 6
8.5	110.4	1060	0.9	CB 110	100A 6
8.4	110.4	1077	0.9	CB 110	90LB 6
7.3	128.8	1237	0.8	CB 110	100A 6
7.2	128.8	1257	0.80	CB 110	90LB 6
7.0	200	1272	3.2	CRMI 85/180	90L 4
7.0	200	1255	2.3	CRMI 85/150	90L 4
7.0	200	1206	1.5	CRMI 63/130	90L 4
7.0	200	1206	0.8	CRMI 63/110	90L 4
5.0	280	1564	2.4	CRMI 85/180	90L 4
5.0	280	1516	1.7	CRMI 85/150	90L 4
5.0	280	1451	1.1	CRMI 63/130	90L 4
3.5	400	2296	2.0	CRMI 85/180	90L 4
3.5	400	2263	1.3	CRMI 85/150	90L 4
3.5	400	2087	0.9	CRMI 63/130	90L 4
2.3	600	2835	1.5	CRMI 85/180	90L 4
2.3	600	2785	1.0	CRMI 85/150	90L 4
1.4	980	4432	1.0	CRMI 85/180	90L 4
1.0	1372	5293	0.9	CRMI 85/180	90L 4
0.71	1960	4600	—	CRMI 85/180	90L 4
0.50	2800	3900	—	CRMI 85/180	90L 4
0.35	4000	4400	—	CRMI 85/180	90L 4
0.25	5600	4600	—	CRMI 85/180	90L 4
0.20	7000	4600	—	CRMI 85/180	90L 4
0.18	8000	4200	—	CRMI 85/180	90L 4
0.14	10000	3300	—	CRMI 85/180	90L 4

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
396	7	37	2.5	RMI 70	80D 2
396	7	37	2.2	RMI 63	80D 2
396	7	37	1.4	RMI 50*	80D 2
277	10	52	2.0	RMI 70	80D 2
277	10	52	1.8	RMI 63	80D 2
277	10	52	1.1	RMI 50*	80D 2
200	7	73	3.4	RMI 85	90LB 4
200	7	73	1.8	RMI 70	90LB 4
200	7	72	1.6	RMI 63	90LB 4
185	15	76	1.4	RMI 70	80D 2
185	15	76	1.3	RMI 63*	80D 2
140	10	103	2.7	RMI 85	90LB 4
140	10	102	1.4	RMI 70	90LB 4
140	10	102	1.2	RMI 63	90LB 4



1.7 Prestazioni motoriduttori

n_2 min ⁻¹	ir	T2 Nm	FS'		
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

134	7	108	2.8	RMI 85	100B 6
134	7	108	1.5	RMI 70	100B 6
93	15	149	1.9	RMI 85	90LB 4
93	15	147	1.0	RMI 70	90LB 4
93	15	147	0.9	RMI 63*	90LB 4
70	20	194	1.6	RMI 85	90LB 4
70	20	189	0.80	RMI 70*	90LB 4
64	43.0	211	1.6	CB 85	80D 2
63	15	219	2.9	RMI 110	100B 6
63	15	223	1.5	RMI 85	100B 6
54	51.3	252	1.3	CB 85	80D 2
50	28	248	1.1	RMI 85	90LB 4
47	20	289	2.5	RMI 110	100B 6
47	20	282	1.3	RMI 85	100B 6
47	59.1	293	2.3	CB 110	80D 2
47	59.1	290	1.2	CB 85	80D 2
40	69.0	338	2.1	CB 110	80D 2
40	69.0	334	1.1	CB 85	80D 2
35	40	354	1.8	RMI 110	90LB 4
35	40	339	0.9	RMI 85*	90LB 4
35	80.2	358	1.9	CB 110	80D 2
35	80.2	343	0.9	CB 85*	80D 2
33	43.0	412	1.9	CB 110	90LB 4
33	43.0	407	1.0	CB 85	90LB 4
29	49	415	1.4	RMI 110	90LB 4
27	51.3	491	1.6	CB 110	90LB 4
27	51.3	485	0.8	CB 85	90LB 4
25	56	474	1.0	RMI 110	90LB 4
24	59.1	552	1.6	CB 110	90LB 4
24	59.1	544	0.8	CB 85	90LB 4
20	69.0	644	1.4	CB 110	90LB 4
20	70	550	0.9	RMI 110	90LB 4
17.5	80	609	0.8	RMI 110	90LB 4
17.5	80.2	679	1.2	CB 110	90LB 4
15.9	59.1	800	1.2	CB 110	100B 6
13.4	70	806	1.7	RMI 150	100B 6
13.4	70	794	1.2	RMI 130	100B 6
12.7	110.4	895	1.0	CB 110	90LB 4
11.8	80	907	1.4	RMI 150	100B 6
11.8	80	878	1.0	RMI 130	100B 6
10.9	128.8	1044	0.9	CB 110	90LB 4
10.0	140	1110	3.4	CRMI 85/180	90LB 4
10.0	140	1096	2.4	CRMI 85/150	90LB 4
10.0	140	1054	1.6	CRMI 63/130	90LB 4
10.0	140	1040	1.0	CRMI 63/110	90LB 4
9.4	100	1061	1.1	RMI 150	100B 6
8.5	110.4	1272	0.8	CB 110	100B 6
7.0	200	1526	2.7	CRMI 85/180	90LB 4
7.0	200	1506	1.9	CRMI 85/150	90LB 4
7.0	200	1447	1.2	CRMI 63/130	90LB 4
5.0	280	1877	2.0	CRMI 85/180	90LB 4
5.0	280	1819	1.4	CRMI 85/150	90LB 4
5.0	280	1741	0.9	CRMI 63/130	90LB 4
3.5	400	2755	1.7	CRMI 85/180	90LB 4

1.7 Gearmotors performances

n_2 min ⁻¹	ir	T2 Nm	FS'		
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

3.5	400	2716	1.1	CRMI 85/150	90LB 4
2.3	600	3401	1.2	CRMI 85/180	90LB 4
2.3	600	3342	0.9	CRMI 85/150	90LB 4
1.4	980	5319	0.9	CRMI 85/180	90LB 4

n_2 min ⁻¹	ir	T2 Nm	FS'		
2.2 kW				$n_1 = 2840 \text{ min}^{-1}$ $n_1 = 1410 \text{ min}^{-1}$ $n_1 = 950 \text{ min}^{-1}$	90L 2 100A 4 112A 6

406	7	45	2.1	RMI 70	90L 2
406	7	45	1.9	RMI 63*	90L 2
284	10	62	1.7	RMI 70	90L 2
284	10	62	1.5	RMI 63*	90L 2
201	7	89	2.8	RMI 85	100A 4
201	7	89	1.5	RMI 70	100A 4
189	15	91	2.3	RMI 85	90L 2
189	15	91	1.2	RMI 70*	90L 2
189	15	91	1.1	RMI 63*	90L 2
141	10	125	2.2	RMI 85	100A 4
141	10	124	1.1	RMI 70	100A 4
136	7	130	2.3	RMI 85	112A 6
94	15	183	2.9	RMI 110	100A 4
94	15	181	1.6	RMI 85	100A 4
94	15	179	0.8	RMI 70*	100A 4
71	20	241	2.6	RMI 110	100A 4
71	20	235	1.3	RMI 85	100A 4
58	49	261	1.7	RMI 110	90L 2
55	51.3	304	2.1	CB 110	90L 2
55	51.3	300	1.1	CB 85	90L 2
50	28	317	2.5	RMI 130	100A 4
50	28	313	1.8	RMI 110	100A 4
50	28	300	0.9	RMI 85*	100A 4
48	59.1	350	1.9	CB 110	90L 2
48	59.1	345	1.0	CB 85	90L 2
41	69.0	403	1.8	CB 110	90L 2
41	69.0	398	1.0	CB 85	90L 2
35	40	447	3.1	RMI 150	100A 4
35	40	435	2.1	RMI 130	100A 4
35	40	429	1.5	RMI 110	100A 4
33	43.0	500	1.5	CB 110	100A 4
29	49	518	2.5	RMI 150	100A 4
29	49	511	1.7	RMI 130	100A 4
29	49	504	1.2	RMI 110	100A 4
27	51.3	596	1.3	CB 110	100A 4
25	56	609	2.1	RMI 150	100A 4
25	56	576	1.4	RMI 130	100A 4
25	56	576	0.8	RMI 110	100A 4
24	59.1	669	1.3	CB 110	100A 4
20	69.0	781	1.1	CB 110	100A 4
20	70	699	1.7	RMI 150	100A 4
20	70	699	1.2	RMI 130	100A 4
17.6	80	787	1.4	RMI 150	100A 4
17.6	80	763	1.0	RMI 130	100A 4

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS'		
2.2 kW				$n_1 = 2840 \text{ min}^{-1}$ $n_1 = 1410 \text{ min}^{-1}$ $n_1 = 950 \text{ min}^{-1}$	90L 2 100A 4 112A 6

17.6	80.2	825	1.0	CB 110	100A 4
16.1	59.1	967	1.0	CB 110	112A 6
14.1	100	924	1.1	RMI 150	100A 4
14.1	100	879	0.79	RMI 130	100A 4
12.8	110.4	1086	0.8	CB 110	100A 4
11.9	80	1097	1.2	RMI 150	112A 6
11.9	80	1062	0.8	RMI 130	112A 6
10.1	140	1348	2.8	CRMI 85/180	100A 4
10.1	140	1330	2.0	CRMI 85/150	100A 4
10.1	140	1294	1.3	CRMI 70/130	100A 4
7.1	200	1852	2.2	CRMI 85/180	100A 4
7.1	200	1827	1.6	CRMI 85/150	100A 4
7.1	200	1756	1.0	CRMI 70/130	100A 4
5.0	280	2278	1.6	CRMI 85/180	100A 4
5.0	280	2208	1.1	CRMI 85/150	100A 4
3.5	400	3343	1.4	CRMI 85/180	100A 4
3.5	400	3296	0.9	CRMI 85/150	100A 4
2.4	600	4128	1.0	CRMI 85/180	100A 4

n_2 min ⁻¹	ir	T2 Nm	FS'		
3 kW				$n_1 = 2840 \text{ min}^{-1}$ $n_1 = 2860 \text{ min}^{-1}$ $n_1 = 1420 \text{ min}^{-1}$ $n_1 = 940 \text{ min}^{-1}$ $n_1 = 950 \text{ min}^{-1}$	90B 2 100A 2 100B 4 112B 6 132S 6

409	7	60	2.9	RMI 85	100A 2
409	7	60	1.6	RMI 70*	100A 2
406	7	61	2.9	RMI 85	90LB 2
406	7	61	1.6	RMI 70*	90LB 2
406	7	61	1.4	RMI 63*	90LB 2
286	10	85	2.4	RMI 85	100A 2
286	10	84	1.2	RMI 70*	100A 2
284	10	86	2.4	RMI 85	90LB 2
284	10	85	1.2	RMI 70*	90LB 2
284	10	85	1.1	RMI 63*	90LB 2
203	7	120	2.1	RMI 85	100B 4
203	7	120	1.1	RMI 70*	100B 4
191	15	125	3.2	RMI 110	100A 2
191	15	123	1.7	RMI 85*	100A 2
191	15	123	0.9	RMI 70*	100A 2
189	15	124	1.7	RMI 85*	90LB 2
189	15	124	0.9	RMI 70*	90LB 2
189	15	124	0.8	RMI 63*	90LB 2
142	10	171	3.1	RMI 110	100B 4
142	10	169	1.7	RMI 85	100B 4
142	10	167	0.8	RMI 70*	100B 4
95	15	254	3.3	RMI 130	100B 4
95	15	248	2.2	RMI 110	100B 4
95	15	245	1.2	RMI 85*	100B 4
71	20	335	2.7	RMI 130	100B 4
71	20	327	1.9	RMI 110	100B 4
71	20	319	1.0	RMI 85*	100B 4
67	43.0	345	1.8	CB 110	100A 2
66	43.0	347	1.8	CB 110	90LB 2
63	15	375	2.6	RMI 130	132S 6



1.7 Prestazioni motoriduttori

n_2 min ⁻¹	ir	T2 Nm	FS*		
5.5 kW				$n_1= 2880 \text{ min}^{-1}$ $n_1= 2870 \text{ min}^{-1}$ $n_1= 1440 \text{ min}^{-1}$ $n_1= 950 \text{ min}^{-1}$	112B 2 132S 2 132S 4 132ML 6

29	49	1323	1.6	RMI 180	132S 4
29	49	1269	1.0	RMI 150	132S 4
26	56	1491	1.4	RMI 180	132S 4
26	56	1491	0.9	RMI 150	132S 4
21	70	1736	1.1	RMI 180	132S 4
18.0	80	1955	0.9	RMI 180	132S 4
13.6	70	2554	0.9	RMI 180	132ML 6

7.5 kW				$n_1= 2880 \text{ min}^{-1}$ $n_1= 2890 \text{ min}^{-1}$ $n_1= 1440 \text{ min}^{-1}$ $n_1= 960 \text{ min}^{-1}$	112BL 2 132SL 2 132M 4 160M 6
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413	7	153	3.3	RMI 130	132SL 2
413	7	149	2.3	RMI 110*	132SL 2
409	7	154	3.2	RMI 130	112BL 2
409	7	151	2.3	RMI 110*	112BL 2
289	10	216	2.7	RMI 130	132SL 2
289	10	211	1.9	RMI 110*	132SL 2
286	10	218	2.6	RMI 130	112BL 2
286	10	213	1.8	RMI 110*	112BL 2
206	7	306	3.5	RMI 150	132M 4
206	7	306	2.3	RMI 130	132M 4
206	7	299	1.6	RMI 110*	132M 4
193	15	316	3.0	RMI 150	132SL 2
193	15	312	2.0	RMI 130*	132SL 2
193	15	309	1.3	RMI 110*	132SL 2
191	15	316	2.0	RMI 130*	112BL 2
191	15	312	1.3	RMI 110*	112BL 2
144	10	433	2.7	RMI 150	132M 4
144	10	433	1.8	RMI 130	132M 4
144	10	423	1.3	RMI 110*	132M 4
96	15	642	2.8	RMI 180	132M 4
96	15	634	2.0	RMI 150	132M 4
96	15	627	1.3	RMI 130*	132M 4
96	15	612	0.9	RMI 110*	132M 4
72	20	836	2.4	RMI 180	132M 4
72	20	836	1.7	RMI 150	132M 4
72	20	826	1.1	RMI 130*	132M 4
51	28	1100	1.7	RMI 180	132M 4
51	28	1058	1.2	RMI 150*	132M 4
36	40	1492	1.3	RMI 180	132M 4
36	40	1492	0.9	RMI 150*	132M 4
29	49	1804	1.2	RMI 180	132M 4
26	56	2033	1.0	RMI 180	132M 4
21	70	2368	0.8	RMI 180*	132M 4
17.1	56	2966	0.8	RMI 180*	160M 6

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. 1.7-A

I valori contrassegnati dal simbolo (—) indicano la coppia massima applicabile al riduttore con FS=1. In questi casi la potenza del motore applicato non dovrà mai essere utilizzata integralmente onde evitare danneggiamenti al riduttore.

1.7 Gearmotors performances

n_2 min ⁻¹	ir	T2 Nm	FS*		
9.2 kW				$n_1= 1450 \text{ min}^{-1}$	132ML 4

207	7	373	2.9	RMI 150	132ML 4
207	7	373	1.9	RMI 130*	132ML 4
207	7	365	1.3	RMI 110*	132ML 4
145	10	533	3.1	RMI 180	132ML 4
145	10	527	2.2	RMI 150	132ML 4
145	10	527	1.5	RMI 130*	132ML 4
145	10	515	1.0	RMI 110*	132ML 4
97	15	782	2.3	RMI 180	132ML 4
97	15	773	1.6	RMI 150	132ML 4
97	15	763	1.1	RMI 130*	132ML 4
73	20	1018	2.0	RMI 180	132ML 4
73	20	1018	1.4	RMI 150	132ML 4
73	20	1006	0.9	RMI 130*	132ML 4
52	28	1340	1.4	RMI 180	132ML 4
52	28	1289	1.0	RMI 150*	132ML 4
36	40	1818	1.1	RMI 180*	132ML 4
30	49	2197	0.9	RMI 180*	132ML 4
26	56	2477	0.8	RMI 180*	132ML 4

11 kW				$n_1= 2940 \text{ min}^{-1}$ $n_1= 1455 \text{ min}^{-1}$ $n_1= 965 \text{ min}^{-1}$	132M 2 160M 4 160L 6
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420	7	220	2.3	RMI 130*	132M 2
420	7	215	1.6	RMI 110*	132M 2
294	10	311	1.8	RMI 130*	132M 2
294	10	304	1.3	RMI 110*	132M 2
208	7	445	2.4	RMI 150	160M 4
196	15	450	1.4	RMI 130*	132M 2
147	20	600	1.8	RMI 150*	132M 2
147	20	593	1.2	RMI 130*	132M 2
146	10	635	2.6	RMI 180	160M 4
138	7	671	2.7	RMI 180	160L 6
138	7	663	2.0	RMI 150	160L 6
97	15	931	1.9	RMI 180	160M 4
97	15	921	1.4	RMI 150*	160M 4
73	20	1213	1.7	RMI 180	160M 4
64	15	1388	1.5	RMI 180	160L 6
52	28	1597	1.2	RMI 180*	160M 4
48	20	1807	1.3	RMI 180	160L 6
36	40	2166	0.9	RMI 180*	160M 4

NOTE.
The indicated power is based on the mechanical capacities of the gearboxes.
For the gearboxes marked with (*) it is also necessary to obey the thermal capacity like shown on chapter 1.7-A.

Values marked with (—) show the maximum torque that can be applied to the gearbox with FS=1. In these cases, the power of the motor applied shall never be used completely in order to avoid damages to the gearbox.

1.7 Leistungen der Getriebemotoren

n_2 min ⁻¹	ir	T2 Nm	FS*		
15 kW				$n_1= 2900 \text{ min}^{-1}$ $n_1= 2930 \text{ min}^{-1}$ $n_1= 1455 \text{ min}^{-1}$	132ML 2 160MB 2 160L 4

419	7	301	2.5	RMI 150*	160MB 2
414	7	304	2.5	RMI 150*	132ML 2
414	7	304	1.6	RMI 130*	132ML 2
293	10	425	2.0	RMI 150*	160MB 2
290	10	430	2.0	RMI 150*	132ML 2
290	10	430	1.3	RMI 130*	132ML 2
208	7	613	2.5	RMI 180	160L 4
208	7	606	1.8	RMI 150*	160L 4
195	15	631	2.1	RMI 180*	160MB 2
195	15	623	1.5	RMI 150*	160MB 2
146	10	866	1.9	RMI 180	160L 4
97	15	1270	1.4	RMI 180*	160L 4
73	20	1654	1.2	RMI 180*	160L 4
52	28	2178	0.9	RMI 180*	160L 4
64	15	1388	1.5	RMI 180	160L 6
52	28	1597	1.2	RMI 180*	160M 4

18.5 kW				$n_1= 2910 \text{ min}^{-1}$ $n_1= 1460 \text{ min}^{-1}$	160L 2 180M 4
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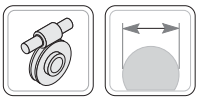
416	7	378	2.7	RMI 180	160L 2
416	7	374	2.0	RMI 150*	160L 2
291	10	534	2.2	RMI 180*	160L 2
291	10	528	1.6	RMI 150*	160L 2
209	7	754	2.0	RMI 180	180M 4
194	15	783	1.7	RMI 180*	160L 2
194	15	774	1.2	RMI 150*	160L 2
146	10	1065	1.5	RMI 180*	180M 4

22 kW				$n_1= 2925 \text{ min}^{-1}$ $n_1= 1460 \text{ min}^{-1}$	180M 2 180L 4
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418	7	447	2.3	RMI 180*	180M 2
293	10	632	1.9	RMI 180*	180M 2
209	7	897	1.7	RMI 180*	180L 4
146	10	1266	1.3	RMI 180*	180L 4
97	15	1856	1.0	RMI 180*	180L 4

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. 1.7-A).

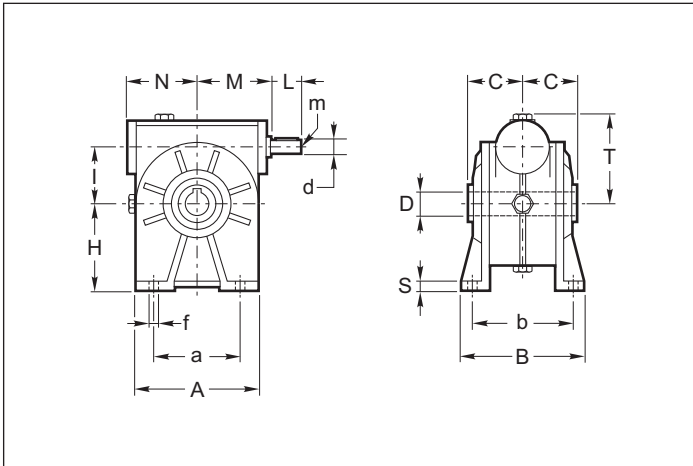
Die mit (—) gekennzeichneten Werte zeigen das für ein Getriebe bei FS=1 mögliche Maximaldrehmoment an. Um Schäden an Getriebe zu vermeiden, darf in diesen Fällen der Motor nicht mit voller Leistung gefahren werden.



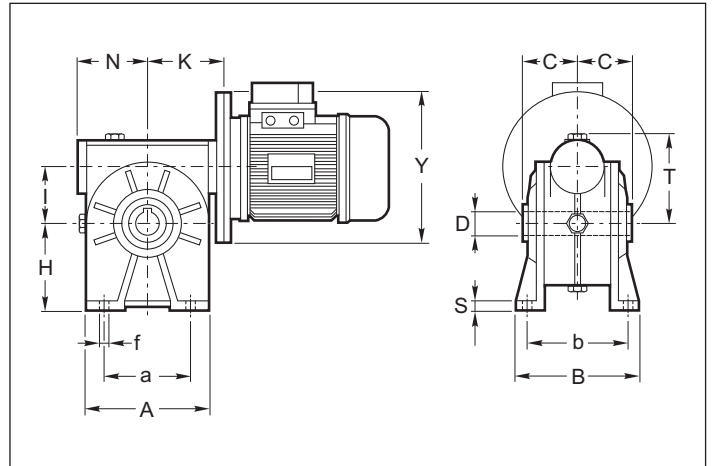
Dimensioni riduttori
Gearboxes dimensions
Abmessungen Getriebes

RI - RMI

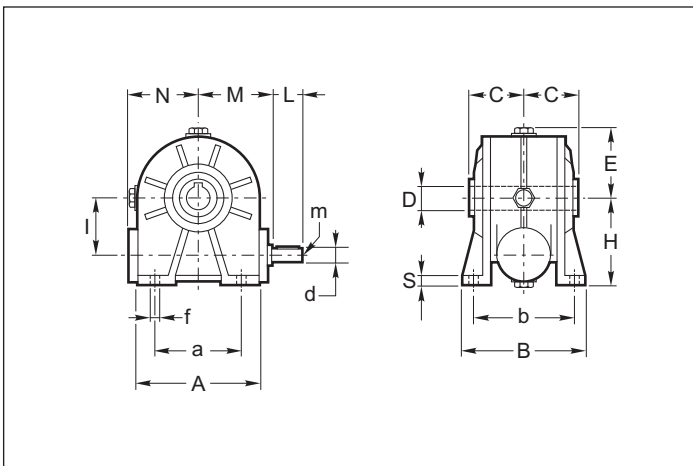
RI S



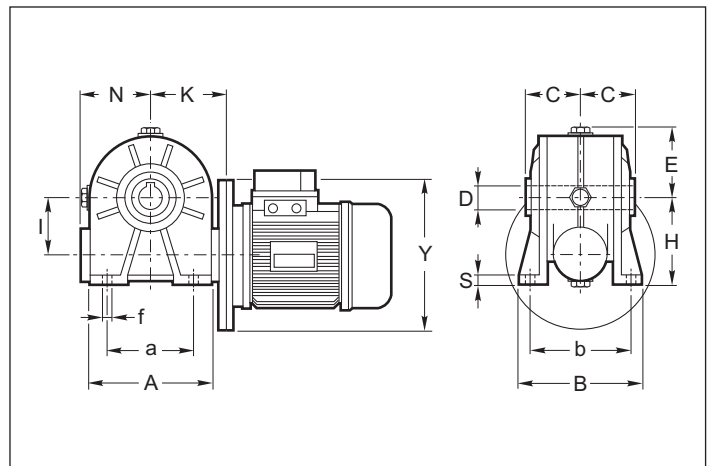
RMI S



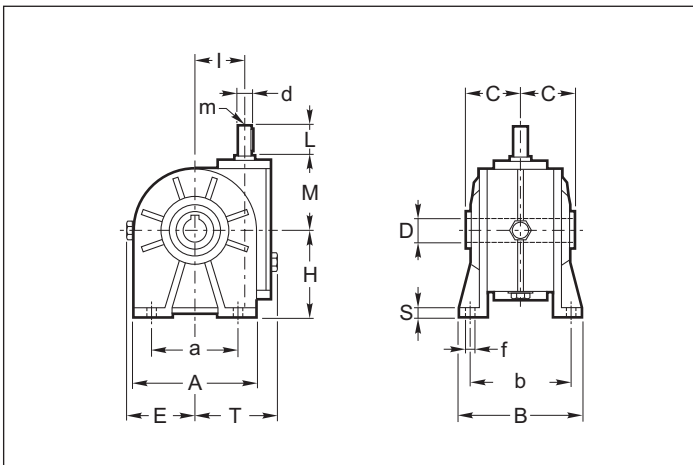
RI I



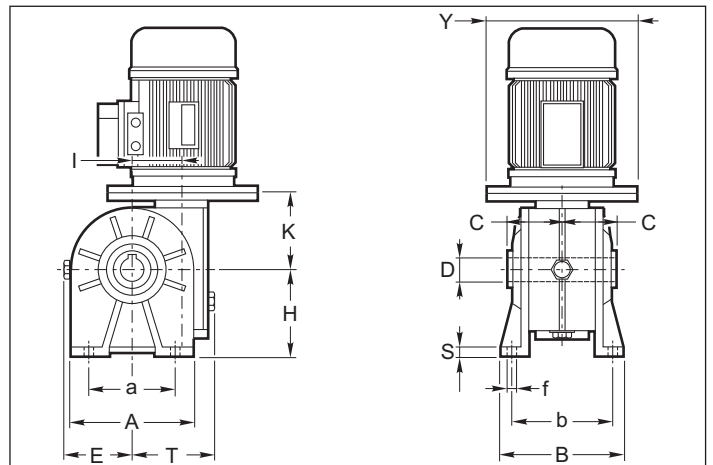
RMI I



RI D



RMI D





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

RI RMI	A	a	B	b	C	D _{H7}	d _{j6}	E	f	H	I	L	M	m	N	S	T
28	67	52	78	66 ⁺² ₋₆	30	14	9	40	5.5	52	28	20	47	M4	44.5(46)*	6	49
40	100	70	102	84 ^{±3}	41	19 (18)	11	59	7	71	40	22	64	M5	61.5	8	66
50	120	85	119	99 ^{±3}	49	24 (25)	14	69	9	85	50	30	74	M6	72.5	10	80
63	140	95	136	111 ⁰ ₊₅	60	25	18	81	11	100	63	45	96	M6	84	11	99
70	158	120	140	116 ⁺² ₋₆	60	28	19	87	11	115	70	40	97	M8	92	13	108
85	193	140	168	140	61	32 (35)	24	105	13	135	85	50	115	M8	111	15	135
110	250	200	200	162	77.5	42	28	135	14	172	110	60	146	M8	142	17	170
130	286	235	230	190	90	48	38	154	15	200	130	80	166	M10	161.5	19	195
150	336	260	250	210	105	55	42	178	19	230	150	100	195	M12	189	20	224
180	400	310	320	260	120	65	48	210	22	265	180	110	235	M14	232	22	265

*RI 28 - RMI 28 IEC56: N=44.5, RMI 28 IEC63: N=46

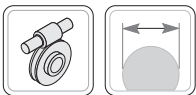
RMI	28		70		85		110		130		150		180	
	Y	K	Y	K	Y	K	Y	K	Y	K	Y	K	Y	K
B5	120	49	160	100	160	118	200	145	250	163	250	190	—	—
	—	—	200	100	200	118	250	145	300	163	300	190	300	234
	—	—	—	—	250	120	300	145.5	—	—	350	197	350	234
B14	80•	49	105	100	120•	118	160	145	—	—	—	—	—	—
	90	51	120	100	140	118	—	—	—	—	—	—	—	—
	—	—	140	100	160	120	—	—	—	—	—	—	—	—
	—	—	160	100	—	—	—	—	—	—	—	—	—	—

RMI...G	40		50		63	
	Y	K	Y	K	Y	K
B5	120	70.5	140	80.5	160	94.5
	140		160		200	
	160		200		—	
B14	90•		90•		105•	94.5
	105		105•		120	
	—		120		140	

(•) Vedi nota in fondo a tabella 2.13

(•) See note at the bottom of table 2.13

(•) Siehe Bemerkungen Tabelle 2.13 unten

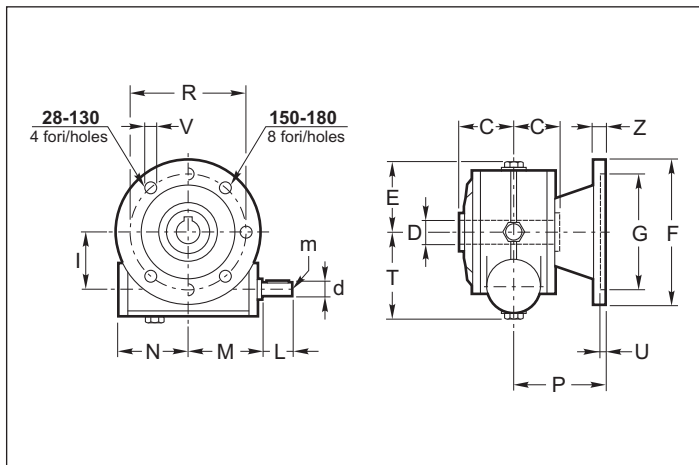


1.8 Dimensioni

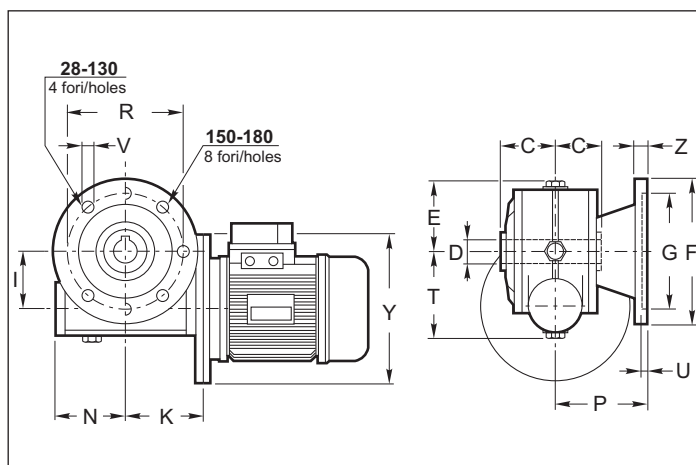
1.8 Dimensions

1.8 Abmessungen

RI FL



RMI FL

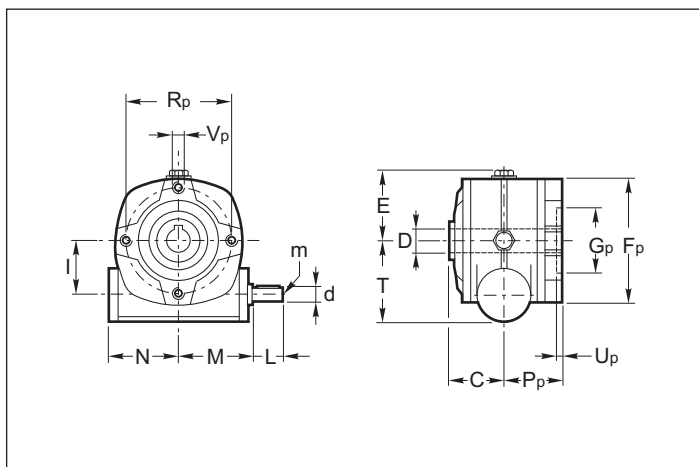


N.B.
Nelle grandezze 40, 50, 63, 70 la versione FL viene ottenuta applicando una flangia modulare sulla flangia pendolare della versione PP.

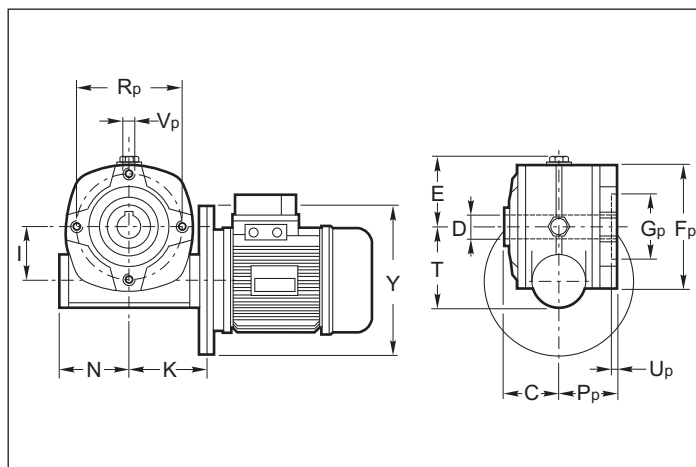
NOTE.
In sizes 40, 50, 63, 70, the FL version is obtained by applying a modular flange onto the shaft-mounted flange of the PP version.

HINWEIS.
Bei den Größen 40, 50, 63 und 70 erhält man die FL-Version, indem ein Modulflansch an den Flansch mit Drehmomentstütze der PP-Version befestigt wird.

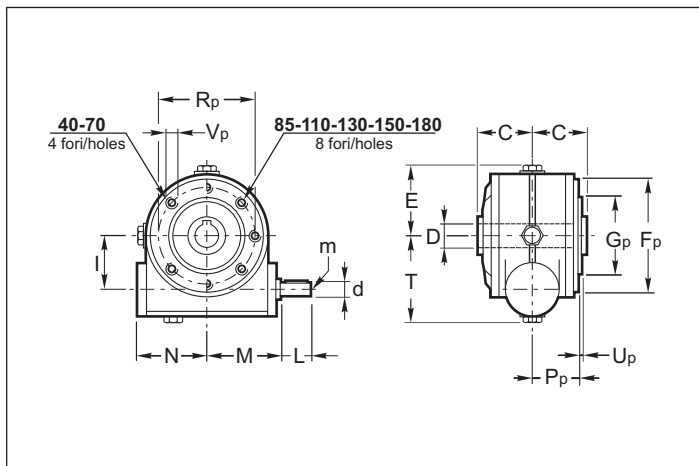
RI 28P



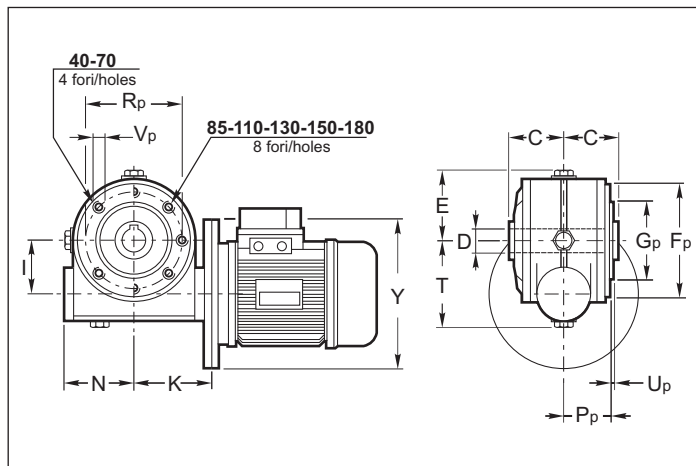
RMI 28P



RI 40PP - 70PP, 85P - 180P



RMI 40PP - 70PP, 85P - 180P





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

RI RMI	C	D H7	d j6	E	I	L	M	m	N	T
28	30	14	9	40	28	20	47	M4	44.5 (46)*	49
40	41	19 (18)	11	59	40	22	64	M5	61.5	66
50	49	24 (25)	14	69	50	30	74	M6	72.5	80
63	60	25	18	81	63	45	96	M6	84	99
70	60	28	19	87	70	40	97	M8	92	108
85	61	32 (35)	24	105	85	50	115	M8	111	135
110	77.5	42	28	135	110	60	146	M8	142	170
130	90	48	38	154	130	80	166	M10	161.5	195
150	105	55	42	178	150	100	195	M12	189	224
180	120	65	48	210	180	110	235	M14	232	265

*RI 28 - RMI 28 IEC56: N=44.5, RMI 28 IEC63: N=46

RI RMI	F	G H8	P	R	U	V	Z	Fp	Gp e8	Pp	Rp	Up	Vp
28	70	40	49	56	5	6	5	67	42(H8)	36	56	7	M6
40	140°	95	82	115	5	8.5	9	95	60	38	83	2	M6
50	160°	110	91.5	130	5	10	10	105	70	49	85	2.5	M8
63	180°	115	116	150	5	11	11	105	70	57.5	85	3.5	M8
70	200°	130	111	165	5	13	11	120	80	57	100	5	M8
85	200	130	100	165 ⁰ ₊₁₁	5	13	12	144	110	56.5	130	3.5	M10
110	250	180	150	215	5	15	16	200	130	74	165	3	M12
130	300	230	150	265	5	15	18	242	180	87	215	5	M12
150	350	250	160	300	6	19	18	250	180	102	215	5	M14
180	400	300	180	350	6.5	22	22	300	230	117	265	5	M16

N.B.

La versione FL contrassegnata con il simbolo (°) è ottenuta applicando una flangia modulare sulla flangia pendolare della versione PP.

NOTE.

FL version that is marked with (°) is obtained by applying a modular flange onto the shaft-mounted flange of the PP version.

HINWEIS.

Die mit (°) gekennzeichneten Version FL erhält man, indem ein Modulflansch an den Flansch mit Drehmomentstütze der PP-Version befestigt wird.

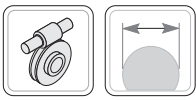
RMI	28		70		85		110		130		150		180	
	Y	K	Y	K	Y	K	Y	K	Y	K	Y	K	Y	K
B5	120	49	160	100	160	118	200	145	250	163	250	190	—	—
	—	—	200	100	200	118	250	145	300	163	300	190	300	234
	—	—	—	—	250	120	300	145.5	—	—	350	197	350	234
B14	80•	49	105	100	120•	118	160	145	—	—	—	—	—	—
	90	51	120	100	140	118	—	—	—	—	—	—	—	—
	—	—	140	100	160	120	—	—	—	—	—	—	—	—
	—	—	160	100	—	—	—	—	—	—	—	—	—	—

RMI...G	40		50		63	
	Y	K	Y	K	Y	K
B5	120	70.5	140	80.5	160	94.5
	140		160		200	
	160		200		—	
B14	90•		90•		105•	94.5
	105		105•		120	
	—		120		140	

(•) Vedi nota in fondo a tabella 2.13

(•) See note at the bottom of table 2.13

(•) Siehe Bemerkungen Tabelle 2.13 unten



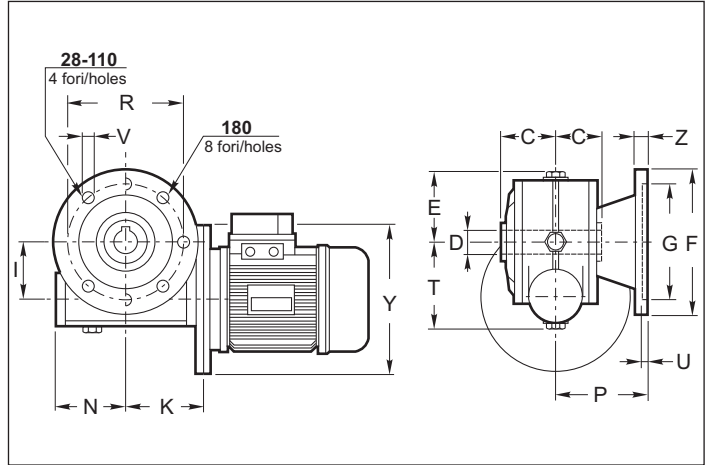
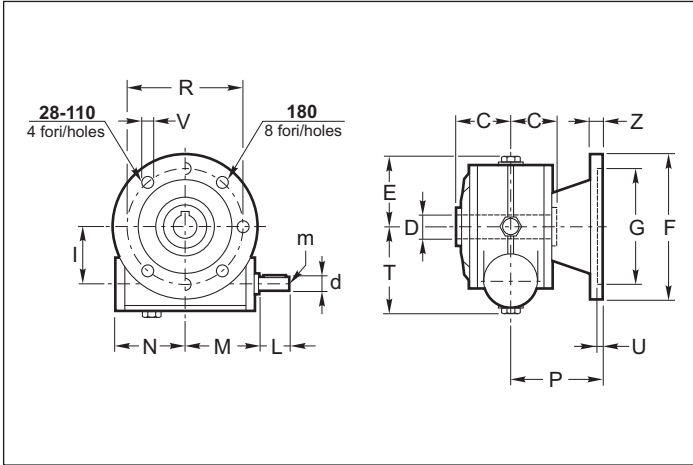
1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

RI F1 - F2 - F3 - F4

RMI F1 - F2 - F3 - F4



N.B.
Le versioni F1, F2, F3 contrassegnate con il simbolo (°) sono ottenute applicando una flangia modulare sulla flangia pendolare della versione PP.

NOTE.
F1, F2 and F3 versions that are marked with (°) are obtained by applying a modular flange onto the shaft-mounted flange of the PP version.

HINWEIS.
Die mit (°) gekennzeichneten Versionen F1, F2 und F3 erhält man, indem ein Modulflansch an den Flansch mit Drehmomentstütze der PP-Version befestigt wird.

RI	F	G	P	R	U	V	Z	C	D	d	E	I	L	M	m	N	T	
RMI		H8							H7	j6								
28	F1	80	50	53	62 ^{+0.6}	4	6	7	30	14	9	40	28	20	47	M4	44.5(46)*	49
	F2	95	70	72	85	4	6.5	8										
40	F1	106	60	69	87	5	8.5	9	41	19 (18)	11	59	40	22	64	M5	61.5	66
	F2	120	80	62	100	5	9	9										
50	F1	125	70	93	90 ^{+0.8}	5	10.5	10										
	F2	125	70	73	100	4	9	9										
	F3	140	95	75	115	4	9	9	49	24 (25)	14	69	50	30	74	M6	72.5	80
	F4	125	70	85	90 ^{+0.4,5}	5	10.5	11										
63	F1°	175	115	86	150	5	11	11	60	25	18	81	63	45	96	M6	81	99
	F2°	200	130	102	165	5	13	11										
	F3°	160	110	82	130	5	10	11										
70	F1°	175	115	116	150	5	11	10	60	28	19	87	70	40	97	M8	92	108
	F2°	175	115	85	150	5	11	10										
	F3	160	110	101	130	6	11	11										
85	F1	200	130	141	165	6	13	12	61	32 (35)	24	105	85	50	115	M8	111	135
	F2	210	152	120	176	5	13	14										
	F3	160	110	91	130	5	11.5	10										
110	F1	200	130	115	165	5	13	12	77.5	42	28	135	110	60	146	M8	142	170
	F2	270	170	132	230	10	13.5	18										
	F3	270	170	178	230	10	13.5	18										
180	F2	400	300	150	350	6.5	22	22	120	65	48	210	180	110	235	M14	232	265

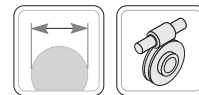
*RI 28 - RMI 28 IEC56: N=44.5, RMI 28 IEC63: N=46

RMI	28		70		85		110		130		150		180	
	Y	K	Y	K	Y	K	Y	K	Y	K	Y	K	Y	K
B5	120	49	160	100	160	118	200	145	250	163	250	190	—	—
	—	—	200	100	200	118	250	145	300	163	300	190	300	234
	—	—	—	—	250	120	300	145.5	—	—	350	197	350	234
B14	80*	49	105	100	120*	118	160	145	—	—	—	—	—	—
	90	51	120	100	140	118	—	—	—	—	—	—	—	—
	—	—	140	100	160	120	—	—	—	—	—	—	—	—
	—	—	160	100	—	—	—	—	—	—	—	—	—	—

(•) Vedi nota in fondo a tabella 2.13
(***) Non disponibile in versione F2

(•) See note at the bottom of table 2.13
(***) Version F2 not available.

(•) Siehe Bemerkungen Tabelle 2.13 unten
(***) Nicht erhältlich in Ausuerung F2



1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

RMI...G	40		50		63	
	Y	K	Y	K	Y	K
B5	120	70.5	140	80.5	160	94.5
	140		160		200	
	160		200		—	
B14	90•		90•		105•	94.5
	105		105		120	
	—		120		140	

(•) Vedi nota in fondo a tabella 2.13

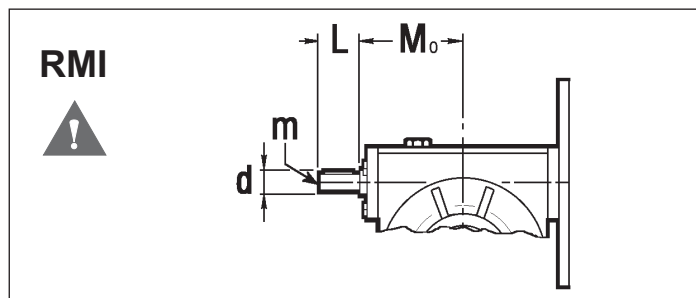
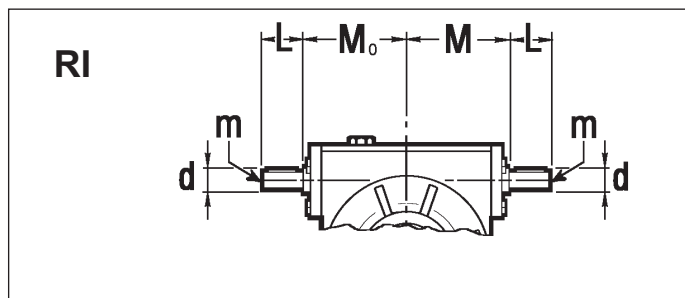
(•) See note at the bottom of table 2.13

(•) Siehe Bemerkungen Tabelle 2.13 unten

Esecuzione con vite bisporgente

Double extended input shaft

Ausführung mit beidseitiger Antriebswelle



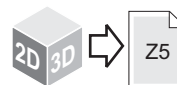
RI RMI	d j6	L	m	M	M ₀
28	9	20	M4	47	47
40	11	22	M5	64	64
50	14	30	M6	74	74
63	18	45	M6	96	85
70	19	40	M8	97	97
85	24	50	M8	115	115
110	28	60	M8	146	146
130	38	80	M10	166	166
150	42	100	M12	195	195
180	48	110	M14	235	235

⚠ Per i riduttori RMI con vite bisporgente vedi nota tab. 2.12.

⚠ The RMI worm gearbox with double extended input shaft see table 2.12.

⚠ Bei der Ausführung mit beidseitiger Antriebswelle bitte die Bemerkung auf Tab. 2.12 beachten.

Download 2D/3D



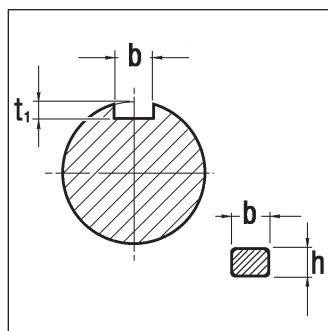
Linguette

Keys

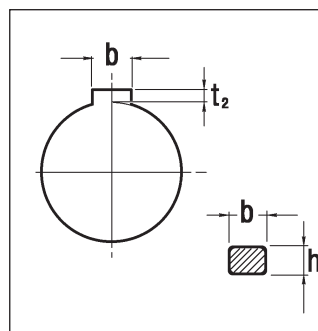
Federn

Albero entrata
Input shaft
Antriebswelle

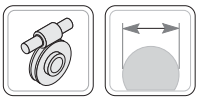
Albero uscita
Output shaft
Abtriebswelle



d	b x h	t ₁	
9	3 x 3	1.8	+0.1 0
11	4 x 4	2.5	
14	5 x 5	3.0	
18	6 x 6	3.5	
19	6 x 6	3.5	
24	8 x 7	4.0	+0.2 0
28	8 x 7	4.0	
38	10 x 8	5.0	
42	12 x 8	5.0	
48	14 x 9	5.5	



D	b x h	t ₂	
14	5 x 5	2.3	+0.1 0
18	6 x 6	2.8	
19	6 x 6	2.8	
24	8 x 7	3.3	
25	8 x 7	3.3	
28	8 x 7	3.3	+0.2 0
32	10 x 8	3.3	
35	10 x 8	3.3	
42	12 x 8	3.3	
48	14 x 9	3.8	
55	16 x 10	4.3	
65	18 x 11	4.4	



STANDARD

line

1.8 Dimensioni

1.8 Dimensions

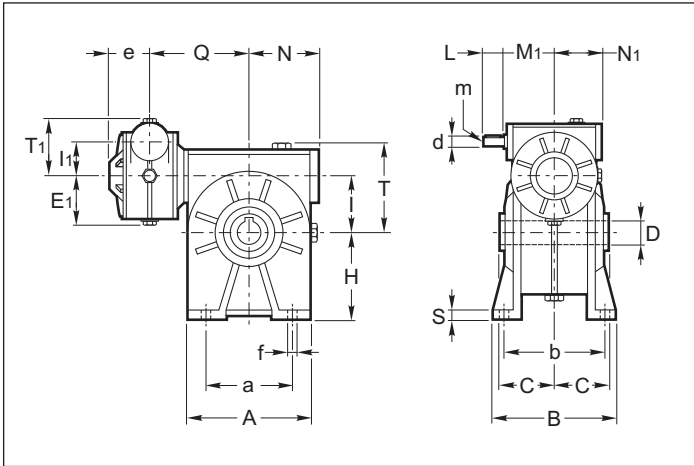
1.8 Abmessungen



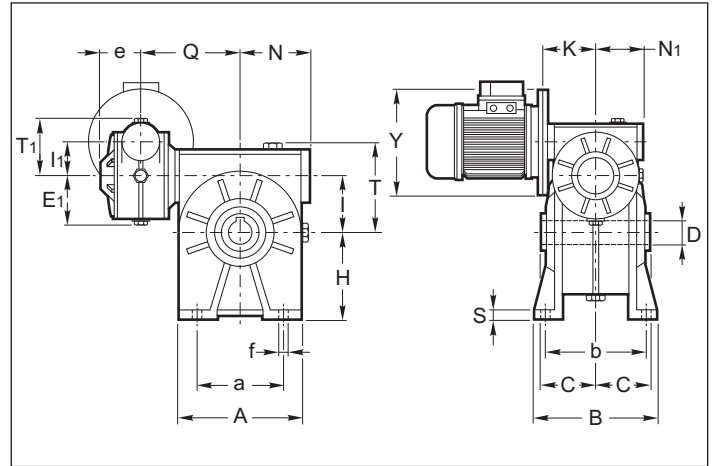
Dimensioni riduttori
Gearboxes dimensions
Abmessungen Getriebes

CRI - CRMI

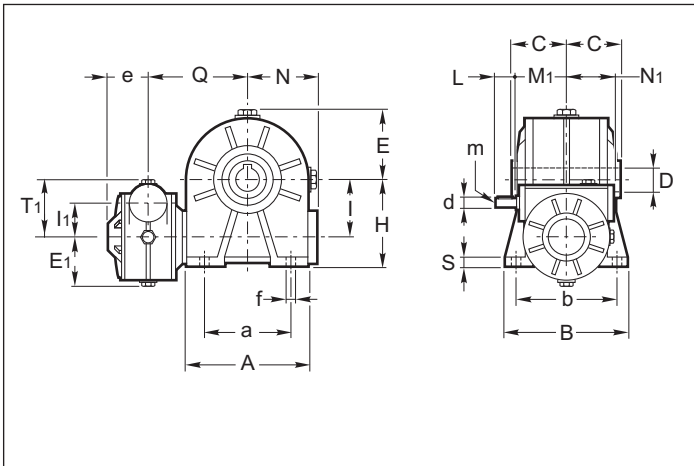
CRI S



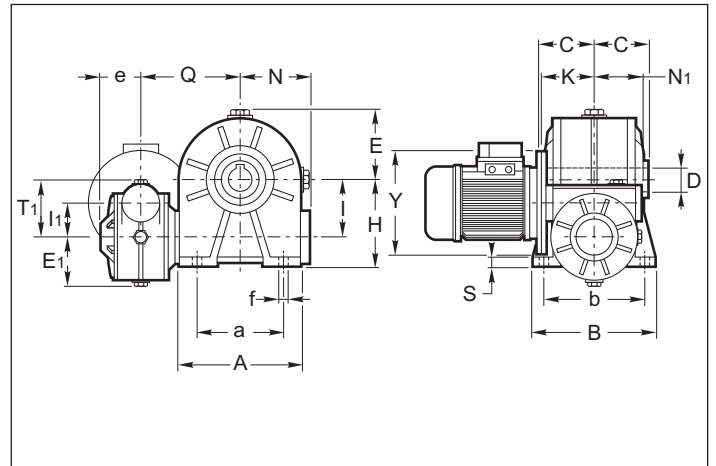
CRMI S



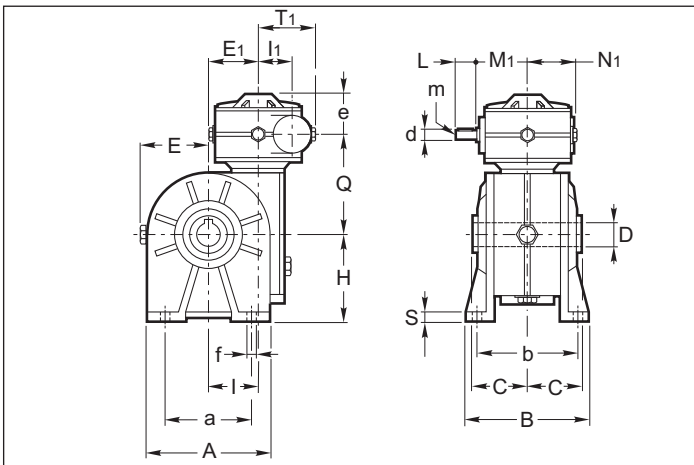
CRI I



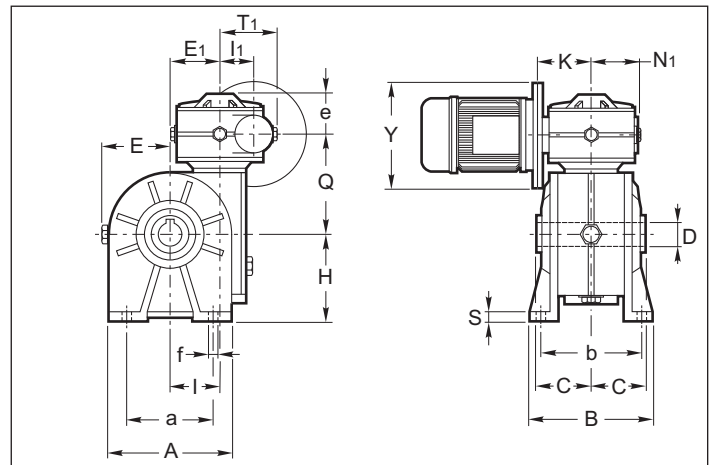
CRMI I

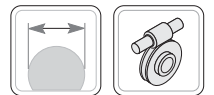


CRI D



CRMI D





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

CRI CRMI	A	a	B	b	C	D H7	d j6	E	E ₁	e	f	Q	H	I	I ₁	L	m	M ₁	N	N ₁	S	T	T ₁
28/28	67	52	78	66 ^{+2/-6}	30	14	9	40	40	35	5.5	90	52	28	28	20	M4	47	44.5	44.5*	6	49	49
28/40	100	70	102	84 ⁺³	41	19(18)	9	59	40	35	7	104.5	71	40	28	20	M4	47	61.5	44.5*	8	66	49
40/40 **	100	70	102	84 ⁺³	41	19(18)	11	59	59	49	7	145.5	71	40	40	22	M5	64	61.5	61.5	8	66	66
28/50	120	85	119	99 ⁺³	49	24(25)	9	69	40	35	9	115	85	50	28	20	M4	43	72.5	44.5*	10	80	49
40/50	120	85	119	99 ⁺³	49	24(25)	11	69	59	49	9	106	85	50	40	22	M5	64	72.5	61.5	10	80	66
28/63	140	95	136	111 ⁺³	60	25	9	81	40	35	11	135.5	100	63	28	20	M4	47	84	44.5*	11	99	49
40/63	140	95	136	111 ⁺³	60	25	11	81	59	49	11	146	100	63	40	22	M5	64	84	61.5	11	99	66
28/70	158	120	140	116 ⁺³	60	28	9	87	40	35	11	140.5	115	70	28	20	M4	47	92	44.5*	13	108	49
40/70	158	120	140	116 ⁺³	60	28	11	87	59	49	11	151	115	70	40	22	M5	64	92	61.5	13	108	66
50/70	158	120	140	116 ⁺³	60	28	14	87	69	59	11	149	115	70	50	30	M6	74	92	72.5	13	108	80
63/70 **	158	120	140	116	60	28	18	87	81	69	11	182	115	70	63	45	M6	96	92	81	13	108	99
40/85 **	193	140	168	140	61	32(35)	11	105	59	49	13	198	135	85	40	22	M5	64	111	61.5	15	135	66
50/85	193	140	168	140	61	32(35)	14	105	69	59	13	173	135	85	50	30	M6	74	111	72.5	15	135	80
63/85 **	193	140	168	140	61	32(35)	18	105	81	69	13	198	135	85	63	45	M6	96	111	81	15	135	99
70/85	193	140	168	140	61	32(35)	19	105	87	68	13	165	135	85	70	40	M8	97	111	92	15	135	108
50/110 **	250	200	200	162	77.5	42	14	135	69	59	14	236.5	172	110	50	30	M6	74	142	72.5	17	170	80
63/110 **	250	200	200	162	77.5	42	18	135	81	69	14	227	172	110	63	45	M6	96	142	81	17	170	99
70/110	250	200	200	162	77.5	42	19	135	87	68	14	191	172	110	70	40	M8	97	142	92	17	170	108
85/110	250	200	200	162	77.5	42	24	135	105	71	14	195	172	110	85	50	M8	115	142	111	17	170	135
63/130 **	286	235	230	190	90	48	18	154	81	69	15	265	200	130	63	45	M6	96	161.5	81	19	195	99
70/130	286	235	230	190	90	48	19	154	87	68	15	214	200	130	70	40	M8	97	161.5	92	19	195	108
85/130	286	235	230	190	90	48	24	154	105	71	15	213	200	130	85	50	M8	115	161.5	111	19	195	135
85/150	336	260	250	210	105	55	24	178	105	71	19	240	230	150	85	50	M8	115	189	111	20	224	135
110/150	336	260	250	210	105	55	28	178	135	92	19	254	230	150	110	60	M8	146	189	142	20	224	170
85/180	400	310	320	260	120	65	24	210	105	71	22	283	265	180	85	50	M8	115	232	111	22	265	135
110/180	400	310	320	260	120	65	28	210	135	92	22	296	265	180	110	60	M8	146	232	142	22	265	170
130/180	400	310	320	260	120	65	38	210	150	102	22	306	265	180	130	80	M10	166	232	159	22	265	200

* CRI 28/... - CRMI 28/... IEC56: n=44.5, CRMI 28/... IEC 63: n=46

	28/28 28/40 28/50 28/63 28/70		40/40 ** 40/50 40/63 40/70 40/85 **		50/70 50/85 50/110 **		63/70 ** 63/85 ** 63/110 ** 63/130 **		70/85 70/110 70/130		85/110 85/130 85/150 85/180		110/150 110/180		130/180	
	Y	K	Y	CRMI...G K	Y	CRMI...G K	Y	CRMI...G K	Y	K	Y	K	Y	K	Y	V
	B5	120	49	120	70.5	140	80.5	160	94.5	160	100	160	118	200	145	—
	—	—	140	160		200		200		100	200	118	250	145	250	163
	—	—	160	200		—		—		—	—	250	120	300	145.5	300
B14	80•	49	80	—	90	80.5•	105•	94.5	105	100	120•	118	160	145	—	—
	90	51	90	70.5•	105		120		140	118	—	—	—	—	—	
	—	—	105	70.5	120		80.5		140	140	100	160	120	—	—	—
	—	—	—	—	—		—		—	—	160	100	—	—	—	—

(•) Vedi nota in fondo a tabella 2.13

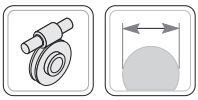
(•) See note at the bottom of table 2.13

(•) Siehe Bemerkungen Tabelle 2.13 unten

(**) Riduttori con accoppiamento eseguito con kit di montaggio, vedi pag.B53.
N.B. Le dimensioni delle linguette sono riportate di seguito.

(**) Gearboxes assembled with combination kit, see also page B53.
NOTE. Sizes of feathers are shown below.

(**) Getriebe angebaut mit kombinationskit, siehe auch Seite B53.
HINWEIS. Die Abmessungen der Federn sind auf angegeben.

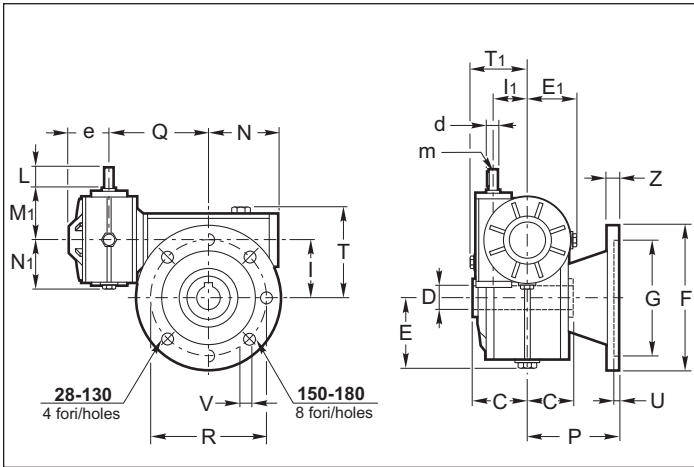


1.8 Dimensioni

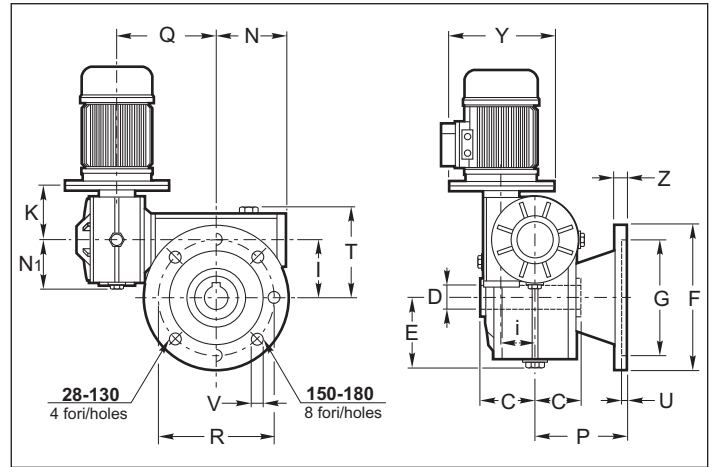
1.8 Dimensions

1.8 Abmessungen

CRI A(FL)



CRMI A(FL)

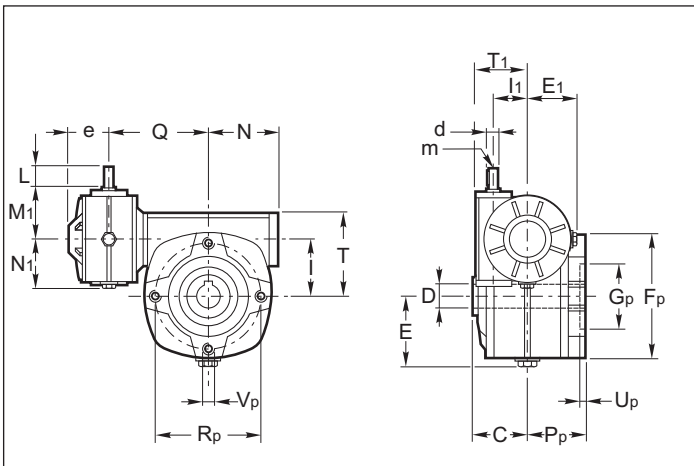


N.B.
 (*) Nelle grandezze .../40, .../50, .../63, .../70 la versione A(FL) viene ottenuta applicando una flangia modulare sulla flangia pendolare della versione A(PP).

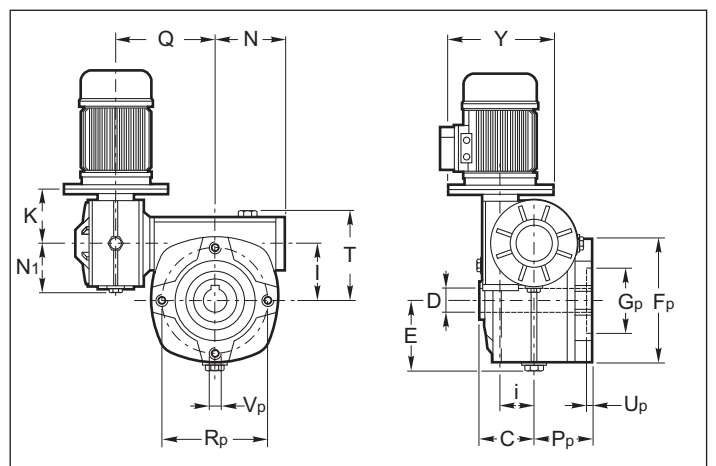
NOTE.
 (*) In sizes .../40, .../50, .../63, .../70 the FL version is obtained by applying a modular flange onto the shaft-mounted flange of the A(PP) version.

HINWEIS.
 (*) Bei den Größen .../40, .../50, .../63, .../70 erhält man die FL-Version, indem ein Modulflansch an den Flansch mit Drehmomentstütze der A(PP)-Version

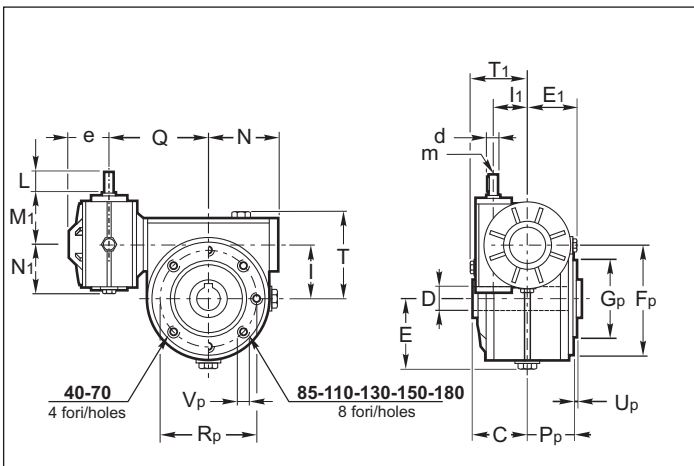
CRI .../28A(P)



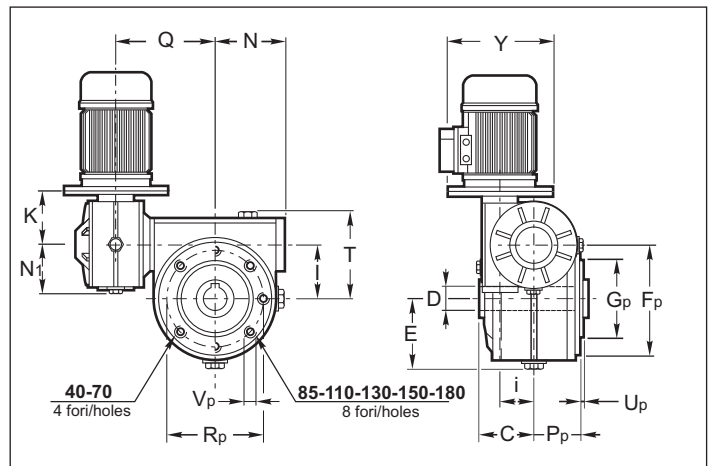
CRMI .../28A(P)

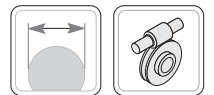


**CRI .../40A(PP) - .../70A(PP)
 CRI .../85A(P) - .../180A(P)**



**CRMI .../40A(PP) - .../70A(PP)
 CRMI .../85A(P) - .../180A(P)**





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

CRI CRMI	C	D H7	d j6	E	E ₁	e	Q	I	I ₁	L	m	M ₁	N	N ₁	T	T ₁
28/28	30	14	9	40	40	35	90	28	28	20	M4	47	44.5	44.5*	49	49
28/40	41	19 (18)	9	59	40	35	104.5	40	28	20	M4	47	61.5	44.5*	66	49
40/40 **	41	19 (18)	11	59	59	49	145.5	40	40	22	M5	64	61.5	61.5	66	66
28/50	49	24 (25)	9	69	40	35	115	50	28	20	M4	43	72.5	44.5*	80	49
40/50	49	24 (25)	11	69	59	49	106	50	40	22	M5	64	72.5	61.5	80	66
28/63	60	25	9	81	40	35	135.5	63	28	20	M4	47	84	44.5*	99	49
40/63	60	25	11	81	59	49	145.5	63	40	22	M5	64	84	61.5	99	66
28/70	60	28	9	87	40	35	140.5	70	28	20	M4	47	92	44.5*	108	49
40/70	60	28	11	87	59	49	151	70	40	22	M5	64	92	61.5	108	66
50/70	60	28	14	87	69	59	149	70	50	30	M6	74	92	72.5	108	80
63/70 **	60	28	18	87	81	69	182	70	63	45	M6	96	92	81	108	99
40/85 **	61	32 (35)	11	105	59	49	198	85	40	22	M5	64	111	61.5	135	66
50/85	61	32 (35)	14	105	69	59	173	85	50	30	M6	74	111	72.5	135	80
63/85 **	61	32 (35)	18	105	81	69	198	85	63	45	M6	96	111	81	135	99
70/85	61	32 (35)	19	105	87	68	165	85	70	40	M8	97	111	92	135	108
50/110 **	77.5	42	14	135	69	59	236.5	110	50	30	M6	74	142	72.5	170	80
63/110 **	77.5	42	18	135	81	69	227	110	63	45	M6	96	142	81	170	99
70/110	77.5	42	19	135	87	68	191	110	70	40	M8	97	142	92	170	108
85/110	77.5	42	24	135	105	71	195	110	85	50	M8	115	142	111	170	135
63/130 **	90	48	18	154	81	69	265	130	63	45	M6	96	161.5	81	195	99
70/130	90	48	19	154	87	68	214	130	70	40	M8	97	161.5	92	195	108
85/130	90	48	24	154	105	71	213	130	85	50	M8	115	161.5	111	195	135
85/150	105	55	24	178	105	71	240	150	85	50	M8	115	189	111	224	135
110/150	105	55	28	178	135	92	254	150	110	60	M8	146	189	142	224	170
85/180	120	65	24	210	105	71	283	180	85	50	M8	115	232	111	265	135
110/180	120	65	28	210	135	92	296	180	110	60	M8	146	232	142	265	170
130/180	120	65	38	210	150	102	306	180	130	80	M10	166	232	159	265	200

* CRI 28/... - CRMI 28/... IEC56: n=44.5, CRMI 28/... IEC 63: n=46

CRI CRMI	F	G H8	P	R	U	V	Z	Fp	Gp e8	Pp	Rp	Up	Vp
28/28	70	40	49	56	5	6	5	67	42(H8)	36	56	7	M6
28/40	140°	95	82	115	5	8.5	9	95	60	38	83	2	M6
40/40 **	160°	110	91.5	130	5	10	10	105	70	49	85	2.5	M8
28/50	180°	115	116	150	5	11	11	105	70	57.5	85	3.5	M8
40/50													
28/63													
40/63													
28/70													
40/70	200°	130	111	165	5	13	11	120	80	57	100	5	M8
50/70													
63/70 **													
40/85 **													
50/85	200	130	100	165 ⁰ ₊₁₁	5	13	12	144	110	56.5	130	3.5	M10
63/85 **													
70/85													
50/110 **													
63/110 **	250	180	150	215	5	15	16	200	130	74	165	3	M12
70/110													
85/110													
63/130 **													
70/130	300	230	150	265	5	15	18	242	180	87	215	5	M12
85/130													
85/150	350	250	160	300	6	19	18	250	180	102	215	5	M14
110/150													
85/180	400	300	180	350	6.5	22	22	300	230	117	265	5	M16
110/180													
130/180													

	28/28 28/40 28/50 28/63 28/70		40/40 ** 40/50 40/63 40/70 40/85 **		50/70 50/85 50/110 **		63/70 ** 63/85 ** 63/110 ** 63/130 **		70/85 70/110 70/130		85/110 85/130 85/150 85/180		110/150 110/180		130/180	
	Y	K	Y	CRMI...G K	Y	CRMI...G K	Y	CRMI...G K	Y	K	Y	K	Y	K	Y	V
B5	120	49	120	70.5	140	80.5	160	94.5	160	100	160	118	200	145	—	—
	—	—	140		160		200		200	100	200	118	250	145	250	163
	—	—	160		200		—		—	—	—	250	120	300	145.5	300
B14	80•	49	80	—	90	80.5•	105•	94.5	105	100	120•	118	160	145	—	—
	90	51	90	70.5•	105		120		120	100	140	118	—	—	—	—
	—	—	105	70.5	120		80.5		140	140	100	160	120	—	—	—
	—	—	—	—	—	—	—	—	160	100	—	—	—	—	—	—

(•) Vedi nota in fondo a tabella 2.13

(•) See note at the bottom of table 2.13

(•) Siehe Bemerkungen Tabelle 2.13 unten

(**) Riduttori con accoppiamento eseguito con kit di montaggio, vedi pag.B53.

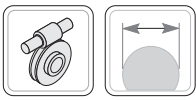
(**) Gearboxes assembled with combination kit, see also page B53.

(**) Getriebe angebaut mit kombinationskit, siehe auch Seite B53.

N.B. Le dimensioni delle linguette sono riportate di seguito.

NOTE. Sizes of feathers are shown below.

HINWEIS. Die Abmessungen der Federn sind angegeben.



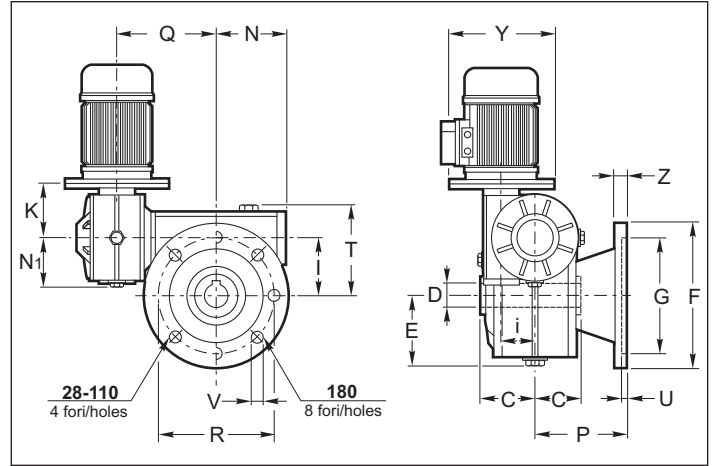
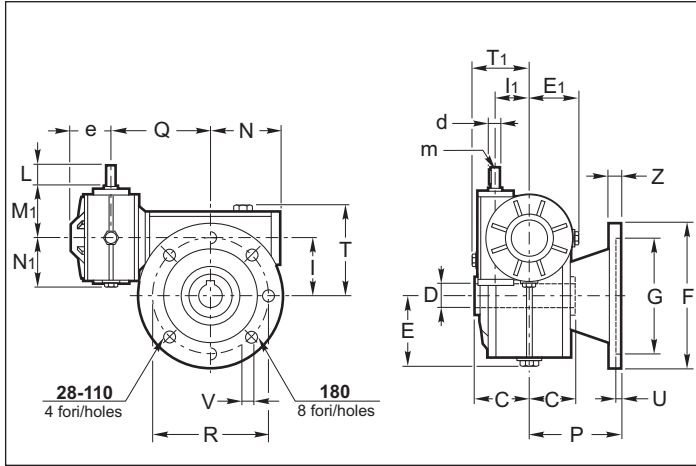
1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

CRI A(F1 - F2 - F3 - F4)

CRMI A(F1 - F2 - F3 - F4)



CRI - CRMI																						
		28/28		28/40 40/40**		28/50 40/50			28/63 40/63			28/70 40/70 50/70 63/70**			40/85** 50/85 63/85** 70/85			50/110** 63/110** 70/110 85/110			85/180 110/180 130/180	
		F1	F2	F1	F2	F1	F2	F3	F4	F1°	F2°	F3°	F1°	F2°	F3	F1	F2	F3	F1	F2	F3	F2
F		80	95	106	120	125	125	140	125	175	200	160	175	175	160	200	210	160	200	270	270	400
G (H8)		50	70	60	80	70	70	95	70	115	130	110	115	115	110	130	152	110	130	170	170	300
P		53	72	69	62	93	73	75	85	86	102	82	116	85	101	141	120	91	115	132	178	150
R		62 + ⁰ / ₉	85	87	100	90 + ⁰ / ₉	100	115	90 + ⁰ / ₅	150	165	130	150	150	130	165	176	130	165	230	230	350
U		4	4	5	5	5	4	4	5	5	5	5	5	5	6	6	5	5	5	10	10	6.5
V		6	6.5	8.5	9	10.5	9	9	10.5	11	13	10	11	11	11	13	13	11.5	13	13.5	13.5	22
Z		7	8	9	9	10	9	9	11	11	11	11	10	10	11	12	14	10	12	18	18	22

Le versioni F1, F2, F3 contrassegnate con il simbolo (°) sono ottenute applicando una flangia modulare sulla flangia pendolare della versione PP.

F1, F2 and F3 versions that are marked with (°) are obtained by applying a modular flange onto the shaft-mounted flange of the PP version.

Die mit (°) gekennzeichneten Versionen F1, F2 und F3 erhält man, indem ein Modulflansch an den Flansch mit Drehmomentstütze der PP-Version befestigt wird.

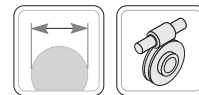
CRI CRMI	C	D H7	d j6	E	E ₁	e	Q	I	I ₁	L	m	M ₁	N	N ₁	T	T ₁
28/28	30	14	9	40	40	35	90	28	28	20	M4	47	44.5	44.5*	49	49
28/40	41	19 (18)	9	59	40	35	104.5	40	28	20	M4	47	61.5	44.5*	66	49
40/40**	41	19 (18)	11	59	59	49	145.5	40	40	22	M5	64	61.5	61.5	66	66
28/50	49	24 (25)	9	69	40	35	115	50	28	20	M4	43	72.5	44.5*	80	49
40/50	49	24 (25)	11	69	59	49	106	50	40	22	M5	64	72.5	61.5	80	66
28/63	60	25	9	81	40	35	135.5	63	28	20	M4	47	81	44.5*	99	49
40/63	60	25	11	81	59	49	146	63	40	22	M5	64	81	61.5	99	66
28/70	60	28	9	87	40	35	140.5	70	28	20	M4	47	92	44.5*	108	49
40/70	60	28	11	87	59	49	151	70	40	22	M5	64	92	61.5	108	66
50/70	60	28	14	87	69	59	149	70	50	30	M6	74	92	72.5	108	80
63/70**	60	28	18	87	81	69	182	70	63	45	M6	96	92	81	108	99
40/85**	61	32 (35)	11	105	59	49	198	85	40	22	M5	64	111	61.5	135	66
50/85	61	32 (35)	14	105	69	59	173	85	50	30	M6	74	111	72.5	135	80
63/85**	61	32 (35)	18	105	81	69	198	85	63	45	M6	96	111	81	135	99
70/85	61	32 (35)	19	105	87	68	165	85	70	40	M8	97	111	92	135	108
50/110**	77.5	42	14	135	69	59	236.5	110	50	30	M6	74	142	72.5	170	80
63/110**	77.5	42	18	135	81	69	227	110	63	45	M6	96	142	81	170	99
70/110	77.5	42	19	135	87	68	191	110	70	40	M8	97	142	92	170	108
85/110	77.5	42	24	135	105	71	195	110	85	50	M8	115	142	111	170	135
85/180	120	65	24	210	105	71	283	180	85	50	M8	115	232	111	265	135
110/180	120	65	28	210	135	92	296	180	110	60	M8	146	232	142	265	170
130/180	120	65	38	210	150	102	306	180	130	80	M10	166	232	159	265	200

* CRI 28/... - CRMI 28/... IEC56: n=44.5, CRMI 28/... IEC 63: n=46

(**) Riduttori con accoppiamento eseguito con kit di montaggio, vedi pag. B53.
N.B. Le dimensioni delle linguette sono riportate di seguito.

(°) Gearboxes assembled with combination kit, see also page B53.
NOTE. Sizes of feathers are shown below.

(°) Getriebe angebaut mit Kombinationskit, siehe auch Seite B53.
HINWEIS. Die Abmessungen der Federn sind auf angegeben.



1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

	28/28 28/40 28/50 28/63 28/70		40/40 ** 40/50 40/63 40/70 40/85 **		50/70 50/85 50/110 **		63/70 ** 63/85 ** 63/110 ** 63/130 **		70/85 70/110 70/130		85/110 85/130 85/150 85/180		110/150 110/180		130/180		
	Y	K	Y	CRMI...G K	Y	CRMI...G K	Y	CRMI...G K	Y	K	Y	K	Y	K	Y	V	
B5	120	49	120	70.5	140	80.5	160	94.5	160	100	160	118	200	145	—	—	
	—	—	140		160		200		200	100	200	118	250	145	250	163	
	—	—	160		200		—		—	—	—	250	120	300	145.5	300	163
B14	80•	49	80	—	90	80.5•	105•	94.5	105	100	120•	118	160	145	—	—	
	90	51	90	70.5•	105		120		120	100	140	118	—	—	—	—	
	—	—	105	70.5	120		80.5		140	140	100	160	120	—	—	—	—
	—	—	—	—	—		—		—	—	160	100	—	—	—	—	—

(•) Vedi nota in fondo a tabella 2.13

(•) See note at the bottom of table 2.13

(•) Siehe Bemerkungen Tabelle 2.13 unten

(**) Riduttori con accoppiamento eseguito con kit di montaggio, vedi pag.B53.
N.B. Le dimensioni delle linguette sono riportate di seguito.

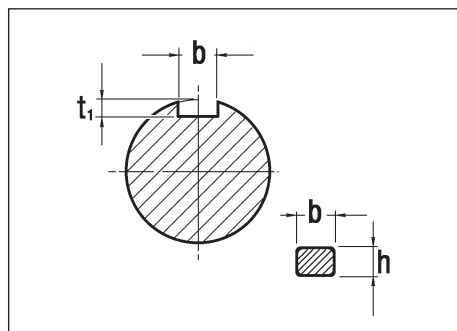
(**) Gearboxes assembled with combination kit, see also page B53.
NOTE. Sizes of feathers are shown below.

(**) Getriebe angebaut mit kombinationskit, siehe auch Seite B53.
HINWEIS. Die Abmessungen der Federn sind angegeben.

Linguette

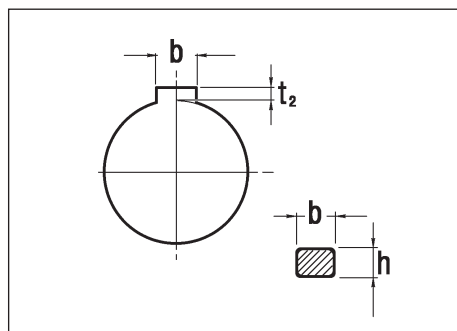
Keys

Federn



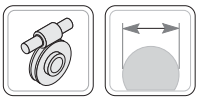
Albero entrata
Input shaft
Antriebswelle

d	b x h	t ₁
9	3 x 3	1.8
11	4 x 4	2.5
14	5 x 5	3.0
18	6 x 6	3.5
19	6 x 6	3.5
24	8 x 7	4.0
28	8 x 7	4.0
38	10 x 8	5.0
42	12 x 8	5.0
48	14 x 9	5.5



Albero uscita
Output shaft
Abtriebswelle

D	b x h	t ₂
14	5 x 5	2.3
18	6 x 6	2.8
19	6 x 6	2.8
24	8 x 7	3.3
25	8 x 7	3.3
28	8 x 7	3.3
32	10 x 8	3.3
35	10 x 8	3.3
42	12 x 8	3.3
48	14 x 9	3.8
55	16 x 10	4.3
65	18 x 11	4.4



Esecuzione con vite bisorgente

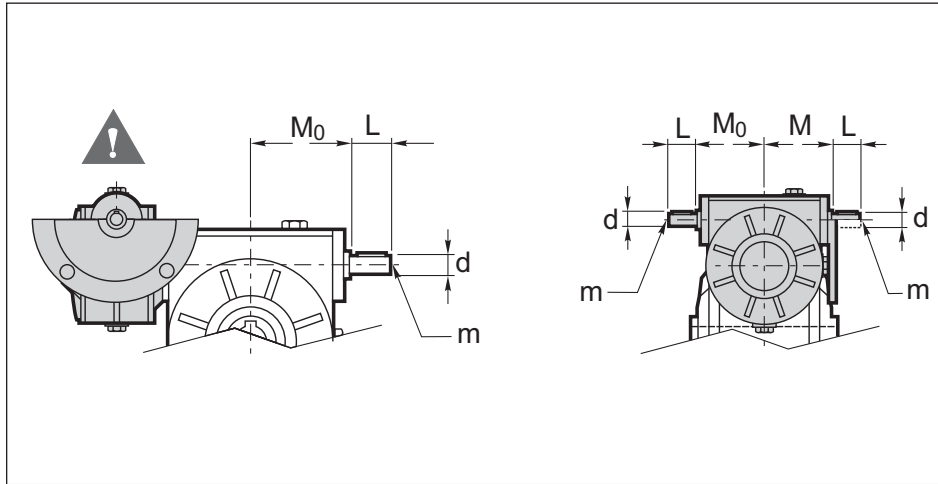
Double extended input shaft

Ausführung mit Wellenzapfen auf beiden Seiten


Nei riduttori combinati è necessario specificare se questa configurazione è riferita al primo riduttore (in entrata) o al secondo riduttore (in uscita).


In combined gearboxes, it is necessary to specify if such configuration refers to the first gearbox (input gearbox) or to the second one (output gearbox).

Bei den Kombinationsgetrieben muß angegeben werden, ob sich die Konfiguration auf das erste Getriebe (Eingang) oder auf das zweite (Ausgang) bezieht.



Grandezza Size Größe	d	L	m	M	M ₀
28	9	20	M4	47	47
40	11	22	M5	64	64
50	14	30	M6	74	74
63	18	45	M6	96	85
70	19	40	M8	97	97
85	24	50	M8	115	115
110	28	60	M8	146	146
130	38	80	M10	166	166
150	42	100	M12	195	195
180	48	110	M14	235	235

 Per i riduttori CRMI con vite bisorgente vedi nota tab. 2.12.

 *The CRMI worm gearbox with double extended input shaft see table 2.12.*

 Bei der Ausführung mit beidseitiger Antriebswelle bitte die Bemerkung auf Tab. 2.12



Accoppiamenti

E' inoltre disponibile un kit che permette di combinare modularmente i riduttori, utilizzando un riduttore in entrata in versione flangiata e il riduttore in uscita predisposto con flangia attacco motore IEC. La tabella seguente indica le possibili combinazioni.

Coupling

To make you more flexible it is also possible to supply the gearboxes seperately and to combine them with an assembling kit. For this we deliver the input gearbox in the flanged version and the output gearbox with IEC motor connecting flange. The possible combinations and the assembling kits are listed below.

Kupplung

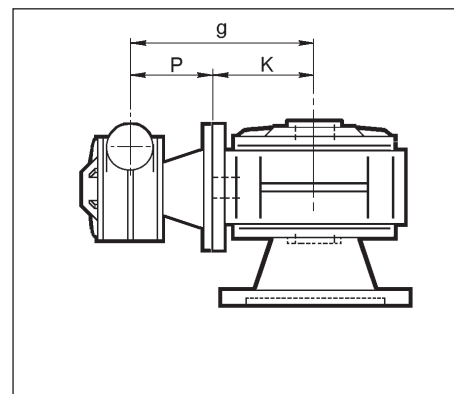
Um bei der Kombination der Getriebe vorort flexibler zu sein, bieten wir einen Montage-Kit an, mit dessen Hilfe ein Standardgetriebe mit Abtriebsflansch in der ersten Übersetzungsstufe und ein Standardgetriebe mit IEC-Eingangsfansch in der zweiten Übersetzungsstufe kombiniert werden können. Die Kombinationsmöglichkeiten sowie die zugehörigen Montage-Kits sind in der folgenden Tabelle aufgelistet.

Nei riduttori e motorvariatori combinati 28/28 e 28/40 (accoppiati con kit di montaggio) l'asse della vite del 1° riduttore è sempre inclinata di 45° rispetto all'asse orizzontale o verticale. Specificare la posizione in fase di ordine.

In the combined worm gearboxes and motor-variators 28/28 and 28/40 (coupled with an assembly kit) the wormshaft axis of the first gearbox has always a tilt of 45° compared to the horizontal or vertical axis.

The position has to be specified in the order.

Wird das Kombinationsgetriebe 28/28 und 28/40 mit Hilfe des Montagekits gebildet, so befindet sich die Achse des ersten Getriebes immer in 45° bezüglich zur Horizontalen bzw. Vertikalen. Bei Auftragserteilung bitte die Montageposition angeben.

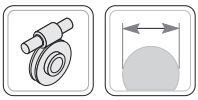


CRI CRMI	P	K	g	Riduttore in entrata Input gearbox Erstes Getriebe	Kit di montaggio Assembling kit Montage-kit	Riduttore uscita Output gearbox Zweites Getriebe
28/28	53	49	102	28 F1	KIT 28/28	28 IEC56 B14
40/40*	82	63.5	145.5	40 FL	*KIT 40/40G	40 IEC63 B5
40/50*	82	77	159	40 FL	*KIT 40/50G	50 IEC140/14
50/50*	91.5	77	168.5	50 FL	*KIT 50/50G	50 IEC71 B5
40/63*	82	95	177	40 FL	*KIT 40/63G	63 IEC140/19
50/63*	91.5	95	186.5	50 FL	*KIT 50/63G	63 IEC160/19
63/63*	82	95	177	63 F3	*KIT 63/63G	63 IEC160/19
40/70	8	100	182	40 FL	KIT 40/70	70 IEC140/19
50/70	91.5	100	191.5	50 FL	KIT 50/70	70 IEC160/19
63/70	82	100	182	63 F3	KIT 63/70	70 IEC160/19
70/70	111	100	211	70 FL	KIT 70/70	70 IEC80 B5
40/85	82	116	200	40 FL	KIT 40/85	85 IEC90 B14
50/85	91.5	116	209.5	50 FL	KIT 50/85	85 IEC160/24
63/85	82	116	200	63 F3	KIT 63/85	85 IEC160/24
70/85	111	116	229	70 FL	KIT 70/85	85 IEC90 B5
85/85	100	116	218	85 FL	KIT 85/85	85 IEC90 B5
50/110	91.5	145	236.5	50 FL	KIT 50/110	110 IEC100 B14
63/110	82	145	227	63 F3	KIT 63/110	110 IEC100 B14
70/110	111	145	256	70 FL	KIT 70/110	110 IEC200/28
85/110	100	145	245	85 FL	KIT 85/110	110 IEC200/28
63/130	102	163	265	63 F2	KIT 63/130	130 IEC200/28

* Per i riduttori tipo "G", sul riduttore in uscita è necessario ordinare il Kit di montaggio con giunto "G" in acciaio.

* For Gearboxes "G" type, output gearbox must be with stainless steel coupling G.

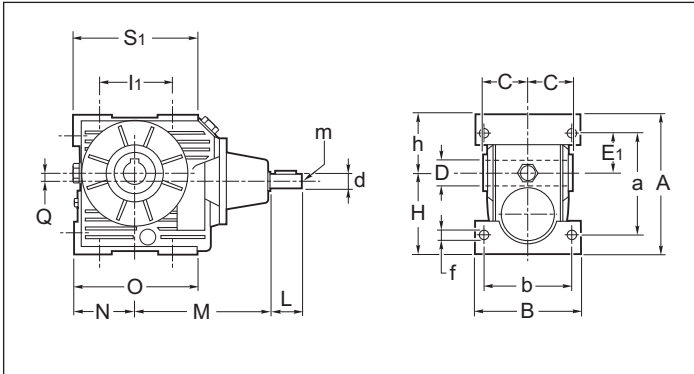
* Fuer die Getriebe Typ "G" ist bei dem Abtriebsgetriebe ein Montagekit mit Kuppung G in Stahl notwendig.



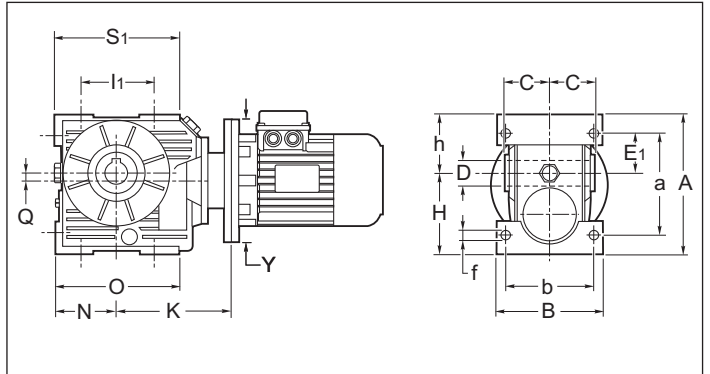
Dimensioni riduttori
Gearboxes dimensions
Abmessungen Getriebes

CR - CB

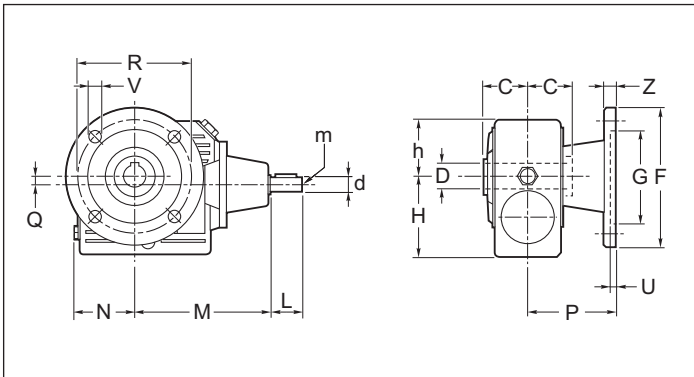
CR



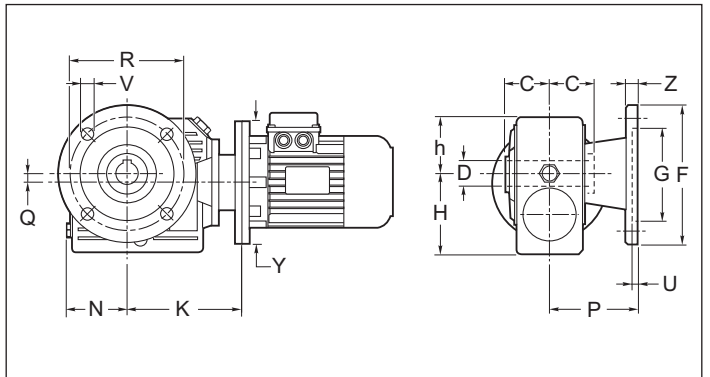
CB



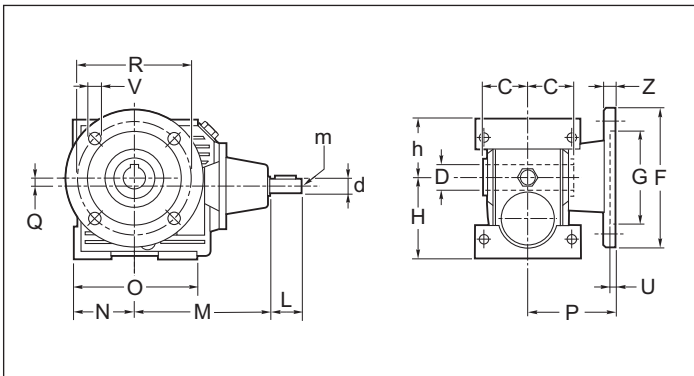
CRF



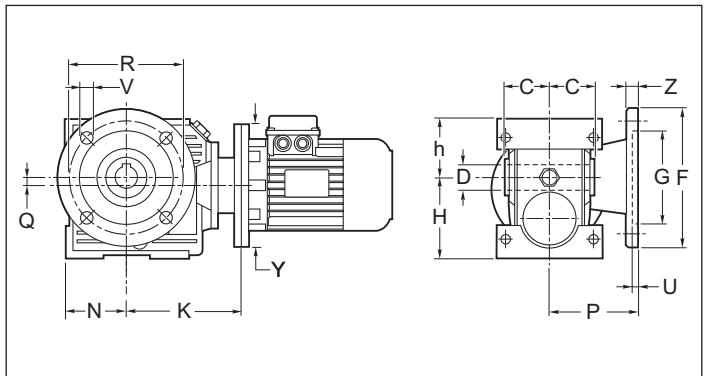
CBF



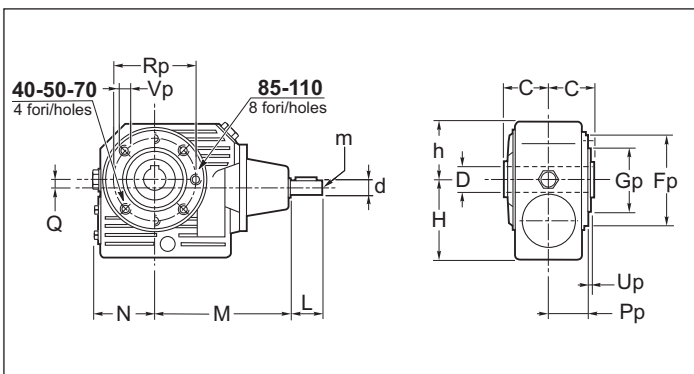
CR/F



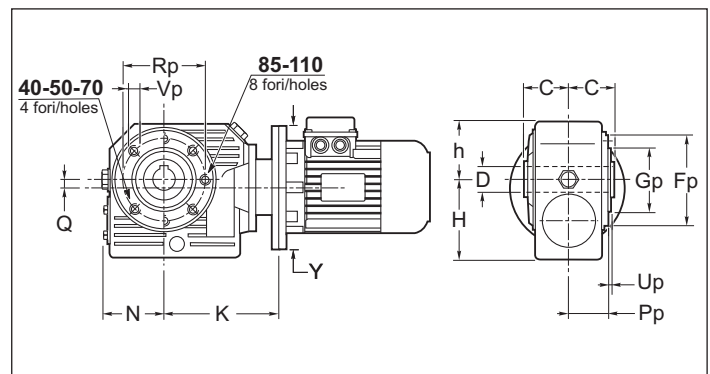
CB/F

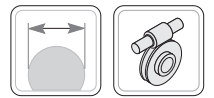


CRP



CBP





1.8 Dimensioni

1.8 Dimensions

1.8 Abmessungen

CR CB	A	a	B	b	C	D H7	d J6	E1	f	H	h	I1	L	M	m	N	O	Q	S1
40	135	100	102	84	41	19 (18)	14	40	7	78	57	70	30	137	M6	59	117	7	117
50	166	120	120	99	49	24 (25)	19	46	9	97	69	85	40	143	M8	69	130	9	130
70	215	160	140	116	60	28	24	61	11	124	88	120	50	188	M8	93	193	17.5	186
85	252	188	170	140	61	32 (35)	28	74	13	145	107	140	60	212	M8	116	231	29	221
110	330	244	200	162	77.5	42	32	97	14	190	140	200	70	264.5	M10	142	282	43	277

CR CB	F	G H8	P	R	U	V	Z	Fp	Gp e8	Pp	Rp	Up	Vp
40	140°	95	82	115	5	8.5	9	95	60	38	83	2	M6
50	160°	110	91.5	130	5	10	10	105	70	49	85	2.5	M8
70	200°	130	111	165	5	13	11	120	80	57	100	5	M8
85	200	130	100	165 +1 ⁹	5	13	12	144	110	56.5	130	3.5	M10
110	250	180	150	215	5	15	16	200	130	74	165	3	M12

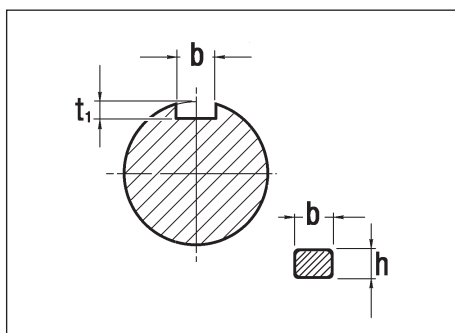
	CB									
	40		50		70		85		110	
	Y	K	Y	K	Y	K	Y	K	Y	K
B5	120	108	120	133	140	153	140	172.5	200	229
	140	108	140	133	160	153	160	172.5	250	239
	—	—	160	133	200	165	200	193	—	—
B14	80	108	80	133	—	—	—	—	—	—
	90	112	90	133	—	—	—	—	—	—

N.B.
(°) Nelle grandezze 40, 50, 70 la versione FL viene ottenuta applicando una flangia modulare sulla flangia pendolare della versione PP.

NOTE.
(°) In sizes 40, 50, 70 the FL version is obtained by applying a modular flange onto the shaft mounted flange on the PP version.

HINWEIS.
(°) Bei den Größen 40, 50, 70 erhält man die FL-Version, indem ein Modulflansch an den Flansch mit Drehmomentstütze der PP-Version befestigt wird.

Linguette

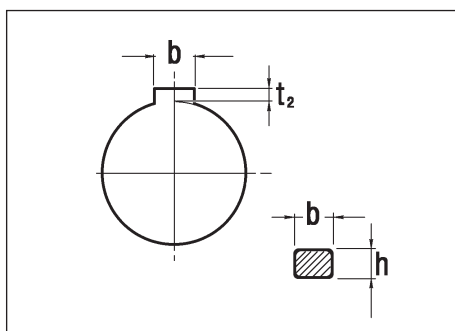


Keys

Albero entrata
Input shaft
Antriebswelle

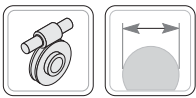
d	b x h	t ₁
14	5 x 5	3.0 +0.1/0
19	6 x 6	3.5 +0.1/0
24	8 x 7	4.0 +0.2/0
28	8 x 7	4.0 +0.2/0
32	10 x 8	5.0 +0.2/0

Federn

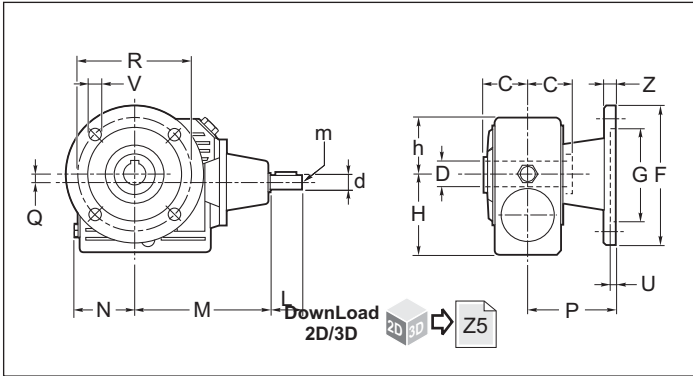


Albero uscita
Output shaft
Abtriebswelle

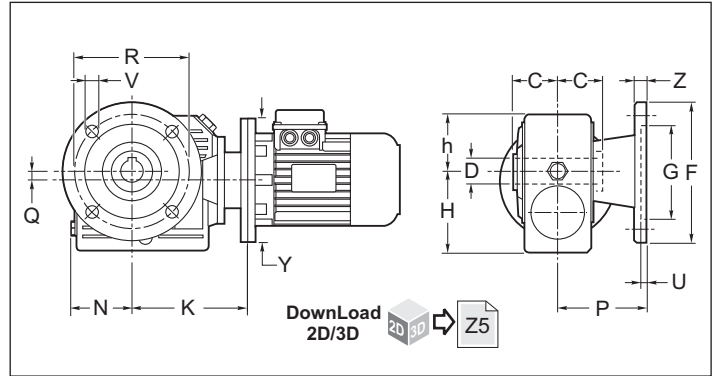
D	b x h	t ₂
19	6 x 6	2.8 +0.1/0
24	8 x 7	3.3 +0.2/0
28	8 x 7	3.3 +0.2/0
32	10 x 8	3.3 +0.2/0
42	12 x 8	3.3 +0.2/0



CRF (F1, F2, F3, F4)



CBF (F1, F2, F3, F4)



	CR - CB														
	40		50				70			85			110		
	F1	F2	F1	F2	F3	F4	F1°	F2°	F3	F1	F2	F3	F1	F2	F3
F	106	120	125	125	140	125	175	175	160	200	210	160	200	270	270
G (H8)	60	80	70	70	95	70	115	115	110	130	152	110	130	170	170
P	69	62	93	73	75	85	116	85	101	141	120	91	115	132	178
R	87	100	90 ^{+0.8}	100	115	90 ^{+0.45}	150	150	130	165	176	130	165	230	230
U	5	5	5	4	4	5	5	5	6	6	5	5	5	10	10
V	8.5	9	10.5	9	9	10.5	11	11	11	13	13	11.5	13	13.5	13.5
Z	9	9	10	9	9	11	10	10	11	12	14	10	12	18	18

N.B.
Le versioni F1, F2 contrassegnate con il simbolo (°) sono ottenute applicando una flangia modulare sulla flangia pendolare della versione PP.

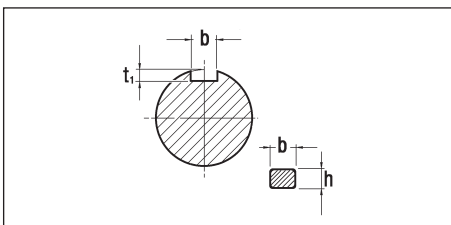
NOTE.
F1, F2 versions that are marked with (°) are obtained by applying a modular flange onto the shaft mounted flange on the PP version.

HINWEIS.
Die mit (°) gekennzeichneten Versionen F1, F2 erhält man, indem ein Modulflansch an den Flansch mit Drehmomentstütze der PP-Version befestigt wird.

CR CB	C	D H7	d J6	L	Q	H	h	M	m	N
40	41	19 (18)	14	30	7	78	57	137	M6	59
50	49	24 (25)	19	40	9	97	69	143	M8	69
70	60	28	24	50	17.5	127	88	188	M8	93
85	61	32 (35)	28	60	29	145	107	212	M8	116
110	77.5	42	32	70	43	190	140	264.5	M10	142

	CB									
	40		50		70		85		110	
	Y	K	Y	K	Y	K	Y	K	Y	K
B5	120	108	120	133	140	153	140	172.5	200	229
	140	108	140	133	160	153	160	172.5	250	239
B14	—	—	160	133	200	165	200	193	—	—
	80	108	80	133	—	—	—	—	—	—
	90	112	90	133						

Linguette

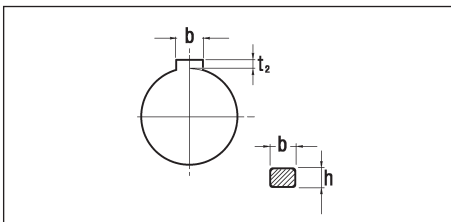


Keys

Albero entrata
Input shaft
Antriebswelle

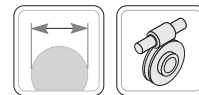
Federn

d	b x h	t ₁
14	5 x 5	3.0 ^{+0.1}
19	6 x 6	3.5
24	8 x 7	4.0
28	8 x 7	4.0 ^{+0.2}
32	10 x 8	5.0



Albero uscita
Output shaft
Abtriebswelle

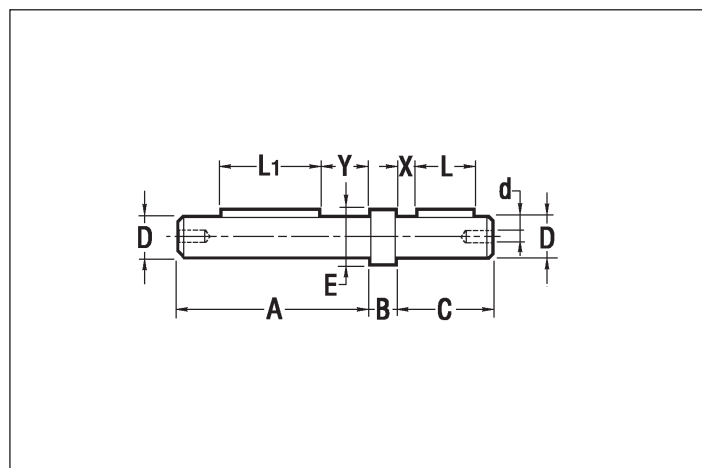
D	b x h	t ₂
19	6 x 6	2.8 ^{+0.1}
24	8 x 7	3.3
28	8 x 7	3.3 ^{+0.2}
32	10 x 8	3.3
42	12 x 8	3.3



**1.9 Accessori
Alberi lenti**

Tutti i riduttori a vite senza fine sono forniti con albero lento cavo. A richiesta, possono essere forniti alberi lenti come indicato nei disegni dimensionali.
Le dimensioni delle linguette sono conformi alle norme UNI 6604-69.

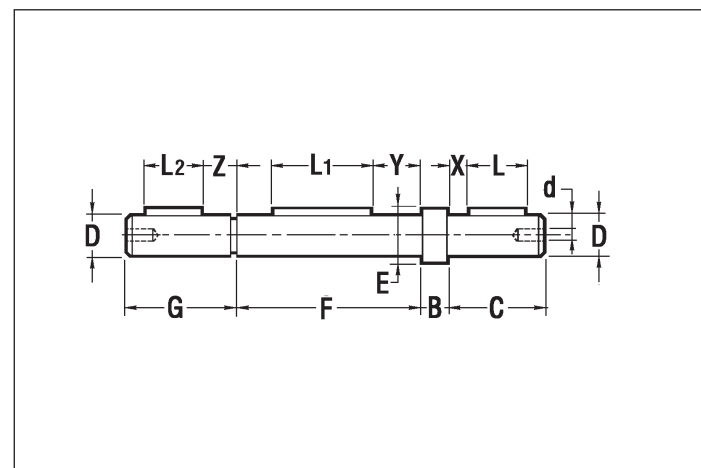
Albero lento
Single output shaft
Einseitige Abtriebswelle



**1.9 Accessories
Output shafts**

All worm gearboxes are supplied with hollow output shaft. Output shafts as shown in the size drawings can be supplied upon request.
Sizes of feathers comply with standards UNI 6604-69.

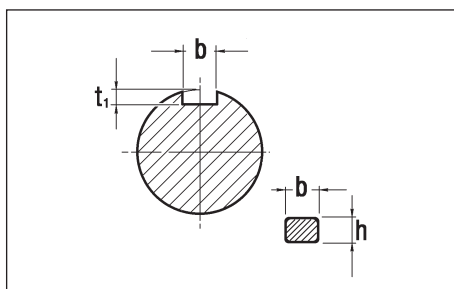
Albero lento bisporgente
Double output shaft
Beidseitige Abtriebswelle



**1.9 Zubehör
Abtriebswellen**

Alle Schneckengetriebe werden mit hohler Abtriebswelle geliefert. Auf Anfrage können Abtriebswellen gemäß den Maßzeichnungen geliefert werden.
Die Abmessungen der Federn entsprechen den Normen UNI 6604-69.

RI - RMI	28	40	50	63	70	85	110	130	150	180
CRI - CRMI	28/28	28/40 40/40	28/50 40/50	28/63 40/63	28/70 40/70 50/70 63/70	40/85 50/85 63/85 70/85	50/110 63/110 70/110 85/110	63/130 70/130 85/130	85/150 110/150	85/180 110/180 130/180
CR - CB	—	40	50	—	70	85	110	—	—	—
A	58	80	95	109	117	119	153	177	207	239
B	1.5	10	10	10	10	10	10	20	20	20
C	29.5	40	45	60	60	71	100	110	110	130
D _{g6}	14	19	24	25	28	32	42	48	55	65
d	M6	M8	M8	M8	M8	M10	M10	M10	M12	M14
E	17	22	28	34	34	38	50	58	63	78
F	60	82	98	120	120	122	155	180	210	240
G	31	50	55	70	70	81	110	130	130	150
L	20	25	30	40	40	50	80	90	90	100
L ₁	20	40	50	60	60	70	80	90	100	120
L ₂	20	25	30	40	40	50	80	90	90	100
X	4.5	8	7.5	10	10	10	10	10	10	15
Y	20	21	24	30	30	26	37	45	55	60
Z	6	18	18	20	20	20	20	30	30	35

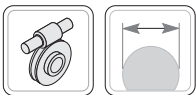


D	b x h	t ₁
14	5 x 5	3.0 +0.1
19	6 x 6	3.5 0
24	8 x 7	4.0
25	8 x 7	4.0
28	8 x 7	4.0
32	10 x 8	5.0
42	12 x 8	5.0 +0.2
48	14 x 9	5.5 0
55	16 x 10	6.0
65	18 x 11	7.0

N.B.
Tutti gli alberi lenti vengono forniti in kit di montaggio completi di linguette, rondelle, viti (e anelli elastici seeger per l'albero bisporgente).

NOTE.
All output shafts are supplied in kit complete with feathers, washers and screws (as well as snap rings for the double extended shaft).

HINWEIS.
Alle Abtriebswellen werden als Bausätze komplett mit Federn, Scheiben und Schrauben geliefert (bei der beidseitigen Abtriebswelle auch die Seegerringe).

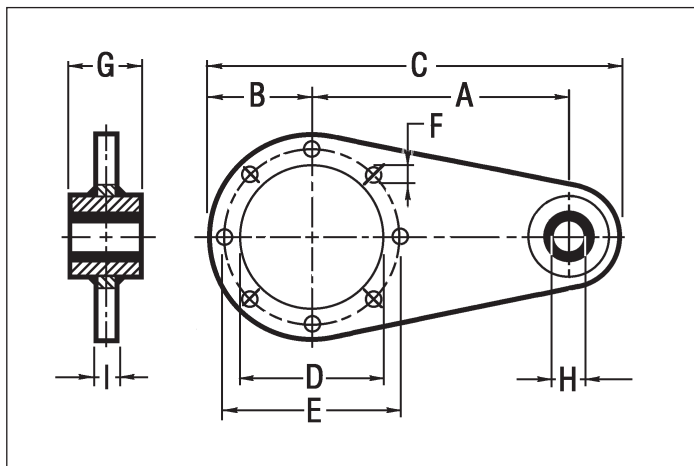


1.10 Accessori
Braccio di reazione

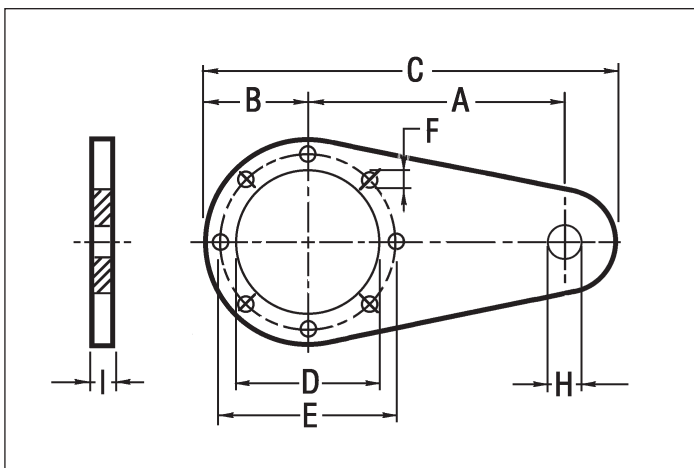
1.10 Accessories
Torque arm

1.10 Zubehör
Drehmomentstütze

Con boccola VKL
With VKL bushing
Mit VKL-Buchse



Standard



RI - RMI	28	40	50	63	70	85	110	130	150	180
CRI - CRMI	28/28	28/40 40/40	28/50 40/50	28/63 40/63	28/70 40/70 50/70 63/70	40/85 50/85 63/85 70/85	50/110 63/110 70/110 85/110	63/130 70/130 85/130	85/150 110/150	85/180 110/180 130/180
CR - CB	—	40	50	—	70	85	110	—	—	—
A	70	90	100	150	150	200	250	300	350	400
B	34.5	50	60	53	60	75	100	120	125	150
C	119.5	165	185	230	240	313	388	465	525	610
D	42.15	60	70	70	80	110	130	180	180	230
E	56	83	85	85	100	130	165	215	215	265
F	6.5	7	9	9	9	11	13	13	15	17
G	—	15	15	20	20	25	25	30	30	35
H	9	10	10	10	10	20	20	25	25	35
I	4	4	4	6	6	6	6	6	6	10